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EDITORIAL

This issue contains nine articles on accounting research, corporate accounting, accounting education, information system and tax laws. S. K. Chakraborty raises a number of serious issues in his article 'Survey Research in Accounting for India : Is There a Case ?' Arun Basu examines how far the value added data can measure the performance of an enterprise. Desai and Oza study the implementation of accounting standards in public enterprises in Gujarat. While Khandelwal deals with some current issues of accounting education in India, Sengupta, Pande and Mookerjee examine corporate reporting, tax laws (both in Indian perspective) and accounting information system, respectively. The remaining two articles by K. R. Lambert and S. Agrawal and Ibrahim Aly and Farhad Simyar respectively, deal with issues relating to fundamental areas in accounting.

I draw the attention of our members to the notification regarding the XVII All-India Accounting Conference published elsewhere in this issue. Members may also attend the Fourth Asian-Pacific Conference on International Accounting Issues in Dunedin, New Zealand, in large number.

The publication of the present volume is delayed by about two months due to various reasons beyond our control.

At the end, I thank the Calcutta Branch and the Gujarat Branch of the Indian Accounting Association for funding partly the publication of this issue.

September 1, 1992

B. Banerjee
Chief Editor

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SURVEY RESEARCH IN ACCOUNTING FOR INDIA : IS THERE A CASE ?

*S. K. Chakraborty**

Namaskar to all of you, Prof. Roy. Prof. Kulshrestha, Prof. Sukumar Bhattacharya, Prof. Bhabatosh Banerjee, and to all of my friends across the floor.

When Prof. Roy, the grand old man of Indian accounting education, was on the last few shuttering observations of his, I was only thinking to myself : what might have been the situation in the west—in a western audience—where the only important part of human existence is youth. Childhood is an interference ; old age is a nuisance. Only youth is given credence there so I was trying to visualize and once again realize within myself that this is probably one of the distinctive features of the Indian ethos and culture, that we don't look upon man as merely a machine so that if the machine does not yield any tangible product, it is heaped into the dust-bin. We don't do it still and that is a very great achievement silently preserved by this culture.

Coming to the paper, I have none as such. I had suggested a title for the discussions, but then after I had worked out some thoughts on this title, I could realize something deeper and wider, and that is what I will share with you and may be, at the very end, I will come back if necessary, to this small brief note which is with you. Dr, Banerjee's presidential address at the last National Conference of the IAA was quite useful to me. I went over it, particularly the last few sections, which were a good guidance for me to formulate some of my thoughts.

Now, let me begin by some reflections on *who* is an accountant—what kind of a *being* is an accountant ? I do not want to use the word 'animal' although all of us are animals of sorts anyway, accountants not

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* Delivered at the First Seminar of the Indian Accounting Association Research Foundation held on 28th March 1992 in Calcutta.

* Professor, Finance & Control Area, Indian Institute of Management, Calcutta.

excluded. I am trying to explore within myself and partly aloud to you here : how can we characterize an accountant ? I do confess that any kind of labelling or characterization oversimplifies, yet we cannot help doing characterizations. And I have jotted down here four thoughts which came to my mind :—

—Is the accountant primarily a *controller ?*

—Is he/she primarily a *reporter ?*

—Is he/she primarily a *helper ?*

—Is he/she primarily a *treasurer ?*

These are key questions because if the accountant has to conceive his/her role and wants the academic stream to help him/her in the execution of that role, it is very much necessary for the accountant to clarify what fits best his expectations from his own role.

It must be pointed out that these roles are not exclusive, neither are they complete. They are just an indication, and many questions have to be answered here :—

Controller : Who does he control ? How does he control ?

Reporter : What is the role profile of a reporter ? Whom does he report to—the external world or to the internal world of the organisation ? Are the demands of these two worlds identical ?

Helper : Can a good accountant consider himself/herself to be a helper ?
Can he dig into the sense and nuances of the word 'help' ?

[In IIMC two of our colleagues and I had done a field-work on this aspect : 'helping role and controlling role' in the Indian context. The work has been published* but the book is no longer available.]

Treasurer : Who holds the purse strings—the collection and garnering of resources and their deployment.

On reflection, we need not read them as either/or options. There may be a provision for each dimension to make some relevant contribution. The accountant must be sensitive to these roles so that he can come back to the academic world and say : "This is the dimension I want you to address yourselves to—for making me more effective."

Next we come to the *researcher.* What kind of an animal or being is he ? Here I want to do a lot of introspective talking. There's this

*S. K. Chakraborty, P K. Sen, T. B. Padmaprabha ; *The Human Dimension of Financial Control,* (Calcutta : Allied Book Agency, 1982.)

need for frank introspection on our part. With what kind of a 'mind-set' does the researcher set out into the world of research ?

It is important to realize when we talk of theoretical research in Accounting (and in the still broader canvas of Management), the difference in theory building here compared with that in Physics and Mathematics.

Theory building here must proceed from practice. The movement must be from practice to theory. This does not limit refinements in theory ; but theory by itself, if it assumes the arrogance—if the academic researcher assumes the arrogance of trying to guide and help the world of practice without him/herself standing on the ground of practice—I think we are not going to click. Remember please (and I say this with all humility), that a place like IIM provides much ampler oppurtunities for interaction between working organizations and industry. This is not bragging, but a fact. And I have gone through this process for the past twenty years.

Yet when today I ask myself what is my competence to understand how the practical world runs and moves, I find I have to give myself a rather negative answer. And then I move backward and further ask myself, in that case, what competence do I have to assume that whatever I write is going to make sense to the practising man ? What makes me think like that ? My ego is further deflated by the fact that the writings which we today bring out are nothing compared with those from the West. The sheer labour that they do, the sheer hard work, the sweating and the toiling they put behind a single fact, paper, article, case study—we don't do it. There are problems here and we will come to them later on.

But the *starting point is this self-introspection* of the researcher himself/herself. And for any Association like this one, which is very timely, it ought to be done at this inaugural juncture. This is part of the initial preparatory homework—this honest introspection which is indispensable in my opinion.

I would be extremely shaky today to recommend a practical system of, say, an internal management accounting system to an organization. Why ? Because I just don't have any familiarity with the production system. Therefore, let us now look back at ourselves.

When in the 1970s the oil crunch first came, there was a spate all over India of programmes for managers called 'Finance for Non-Finance Executives : What was the stand ? If I recollect now I find that just because finance became more costly, there was a resurgence in the power—base of the accounting and finance function in the organization, and with

that enhanced power-base, and because of the high cost and scarcity of finance, they thought they could and ought to teach the rest of the community of management : What is money ? What is the worth of money ? How to handle it ? How to manage it ? This is the kind of thing which we did and still there are rumblings of that process going on, though the tide has ebbed by now.

Now compare this with the kind of writings and programmes which are being done in the West, most vigorously in the U.S. and partly in the European countries also. What is their emphasis ? They hardly talk about finance for non-finance executives. They are talking rather of 'manufacturing and marketing for accounting and finance executives'. A total reversal for the assumed arrogance of the finance function. These are the issues of the 'mind-set' that I am talking about. Unless these elements of the mind-set are sincerely probed, I do not think we are going to be honest to our ourselves, and probably we cannot be of much use to prospective users.

Therefore, what should be the *reference point* of this Association for research that this organization would be seeking—the two professional Institutes ? Probably yes. My reading of the situation is that it would be good, probably even better, to have the reference point with the *ultimate user* of information in any kind of organization—industrial or non-industrial. You see, that should be the reference point—at least on the same footing as the two professional Institutes, if not given priority. I'm saying this because between both these professional institutions, and if there are any others in the field (cognate bodies), and this kind of academic Association or research body which is being founded now, there could be a 'supplier-customer' relationship. But taking these three or four (professional) institutions together, they in turn are suppliers to those customers which are the actual user organizations. So it is ultimately with these user organizations that we have to come to an authentic basis of understanding. India has singularly lacked this, notwithstanding the fact that the IIMs also had been around with much greater resources at their command. Notwithstanding this fact, for the last 20-25 years this basis has just not been reached. Therefore, we have got to recognize these things, and this requires a tremendous amount of thinking through about my own personal profile to begin with.

For the accountant (this is my personal feeling), in the long run it is the 'helper' profile of his function which is the most positive and best to assert. Neither controller, nor reporter nor treasurer merely, but that of a helper—*the most positive long-run profile of an accountant.* If that

be the profile in the long-term then the researcher has got to examine his/her own credentials for being an authentic and genuine helper. So, no amount of university gold medals and association examination gold medals is going to do that. And I confess that to you with all humility. If it's not now then when shall I recognize it ?

Today, there is increasing talk about *consortium programmes and learning alliances.* Consortium programmes in the broad function of management can be tailored down to the field of Accounting as well. I don't see any problem in principle. Interestingly enough, here the signal has been taken by the U. S. from the European experiments. Apparently, the European situation has taken a lead in this respect where some of the most well-known industrial organizations have established management institutes outside the university framework as a consortium where four, five, half a dozen or even more organizations have pooled themselves together, financial resourcewise, and have built up a management institute eg. the Institute of Management Development (IMD). There the whole programme the whole curriculum, is thrashed out by the Board of Studies constituted by the people from these very consortium organizations. In Britain, there is a variation of this. Here, these consortium organizations insert advertisements in newspapers along these lines :
"This is the kind of consortium programme we want. Are there any takers from the Universities ?" So, universities then become applicants to those consortium advertisements for such ventures. Universities like Leeds, Lancaster, Warwick and so on volunteer as candidates. The consortium organizations do a sort of screening of these universities who are applicants, and then decide : "Alright, you are the right university for the kind of thing that we want." Then *this* university becomes the academic nucleus. But it is the consortium members which nominate the executives and the students from their ranks to this consortium-determined curriculum. In the design of the curriculum, the whole thing is not left to the university academics at all. Yes, in the Board of Academic Studies there may be two, three or four university academics but the rest of the Board comprises the top echelons of these sponsoring consortium organizations. This is a model which has been working in Europe and Britain for a long time, and just about now, this is beginning to be talked about in the U.S. also.

What has been the impetus ? Why has this taken place ? Why the dissatisfaction with university-based accounting education and university-based management education ? Why this disenchantment ?

If they (the western countries) can be disenchanted to that extent,

let us measure our own disenchantment that we should be having. Of course, we are not disenchanted because we are more or less like ostriches. So we prefer to put our head and eyes under the sand. So we don't feel. But they feel it and they confess it. And what is the language of that confession ? I'll just quote one to you. This has come from the Dean of the Business School of New York University as an expression of his disenchantment with the School's business management programme (Remember from the heartland of modern industrialization and the commercial capital of the world—N. Y. City) :

"Over-emphasis is placed on scholarly research which basically says nothing and also says this in a pretentious way."

The same article echoes and quotes another Business School Dean who feels that as much as 80 per cent of management research may be irrelevant. Now just think of this. In 1990, in the last decade of the 20th century, from the heartland of business and industrial revolution, this is the introspection which is emerging in public in print !

Where do we stand in India ? We do not engage in such introspection. But unless we begin from that level, we will be doing papers and publishing monographs, but that's it. It remains within us. [That's true of whatever little I have done in spite of whatever he (Prof. Banerjee) might have said. I thank him for what he had said, but let me not delude myself]. So, what is happening in the West is called *action learning*. This means that if you have a one-year programme, eight months of it is out in the industry in the field. You only come back for four to six weeks for consolidation, reconceptualization and so on. Are we equipped to do this in India ? No —our educational system has not an iota of this. And it is out of that educational system that you and I are becoming graduates and post-graduates, and then this is the stuff which is going to do the research. Who is going to use it ? If this be the condition in the U. S., 80% research is irrelevant—as late as in the 1990s this is the confession made by them ! I am not intending to pour cold water on our laudable ambitions. But it is essential to be hard-headed and I think accounting is a function which is supposed to be hard-headed. If in mounting its own ideas, programmes and research it is not as hard-headed as that, well, it does not justify probably calling itself the accounting function. It has to demonstrate what hard-headedness is. So how do we go about it ?

I will give one more illustration—a specific theme and now I am zooming in, coming a little bit to the synopsis which I gave you. I think I have listed there a few areas. Again, they are indicative as they appear

to my mind. Let us know that today in the USA a raging battle is going on between accounting for external reporting and accounting for internal reporting. A ding-dong battle is going on—nothing short of the Mahabharata war between the Pandavas and Kauravas. Who are the Pandavas and who are the Kauravas here? To me it seems it is the external accounting fraternity of the accounting profession who are the Kauravas and it seems that the Pandavas—the deprived ones so long, constitute the internal reporting aspect of the accounting function.

What are they saying? And this is where the beauty of the sincerity of the academic profession emerges. What is it? Of course, they have been triggered into consciousness by the onslaught of the Japanese. And the most important highlights of the American industrial conscience—the steel industry, the automobile industry—it is these industries which have taken the greatest amount of jolting and battering from the Japanese. So, naturally they are trying to understand why they are beaten on these things. And what they find is that manufacturing technologies have gone so far and advanced so much and the accounting function has lagged so far behind, that there is a yawning gap between the accounting function's ability to report issues, concerns and consequences which respond to the kind of sea-change which has taken place in the manufacturing lineage. This goes to the ridiculous extent that they find, when they do in-depth studies in organizations which have advanced modern technologies, that the physical yardsticks of performance show all registered improvements over the year, whereas the financial reports are showing negative downslides. And they can't reconcile it. When the managers inside are being given these financial yardsticks report (Varianee Analysis etc.) they probably say. "Come on, there are the physical parameters—wastage time has been reduced, set-up time has been reduced, all these things have been reduced. You don't tell me anything about that. Your report only shows me negative variances."

So, that is the kind of *credibility gap* which has occurred even in that country. Referring to Prof. Sukumar Bhattacharya's inaugural address which emphasized globalization for India, I don't think we are simply sensitive to what it means. 'Globalization' is only a word for us. It does not ring deep into us at all; we just don't have that sense of mission. When you read the American authors' writings and reactions to this kind of deluge which is happening on them from Japan and other countries from the Far-East, you can sense the fiery sense of mission from which they do that work. Where is that sense of mission

in us ? Neither is the industry willing to open itself up to us, *nor are we equipped to face it.* So globalization would lead to this kind of consequences. Therefore, if we want to make accounting relevant and useful, *then* only research needs to be done. Otherwise, there is not much to it.

Therefore, which is the domain we should concentrate upon ? One is the management of costs and management of internal data. The other, of course, is external reporting for the world at large—tax authorities, the public at large, the community at large. If we go by the Harvard Accounting and Business professors, they are willing to concede that in the U. S., external report accounting has overruled the internal reporting imperatives. And this has been one of the major causes of the irrelevance of internal accounting for internal management control and health purposes. Well, I am willing to speculate before the audience here that this must have been far more intensive to us here in India—far more intensive. We may just watch the recruitment patterns in organizations here—particulary the private sector. Recruitment for the top positions in finance in this sector generally goes (with a very few exceptions) to Chartered Accountants. Cost Accountants are appointed only where cost audit is mandatory. Even in the public sector, Cost Accountants are appointed primarily to fulfil legal requirements.

The important point is not a plea for one profession vis-a-vis another. Professionally, there is a basic underlying difference in orientation. This pattern is symbolized today in the U. S. under the rubric of what is called *Activity Based Cost (ABC) Accounting.* The amount of literature and writing which is emerging over the past 5-7 years on ABC Accounting is nothing but symbolic of this struggle of the internal management accounting and cost accounting function to regain command over the internal 'help-control' aspects of the financial system. ABC accounting is the clinching ground of this battle. References are being made to the GAAP. Yes, they have a lot to be looked into so far as external reporting is concerned. True. But GAAP has hardly anything to contribute to internal decision-making processes of management. How do you take care of that ? I think the essence here is to make a distinction between who is a CPA and who is a CMA. When we are going for globalization and open-market competition, the necessity, the sheer compulsion of much more finely tuned internal accounting and reporting systems cannot be gainsaid. Let us understand this very clearly—external image producing accounts will be only a by-product of the thoroughness in the internal accounting systems. If this is not done, external

image-building accounts will just not stand long because they are just a final aggregation at the year-end on what is the net thing that is happening from the events in terms of pricing, product strategies, diversification, divestiture, acquiring new product lines, replacing existing technologies with modern ones, and so on. All these are going on inside all the time which ultimately produces from year to year the annual reports we use for the external reporting function.

So if you permit me [my present fascination is no longer accounting as many of you may know ; I'm a prodigal child of the accounting field to that extent]. I want to say one thing. If this ever happens, it would constitute a very fruitful alliance with the basic tenets of the Indian culture and ethos also. What is the basic element of this Indian ethos and culture ? One of its basic tenets is *inside-out*. You always project in the external world what you have first of all inside ; so let us work on the inside, the outside will take care of itself—a profoundly simple thing. A person who is calm, who is stable, who is peaceful within will create around him an ambience of that very calmness and peace, and you feel it. There's no need for logic there. If I am turbulent inside, I will reproduce and project this turbulence outside of myself. At the philosophical level, for human development, this is the keynote of Indian thought. Now I detect an emerging parallel to this in the field of accounting also. What is that ? Yes, we want to be globally impressive, we want to be competitive, be excellent. These are all external projections. Where will they come from ? From the internal world. The 'effect' of externally reported global strength, externally reported competitive strength—these are externally projected effects. We want them. But where will they come from ? What are the causal foundations deep inside, deep within ? In that case the internal organization has to be emphasized. Therefore, while the accounting perspective needs to maintain, improve and sharpen the aggregate picture that external reporting gives to the external world, let us remember that the 'cause' of all the excellence in that domain is dependent upon excellence in the internal working. Otherwise, it won't happen. Hence simultaneity of research in both the dimensions is called for. It cannot be to the exclusion of one or the other.

Still, if you ask me in a very personal way, my inner sense, my intuitive feel is that given the limited resources—monetarily, manpower-wise, excellence-wise, in terms of research calibre—if at all we have to prioritize to some extent, where should we concentrate more of these highly scarce parameters of research in India ? My inclination due to my own background is that relative priority should be accorded to the 'within'—the

internal accounting system of the organization, because the existing systems are often giving wrong signals, spurious signals to the actual decision-makers regarding strategy. In that case, no amouut of competent reporting in Balance Sheets is going to serve. For instance, in India public sector enterprises, in one sense, have got an edge over private sector enterprises. Prof. G. D. Roy was talking about V. A. (Value Added). For years we know that all the PSE's are publishing statements of V.A. For what use ? Look at it. The funny thing is that V.A. as we calculate it in accounting is a production-oriented definition : Sales less cost of Direct Materials (i.e. cost of power, coal and oil used as fuel) ± Increase/Decrease in the Value of W.I.P. and Finished goods. This is the BPE's definition of V.A. Just imagine a company which produces a lot and has a sales value of zero. What is the definition ? Sales (which is zero) – Throughput ± Increase/ Decrease in Stock of Finished Goods and W.I.P. So, you go on adding to your finished goods and W.I.P. and you merrily get off with a very good V.A. What a joke ! You are bringing in advanced technologies, and beginning to talk about J.I.T. and J.I.T means zero inventory. When it is zero inventory you just cannot use that equation to determine your V.A. Japan has given such a good jolt. It is necessary for us to receive these jolts. Had Japan not confronted the world of management with a completely new set of assumptions for everything that they do, including accounting and management accounting, I don't think we would have been set on this new course of thinking in the whole of management. They have done a tremendous job, I can assure you that. In every aspect from inventory to scrap, to marketing strategy, to finance, to pricing—think of any crucial dimension—they have a different set of assumptions and they have beaten the West in the game with their set of assumptions.

They had a sense of mission. They had a point to prove. India has no point to prove. Upto 1947 India had a point to prove ; after 1947, India has no point to prove. Nobody is charged with that sense of mission. We are not inspired. That's the difference. Accounting systems will come later on. I am transcending the accounting discipline for a moment. The real problem in India is not in present systems and procedures. For one thing, I would say, let us stop, let us impose an embargo to new systems and procedures because out of the very existing classical, traditional systems we have not picked up even 30% mileage. And to our great folly and shame, any new thing which comes as a package from abroad, we jump for that, without recognizing that the existing systems have still not been exploited by even one-third of what they can give. That is India's undoing. Take Z.B.B. for instance ; what

is the fate of Z.B.B. ? They don't even utter that name now in the U.S.A. and in India the whole of Central Government together with the Administrative Reforms Commission went headlong into it. That is India. Think of Human Asset Accounting. It too has been cast aside, just not written about in the U.S.A.

So, what I'm trying to say is : we have to get back to our own ground level. Let us do solid work—soil our hands, our feet, our overall and get down to the set of the shop floor, and then become researchers. With anything short of that, I don't think all these new slogans are going to mean anything to us.

What may we gain by this reorientation ? 'We' means the accounting academics. The professional bodies and the industrial organization are the other side. They cannot be left outside the game. One of the reasons for the existing gap between the two sides, I think, is their lack of trust in us. They simply don't trust the academics about their capability, ability, and inclination to offer useful ideas and methods. They just don't have faith in us. And there is every reason for that. If the accounting researchers in America are accused of being theoretical, of no use, where do we stand ? Why should our industries then give us credence ? Why should they open their doors to you and me ? And so it needs very thorough soul-searching.

To close down, I would like to express one or two more thoughts. Can we catalyse some sort of arrangement with certain go-aheads, i.e. who are forward-looking ? My implicit frame of reference is, of course, the industrial organization, and to that extent I must apologise to Dr. Banerjee because in his presidential address he has woven a very wide spectrum. When I am saying this I merely ask, where do we start ? If we have to start somewhere it is better probably to start first where a pretty clear organization system already exists. That is why industry can earn our first attention. Can we systematically cultivate with a few such organizations, a few consortium research projects ? It is not for me to identify the research topics ; it is for them—by taking me to the shop floor, to the marketing department, to their specific decision areas saying : "This is my problem, I want to assign this to you." I think we must forget now, spinning our own abstracted thoughts of research topics. We must get rid of that habit. For too long we have been doing this. It is no longer going to fit in with the demands of the open economy culture we are going to adopt. Our modes of thinking have to change. Can we approach it like that ? Can we go to some organizations where some of us are known

and inform them, "we are having a set of committed, missionary researchers. We wish to address ourselves to your problems and not invent academic issues from our own imagination." That is one practical thing I can think of for fostering a new kind of research that can be considered by this Association of Accounting Research on behalf of I.A.A. If it can make a beginning it will really be a pioneering way of doing research in this country.

Finally, if I have unintendedly hurt anybody's sentiments in any way, I must confess that this just happened spontaneously in the best and sincerest of spirits, having used myself and my own experiences as the melting pot. And I have been indicting myself, accusing myself in the process. If nevertheless, I have hurt anybody unwittingly, please forgive me. I wish you all the best.

[TRANSCRIBED]

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VALUE ADDED AS A MEASURE OF BUSINESS PERFORMANCE

*Arun Kumar Basu**

This paper explores the concept of "value added income" and examines how far the value added data can be used as a basis for measuring the performances of business firms.

I. Introduction

Much has been written during the recent years as to how the concept of value added can be made operational in the context of business accounting and reporting and how the data generated by the value added accounting system can be helpful in providing a useful basis for measuring business performance. The measurement of the performance of a business firm, which is the principal theme of this article, is not at all an easy task. The performance of a business firm can be evaluated or measured from a number of perspectives, and there are various quantitative as well as qualitative criteria that can be employed for this purpose. It is the perspective from which one seeks to evaluate business performance which determines the criteria that one will select for the purpose of conducting one's performance evaluation work.

In most cases, however, the performances of business firms are evaluated and judged from financial perspective. The term "business performance" is also generally used in the accounting and finance literature to signify "financial performance". Finance is a key force in business operations and a business firm has ultimately to be successful financially if it is to maintain continuity of its existence. It is also an established fact that financial success cannot be achieved by a business firm without achieving success in other fronts of its operations.

The main objective of undertaking this study is to examine the nature of value added data and to see how such data can be used in the

* Reader in Commerce, University of Calcutta.

eontext of business performance measurement. The study will remain confined only to financial performance. Under the conventional practice, the performance of a business firm is evaluated and judged mainly in terms of rates and sizes of profits. The study will, therefore, begin by stating a few words on the nature of business profits and on how such profits are used in the measurement of business performance.

II. Profit as an Index of Business Performance

Profit is a measure of surplus wealth generated by a business firm from its operations. The measurement of profits in a continuing business firm takes place on a periodic basis. Profits can arise when the price paid by the customers for the product of the business firm exceeds the cost that has been incurred for it. The size of the profits earned by a business firm in a specified period is determined by two factors : the spread between the unit price and unit cost and the volume of output produced and sold. Profits can be increased either by widening the gap between the unit price and unit cost or by increasing the volume of output. The two courses of action may also be adopted simultaneously. The gap between the unit selling price and unit cost can be widened either by increasing the former or by reducing ths latter, or by doing both. But in a competitive environment it may not always be possible for a business firm to increase its profits by increasing the selling price. Emphasis has, therefore, to be laid on the cost side. It may be possible to reduce cost of production by making a compromise with product quality or by depriving the owners of factors of production of their legitimate dues, but such a cost reduction policy cannot pay in the long run. So if a reduction in unit production cost is to be effected, it has to be achieved through increasing the efficiency of utilisation of labour, capital and other productive resources. This is also the most feasible way of achieving an increase in the volume of output. The volume of output can, of course, be increased by increasing the scale of business operation, but this will not increase the real profitability of the business firms unless it is accompanied by a simultaneous increase in the efficiency of resource utilization.

Profits have to be earned and they have got to be earned on a regular or continuing basis. Business firms that are unable to generate sufficient profits from their operations cannot remunerate the providers of their capital and this makes it difficult for them to maintain the continuity of their existence. Profits are needed not only to remunerate capital but

also to finance growth and expansion. The survival of a firm in a growing economy cannot always be ensured simply by maintaining the status quo. If the firm is to survive in a dynamic and expanding environment, it has to go on expanding the scale of its operations on a regular and continuing basis. Funds can, of course, be procured from external sources in order to finance the needs of growth and expansion but there is a limit to this. Funds procured from external sources have regularly to be supplemented by internally generated funds. But generation by a business firm, on a regular basis, of surplus wealth sufficient enough to meet both the requirements of remunerating capital and financing growth and expansion can be possible only when the firm is able to respond effectively to the demands being placed upon it by the suppliers, customers, employees, providers of capital, government and the community.

