# INDIAN Journal of ACCOUNTING

Vol. XIV

June & December 1984

Parts I & II

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#### Indian Journal of Accounting

Volume XIV

June & December, 1984

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The present volume of the Indian Journal of Accounting is divided into two parts. Part I comprises the Inaugural and the Presidential Address delivered, and some selected papers from those presented, at the XII All India Accounting Conference held at Jaipur in October, 1985. However, two articles, one entitled 'Inflation Accounting: Developments in Overseas and India' by Sri K. C. Paul and the other entitled 'Concept of Income for Taxation' by Professor H. S. Kulshrestha, are added to it to make it more useful to the readers. Many papers presented at the XII Conference could not be accommodated due to space constraints for which, I believe, the members would bear with me. In Part II two articles on two burning issues are included. Dr. Kathleen Ranney Bindon was received through the good offices of Dr. Paul Garner, Dean Emeritus, University of Alabama. It requires no further mention that Dr. Garner has all along been taking very keen interest in the activity of the Indian Accounting Association.

The readers will be pleased to note the contents of a letter, published on page 178 from Professor Stephen A. Zeff, President, American Accounting Association, for a formal liason between the AAA and the IAA. Professor Zeff has been instrumental in the development of our Association. He is one of the members of our Editorial Board. On behalf of the Indian Accounting Association, I record our sincere gratefulness to Professor Zeff because it is during his tenure as President that IAA has become an "AAA Associate Organisation".

Many members of our Association helped me to their best to publish this volume in spite of many difficulties. In particular, I must mention the helpful role of the members of the Calcutta Branch. I am grateful to all of them. Sri A. K. Basu, Associate Editor, deserves credit for managing the printing of this volume almost single handed. However, for any error or lapse the responsibility is mine.

Calcutta University July 24, 1986.

B. BANERJEE
Chief Editor

## XIII All India Accounting Conference Call for Papers

The XIII All India Accounting Conference of the Indian Accounting Association will be held at Calcutta in December, 1986/January, 1987. Papers are invited on the following topics:

- 1. Zero-base Budgeting in India
- 2. Lease Financing-Its Prospect in India

An attempt will be made to publish Volume XV of the Indian Journal of Accounting (conference volume) before the XIII All India Accounting Conference. Full text of the Papers accepted by the Technical Committee will be published in the conference volume. In other cases, only a brief summary will be published due to space constraint.

All manuscripts should be neatly typed in double space and submitted in duplicate by 31st October, 1986. to:

Dr. Bhabatosh Banerjee Chief Editor, IJA 164/78, Lake Gardens Flat C/7 Calcutta-700 045 India

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#### Inaugural Address\*

(SUMMARY)

By His Excellency Mr. O. P. Mehra Governor of Rajasthan

While inaugurating the XII All India Accounting Conference at Maharani's College, Jaipur, on 5th October, 1985, His Excellency Mr. O. P. Mehra, Governor of Rajasthan, called upon professional accountants to bring about the desired change in their approach keeping in view the challenging socio-economic problems facing the country. He also advised the delegates to work for the simplification of laws pertaining to trade, commerce and tax structure. Mr. Mehra pointed out that the accountants were the custodians of public money and as such they should be above suspicion. He suggested that the appointments of auditors or accountants should rest with the shareholders in stead of the Board of Directors. He appealed to the professionals to help provide social justice to the masses and help cleanse the atmosphere of big corporations. The Governor was critical of the tendency on the part of the established professionals to monopolise the work and advised them to encourage the younger generation of professionals.

Professor R. P. Agrawal, Vice-Chancellor, University of Rajasthan, in his welcome speech said that accounting was not a static but a continuously evolving discipline. He called upon the delegates to help remove the striking imbalance between the rich and the poor in the country through their expertise knowledge and service.

<sup>\*</sup>Delivered at the XII All India Accounting Conference held at Jaipur in October, 1985, under the auspices of the Department of Accountancy and Business Statistics, University of Rajasthan.

#### Presidential Address\*

Dr. S. P. Gupta†

I have great pleasure in welcoming our honourable chief guest, His Excellency Mr. O. P. Mehra, Governor of Rajasthan, special invitee, Professor R. P. Agrawal, Vice-Chancellor, University of Rajasthan, distinguished delegates and members of the Indian Accounting Association, to this XII Annual Conference of Indian Accounting Association.

Friends, I deem it a special honour to my person given by you to have elected me the President of this very distinguished body of academics and professionals who are actively engaged in the learning and practice of accounting wisdom. The main objective of our Association is to carry out research, studies and discussions on accounting principles and standards. Holding annual conferences like the present one is just one of the efforts directed to achieve a part of the said objective through discussions and deliberations at Technical Sessions.

This august gathering will agree with me if I opine that no period in history has ever thrown challenges and opportunities to the accounting scholar as the present one. The past ten months' period has undoubtedly been a momentous one. The assassination of our beloved late Prime Minister Mrs. Indira Gandhi and the incident that followed thereafter is the greatest tragedy in the country's life after partition. Although a cloud of gloom looms large in the national life, there are also clear rays of political and economic resurgence. The pragmatism of the present leadership of

<sup>\*</sup>Delivered at the XII All India Accounting Conference held at Jaipur in October, 1985.

<sup>+</sup>Rohilkhand University, Bareilly.

the country is well evinced in the Budget and post budget encouraging policy pronouncements. We the people in the field of accounting discpline should rise to the occasion to meet the challenges posed by the dynamic changes in political and economic environment. I am pleased to note that a large number of learned colleagues from all over the country have assembled here to participate in the deliberations of the conference. This obviously indicates the modernity in our thinking and awakening to sharpen our skills and to heighten our awareness of various facets of accounting teaching and profession.

The topics chosen for the conference are most befitting and topical in the light of growing inflation and increasing multinational activities. I do not wish to dwell upon them hereat, for we shall be discussing these topics adequately in our technical sessions. I am convinced that such deliberations and discussions will immensely strengthen and enrich the forntiers of out knowledge in the field of accounting I would, however, like to utilise this opportunity to share with you a few thoughts on a new dimension emerging in the field of accounting due to current changes in our administrative, economic and social thinking.

Our young and energetic Prime Minister has infused a new dynamism into the struggling and faltering national policies. Receiving rousing mandate from the people, Mr. Rajeev Gandhi set about his task of providing "a government that really works". He has displayed a remarkable ability for quick decision making. His approach to problems—be it of political nature or economic—is management oriented, i. e. identification of the problem, narrowing down of alternative courses of action, choosing the best suitable one and monitoring the implementation. All ingredients of a sound management policy seemed to have been made the basis of functioning a government. Consequently, public administration has been transformed into a utilitarian and a highly technical function and it has got to be adjusted to the social mores and cultural fibre of the nation leaping into 21st century. This will call for a phenomenal change in information management and data-base system. Fully seized of the potentials of this great challenge, we in the Association particularly the academia group have to devise appropriate standard of accounting education and value-added orientation to the accounting profession.

#### Presidential Address\*

Dr. S. P. Gupta†

I have great pleasure in welcoming our honourable chief guest, His Excellency Mr. O. P. Mehra, Governor of Rajasthan, special invitee, Professor R. P. Agrawal, Vice-Chancellor, University of Rajasthan, distinguished delegates and members of the Indian Accounting Association, to this XII Annual Conference of Indian Accounting Association.

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<sup>\*</sup>Delivered at the XII All India Accounting Conference held at Jaipur in October, 1985.

<sup>†</sup>Rohilkhand University, Bareilly.

Accounting must stand for national reconstruction in future so as to promote diversified socio-economic development in the country. Both accounting education taught in the Colleges and Universities and accounting practices practised by professionals need innovative thinking, so as to contribute meaningfully in the creation of 21st century as envisaged by our young Prime Minister and successful adminocrat—Mr. Rajeev Gandhi.

The Present accounting education, as it is imparted in the Universities and Colleges, does not provide a comprehensive conceptual framework to embrace the challenge response processes of socio-economic development. It also fails to equip the students with such tools and techniques as to facilitate the presentation, analysis and evaluation of information at macro-level. Accounting functions are essentially a service-oriented function to be of use not only to the enterprise at micro-level but also to the various sectors of the economy at macro-level. While accounting profession academia in our country have contributed upto a desired extent in fostering accounting education and research at micro level, they have refrained from getting involved in macro-accounting and economic policy matters. Macroaccounting in many developing countries has remained the preserve of economists rather than accountants. Involvement of accounting for economic analysis and decision-making purpose in macro sectors of the economy assumes much significance in our country at the moment. Such macro-accounting system should at least serve the following purposes:

- (i) to aid the formulation and execution of economic and fiscal policies;
- (ii) to protect the real investment and savings content of the Plan;
- (iii) to enable the relative economy of operations to be assessed;
- (iv) to examine the impact of cost and time over runs on projects, profitability, national plans and programmes, Net National Product etc.;
- (v) to provide information for economic analysis and planning for governmental activity;
- (vi) to provide a full disclosure of financial results including

the measurements of revenue and cost of activities, programmes and organisations of all types;

(vii) and finally to assess and report the accountability not only for honesty and integrity but more for efficiency any productivity.

A perusal of history of Accounting reveals that it has been developed to meet the needs of the situation and to keep pace with the changing field of accounting due to these changes. The academics and practitioners engaged in accounting profession should always strive to keep themselves aware of the changes in their surrounding environment and keep their tools and techniques up-to-date so that they are in a position to meet the social and national demands. The frame-work, concepts and standards of accounting should be improved in such a way as to meet the requirements of economic development. It is high time that accounting theory, function and process as well as the information system should be so reorganised and remoulded as to help the public administrators in decision-making; to assess their accountability in terms of efficiency and productivity and to ensure the proper utilisation of public resources in terms of social good. This calls for a radical change in the accounting courses and contents and making accounting as a course of inter-disciplinary nature.