Profits are undoubtedly a very good indicator of business performance, but the real standard of performance of a business firm cannot be judged by the absolute size of its periodic profits If profits are to act as an indicator of business performance, they have got to be related to some other variables with which they are functionally connected. Normally, the sufficiency or insufficiency of profits is judged by relating them to capital employed[1]. The rate of return on capital employed (ROCE), which is computed by dividing net profits by capital employed, is used most frequently to measure how efficiently a business firm has conducted its operations. To obtain a more meaningful perspective of business efficiency, the ROCE is decomposed into sales margin ratio (SMR) and capital turnover ratio (CTR). The SMR establishes the relationships of profits to sales volume attained. This ratio is capable of offering a very useful indication regarding the production and distribution efforts of the business firm. It can also shed some light on the pricing policies the firm has adopted. The CTR on the other hand is concerned about the relationship of sales to capital employed. The main purpose of computing this ratio is to obtain an understanding of how effectively the business firm is utilising its available resources to produce output. The greater the out turn of goods and services from identical capital, other things remaining the same, the higher will be the firm's profitability. Both the SMR and the CTR can be decomposed further in order to obtain detailed pictures of operation of the factors that contribute to profits and profitability.[2]

Profit is a measure of wealth creation – it is a measure of the wealth a business firm has created for its owners The wealth creation activity of a business firm can also be viewed from a different perspective. The

business firm creates wealth not only for its owners but also for a number of other parties that take part in the process of production of its output. There is a system by which measures can be obtained of the wealth the business firm has generated during a specified period of time for all those parties that have taken part in its wealth-creation activity. This wealth can also provide a basis for measurement of the performance of the firm. The amount of wealth a business firm has actually created during a specified period of time can be determined either by summing up the values it has allocated to different parties participating in the wealth-creation activity or by subtracting from the sales revenue, the costs of bought-in goods and services the firm purchased from outside sources. The term 'value added' is used in accounting to denote this larger amount of wealth. Value added is, in fact, a measure of the utility that a business firm adds to the bought-in materials and services. Arguments have been put forward from various quarters to the effect that if value added measures are used intelligently, they can then be very useful in offering valuable indications regarding the performances of business firms. An endeavour will be made, in the remaining part of the paper, to explain the concept of "value added" and to examine how value added measures can be used to evaluate and judge business performance.

III. The Concept of "Value Added"

The value added concept is a very familiar one in economics. It is used in the context of measurement of gross national product (GNP). There are a number of approaches to the computation of GNP and the value added approach is one of them. Under this approach, GNP is computed by summing up the additional values created by all participating entities in the producing sector. Each entity in the producing sector is said to add value to the national product equal to the value of the output produced by the entity minus the value of the intermediate product it has purchased from other participating entities in the producing sector. The value added by an entity equals the payments it has made to the factors of production in the form of wages, rent, interest and profit. Payments made by the entity in respect of the goods and services it purchased from other entities are excluded from the purview of value added computation. Wages, rent, interest and profit are, thus the four components of value added.

Although the value added concept has long been used in the field of economics[3], the accounting use of the concept is a phenomenon of

very recent origin. In fact, it is after the publication in 1975 by the Accounting Standards Steering Committee of the UK *of* a discussion paper entitled *The Corporate Report*[2] that the value added concept started attracting attention from the business community. This discussion paper was prepared with the objective of providing as to how the usefulness of corporate financial reporting could be improved. One of the important conclusions drawn in the paper is that profits can no longer be regarded as the sole or premier indicator of business performance. It is mentioned in the paper that some additional indicators are needed to arrive at a basis for determining how efficiently and effectively enterprises are conducting their operations. According to the preparers of the paper, it is necessary for enterprises to prepare, in addition to the financial statements normally prepared, some additional statements in order to satisfy the growing information needs of the users of published financial statements. One of the proposed new statements is the statement of value added. The statement is to be prepared on the basis of the assumption that the business firm is a partnership—a partnership made up of the employees, providers of capital, government and the firm itself. The partners render services with the help of which the utility of bought-in goods and services is increased and thereby, value is added. The employees lend their labour power which constitutes the most significant factor in value creation. Capital providers provide funds with the help of which productive resources are acquired, and the government is there to provide the business firm with different types of infrastructure facilities. The business firm has to maintain a network of buildings, equipment, furniture etc. whose services are as essential in value creation as are those received from the employees, capital providers and the government. The value added statement is needed in order to provide information regarding the creation and application of the value by the business firm.

The principles followed by the accountant in value added accounting are not fundamentally much different from the principles the economist follows in measuring GNP by the value added method. But the way in which the accountant classifies the value added data of a business firm does not correspond fully with the way in which the economist performs his job. There are also some differences between the accountant and the economist in the matter of recognition of the timing of value creation. The reasons why these are so should not be difficult to identify. The value added measures developed by the economist are used to serve purposes which are

different from the purposes for which the value added data are computed by the accountant. Since the economist is concerned with operations at the aggregate level, he can use approximate measures and this does not destroy the validity of his analysis. But this is not possible in accounting. The accountant is required to deal with a single entity and because of this, he has to be very precise about the measures he produces. He has also to be very specific about the recipients of value added and their respective shares. There does not exist enough scope for him to apply imagination and personal judgements. Everything has got to be done within the boundary set forth by the generally accepted accounting principles. These principles, it may be mentioned here, are founded on certain basic assumptions like continuity, accrual, consistency, conservatism, materiality and relevance. Although value added information is provided on a supplementary basis, yet it cannot violate the established criteria of identification, measurement and reporting of accountable events and phenomena.

IV. How Value Added Data can be Useful in Business Performance Measurement

If used intelligently, value added data can provide some very useful insights into the wealth-generation process of the business firm. One of the important qualities possessed by value added data is objectivity. It is this quality of objectivity which contributes significantly towards making accounting information useful for decision making. Unlike accounting profits, value added data are not influenced much by the personal judgements of the measurer. As has been pointed out earlier, value added income is computed by differentiating between sales and bought-in materials and services. Both these measures are objectively determined because they are derived directly from transactions with third parties. Accounting profits cannot be as objective as value added data are. There are at least two important sources from which subjectivity can enter the process of measurement of accounting profits, namely depreciation computation and stock valuation. Value added income is not influenced by the way depreciation is measured. Of course, this can happen if depreciation is not included in bought-in items. Depreciation is generally shown by business firms as an allocation of value added. When depreciation is excluded from the purview of bought-in items, value added income cannot be manipulated by means of depreciation amounts. The manipulation of value added income is also not possible by manipulating stock valuation if sales constitute the basis of measurement of the value of output.

Value added data are capable of being used for measuring the performances not only of business entities but also of nonbusiness entities. As a matter of fact, value added can be the only reliable indicator of performance for these entities that do not exist to generate profits from their operations. There are some commercial entities, particularly those in the public sector, that are desirous of earning profits but the profit earning objective is relegated by them to a position of secondary importance. The performance of such an entity can be measured more meaningfully if value added data are used instead of profit figures as the basis of performance measurement. It may be mentioned in this connection that considerable difficulties are encountered in deriving value added measures concerning entities producing goods or services for which there is no market price. In such a situation there is no other alternative but to rely on factor payments. This is, however, a different issue and not at all relevant in the context of the present study.

Value added data can be used in a variety of ways for purposes of measurement of the performance of a business firm. One of the important ways in which such data can be used effectively in measuring business performance is the construction of ratios. A number of ratios based on value added data can be constructed for the purpose of obtaining a better understanding of the various aspects of the operation of a business firm that have a significant bearing on its performance. First of all, there are ratios that indicate the relative shares of the parties that have taken part in the process of wealth generation. Such ratios are computed by dividing the amounts allocated to the respective parties by the aggregate amount of value added. From a careful and systematic analysis of the behaviour of these ratios over a number of years it may be possible to draw some valuable conclusions about how the affairs of the business firm are being conducted. For example, by examining the movement over a number of years, of the ratio of labour costs to value added, conclusions can be drawn as to whether labour productivity is increasing or decreasing through time[5]. If the ratio declines over time, this may then be regarded as an indicator of improvement in labour productivity. An increase in the productivity of labour is very likely to lead to an increase in the profitability of the firm. But before any such conclusion is drawn it is necessary to study carefully the behaviour of some other ratios. The benefit of higher labour productivity may not at all accrue to the business if for example, the government goes on increasing its relative share of value added. If the government actually does this then the ratio of taxation to value added will duly reflect the phenomenon. If the benefit of higher labour

productivity accrues to the business firm itself, this will be reflected in the ratio of depreciation plus retention to value added. An increase in the ratio of depreciation plus retentions to value added is suggestive of the fact that the firm has increased its ability to adapt itself to the changing environment. This is indeed a very good sign and there is every reason to be hopeful about the firms that are able to achieve such a thing on a continuing basis.

Labour productivity can also be measured using several other ratios. The ratios that can be relevant in this context are value added per employee (value added/no. of employees), value added per man-hour worked (value added/effective man-hours utilised during the period) and value added per rupee of wages. But the ratio referred to above seems to be the most relevant one in the measurement of labour productivity.

Capital and labour happen to be the two most important factors of production and the profitability of the business firm depends greatly on how efficiently and effectively it utilises these two factors of production. The productivity of capital can be measured by the ratio of value added to capital employed. The higher the ratio the greater is the productivity of capital. Data should be gathered concerning a number of accounting periods with a view to examining movements and trends in the ratio. A steady increase in the ratio is suggestive of the fact that the firm is steadily raising the standard of its performance. If, on the other hand, the ratio declines over the years, then a reverse conclusion would have to be drawn. The ratio may also behave erratically. In that case, further analyses are needed in order to identify the source or sources from which troubles are arising.

Traditionally, the productivity of capital has been judged by the capital turnover ratio which is obtained, as it has been stated earlier, by dividing sales revenue by capital employed. But this ratio might give misleading information about the real productivity of capital. A high turnover of capital employed does not necessarily imply that the productivity of capital is really very high. If bought-in items account for a major portion of the sales revenue then high sales value's credit cannot go fully to capital. Business firms concentrating mainly on trading operations can achieve high sales revenues with small capital investment. The capital turnover ratio in these firms will naturally be very high. The real productivity of capital can best be judged if the turnover of capital employed is calculated in relation to value added. The value added to capital ratio may be used in conjunction with the capital intensity ratio for obtaining more meaningful results.

In addition to the ratios referred to above there are also a number of other value added-based ratios that can be computed with a view to gathering detailed particulars concerning factors and processes contributing to success of the firm[6]. The ratio of value added to sales is one such ratio. This ratio is capable of providing indications regarding the proportion of bought-in items in sales. If the ratio is very high then it can be inferred that the proportion of bought-in items is low and vice versa. Those business firms that have a very low value added to sales ratio are likely to have a high vulnerability, for a slight increase in the prices of bought-in items might result in a drastic reduction in the ultimate rate of their profitability. The ratio tends to be high in the firms that are vertically integrated. In a completely vertically integrated firm the ratio will approach unity. The firms that have high value added to sales ratio may not experience much difficulty in withstanding outside pressures, but they may be lacking in the flexibility needed to cope with the changing environments.

The ratio of after tax profits (i.e. dividends plus retentions) to value added can also be another value added-based ratio of considerable importance. The purpose of this ratio is to give indication as to the proportion of wealth creation that is available to the shareholders who have taken upon their shoulders the major part of the risk that is associated with the operation of the firm. An improvement in the ratio can be brought about if the relative share of one or more of the other claimants to value added can be reduced. But this is indeed very difficult to achieve. However, if the ratio declines over time, this will then mean that the firm is possibly losing the ability of maintaining its attractiveness as a source of investment.

Value added measures can be used both by management and by parties outside the business firm. Management has to evaluate its own performance on a continuing basis. It has to do this because performance evaluation is a key to performance improvement. Value added measures can be very useful to management in evaluating the results of its past decisions and actions. It is through systematic and continuous evaluation of past performances that management can identify trouble spots and discover better ways of doing things. Value added ratios can be of great assistance to management in the matters of identifying the areas of its strengths and weaknesses and of designing better systems of planning and controlling future operations. Many proponents of value added accounting have expressed the belief that a substantial improvement in labour productivity can be achieved by management if it links up the systems of

providing incentives to labourers with value added. Management can prepare separate value added statements in relation to the different segments of the business and these segmented statements can be more useful than a single consolidated statement in providing a basis for determining the directions in which improvements can be achieved. The segmenting of the business is necessary particularly when the different segments of the business differ significantly with regard to their risks, rates of growth, flexibility of operations and vulnerability to outside pressures.

There seems to exist some amount of confusion as to how value added data can be of use to parties external to the business firm. The financial statements business firms release for external use are designed to serve the information needs of a large number of parties. The various parties that are likely to be benefited by the information contained in published financial statements include investors, creditors, customers, professional financial analysts, security market participants, and taxing and regulatory authorities. But although published financial statements are aimed at serving the information needs of so many parties, their main focus of attention is, however, on investors and creditors. It is also believed by many that if financial reporting can satisfy the information needs of investors and creditors, the information needs of many other parties are automatically satisfied. The decisions that investors and creditors take concerning the business firm are respectively the investment and the credit decisions. These parties look to financial statements for information needed to make rational investment and credit decisions. Financial statements are not the only source from which information relevant to decision making is collected by investors and creditors, but they are definitely the major source of such information. As a matter of fact, the information that investors and creditors seek to collect from published financial statements is the information about the ability of the business firm to generate cash flows from its operations in the future. Whether or not a business firm will be able to generate sufficient cash flows from its future operations may be judged from the firm's past performances which are reflected in the basic financial statements and other supplementary data included in the reports published by the firm for use of external parties. Value added data can contribute significantly towards facilitating the processes of evaluation of past performances and of forecasting of future events by providing some useful additional insights into the operations of the firm. The value added-based ratios that are aimed at measuring the productivity of capital, productivity of labour, intensity of capital,

flexibility of operations, and the ability to generate cash internally can be of great use in providing such insights.

V. Some Controversial Issues in Value Added Accounting

The accountant has to encounter a number of controversial issues in computing the value added income of a business firm. First of all, there is the issue of depreciation. There are a number of conflicting viewpoints as to how the item should be treated in value added accounting. Depreciation is basically a measure of the services of tangible fixed assets consumed in the process of production of goods and services. In the discussion that has been made above in connection with examining the nature of the concept of value added, it has been mentioned that depreciation is an application of value added. But this can easily be contested. Tangible fixed assets in respect of which depreciation is computed are normally acquired by business firms from outside sources. The values of these assets are included in the value added computations of the vendors from whom they have been purchased. So logic demands that depreciation be included in bought-in items for, otherwise, there will be a double counting. But, despite this, many are in favour of excluding the item from bought-in items. Depreciation computation involves a great deal of subjectivity and it is mainly due to this that many are not prepared to include it with bought-in materials and services. The inclusion of depreciation in bought-in items raises the possibility of manipulation of value added income. The problem may, however, be overcome if value added income computation is accomplished in two stages. In the first place, value added income may be computed by deducting from sales revenue, the costs of bought-in materials and services excluding depreciation. The income that is computed in this way may be termed as "gross value added (GVA)". Depreciation may then be deducted from this gross value added to arrive at what may appropriately be referred to as "net value added (NVA)". For comparison purposes it is the GVA and not the NVA which should be used. This is how the problem of depreciation is tackled in the field of national income accounting.

Apart from the objectivity criterion mentioned above, there exists at least one more convincing reason why depreciation should be excluded from bought-in items. If depreciation is joined with retained profits and shown as an application of value added it may then give the value added statement some sort of a cash flow orientation. It may be mentioned here that if depreciation is combined with retained profits then the resultant figure can readily give an indication of the funds the business firm has

generated from its internal sources. A measure of the funds generated internally from the operations of the firm can, of course, be obtained even if depreciation is included wlth bought-in goods and services, but that will require some additional calculations.

The treatment of unsold goods is another important controversial issue in value added accounting. Value added income is defined in accounting as the excess of sales over bought-in goods and services. But the value of output produced by a business firm during a specified period of time may not be equal to the sales that have been effected by the firm during that period. The two values will be different if closing stocks of work-in-progress and finished goods are different from opening stocks of work-in-progress and finished goods. If the sum total of the former two items is greater than the sum total of the latter two items then the value of output that the firm has produced in the concerned period is definitely higher than the value of the period's sales. In a situation like this value added income will be understated if it is computed on the basis of sales. The income will be overstated when the situation is just the reverse (i.e., opening stocks exceeding closing stocks). One way of solving the problem is to adjust sales value for net change in inventories. But this will not remove the anomaly altogether. Sales include a profit element, but inventories are normally taken at costs. So even after making the stated stock adjustments value added income will still continue to be either understated or overstated. The magnitude of the overstatement or understatement will, however, be small. This problem can be solved if stocks are valued not at costs but at market prices. But such a course of action will lead to a violation of the principle of realisation.

Another alternative approach to the tackling of the problem is to eliminate altogether, wages, depreciation and other elements of costs, if any, from stock valuation, and to confine the value added application only to those amounts that are related to the period's sales. But if this practice is actually adopted there will then arise some divergencies between the profit and loss account and value added statement figures. Confusion may therefore, be created in the minds of the financial statement users. So the first alternative seems to be preferable to the second one.

The treatment af taxation is a third important controversial issue in value added accounting. The types of taxes a business firm is required to pay are many and varied. They include income taxes, stamp duties, licence fees, local taxes, customs and excise duties and rates. There are many business firms that treat all sorts of taxes payable to the government as application of value added. Others show only income taxes and the other

taxes that are levied on the basis of profits as application of value added. Excise and customs duties and similar other indirect taxes are included by these business firms with bought-in items. This latter practice seems to be quite logical. When tax burden is determind by the level of consumption of goods and services, there can be little justification for treating such taxes as an application of value added.[7]

Besides the three issues discussed above, there are also certain other controversial issues in value added accounting. They include governmental grants and subsidies, foreign currency losses, research and development costs, income from investments in financial assets (i.e., corporate securities, bank deposits etc.) and extraordinary gains and losses. No doubt they are very important issues, but they will not be discussed here in detail because that is not necessary in the context of the present study. The issues of depreciation, inventories and taxation have been discussed at length because these issues have a significant bearing on the magnitude of value added measures.

VI. Limitations of Value Added Income

Value added income suffers from a number of shortcomings and because of them, many accounting writers are not prepared to put much reliance on such income as an index of business performance. There are some who are of the opinion that the data contained in the value added statement are not capable of adding anything significant to the information content of the basic financial statements which are made up of the balance sheet, profit and loss account and the funds or cash flow statement. Much of the information that value added data are designed to convey can be obtained, it has been argued, by a careful analysis of the figures contained in the basic financial statements. Some have even criticised value added accounting by saying that if it can add anything, it can add to confusion. This is indeed exaggeration.

Value added accounting does not recognise the special role that profit plays in the field of business. In the value added statement, profit is treated almost at par with other items. The main emphasis of the statement is on value creation and value allocation. Profit is undoubtedly a part of value added, but value added maximisation does not necessarily lead to maximisation of profits. A business firm is able to maximise value added by adopting a number of inefficient policies but it cannot maximise profiits in such a way. For example, a business firm can maximise value added by producing inferior products or by producing goods or services which it could otherwise procure from outside sources at lesser costs. Such

actions are detrimental to the profitability of the business firm. But if management is given to understand that its performance is being judged by the users of financial statements in terms of value added, then a tendency may arise on its part to maximise value added income even by producing products whose selling prices do not cover the whole of material and labour costs. The fate of a business firm whose value added is maximised in this way can easily be imagined.

There is no denying the fact that value added can be maximised by taking inefficient and unsupportable decisions, but how far management will really be induced to do this is a matter of doubtful proposition. If value added is actually maximised by taking inefficient or suboptimal decisions, this fact cannot long be concealed from the sophisticated financial statement users. The impact of all bad decisions will ultimately be reflected in the different value added ratios that are normally used to measure business performance. It is not sensible to assume that the users of financial statements will always be guided simply by the absolute size of value added.

Truly speaking, the most serious limitation of value added data stems from lack of any uniformity among business firms in the matter of preparation and presentation of value added measures. Differences are encountered mainly in the areas of treatment of items like depreciation, taxation and unsold stocks. The users of financial statements always need comparable information. Comparability of financial statements between firms is greatly impaired when such statements are prepared by the firms using dissimilar principles and rules.

VII. "Added Value" : An Alternative Index of Business Performance

A group of economists of London Business School (LBS) has recently developed a new technique of measurement of business performance which is based on what these economists have termed as "added value". This added value is completely different from the concept of value added with which business people are familiar. LBS's added value is concerned with measuring "how much more a firm's output is worth than all its inputs of materials, labour and capital". Viewed from an operational perspective, added value is equal to operating profit adjusted for depreciation minus capital charge. The term 'capital charge" is used to mean some sort of a notional charge which is computed by multiplying the current cost of capital employed by the interest rate on risk-free bonds.

The idea of treating the cost of capital as a cost of doing business is a very logical one. The conventional accounting profit cannot give a

realistic view of the surplus generation of the business firm because such profit is computed without deduction of the cost of proprietary capital. So, what is reported by the accountant as "profit" is not profit in the real sense of the term. A business firm should generate from its operations at least that amount of surplus wealth which can be earned easily by investing the capital in risk-free securities. Profit in the real sense of the term can be said to have been earned only when the surplus wealth generated by the business firm exceeds this opportunity cost.

The conventional ROCE is always biased in favour of labour intensive firms. It is also likely to be influenced heavily by the ways business firms are financed. The ratio of added value to capital employed is free of all these defects. LBS's final ranking of firms is accomplished on the basis of the ratio of added value to sales. Since added value is computed after taking into consideration the charge for utilisation of capital, the added value to sales ratio is not, unlike the conventional sales margin ratio, biased in favour of capital intensive firms.

If LBS scale is used to measure business performance, most of the business firms which come to be regarded as highly profitable ones by the conventional standards will start exhibiting different pictures. The applicability of LBS performance measurement scale is, however, constrained by the non-availability of current cost data. Historical cost data may be used as a substitute, but that will result in an understatement of capital charge.

Added value can be accomodated within the framework used to measure and report value added data. But this will call for a slight reorientation of the data that appear on the application section of the statement. Under the new arrangements, interest and dividend will be replaced by a consolidated figure known as "capital charges". Since capital charges are computed on a notional basis, the amount of such charges are likely to be quite different from the sum total of interest and dividend. Retained profits shown in the conventional value added statement will be replaced in the modified system by what LBS economists have referred to as added value. But this reorientation should be attempted only if it can be demonstrated that by doing this, the usefulness of value added accounting can be enhanced significantly.

VII Concluding Comments

Business performance measurement is a very complicated task. Yet, it has got to be done. The performance of a business firm is normally measured in terms of profits. But profits are not a foolproof index of

measurement of business performance. In spite of this, profits are being used widely as an index of business because no other reliable alternative performance measurement index is available. Efforts have been made in recent years from some quarters to explore the possibility of utilising value added data as a basis of measurement of business performance. A number of ratios based on value added data have been developed and such ratios are being used on an experimental basis to see if they can offer any useful insights into the various key aspects of business operations. Many are convinced that if value added ratios are used intelligently they will open up new horizons in the frontiers of financial analysis.

There still exist some misconceptions among business people as to the real objective of preparation of the value added statement. Misconceptions also exist as to the nature of the information that the statement is designed to provide. Efforts should be made to dispel all such misconceptions. There are some who are so enthusiastic about value added accounting that they have started looking upon it as a substitute for profit accounting. This is not the case. Value added accounting can by no means be a substitute for profit accounting. The main objective of preparation of the value added statement is to expand the information base of financial accounting and reporting through providing some additional data. The usefulness of value added measures should, therefore, be judged from this perspective.

There does not exist any uniformity among business firms in the matter of preparation and presentation of value added data. To maintain comparability between firms, some sort of a uniformity is needed in the methods of identification, measurement and reporting of value added data. The achieving of this uniformity may greatly be facilitated if an accounting standard prescribing the principles of preparation and presentation of the value added statement is promulgated by the authoritative body responsible for setting and implementing standards in relation to financial accounting and reporting.

REFERENCES

1. The term "capital employed" can have a number of interpretations. It is sometimes used to mean net assets and at other times it is used to refer to fixed assets plus working capital. The two will, of course, be identical if the firm has no long-term loans. There are also situations when the term is used to denote all operating assets of the firm. It is the definition of capital employed adopted which determines how profits should be interpreted.

2. Readers not familiar with the technique of how the constituent ratios of the ROCE can be computed are advised to refer to the pyramid of ratios devised by the Centre for Interfirm Comparisons Ltd., a body established by the British Institute of Management (*Efficiency Comparisons within Large Organisations*, B. I. M. and the Centre for Interfirm Comparisons, 1962).

3. For an historical perspective of the evolution of the value added concept of income, see *Value Added Accounting* (Ch. 2) by G. Sinha (Book World, Calcutta, 1983).

4. Accounting Standards Steering Committee, *The Corporate Report*, 1975.

5. Labour productivity may improve as a result of an increase in the intensity of capital investment This fact has to be borne in mind while interpreting the labour costs to value added ratios. The intensity of capital can be measured by the ratio of labour costs to capital employed. These two ratios should be studied simultaneously.

6 A detailed discussion of the value added ratios is available in *The Value Added Statement* by M. F. Morley (Gee & Co., London, 1978).

7. For a detailed analysis of how different types of taxes should be treated in computing value added income, see an article, "Value Added as a Focus of Attention for Financial Reporting" by B. A. Rutherford (*Accounting and Business Research* Summer, 1977 (p. 215-220).

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IMPLEMENTATION OF ACCOUNTING STANDARDS IN PUBLIC SECTOR ENTERPRISES OF GUJARAT—A CASE STUDY

*Bhairav H. Desai**
*Harish S. Oza**

This study is aimed at examining how far the financial accounting and reporting practices of some selected public sector enterprises operating in the state of Gujarat conforms to the standards formulated by the ICAI, statutory requirements and the guidelines issued by the BPE.

I. Introduction

The objective of corporate reporting is to communicate economic measures of and information about the resources and performance of the reporting entity useful to those having reasonable rights to such information.[1]

The International Accounting Standards Committee (IASC) has issued an Exposure Draft on May 1, 1988 on 'Proposed Statement Framework for the Preparation and Presentation of Financial Statements. It stated thus : 'The objective of financial statement is to provide information about the financial position, performance and changes in financial position of an enterprise that is useful to a wide range of potential users in making economic decisions. It also shows the results of the stewardship of management or the accountability of management for the resources entrusted to it'. Public Sector Enterprises differ from others in the field of business only in respect of ownership. So far as the objectives are concerned the differences are only of degrees and not of kind. In the situation, needless to mention, these enterprises have also the necessity of conveying information about their performance in terms of surplus creation and its disposition among others. Reporting practices in the context of public sector enterprises are also now recognised as an effective mechanism

* Faculty members, Post-graduate Department of Commerce, Gujarat University, Ahmedabad.

for discharging their Public Accountability requirements. Accounting standards are designed to bring uniformity in the Accounting Practices because in the views of many, more uniform accounting means scientific accounting. In June 1986, the Govt. of India appointed a committee to evolve uniform accounting policies and practices for the Central Public Sector Enterprises while remaining within the overall framework of Generally Accepted Accounting Principles and Concepts. The committee went into details of various accounting standards, guide notes and statements issued by the ICAI and recommended in December 1986, adoption of standards and guide notes on specific topics subject to certain additions and amplifications which the committee found necessary in the case of Central Public Enterprises. By a recent circular the Bureau of Public Enterprises has advised the Public Enterprises to comply with these recommendattions[2]. With these developments in the background, the theme of the present exercise is to :

(i) highlight the external financial reporting practices in public enterprises, and

(ii) examine, through empirical analysis, the disclosure practices in Public Enterprises in the State of Gujarat (Appendix –B).

For the purpose of the study, the Annual Reports of the Public Enterprises in the state of Gujarat covering a period of eleven years from 1977-78 to 1987-88 and also the Accounting standards developed by the ICAI upto the end of 1988 will be considered. Before going to do this it will be relevant to give an idea about the dimension of the Public Enterprises in the State of Gujarat itself.

2. Importance of PEs in Gujarat

From a humble beginning in 1960, Gujarat has now progressed to be a leader on the industrial scene. Development, since then, has been phenomenal and the world now knows Gujarat as a state leading the industrial progress of the nation from upfront. The State boasts of 1200 large & medium and 88,000 small industrial units which turn out production worth Rs. 30,000 crores. The State Government has played a pivotal role in this field through its agencies – State undertakings.[3]

The State-level public units play a predominant role in the development of economy of the state. With the formation of Gujarat State in May 1960 there were four PEs, namely (i) Gujarat Electricity Board (ii) Gujarat State Road Transport Corporation (iii) Gujarat State Financial Corporation, and (iv) Gujarat Housing Board. Since then, 47 PEs have been

incorporated upto 31st March, 1988—34 PEs as Government Companies and 13 PEs as Statutory Corporations.[4]

As on 31st March, 1989, there were 827 State enterprises in the country with an investment of Rs. 5163.98 crores of which Gujarat has 39 PEs (4.71%) having an investment of Rs. 209.25 crores (4.05%).[5]

The total resources of the PEs of Gujarat at the end of 1987-88 were Rs. 5059.09 crores in which State Government has invested Rs. 2195.11 crores (i.e.43.49% of total resources).[6] In short, the PEs of Gujarat have displayed tremendous achievement in the development of the State. To highlight the progress at a glance, we have tabulated the information in Appendix-'A'.

3. Existing Framework of Financial Reporting

It is difficult to trace the evolution of Financial Statements, but modern accounting appreciated from the very inception the need for a summary of the accounts of a business or an enterprise.[7] After all, accounting is a social phenomenon. The development of principles of accounting is based on concepts, postulates and conventions and some prevailing practices recognised by the requirements for statutory disclosure.

There is apparently no difference between the public sector enterprises and private sector enterprises with respect to their preparation of financial reports, as most of the PEs in India are incorporated under the provisions of the Companies Act. 1955. However, there is more disclosure in case of PEs in India. The financial reporting practices in PEs are guided by—

(i) The statutory requirements under the Companies Act, 1956.

(ii) The guidelines issued by the Bureau of Public Enterprises (BPE) and

(iii) The guidelines provided by the Institute of Chartered Accountants of India (ICAI).

(1) *Statutory Disclosure* :

The Companies Act, 1956, (Sections 209 to 233 B) provides the statutory requirements in connection with the accounts and audit of the company which are also applicable to PEs incorporated under the said Act. These are as under :

(a) Profit & Loss Account (Schedule VI Part-II Sec. 210(1) (b)) or Income Statement (Sec. 210 (2)).

(b) Balance Sheet (Schedule VI Part-I Section 211).

(c) Board of Directors' Report (Sec.217).

(d) Auditor's Report (Sec 227 & 233 (b).

The financial statements (either vertical or in horizontal form) should also include notes on accounts explaining accounting policies.

Alongwith these legal requirements, the Annual Reports (AR) of PEs are also required to disclose the following information under section 619-A:

(i) Review of Accounts by the Indian Audit and Accounts Department,

(ii) Comments of the Comptroller and Auditor General of India (CAG), and

(iii) Replies to the comments of the CAG.

(II) Guidelines Issued by BPE

As PEs are owned and controlled by the Government, they are expected to make more disclosure in respect of resource management, accountability, audit and external reporting. In view of this, the BPE has laid down following guidelines in the year 1968 for AR :

(i) a summary of financial results indicating the annual turnover, profit after depreciation & interest but before tax provision for taxation, net profits, proposed dividend and appropriation to reserves & provisions ;

(ii) change in the capital structure ;

(iii) change in the pricing policy ;

(iv) change in the accounting methods regarding depreciation & inventory ;

(v) main events which have influenced the production and profitability ;

(vi) general order-book position and production performance, capacities and targets ;

(vii) export achievements and foreign earnings ;

(viii) any achievements in import substitution or development of new product ;

(ix) employer-employee relations, strikes, lockouts, training and other incentive schemes, etc.

(x) staff welfare activities, township, education and health facilities, and

(xi) a brief summary of the operational results for the last three years and future planning.

Further, in respect of social accounting-new dimension, the BPE has made it obligatory on the part of PEs to furnish all disclosures of Social Overheads[8].

These are as under :

(i) expenditure on township
(ii) maintenance of school & educational facilities
(iii) additional medical facilities
(iv) subsidy on transport
(v) subsidies for social & cultural activities
(vi) maintenance of dairy farms & libraries
(vii) vegetable farms
(viii) expenditure incurred towards family planning
(ix) community drinking water-supply programmes
(x) drought flood relief

III. Guidelines Provided by ICAI

The International Accounting Standards Committee (IASC) has prescribed International Accounting Standards (IAS) (IAS-I to IAS 26) which are generally accepted by the national body of the respective country. In India, the ICAI is a member of IASC and has agreed to support the objectives (ASB) on 21st April, 1977. The Accounting Standards (AS) issued by ASB of ICAI are as under[9] :

(1) Disclosure of Accounting Policies (AS-1) (Nov.1979)
(2) Valuation of Inventories (AS-2) (June 1981)
(3) Changes in Financial Position (AS-3) (June 1981)
(4) Contingencies and Events Occuring after the Balance Sheet Date (AS-4) (Nov. 1982)
(5) Prior Period and Extraordinary Items and Changes in Accounting Policies (AS-5) (Nov.1982)
(6) Depreciation Accounting (AS-6) (Nov.1982)
(7) Accounting for Construction Contracts (AS-7) (Dec.1983)
(8) Accounting for Research aud Development (AS-8) (Jan.1985)
(9) Revenue Recognition (AS-9) (Nov.1985)
(10) Accounting for Fixed Assets (AS-10) (Nov.1985)
(11) Accounting for the Effects of Changes in Foreign Exchange Rates (AS-11)

In the absence of ASs for disclosure, the financial statements (FS) may present either too much or too little information to its end-users and it creates misunderstanding and confusion among the users in the analysis and interpretation of FS[10]. Therefore, for implementing AS, the Sengupta Committee suggested that a group consisting of representatives of CAG professionals in the field including PEs and BPE should be formed without delay to evolve accounting policies for PEs[11].

A committee to evolve Accounting Policies for Central Public Enterprises was set up under the chairmanship of Shri K.V.Ramakrishna. The Committee has recommended the adoption of AS on compulsory basis subject to certain modifications found necessary to make them more meaningful in respect of PEs[12].

Thus, the financial reporting practices of PEs in India are required to be elaborate and given more disclosure as compared to private sector enterprises. The implementation of AS are expected to harmonise the diverse accounting policies and practices in PEs.

4. Observations

It would be recalled that the theme of this paper was to highlight the external financial reporting practices in PEs and examine, through empirical analysis, the disclosure practices in PEs of Gujarat state, the details of which were given in Annexure B.

A study of 'Public Enterprises Annual Report' from First to Eleventh prepared by Govt. of Gujarat, available upto 1987-88, indicates that :

(*a*) Some of the PEs have delayed the publication of their annual accounts by as many as two to three years. There are 22 out of 51 enterprises which have not finalised their accounts (as per the statement 'Delay in Finalisation of Annual Accounts' shown on Page No. 7 of PEs Eleventh Annual Report 1987-88). Therefore, it means that even if their accounts disclose fully, all the relevant information, the utilisation of such reports is reduced to a great extent. In other words, such PEs have not conformed to even the minimum requirements of disclosure in time which are compulsory by the statute.

(*b*) It is interesting to assess the degree of disclosure afforded by the PEs which had conformed to the minimum statutory requirements and whether they could have disclosed still more. Such enterprises are 35 in number.

(1) Since they have finalised their accounts in time, they seem to have a comparatively better accounting information system. They have submitted all the necessary reports and accounts which fulfil statutory requirements.

(2) Taking into consideration the guidelines issued by BPE, it appears that all PEs mentioned above disclosed all relevant information in their annual reports. It is true that some of

the items required to be presented are clubbed together e.g. disclosure regarding staff welfare expenses is required to be made separately in addition to expenditure on training employees. This is, in our view, not a remarkable departure from the observation of guidelines. To put it briefly, all PEs which have delayed reporting have disclosed all information as applicable to them under the guidelines. Therefore it appears that PEs are in no way inferior to private enterprises in regard to disclosure of information as recommended by their statutory body.

(c) The AS recommended by ICAI are also applicable to PEs. As mentioned earlier, the Ramakrishna Committee has recommended the adoption of all such ASs to all PEs after making necessary modifications. In an attempt to understand how far the reporting in PEs conforms to the AS, as laid down by ICAI, we have considered the modified version of such AS as worked out by BPE as follows :

AS-1 : DISCLOSURE OF ACCOUNTING POLICIES

The Committee to Evolve Accounting Policies for Central Public Enterprises, Govt. of India, mentioned earlier, recommended that the policies of PE should be subservient to AS of ICAI.

Thus AS-1 is adopted as such. In addition to this, the Committee has listed specific major areas in regard to which accounting policy may be disclosed.

The study of annual reports of Gujarat PEs conforms to this standard.

AS-2 : VALUATION OF INVENTORIES

The Committee has recommended that the historical cost of inventories should be determined by FIFO or Weighted Average Cost formula. The LIFO method as suggested by ICAI in addition to the above two methods is not recommended for PEs, perhaps because it is intended that the inventory may be valued at the utmost current prices. However, it is true that it might adversely affect the cost of production and revenue from sales.

Although the inventories are shown to be valued at 'cost' or 'net realisable value', whichever is lower, the basis of cost is missing i.e. whether

the inventory is valued at FIFO or Weighted Average Cost is not specifically mentioned in the reports. So, the AS-2 is not fully implemented in PEs of Gujarat.

AS-3 : CHANGES IN FINANCIAL POSITION

The Committee has accepted the proposed AS-3 so that movement of funds during a particular accounting period can be identified and its effect on financial position can be assessed. In addition to this, it has advocated a uniform format for showing financial changes for all PEs. It requires a separate statement to be prepared as regards the funds provided from or used in the operations of PE.

The study of PEs in Gujarat suggests that information regarding sources and uses of funds is given in the review on the accounts, but a separate statement is not prepared upto the end of accounting year 1987-88. It is a matter of further study whether such statement is prepared or not after 1988, as latest annual reports are not available. The previous year figures are also not disclosed in the report.

AS-4 : CONTINGENCIES AND EVENTS OCCURING AFTER THE BALANCE SHEET DATE

The AS-4 is accepted by the Committee. However, in respect of certain items, the manner in which accounting effect is reported may vary from PE to PE and therefore the specific treatment suggested is as follows :

(*a*) the provision for liabilities on liquidated damages be made only if their estimates are reasonable and have accrued as per rules and regulations.

(*b*) benefit (gain) on liquidated damages should be recorded only if it is certain to be realised, and

(*c*) normally claims should be treated as contingencies. A list of contingencies has been prepared.

A glance at the annual reports of PEs working in Gujarat does show that notes on accounts do disclose reasonably well on all contingent liabilities like claims not acknowledged as debts excluding interest and estimated amount of capital contracts remaining to be executed and not provided for.

It appears that events occuring after Balance Sheet date have not been adjusted or disclosure to that effect is not given in the annual reports

of PEs in Gujarat. Even a statement that it is not possible to make a reasonably true estimate is missing from annual reports of PEs herein.

AS-5 : PRIOR PERIOD AND EXTRAORDINARY ITEMS AND CHANGES IN ACCOUNTING POLICIES

The Committee does not agree with the standard as advocated by ICAI in regard to changes in accounting policies. However, it has recommended the standard relating to disclosure and presentation of prior period and extraordinary items. It has suggested that the changes in accounting policies likely to result in more suitable presentation of annual reports should be referred to BPE before the same is implemented by any PEs.

The annual reports of selected PEs of Gujarat during the period of our study have not mentioned any significant changes in accounting policy adopted by them. Perhaps there may not have been any such changes.

The standard relating to prior period items seems to have been duly adopted, e.g. the annual report of 1987-88 of GCEL mentions as follows :

"The Company has adopted the practice of making Prior Period Adjustment Account in respect of all transactions above Rs. 10,000/- pertaining to period prior to the current period."

AS-6 : DEPRECIATION ACCOUNTING

The standard relating to accounting of depreciation as suggested by ICAI has been advocated by the Committee. The circulars of BPE in general are supposed to follow straight line method but at the same time they have to maintain record as per written down value method, keeping in mind the provisions of I.T.Act.

It appears that PEs of Gujarat maintain depreciation as per WDV method but they have not adopted straight line method as suggested by the Committee. They do conform to the accounting treatment of depreciation keeping in mind the provisions of the Companies Act, 1956 regarding various classes of blocks of assets. Disclosure on depreciation is meaningful in certain cases. The following statement appears in the annual report of GMDC for the year 1987-88 :

NOTES ON ACCOUNTS

"In respect to addition to fixed assets during the current year, depreciation has been provided as per the WDV method for the entire year

at the rates prescribed under I. T. Rules 1962, without considering the Amendments of the Companies Act, 1988 as per the legal advice obtained by the company. Hitherto, the depreciation has been provided for the entire year and accordingly, this change has resulted in additional provision for depreciation amounting to Rs. 692.93 lakhs and correspondingly the profit is understated."

AS-7 : ACCOUNTING FOR CONSTRUCTION CONTRACTS

Regarding this standard, ICAI has recommended two methods of accounting—

(i) Percentage of completion method, and

(ii) Completed contract method.
The Committee on PEs has strictly advocated the adoption of first method only. PEs will have to take prior permission of BPE before adopting the second method.

This standard does not seem to be applicable to the selected PEs under study.

AS-8 : ACCOUNTING FOR RESEARCH & DEVELOPMENT

The ICAI and the Committee agree to the requirement of disclosure of total R & D cost in Profit & Loss Account for the accounting period and deferred expenses under the head of Miscellaneous Expenditure in the Balance Sheet.

The annual reports of the PEs under study appear to disclose significant information of R & D cost, e. g., the Annual Report (AR) of GECL for the year 1987-88 mentions :

(i) R & D pertaining to development of new lines and engineering activities required to advance the design.

(ii) R & D expenses are apportioned with the help of total direct labour hours spent by the development and engineering department as a proportion to total labour hours of production department and development and engineering department.

(iii) During the year, the amount of Rs. 163.61 lakhs (previous year Rs. 134.15 lakhs) has been carried forward as deferred expenses to be apportioned to P & L A/c on its completion.

R & D expenses carried over to be apportioned or written off on

the completion of the development have been mentioned under the head 'Miscellaneous Expenditure' for which a separate Schedule – L has been maintained.

AS-9 : REVENUE RECOGNITION

The Committee has recommended that, as suggested by ICAI, the revenue from sales and services can be recognised when it is possible to be accurate about its recovery— whether in cash or not. In addition, a letter of subordinate or a letter of acceptance from the proper authority is to be taken as enough proof of revenue recognition.

Most of the PEs seem to follow this standard—an exception being GMDC where Income & Expenditure are accounted for on cash basis.

AS-10 : ACCOUNTING FOR FIXED ASSETS

The Committee has agreed to the standard as developed by ICAI, with the exception of certain types of capital expense like the cost of roads built up by a PE. In such a case, the Committee has advocated the disclosure of such item as a capital expense, not represented by any assets owned by the PE. Such an expenditure has to be written off during a period of five years.

All PEs studied herein seem to follow the above standard reasonably well.

AS-11 : ACCOUNTING FOR THE EFFECTS OF CHANGES IN FOREIGN EXCHANGE RATES.

AS-11 deals with accounting for transactions in foreign currencies in the financial statements of an enterprise and with transactions of the financial statement of foreign branches into rupees for the purpose of including them in the financial statements of the enterprise.

A study of the financial statements of the selected PEs of Gujarat reveals that all the PEs which transact business with outside countries do incorporate the relevant information in their annual reports, i.e.

(a) Expenditure in the foreign currency during the financial year on account of :

(i) Technical know-how, royalty, professional consultancy & interest ;

(ii) Other matters including remittance of comission on export sales, foreign travelling etc.

(GSEC Ltd. Annual Report-1986-87, Page 28)

(b) Exchange variation on loans—

The liability in respect of loans repayable in foreign currencies is translated into rupees taking into consideration the exchange rate prevailing on the date of Balance Sheet.
(GCE LTD. : Annual Report 1987-88, Page 35).

AS-12 : TREATMENT OF EXPENDITURE DURING CONSTRUCTION PERIOD

Apart from the AS Nos. 1 to 11 developed by ICAI, the Committee has advocated the above standard and issued the guidelines in addition to the relevant circular of BPE. Accordingly, the construction period is supposed to be over when the plant is ready for the commercial production. It is not important as to when the actual production starts and therefore expenses are to be treated as capital or revenue expenses accordingly.

The practice followed by PEs differ. In the case of Gujarat Amino Chem Ltd. the annual report of 1986-87 contains the relevant statement : "The company has not started any manufacturing and trading operation. Therefore, all expenses incurred up to 31-3-86 have been transferred to P & L A/c."

However, the amount charged to P & L A/c has been added to the amount of current year's loss. This means that they have not been considered as capital expenses.

(d) It appears that the selected PEs have not made any conscious efforts in incorporating some of the emerging dimensions leading to greater disclosure, such as Accounting for Changing Price Level, Accounting for Human Resources, Preparation of Value Added Statement, Cost-Benefit Analysis Statements, etc.

5. Conclusion

It appears that the selected PEs included in our study seem to conform to the statutory requirements as far as possible. The guidelines of BPE regarding financial reporting practices are generally followed by all PEs. Our study leads to a mixed reaction regarding the question whether PEs have adopted accounting standards fully and in true spirit while preparing their annual reports. It would not be out of the way to expect that PEs would come forward and provide a lead in the implementation of AS. However, it seems to us that there is no conscious

effort on the part of the managements of PEs in adopting accounting standards advocated by ICAI and as modified by BPE in certain cases.

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1	2	31-3-78 3	31-3-85 4	31-3-86 5	31-3-87 6	31-3-88 7
1.	TOTAL NO. OF PEs	35	50	50	61	51
2.	No. of PEs whose accounts have been taken into consideration	28	41	38	44	35
3.	Total Financial Resources (Rs. crores)	1014.54	3769.92	4242.41	4688.79	5059.09
4.	Total Investment of State Govt. (Rs. crores)	415.72	1767.31	1973.51	2002.47	2195.11
5.	Capital Employed (Rs. crores)	762	2121	2231	2241	2403
6.	No. of PEs making Profits	15	24	24	24	21
7.	Total Profit after Income Tax	2.49	17.54	26.73	37.34	36.33
8.	No. of PEs incurring Losses	13	17	14	20	14
9.	Total Loss (Rs. crores)	(–) 7.23	(–) 74.86	(–) 164.98	(–) 114.12	(–) 179.35
10.	Net Profits or Losses	(–) 4.74	(–) 57.32	(–) 138.25	(–) 76.78	(–) 143.02
11.	Total Turnover (Rs. crores)	305.22	1310.49	1478.82	1843.13	2190.21
12.	Percentage of Turnover on Capital Employed.	40.32	61.78	66.28	82.25	91.12

(Source : Govt. of Gujarat : Public Enterprises Eleventh Annual Report, 1987-88, p. 12)

APPENDIX—B

1. Gujarat Mineral Development Corporation Ltd. (GMDC) (1987-88)
2. Gujarat State Export Corporation Ltd. (GSEC) (1986-87)
3. Gujarat Small Industries Corporation Ltd. (GSIC) (1987)
4. Gujarat Communication & Electronics Ltd. (GCEL) (1987-88)
5. Gujarat Industrial Investment Corporation Ltd. (GIIC) (1986-87)
6. Gujarat Nylons Ltd. (1986-87)
7. Cement Corporation of Gujarat (1986-87)
8. Gujarat Amino—Chem. Ltd. (1986-87)
9. Steel Corporation of Gujarat Ltd. (1986-87)
10. Gujarat Mulco Electronics Ltd. (1986-87)
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ACCOUNTING EDUCATION IN INDIA— CURRENT ISSUES

*N. M. Khandelwal**

In this paper the author examines the current state of accounting education in India and suggests measures as to how the deficiencies underlying the prevailing systems can be removed.

Introduction

The present paper attempts to examine various issues confronting accounting education in India at different levels. The recent developments, requirements of twenty-first century, current debates and future trends have been considered and proposals have been put forth for healthy development of accounting education in India. Accounting education consists of the study of book-keeping and financial accounting, cost accounting, management accounting, taxation and auditing.

1. School Level

As a part of middle and secondary level education, book-keeping used to be taught. At higher secondary level, partnership and company accounts (elementary) were taught. Thus, book-keeping used to be taught as a part of general education and then as a major component of school level specialisation of commerce at 9th, 10th and 11th standards. After the introduction of 10+2+3 scheme, now teaching of commerce, including book-keeping and accounts, as a part of general education has been completely stopped. Now its study is provided only at plus two stage as specialisation only. Looking to the increasing importance of the knowledge of element of book-keeping as a part of general education, I consider this change as highly retrograde. This needs an urgent review at national school education policy level.

* Professor & Head, Department of Commerce and Business Administration, Saurashtra University, Rajkot—360005.

If we go through the new plus 2 level syllabus for accounting, it includes Book-keeping, Financial Accounting, Elementary Cost Accounting, Financial Statement Analysis, etc. It appears to be overloaded and, I am afraid, it may scare away students from this specialisation.

2. College Level

At first degree level, accounting is being taught as a core as well as a specialisation subject under the faculty of Commerce in all the Indian Universities. Included in the papers taught are Advanced Financial Accounting, Cost Accounting, Taxation, Auditing and some part of Management Accounting. At optional level and B. Com (Hons) level, papers like Management Accounting, Advanced Accounting, Advanced Cost Accounting, Taxation and Tax Planning are being taught. It is worth mentioning that elements of Book-keeping and Accounts is being taught at B.A., B. Sc., and B.E. programmes also as a subsidiary subject.

At post-graduate level, different universities have different course-structures. About 6 Universities are having M. Com. (Accountancy and Finance or Business Statistics) as specialised degree with at least 6 papers out of a total of 8 papers belonging to this specialisation. Then, there are universities having a 2 to 4 paper specialisation in accounting. Generally, Management Accounting is taught as compulsory paper at M. Com. level.

A few universities have started job-oriented diploma programmes at undergraduate level like Diploma in Stores Accounting, Diploma in Farm Accounting, and at postgraduate level like Diploma in Cost and Works or Cost and Management Accounting, Diploma in Taxation, etc.

At various management programmes like M.B.A., D.B.M etc, Accounting for Management is being taught as a foundation course and Cost and Management Accounting, or Accounting for Control and Taxation as specialisation under the title 'Finance'.

At university level, accounting education is deemed as 'academic' and, programmes run by professional institutes like the Institute of Chartered Accountants of India and the Institute of Cost and Works Accountants are deemed as 'professional'. This type of dichotomy is open to a serious debate. Now time has come when we should initiate a national-level dialogue/debate on this issue and review the relationship between those Institutes aud Indian universities, keeping in view the overall interest of the student community and national economy.

3. Emerging Nature and Scope

The very concept of accounting has undergone a basic transformation over the past three decades from a mere art or practice to a serious 'science of accounting'. This calls for giving due weightage to the study of accounting theory. Now it is being realised that accounting is an inter-disciplinary area of study. It draws its straws from economics, law, quantitative techniques, and financial management. During the past three decades, researchers have focussed their attention on social and behavioural aspects of accounting also. Thus, social responsibility accounting, behavioural accounting, human resource accounting and accounting for price-level changes are engaging our attention. The growth of global business relations has fostered development of International Accounting and a move towards regional and global standardisation or harmonisation of accounting. International Accounting and Accounting Standards have become a growing area of study now. After the introduction of computerisation, the basic book-keeping, material accounting, labour accounting, etc are becoming computer-operated instead of manual. Auditing under computer environment is a new emerging area of study. The traditional teaching of book-keeping, cost accounting, auditing, etc will require basic changes now in order to take care of these developments.

A most significant development which has received scant attention of accounting educators in India is interrelationship between accounting and management information systems. Since accounting is considered now as a decision-support system inside and outside an organisation, study of MIS and accounting must be given its due importance in Commerce courses.

It should be duly realised that accounting is very intimately aligned with quantitative analysis and MIS on the one hand, and financial management/control on the other.

In order to teach management and operational audit and social audit effectively (including sub-areas like environmental audit, energy audit, forex audit, etc), linkage with environment of business and management discipline should not be missed.

4. Changing Product Features

The accounting education's target product may be the accounting teacher, researcher, financial controller, tax manager, internal auditor, management auditor at higher level and accounting technician/assistant and middle-level accounting and finance executive at lower and middle levels. The ideal product features to meet with the challenges of this last decade of

the present century and the early part of the 21st century may be identified as—

(a) Sound theoretical accounting foundation ;
(b) Competence to write and speak with behavioural expertise ;
(c) Capacity to master computer skills.

5. Emerging Course Structures

Keeping in view the above-stated required product features, an attempt is being made here to evaluate the suitability of the proposed course structures.

(*a*) *Undergraduate level courses*

Let us evaluate the suggested course structure for B. Com. and M. Com. by the Curriculum Development Centre in Commerce. First of all we take-up B. Com. (Honours). It consists of the following course structure :

I Year	II Year	III Year
1. Business Organisation and Management	1. Higher Financial Accountancy	1. Income Tax Law
2. Business Laws	2. Cost Accounting	2. Auditing
3. Business Economics	3. Production Management	3. Personnel Management
4. Environmental Studies	4. Financial Management	4. Marketing Management
5. Financial Accounting	5. Monetary Economics	5. International Trade
6. Business Mathematics and Computer Awareness	6. Statistics	6. Public Finance
7. Communication Skills		

The above course structure appears to be quite rational and well balanced. The objective of first degree under the Faculty of Commerce cannot be to prepare specialists. From this angle, it is correct to give equal weightage to all the three core areas of study—Business Administration, Accounting and Applied Economics. Each one has got roughly equal number of papers. Care has also been taken to provide for foundation courses like environment studies, business laws, mathematics, computer awareness and communication skills. Various functional areas of management have also been assigned full papers separately. Statistics has also been allotted one separate paper. However, the major missing link is behavioural foundation consisting of elements of business sociology and

psychology, logic, etc. Nothing has been stated about development of oral communication skills. Economic planning and development are not included anywhere.