Friends, it is easier to organise than to reorgnise, but for the complex situation, this uphill task has got to be accomplished by those who matter. I take this opportunity to stress upon my fellow-beings to resolve strongly to do what is needed in this regard. Teaching of accounting just in a ritual and traditional way should be dispensed with. To my mind, our Association can play a major role in exploring the following general scheme of actions for reorganising accounting the courses and making it relevant to socio-economic objectives:-

- (a) restructuring and reforming the academic courses in accounting at least at Colleges' and Universities' levels;
- (b) developing necessary text-books and class-room materials;
- (c) directing and stimulating research programmes in the field of macro accounting;

- (d) introducing faculty exchange programmes within the University:
- (e) promoting continuing educational programmes on the lines adopted by I. C. A. I and I. C. W. A. I & AAA;
- (f) establishing good rapport and effective collaboration with various accounting bodies and associations both at regional and national levels:
- (g) setting up a Committee by our Association with terms of reference covering the above points;

These suggestions need being pursued vigorously and with sense of purpose and urgency. It is imperative that there should be uniformity and consistency not only in the nomenclature but also in the course contents of accounting education. The courses should be such as to inculcate academic competence as well as educational competence While devising the courses, care should be taken that the courses have a good horizontal (inter-disciplinary) approach and include the knowledge of economic analysis, planning and programming requirements and the use of data for macro accounts. Similarly, while developing theories, concepts and standards for inclusion in the above courses, our anxiety should be to see that these conform to the socio-economic objectives of our country. Merely adopting or translating foreign theories, concepts and standards would not be very useful, nor would it serve the accounting discipline in the long run.

Friends, I do not wish to tax your endurance any more. I wish to express my deep gratitude to all my colleagues for their support, encouragement and guidance. On behalf of the members and delegates, I take this opportunity of expressing our thankfulness to the host University, its distinguished Vice-Chancellor, Professor R. P. Agrawal, and to Professor M. C. Khandelwal, Conference Secretary, and his team for the efforts they have made in organising the Conference, the excellent arrangements they have made and the warm hospitality they have extended to us.

## Inflation Accounting: Developments in Overseas and India†

K. C. Paul\*

The author presents a sketch of the institutional developments of Inflation Accounting mainly in the overseas countries.

Inflation is a world wide phenomenon and the adverse effects of inflation on financial statements when accounts are maintained under historic cost are recognised by almost every country of the world. Most of them have realised the need for inflation accounting. But only a few developed countries like United Kingdom, United States of America, Australia, Canada etc. have been making constant endeavour in search of a remedial measure. In this paper, an attempt is made to summarise the country-wise institutional devlopments of inflation accounting. While, on the one hand, for countries like the U. K., U. S. A., Australia and Canada. which played pioneering role in the matter, the discussion has been made quite comprehensively, a brief account of the position in New Zealand, France, Argentina, Brazil and India has also been attempted, on the other. This is followed by a reference to the recommendations of the International Accounting Standard Committee. Lastly, a comparative study of the developments in the overseas countries has been attempted.

#### Developments in U. K.

Table 1 is an abridged list of chronological developments in U. K.

<sup>†</sup>The author expresses his deep gratitude to Dr. Bhabatosh Banerjee, Professor of Commerce, Calcutta University, for his valuable comments and guidance.

<sup>\*</sup>Lecturer, Dept. of Commerce & Management, Vidyasagar University.

 $\label{eq:Table-1} \textbf{TABLE} = \mathbf{1}$  Inflation Accounting: Developments in U. K

Time	Nature of Development	Title	Authority	
ı ı	2	3	4	
Jan., 1949	Accounting Principle No. N-12	"Rising Prices Level in Relation to the Accounts"	The Institute of Chartered Accountants in England and Wales	
May, 1952	Recommendation	"Accounting in Rela- tion to Changes in the Purchasing Power of Money"	Same as above	
Before 1970	Booklet	Accounting for Stewardship in a period of Inflation"	Research founda- tion of the above Institute	
Jan., 1973	Exposure Draft (ED) —8	'Accounting for the Changes in the Purchasing Power of Money"	Accounting Stan- dards Steering Committee (ASSC	
Jan., 197 <b>3</b>	Working Guide as a Companion to ED-8	"Accounting for Inflation - A Working Guide to the Accounting Procedures"	The Institute of Chartered accoun- tants in England and Wales	
May, 1974	Provisional Statement of the Standard Acco- unting Practice (PSSAP) - 7	"Accounting for Changes in the Purcha- sing Power of Money"	ASSC	
Sept., 1975	Sandilands Report	Report of Inflation Accounting presented to Parliament	Sandilands Committee	
Nov., 1975	Comments	"Initial Reactions" to the Sandilands Report	Consultative Committee of Accountancy Bodies(CCAE	
Nov., 1976	ED - 18	Current Cost Accounting	Accounting Standards Committee (ASC)	
Nov., 1977	Hyde Guidelines	" nflation Accounting: An Interim Reco- mmendation"	ASC	
April, 1979	ED - 24	"Current Cost Accounting"	ASC	
March, 1980	SSAP - 16	"Current Cost Accounting"	ASC	
	Guidance Notes	Guidance Notes on SSAP No. 16: Current Cost Accounting	ASC	
July, 1984	ED - 35	"Accounting for the Effects of Changing Prices"	ASC	
1985-86	TR - 604	Technical Release	ASC	

It transpires from Table 1 above that developments started in U. K. as early as in 1949 when it experienced a high rate of

inflation which got impetus from the Second World War. The Institute of Chartered Accountants in England and Wales (ICAEW) took the pioneering role. Devaluation in 1966 made the subject of inflation accounting more important. ASSC was established in 1970 by various professional bodies, which published the method of inflation accounting in ED 8. At the same time, i. e. in January 1973, the ICAEW issued working guide for adopting ED 8. After a considerable debate on ED 8, ASSC issued PSSAP-7 in May 1974, which recommended CPP method. The most important feature of CPP method is the replacement of monetary unit by purchasing power unit.

During the discussion period of ED-8, Sandilands Committee was set up by the Government, which submitted its wideversed 'Sandilands Report' in September, 1975. It recommended 'Current Cost Accounting' (CCA) as opposed to CPP. Initial reactions to the Sandilands Report were highlighted by CCAB in November, 1975. British Government accepted the Sandilands Report in principle; but it appointed the Inflation Accounting Steering Group (IASG), headed by Mr. D. Morpeth, to convert the Sandilands Report into an exposure draft. In September, 1976, IASG submitted the exposure draft to the ASC which published it in November, 1976 as ED-18.

To the surprise of most, ED-18 was rejected by the British Chartered Accountants on July 6, 1977. It was said that the Morpeth Committee in its ED-18 recommended too much too soon. However, with the rejection of ED-10, CCAB appointed the Hyde Committee which submitted in November, 1977 'An Interim Recommendation', popularly known as Hyde guidelines. Hyde guidelines were of a temporary nature and IASC was still continuing its endeavour for a better version of ED-18. Ultimately, in April 1979, ASC publishd ED-24 which introduced one more adjustment known as Monetary Working Capital Adjustment in addition to Depreciation Adjustment, Cost of Sales Adjustment and Gearing Adjustment introduced by Hyde guidelines.

ED - 24 was also debated at length. In March, 1980, ASC introduced SSAP - 16 prorosing CCA system. The Guidance Notes

<sup>1.</sup> Ramesh Gupta, Inflation Accounting, Tata McGraw-Hill Publishing Company Ltd., New Delhi, 1983, p. 91.

were also issued by ASC for implementing SSAP—16. "It was reported ... that a stock exchange survey has revealed an early compliance rate of more than 90 per cent of the entities affected; most are producing supplementary CCA statements."<sup>2</sup>

But within a very short period the dissatisfaction with SSAP - 16 was so widespread and strong that it faced comments from the Hewden-Stuart Plant like "in the opinion of your Board the accounts are certainly meaningless, possibly misleading and probably nonsense. They are of no practical value to the directors or the management of your Company." Consequent to this type of dissatisfaction the ASC reconsidered SSAP - 16 and ultimately it came out with ED - 35 which came into effect from January 1, 1985. The revised Exposure Draft applies to all companies other than value-based companies (e.g. insurance, investment, property dealing) and wholly owned subsidiary companies. Regarding disclosure requirements. the current cost information is required to be given in a note to the main accounts rather than in supplementary current cost accounts. The information includes showing the effects of current cost adjustments namely, depreciation, COSA, MWCA and gearing adjustment. Separate disclosures of gross current cost of fixed assets and inventory and the accumulated current cost depreciation are also required.

In a recent statement, the Accounting Standard Committee has proposed to the six major accountancy bodies in the U. K. that SSAP 16, "Current Cost Accounting", should be withdrawn. Technical Release (TR) 604 issued by the ASC sets out its policy on accounting for the effects of changing prices.

In order to free the way for innovation and development of appropriate disclosures, ASC proposes that SSAP 16 should be withdrawn ASC considers that its general principles and methodology remain sound and commends them as the preferred model of current cost accounting.

<sup>2.</sup> R. S. Gynther, Accounting for Changing Prices: Developments in Australia and Overseas", *The Australian Accountant*, August 1982, p. 468.

Quoted from R. Gupta, "Inflation Accounting: Perspective and Prospects", Working Paper No. 550, January 1985, Indian Institute of Management, Ahmedabad, India, p. 11.

Accountancy, February, 1986 (Quoted from The Chartered Accountant, March, 1986, p-782).

In the light of experience gained so far, ASC is convinced that if a general practice of even modest minimum disclosure is to be established, it is presently beyond the accounting profession alone. ASC intends to consult with the CCAB about how such a minimum disclosure requirement might be developed and discuss with them whether statutory support should be sought.

#### Developments in U. S. A.

Table 2 summaries the major developments that have taken place in U. S. A., arranged in order of their occurrences.

'TABLE—2
Inflation Accounting: Developments in U. S. A.

Time	Nature of Development	Title	Authority
1	2	3	4
Dec., 1947	Accounting Research Bulletin (ARB) No. 33	"Depreciation and High Costs"	The Committee on Accounting Procedure
1951	Supplementary Statement No. 2	"Price Level Changes and Financial State- ments"	Committee of the American Accounting Association
1958	Publication	"Survey on Price- Level Adjustment of Depreciation"	American Institute of Certified Public Accountants (AICPA)
1963	Accounting Research Study (ARS) No. 6	"Reporting the Finan- cial Effects of Price- Level Changes"	AICPA
June, 1969	Accounting Principles Board (APB) State- ment No. 3	"Financial Statements Restated for General Price Level Chenges"	Accounting Principles Board (APB)
Feb., 1974	Discussion Memoran- dum	"Reporting the Eff- ects of General Price- Level Changes in Financial Statements"	Financial Account ing Standard Board (FASB)
Dec., 1974	Exposure Draft (ED)	"Financial Reporting in Units of General Purchasing Power"	FASB
March 1976	Accounting Series Release (ASR) No. 190	Notice of Adoption of Amendments to S-X Requiring Disclosure of Certain Replacement Cost Data "	The Securities and Exchange Commission (SEC)

TABLE—2 (Contd.)