To my mind, the title of the programme should have been B. Com. (General) rather than B. Com. (Honours).

The C. D. C. has suggested a separate scheme for B. Com. (Professional) which is as follows :

First Year course structure is common with B. Com. (Honours) first year. Second year provides for 2 papers from each of the core areas :

Accounting

Cost Accounting
Accounting Practices for Small Units

Business Studies

Financial Management
Factory Organisation and Management

Business Economics

Statistics
Indian Financial Systems

Second Year course has 50% common courses with B. Com. (Honours) and 50% belong to professional streams. However, it is not clear how statistics has been put under the head, 'Business Economics'.

The B. Com (Professional) Third Year provides for 100% specialisation. The papers related to accounting area are :

(*i*) *Accounting*

1. Company Accounting
2. Computer Concepts and Cobol Programming
3. Auditing

(*ii*) *Taxation*

1. Customs and Central Excise
2. Income-Tax
3. Wealth Tax, Gift Tax, Sales Tax and State Excise.

A detailed study of internal audit in public sector, cost and management audits, social responsibility accounting and auditing, cost reduction techniques may be included in the detailed syllabus. It also appears necessary to include a study of management information systems.

When we talk about a professional course, the questions of admission eligibility, admission procedure, instruction and training, project work,

viva-voce, medium of instruction and passing standards must also have been answered unequivocally.

Number of students to be admitted and arrangements for practical training (internship) must also be specified. Ratio of guest faculty to core faculty, qualifications of the faculty and needs for faculty improvement programmes, model resource and minimum resource requirements, accreditation mechanism are also to be worked out.

It would be useful to compare the B. Com. (Professional) course structure suggested by the CDC with that suggested by the Education Committee of the International Federation of Accountants (IFAC) for development of accounting technicians[3]. Its course structure is as follows :

Preliminary

1. Basic Accounting
2. Communication
3. Business Administration
4. Numeracy and Statistics

Intermediate

1. Accounting
2. Elements of Information Systems
3. Business Law
4. Economics and Statistics

Final

1. Financial Accounting
2. Cost Accounting and Budgeting
3. Analysis and Design of Information Systems
4. Organisation and Financial Control
5. Public Sector Accounting and Auditing
6. Public Sector Organisation and Financial Control

The notable feature is the inclusion of management information systems whereas surprising exclusions are environment, computers and behavioural aspects of accounting. Auditing and taxation have also been ignored. The last omission may be on account of development of sub-specialisations within the area of accounting.

If elements of management information systems and behavioural aspects are included in B. Com. (Professional) course structure, it will be a superior course as compared to the one proposed by the IFAC.

It is noteworthy that the proposed B. Com. (Professional) course structure recognises accounting and taxation as separate sub-specialisations.

It is a step in the right direction. However, other sub-specialisations like internal auditing (including management and operational audits), public sector accounting and auditing, government accounting and auditing, cost and management accounting, financial services, macro or social accounting may also be added. This is necessary in order to provide for the needs of 21st century.

It should be understood clearly that university education in accounting should not aim at serving as a feeder to professional institutes like that of Chartered Accountants and Cost and Works Accountants. It must aim at preparing a professional who can stand in a competitive market on his own. As the law stands, our graduates cannot practise as statutory auditors. However, there are a good number of positions in industry, government and other organisations like financial controllers, finance executives, tax managers, management accountants, for which we may prepare our students. Moreover, independent practice as financial consultants, tax practitioners and management auditors can be visualised where B. Com. (Professional) degree holders can work with confidence and make a rewarding professional career.

(*b*) *Post-graduate Level*

A separate specialised post-graduate degree titled M. Com. (Accounting) has been suggested. It is debatable whether it should be titled as Master of Accounting and Finance (M. A & F) degree. The suggested course structure consists of the following papers :

1. Higher Company Accounts
2. Accounting Theory
3. Management Accounting
4. Management Control Systems
5. International Accounting
6. Operations Research and Computer Applications
7. Financial Management
8. Theory and Practice of Statistics
9. Direct Tax Laws
10. Tax Planning and Management
11. Investment Management

It is suggested that keeping in view the needs of 21st century, the proposed course structure be reconsidered in the light of the following comments :—

I. Core papers as compulsory may be thought of. These may be—

(1) Accounting Theory
(2) Statistical and Quantitative Tools for Business
(3) Management Information Systems and Computer Applications
(4) Accounting Research Methodology, Dissertation and Viva-voce.

II. Sub-specialisation (each consisting of four papers) :

(1) Financial Accounting and Auditing, International Accounting
(2) Cost and Management Accounting, Financial Control, Management Control Systems
(3) Taxation, Tax Planning and Tax Management
(4) Financial Analysis, Financial Services, Investment Management, etc.
(5) Internal Audit, Management Audit and Operational Audit etc.

Sectoral and regional studies may also be included wherever required. Public sector accounting and audit, government accounting and audit, social accounting, cooperative accounting and audit, accounting and audit for small business can be such examples. Agri-accounting can be a potential area of specialised study.

6. Organisational Structure

The prevalent pattern of one department under the faculty of Commerce will not be able to cater to the needs of the emerging course structure. To begin with, the faculty of Commerce will have to be restructured. Instead of Lecturer/Reader/Professor in Commerce, there must be Lecturer/Reader/Professor in Accounting. Sub-specialisations may be indicated as per requirement. Instead of College of Commerce/School of Commerce/Department of Commerce, there must be a separate Department of Accounting to be followed by full-fledged College or School of Accounting at a later stage. Such schools will have various departments for different sub-specialisations.

The M. S. University, Baroda and Rajasthan University, Jaipur have been pioneers in bringing about such restructurisations. Udaipur and Jodhpur Universities have also followed them. However, an overwhelming majority of universities are still hesitant to bring about this much needed reform. Now it is high time that the Indian Accounting Association and the U. G. C. take up this issue with various universities. This change is essential in order to make the implementation of new course structure feasible.

7. Teaching and Examination

Much remains to be done in both these vital areas. So far, the teaching of accounting has continued to be numerical example loaded. So is the case with the examination also. The teaching of concepts gets neglected. The examinees are in search of all the five numericals in order to obtain a high score. They go for tuitions and coaching. Teachers also earn handsome extra tax-free money. However, the students fail to explain basic accounting concepts even after getting 90% or more marks. They cut a very sorry figure when they face a selection committee. This distressing scenario must be changed now and science of accounting must be allowed to occupy a rightful place in teaching and examination.

8. Faculty Improvement

Till now accounting is recognised as a core area under the faculty of Commerce in general. Any M. Com. degree holder can teach Accounting papers alongwith Business Administration and Applied Economics. Only a few universities like the M. S. University of Baroda and University of Rajasthan, Jaipur have separate post-graduate departments of accounting with a specialised degree of M.Com. with Accounting and Finance/Accounting and Business Statistics, etc. where nomenclature of faculty position is Lecturer/Reader/Professor of Accounting rather than of Commerce and the prescribed qualifications is M Com. with Accounting and Finance/ Accounting and Business Statistics. Such universities are much ahead of the universities in general in the matter of development of specialised faculty for accounting. It is suggested that other universities should also move fast in this direction without wasting any more time. The U. G. C. should find some effective way out to make all universities follow this setup for the healthy development of accounting education.

A few universities which are already having separate departments for accounting will be well-advised to gear themselves to move in the direction of development of sub-specialisations like financial accounting, auditing, taxation, cost accounting and management accounting, financial management, quantitative techniques with computer accounting and MIS in order to meet the emerging challenges of manpower requirements of 21st century. Faculty should be recruited on the basis of these specialisations. Other universities should also strive to achieve this level of specialisation after completing the first stage of specialisation. It may safely be predicted that 21st century will require separate schools/institutes /faculty of accounting with separate departments for financial accounting,

auditing, taxation, cost and management accounting, financial management, quantitative techniques including computer accounting and MIS.

In North Indian universities, CA/ICWA without B. Com/M. Com is not considered eligible to teach at college and university level. In Gujarat and Maharashtra, they are recognised for the purpose of part-time faculty positions. The question of recognising CA/ICWA for faculty positions to teach accounting needs careful thinking to which I shall revert under the next heading.

As a part of Mehrotra Pay Commission for college and university teachers, now an M. Com. with atleast 55% marks is eligible for appointment as lecturer in the faculty of Commerce. Now national test for lecturership, which is being conducted by the U.G.C. (NET Division), is likely to be made compulsory for recruitment of lecturers. This test, also known as Junior Research Fellowship Test (JRF test), will become a qualifying test for registration as Ph.D level researchers. With this change, the CA/ICWA's eligibility for Ph.D level research under the faculty of Commerce will become meaningless. This issue of equivalence of CA/ICWA with M. Com. will have to be considered afresh now.

As things stand now, the U.G.C conducts National Test in Commerce as a whole in which three papers are there :

I Paper : General Intelligence, Aptitude test-objective type.

II Paper : Commerce-objective type. (all the subjects under the faculty of Commerce are covered).

III Paper : Specialisation area—
Accounting and finance, taxation and business statistics are the three alternatives choices available to the students of Accounting and Finance/Business Statistics. This paper contains 12 short answer questions of which all are compulsory and 3 essay type/numerical problem questions of which any two are to be answered.

Now a person will become eligible for appointment as Lecturer in colleges and universities if he/she has atleast 55% marks at M. Com and passes the national test. The same will apply for Ph. D level research registration also.

The present scheme of national test calls for some important changes. I would suggest that there be a separate test for accounting and finance/business statistics where second paper should consist of more objective type questions related to all papers falling under the core and specialisation area of accounting and third paper should provide for the

the various sub-specialisation areas identified hereinbefore. Such a test will adequately respond to the requirements of 21 st century.

Now Academic Staff Colleges set up by the U.G.C at selected universities in India offer facilities for orientation and refresher courses for lecturers. It is suggested that specialised programmes for Accounting be provided for at more centres. Even separate specialised staff colleges may be created in order to provide excellent orientation and refresher programmes.

9. Relationship between Universities and Professional Institutes

The university system in India has faculty of Commerce which is running B. Com., M. Com., M. Phil., B.B.A and M.B.A (finance) and several diploma courses where accounting and finance/business statistics is a very popular area of specialisation. At the same time, we have C. A/ ICWA/C.S certificates being awarded by national level professional institutes established under separate laws passed by the parliament. In addition to this, we have several institutes established by individuals without any legal sanction like these three institutes. A dichotomy has been created that the university system is producing academicians whereas these institutes are producing professionals. Let us examine carefully whether this dichotomy has any sound logic.

As the matters stand now, the faculty of Commerce at Indian universities has been considered as a part of social sciences and humanities. Even after 40 years of its existence with tremendous growth, the U.G.C. has failed to recognise it as a separate faculty consisting of different specialised departments. It considers Commerce as a department like Economics, History, Sociology, etc. This has very adversely affected the development of accounting as a separate specialisation under the faculty of Commerce at Indian universities. Perhaps, the U.G.C. is influenced by Delhi University which has a Department of Commerce under the faculty of Social Sciences and Humanities rather than a separate faculty of Commerce. Four more such universities are there. But, however, all other universities, excepting 5 universities, are having a separate faculty of commerce and 6 of them are having separate departments of accounting also. It will be in the national interest if the U.G.C recognises commerce as a faculty consisting of various specialised departments.

Commerce education has been considered to be part of liberal education rather than professional. It has become a major segment of mass education. An academician is one who does not know to do whereas a professional knows to do but does not know why and what ought to be.

This is perhaps the logic behind the dichotomy of academic and professional in the field of Commerce. But, however, if we compare the course contents of CA/ICWA/CS with B. Com., M. Com-, etc. we hardly find any significant difference. The major point of difference is practical training and legal recognition. Otherwise, both the systems are overlapping and quite wasteful.

Before I make final proposals regarding the relationship between the professional institutes and Indian universities, it would be useful to remember that statutory bodies in the field of other professional education like engineering and technology, management, law, medicine, etc. do not run any courses themselves. They concentrate their attention on vital matters like prescribing courses of study, training, admission tests, research, development, accreditation of educational institutes, prescribing minimum resource pattern, enforcement of code of conduct of their members etc. However, education is left to universities under the supervision and control of statutory bodies like All India Council of Technical Education, Indian Medical Council, Bar Council of India etc. No dichotomy of academic and professional is created.

Keeping in view all the foregoing facts, I would suggest the following reforms in order to establish a healthy relationship between the professional institutes in the field of accounting, commerce and the Indian universities.

(a) Dichotomy of academic and professional degrees be removed. We may have either B. Com. M. Com or CA/ICWA/CS.

(b) The statutory professional institutes should limit their area of operation to the activities which are being undertaken by other similar bodies for medical, engineering, law, etc.

(c) Running correspondence courses, admitting students indiscriminately and passing 5% to 10% students leads to huge wastage of national resources and causes avoidable frustration amongst students. This arrangement should be replaced by colleges/schools/institutes of accounting, secretaryship, etc. just like medical, engineering, law and management colleges/institutes under the university system. Admissions must be based on all India admission test and modern techniques of teaching and training be adopted. Prescribing courses, passing standards, admission eligibility, resource pattern, teaching methods, evaluation, practical training, fee to be charged, etc. must be controlled by professional institutes through a statutory system of accreditation and inspection but actual teaching should be left with university system.

(*d*) For teaching positions, when dichotomy is removed, members of the professional institutes will not require any additional recognition and the problem of equivalence will not arise. Just like doctors, engineers, advocates, and managers, they will be eligible to teach after passing the relevant national test prescribed by the U.G.C., if they have atleast 55% marks at the post graduate level.

(*e*) The professional institutes should design first degree courses like M.B.B.S., B.E., L.L.B. etc. and post graduate level second degree courses like M.D., M.S., M.E., L.L.M., M.B.A. etc, separately and selected universities may be identified and accredited for conducting these programmes.

If for any historical or psychological reasons, dichotomy of the degrees cannot be given up, the institutes may design objective-type tests for admission to membership where B. Com and M. Com degree holders may be tested instead of asking them to pass CA/ICWA/CS examination after completing postal coaching.

The present duality of degrees and dichotomy of academic and professional has led to several complications and avoidable wastages which a developing country like India can ill-afford.

In the end, let us hope that the professonal institutes and universities will join hands to devise a single system in the interest of our nation and gear themselves to cater to the surging global need of accounting professionals during the 21st century. Now no academician can be theoretically or philosophically sound without a practical exposure and no practitioner can be an effective professional without a sound conceptual or philosophical foundation. Hence the dichotomy must give place to unification. If we do not act now, the dichotomy will close the doors of university system for CA/ICWA/CS now for the purpose of research and teaching.

REFERENCES

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2. The University Grants Commission, New Delhi 1989, *Report of the Curriculum Development Centre in Commerce.*
3. IFAC Exposure Draft, *The Chartered Accountant*, July, 1986, pp 82-90.

separately identified under the heading of information costs. Internal costs of providing information e. g. the opportunity cost of time spent by managers in preparing budget estimates, which are presently omitted from the accounting purview on the grounds of lack of objectivity should also be recognized. Other costs which need to be considered include the cost of adhering to accounting standards in terms of relevance lost and provision of untimely and even misleading information. Any serious consideration of the inadequacies of accounting reports must dwell on this theme.

Moreover, since accounting information is an economic good, 'the benefits of improved quality of information must always be compared with their costs.'[17] The accountant in his quest for optimality in information supply should consider the extent to which the information to be provided reduces uncertainty in decision-making. The emergence of information technology has enabled the supply of enormous masses of information but much of it still concentrates on areas of virtual certainty. The problem to be addressed is one of providing significant information for user decision-making instead of furnishing masses of unintelligble data, resulting in a GIGO syndrome in the user. There should also be a more conspicuous theoretical thrust on cost-benefit analysis rather than an implicit pervasive constraint or a practical criterion. The official pronouncements governing accounting practice seldom refer to cost-benefit analysis as a major means of resolving issues i.e. the net benefits to society versus the net costs to individual organizations. Though this may appear to be a relatively abstract exercise workable in single-person decision situations, the challenge to the accounting academic is to develop operational methods of analysis applicable in multi-person decision situations as well.

(iii) *The Timeliness Dimension* : Although the aspect of timeliness in providing accounting information is related to relevance, it assumes a new perspective with the rapid advances in information technology. On-line, real-time data collection systems permit the preparation of real time financial reports and other information while improvements in telecommunications facilitate immediate dissemination of such information to on-line users. The presentation of real-time accounting information to external users will also ensure greater completeness in terms of information on risks and uncertainties. Although such information and its provision may seem alien and irrelevant to external reporting now, the conclusion that 'information which investors need in order to make proper decisions about their involvement with an entity is the same in

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AN INFORMATION SYSTEM PERSPECTIVE OF ACCOUNTING

*Kanika Mookerjee**

This paper examines accounting from an information system perspective and tries to explain how the systems approach can be contributive toward advancement of the accounting discipline.

1. Introduction

Today we are on the threshold of a transition from an industrial based mass economy to a post-industrial information based service economy where information is the major fuel that provides energy to produce knowledge in intelligent user-consumers. Furthermore, subscribing to Davis' (1989) assertion[1] that 'the fundamental properties of the *universe* are transformed into *scientific* understanding, developed in new *technologies* which are applied to create products and services for *business*, which ultimately define our models of *organization*, a shift toward a new economy, in effect, implies a change in the models of organization used. This in turn, provokes a rethinking about the context and content of the myriad organization functions. The intent of this paper is to highlight the rethinking with respect to the accounting function. It is structured as follows. The next section reviews the rationale of accounting as a discipline in transition. The 'information system' view of accounting is focused upon in the third section while the fourth section tries to reveal the hiatus in the present conceptual framework of accounting. The penultimate section concentrates on a few implications derived from the information systems perspective for enrichment of the aforesaid framework. The final section seeks to draw out the potentialities and problems associated with these implications.

2. A Discipline in Transition

Recognizing that accounting is a social activity which must adapt to

* Lecturer, Department of Commerce, University of Calcutta.

kind, but not in volume as the information which management need to run it' (I.C.A.S. 1989),[18] does adduce its provision in the near future.

(iv) *Accounting for Value Added* : Hitherto, accounting has mainly operated at the detail of the individual enterprise (entity) level rather than dwell on the realm of the social. Accounting education is so obsessed with its technical rationale that monetary values (e.g. profit, wealth etc.) are elevated as ends in themselves and the surrogate role of money as a token of expression of human and social needs is ignored. The social purpose of profit and its tenuous connexions to social welfare are not articulated (Tinker, 1985)[19]. Social realities such as organizational conflict, power and disagreement find no place for expression in technical accounting.

Although it is even more difficult to gain consensus on what constitutes social reality as compared with economic reality (which may be derived from market phenomena), it is necessary from a systems viewpoint, to show how accounting measurements are instrumental in creating conceptions of social power and interest. We need to appreciate that a neglect of social consequences of the accounting function does not impart neutrality to traditional technique-ridden accounting but rather impedes its emancipatory change.

Value Added Statements (V.A.S.) which emerged as an accounting phenomenon in the late 1970s consequent upon conceptions of industrial democracy, the regulation of the accounting profession (through The Corporate Report, 1975 in the U.K.), and the management of national income policies in the context of public sector organizations, do attempt a portrayal of social conflicts in a rudimentary way. The VA concept as a measure of organizational performance is broader, more universally applicable and closer to social reality in comparison with profit. A further refinement of the accounting aspects of V.A. theory emphasizing stakeholder interests can help to highlight the fundamental conflicts in an industrial society concerning profit definition and appropriation, efficiency and wealth accumulation.

(v) *Behavioural Implications* : Earlier, it has been emphasized that the accounting information system is a human creation for the fulfilment of human needs, and so, the human element pervades such a system, however technically oriented it may be. We should therefore realize that accounting as a system is not purely mechanistic, in that users and accountants are imperfect, value driven and motivated receptors and transmitters of accounting messages. Behavioural accounting research (which shows how accounting and human behaviour interrelate in

the needs of society and changing human conditions, it is interesting to note that the accountant's concern has always been the processing of data and provision of information. However, the perceived rationale or 'ends' of his function has changed over the years to evidence a process of adaptation, albeit a slow and imperfect one.

Historically, the purpose of accounting reports has been stewardship and such a function was asserted till the early 1970s (Rosenfield, 1972)[2], and is manifest even today in the audit reports of financial transactions that directors issue to shareholders in discharge of their past actions in looking after funds entrusted by the latter.

The emergence of the corporate era and far reaching developments in management thought as an aftermath of the Industrial Revolution, coupled with the accelerated pace of technological advancement and globalization of economic activities since the post world war years, have ushered a sea-change in the socio-economic scenario. In particular, there have been rapid and continuous improvements in material well-being, a mounting concern for the concomitant deterioration in the 'quality of life', changing political situations with growing political consciousness, volatility in interest rates, commodity prices and foreign exchange values worldwide, and a dramatic increase in the demand for and supply of information with the development of information technology. Also, the idea of the traditional unifocal corporation with the shareholder as the nucleus is fast losing ground to the 'metrocorporation' serving a constellation of stakeholder interests.

Thus circumstanced, the accountants' responsibilities have multiplied and today, accounting as a social process, must of essence play a pivotal role in improving the quality of decisions regarding allocation of natural, human and financial resources by reforming the extant inchoate state of the accounting craft. The raison d'etre of the accounting function should now be couched in terms of generation of information covering *all* aspects of human activity with widely divergent objectives. The strong stewardship bias should be steadily supplanted by a decision usefulness orientation, so that accounting is increasingly seen as a *creative* rather than a merely *reflective* measurement-communication function of the organizational and social decision process (Hopwood, 1989)[3]. In this connexion, the nuance of the term 'information system' can be fruitfully explored as a frame of reference in our attempt to build a more comprehensive and integrated conceptual framework to interpret the heightened role of accounting over a broad spectrum of activities (Miles, 1973)[4].

the organizational context) has been addressing this reality for the past twenty five years. Issues such as the organizational characteristics of accounting firms and personal characteristics of accountants, information inductance in the accountant, effects of accounting information on human decision making, impact of budgets on individual performance have been taken up. The problem with such research findings is their over emphasis on internal rather than external validity. In other words, the empirical accounting data has scarcely contributed to theory development. Also, theories already developed are rarely tested in a 'real world' accounting setting. The challenge before the researcher is to enable a more effective interplay of the theoretical and practical orientations of behavioural accounting research so that the accountant can understand the nature and constraints of his task better and improve the design of accounting systems.

6. Summary and Conclusions

This paper posits that an information systems perspective of accounting can open many an avenue to accountants for improving the quality of accounting reports to meet the opportunities and threats that the accounting environment throws up. If the existence of the accounting profession and the role of the accountant, in general, is to be justified, a decision to reshape the nature, form and content of future accounting information is imminent. This, in turn, will require a (i) reorientation in the training and education imparted by the accounting academia ; (ii) a change in the mind-set of the accounting professional in amending the accounting 'constitution' and the standards emanating therefrom, (iii) a greater involvement of academics and a wider representation of the public interest in standard setting, since accounting standards cannot be totally dispensed with in the interest of user understandability ; (iv) a gradual unification of the hitherto divergent fields of financial reporting and management accounting by a fuller disclosure of inside information to external users (probably at a negligible additional cost) on a real time basis ; (v) a greater commitment toward change in accounting on the part of regulatory bodies associated with external reporting regulation.

Many of the implications of the systems approach may not be operational right now (e. g. reporting information costs, social realities and behavioural impacts). In that case, we should seek surrogate quantitative values if possible (as we do in Human Resource Accounting or Social Accounting). In the absence of such measures, supplemental qualitative information should be provided in some form on a mandatory or recommendatory rather than a voluntary basis.

3. The 'Information System' Image

The 'information system' conceptualization of accounting has pervaded academic and official literature on the subject for quite some time, although the very first use of the term in this context is not traceable (A.A.A., 1966 ; Belkaoui, 1981 ; Bedford, 1986)[5].

As a system, accounting is *man-made* (as regards its origin), *conceptual* (in its basic nature), *open* (in relation to its environment), *intricate* (in terms of complexity) and *unpredictable* (with respect to its outcome in a nondeterministic environment). More specifically, it exists as a subsystem of the formal organizational information system, pari passu with the management information system,[6] for selecting, sorting and putting into order, bits of financial transaction data from the mass of cues within and without the organization, in order to provide score-keeping, attention-directing and problem-solving financial information (Simon, 1976)[7] for user-decision makers. Furthermore, it involves *persons* (corporate managers, corporate accountants, information systems designers, auditors, information users and the pedagogue imparting accounting education), their *skills and ideas* (technical, computational, conceptual and behavioural) and a host of *information processing and transmitting devices* (manual, automated, computer-based) as its array of interrelated components. From this point of view, accounting (like its supra system the organization) is a *socio-technical* system where psychological, social and technical requirements mutually interact and must have *economic* validity. Each of these three interdependent aspects must be emphasized to enable optimum performance of the system and to facilitate homeostasis (i. e. to steer it to a state of dynamic equilibrium) in a non-deterministic environment.

At this stage, it may be worthwhile to clarify that when the 'information system' tag is attached to the term accounting, three distinct connotations are created, namely :

(i) structurally, the accounting information system as a component of the organization's formal information system comprised of persons, equipment, ideas, skills and methods, and their interrelationships ;

(ii) pedagogically, AIS as a discipline in the information systems field, warranting inclusion in an accounting education curriculum ; and

(iii) conceptually, as an image of the accounting process to elaborate alternative theories of accounting (Davis, Menon and Morgan, 1982)[8].

The present paper addresses primarily the third connotation and in part, the second one also.

4. A Conceptual Framework for Accounting—Can It Be Fool-Proof ?

To date, herculean efforts have been made in deriving a conceptual framework (CF) or a constitution—a search for a 'Holy Grail', so to say—for accounting. Such prolonged endeavours are manifested by the APB Statement No. 4 (1970), the Trueblood Report (AICPA, 1973), the Corporate Report (ASC, 1975), the Stamp Report (CICA, 1980) and the FASB's conceptual framework project (1978, 1980a, 1980b). The FASB project has been acclaimed to have surpassed the others in tenure, ambition and in the claim to creation of a monolithic accounting constitution for resolving disputes in the standard-setting process.

So, with the FASB's CF project as a point of reference and the information systems viewpoint in mind, a few introspective interrogatives need to be framed such as :

(a) Wnat is/are the purpose (s) of designing a CF ?

(b) What/whose objectives need to be focused here ?

(c) What attributes of accounting information need to be emphasized to enhance their acceptability to users ?

The FASB suggests that a CF is primarily intended to assist standard setting. In this connexion, it may be pointed out that a CF serves to rationalize the standard-setting body's choices from among accounting alternatives as optimal social choices and thereby helps to reinforce, by fiat, the public interest argument. Thus, if the task of standard setting was entrusted with a more representative body of public interest, probably the need for a CF could be obliterated. As a matter of fact, 'the demand to develop a conceptual framework may be inversely related to the power of enforcement which the standard setting agency can command' (Dopuch and Sunder, 1980)[9]. In our view, a CF is imperative for any discipline, accounting included, to provide its *philosophical foundations*. It is necessary not only for the accounting profession as we are generally given to believe, but also for the academic, the corporate accountant and the users involved. We do, however, acknowledge that a CF in accounting must be a continually evolving one since the accounting system is a human creation aimed at satisfying changing human needs. It cannot partake the nature of a Decalogue as it does in the case of the physical sciences.

With respect to objectives, are we talking of the objectives of accounting as an activity, or the objectives of the transmitter of accounting information (the accountant is both a supplier and a user of accounting information), or that of its receivers ? The FASB frames its objectives in

terms of dominant user groups in society who are able to impose their will on others i.e. the existing and prospective investors and creditors. While it is true that accounting's objectives will have to be those of the persons somehow involved in the activity and that the information systems view is implicit in the user-decision maker focus, it is difficult to accept the dominant group presumption on the grounds of ethical and social welfare considerations, particularly, if we see accounting as an 'artifact residing in the domain of the social rather than the narrowly organizational' (Hopwood, 1989)[10]. Furthermore, the objectives of the accountant (transmitter) as information system designer, processor and auditor cannot be totally ignored when we consider the phenomenon of information inductance on the information sender (Prakash and Rappaport, 1977)[11]. If refers to a complex process where the information that a person (accountant) is required to communicate impacts his/her behaviour and objectives before it is communicated, as a result of the sender's inclination to anticipate the possible use of the information, the consequences of such use and his/her reactions to such consequences. This is all the more pertinent where the accountant plays a dual role of information supplier and information user.

In connexion with the attributes of accounting information, the FASB project (in SFAC No. 2, May 1980) presents a hierarchy of qualities, all of which are aimed at augmenting the decision usefulness of the information. While the key user-specific quality is understandability of the decision maker, the chief decision-specific qualities are relevance and reliability. A secondary decision-specific quality is comparability. Cost is a pervasive constraint and materiality is a thereshold constraint for recognition.

What is particularly discernible is the conflicting nature of the two primary decision-specific qualities, thus necessitating a balancing or trade off in practice, based on judgment. While the demand for decision usefulness should not relegate reliability into oblivion, it must accord relevance a pre-eminent position. Historically, with the accounting spotlight on stewardship or managerial accountability and historical record, reliability has enjoyed precedence over relevance. This is testified by (i) the increasing uniformity in accounting methods by means of standardization without a consideration of their relevance to user needs or the additional costs that such a process may entail to the user (in terms of holding wrong beliefs and incurring excessive transaction costs as well as the cost of the accountant's failure to report an item which the user may have to obtain through a more expensive source) ; (ii) the treatment

of published financial statements as general purpose statements having a legalistic rather than economic flavour ; (iii) the virtual absence of adjustments for changes in the value of money, in accounting practice, despite the distorting effects of inflation, (iv) the underrating of historic and/or forecast cash flow reports as major constituents of financial statements despite their recognized predictive ability and avoidance of the subjectiveness of accounting allocations aud valuations, and (v) a myopic obsession with monetary data which precludes socially relevant non-monetary data and which fails to shed light on the behavioural and societal facets of the discipline.

The accountant's predilection for maximizing objectivity to prevent fraud and to facilitate an independent audit is irrational in the context of a decision usefulness orientation enshrined under the systems approach. This is because the more realistic and useful figures are for decision making the less objective they tend to be from an accounting standpoint. Put differently, as accounting measures increase in precision with the greater arbitrariness and/or specificity resulting from rigid definitions and detailed roles, the number of people to whose needs they are relevant, decreases (unless they are forcefully declared to be relevant by the official sanction of authoritative standard setters). What appears to be a paradox is that the accounting profession continues to stress objectivity and verifiability to foster user understandability and confidence even at a time when financial statement users are turning increasingly to other sources to meet their needs not catered to by the information that these statements contain (Rimerman, 1990)[12]. The relative importance of financial statements diminishes with more and more other data and analyses becoming available and it is necessary for the accountant to ask himself what these alternative sources are and the costs associated with them vis-a-vis that of financial statements. It would be foolhardy for accountants to believe that they are the only suppliers of information about the entity to the users. For, as Beaver (1973)[13] asserts, 'the market uses a broad information set, and the accountant is *one —and only one*—supplier of information' (emphasis added). Accordingly, as the gulf between users' needs and what statements provide, widens, practising accountants will find themselves playing a detracting role in attesting credence to information of declining importance. This surely attaches a high social cost to the accounting profession. It is heartening to note in this connexion that the AICPA Future Issues Committee has prepared an Issues Paper on the changing significance of financial statements which describes the Committee's findings, the

implications for the profession and the options available. It is to serve as an input to the Institute's strategic planning process.

5. Implications of the Information System Approach

The systems approach to accounting affords some helpful theoretical and practical insights. Belkaoui (1981)[14] observes that this view of accounting has important conceptual and empirical overtones. A few of these are delineated below :

(i) *A Multidisciplinary Focus* : Academics have attempted to relate systems with a view to creating a theoretical framework for describing relationships of the empirical world and such an effort goes by the name of 'general systems' theory. The aim of such an effort is to create a framework connecting various disciplines into a meaningful relationship. Progress in this direction is evident from the emergence and development of interdisciplinary studies such as social engineering, environmental engineering, economic psychology and organization theory. To relate these developments to business and particularly to accounting, a systems approach is inevitable because systems theory posits that any meaningful study draws upon the accumulated knowledge available, no matter which areas of knowledge thereby require investigation. Since accounting falls within the information systems field of study, it is necessary to adopt an interdisciplinary approach by drawing upon a continuum of knowledge areas ranging from computer science on one extreme to sociology on the other. Other areas include electrical engineering, operations research, information systems, organization theory and psychology. The Bedford Report (1986)[15] and the Mock Report (1987)[16] have been styled in cognizance of such a multiple focus although the second extreme of the continuum has not been given the significance that it deserves.

(ii) *Accounting for (Accounting) Information* : Accounting information output is an intangible resource—an input to decision models of users, and one which facilitates an organization to reach its objectives by an efficient use of its other resources. The plea here is to recognize information as a separate resource in some kind of value terms. We admit that accountants do not abstain from recording the cost of acquisition and use of information outright. These costs, including those of collection, compilation, processing, supply and education, are, however, recorded under various heads either in the Income Statement (e. g. salaries to personnel engaged in information work, stationery, costs of training etc.) or in the Balance Sheet (e. g. the unexpired historical cost of acquisition of information 'hardware', furniture. office space etc.) instead of being

In fine, it may be mentioned, that the information systems approach has the potential to elevate accounting as a discipline to the height of a *true* social science by demonstrating that the scientistic approach embracing the technical aspects should be focused together with an understanding of the human states of mind.

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CORPORATE REPORTING AND THE NATIONAL ECONOMY

*Asit Kumar Sengupta**

The Indian economy has reached such a stage that causes the rising proportion of the aggregate investible surplus to converge towards the corporate sector, in general, and the manufacturing sector, in particular. This situation certainly calls for the fair and adequate disclosure of accounting information of corporate enterprises. The correct assessment of the benefits and costs – rather rewards and punishments—of the economy would always require an enormity of corporate reporting. Technical modification of the design of reporting is highly imperative. In this connection, the national targets and constraints in the framework of planning design are expected to be desirably quantified with the help of some exhaustive accounting records of the entire business sector (being the major part of the national income estimates) of which the corporate sector assumes a significant proportion. Moreover, the recent policy programmes of the present regime can only be successful if sufficient information is offered by the corporate sector.

I

The Indian economy has reached such a stage that causes the rising proportion of the aggregate investible surplus to converge towards the corporate sector, in general, and the manufacturing sector, in particular. The intersectoral financial flows of the Indian economy as presented by the Reserve Bank Reports indicate the propensity of the financial resources to be increasingly clustering around the corporate enterprises. The financial matrix of the sources and uses of funds of the entire economy, by different sectors, (e.g. Banking, Other Financial Intermediaries, Private Corporate Business, Household, Government, and the Rest of the World) as revealed in the RBI Reports on Currency and Finance of different years, speaks volumes of the convergence of the increasing proportion of resources towards the corporate sector. It can be expected, therefore, that the corporate sector should share the obligation of useful and proper disclo-

* Reader & Head of the Deptt. of Commerce, Vidyasagar Evening College, Calcutta & Guest Lecturer, University of Calcutta.

sure of facts in order that the correct decision at different levels relating to the corporate sector can be adopted judiciously.

The obligation of the proper disclosure of corporate activities lies, also, in the fact that the economy's business sector thrives under the leadership of the corporate sector. This sector draws its sinews mainly from the rest of the economy, while the latter bears the brunt of all the negative consequences of the former's ever-increasing operations. Here, a logical hypothesis is that corporate reporting on a considerable scale is related to the burning issues of the corporate activities.

One of the issues of paramount importance is how to increase the value-added, and more particularly, to increase the surplus generation. However, any amount of such increase depends on market expansion with a guarantee of decreasing cost function, which, in turn, varies directly with the application of modern technology.

On the other hand, the expansion in employment and the distribution of income by the corporate sector is also one of great importance. Thus, income generation, employment expansion, cost control, and technological breakthroughs are the real issues involved in corporate activities. In the light of this observation it is maintained that the emerging issues of corporate reporting can never be away from some of the oft-repeated burning questions emanating from the exponential growth of the corporate activities. In this connection, one can hardly ignore the problem of externalities associated with the industrial operation of the corporate sector. In other words, alongwith the set of objective realities open to the corporate sector, the question of adequacy of environmental management is another important issue that signifies the need for revealing of facts. Thus, some imporant economic and managerial decisions coupled with those of externalities exist in the central area of the domain of useful corporate reporting.

II

However, it appears logical to highlight the direct and indirect effects of the ever expanding corporate sector and the issues relating to corporate reporting that are likely to be associated with them. Briefly, these are as follows :—

(1) The rate of growth of the supply of investment goods has been double the corresponding rate of consumption goods.

(2) The rise in general price level has been lagging behind that of the cost of a unit bunch of investment. Therefore, in order to maintain

the given growth rate in real investment, the economy has to save relatively higher and higher proportion of its national income at current prices.

(3) Here, the growth in gross savings rates to GDP of the private corporation sector has been found to be always lagging behind those of the other two sectors, namely the Household Sector, and the Public Sector. It has improved its position only in recent years. But in absolute terms, gross savings of the private corporate sector is no match to those of the other two sectors.

(4) The rates of financial liabilities to GDP has been rising.

(5) Very recently there has been a remarkable market expansion for the new issues, and the private corporate sector has immensely benefited itself by way of mobilizing financial resources as available from the venture capital operation of the government financial institutions.

(6) There has been a marked development in the nominal interest rates in official markets. Despite inflation, real interest rates have also risen.

(7) The entire financial system has been activated phenomenally, and the rural and unorganised sectors have been encompassed by this system increasingly.

(8) The flourishing parallel economy has caused a gap between the tax-revenue potential and the mobilised revenues.

(9) The efficiency achieved through a healthy competitive system i.e. through a non-attenuated structure of rights, cannot be ensured due to the prevalence of a sheltered market in which the corporate enterprises can operate.

(10) The relative share of wages and implicit wage income seem to have been constant, while the rate of profit is either increasing or being prevented from falling.

(11) The input requirement per unit of increment of real national product have been going up, and the increase in overhead costs has bred newer issues in the economy.

In the light of the above observations we can summarise some of the maladies that the corporate industrial enterprises are beset with.
They are—

(i) "High capital-output ratio due to over-aged plant, heavy capitalization, heavy replacement arrears, obsolescent technology, and lack of capacity output."

(ii) Absence of scale economies, sometimes sub-optimal location of units.

(iii) Inefficient management and poor maintenance along with too frequent breakdowns and work stoppages.

(iv) Excess inventory holdings due to poor off-take and uncertanity in supplies.

These maladies give rise to high operating costs, while due to lack of competition, price-rigidities persist, and interestingly, there appears a broad drift of equalisation in profit rates among units in the private corporate sector.

We have so far identified some developments in the economy as well as some maladies associated with corporate enterprises. Considering all these basic and real issues, corporate reporting must include some more refined and analytically helpful information that will pave the way for a greater revelation of real problems in national income accounting and finance.

III

Most of the large scale industrial establishments in India are either so called Indianised foreign firms or enterprises based on foreign collaboration agreements. In other words, Indian industries stand on the foundation of borrowed technology. This situation does not only indicate the abject dependence of Indian entrepreneurs on the foreign assistance, but also highlights the implications of the foreign interest associated with the crisis-ridden balance of payments position. Under the circumstances, it is desirable that the accounting information with regard to the aspects of foreign involvement in Indian industrial aspirations shall invariably be disclosed with all its different dimensions.

From the first year of the seventh five year plan the new leadership in the state administration in India adopted a new economic policy (NEP) offering a new institutional framework to continue the persistent war against age-old socio-economic ills, (namely, poverty, unemployment, disease and ignorance) so that the plan objective of growth with justice are realised soon. Productivity improvement through the application of modern technology with increased capacity utilization was the basic strategy that dwelt upon increased input of foreign capital as well as foreign collaboration agreements in an effort to boost up the corporate sector. To provide larger scope to the private sector, policy modifications were made in order that industrial licensing under various acts like ID & RA, MRTP and FERA were liberalised, thus offering unfettered expansion opportunities to the private sector in general, and multinational corporations in particular. In the situation, policies involving relexation of control,

restoration of competition and incursion of the foreign capital interest were designed and implemented enormously. Now the logical question is how far these policy implications are reflected in corporate reporting. First, till now the increased foreign capital involvement in corporate industries in India has not been revealed in any of the documents, both official and private accounting records. Second, how far the import of hi-tech production process has contributed to the cost effective as well as productivity augmenting results is yet to be experienced. It is not clear whether regular disclosure of data to this effect by the different government agencies have ceased during the recent past is due either to the insufficiency of corporate accounting information or to the repugnance of the new official policy makers for the public consumption of corporate information. Thus, the NEP could not be seen both as a challenge and an opportunity to the corporate sector in the absence of additional information against the conventional revelation of flow and stock information of the sector. In this environment of corporate accountability, it is likely that proper policymaking efforts will bear scant result, and the achievement of plan objectives shall be a distant cry. The so-called sunrise industries could not herald the dawn of the information breakthroughs.

IV

In the light of the recent policy changes of the Government of India it is desirable to locate the areas for which sufficient information is considered necessary for the authority to formulate the policy goals. Let us first look into the domain of private involvement resulting from the structural adjustment programmes of the government. It is claimed that this programme is designed to mobilise the resources to finance social objectives with the help of socially relevant mechanism, the shipment of productive capital towards relatively potential sectors and productivity increases, in general, are the two logical consequences of the new economic programme. Moreover, it is expected that large amounts of foreign exchange would be available to alleviate the problem of balance of payments crisis, and larger doses of direct and portfolio (foreign) investments in the modern industrial sector would be deployed as a result of the government programme for the opening up of the economy as well as liberal licensing policies. Programmes of the present regime are also steered towards (i) import liberalisation, (ii) letting the rupee play a partial role in the international foreign exchange markets, (iii) containment of public sector projects, (iv) encouragement of capital intensive enterprise in the medium and large scale industrial establishments, among other drives.

All the above policy issues are sufficient to call for a more important and responsible role of the corporate sector in the perspective of meaningful disclosure of information relating to (i) the sources and uses of funds, (ii) the justifiability of opting for a particular course of action from among some alternative ways and means, (iii) possible consequences of the activities involving the future path of progress of the enterprise or industry itself, (iv) the contribution of industry towards the achievement of social goals, and above all, (v) the possible course of action that may be adopted by the public household in order that the micro and macro level decision making process of the regime is importantly assisted in the successful design of the socio-economic algorithm in view of which the authority has expressly taken recourse to the structural adjustment process. There is no doubt that the government has recently attempted for a fresh look into the economanagerial aspects of the entirety of the business sector taking a particular fact into consideration that the business sector for which the government is so keen to have a successful record of achievement is nothing but a social organisation. So, the pious hopes behind the recent policy prescriptions of the government in the interest of that sector must not be defeated. It is expected that a set of entirely new elements of information in variance with the conventional revelation of data of the corporate sector is what is warranted in the new environs of business operations. So, the added responsibility of this sector is now thought to have arisen in the sense that insufficiency in corporate reporting may not help the regime analyse in terms of feedback effects of its policy proposals, and, in consequence, may lead the authority to live in the quagmire of ineffective data. In this connection, the accountability of the foreign houses and their collaborative agents in India, the business of which assumes the greatest part of the medium and large scale industrial sector of the economy, is considered to have roundly enhanced. It is because of the fact that the government has virtually adopted a policy of speculation, (which has been assumed to be analogous to gambling in different quarters), in dealing with the additional role of foreign capital in the economy, in keeping its eyes shut to the clandestine regime of the parallel monetary prowess, and in bestowing the private sector with the sufficiently large doses of monetary and fiscal concessions in the event of a new outlook of so-called futility of the public sector enterprises. However, all the above observations can eloquently justify the need for the corporate accountability to have strong foundation and larger edifice.

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INDIAN ECONOMY AND SOME ASPECTS OF CORPORATE TAX LAWS— A THEORETICAL DISCUSSION

*D. P. Pande**

In this paper, the author investigates the effectiveness of provisions of corporate taxation as policy instruments for India's industrialization, especially that of the backward regions. The exercise is done against the backdrop of the objectives of the Eighth Five Year Plan, its proposed pattern of financing and also the economic objectives of taxation policy. Suggestions for streamlining these provisions are made in conclusion.

1. Introduction

India suffers from underdevelopment, as shown by various economic and social indicators reflected in the Economic Survey 1991-92 presented by the Finance Minister, Dr. Manmohan Singh in the Parliament on 26th of February, 1992. Lower per capita income, lower real gross domestic product (GDP), slower industrial growth rate and of agricultural production etc. are some of the reflectors of the general state of the economy[1].

1.1. Causes of Underdevelopment

The major causes of such economic underdevelopment are (a) Excessive dependence on agriculture, (b) deficiency of capital, (c) low labour productivity, (d) lack of infrastructure, (e) inequalities in income and wealth distribution, (f) low levels of consumption and (g) unutilised talents[2].

2. Five Year Plans

Within three years of achieving independence, the Indian Planning Commission was set up to draw up plans for economic development. The First Five Year Plan started in 1950-51 and at present the Eighth Five Year Plan is in progress since April, 1992. The priorities in objectives set up in different Plan periods changed according to the needs of the

*Professor & Head, Department of Commerce with Farm Management, Vidyasagar University, Midnapore.

society with the aim of bringing overall economic development of the country. It would not be out of place here, to my mind, to highlight the objectives and priorities set up in the current Plan to ameliorate the sufferings of millions of people in this country.

2.1. *Eighth Plan (Objectives)*

The Eighth Five Year Plan has given priority to the following objectives :

(i) Generating adequate employment ; (ii) Checking of population growth ; (iii) Universalisation of elementary education ; (iv) Provision of safe drinking water and primary health facilities including immunisation so as to make them accessible to all villages and entire population and complete elimination of scavenging ; (v) Growth and diversification of agriculture to achieve self sufficiency in food and generation of surpluses for exports ; and (vi) Strengthening the infrastructure (energy, transport, communication, irrigation) in order to support the growth process on a sustainable basis[3].

The Plan will focus on these objectives keeping in view the need for (a) continued reliance on domestic resources for financing investment ; (b) increasing the technical capabilities for the development of science and technology ; (c) modernisation and competitive efficiency so that the Indian economy can keep pace with and take advantage of global developments[4].

I am not to discuss the five year plans in detail here but want to emphasize that rapid industrialisation along with infrastructural development is a sine-qua-non for achieving higher economic growth in any developing countries of the world. It had been envisaged also in the approach papers of all the five year plans including the eighth one.

2.2. *Industrialisation*

Industrialisation is the result of many facets. The broader aspects are : (i) technological development in the processes involved in the production of the existing industries, (ii) setting up of new industrial units in different regions and boosting up of production, and (iii) production of exportable surplus to pay for essential imports.

The governments of all the countries of the world take many measures and incentive schemes for the development of all the productive stages involving industrialisation and India is no exception in this regard.

2.3. Source of Financing

Developing countries to a very large extent finance internally, their, development programmes. The primary means of internal financing available to such countries is 'taxation'. The explicit context for the examination and evaluation of taxation policy must be the specification of the objectives of taxation policy in the context of planned economic development, the objectives set reflecting the objectives of planned development articulated in the series of five year plans[5].

3. Economic Objectives of Taxation Policy

In the economic sense the objectives of any taxation policy may be summarised as growth, equity and stabilisation of the economy.

Though, I believe, simply the growth of national income of the country will not reflect the pattern of economic growth of different regions of the country, sometimes it may be required to bring inequalities of treatment, as against equity among taxpayers, by allowing differential tax incentives which may be desirable under planning objectives. I deliberately avoid to discuss the complicated economic theories and different models in connection with economic growth and taxation policies like Adam Smith's Theory of Economic Development, Ricardo's Theory of Economic Development, Marxian Theory of Economic Development, Harrod's and Domar's Model of Growth, General Equilibrium Models etc.[6,7] but shall try to show the objectives of taxation in the following paragraphs in such language as would be easily understandable to all of us.

3.1. Objectives of Taxation Policy

Any tax policy should be based on certain clear major objectives and also be accompanied by other consequential objectives which are not of lesser importance from the point of view of national economy. The major objectives behind any tax policy are threefold : (i) to collect increasing amount of revenue, (ii) to promote equity in distribution of income and wealth, and (iii) to achieve higher economic growth by maintaining higher rate of savings and investment as such in the desired channels. The other accompanying objectives may be mentioned as generation of employment, regional development, curbing of inflation, utilisation of factors-capacity etc.

The subsidiary objectives may be ever changing and remodelled to meet specific purposes at a particular point of time. Though the objectives are very much interrelated, sometimes they are conflicting with

each other. As for example, tax-free allowances may be given for absorbing more and more number of unemployed persons, but that may not fulfil the objectives of higher investment in fixed assets. On the other hand, capital intensive tax-free allowances may help in increasing productivity of capital and labour but may not serve to achieve the desired level of employment. In the same way, rebates and reliefs in taxation may be allowed to develop a particular backward region but that may lead to the.diminution in the amount of revenue to the exchequer.

In the face of so many interrelated and apparently conflicting objectives, it is very difficult to come to a conclusive decision as to the effectiveness of corporate taxation to achieve a particular objective. Though it has been tried by some of the scholars in India to show certain amount of taxation on savings, investment, employment etc. but we can not deny the fact that it is very difficult, if not impossible, to quantify the 'effects' both theoretically and empirically[8].

As there are many socio-economic constraints and government's regulatory influences, which may sometimes be guided by contradictory objectives, the Government generally tries to make balance of all the planned objectives and formulate its fiscal policies in such a way as to render the optimum amount of socio-economic benefits to its subjects.

A number of committees, commissions and others[9] had been appointed by the Government to study the structure and rationale of different types of tax measures since it was recognised as one of the most effective regulatory fiscal policies in 1860 but none of the committees are able to prescribe an "ideal" profilectic which can fulfil all the objectives taken together.

Therefore we can precisely say that tax measures may act as 'catalytic agent' to pursue for fulfilment of any particular objective.

4. Broad Outlines of the Work

With this background in view my exercise is concerned with studying the role of some of the provisions of corporate taxation as a policy instrument in the area of industrialisation in general and in the backward regions in India in particular. For this purpose, over and above capital consumption allowances under the broad heading 'general provisions', we can divide the main theme into three broad sections or areas which are distinct and separate but influencing each other. Such areas are : (A) Provisions for general industrialisation ; (B) Provisions for industrialisation in the rural and backward areas of the country ; and (C) General provisions in connection with inter-corporate dividend,

royalties and commissions as considerations for providing technical know-how in terms of foreign exchange and earning of foreign exchange against exports.

As the provisions are interrelated we shall try to highlight the provisions under a broad heading as 'deductions allowed to selected industries'.

4.1. General Provisions

Presently, tax laws are burdened with many provisions for incentives, deductions and exclusions. Special incentives for investment are very common in almost all the developing countries in the world. In India such incentives are generally termed as Capital Consumption Allowances. That includes mainly (a) Depreciation[10], (b) Investment Allowance[11], (c) Development Rebate[12] and (d) Amortisation of Preliminary Expenses. Though the ambit of my paper is to show the role of special incentives for industrialisation in general, and backward regions in particular, I like to give brief outlines of the said allowances.

4.2. Depreciation

The Income-tax Act permits the deduction of capital expenditure, incurred for the business or profession, mainly in the form of Depreciation under section 32 (1), subject to fulfilment of certain conditions. Before submission of the Report on Rationalisation and Simplification of the Tax Structure by Sri S. Bhoothalingam in 1967, there were numerous rates for normal depreciation on different types of assets. That was amended afterwards. Mr. C.C. Chokshi, Chairman of Direct Tax Laws Committee, in his report submitted in 1977, brought the concept of 'block of assets' and accordingly that has been amended from the A. Y. 1988-89 showing good bye to the concept of 'individual asset' somewhat in a changed form.

4.3. Investment Allowance

The Finance Act 1976 replaced the scheme of initial depreciation allowance in respect of plant and machinery, granted earlier under section 32 (1) (iv) of the Income Tax Act, 1961 by a scheme of Investment Allowance. As the scheme of initial depreciation had been regarded unanimously by industrial circles as no substitute for development rebate, discontinued earlier, Mr. Subramaniam, the then Finance Minister, had to introduce an investment-oriented scheme, viz., Investment Allowance under a new Section 32 A which became effective from the A. Y. 1977-78 with the object of encouraging investment in new plant and machinery, accelera-

ting production and extending the scope of employment. Since then a number of changes had been made by different Finance Acts from time to time with the main object of availability of capital in the selected industries which are unlikely to be developed in the hands of the private entrepreneurs without special stimulus.

In practice, such tax-free benefit created a tendency among entrepreneurs to use capital more liberally, even wastefully, in capital equipment than it was justified from the point of view of economic necessity. It has been empirically verified that in most of the cases such an allowance creates unutilised capacity in the long run. It does not help also in creation of more employment and at the same time diminishes the collection of tax revenue of the exchequer[13].