1	2	3	4
Dec., 1976	Discussion Memoran- dum	"Conceptual Frame- work for Financial Accounting and Reporting: Elements of Financial Statements and Their Measurement"	FASB
Dec., 1978	ED	"Financial Reporting and Changing Prices"	FASB
March, 1979	ED	"Constant Dollar Accounting" as a Supplement to the 1974 proposed statement on general purchasing power adjustments	FASB
Sept., 1979	Statement of Finan- cial Accounting Stan- dard No. 33	"Financial Reporting and Changing Prices"	FASB
Nov., 1984	Statement No. 82	"Financial Reporting and Changing Prices: Elimination of Certain Disclosures"	FASB
Dec., 1984	ED	"Financial Reporting and Changing Prices: Current Cost Infor- mation"	FASB

Table 2 reveals that like U K., U. S. A. also started thinking over the matter after the Second World War, perhaps being badly affected by the adversities of the great war. The Committee on Accounting Procedure was the predecessor of the Accounting Principles Board (APB) of the American Institute of Certified Public Accountants (AICPA), which was vested with the responsibility of setting accounting standards. After facing some criticisms on the APB during 1960s, AICPA set up two study groups in 1971. One group, known as the Wheat Study Group, was headed by the former Commissioner Wheat of the SEC, an arm of the U. S. Congress. On its recommendation, Financial Accounting Standard Board (FASB) was established, which took over the charge from APB in June 1973. ARS-6 of AICPA and APB-3 suggested more or less the principles of Stabilized Accounting. FASB after proper discussion

memorandum in early 1974, published the Exposure Draft in December of the same year requiring supplementary disclosure of specified financial information in units of general purchasing power. Before finalising the standard by the Board, SEC released ASR 190 requiring disclosure of replacement cost data on inventories and on the 'equivalent capacity' of the fixed assets and also its effect on cost of goods sold and depreciation. The difference between the replacement cost of the fixed assets as indicated in the Sandilands Report and the SEC is worth-noting. The former meant for the replacement cost of the fixed assets actually owned while the later dealt with the replacement cost of the equivalent productive capacity of the fixed assets.<sup>5</sup>

After a discussion memorandum in December, 1976 as mentioned in Table 2 and a Research Report on "Field Tests of Financial Reporting in Units of General Purchasing Power" in May 1977, the FASB issued in December, 1978 an ED requiring supplemental information on the current year income from continuing operations and a five-year summary of key financial data after selecting the current cost basis or the historical cost/ constant dollar basis (price level accounting). In March, 1979, another ED on "Constant Dollar Accounting" was issued by FASB. Finally, in September, 1979, the FASB issued its wide versed and most debated standard, FASB-33.

According to the standard, one set of information is required for the current year while other set will relate to the last five years in addition to the special narrative notes.

Current year's information will include:

- (1) Income from continuing operations with:
  - (a) revenues and expenses measured on the same historical basis as in the primary financial statements but in units of general purchasing power;
  - (b) cost of goods sold and depreciation expense measured at current cost.
- (2) The gain or loss on holding net monetary items;
- (3) The current cost amounts of inventory and fixed assets at the end of the current fiscal year;

<sup>5.</sup> Ramesh Gupta, *Inflation Accounting*, Tata McGraw-Hill Publishing Company Ltd., New Delhi, 1983, p. 205.

(4) The increases or decreases in current cost amounts of the inventory and fixed assets, net of general inflation.

All financial enterprises are also required to present a fiveyear summary of selected financial data stated in units of general purchasing power with the object of focus on trends in 'real' terms.

The FASB No. 33 was an experimental measure with an assurance that the situation will be reviewed within a period not exceeding five years. Accordingly, the FASB issued Statement No. 82 in November 1984. By the issuance of this statement the Board agreed to do away with the dual aspect of reporting and retained only current cost information. In December, 1984, the Board again brought out an exposure draft which says that if an enterprise presents the minimum information as per the proposed statement, the five-year summary of selected financial data would be stated in average of the current year units of purchasing power. The option to use the base year for the U. S. consumer price index stands eliminated, thus improving the comparison of disclosures across enterprises. 6

#### Developments in Australia

Table 3 contains a summary of the recent developments that took place in Australia. It is found that the ED issued in December, 1974, was patterned after SSAP-7 of the U. K. Mathews Committee appointed by Government in the same month submitted its recommendation in May, 1975. Though the Committee studied the effects of inflation upon taxation primarily, CCA was the conceptual base of the recommendations. Another preliminary ED was issued by AARF in may, 1975, on the Current Value Accounting which was on issue at the same time with its earlier ED issued in December, 1974. After an evaluation paper in September, 1975, on the two methods proposed in EDs, the AARF issued in October, 1976, the Statement of Provisional Accounting standard on "Current Cost Accounting" together with an explanatory statement on the basis of Current Cost Accounting. Paying due heed to the comments

B. M. Lall Nigam, paper presented at the XII All-India Accounting Conference of the IAA held in October, 1985 in Jaipur.

<sup>7.</sup> R. S. Nigam, "Price Level Adjustment and Current Cost Accounting" The Management Accountant, February 1978, ICWAI, p. 126.

<sup>8.</sup> G. W. Kellehar, "Accounting for Changes in the Value of Money," The Chartered Accountant, April 1978, ICAI, p. 610.

received, these statements were amended in August, 1978. "These statement all focused their attention on fixed assets, depreciation, inventories an cost of goods sold; they made it clear that the treatment of monetary items would be the subject of separate Statements".

Table—3

Inflation Accounting: Developments in Australia

Time	Nature of Development	Title	Authority
1	2	3	4
Dec., 1974	Preliminary Exposure Draft	"A Method of Acco- unting for Changes in the Purchasing Power of Money"	Australian Accounting Research Foundating (AARF)
May, 19 <b>7</b> 5	Recommendation	Effects of Inflation upon Taxation Primarily	Mathews Committee
June, 19 <b>7</b> 5	Preliminary ED	"A Method of Current Value Accounting"	AARF
Sept., 1975	Evaluation Paper	'A Comparison of Accounting Measure- ment System"	AARF
Oct., 19 <b>7</b> 6	Statement of Provisio- nal Accounting Standards A N D	"Current Cost Accounting"	AARF
	Explanatory Statement	'The Basis of Current Cost Accounting"	AARF
1977	Recommendation	Supplemental notes disclosing current costs of fixed assets, depre- ciation inventories, cost of sales	Current Cost Accounting Steer- ing Group (CCASG)
July, 1978	Exposure Draft	"The Recognition of Gains and Losses on Holding Monetary Resources in the con- text of Current Cost Accounting"	
Aug., 1978	Amendments	Amended versions of both the statements issued in October, 1976	
Aug., 1979	Revised Exposure Draft	Revision of Exposure Draft issued in July 1978	

<sup>9.</sup> R. S. Gynther, "Accounting for Changing Prices: Developments in Australia and Overseas," op. cit., p. 470.

Table-3 (contd).

1	2	3	4
March, 1980	Omnibus Exposure Draft	Miscellaneous matters not specifically referred to in the previous statements and expo- sure drafts	
Early in 1981	Pre-exposure	Proposed Standard and Guidance Notes	Current Cost Accounting Standards Committee (CCASC)
	Revision	Same as above	Same as above
Jan., 1982	Finalisation	Same as above	Same as above
July, 1982	Selective Exposure	Proposed Statement of Accounting Standards: Current Cost Account- ing	AARF

Accordingly, an ED relating to the treatment of monetary items was issued in July 1978, followed by a subsequent revision in August, 1979. An omnibus ED for residuary matters not specifically referred to in the previous statements and EDs was issued in March, 1980. CCASC after considering all the comments and recommendations including the points raised by the CCA Technical Applications Review Committee set up by Joint Standing Committee, as well as the developments in other countries of the world, prepared the pre-exposure in early 1981 on the proposed Statement and Guidance Notes. After revision these were finalised in January, 1982. CCA Technical Applications Review Committee considered the political and commercial acceptability of the proposed Standard and Guidance Notes, and examined the technical aspects of the documents. In July, 1982, the AARF issued selective exposure on the "Proposed Statement of Accounting Standard: Current Cost Accounting".

#### Developments in Canada

The preliminary position suggested in the discussion paper issued in July 1976 indicated that the shareholders' equity would be restated based on general purchasing power changes. It was suggested that the assets and liabilities other than short term monetary items, should be adjusted on the basis of specific purchasing power

<sup>10.</sup> Ibid., p. 471.

changes.<sup>11</sup> The main feature of the Ontario Committee Report was the voluntary supplemental funds statement disclosing impacts of inflation pending development of current value system.<sup>12</sup> The Re-Exposure Draft issued in December 1981 departed from the earlier ED in the treatment of monetary items. It eliminated the loss on holding monetary working capital and instead provided for inclusion of monetary working capital in the calculation of gearing adjustment. "The net result is only a partial recognition of the loss on monetary working capital, and the non-recognition of a loss on total net monetary items when an overall net monetary asset situation exists. The changes appear to be theoretically inconsistent and capable of being misleading from a CCA view point." <sup>18</sup>

Table—4
Inflation Accounting: Developments in Canada

Time	Nature of Development	Title/ Subject	Authority	
1	2	3	4	
1971	Discussion Paper	Retention of Historical Cost: attached little value to general price level adjustment (GPLA) preferring specific price level adjustment (SPLA)	The Canadian Institute of Chartered Accounts (CICA)	
1973	Anti inflationary Board	Index of personal income tax and controls on prices and incomes		
Nov., 1974	Guidelines	Encouraged the volun- tary reporting of supplemental general price level data		
July, 1975	Exposure Draft	"Accounting for Changes in the General Purchasing Power of Money"	CICA	
July, 1976	Discussion Paper	"Current Value Accounting"	Accounting Research Committee of	
June, 1977	Ontario Committee Report - Supplementary Schedule	"Fund Available for Distribution or Expansion."	CI2A Ontario Committee	
Dec., 19 <b>7</b> 9	Exposure Draft	Almost identical to U. K.'s SSAP 16		
Dec., 1982	Section 4510 of the CICA handbook	"Reporting the Effects of Changing Prices"	CICA	

11. G. W. Kelleher, op. cit., pp. 610-611.

12. Elwood Miller, Inflation Accounting, Van Nostrand Reinhold Company,

1980, pp. 93-95.
13. R. S. Gynther, "Accounting for Changing Prices: Developments in Australia and Overseas," op. cit., p. 470.