It has been rightly observed that special incentives for investment are very common in developing countries. There are a number of problems and abuses which may lead simply to a loss of tax revenue without any corresponding increase in investment. Too often, it is taken as obvious that special tax incentives for investment are needed. The evidence that they have much incentive effect is scanty and it is likely that revenue losses are substantial[14].

However, at present the Section has been withdrawn. It is given that no deduction under section 32 A will be available in respect of any new ship or new aircraft acquired or new machinery or plant installed after March 31, 1990 (Vide Notification No. S. O. 233 (E), dated March 19, 1990).

4.4. Investment Deposit Account

Similarly another capital consumption allowance under section 32 AB under the name Investment Deposit Account Scheme was introduced subsequently and that has also been withdrawn from the A.Y. 1991-92[15].

4.5. Amortisation

A new section 35D was added by the Taxation Laws (Amendment) Act, 1970 providing for amortisation of qualifying amount of certain specified preliminary expenses incurred after March 1970 by an Indian company or resident non-corporate assessee before or after the commencement of business in connection with the extension of an industrial undertaking or setting up a new industrial unit in 10 equal instalments against

the profits of the assessee beginning with the previous year in which the business commences or extension takes place or production begins.

There is a strong support that all types of capital expenditure, not the 'specified' only, whether in the form of depreciation or amortisation, which is incidental to or connected with the business should be allowed as deductible expenditure.

5. Deductions Allowed to Selected Industries

1. To ensure balanced economic growth Sec. 80 HH had been introduced where 20 per cent profits and gains derived from an industrial undertaking or the business of a hotel in backward areas, as per Schedule Eight, which started functioning after March 31, 1973 is allowed to be deducted for each of the 10 successive assessment years, provided certain conditions are fulfilled. The period of ten years is to be reckoned with the assessment year relevant to the previous year in which the business was first started.

2. To prevent regional imbalance, Sec. 80 HHA had been introduced where 20 per cent (25% w. e. f. the A. Y. 1983-84) profits derived from the profits and gains of newly established small scale industrial undertaking in any rural area, is allowed to be deducted from the gross income to find out total income of the company for 10 successive assessment years beginning with the assessment year relevant to the previous year in which such small-scale undertaking begins to manufacture or produce articles, subject to fulfilment of certain conditions.

From the assessment year 1978-79 deduction in either of the two sections 80 HH and 80 HHA is allowed to eligible industrial unit, not both.

3. Sec. 80 HHB had been added by the Finance Act 1982 where 25 per cent of profits arising from specified projects undertaken by an Indian company in foreign countries has been allowed to be deducted, provided the consideration for the execution of such project/work is payable in foreign currency and certain other conditions are fulfilled.

4. To promote the general climate of industrial development in the country, capital-based deduction, popularly known as 'tax holiday benefit', was allowed under section 80 J in computing the total income of the company deriving from industrial activity or the business of a hotel or the operation of a ship at a particular rate on the amount of 'capital employed'[16] in the business with further provision of carry-forward of deficiency, if any, for a number of years.

The section has become redundant after March 31, 1981.

5. The incentive under Section 80 I becomes operative after March 31, 1981 and is applicable to new industrial undertakings (including cold storage plants), approved hotels and ships. The rate of deduction is 25 per cent of profits p. a. derived from the aforesaid activities and is allowed for the first eight assessment years, popularly known as 'tax holiday period', relevant to the previous year in which the industrial undertaking begins to produce articles outside the non-priority list of Eleventh Schedule subject to the fulfilment of certain conditions.

6. Tax Incentives for Industrialisation—Earning of Foreign Exchange

1. From the assessment year 1989-90, the whole of the profits derived from goods or merchandise (other than mineral oil and minerals and ores) by Indian companies and non-corporate assessees resident in India from export is qualified for exemption provided such sale proceeds are receivable by the taxpayer in convertible foreign exchange (Sec. 80 HHC).

2. Where the gross total income of the Indian company includes dividends on shares issued by foreign companies in exchange of technical knowhow or technical services rendered or agreed to be rendered, on the basis of agreement made and approved by the Board of Direct Taxes and if the dividends are received in convertible foreign exchange, the whole of such dividend is allowed to be deducted under Sec. 80 N. That has been withdrawn from the A. Y. 1986-87.

3. Liberal concessions are also allowed for specified industries established in free-trade zones for hundred per cent exportable products.[17]

7. Other Tax Concessions Affecting Industrialisation

1. When the gross total income of a domestic company includes any income by way of dividends from another domestic company, which is mainly engaged in the manufacture or production of specified items and which is formed and registered after 28.2.75, in respect of such income of the company the whole of the amount is allowed as straight deduction under section 80 M. The section has been amended from the assessment year 1991-92 and been substituted by a new section, where actual declaration of dividend by the receiving domestic company has been imbuked.

2. Any income of an Indian company by way of royalty, commission, fees etc. received from any concern in India as consideration for the provision of technical know-how in the specified fields or for rendering services in connection with the provision of such technical know-how, under an approved agreement made after March 31, 1969, is subject to a

deduction of 40% on such income under Sec. 80 MM. That has also been discontinued from the assessment year 1984-85.

3. An Indian company deriving income by way of royalty, commission, fees etc. from certain foreign enterprises is also entitled to claim deduction (Section 80 O) under certain conditions.

8. Scope for Rationalisation

All these deductions are mostly welcome by industrial circles but the nature and ways in which such incentives are allowed, are not beyond criticism and well subjected to the scope of rationalisation.

To remove regional imbalances there should be proper incentives, both fiscal and non-fiscal, to start or shift industrial units in rural areas. But if we look at the industrial map of India, it may be seen that industrial development is noticeable mainly near metropolitan cities. In 1968, the National Development Council constituted two Working Groups—one under the chairmanship of Mr. B. D. Pande, the then Secretary, Planning Commission and the other under Mr. N. N. Wanchoo, the then Secretary, Ministry of Industrial Development and Company Affairs. The former group, headed by Mr. Pande, was entrusted to evolve criteria of 'backwardness' and the latter group headed by Mr. Wanchoo was entrusted to evolve nature of 'concessions' to be extended to attract industrialists to such backward regions. As formulated by the first Working Group, areas having 25% below the national average, based on per capita income, per capita consumption of electricity, length of roads and railways, etc. were identified as 'backward'. Wanchoo Group formulated financial and fiscal concessions to be allowed for attracting industries to such identified backward regions.

Accordingly, Eighth Schedule has been prepared which shows the names of some of the districts as a whole in different states in India as backward areas. We cannot deny the fact that all the districts are not uniformly backward and even within the districts, all the areas are not equally backward. But the tax benefits under sections 80 HH and 80 HHA, mentioned earlier, are granted equally irrespective of the degree of backwardness. This concept of 'backwardness' has resulted in concentration of industries near the metropolis. So, to my mind, more the backwardness, higher should be the quantum of incentives and vice versa, if such provisions are at all necessary in the near future[18].

Regarding incentives for general industrialisation under section 80 I, the system of percentage deduction on profits and gains, to my mind, should be abolished and in place of that the incentives should be directly

related to the level of production and on capacity utilisation in the tune of suggestions given by K. N. Wanchoo[19].

Inter-corporate investment is a powerful instrument for the growth of corporate entities and for the economic growth of any developing country. That is why, in most of the countries in the world, inter-corporate dividend has been either fully exempted from the purview of taxation or a substantial tax relief has been granted. In India, Section 80 M and 80 N are pertaining to tax incentives as regards inter-corporate investments. But one should raise caution against this privilege which may lead to monopoly tendency resulting in inequitable distribution of income and wealth.

The provision relating to foreign exchange earning, Section 80 HHC, should be related to the quantum of foreign exchange earning rather than to profit earning. Profit earning is dependent on many exogenous factors including competition on foreign markets on which the company assessee may not have sufficient control.

9. Conclusion

We have analysed the present state of economy in India and the role of five year plans in brief, showing the broad objectives of the Eighth Five Year Plan. As a major source of financing the Plan outlay, 'taxation' has been identified. As such, economic objectives and broad objectives of any taxation policy have been highlighted. It has been stressed that tax measures may act as a catalytic agent in rapid industrialisation, which is a must for achieving higher economic growth of the country. With that background we have discussed some of the existing provisions of corporate taxation as a policy instrument in the area of industrialisation in general, and, that of the backward regions, in particular. On analysis, it was found that there is a scope for rationalisation of the existing incentives for industrialisation and suggestions have been put forward in appropriate places.

We believe that tax incentives are meaningless if there is no privilege of infrastructural facilities for attracting entrepreneurs for establishing industrial units in any area, not to speak of backward regions only. So, adequate infrastructural facilities like provision of accessible roads, developed lands, transport, water, power, etc. over and above soft loan facility, availability of trained and untrained manpower, raw materials and assured marketing facilities are the basic needs for effective industrialisation in the country.

We have seen that the present tax laws are overburdened with so

many provisions for incentives, deductions, etc. We may consider whether the audited book profits of a company be accepted as taxable profit or not with a single rate of taxation for all types of companies. Simultaneously, whatever provision for incentives and deductions are available may also be deleted. Where special encouragement or discouragement is required against planned objectives, preferential or penalty rate may be adjusted with the basic rate of income tax. That will simplify the tax structure and probably will considerably reduce litigation ; but for the sake of simplicity, revenue collection by the Government should not be overlooked.

I do believe that tax reform is a gradual process and has to be evolved through experiment, debates and discussions. I also believe that it will be misleading to look at one set of tax tools in direct tax laws neglecting the behaviour and impact of other set of tools in indirect tax laws, along with many other non-fiscal measures to have overall economic growth of the country.

Government of India has recently appointed a high-powered committee under the chairmanship of Dr. Raja Chelliah to examine the structure of direct and indirect taxes. The committee is likely to submit its final report shortly.[20]

Let us wait and hope for the better.

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THE EQUITY METHOD OF ACCOUNTING : APPLICATION IN A DEVELOPING COUNTRY

*Kenneth R. Lambert**
*Surendra Agrawal***

This paper deals with three fundamental areas in accounting for long-term investments where the cost and equity methods are divergent. The first is the balance sheet amount used by investors to represent their investment in the net assets of an investee in comparison wlth the book values of the investee representing the same net assets. The second is the amount of income reported by an investee in comparison with the income reported by the investor. The third area is the amount of income an investor corporation reports for both its own operating and investment income under the two methods where attempts to manipulate reported income are made. The authors contend that the equity method is the superior method in supplying accounting information for the consumption of financial statement readers.

1. Introduction

Under the Companies Act a corporation is classified as a holding company if it owns more than 50% of the shares of a subsidiary corporation or is able to control the content of the subsidiary's board of directors. Control of the subsidiary company may be through direct ownership of the subsidiary corporation's shares or indirect ownership as a result of a controlled subsidiary owning a controlling interest in another corporation. When a holding company publishes financial statements it is not required to combine the statements of controlled subsidiaries with its own. Instead, it must attach to its own balance sheet a copy of the subsidiary's financial statements in addition to the directors' and the auditors' reports for the subsidiary. Also included must be a statement indicating the extent of ownership in the subsidiary (i.e. the number of shares held), as well as a statement indicating the subsidiary's income for the current year as well as for the time subsequent to the date it became a subsidiary of the holding

* Associate Professor of Accountancy, Memphis State University, Memphis, Tennessee, USA.

** Professor of Accountancy Memphis State University, Memphis, Tennessee, USA. Dr. Agrawal is currently a visiting professor of Accounting in the Department of Finance and Banking at the National University of Singapore.

company so far as it concerns the holding company. In addition, amounts of such income must be shown separately to the extent they have or have not been recognized in the general ledger of the holding company.

There are two distinct methods of dealing with the investment and income of a subsidiary corporation in the general ledger of a holding company. The easiest and most straight-forward method is the cost method. Under this method the holding company records its investment in the subsidiary at cost. This amount is an asset on the holding company's records that is changed only under unusual circumstances or in the event of an additional investment in the same subsidiary company. The holding company recognizes investment income on its investment when, and to the extent, it receives dividends from the subsidiary corporation. If the holding company receives no dividends from the subsidiary then it recognizes no investment income from that particular subsidiary regardless of the profits the subsidiary may have.

Another method of accounting for long-term investments in the shares of a subsidiary corporation is the equity method. Compliance with the equity method requires changes in the holding company's investment account each year as the subsidiary corporation recognizes its own profit or loss. The amount of investment income recognized by the holding company is based on the subsidiary's reported earnings without regard to the amount of dividends received. Advocates of the equity method contend that it is superior to the cost method in several fundamental respects and that it should be required in certain circumstances as a means of providing more meaningful and useful information to financial statement readers.[1]

In some nations, such as India, the cost method is acceptable for general financial reporting and is customarily used. In other nations, particularly the United States, the equity method is the primary means of disclosing information about long-term investments in subsidiary corporations. In the United States the cost method is used only when the investment in the subsidiary is small (e.g. less than 20% of the total outstanding voting shares of the investee company) or when the investment is temporary. Certainly, the Companies Act in India permits the use of the cost method of accounting for investments in subsidiary corporations. However, it would appear that the Companies Act does not specifically require the cost method to be used and could be interpreted to permit the equity method as well. Because both the cost and equity methods are common in different settings and because they are so fundamentally different, this article is designed to compare and contrast the two methods as well as illuminate some of the advantages and disadvantages associated with their use.

The ensuing discussion is divided into three major sections as follows: In the first, the basic features of the two methods are dealt with from a theoretical point of view. The discussion is enhanced and illustrated by use of a numerical example. In the second, a practical disadvantage of the cost method is highlighted and illustrated and the final section is a summary of the central issues discussed.

2. Basic Concepts and Theoretical Considerations of the Cost and Equity Methods

Background Information

In most industrialized economies it is very common for corporations to hold an investment in the shares of another company. The size of such investments may vary from only a few shares of the investee corporation's equity capital to very large percentages of the total number of outstanding shares. In nations where the cost method of accounting for subsidiary investments is common, the size of the investment or the purpose for making the investment is not an issue. In other nations, where the equity method is predominant, the cost method may be used only in limited circumstances. For example, if an investor corporation holds only a very small percentage of the outstanding shares of another corporation and the intent is to promote good business relations or to speculate on share price and anticipated cash dividends, then the cost method may be permitted. In other circumstances corporations may acquire large percentages (20%-100%) of the outstanding voting shares of another corporation for the purpose of controlling or at least exerting "significant influence" on the actions of the investee company. In these situations the equity method is required and many accountants would argue that the cost method of accounting for such an investment is inappropriate.

A brief numerical illustration is useful to compare and contrast the fundamental concepts of these two methods of accounting for long-term investments. It will be constructive to begin the illustration with a hypothetical example of the cost method. Subsequently, the equity method will be examined in relation to the same example as a means of accentuating differences between the two methods.

Cost Method Fundamentals—Illustration No. 1

To begin, assume that Investor Coropration purchases 100% of the outstanding equity shares of Investee Corporation on December 31, 1985, and plans to account for this investment under the cost method. In this

situation the investor company would hold its investment at a fixed amount and recognize as income from the investment only the dividends received from Investee Corporation. However, in the accounting records of the investee, all depreciable assets will be depreciated each year and their book values will be decreased. In addition, annual profits (losses) will be recorded in the records of the investee, creating still further differences between the accounting records of the investor and investee over time. The balance sheet of each company immediately following the purchase transaction is as shown in Illustration One.

Illustration One

Investor Corporation Statement of Financial Position
December 31, 1985

OWNERS' EQUITY		ASSETS	
Equity Capital	Rs 31,000	Intangibles	Rs 2,000
Retained Earnings	39,000	Plant and Equip. net)	25,000
		Investment in Investee Corp.	32,000
Total Equity Capital	70,000	Stocks	4,000
		Cash	15,000
LIABILITIES			
Long-term Notes Payable	5,000		
Other Current Payables	1,000		
Accounts Payable	2,000		
Total Liabilities	8,000		
Total Liabilities and Owners' Equity	Rs 78,000	Total Assets	Rs 78,000

Investee Corporation Statement of Financial Position
December, 31,1985

OWNERS' EQUITY		ASSETS	
Equity Capital	Rs 15,000	Intangibles	Rs 1,000
Retained Earnings	17,000	Plant and Equip. (net)	20,000
		Long-term Investments	11,000
Total Equity Capital	32,000	Stocks	3,000
		Cash	5,000
LIABILITIES			
Long-term Notes Payable	4,000		
Other Current Payables	1,000		
Accounts Payable	3,000		
Total Liabilities	8,000		
Total Liabilities and Owners' Equity	Rs 40,000	Total Assets	Rs 40,000

In the purchase agreement for the shares of Investee Corporation, Investor Corporation paid Rs 32,000 which is exactly the book value of Investee Corporation's net assets (total assets of Rs 40,000 less total liabilities of Rs 8,000). Additional assumptions that will be necessary to complete the example are as follows: (1) Investee Corporation's annual depreciation charge averages Rs 2,000; (2) During each of the first five years that Investor Corporation owned Investee Corporation's shares, Investee Corporation earned Rs 10,000 net income (after depreciation and income taxes); (3) Each year Investee Corporation pays out 30% of its net income as a cash dividend; (4) Investee Corporation reinvests profits in plant and equipment in an amount that has averaged the same as the annual depreciation charge (Rs 2,000 per year). Over time this policy permits the balance of the plant and equipment account to remain relatively stable; (5) Any profits not paid out as dividends or reinvested in plant and equipment are allowed to accumulate in the cash account; and (6) for purposes of the example, assume that liabilities, stocks, investments and other assets are relatively stable amounts on the balance sheet of Investee Corporation. If these simplified and restrictive conditions exist for a period of five years, the balance sheet of Investee Corporation would appear as shown in Illustration Two at December 31, 1990.

To summarize, during the five-year time period described for Investee Corporation, Investor Corporation has been accounting for its investment in the shares of Investee Corporation using the cost method. Under this method Investor Corporation still reports the original investment cost of Rs 32,000 in its general ledger and has recognized as investment income only the Rs 15,000 in cash dividends received from Investee Corporation. A simple comparison of the financial statements of the two corporations show the same assets (100% of Investee Corporation's net assets) reported at Rs 67,000 by Investee Corporation and Rs 32,000 by Investor Corporation. The income generated by these assets over the five years was reported by Investee Corporation as Rs 50,000 while Investor Corporation reported only Rs 15,000. Obviously, this example is an oversimplification of any normal business situation, but it does illustrate the underlying process that results from application of the cost method of accounting for long-term investments and illustrates the growing lack of symmetry between the records of the investor and those of the investee in accounting for the investee company's net assets and income.

Illustration Two

Investee Corporation Statement of Financial Position
December 31, 1990

OWNERS' EQUITY		ASSETS	
Equity Capital	Rs 15,000	Intangibles	Rs 1,000
Retained Earnings	52,000	Plant and Equip. (net)	20,000
		Long-term Investments	11,000
Total Equity Capital	67,000	Stocks	3,000
		Cash	40,000
LIABILITIES			
Long-term Notes Payable	4,000		
Other Current Payables	1,000		
Accounts Payable	3,000		
Total Liabilities	8,000		
Total Liabilities and Owners' Equity	Rs 75,000	Total Assets	Rs 75,000

Change to Investee Corporation's balance sheet may be summarized as follows :

Net Income each year		Rs 10,000
Plus : Non-cash expenses (depreciation)		2,000
Annual inflow of cash		12,000
Less : Cash dividends	3,000	
Equipment purchases	2,000	5,000
Annual increase to cash account		Rs 7,000
Total cash increase for 5 years (5 × 7,000)*		Rs 35,000
Plus : Beginning cash balance December 31, 1985		5,000
Cash balance December 31, 1990		Rs 40,000

* The *increase* to retained earnings the same time period would also be Rs 35,000 (Rs 10,000 net income less 3,000 cash dividends) × 5 years. Owners' Equity (net assets) is thus Rs 67,000, i.e. Rs 15,000 equity capital plus Rs 52,000 retained earnings.

Equity Method Fundamentals

Unlike the cost method, the equity method does not allow the original investment amount to remain indefinitely fixed in the investor's general ledger nor does it rely on the receipt of cash dividends from the investee corporation as the measure of investment income. Instead, the equity method of income recognition relies on the reported income of the investee company as the fundamental ingredient in the income measurement process for long-term investments. In addition, the equity method provides a much higher degree of agreement between the monetary amounts used to represent a given group of assets on both the investor and investee companies' balance sheets. Correct application of the equity method causes the balance of investor companies' investment accounts to closely parallel the normal movements of net assets of an investee company as it proceeds through time. If an investee company makes profits (or losses) the investor's investment account increases (or decreases) accordingly. If an investee corporation pays cash dividends, which decreases its net assets, the investor corporation will decrease its investment account in accord with the amount of dividends received. In effect, the equity method extends accrual accounting to long-term investments in common stock.[2]

To illustrate the fundamentals of the equity method numerically, it will now be applied to the same two companies above with the same assumptions used in the cost method example. To apply the equity method in the first year, Investor Corporation must recognize investment income equal to that reported by Investee Corporation (Rs. 10,000) and also increase its investment account in the shares of Investee Corporation by the same amount.[3] The general journal entry to achieve this change is :

Investment in Investee Corp. (asset account) Rs. 10,000
Equity in net income of Investee Co. (income account) Rs. 10,000

In addition, Investor Corporation would show a decrease in its investment account of Rs. 3,000 in the first year of ownership as a result of the cash dividends received from Investee Corporation. The general journal entry made to recognize the receipt of the cash dividend from Investee Corporation would be :

Cash	Rs. 3,000	
Investment in Investee Corp.		Rs. 3,000

The net effect of the equity method would be a Rs. 7,000 increase to the investment account as a result of Investee Corporation's income and

dividend paying activities. Because every year was the same, Investor Corporation would have (5 × Rs. 7,000) or Rs. 35,000 added to its investment over the five years. This Rs. 35,000 added to the original purchase price of Rs. 32,000 would bring the investment account in the balance sheet of Investor Corporation to the same amount (Rs. 67,000) as shown for owners' equity in the balance sheet of Investee Corporation. In addition, Investor Corporation would show Rs. 10,000 of investment income each year for a total of Rs. 50,000 just like the income statements of Investee Corporation.

The preceding example demonstrates differences that develop in financial statements over time when the cost and equity methods are applied to a single fact situation. Using the cost method, the investor's investment account, which represents the investment in the shares of the investee, remains unchanged over time while the investee's net assets constantly change because of normal business activities. As a result, the cost method is criticized for creating *non-symmetrical* accounting—i.e. the same assets (those of the investee) are accounted for quite differently by the investor and investee. In contrast, however, the equity method allows the investor's investment account to *parallel* the movements of the subsidiary's actual net assets and is thus much more representative of the amounts in the investee's accounting records.

Many accounting theorists contend that the equity method is superior to the cost method with respect to representation of the investment on the investor's balance sheet, and the financial statement readers are much better informed about the actual value of the investor's investments if the equity method is used. Their reasoning is that when an investor company makes a very large investment in the equity capital of another corporation, there is really no substantial economic difference between owning the shares of a company that owns specific assets and owning the same specific assets directly. For ease of discussion it is useful to define these two types of ownership as indirect (owning the shares of a company that owns a specified group of assets) and direct (owning the specified group of assets outright). In addition, because there is in substance no difference between indirect and direct ownership of an asset group with respect to control of its use, there should also be no substantial differences in accounting for the income earned and the stated valuation of the same assets in financial reporting. This is especially true when the percentage of ownership is large enough to permit the investor corporation to elect several of the investee corporation's directors and thus create an amount of direct control over the policies and actions of the investee. From a theoretical perspective

the issue is one of accounting and reporting symmetry. More specifically, one might ask why the form of ownership should create a difference in the way the investment is accounted for and the amounts used to represent the investment in financial reports of the entity owning it ? The logical answer seems to be that it should not.

Other Aspects of the Equity Method

An extension of the example discussed in the previous section may be useful to illustrate an additional feature of the equity method. In the financial statements presented above for Investee Corporation, it was assumed that the book value of the company's assets was the same as their market value on December 31, 1985. Thus, when Investor Company purchased 100% of the outstanding shares of Investee Company, the purchase price of Rs. 32,000 was exactly equal to the total of owners' equity in the balance sheet. However, for a number of reasons the book value of a company's assets is unlikely to be equal to their market value. Continuing the above example with an additional complication, assume that when Investor Corporation purchased the shares of Investee Corporation the market price was Rs. 33,000 instead of Rs. 32,000 which is Rs. 1,000 greater than the book value of Investee Corporation's net assets. Assuming all of the identified assets on Investee Corporation's balance sheet are properly valued, the only logical justification for this addition to the purchase price is that Investee Corporation has Rs. 1,000 of unrecorded goodwill associated with the company. Investee Corporation may be aware that there is goodwill associated with its business operations but normally cannot arbitrarily write up its own assets even though company officers are of the opinion that goodwill should be recognized.

At this point the two companies have different amounts recorded for the net assets of Investee Corporation. However, it should be noted that in this example the difference in monetary amounts used by the two companies is because of a difference between market and book values of the subject assets. And, as the following discussion will show, the difference will be diminished over time as the equity method is applied in subsequent years which is the opposite effect generated by the application of the cost method.

Investor Corporation, even though applying the equity method of accounting for its investment in Investee Corporation, is required to abide by the overall constraints of historical cost based accounting. This means that Investor Corporation will view its recorded amount of Rs. 33,000 as the more current and thus superior measure of Investee Corporation's net

assets. When determining income, Investee Corporation will apply the matching principle and thus record depreciation and other asset costs on the basis of recorded original costs for assets used in the income generation process. Therefore, when Investee Corporation reports income of Rs. 10,000, Investor Corporation will consider that amount to be "overstated" because Investee Corporation does not have recorded as an asset the Rs. 1,000 for goodwill and thus has not amortized the goodwill as a normal business expense.

Appropriate application of the equity method requires Investor Corporation to adjust the reported income of Investee Corporation in its own records to reflect amortization of the Rs. 1,000 of goodwill. Assuming Investor Corporation's policy is to amortize all goodwill amounts over a five-year period, an additional Rs. 200 of expense will be recognized by Investor Corporation as an offset against the recognized income of Investee Corporation. The following additional general journal entry would be required each year as the equity method is applied to the Investee Corporation investment :

Amortization expense of investee goodwill	Rs. 200
Investment in Investee Co.	Rs. 200

The end result of this entry is to adjust the income recognized from Investee Corporation downward by Rs. 200 to Rs. 9,800 and to decrease the amount of the Investment account by the same amount. Over a five-year period, Investor Corporation will decrease the total income recognized from Investee Corporation from Rs. 50,000 (5 years × Rs. 10,000) to Rs. 49,000 (5 years × Rs. 9,800). Also, after five years of amortizing Rs. 200 for goodwill each year, Investor Corporation will decrease its Investment in Investee Corp. account by a total of Rs. 1000 (5 years × Rs. 200) and the investment account balance will be the same amount (Rs. 67,000) as the total owners' equity shown in the general ledger of Investee Corporation. Had Investor Corporation been using the cost method, the investment account would still be shown at Rs. 33,000.

When the cost of an investee's net assets to an investor at the date of purchase, is different from the book values of the investee for the same net assets, the records of the investor are superior to those of the investee because they reflect the current or market value of the investee's net assets. In addition, if the investor uses the equity method to account for the investment, recognized income from the investment by the investor will also be superior because the investee's financial statements will be based on historical costs that are not current. The above example concerning

goodwill is based on the assumption that only one asset creates the total difference between market and book value of the investees net assets. In reality, most purchases of this kind will involve a large number of assets having book values that are substantially different from their market values. The equity method, requiring the investor to calculate investment income on the basis of the market value of the investee's net assets at the time of acquisition, will always be theoretically superior to the historical based income calculated by the investee.

This difference between the investment income under the two methods is magnified when one realizes that most large companies do not have only one investee company in which they hold an interest. To the extent that the above example is repeated in a large number of investee companies, (sometimes several hundred investees) the problem of non-symmetrical income and asset reporting is magnified for the investor company as a whole and the difference between the cost and equity methods is magnified.

3. Practical Considerations of the Cost and Equity Methods

When choosing between alternative accounting methods, one of the criteria relevant in the decision model is the ability of the chosen method to capture the economic essence of recorded transactions in addition to causing the financial reporting process to be adequately reflective of the underlying economic circumstances. For lack of a better term this might be called the "economic accuracy" criterion. All accounting methods are not equal relative to this criterion and certainly such is the situation when the cost and equity methods are compared.

The discussion and example to follow are based on a situation that is quite common in today's business world. The situation is one where a holding company owns several subsidiary companies in a particular industry, forming what could be called a "natural business unit" or a "family" of companies. Within this group of related companies one would expect to find numerous transactions representing the purchase and sale of stock, financial dealings in debt and equity securities, lessor and lessee arrangements, service contracts, sales of new and used equipment, real estate transfers, etc.. A significant financial reporting issue is how to deal with the intercompany profit created by such intercompany transactions. In the numerical example to follow, just one of the many types of intercompany transactions, intercompany sales of stock, is used to illustrate the potential that exists for manipulating reported income within a "family"

of companies under the cost method of accounting for long-term investments. Motivations for the manipulation are discussed and the superiority of the equity method as a defense against them is noted.

Motivation for Manipulations

Experienced auditors and academicians have long been aware of the opportunities and propensity of key high-level corporate managers to manipulate and control, to a certain extent, the reported income of the companies where they are employed. Accounting literature frequently contains articles that have been written to address the motivations and methods of managers who would try to "manage" the reported results of their corporate activities. It should be noted that the manipulations referenced here normally are not fraudulent or illegal acts that would result in criminal or civil penalties. The activities under discussion here are the types of things permitted within the realm of accepted accounting principles.

In the complex environment of modern-day free enterprise there are virtually unlimited types of diverse business organizations. The types of business activities and transactions in which these organizations participate are also virtually unlimited. With such diversity in the economy it would be unacceptable to even consider that a single set of accounting principles would be appropriate for every business organization in every industry. Because of diversity in the economic environment it has long been accepted that alternative accounting methods are needed to accommodate the aforementioned conditions. Accordingly, some choice is available to the captains of industry in selecting the particular accounting methods under which their specific corporations shall account and report. It is the flexibility and choice available to decision makers, inside the realm of accepted accounting methods, that simultaneously affords managers the opportunity to manipulate reported income and challenges the writers of accounting standards to prevent undesirable and misleading financial statements.

Motivations for manipulating reported corporate income fall into two basic categories that may be described as either long-term or short-term. Whether the type of manipulation conducted by high-level corporate officials is long-term or short-term there is ultimately a personal benefit to the responsible individual (s).

Long-term manipulations of corporate income may take different forms involving activities designed to cause the corporation to eventually appear more desirable to investors and creditors than they otherwise would.

Two common types of long-term manipulation are income smoothing and projection matching. Corporations having a volatile earning record may be perceived as a higher investment risk due to unstable earnings that are difficult to project into the future. As a result, there may be a desire to level out or smooth the volatility of reported earnings. Also, managers may choose to manipulate reported income in order to meet earnings projections made by company officers. If corporate managers can make the earnings record of their corporation appear more stable *and* more predictable over time, the overall result may be higher market prices for company stock, increased ability to borrow funds and, eventually, a more secure position with an improved professional reputation for the individuals involved. The basic philosophy of the long-term approach to manipulation of reported income is to make the corporation look good over a long period of time for the purpose of generating personal rewards. The short-term approach toward income manipulation has the same ultimate goal of personal reward as the long-term approach but must employ different strategies in order to accomplish the intended short-term benefits. Here, instead of trying to make reported corporate income appear to be steadily growing at a predictable rate, the intent may be just the opposite. High level executives may actually attempt to make corporate income appear worse than it actually is and then use the poor performance as a justification for establishing a system of executive bonuses and/or stock option plans that are linked to reported corporate profits in the future. The stated purpose of the bonus system, of course, would be to motivate upper management toward improved corporate performance in the future and higher profitability. Subsequently, when the system of bonuses are in effect, high level executives will be motivated to report higher corporate profits and maximize their own personal benefit under the bonus/stock option plans.

Method of Corporate Income Manipulation

In an environment where a corporation has a large ownership position in the shares of several investee corporations, there are various methods of creating income manipulations for either the investor or the investee and, as discussed in the previous section, motivations for doing so. For illustration purposes here, however, it is useful to limit the discussion to just two areas of potential income manipulation : cash dividends and intracompany sales of stock.

One of the simplest methods of income manipulation under the cost method of accounting for investments is the control of cash divi-

dend payments. Because the only investment income recognized under the cost method is cash dividends received, an investor corporation having control of an investee could easily increase or decrease the amount of cash dividends paid by the investee and thus control the amount of investment income from that particular investee. Obviously, there would be an upper limit on the amount of cash dividend that could be extracted by an investor corporation from an investee. However, should an investor corporation so choose, it could make substantial cash loans to an investee corporation and then require that investee to pay out the borrowed money in a dividend to the investor. The end result of such a transaction would be a direct increase to investment income under the cost method. In future years the investee could limit its cash dividends and use the cash saved to repay the loan from the parent. Thus, the cost method permits the investor company to shift future investment income to the present or present investment income to the future, by controlling the timing of cash dividend payments.

Regarding intercompany sales of stock, investor corporations using the equity method to account for intercompany sales are to required to eliminate any unrealized profit on sales within the "family" of corporations before determining net income. Under the cost method such "unrealized" profits are included, without question, and may increase income above what it shold be. In other situations, where obvious income manipulation is associatcd with intercompany sales, a much larger distortion of reported income can be created than a mere failure to eliminate the unrealized profit on a normal level of intercompany business.

When an investor corporation owns more than 50% of the outstanding voting shares of an investee corporation, there is no question that the investor company can control every action of the investee. Depending on the circumstances, an investor may also have significant influence and control over the actions of an investee even when the percentage of ownership is less than 50%. In such cases, the investor corporation could easily control both the volume and price of intracompany sales between the two companies. Should the investor company be having a poor year in their own operations, several investee companies could be required to purchase large amounts of inventory from the investor company, at huge profits, as a way of increasing the investor's income. If the cost method is used to account for long-term investments, such transactions would not be challenged, unrealized profits would not be eliminated and the investor's income would be increased. In transactions where the *price* of intercompany shipments to investees has been artificially increased above

normal, the effect is to transfer or shift income to the investor from the investee. In transactions where the *quantity* has been increased above normal, the effect is to transfer or shift income to the investor from future time periods to the present. Obviously, both of these techniques could be used simultaneously.

Equity Method Illustration—Intercompany Sales

For purposes of this illustration assume that Investor Corporation has two subsidiary corporations, Investee 1 and Investee 2, that Investor Corporation organized to facilitate its own business activities. Originally, 100% of the voting shares in each corporation were owned by Investor Corporation. Three years ago Investor Corporation sold equity shares to outside investors that reduced its ownership percentage to 75% in both Investee 1 and Investee 2. Both of the investee corporations are part of a natural business unit as defined in the previous paragraph and substantial intercompany sales occur each year. Investee 1 is a company that supplies large quantities of raw materials to Investor Corporation, so a major percentage of its total sales each year are intercompany in nature. Investee 2 is a marketing outlet that purchases a substantial percentage of its stock from Investor Corporation, creating a large percentage of intercompany sales for Investor Corporation. Because Investor Corporation owns 75% of the equity shares in each Investee company, both the price and quantity of stocks transferred through intercompany sales are controlled by Investor Corporation. As a matter of company policy, however, Investor Corporation sets transfer prices for stocks transferred between itself and both investee companies at current market price. For purposes of this example, assume that this pricing mechanism is consistent with industry standards and provides a 100% mark-up on stocks transferred i.e. prices Investor Corporation pays for stock from Investee 1 is twice the cost of the stock to Investee 1 and the prices charged to Investee 2 are twice the cost of the stock to Investor Corporation. One additional assumption that will facilitate the following example is to assume that 60% of the stock Investor Corporation acquired in 19X1 from Investee 1 has been *resold* in the normal course of Investor's operations to customers independent of Investor and both Investees. Also, 75% of the stocks Investee 2 acquired from Investor Corporation in 19X1, have been *resold* to customers independent of Investor and each Investee by the end of the year. In Schedule One, information relative to transactions within these companies is summarized.

Schedule 1

Investor Corporation and Investees
Schedule of Intercompany Sales and Unrealized Profits
For Year Ended December 31, 19XI

(Amounts in 000's)

	Seller's Cost	Transfer Price	ICP*	Percent Resold	ICP Realized**	ICP Unrealized
Investee 1 to Investor	Rs 6,000	Rs 12,000	Rs 6,000	60%	Rs 3,600	Rs 2,400
Investor to Investee 2	7,500	15,000	7,500	75%	5,625	1,875

* ICP stands for Intercompany Profit.

** Stocks transferred from one company to another within a "family" of companies creates intercompany sales. If the transfer price on intercompany sales is set to yield a profit for the selling entity, the profit is considered "realized" only after the transferred stocks have been *resold* to an independent third party in an arm's length transaction. When intercompany sales are made above cost and when the equity method is used in accounting for long-term investments, the companies involved must carefully calculate the amounts of intercompany profit associated with unsold stocks at the end of each fiscal year. Under the equity method all unrealized profits on stock transferred within the family of companies must not be recognized and the balance sheet carrying value for such stocks must be decreased to the actual cost of acquiring or manufacturing the stocks.

Schedule 2

Unadjusted (Independent) Income Statements
For Year Ended December 31, 19XI

	Investee 1	Investee 2	Investor Corp.	Total
Sales (regular)	Rs 10,000,000	Rs37,500,000	Rs28,400,000	Rs 75,900,000
Sales (intercompany)	12,000,000	0	15,000,000	27,000,000
Total Sales	22,000,000	37,500,000	43,400,000	102,900,000
Cost of Goods Sold	(11,000,000)	(18,750,000)	(21,700,000)	(51,450,000)
Gross Profit	11 000,000	18,750,000	21,700,000	51,450,000
Operating Expenses	(3,000,000)	(8,500,000)	(10,500 000)	(22,000,000)
Pretax Operating Income	8,000.000	10,250,000	11,200,000	29,450,000
Income Tax (30%)	(2,400,000)	(3 075,000)	(3,360,000)	(8,835 000)
Net Operating Income	Rs 5,600,000	Rs 7,175,000	Rs 7,840,000	Rs 20,615,000

For 19X1, the records in each of the three companies reflected the income shown in Schedule Two *before* any adjustment that would be required to apply the equity method. As shown there, Investee 1 sold stocks costing Rs. 6,000,000 to Investor Corporation for Rs. 12,000,000 and Investor Corporation sold stocks costing Rs. 7,500,000 to Investee 2 for Rs. 15,000,000. This means that Investee 1 has reported Rs. 6,000,000 gross profit on sales controlled by Investor Corporation while only 60% of this stock has been resold to independent companies outside the "family" of companies. The same is true for Investor Corporation. It has recognized Rs. 7,500,000 gross profit on stocks sold to Investee 2 and only 75% of this stock has been resold to independent companies not controlled by Investor Corporation. Correct application of the equity method requires adjustments to disallow unrealized profit on intercompany sales. Thus, Investee 1 can properly recognize 60% of the Rs. 6,000,000 gross profit from the Rs. 12,000,000 sale of stock to Investor Corporation. Alternatively, 40% of the Rs. 6,000,000 *cannot* be recognized as gross profit because it is *unrealized*. Also, in its balance sheet Investor should reduce the recorded amount for the remaining 40% of the stock that is unsold to the amount actually paid for it by Investee 1. The required reduction would be Rs. 2,400,000 i.e. (.40 × 6,000,000) which is the amount of the unrealized intercompany profit. For the Rs. 15,000,000 sale that Investor Corporation made to Investee 2, the same adjustments must be made. Investor must recognize only 75% of the Rs. 7,500,000 gross profit on its income statement and Investee 2 must decrease its cost of stocks for balance sheet purposes by 25% of Rs. 7,500,000 or the amount of the unrealized profit on intercompany sales.

Making these adjustments to the previously reported incomes results in the restated income amounts in Schedule Three. Please note that the adjustments to remove unrealized intercompany profit were made by deducting unrealized profit from gross profit to obtain "adjusted" gross profit.

In previous years, both investee corporations have paid cash dividends equal to 50% of their reported net income *before* any adjustments to remove unrealized intercompany profit as required by the equity method. Because Investor Corporation owns 75% of both companies, 75% of the cash dividends are paid to Investor Corporation. Furthermore, since Investor Corporation organized both subsidiary companies (they were not purchased as an on-going business), there are no differences between the cost of the investments to Investor Corporation and the book values of the investee companies, such as goodwill, that require adjustments to

Schedule 3

Restated Income Statements
For Year Ended December 31, 1991

	Investee 1	Investee 2	Investor Corp.	Total
Sales (regular)	Rs 10,000,000	Rs 37,500,000	Rs 28,400,000	Rs 75,900,000
Sales (intercompany)	12,000,000	0	15 000,000	27,000,000
Gross Sales	22,000,000	37,500,000	43,400,000	102,900,000
Cost of Goods Sold	(11,000 000)	(18,750,000)	(21,700,000)	(51,450,000)
Gross Profit	11,000,000	18,750,000	21,700,000	51,450,000
Less: Unrealized Profit on Intercompany Sales	(2,400,000)	0	(1,875,000)	(4,275,000)
Adjusted Gross Profit	8,600,000	18,750,000	19,825,000	47,175,000
Operating Expenses	(3,000,000)	(8,500,000)	(10,500,000	(22,000,000)
Pretax Operating Income	5,600,000	10,250,000	9,325,000	25,175,000
Income Tax (30%)	(1,680,000)	(3,075,000)	(2,797,500)	(7,552,500)
Net Operating Income	Rs 3,920,000	Rs 7,175,000	Rs 6,527,500	Rs 17,622,500

the reported income of the investees should Investor Corporation apply the equity method of accounting for these investments. As noted previously, correct application of the equity method requires that Investor Corporation eliminate all unrealized gross profit on intercompany sales when determining its own operational income as well as all unrealized gross profit of subsidiary corporations when determining investment income. In Schedule Four, Investor Corporation's *total* income (investment income added to the operating income from above) is summarized under both the cost and equity methods of accounting for long-term investments. The cost method of determining total income for Investor Corporation will be based on the reported incomes in Schedule Two while the equity method requires that the reported incomes from Schedule Three be used. Please recall that Investor Corporation will equate investment income under the cost method to cash dividends received from the investee companies, while investment income under the equity method will be the net income of each investee multiplied by Investor's ownership percentage in each subsidiary company.

Schedule 4

Investor Corporation

Income Comparison Under the Cost and Equity Methods

For Year Ended December 31, 1991

	Cost Method	Equity Method
Operating Income	Rs 7,840,000	Rs 6,527,500
Investee 1 (Cash dividends only, (.50 × Rs 5,600,000)	2,800,000	
Investee 1 (.75 × Rs 3,920,000)		2,940,000
Investee 2 (Cash dividends only, .50 × Rs 7,175,000)	3,587,500	
Investee 2 (.75 × Rs 7,175,000)		5,381,250
Less tax on *investment* income (not recognized above) @ 30%*	(1,916,250)	(2,496,375)
Net Income	Rs 12,311,250	Rs 12,352,375

*For purposes of simplicity, it is assumed here that Investor Corporation will pay income tax on investment income earned by investees at the standard 30% rate regardless of the method used to account for long-term investments. That may or may not be the situation in different countries. It may be that taxable investment income will be determined by tax authorities according to their own unique method of measuring investment income The method they use may be dissimilar to either the cost or equity method and a unique tax rate may be applied to investment income so determined.

The preceding example was designed to create a situation where the total income of Investor Corporation was approximately equal whether measured by the cost or equity method of accounting for investment income. The difference between the two income numbers in Schedule Four is Rs. 41,125 which is approximately three tenths of one percent. To demonstrate the possible effect of direct income manipulation involving both cash dividends and intercompany sales, the previous example relative to Investor Corporation and Investees 1 and 2 will be recalculated. Assume that Investor Corporation desires to show a substantial increase to its reported income for 1991. To accomplish this desired increase, Investor requires both investees to increase their cash dividend to 75% of net income (from 50%) and requires Investee 2 to make a large increase in the amount of stock purchased from Investor. Specifically, Investee 2 is

required to increase its purchase of stock from Investor by 90%. In the previous example Investee 2 paid Rs. 15,000,000 for stock that cost Investor Corporation Rs. 7,500,000. Increasing both the Rs. 15,000,000 and the Rs. 7,500,000 by 90% causes intercompany sales to Investee 2 to be Rs. 28,500,000 (1.9 × 15,000,000) and the cost of such sales to be Rs. 14,250,000 (1.9 × 7,500). Also assume that this increase to the normal shipment was done at the end of the year and that Investee 2 was unable to sell any of this new quantity received from Investor Corporation. Each of the above schedules will be reprinted under these altered assumptions. Please note that because the equity method does not base investment income on cash dividends and does not permit unrealized profit from intercompany sales to be included as income, there is no change at all in the amount of income reported under the equity method. The income reported under the cost method, however, is drastically changed as a result of the change in cash dividend payout expected of the investees and the unrealized profit from intercompany sales. In Schedule Four the cost method income is Rs. 12,311,250 and in Schedule Four—Alternate it is Rs. 19,271,875—an increase in reported income for Investor Corporation in excess of 56%.

Schedule 1—Alternate

Investor Corporation and Investees
Schedule of Intercompany Sales and Unrealized Profits
For Year Ended December 31, 1991
(Amounts in 000's)

	Seller's Cost	Transfer Price	ICP*	Percent Resold	ICP Realized	ICP Unrealized
Investee 1 to Investor	Rs 6,000	Rs 12,000	Rs 6,000	60%	Rs 3,600	Rs 2,400
Investor to Investee 2	14,250	28,500	14,250	39.47%**	5,625	8,625

*ICP stands for Intercompany Profit.

**This percent decreased from 75% because Investee 2 had much more stock available to sell but was unable to sell any additional quantities because the shipment was made at the end of the year.

Schedule 2—Alternate

Unadjusted (Independent) Income Statements
For Year Ended December 31, 1991

	Investee 1	Investee 2	Investor Corp.	Total
Sales (regular)	Rs 10,000,000	Rs 37,500,000	Rs 28,400,000	Rs 75,900,000
Sales (intercompany)	12,000 000	0	28,500,000	40,500,000
Total Sales	22 000,000	37,500,000	56,900,000	116,400,000
Cost of Goods Sold	(11,000,000)	(18,750,000)	(28,450,000)	(58,200,000
Gross Profit	11,000,000	18,750,000	28,450,000	58,200,000
Operating Expenses	(3,000,000)	(8,500,000)	(10,500,000)	(22,000,000)
Pretax Operating Income	8,000,000	10,250,000	17,950,000	36,200,000)
Income Tax (30%)	(2,400,000	(3,075,000)	(5,385,000)	(10,860,000)
Net Operating Income	Rs 5,600,000	Rs 7,175,000	Rs 12,565,000	Rs 25,340,000

Schedule 3—Alternate

Restated Income Statements
For Year Ended December 31, 1991

	Investee 1	Investee 2	Investor Corp.	Total
Sales (regular)	Rs 10,000,000	Rs 37,500,000	Rs 28,400,000	Rs 75,900,000
Sales (intercompany)	12,000,000	0	28,500 000	40,500,000
Total Sales	22,000,000	37,500,000	56,900,000	116,400,000
Cost of Goods Sold	(11,000,000)	(18,750,000)	(28,450,000)	(58,200,000)
Gross Profit	11,000,000	18,750,000	28,450,000	58,200,000
Less : Unrealized Profit on Intercompany Sales	(2,400,000)	0	(8,625,000)	(11,025,000)
Corrected Gross Profit	8,600,000	18,750,000	19,825,000	47,175 000
Operating Expenses	(3,000,000)	(8,500,000)	(10,500,000)	(22,000,000)
Pretax Operating Income	5,600,000	10,250,000	9,325,000	25,175,000
Income Tax (30%)	(1,680,000)	(3,075,000	(2,797,500)	(7,552,500)
Net Operating Income	Rs 3,920,000	Rs 7,175,000	Rs 6,527,500	Rs 17,622,500

Schedule 4—Alternate

Investor Corporation
Income Comparison Under the Cost and Equity Methods
For Year Ended December 31, 1991

	Cost Method	Equity Method
Operating Income	Rs. 12,565,000	Rs. 6,527,500
Investee 1 (Cash dividends only, .75 × Rs. 5,600,000)	4,200,000	
Investee 1 (.75 × Rs. 3,920,000)		2,940,000
Investee 2 (Cash dividends only, .75 × Rs. 7,175,000)	5,381,250	
Investee 2 (.75 × Rs. 7,175,000)		5,381,250
Less tax on investment income (not recognized above) @ 30%	(2,874,375)	(2,496,375)
Net Income	Rs. 19,271,875	Rs. 12,352,375

The first two numerical examples in this paper were designed to demonstrate differences between the cost and equity methods in accounting for long-term investments from the investor's point of view. They dealt with differences in accounting for the assets and investment income of an investor corporation. The last comparison of the two methods, however, deals with an entirely different situation. The point of focus there is the inability of the cost method to effectively deal with explicit attempts to manipulate, over a limited time period, the total reported income of an investor corporation, should managers choose to mis-represent the profitability of their corporation and its investment holdings. The example deals only with intercompany sales and does not focus on other areas of potential manipulation such as intercompany debt issues, intercompany transfers of real-estate or intercompany transfers of fixed assets such as equipment and machinery. The discussion associated with intercompany sales demonstrates that motivation for profit manipulations does exist and that the cost method is unable to thwart manipulation efforts of high level managers. Therefore, in addition to providing a better measure of income and assets in the financial statements of investor corporations, the equity method, when properly applied, is superior to the cost method where there is potential for income manipulation through ordinary purchase/sale transactions of inventory or other assets.

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The 17th Annual Conference of the Indian Accounting Association will be held in Udaipur on February 14-16, 1993, on the following topics :

(1) Accounting and Management of Finance in Small Business

(2) Appraisal of Direct Taxes in India

Seminar

(3) Ethics in Accounting.

For further details contact :

Professor K. R. Sharma
Dean, College of Commerce and Management Studies
M. L. Sukhadia University
Udaipur—313001.

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CAPITAL MAINTENANCE CONCEPTS AND INCOME MEASUREMENT

*Ibrahim Aly**
*Farhad Simyar**

Here the authors focus upon a fundamental concept in the determination of accounting income and explain how the competing approaches of financial and physical capital maintenance are dealt with in academic and authoritative accounting literature.

Introduction

The concept of capital maintenance has been a major concern for the accountants and users of accounting information for many years. This concept has its roots in economic thought. This fact is reflected in Hicks' definition of net income, which is the maximum amount that a man could consume during a period and still remain as well off at the end of the period as he was at the beginning[1]. This definition is one of the most widely quoted definitions of net income in accounting literature because of its recognition of the dependence of income on capital maintenance. In this regard, income results only after capital has been maintained. Thus, the concept of capital maintenance is used to divide the return on capital (earnings) from the return of capital (recovery of the invested capital). Moreover, the concept, in accounting is essentially a mental construct—an abstraction, not identifiable with any real-world constraint. It enables the determination of business income by spelling out the relationship between capital and income. Since capital, conceptually, is subject to a number of interpretations, depending upon the base of valuation of wealth adopted, the capital maintenance concept too is devoid of unique interpretation. Two main concepts of capital maintenance have been considered in the accounting literature. Some perceive

* Professor and Head of the Department of Accounting, respectively, in Concordia University, Montreal, Canada.

capital as a financial phenomenon ; therefore, they are mainly concerned about the maintenance of the invested financial capital. On the other hand, there are those who perceive capital as a physical phenomenon. They are mainly concerned with maintaining the operating capacity of the firm. The object of this paper is to discuss the major differences between these two concepts of capital and the strengths and weaknesses of each concept and, finally, a brief discussion of capital maintenance in authoritative literature.

1. The Financial Capital Maintenance Concept

This concept of capital maintenance differs, depending upon which definition is used. The capital maintenance concept used with the historical cost convention is designed to maintain the monetary amount of the shareholders' equity. This means that, with the historical cost convention, net income results only if the total of the shareholders' equity at the end of the period is greater than the total of the shareholders' equity at the beginning of the period assuming no change in investment. This definition is geared toward enabling the owners of the business to see how their investment has improved in comparison with its original cost—that is, the money that they originally invested. Thus, the capital to be maintained under the historical cost convention is the original share capital. The following simplified example illustrates this capital maintenance. The following assumptions will be used in this and the later examples :

1. On January 1, 1989, a company starts its business with $ 1,000 cash and buys ten units of inventory for $ 100 per unit.
2. During 1989, the general price index increases by 10 percent.
3. At December 31, 1989, the replacement cost of inventory is $ 120 per unit.
4. The company sells five units of inventory at December 31, 1989, for $ 150 per unit in cash.

The company wishes to distribute a dividend equal to 100 percent of net income. According to the above, the historical cost net income would appear as shown in Table 1.