The reporting requirements of the standard (Section 4510) are similar to those of FASB 33, except that a financing adjustment would also be computed which would allow readers to arrive at the current cost income attributable to shareholders on both concepts of capital maintenance: the operating capability concept and the financial capital concept. It also requires the management to explicitly provide an explanation and a description of the bases and the methods of calculation and narrative discussion of its significance for readers' benefit. The first year's experience is the unwillngness of many companies to accept the CICA's recommendations for voluntary disclosure.<sup>14</sup>

Development in some other countries are also mentioned below in brief.

New Zealand: New Zealand Society of Accountants issued current cost Accounting Standard No. 1 (CCA-1) on "Information Reflecting the Effects of Changing Prices" in April 1982. It closely resembles U. K.'s SSAP 16 excepting the calculation of gains on loan capital. A sample survey report (of 931 companies) published by the Reserve Bank of New Zealand in its Bulletin (May 1983) revealed that 26% of the surveyed companies prepared accounts under the CCA standards. 15

France: France does not have any accounting guidelines regarding inflation accounting, although a project is being undertaken by a major enterprise in conjunction with a number of large companies. The Government did not accept the recommendations of the Government committee which recommended supplementary financial statements based on CPP principles and instead made legislations for revaluation of long-term assets at their use value to the enterprise at the end of 1976. Such revaluation surplus is taxable.

Argentina: In September 1980 the Argentina Professional Council of Economic Sciences of the Federal District which regulates the public accounting profession declared that in future the

<sup>14.</sup> R. Gupta, Inflation Accounting: Perspective and Prospects, op. cit., pp. 15-16.

<sup>15.</sup> International Accounting Briefs, *The Management Accountant*, January 1984, ICWAI, p. 42.

<sup>16.</sup> Ibid.

basic financial statements should disclose historical cost-constant dollar figures in one column and historical cost in another.

Brazil: In Brazil the inflation adjusted statements constitute the basic as opposed to supplementary financial statements. The amended Brazilian Corporation Law requires companies to adjust both permanent assets and equity accounts for changes in general price level using ORTN (a Brazilian government treasury bond index) as deflator. Depreciation is also restated and netted against the asset adjustment. This price level adjusted depreciation is permitted as a deduction for tax purposes.

India: The Institute of Chartered Accountants of India issued, in December, 1982, a Guidance Note on 'Accounting for Changing Prices' recommending CCA. But owing to present implementational problem of CCA, the adoption of periodic revaluation of fixed assets together with LIFO method of inventory valuation has been suggested for the transitional period. This is required as voluntary supplemental information in continuance with the primary financial statements, at least by the large enterprises.

#### International Accounting Standards Committee

The IASC was founded in June, 1973 with the business of formulating and publishing and thereafter improving and harmonising the regulations, accounting standards and procedures relating to the presentation of financial statements. The business of the Committee is conducted by a Board comprising representatives of accounting bodies of the selected countries.

The Committee issued the International Accounting Standard No. 6 (IAS No. 6) which summarised the main inflation accounting alternatives in the preface. The standard simply requires the enterprises to "present in their financial statements information that describes the procedure adopted to reflect the impact on the financial statements of specific price changes, changes in the general level of prices or both. If no such procedure has been adopted that fact should be disclosed." 17

The committee published the International Accounting Standard (IAS) 15, titled "Information Reflecting the Effects of Changing Prices" in November, 1981 which superseded the earlier

<sup>17.</sup> IAS No. 6

standard (No. 6). The standard suggested CCA, the general pricelevel approach or a combination of the two.

#### A Comparative Study of the Developments

It is interesting to note "that, rightly or wrongly, some version of current cost accounting (CCA) is favoured in a majority of the various pronouncements and that the main differences between the various CCA models tend to be confined to the ways in which gains and losses on holding loan capital are treated". Another common feature suggested in almost each country which submits to inflation accounting method is to require only supplementary information on the technique adopted retaining historical cost basis of accounting as the basic accounts. The only exception is the SSAP 16 in U. K. which provides that CCA may also be the basic accounts. A comparative study is presented in Table 5.19 This brings the reliability of any inflation accounting method into question and perhaps

TABLE—5
Inflation Accounting: A Comparative Study of Developments

Country/ Commi-			Whether recogn gains/losses on		
ttee	ment			Monetary Working capital	Loan capital
1	2	3	4	5	6
United Kingdom	SSAP 16 (March, 1980)	CCA	Basic or Supple mentary Profit Statement and Balance Sheet	Yes	Partially
U.S.A.	FASB 33 (Sept., 1979)	CCA and General Price Level	Supplementary Project Statement and current cost information on fixed assets and inventories	Yes; but not sepa- rately and not included in the profit figure	Yes; but not separately and not in- cluded in the profit figure
Canada	Re-Exposure Draft (Dec., 1981)	CCA and some supplementary General Price Level Data	Supplementary Profit Statement and C.C. informa- tion on fixed ass- ets, inventories an shareholders equity	ıd	Partially

<sup>18.</sup> R. S. Gynther, "Accounting for Changing Prices; Developments in Australia and Overseas," op cit., p. 468.

<sup>19.</sup> Ibid.

TABLE - 5 (contd.)

1	2	3	4	5	6
New Zealand	CCA 1 (April 1982)	CCA	Supplementary Profit Statement and Balance Sheet	Yes	Yes
International Accounting Standards Committee	IAS 15 (Nov., 1981)	CCA or General Price Level or Combina- tion of both	Supplementary Profit Statement and CC informa- tion on fixed assets and inventories when CCA is adopted	Yes	Yes; but only to the extent re- quired by the method adopted
India	Guidance Note (Dce., 1982)	CCA; but LIFO and periodic revaluation of fixed ass- ets as tran- sitional arrangement	Supplementary information on a voluntary basis, which will reflect the effects of changing prices	Yes	Partially

supports the view that a suitable method is yet in the evolutionary stage. Table 5 also highlights the differential treatment of monetary working capital and loan capital in different countries. But depreciation adjustment and cost of goods sold adjustment, being the common features of each of the suggested methods in different countries, have not been shown in the above table.

As to the recognition of gains or losses on monetary working capital, most of the countries like U. K., Australia, New Zealand and India are on the same footing. They suggested full recognition of gains or losses and inclusion of the same in the profit figure. But FASB 33 of U. S. A. requires disclosure of gains or losses on holding net monetary items as a separate figure 'below the line', which is not to be merged with the profit figure and not to be segregated for holding monetary working capital and loan capital. Canada however, proposes in its Re-Exposure Draft a peculiar treatment of monetary items by elimination of the loss on holding monetary working capital from the profit statement and inclusion of monetary working capital in the calculation of the gearing adjustment. "The net result is only a partial recognition of the loss on monetary working capital, and the non-recognition of a loss on total net monetary items when an overall net monetary asset situation exists."<sup>20</sup>

<sup>20.</sup> Ibid., p. 470.

Regarding the composition of the net monetary working capital figure, a minor difference may be traced between the U. K. and New Zealand on the one hand and the Australia on the other. But it will not result in any significant difference in profit figures.

What have been stated above are the qualitative aspects of the different approaches to recognising gains or losses on monetary working capital. Quantitative difference also arises between the U. S. A. and other countries. The root cause being the difference in the choice of price movement to employ in making calculation. FASB 33 suggested the use of general price level movement; but the other countries prefer to use movement in the relevant current costs (usually those for inventories) to the general price level movement.

Regarding the treatment of gains on loan capital, New Zealand calculates full gains on loan capital (vide Table 5 ante). U. S. A. also calculates full gains but it is done in conjunction with the gains or losses on holding net monetary working capital. It is not included in the profit figure just like Australia which also calculates full gains on loan capital. U. K. and India partially recognise the gains on loan capital by introducing gearing adjustment. Canada also gives partial recognition to this.

Difference also arises on the capital maintenance concept adopted. Australia adopts the operating capability of the entity. But, by segregating the capital maintenance adjustment reserves into the Gain or Loan Capital Reserve Account and the current Cost Reserve Account the Australian model satisfies both the proprietary-viewpoint and the entity viewpoint respectively. New Zealand model is adopting a concept of maintaining only the operating capability of shareholders' funds—and not the operating capability of the total entity—before allowing profit to emerge.<sup>21</sup> 'FASB— 33 uses a financial capital maintenance concept...and...the deduction of interest on long-term borrowings to compute historical cost income from continuing operations indicate a proprietary view of the business enterprise—a view which is consistent with the financial concept of capital maintenance."22 U. K. 's "SSAP—16 incorporates a physical capacity (operating capability) maintenance assumption"23 but not based on either entity or proprietary capital maintenance methods.

<sup>21.</sup> Ibid., p. 472.

<sup>22.</sup> Ramesh Gupta, Inflation Accounting, op. cit., p. 209.

<sup>23.</sup> Ibid., pp 208-209.

# How to Overcome the Dilemma of Incorporating Purchasing Power of Money in Accounting Records — A Simple and Intrepid Approach

Dr. B. M. Agrawal\*

The author presents a framework for periodically recording the impact of price level changes in accounts. He suggests that a five-year period coinciding with Five Year Plans of our country or the beginning and middle years of each decade may be chosen for the purpose.

#### The Dilemma

The menace of inflation universially disrupted the economic measurments in almost all spheres of human activity. The accountants are also disturbed. The financial statements have begun to lose their meanings. Their uses and interpretations are fraught with danger. The spirit of section 11 of the Compaines Act 1956 for true and fair view is automatically flouted in historical cost based statements. Irrespective of the requirements of Sec. 205 of the Act dividends are likely to be paid out of capital. Against all sound financial tenets. the enterprises are unable to keep their original investments intact in terms of the reduced value of money. The users are in dark about the real earning capacity. The government is getting higher and more than the stipulated share of profit in terms of tax on inflated profits. And above all the basic postulate of accounting viz.. stable money value, on which the whole edifice of accounting records is built, is no longer relevant under the prevailing economic conditions.

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These circumstances have been vigorously agitating the accountants all over the world towards finding logical, simple, and uniformily adoptable method to enable keeping of proper financial records and preparation of financial statements for overcoming the distortions creeping into accounts due to gradual, steep and violent fluctuations in the value of money. Several methods and techniques such as, Current Purchasing Power (C. P. P.), Current Cost Accounting (C. C. A.), Appraisals, Present Values and Cash Flow Accounting have been evolved and suggested institutionally and individually for giving effect to real values in place of historical costs. The recommendations for their adoptability vary in degree from total. partial, or supplemental adoption, to complete inadoption. The amount of confusion created by different results bearing out of different methods, scepticism about their practical utility and voluminous difficulties faced in their implementation have forced the thinkers to think, postpone, rethink and again postpone all decisions in this regard. So far the accountants have failed to reach a consensus solution to combat the demon of inflationary influence on accounting and also could not persuade governments to realise the need for bringing about effective legislation to specifically the newly evolved methods. Yet, the need to bring about the historical cost as near to real economic cost as possible is paramount.

#### The Premises

On the presumption that there is an urgent need to evolve a prudent and acceptable method to giving effect to the changes in the purchasing power of money a framework for innovations in accounting records has been developed in the succeeding section.

Although accounting records are continued to be kept on historical cost basis, for all practical purposes accountants are using current cost viz., for valuation of business, for valuation of shares and goodwill, for working out schemes of amalgamation, absorption and reconstruction, for taking over of a business, for preparation of consolidated financial statements, for evaluating the performance of an enterprise periodically.

Fluctuations in the value of money have disturbed the entire socio-economic-politico polity and it is the Economic Advisor's

Wholesale Price Index Number, in the context of Indian conditions, which has been recognised and accepted by one and all as a measuring scale whenever the decisiors have to be taken for problems involving fall in the value of money. Other index numbers have little or no acceptance. It is presumed that the accountants will have little hesitation in accepting this wholesale price index number for the purposes of giving effect to the current purchasing power (C. P. P.).

The postulate of periodicity forms the base of accounting records and evaluations. We are conversant with daily, weekly, montly, quarterly, bi-annual, annual and quinquennial periods. To bring the historical records in line with the real values use of one more periodicity (say for example a 5 year period) can be accepted for a solution.

The government would be willing to search a solution itself. Any or all new approches would be considered enthusiastically and seriously in giving statutory acceptance and recognition. The broad interest of the public, investors, financers, business and industry would outweigh the narrow interest of revenue collection in the form of taxes on inflated, not real, profits.

In the near and foreseeable future the fluctuations in the value of money would continue to throng the economies of the countries, i. e., inflation is going to stay.

The system to be adopted should be relatively simple so as to create very little difficulties for the training of accountants towards the installation of the system, maintenance of records and their audit. The cost should be much less than the benefits that should flow therefrom.

In view of the varied interests of the owners and managers of the enterprises preparing the accounts and using them for different purposes, it is desirable that discretion in effecting the C.P.P. and C.C.A is left to the minimum and greater objectivity and uniformity are ensured. Ability of the system to serve the vested interests of different parties must be ignored altogether.

#### The Suggestion

To retain the basic system of keeping financial records on historical cost and also at the same time, to make the financial statements true and fair, a via media can be searched out. In stead of regularly effecting the changes in the purchasing power of money

and/or current cost or merely using them on a memorandum basis we may periodically record them in the books and start again on the historical cost basis. It is suggested that a five year period coinciding with five year plans of our country or the beginning and middle years of each decade may be chosen for the purpose. When the enterprise starts it may start keeping records on the historical cost basis and after a five year period the current valuation may be made and recorded in the books and fresh records may again start on the historical cost basis. Thus after every five years the financial position would become realistic and further amortizations, etc. would be in consonance with current values. Choosing of a period of five years would reduce the cost and complexities in maintaining the system. It would give a reasonable time for the carrying on a review of operations. It will also not be very late to be completely out of tune with the changing costs. In fact, yearly review, if required, may be carried on in the same manner as is being done today i. e., on a memorandum basis. The period of darkness about the financial statements for the external users would be reduced from eternity to five.

After accepting the five-year period as the critical period for regularly giving effect to the inflation affected costs, the methodology to convert historical cost based statements into price-level change incorporated statements needs to be discussed.

- (1) If the primary aim is to keep the investment/net capital employed intact, then the original investment less withdrawals and further additions to investment during a period of five years, may be brought to its current purchasing power by using the Wholesale Price Index Numbers. It may be added here, that for this purpose all and sundry use the Economic Advisor's Wholesale Price Index Numbers only. The difference between the recorded investment and the converted value be termed as 'Constant Rupee Reserve' and should be recorded as such and shown in the Balance Sheet at the end of the five year period.
- (2) All monetary liabilities and assets be recorded without any change in their contracted value including share capital at the nominal value.
- (3) All non-monetary assets be recorded at their current cost. For

- this purpose any or all of the usually accepted methods of valuation can be used.
- (4) The difference between the current value of all the assets and the total of all liabilities, capital and constant rupee reserve would indicate the real profit/loss earned/incurred during the five year period (inclusive of gains and losses in the value of assets).
- (5) After recording the current cost and constant rupee reserve in the books the new balance sheet may be taken as that of a newly started concern and records for next five years be kept on the historical cost basis.
- (6) Constant Rupee Reserve will always indicate the amount required to keep the investment intact in terms of the changed purchasing power of money.
- (7) It may be put to the same use as the Capital Redemption Reserve but with more stringent requirements for issue of bonus shares. Controller of Capital Issues may prepare new guidelines for the purpose.
- (8) No immediate fresh legislation is needed for recording the current costs since the Companies Act already contains provision for revaluation of assets, their recognition and recording in the books and other Acts recognise various modes of valuation. The following illustrative example would make the procedure clear:

BALANCE SHEET OF.....

	DALAIT	<u> </u>		<u> </u>	
	1976 Jan. 1	1980 Dec. 31		1976 Jan. 1	1980 Dce, 31
Share Capital Reserves & Surplus	Rs. 1,00,000	Rs. 1,00,000 50,000	Land & Building Cost 40,000 Less: 5%	Rs. 30,000	Rs. 30,000
Debentures Current Liabilities	50,000 50,000	50,000 1,00,000	Plant & Machiner Cost 70 00	- У	30,000
			Less: 10% Deprn. 35,00 Stock	0 70,000 50,000	35,000 1,00 000
			Debtors Cash & Bank	— 10,000	80,000 25,000
	2,00,000	3,00,000	- -	2,00.000	3,00,000

Wholesale Price Index Number on 1-1-1976 = 150 on 31-12-1980 = 300

BALANCE SHEET as on 31st December, 1980

(after adjusting CPP & CCA and to form historical cost from 1-1-1981)

	Rs.	Rs.
Share Capital (Monetary) CONSTANT RUPEE RESERVE	1,00,000	Land (CCA or RVN) 1,00,000 Building (CCA or RVN) 60,000
Reserves & Surplus (Including holding gain/ loss and being the balancing figure)	45,000	Plant & Machinery (CCA or RVN)       60,000         Stock (CCA or RVN)       1,20,000         Debtors (Monetary)       80,000         Cash & Bank (Monetary)       25,000
Debentures (Monetary) Current Liabilities (Monetary)	50,000	Cash & Bank (Monetary) 25,000
	4,45,000	4,45.000

RVN=Revaluation, CCA=Current Cost Accounting

Original Investment or Net Capital Employed on Long Term Funds (Share Capital + Debentures) on 1st January, 1976 through the five year period = Rs. 1,50,000/
Constant Rupee Reserve (CRR) = Original N. C. E. x Current Index Initial Index N.C. E.

= (1,50,000x 300 150) -1,50,000 = Rs. 1,50,000

For the next Balance Sheet the N. C. E. at the beginning would be taken as Share Capital + C. R. R. + Reserve & Surplus + Debentures. The Initial Index Number would be 300 on the same base. It is possible to compute C. R. R. for withdrawals and additions in N. C. E. during the intermediary period on the same basis.

### **Epilogue**

It is believed that the approach presented in the preceding section would be realistic and in consonance with the spirit of existing law. It is an amalgam of the best of the principles of historical cost based records, current purchasing power approach and current cost accounting approach. It also brings the accounting nearest in approach to economics, at least in a period of five years, if not regularly. It provides a base to finding out the real profit (after disposals) being the difference between the value of a business at the beginning and at the end of a five year period.

In actual practice all enterprises do make a current cost estimate of the business and measure performances, carry out financial analysis and take appropriate decisions and some times do incorporate the C. C. A./R. V. N. values in the books of accounts. Periodic incorporation of changed values by all accounting entities on

almost a uniform basis will immensely benefit internal users, external users, Governments, financial analysts and so on.

Situation in which investors with private knowledge purchase shares of companies with huge negative networth at a very high prices would be rare. Also the case of shrewd shareholders, again with personal information, selling their shares at high prices prevailing due to windowdressed accounts and thus cheating the ignorant investors would be minimised.

The need to supply supplementary information with regular financial statements will not remain very pressing. Reporting only the effect of the violent fluctuation in the prices, if any, between the five year period could be done at the discretion of the enterprise or legally when made obligatory.

Classification of the quantum of changes into very insignificant, somewhat significant, significant or very significant for reporting purposes, which itself is highly subjective, may no longer be required. All changes will obviously be recorded at the end of each five year term.

The problem of replacement will then not be the problem of accounting but will be that of the finance only. Constant Rupee Reserve will take care of the original investment and also ensure that dividents are ultimately not paid out of capital.

The controversy regarding adoption of all inclusive concept and operating profit concept in accounting would not remain relevant every fifth year since after following operating profit concept for five years the end Balance Sheet would show the all inclusive profit,

If the total national resources are to be considered for the generation of growth, investment, and production, and the measurement of D. G. P. & G. N. P., the estimates for the organized sector will automatically be more realistic. Resource base of the organized sector for planning at both micro and macro levels in making quantative estimates would more or less be free of ambiguity otherwise present due to the effect of changing level of prices.