Table 1 : Historical Cost Financial Statements

Statement of Income and Retained Earnings
for Year Ending December 31, 1989

Sales revenues ($ 150 × 5)	$ 750
Cost of goods sold ($ 100 × 5)	500
Historical cost net income	$ 250
Dividend (100% of reported income)	−250
Net addition to owner's equity	$ 000

Statement of Financial Position
December 31, 1989

Assets		*Equities*	
Cash	$ 500	Owner's Equity	$ 1,000
Inventory	500		
	$ 1,000		$ 1,000

According to this concept (nominal dollar capital maintenance), the financial capital is maintained because :

1. The company started in 1989 with $ 1,000 as owner's equity represented in inventory that had a historical cost of $ 1,000. Thus, the starting point position is defined in terms of historical cost (nominal dollars).
2. After the company paid a dividend as 100 percent of net income ($ 250), $ 500 of the original cash inflow from sales revenues was retained.
3. The $ 500 retained can then be put back into the purchase of inventory in order to renew the business cycle.
4. If this is done, the company will once again have $ 1,000 of inventory, which is precisely equal to its start-of-period inventory expressed in historical dollars.
4. Therefore, a dividend of $ 250 allows the company to maintain its financial capital in terms of number of historical dollars.

This accounting convention produces useful information for owners and managers of businesses over a period of stable prices. However, this accounting convention fails to reflect the impact of inflation on the reported earnings and capital of business enterprises. This failure stems from two of the most important weaknesses of contemporary accounting : the assumption of a stable monetary unit and stable specific price levels.

In the past fifteen years, changing prices have had a significant impact on the overall performance of business enterprises. Business organizations have reported so called "illusory profit", causing some serious capital formation and liquidity problems[2]. In 1974, nonfinancial corporations in the United States reported $ 466 billion in after tax profits, an apparent increase of 74 percent over 1965[3]. However, after adjusting the figures for the effect of "under depreciation" and inventory, it became evident that after tax profits had actually declined from an adjusted $ 37 billion in 1965 to $ 21 billion in 1974[4]. The 1979 annual report of International Business Machines (IBM) indicates that when historical cost net income was adjusted for the effects of general inflation, the result was a decline of almost 42 percent from $ 3.85 billion nominal dollars to $ 2.25 billion adjusted dollars[5]. In addition, according to General Motors, its historical cost figures adjusted for general inflation and current cost were 46 and 28 percent repectively of the reported historical cost income in 1979[6].

Therefore, the accounting professionals and practitioners argue that, in time of rapidly changing prices, many American companies are paying out most or all of their "real" earnings as dividends, raising serious questions regarding where these companies will obtain sufficient funds to maintain their existing capacity to finance future growth.[7] The end result of this paradox is the erosion of physical operating capability, the erosion of the general purchasing power of invested capital and the deterioration of the earning power of the business enterprises. Harold M. Williams, the chairman of the Securities and Exchange Commission (SEC) pointed out : The economic reality of an inflationary environment is that much of American business is not generating and retaining sufficient funds to replace existing capacity and to maintain present levels of operations.[8]

These criticisms, which is in essence a value judgement, lead us to the other two major capital maintenance concepts : the maintenance of the purchasing power of a company's shareholder's capital or of the company's operating capacity.

2. Constant Dollar Capital Maintenance Concept.

Under this concept of capital maintenance, we use the current value of the dollar as the measuring unit, adjusting earlier years' dollars by a general purchasing power index, and it continues to report on the historical cost of the original investment. The aim of this concept has been argued by Baxter :

> ...if we grant the importance of investors and owners, we are impelled to view capital maintenance in the light of their personal welfare (purchasing power in the general market), not the physical size of the firm : CPP (current purchasing power) represents human beings rather than the 'damned abstraction' of the company.[9]

So, this capital maintenance concept does not recognize profit until the invested capital of the shareholders is maintained, adjusted to reflect movement in a general price index or the consumer index.

The concept of capital maintenance is based on the perception of the firm from proprietary viewpoint, where

(1) the firm is owned by a sole proprietor, a set of partners, or a number of shareholders ;

(2) the firm's assets and liabilities belong to the owners ;

(3) profits and losses of the firm belong to the owners at the time they are earned, whether they are distributed or not (Assets – liabilities = net worth of proprietors) ; and

(4) the objective of accounting is to account for the owners' interest in the firm.

Gynther argues that constant dollar capital maintenance concept is a proprietary viewpoint of capital for two main reasons[10] ; firstly, the general price index used is based on all goods and services, including consumer goods, not on specific goods and services. Therefore, general purchasing power is considered by entity theorists to be not relevant for each firm. Secondly, the adjustment entries made by general purchasing power are usually based on the total of common shareholder funds and not on the total of all funds invested in the entity. In addition, holding gain is considered by the proprietary theorist as real income. It should accrue to the shareholders as a measure of their real accretion of wealth caused by the rise in the value of the assets held by their firms because shareholders identify their share in the company as its nominal equity capital.[11]

The following simplified example illustrates this capital maintenance concept. Using the same data which were introduced above and based on this concept, historical cost/constant dollar financial statements would appear as shown in Table 2.

Table 2 : Historical Cost/Constant Dollar Financial Statements

Statement of Income and Retained Earnings
for Year Ended December 31, 1989

Sales revenue ($ 150 × 5)	$ 750
Cost of goods sold ($ 100 × 5 × 1.1)	550
Constant dollar operating income	$ 200
Holding Gain ($ 100 × 10 × 0.10)	100
Owner's equity adjustment (1,000 × 0·10)	– 100
Net Income	$ 200
Dividend 100% of net income	– 200
Net addition to owner's equity	000

Statement of Financial Position
December 31, 1989

Assets		*Equities*	
Cash	$ 550	Owner's equity	$ 1,000
Inventory	550	Constant dollar adjustment	100
Total	$ 1,100	Total	$ 1,100

According to this concept (constant dollar capital maintenance), financial capital is maintained because of the following :

1. The company started in 1989 with inventory which had a historical cost of $ 1,000. But, because of general inflation, it now takes $ 1,100 at December 31, 1989, to buy what $ 1,000 bought at January 1, 1989. Thus, the starting point is defined in terms of constant dollars.
2. After the company paid a dividend as 100 percent of the net income ($ 200), $ 550 of the original cash inflow from sales revenues was retained.
3. The $ 550 retained can then be put back into the purchase of inventory in order to renew the business cycle.
4. If this is done, the company will once again have $ 1,100 of inventory with a year-end purchasing power equivalent of the beginning of the period's historical cost dollars.

Strengths. The major strengths of this concept are the following :

1. The proponents of this concept (CPP) generally regard its main advantage as being the use of homogeneous units of measure-

ment, whereas the historical cost nominal dollars involve units having a variable worth. They believe that their concept will generate reliable information for users because it is based on financial accounting principles. It is objective, verifiable, and represents the least departure from historical cost convention.[12]

2. Current purchasing power accounting is fundamentally a form of historical cost accounting because it adjusts only the units of measurement.[13] Thus, the information produced is as reliable as the information produced by historical cost acounting.
3. In addition, this concept of capital maintenance enables inter-temporal comparisons of accounting data to become more meaningful.[14]
4. It also allows one to determine, in part, the impact of inflation on an entity by the purchasing power gain or loss calculation on monetary assets and liabilities.

Weaknesses. The major criticisms of this concept are the following :

1. Income in the case of price increases will tend to be overstated because of inventory, under-depreciation, and the like.[15]
2. The inclusion of holding gains in earnings is misleading for the investors in making their predictions about the future of the company, because it does not necessarily reflect the management success and it does not provide funds for dividends or expansion.[16]
3. This concept of capital maintenance does not conform to the accepted going concern assumption. Only the income computed on the basis of maintaining the productivity capacity of the firm will be acceptable and consistent with the going concern concept.[17]
4. This concept assumes that inflation falls equally on all firms and all classes of assets because it uses a general index instead of a specific index that reflects the changes of values of goods relative to each other besides their changes relative to monetary value.
5. How reliable are the general price indices ? The index number problem is also pervasive because the biases (for example, the goods that are selected for the sample and the area of the country that is used for determining the prices of those selected goods associated with the index) will be reflected in the converted numbers in addition to the quality changes while productivity changes are not reflected in the index.[18].

3. The Physical Capital Maintenance Concept

Under this concept, the firm itself and its assets are the center of interest. Thus, the proponents of this concept view capital as being a physical phenomenon. Their main concern is the physical properties of the underlying assets or their capacity to produce a certain amount of goods and services. More specifically, in their view, the capital to be maintained is the physical productive capacity of the company, and the costs to be recovered are current replacement costs of assets that have the same productive capacity as the used assets. Thus, the physical concept of capital maintenance defines income as "the maximum amount that can be spent (distributed) during a period while leaving the enterprise with the same physical capacity at the end of the period as it had at the beginning".[19]

This concept of capital maintenance is based on the perception of the firm entity viewpoint where the firm is something separate and distinct from those who contributed capital. The firm's assets and liabilities belong to the entity itself. Profits as earned by the firm are seen to become the property of the firm. The profits accrue to the shareholders only if and when a dividend is declared. A main objective of accounting is to account for the interest of the enterprises.

The entity concept, therefore, seeks to ensure that the distribution of profits to shareholders does not lead to a reduction in the firm's operating capability. Therefore, the advocates of physical capital maintenance concept do not consider holding gains as a part of net income. They consider a rise in the value of an asset as an increase in the current measurement of the capital funds invested in the assets' operating capability.[20] The following simplified example illustrates this capital maintenance concept. Using the same data which were introduced above and based on this concept (physical capital), current cost financial statements would appear as shown in Table 3.

According to this concept, capital is maintained because of the following :

1. The company started in 1989 with ten units of inventory. Thus, the starting position is defined in physical terms.
2. After the company paid a dividend as 100 percent of the net income of continuing operation ($ 150), $ 600 of the original inflow from sales revenues was retained.
3. The $ 600 retained can then be used to purchase another five units of inventory in order to renew the business cycle.

4. If this is done, the company will once again have ten units of inventory, which is precisely equal to its start of period inventory position expressed in physical terms.
5. Therefore, a dividend of $ 150 allows the company to maintain its capital in terms of physical units.

From this example, we can see that the advocates of this concept do not consider changes in replacement prices of the assets during the period as components of earnings. They consider these changes as a capital maintenance adjustment of owner's equity. Thus, income is not recognized until a provision has been made to maintain physical capacity.

Table 3 : Current Cost Financial Statements

Statement of Income and Retained Earnings
for Year Ending December 31, 1989

Sales revenues ($ 150 × 5)	$ 750
Current cost of goods sold ($ 120 × 5)	600
Current cost income from continuing operations	$ 150
Holding gain (a direct credit to owner's equity)	200
Dividend 100% of income from continuing operations	– 150
Net addition to owner's equity	$ 200

Statement of Financial Position
December 31, 1989

Assets		*Equities*	
Cash	$ 600	Owner's equity	$ 1,000
Inventory	600	Addition in 1989	200
	$ 1,200		$ 1,200

There has been, however, some disagreement among the proponents of this concept about the specific meaning of "productive capacity". One view focuses on the actual physical assets of the company. Thus, profit would be the amount that could be distributed aftet making sufficient provision to replace the physical assets held by the company as they are used up or sold. The second definition focuses on the quantity of goods and services of a specified quality. The third definition focuses on the capacity to produce goods and services having the same value as in the previous year[21]. Most of the advocates of the physical capital concept reject the first definition of the productive capacity on the basis of its inability to allow for improvement in technology ; thus it could lead to

the maintenance of obsolete productive capacity. Both the second and third definitions of productive capacity allow for technological improvements. However, the third definition appears to be difficult to apply in practice because it includes compensation for changes in selling prices of goods and services.

Some advocates of the physical capital concept would extend the concept to include the changes in net monetary capital, that is, receivables plus cash needed for operation less payables. They argue that, if the turnover of working capital is fixed, operating capacity cannot be maintained during times of increasing prices without increasing monetary working capital.[22]

Strengths. The major strengths of this concept are the following :

1. It provides insight with respect to the dividends that may be paid to the shareholders without impairing the ability of the entity to replace its operating capacity.
2. The concept conforms to the going concern assumption. There is no income until the firm makes provisions to replace the productive capacity of the firm's assets.[23]
3. The accounting system which is based on physical capital maintenance can produce more relevant information than general price level accounting because the real focus here is on maintaining the firm's assets.[24]

Weaknesses. The major criticisms of this concept are the following :

1. The value of current replacement cost is subjective because it will differ from period to period. In this case, the main reason for this subjectivity is that current replacement cost data are based on a hypothetical transaction and do not seem to have a conceptual relationship with future cash flows.
2. According to the physical concept of capital maintenance, capital includes amounts that are part of earnings. Thus, earnings are understated.
3. By insisting on maintaining the productive capacity of the enterprise, the proponents of the physical concept of capital maintenance appear to confuse the function of financial measurement (accounting) and those of financial policy management.[25]
4. The concept of physical capital maintenance is criticized on the grounds that it is an arbitrary approach. It is not applied, for

example, to investments in securities because replacement cost of those securities is always greater than or equal to the selling price. Thus, if the concept were applied to those securities, the investor could never have earnings or income from their sales until he ceased to invest in them.[26]

5. The advocates of the concept of physical capital maintenance have made a distinction between holding gains and capital maintenance adjustment on the basis of the necessity of asset to the continued operation of the enterprise. They argue that, if assets are considered essential, their value must be measured by the cost to replace the operating ability that they provided to the enterprise, and changes in their replacement cost would be considered increases in capital, not earnings. However, if the assets were not considered to be essential, their value to the enterprise would be the net realizable value and the changes in this value would be considered gains (losses) to be included in the enterprise's earnings. The basis on which assets are considered essential or not essential is an arbitrary one. Thus this arbitrary practice can be viewed as a major defect in the physical concept of capital maintenance[27].

4. Capital Maintenance in Authoritative Literature

A closer look at how different authoritative bodies in different countries have dealt with the concept of capital maintenance reveals the following facts. First, the U. S. FASB appears to be the only authoritative body in account that has given detailed attention to the concept of capital maintenance. Second, the authoritative body of the U. K. and Ireland has issued a standard on currrent cost accounting which adopts a physical capital maintenance concept. However, it does not give a detailed discussion of the reasons for that choice. Third, Canada and Australia are about to take positions on the issue similar to that taken by the authoritative body of the U. K. and Ireland.[28]

In 1978, an exposure draft was published that has briefly stated that "the Board favoured continued use of the financial capital maintenance concept." Four main reasons were advanced for this capital maintenance proposal.[29]

First, under the entity concept, a rise in the buying price of an existing asset would be excluded from income despite its favourable effect on the investor's purchasing power. Second, if the buying price of an enter-

prise's assets decreased or rose only slowly it could maintain operating capacity but fail to maintain the purchasing power of investor's capital. Third, a rigid application of the physical operating capacity concept would deny the responsibility of advantage being gained by the enterprise through judicious timing in the purchase of assets although this would be to the benefit of its shareholders. Fourth, the operating capacity concept appears to be more relevant to a static enterprise rather than one involved in a dynamic situation involving changes in activities and methods of production :

The 1980's Concepts Statement No. 3 defines equity, the accounting representation of capital, as being made up of investment by ownes, distributions to owners, and comprehensive income. Therefore, it seems to adopt the financial concept of capital maintenance. However, Concepts Statement No. 3 does not have a final decision on the capital maintenance issue. It recognizes that additional elements may need to be defined later. It states that capital maintenance will be considered further in the later stages of conceptual framework project.

In 1981, the Board "tentatively decided to adopt the financial concept of capital maintenance." Such a tentative decision was justified on the grounds that adopting a financial concept of capital maintenance would produce more useful information to the users of the financial statements. The Board has indicated that it did not adopt the physical capital maintenance concept because "it did not produce a measure that could be regarded as an objective measure of aggregate income[30].

5. Conclusion

In our view, the choice between the financial and the physical concepts of capital maintenance is a reflection of the trade-off between reliability and relevance. The financial capital concept seems to produce more reliable information. The general price level adjusted information is still based on the historical cost principle. That principle is objective because it is the result of actual arm's length transactions. On the other hand, the use of the physical concept of capital maintenance seems to produce more relevant information to the users of financial statements. The real focus with the physical concept of capital maintenance is on maintaining the firm's assets. However, this concept contains the view that assessing the value of the current replacement cost is subjective because it will change from period to period. Thus, subjectivity stems from the fact that the valuation of the firm's assets is based on hypothe-

tical transactions and does not seem to have a conceptual relationship with future cash flows.

However, it would be a mistake to draw conclusions as to a preferable concept of capital maintenance at this time. It does require further study and empirical research to help in sorting out and evaluating the results obtained under each major concept in a wide variety of real company and real industry situations. In the meantime, it might be advantageous to disclose information under each capital maintenance concept separately.

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INTERNATIONAL CONFERENCE NEWS

FOURTH ASIAN-PACIFIC CONFERENCE ON INTERNATIONAL ACCOUNTING ISSUES

The Department of Accountancy at the University of Otago, New Zealand and California State University, Fresno, U.S.A. are co-organizing the "Fourth Asian-Pacific Conference on International Accounting Issues," on November 22-25, 1992.

After three successful conferences in Fresno (1989), Vancouver, Canada (1990), and Hawaii (1991), the fourth Asian-Pacific Conference on International Accounting Issues will be held in Dunedin, New Zealand on November 22-25, 1992. This conference will provide an opportunity for academicians and practitioners to discuss and assess the impact of the amazing developments which are taking place in the Asian and Pacific countries as well as Europe, their potential and implications for new and the future ; for the accounting information and control systems, education standard setting and practice in Asian-Pacific countries. Research papers presentation, panel discussions, and workshops will be held throughout the three-day conference.

Highlights of the Fourth Annual Conference

	Sunday (November 22)	**Monday** (November 23)	**Tuesday** (November 24)	**Wednesday** (November 25)
08 : 30		Opening Ceremony Plenary Session (Chairman : A. Rashad Abdel-Khalik)	Concurrent Sessions with two Panel Discussions : (Chairman : 1. Gary L. Sundem 2. Art Guthrie)	One Day Railway Trip with B. B. Q. Place : Taieri Gorge
12 : 00		**Lunch with Speaker President of IFAC**	**Lunch with Speaker**	
13 : 30		Concurrent Sessions with Panel Discussion (Chairman : Gerhard Mueller)	Workshop : Accounting Research (Chairman : A. Rashad Abdel-Khalik)	
15 : 00	Registration			
17 : 00 Evening	Registration Welcome Reception	Banquet with Entertainment		

Other Speakers : Michael Bradbury, Sidney Gray, Zelma Rebmann-Huber, Rong-Ruey Duh, Wai Fong Chua, and John H. Denman

Registration Fee

Received by September 15, 1992 : NZ $ 360 or US $ 200
After September 15, 1992 : NZ $ 450 or US $ 250

You are cordially invited to attend this exciting conference and benefit from a variety of national and international topics and participate in discussion of controversial issues. Please feel free to call any one of the organizing committee members if you require further information.

U.S.A.

Professor Ali Peyvandi or
Professor Benjamin Tai
Asian-Pacific Conference on
International Accounting Issues
School of Business and Adminstrative Sciences
California State University, Fresno
Fresno, California 93740-0006 USA
Telephone: (209) 278-2921
Fax: (209) 278-4911

New Zealand

Professor Jack Huggins
Asian-Pacific Conference on
International Accounting Issues
Department of Accountancy
University of Otago
Dunedin, New Zealand
Telephone: 64-3-479-8069
Fax: 64-3-479-8450

ENDEC WORLD CONFERENCE ON ENTREPRENEURSHIP IV
SINGAPORE, JULY 14-16, 1993

The ENDEC World Conference on Entrepreneurship IV will be held in Singapore from July 14-16, 1993. Further details will be published in the next issue of the journal.

Contact Address

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

SOUTHEASTERN REGION, AMERICAN ACCOUNTING ASSOCIATION MEETING, ATLANTA, APRIL 1993

The 45th Annual Meeting of the Southeastern Region, American Accounting Association, is scheduled to be held April 22-24, 1993, at the Marriott Marquis, Atlanta, Georgia. Members and graduate students are invited to submit a completed paper for presentation or to participate as a reviewer of papers, a discussant, or a session chairperson by October 1, 1992. Proposals for workshops, CPE programs and panel sessions are also invited. All papers will be "blind reviewed" for presentation and will be published in the proceedings of this meeting. Submit the paper, a diskette, and a $ 15 cheque made payable to AAA Southeast Region to :

SEAAA Program Coordinator
J. M. Tull School of Accounting
Brooks Hall
University of Georgia
Athens, GA 30602-6252
Phone (706) 542-1616
Fax (706) 542-7196

[*Source* : *Cosmos Accountancy Chronicle*]

AAA MIDWEST REGIONAL MEETING ST. LOUIS, APRIL 22-24, 1993

Papers or extended abstracts of papers for possible presentation at the Midwest American Accounting Association annual meeting at the Marriott Pavilion Hotel in St. Louis should be sent by September 30, 1992. Author (s) will be notified of acceptance by mid-December 1992. Send papers or abstracts to :

Professor Fred Jacobs
Program Chair—Midwest AAA
The Eli Broad College of Business
Michigan State University
East Lansing, Michigan 48824-1121
Fax : 517-336-1101
Tel : 517-336-2911

[*Source* : *Cosmos Accountancy Chronicle*]

BRANCH NEWS

IAA—VISAKHA BRANCH

IAA, Visakha Branch, has sponsored One-year Post Graduate Diploma in Accounting Software, during the academic year 1991-92. The programme was inaugurated on 29th March 1992, by the Vice-Chancellor of Andhra University, Dr. M. Gopalakrishna Reddy. Prof. B. Banerjee, the then President of Indian Accounting Association, was the Chief Guest for the function. Shri K. Parvathi Kumar, the Chairman of IAA Visakha Branch and the Chief Co-ordinator of the programme, said that the course was designed to meet the applied accounting needs of small and medium scale industry and business. Dr. D. Prabhakara Rao, the Secretary of IAA Visakha Branch and the Course Director of the Progamme, informed that the course outline consists of a package of subjects from the disciplines of accounting, finance, and computer software. Computer Spreadsheet applications in Accounting and Finance would be given adequate importance while imparting practical training to the students. The Diploma would be first of its kind in India.

The first Convocation of the maiden batch was held on 20th May 1992, at Hotel Daspalla under the Chairmanship of Shri K. Parvathi Kumar. Dr. D. Prabhakara Rao, Course Director, submitted a comprehensive report on the organisation and management of the programme. Shri P.V.R.K. Prasad, I.A.S., Chairman, Visakha Port Trust, delivered a thought-provoking convocation address. Dr. K.V. SIVAYYA, Emeritus Professor, USA, appropriately highlighted the role expected of students of the maiden batch, while presenting the diplomas and prizes. The other notable speakers included Shri D. V. Subba Rao, Mayor of Visakha City and Shri A. Shankara Rao, an industrialist, who had donated a computer for the programme. Although, Visakha Branch was originally proposed to offer the course, due to financial constraints, it was organised by the Academy of Applied Accountants (AAA), which wae sponsored by the IAA Visakha Branch and Sankar Foundation, Soudamani, Visakhapatnam-530 003.

IAA—GUJARAT BRANCH

The Indian Accounting Association—Gujarat Branch—was formed on the Ram Navami Day with 112 members. The following office bearers were elected :

President : Principal R. H. Vyas
Vice-President : Dr. B. H. Desai
Shri K. D. Shah
General Secretary : Shri H. S. Oza
Joint Secretary : Shri S. M. Patel
Treasurer : Shri P. M. Shah

The following members were elected to the Executive Committee : Prof. K. C. Mehta ; Dr. N. M. Khandelwal ; Dr. D. M. Shah ; Dr. B. K. Oza ; Shri C. V. Sopariwala ; Principal N. V. Shah ; Principal V. S. Dalal ; Shri C. B. Raval and Shri G. A. Pathak.

The following members were co-opted to the Executive Committee : Shri M. N. Shah ; Shri Kiran Mehta ; Shri Bipin Acharya ; Shri C. B. Mehta and Shri N. G. Bateriwala.

IAA—CALCUTTA BRANCH

The Annual Seminar of the Branch was held in the Department of Commerce, Kalyani University, West Bengal, on 14 December, 1991 on the theme "Accounting and Auditing Practices in the Public Sector". Prof. Kalyan Kumar Dasgupta, Vice-Chancellor of the University, inaugurated the seminar and Professor Saroj Sengupta, Head of the Department of Commerce, Calcutta University, was the Chief Guest. The seminar was presided over by Shri Sukumar Bhattacharya, Chairman of the Branch. The welcome address was given by Dr. J. B. Sarker, Secretary of the Branch and Dr. P. Bhattacharyya, Head of the Department of Commerce, Kalyani University.

Altogether fifteen papers dealing with different aspects of accounting and auditing practices in the public sector were presented. The lead paper was presented by Professor P. Chattopadhyay, Department of Business Administration, Burdwan University. Members from West Bengal, Andhra, Meghalaya and Pondicherry, participated and presented papers in the seminar. Messrs. Andrew Yule & Company, Calcutta,

offered lunch to the delegates. Professor R. K. Lahiri of Kalyani University offered a hearty vote of thanks to the delegates.

The Annual General Meeting of the Branch for the year 1991-92 was held on August 8 at the auditorium of the Indian Institute of Social Welfare and Business Management, Calcutta, with Dr. N. G. Chowdhury in the Chair. The meeting was preceded by a half-day seminar where Professor D. P. Pande, Head of the Department of Commerce with Management, and former Dean of the Faculty of Arts and Commerce, Vidyasagar University, Midnapore, presented a paper on "Indian Economy and Some Aspects of Corporate Tax Laws—A Theoretical Discussion". The seminar was presided over by Shri Sukumar Bhattacharya. Professor G. D. Roy, past President of IAA, Professor R Khasnabis, Head of the Department of Business Management, Calcutta University, Shri P. C. Basu, Senior Manager (Accounts), Balmer Lawrie & Co. Ltd, Calcutta, Dr. N. G. Chowdhury, former Chairman and Managing Director, Tribeni Tissues Ltd., and many other distinguished speakers participated in the discussion.

The Annual Seminar of the IAA Calcutta Branch for 1992 will be held at Sri Chaitanya College of Commerce, Habra, Prafulla Nagar, 24 Parganas (North), West Bengal, some time in the later part of December 1992 on the topic 'How Reliable is our Accounting System'. Papers in duplicate, typed in double space, not exceeding twelve pages, should reach the Secretary, IAA Calcutta Branch, by 30th November, 1992 at the latest. Delegate fee would be Rs. 50/- (fifty only) per person.

ON THE FIRST LADDER OF THE EIGHTH PLAN

GROWTH WITH PROMISE MARKS CCL PERFORMANCE

	1989-90	1990-91		
	Actual	Target	Actual	Growth
Coal Production (in lakh tonnes)	285-86	291.70	300.05	5.1%
Washed Coal (in lakh tonnes)	40.39	42.30	43.14	6.8%
Soft coke (in lakh tonnes)	3.57	4.00	4.03	12.9%
OBR (in lakh cubic meters)	467.02	480.00	488.20	4.5%
Productivity (in tonnes)	1.20	1.28	1.31	9.2%

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