## Inflation Accounting

Dr. D. Prabhakara Rao\*

In this paper, the author suggests Asset Replacement Fund (ARF) method for providing depreciation for replacement of an asset. Here the estimated replacement cost of the asset is used for computing depreciation. In developing ARF method the theme of CCA and the methodology of Sinking Fund Approach are taken as the basis.

The quest for improvement of accounting analysis in the wake of fluctuations in the value of money, has resulted in the development of Inflation Accounting. Already, there is a lot of awareness and recognition of the concept and its need in the academic and business circles.<sup>1</sup>

This paper highlights an important aspect of accounting—the aspect of Depreciation wherein Inflation Accounting can serve a reasonable purpose Depreciating an asset means systematic writing off of the asset cost over its useful life span. The rationale for the depreciation methods followed under conventional accounting seems to be crude and the logic for choosing a particular method is seldom stated in a convincing manner<sup>2</sup>. Most methods of depreciation are followed to satisfy the procedure involved in computing corporate tax and totally depend upon the legal provisions, setting aside the economic justification.

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The companies which have published Inflation Accounts in their Annual Reports are 1. BHEL; 2. Cement Corporation of India Ltd.; 3. Hindustan Machine Tools Ltd.; 4. Hindustan Organic Chemicals Ltd.; 5. Ashok Leyland Ltd.; 6. Hindustan Lever Ltd.; 7. Chemicals & Fibres (India) Ltd.; 8. Philips etc.

J. R. D Tata argues Inflation Accounting is highly essential to present a true and fair view of a company's financial state of affairs.

There is also a different view on the validity of Inflation Accounting.

Ayyar, J. M., 'Inflated' Inflation Accounting, The Management Accountant,
Vol. 17, No. 11. Nov. 1982, pp. 532-35.

<sup>2.</sup> Baxter, William T., Accounting Values and Inflation. (Sponsored by the Research Committee of the Institute of Chartered Accountants in England and Wales), Mcgraw-Hill Book Company (UK) Ltd., London, 1975, p. 145.

The prominent purpose of depreciation is to provide for the replacement of a specified asset at the end of its life or use in the business<sup>3</sup>. Depreciation is a function of the replacement value of the asset under question<sup>4</sup>. In making managerial decisions what is important, is not historical cost but the replacement cost<sup>5</sup>. The replacement cost may be (a) the current cost of an identical asset or (b) the current cost of an asset which is equivalent in capacity and service<sup>6</sup>. The amount of depreciation created on the basis of historical cost of the asset<sup>7</sup>.

This can be observed from the analysis of the following hypothetical case:

The acquisition cost of the		
Plant on 1.1.1981	Rs.	1,00,000
Estimated life		5 years
Salvage Value		
at the end of the 5th year		0
The estimated Replacement Cost		
at the end of the 5th year	Rs.	3,00,000

The total amount of depreciation on this plant over the five years is Rs. 1,00,000 under straightline method<sup>8</sup>. Moreover, the methods of Declining Balancing, Sum of the years digits and Annuity also failed to provide for the replacement of the asset under review. It is essentially because these methods consider historical cost as the basis for computing depreciation.

<sup>3.</sup> Accounting Standards Committee, Inflation Accounting: An Interim Recommendation. The Author, London, 1977.

<sup>4.</sup> Institute of Cost & Works Accountants of India, Inflation Accounting: Tools and Techniques, The Author, Calcutta, 1975, p. 77.

Lietaer, Bernard A., Prepare your company for Inflation, Harvard Business Review, Sep. Oct. 1970, A Harvard Business Review Reprint Series, No. 21159, Harvard College, 1976, p 116.

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<sup>7.</sup> Kirkman, Patrick R. A. Accounting Under Inflationary Conditions, George Allen & Unwin, London, 1978, p. 99.

<sup>8.</sup> The formula for depreciation under straightline method is Dc = ∑(AC—SV)/N where Dc is depreciation under conventional accounting; AC is the acquisition cost of the asset; SV is the salvage value and N is the number of years, the life of the asset.

An alternative method is employed to meet the expected price rise in the cost of the plant, with the help of the following General Price Indices<sup>9</sup>:

As on	GPI
1. 1.81	100
31.12.81	105
31.12.82	112
31.12.83	121
31.12.84	132
31.12.85	145

If the depreciation under the conventional accounting based on Straightline approach is restated with the help of GPP method, a different amount will be arrived at. The equation for depreciation can be expressed as:

$$Di = \sum_{i=1}^{N} Dc \quad (GPIe/GPIb)$$

where Di is depreciation under Inflation Accounting; GPIe is the General Price Index at the end of the period and GPIb is the General Price Index at the beginning of the period.

Under this method, the total amount of depreciation at the end of the fifth year will be Rs. 1,23,000, which still falls short of Rs. 1,77,000 to replace the asset under question.

To overcome the aforesaid drawback, Asset Replacement Fund Method of depreciation is suggested<sup>10</sup>. The following equation is observed to calculate the depreciation:

$$Di = \bigotimes_{i=1}^{N} AVr \quad x \quad RFIF$$

General Purchasing Power (GPP) approach is one of the methods advocated by the theory of Inflation Accounting. The General Price Index will be used to compute the depreciation.

Kirkman, P.R.A., Op. cit., p. 50.

<sup>10.</sup> In developing this method, the theme of CURRENT COST ACCOUNTING (CCA) and the methodology of Sinking Fund Approach are considered to be the basis. The method approximates the overall impact of inflation on depreciation which would vary with the variations in the rate of price changes, the average age of asset, the asset structure of the organisation and many other complex factors, besides the suggested cost index projection.

where AVr is the replacement cost of the asset and RFIF is the Replacement Fund Interest Factor which can be readily obtained from tables.

In Asset Replacement Fund Method, the estimated replacement cost of the asset is the basis for computation of the depreciation. The relevant computations are presented in table-1. The amount of depreciation at the end of the 5th year is sufficient to meet the estimated replacement cost of the asset. The author is aware of the limitations of the method, just like that of any other method. But the drawbacks involved in the subjectiveness of estimating the replacement cost can be minimised by adjusting the original cost of the asset on the basis of an appropriate cost index projection.

TABLE —1

Computation of Depreciation Under Asset
Replacement Fund (ARF) Method

Year Endin	Estimated g Replace- ment		Interest @ 5%	Depreciation	Annual Depre- ciation & Interest	Closing Balance & of ARF	Depreciteda Value of the ARF Asset
1	2	3	4	5	6 (4+5)	7 (3+6)	8 (2-7)
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1981	3,00,000		_	54,292	54,292	54,292	2,45,708
1982	3,00,000	54 <b>,2</b> 92	2,715	54,292	57,00 <b>7</b>	1,11,299	1,88,701
1983	3,00,000	1,11,299	5,565	54,292	59,857	1,71,156	1,28,844
1984	3,00,000	1,71,156	8,558	54,292	62,850	2,34,006	65,994
1985	3,00,000	2,34,006	11,700	54,292	65,994	3,00,000	-

# **Accounting for Price Level Changes**

M. S. G. K. Murthy\*

The author highlights the internal control of an organisation by devising a Management Model which is stated to be useful in controlling the price level changes of the inputs in the organisation.

Accounting for price level changes conceptualises the monitoring of information reflecting the trends and consequential effects of changing prices<sup>1</sup> in the accounts of an organisation. As a result of three decades<sup>2</sup> of thinking in this direction, divided opinion exists on the mode of current cost accounting that can serve as an alternative<sup>3</sup> to pure historical cost accounting system.

There are two main uses of Current Cost Accounting to management. First, the assets and liabilities in the balance sheet are shown on the principle of their "value to the business" at the end of this period. This exhibition informs the public the return on the capital employed by the different Companies which can become the basis for comparative analysis. Second, the clear exhibition of "operating gains", extraordinary gains excluding "holding gains" in the Company's accounts would help the management to compare the performance in terms of profits that are generated by the skills of management as against those generated purely by chance. The second use is the area where some more attention can be paid for improving the internal control of an organisation.

This paper contributes to strengthen the internal control of an organisation by devising a Management Model which is useful in controlling the price level changes of the inputs in the organisation. This is submitted as furtherance of the uses of the principles of Current Cost Accounting<sup>5</sup> to individual managers in the Firm.

The individual managers are responsible for their performance in terms of quantity as well as cost. Even within the cost, the prices play a vital role due to changing levels from time to time. Unless this

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is taken care of, the managers are made reponsible for the whole change in the cost whereas they are not responsible for that portion of the price change<sup>6</sup> which is caused by various reasons beyond their control like inflation, change in the market conditions, etc.

Therefore, the following steps are needed to analyse what portion of the cost is exactly the price of the commodity and what part of the cost is due to the conditions that are beyond the control of the Manager. For example, the Purchase Manager is always burdened with explaining why there is a great difference in the planned prices and the actual prices paid. There should therefore be a method of separating some constituent parts in the prices of inputs for analysis and control. One such method is to divide the price into (i) proportion due to the manufacturing cost of the product plus profit; (ii) proportion due to sudden drop in supply/demand in the market; and (iii) proportion due to inflation. This method is further explained.

The proportion of the price due to the manufacturing cost of the product plus a reasonable percentage of profit is a normal one. The proportion of the price due to market conditions when they are sudden and severe by any national catastrophe like war, famine, earthquake, etc., is the abnormal one. The proportion of the price that is due to inflation is related to the reduction in the purchasing power of money is also not a normal one. The first division of the price can be obtained by analysis of the prices quoted by the manufacturer and other relevant sources. The second factor of the price can be obtained by watching the ups and downs of the market conditions closely and arriving at a managerial estimate of the percentage of increase or decrease due to this situation. The third aspect in the price can be obtained by the Reserve Bank of India Estimates of the increasing and decreasing purchasing power of money which reflects in the price of the input or by any other method.

For developing the Model, the following steps are useful.

1. A list of inputs that go into the entire manufacturing process are to be graded as A, B, C categories. The basis of this categorisation is their likelihood to be affected by price level changes and other related management needs. 'A' class will be the category where the price level changes are very high. The 'B' class category will have a medium price level changes. The 'C' Class category has either no significant changes in price level or the changes in price levels may be with no consequence.

2. Using statistical methods each of the inputs of A, B and C categories can have an estimate of price.

When this model is used in the material planning exercises, the actuals are also divided into these three proportions of prices and compared with the planned ones. The significant deviations are analysed and the gaps in planning, if any, are rectified. In this process the operating managers are responsible for the variances in the first revision and for the rest in other divisions, the responsibility is of the top level management.

The Internal Price Level Control Management Model is further illustrated 7 with the help of the Exhibits 1 to 5.

Exhibit 1 delineates the theory, so far enunciated in earlier paragraphs. It can be seen from the Exhibit that the input prices are classified into A, B and C categories depending upon the probability (estimated) of high degree price level changes (.6), medium degree price level changes (.3) and low degree price level changes (.1). The price in each of these categories has to be divided into three proportions—(i) the proportion of price containing the manufacturer's cost plus profit; (ii) the proportion of price resulting from a sudden drop in supply/demand and (iii) the proportion of the price consequent on the reduction in the purchasing price of money or inflation.

Exhibit 2 explains the process of categorising material inputs into A, B, C categories. There are 3 items in category 'A', 7 items in category 'B' and 14 iteams in category 'C'.

Exhibit 3 discloses the analysis of the prices in 'A' category material according to the model under illustration. It can be seen that the prices for six months are exhibited for 'A' category material. Based on these an estimated price is computed for each item by applying simple average method.

For Material Code 0232 the price is divided into two—manufacturing cost plus profit (Rs. 27+3 — 07) and the amount due to inflation (Rs. 0-61). There is no proportion in this price due to sudden drop in supply or demand. In the Material Code 0239 there is a sudden drop in supply, and therefore, the proportion of the price (0-44) is the amount that can be attributed to this division. When the actuals are analysed in the same manner, then trends of deviations in the first, second and the third categories are known and are useful for the purposes of planning and controlling them. It is needless to point out

that division 'one' is the responsibility of the operating managers and divisions 'two' and 'three' are the responsibilities of top-level management.

Similarly Exhibit 4 analyses the B category materials. It can be seen from the Exhibit that there is only one material—0231 which has a proportion in its price of Rs 0-77 due to inflation and the rest of the items are due to the sudden drop in demand, Item 02321 appears to be an abnormal case.

Exhibit 5 displays the analysis of C category materials. It can be seen from it that none of the items are either in the second division or in the third division.

### Conclusion

In the above paragraphs an attempt is made to divide the changes in prices into three sections out of which the first one is accepted to be the responsibility of the operating managers and the latter two divisions of the price being non-controllable are the responsibilities of the top-level management for the purposes of planning and control. The advantage of such classification (although it requires more effort on the part of the management) is that the inputs in the organisation can be scientifically planned, measured and controlled to the best advantage of the management relieving undue and unnecessary strain on the operating managers.

There is wider scope in this exercise for improving the model in many angles than what are suggested in this brief but useful work. This current presentation is to stimulate further thinking in this direction.

EXHIBIT I
Internal Price Level Control Management Model

Material	s INPUTS	INTO THE	PROCESS	I	Divisionalisation of the Price into three proportions:				
Code Nos.	A	В	С	Controllable and Non-controllable by Managers.					
be by le ge de	ikely to e effected / Price vel chan- es of high egree .6 probability)	for lesser concentra- tion by Manage- ment	Likely to be effected by low level of changes or calling low degree of concentra- tion by Manage- ment .1 (probability)	2.	The proportion of the price containing the manufacturer's cost plus a percentage of profit, which is controllable by Managers.  Proportion of the price resulting from a sudden drop in supply/demand which is unpredictable and therefore noncontrollables by the Management,  Proportion of the prices consequential to the reduction in the purchasing power of money or inflation which is also not controllable by the Managers.				
			EVUI	DIT					

EXHIBIT 2
List of selected material inputs into the Organisation

Materials	Category A	Category B	Category C
Input	High degree of price	Medium degree of price	Low degree of price
Code Nos.	level change	level change	level change
0231			C
0232	Α	_	
0233		В	
0234			C C
<b>023</b> 5			C
0236		В	
0237		В	
0238		В	
0239	Α		
02310			C
02311			C
02312			C
02313			C C C C C
02314			C
02315			$\mathbf{C}$
02316			$\mathbf{C}$
02317			
02318		В	C C
02319			$\mathbf{c}$
02320			
02321		В	
02322	Α		
02323		В	
92324			C
<i>5</i> – • – ·			

EXHIBIT—3

# 'A' Category of Materials

April May Ju 1985 1985 19		FIICES TOT THE TASE SIX INDICATES	ا ۾	Estimated	Division	Division of Estimated Price into	into	Estimated	Estimated
	June July Aug. Sept.	ly Aug.	Sept.	prices	th	three proportions	:	Profit	Inflation
	1985 198	1985 1985 1985	1985		Based on	Based on 'Resulting from' Due to	Due to		
					manufacturing	manufacturing sudden drop in Inflation	Inflation		
					cost plus (profit	cost plus (profit) supply/demand			
					*	* *	*		
0232 Per Doz 30-82 30-67 30-	30-10 30-82 30-82 30-82	2 30-82	30-82	30.68	27-00		0-61	%01	2-39%
					(3-07)				
0239 Per Article 5-50 7-25 —	5-5	5-50 5-50	5-50	5.94	4-67	0-44	]	15%	ïŻ
					(0-83)				
78-65 79-	79-60 79-50 78-75 79-78	0 78-75	79-78	73-32	64-75		1-25	10%	1.7%
					(7-03)				

<sup>\*</sup> Controllable
\*\* Non-controllable
( ) Profit

	Estimated Inflation	Allifation		I	ı	1	1	29.78%	<b>%</b> 00.0 <b>\$</b>	i
	Estimated Droft	FIORE		%\$	10%	%s	%\$	%01	10%	%51
tation	Due to		*	1	ı	ı	1	0-77	3-50	1
Division of Estimated Presentation Proportions	Resulting	from suggen drop in supply/demand	*	0-18	0-46	3-53	1-66	í		0.18
Division of Es	Based on Manu-	racturing Cost plus Profit	*	2-68 (0-67)	2-20 (0-24)	13-34 (3-34)	12-00 (3-00)	1.64 (0-18)	5-2 <b>5</b> (0-58)	5-95 (1-05)
	-	Estimated Price		3-53	2-90	20-21	16-66	2-59	9-33	7-18
		Sept. 1985	Rs.	3-35	2-44	16-68	1	I	10-50	i
	onths	Aug. 1985	Rs.	3-50	2-64	i	I	1	10-50	I
	for last Six Months	July 1985	Rs.	3-35	2-97	1	ĺ	2-92	10-50	2-00
		June 1985	Rs.	3-50	3-00	18-00	15-00	1	10-50	7-35
	Price	May 1985	Rs.	3-75	3-00	17-10	1	i	2-00	1
		April 1985	Rs.	3-75	2-74	29-05	18-33	2-25	2-00	1
		C Dift		0233 Per Kg	0236 Per Lit	0237 Per Tin	Per Kg	Per Shæt	02321 Per Bottle 7-(	Arsali
		Material Unit Code		0233	0236	0237	0238	02318	02321	02323

\*Controllable

\*\*Non controllable

( ) Profit

	Estimated Inflation															
	Estimated Profit	10%	15%	10%	%\$	10%	15%	•	%0I	%01 %	15%	10%	5%	%5	10%	5%
presenta- is	Due to		i	I	-	1	I		l	1	l	ı	į	1	I	i
Division of Estimated presenta- tion proportions	Resulting from sudden drop in supply/					I	ı		1	t	i	l	1	i	I	1
Division of tion	Based on Manufacturing cost	27-00	( 3-00) 4-39	2-33	(77-0 ) (9-9)	20.5	27-65	42-30	36-00	( 4-00) 5-14	( 0-36) 7-56	( 0-84) 5-98	(1-49) 63-61	(15-8 <b>5</b> ) 35-26	(3-91)	(0-87)
•	Estima- ted price	30-00	4-78	2-25	2-00	2-25	29-63	47-00	40-00	5.50	8-40	7-47	79-46	39-17	4-35	.
	Sept 1985	1	ı	i	1	1	30-00	47-00		١	I	1	79-65	35-00	4-35	
S	Aug 1985 Rs	1	2-00	2-50	ı	2-50	1	48-00	i	ı	I	7-47	79-40	40-00	1	ļ
Prices for Last Six Months	July 1985 Rs	ı	1	ı	00-9	i	30-00	<b>46-</b> 00	i	1	ł	7-47	79-40	40-00	ł	
s for Last	June 1985 Bs		ı	ı	I	ļ	I	I	ļ	١	ı	7.47	79-40	40-00	4.35	
Price	May 1985 Be		1	ı	;	1	30-00	47-00			1	7-47	79-40	40-00	I	
	April 1985 Bs	30-0	4-55	2-00	8-00	2-00	28-50	47-00	40-00	5-50	8-40	1	79-49	40-00	I	
	Code Unit -	Per Tin 30-00		:	Each	:		Bottle	Kg.	Each	Bottle	Ltr	Tin	Kg		- 1
	Code	0231	0234	0235	02310	02311	02312	02313	02314	02315	02316	02317	02319	02320	02324	

\*Controllable \*\*Non-controllable ( ) Profit

### REFERENCES

- 1. International Accounting Standards Committee (IASC) has preferred formulation of the topic as 'Accounting for the effects of Changing Prices' and decided to drop the name as 'Inflation Accounting'. The reason for this is that this subject on international level has been in an unbalanced state of development: Dr. S. Kleerkoper, "Information Reflecting the Effects of Changing Prices", paper presented at the International Congress of Accountants, October 10-13, 1982, Mexico City, Technical Papers, pp. 39-45.
- 2. The importance of replacement value in accounting for the management of an enterprise in a period of inflation has been presented in a paper and discussed in the Sixth International Congress of Accountants held at London, 1982. Further the Congressional Meetings in 1957, 1962, 1967 and in 1972 have recognized the emerging importance applying current value in the accounting systems of reflecting the changing levels of prices. In 1982, the International Congress of Accountants at Mexico City had again discussed Inflation Accounting. The technical groups recognized the difficulty in setting up international accounting standard in this area. Although they have noted a strong support for the current cost method, it is suggested that individual practitioners of the profession has to take lead by educating their Companies and clients: Dr. S. Kleerkoper, Ibid, Proceedings of 12th International Congress of Accountants, October, 1982 Mexico City, pp. 150-151.
- 3. The originators of international discussion on this topic are from Netherlands. The leaders of the thought on suitable accounting for reflecting price level changes are U. K and U. S. A. In U. K the tide for current purchasing power accounting has been checked by the standard on Current Cost Accounting issued in March 1980 known as SSAP 16 (Statement of Standard Accounting Practice). According to this the presentation of inflation adjusted information on current cost basis is required in addition to historical cost financial statement. In U.S.A. Financial Accounting Standards No. 33 known as F. A. S. 33 stipulates the disclosure of income from continuing operations on both constant Dollar basis as well as on Current Cost basis. Netherlands generally follow the U. K. approach to this problem now: Dr. S. Klee koper, op cit: Wagdy Sharkas "Inflation Accounting, "The American Dilemma". The Chartered Accountant (Institute of Chartered Accountants of India, New Delhi). Vol. XXIX No. 7 Jan '81, pp. 513-17. J. T. Sahe and R. W. Scapens, "Accounting for the Effects of Changing Prices": a Review, Ibid., p. 530.
- 4. "A holding gain" is the difference between the value to a Company of an asset at any point of time, and the original cost incurred by the Company in purchasing that asset. Since gain may be either realised or unrealised, "An Operating Gain" is the difference between the amounts realised for a Company's output (its earnings from goods or services provided) and the value to the business of the inputs used by the Company in generating those amounts: "Inflation Accounting": Report of the Inflation Accounting Committee chaired by FEP Sandilands, popularly known as SSAP 7 (UK):

- Management Accounting (ICMA): London, October, 1975) Vol. 53, No. 9, pp. 312-13.
- Dr. Y. Ranga Rao, "The Principles of Current Cost Accounting and Inflation: A Review", The Indian Journal of Commerce (Indian Commerce Association, June '78), Vol. XXXI, Part II, No. 115, pp. 19-27.
- 6. Dr. Y. Ranga Rao, "Inflation Accounting for Cost Control", paper presented at a Seminar conducted by (Korba Chapter of Cost Accountants) held on 28th March, 1982. An attempt is made to separate price variance due to inflation and price variance due to other reasons than inflation.
- It is to be emphasized that inflation is one among the causes for changing price levels. It is also acquiesced that there can be more number of divisions than what are submitted in this context.
- 8. The illustration is about the material inputs into the Organisation. This can be adopted with little modifications for services inputs also.

# Accounting for Price-Level Changes: A Case Study of the Shipping Corporation of India

G. Soral\*

The author attempts to gauge the impact of adjustments for price level changes on accounting results of Indian Shipping Companies as obtained by historic cost accounting. He selects, for this purpose, Shipping Corporation of India for a period of four years from 1978-79 to 1981-82.

While the debate on various issues pertaining to 'accounting for price-level changes' has been going on among accounting experts in India during the last decade, some concerns have already adopted this new accounting technique<sup>1</sup> in some form. Indian shipping industry, inter alia, has, however, remained aloof from adopting this accounting technique

The present study, therefore, is a highly relevant attempt to gauge the impact of adjustments for price-level changes on accounting results of Indian shipping companies as obtained by Historical-cost Accounting Method. The *structure* of the study is briefly described below:—

1. Scope: Of the total shipping capacity of the country, about 49% is owned by one Government of India undertaking alone viz. the Shipping Corporation of India Ltd.<sup>2</sup> This concern is large enough to be considered fairly good representative of about 69 Indian Shipping concerns. Hence, the concern was deliberately selected for the analysis of financial statistics under the study.

The author is indebted to Dr. K. R. Sharma, Associate Professor and Head, Department of Accountancy and Statistics, M. L. Sukhadia University, Udaipur, for his valuable suggestions towards further enrichment of the contents of the article.

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- 2. **Period**: The study stretches from 1978-79 to 1981-82, a four years period. In Indian shipping industry, this period covered all stages of an economic cycle. Along with a prolonged depression situation, the industry had a short-lived boom period also covered within this period
- 3. Hypotheses: The following hypotheses were tested under the study—
- I. Price-level adjustments have the following impacts, on historical-cost accounting results, throughout the period—
- i) Due to constant and gallopping inflation, the burden of amortized costs increases.
- ii) Due to the above, as generally suspected<sup>3</sup>, profit margin on operating revenue declines.
- iii) Turnover position weakens due to burdensome investment figure.
- iv) As a net result of the above, return on investment is comparatively bleak.
- v) Debt-equity ratio improves, depicting less burden of borrowed funds
- vi) Debt-service position deteriorates due to worsened profitability.
- II. The financial statements, prepared on the basis of historical cost accounting, become more meaningful after price-level adjustments.
- 4. Methodology: The profit and loss account and the balance sheet of the shipping concern for the relevant period were condensed keeping in view the following two objects:-
- a) Depiction of major impacts of adjustments for price-level changes on various financial statement items.
- b) Computation of some representative solvency, activity and profitability ratios.

Selection of Adjustment Method: Of the various methods available for bringing out the impact of price-level changes in accounts 4, the General Price-level Adjusted Accounting method (also known as General Purchasing Power Accounting) was relied upon for this case study because of its simplicity and feasibility.

Selection of Price-index Numbers: For General price-level adjustments, retail price-index numbers or consumer price-index numbers have been generally suggested<sup>5</sup>. The wholesale price-index

numbers have also been advocated and used <sup>6</sup>. However, for general price-level changes it can be asserted that consumer price-index numbers are more suitable than the wholesale ones, as while the former depict the prices of the retailers, the latter do not. Even then, due to the non-availability of suitable data,\* the study had to be based upon wholesale price-index numbers.

Assumptions and conversion-procedure: In order to transcribe the historical-cost data into uniform rupee values as on 31st March, 1982, conversion factors were obtained on the basis of the whosale price index numbers for selected years and dates (refer to Table No. 2). For this purpose, the well-laid down procedure<sup>7</sup> of GPLA was followed, subject to the following exceptions and assumptions—

- a) Foreign monetary assets and liabilities could not be identified out of the data available in the annual reports. Hence, no separate adjustments were made therefor.
- b) Items of fixed assets other than fleet and pre-payments for ships under construction as included in other non-monetary assets were assumed to be of one year average age.
- c) As the figure of inventory comprising mainly of spare parts, fuel, oil etc. was small, the same was ignored while adjusting operating costs.
- d) Fluctuations in the prices of ships, other than those due to the changes in general price-level, were assumed to have not affected the results of the study significantly as they were expected to be counter-balanced during the period under study.
- 5. Interpretation of results and conclusions: The comparison of ratios based on price-level adjusted (uniform-cost) figures with those based on historical-cost figures reveals the following major variations (refer to Table No. 1).
- a) Depreciation on fleet as percentage of operating revenue significantly increases if uniform-cost figures are based upon.

<sup>\*</sup>Reserve Bank of India Bulletins provide authentic and detailed information of consumer price index numbers but the same is available separately for agriculture labourers, industrial workers and urban non-manual employees; and not in aggregate. The author could not find any other reliable source for the required information.

- b) Profit margin as percentage of operating revenue, based on uniform-cost figures, shows better position for the three year period from 1978-79 to 1980-81 though it is not so for 1981-82.
- c) Turnover of net worth for all the four years under study goes down when computed on uniform-cost figures.
- d) Due to the combined effect of the above two ratios, the rate of return on net worth calculated on uniform-cost figures shows significant improvement over the rate calculated on historical-cost figures, for the first three years from 1978-79 to 1980-81. However, the rate is comparatively lower for 1981-82.
- e) Similar to above, the rate of return on long-term investment for the first three years depicts a better position when based on uniform-cost figures than that on historical-cost figures.
- f) The debt-service capacity depicted by debt service ratios when based on uniform-cost figures shows better position except for 1981-82.
- g) The solvency position indicated by the debt-to-equity ratios shows an improving trend throughout the period of four years, as the ratios have declined both on historical-cost figures and on uniform-cost figures. The position, however, remains comparatively better when uniform-cost figures are relied upon instead of the historical-cost figures.

On the basis of the above analysis, the hypotheses about increase in burden of amortized costs, improvement in debt-to-equity ratio and worsening of turnover ratio are proved correct and accepted. The hypotheses regarding deterioration in profit margin on sales, rates of return and debt-service capacity, however, are proved correct only in respect of one year viz. 1981-82. These hypotheses are proved incorrect in respect of the remaining three years, hence completely rejected.

If we look into the reasons for the rejection of some of the above hypotheses, two important points emerge—

i) This shipping concern had a sizable net monetary debt, which resulted in huge holding gains due to inflation. These gains, even after setting off the increased burden of amortized costs because of price-level adjustments, have gone a long way in strengthening the profitability position.

ii) The continuous run of inflation, disrupted somewhat in 1981-82, could produce little holding gain on net monetary liabilities, which could not counter-balance the increased amortized costs due to price-level adjustments. The net outcome has been deteriorated profit figures.

To summarise, due to heavy debt financing, this shipping company has become a net monetary debtor which due to inflation has resulted in huge holding gains to the company. Hence, its profitability position and consequently solvency position has been strengthened.

The second main hypothesis that accounting for price-level changes makes the accounting statements based on historical-costs more meaningful, should also be taken as accepted as the credit for revealing the adove-mentioned startling facts goes to such adjustments. Here it could be useful and interesting to refer to one important querry raised during discussions by one reader, "are the holding gains, revealed by price-level adjustments, real gains and are they so real that they can be taxed, be distributed as dividends and affect the market price of the shares?" The reply should be in affirmative. Better profitability and solvency position displayed by adjustments is not an ornamental beauty but a reality, and the holding gains are definitely real gains. These are, however, unrealized and are represented by enhanced values of non-monetary assets. Therefore, in spite of these being real gains, holding gains cannot be distributed as dividends and should not be subjected to income-tax until realised. prospective investors should, nevertheless, consider the holding gains as an enhancement in the net worth and therefore, the market price of shares should reflect this fact. The price-level adjustments should not be overlooked if real meaning is to be derived out of the financial statements.

To conclude the discussion, accounting for price-level changes makes significant contribution to the utility of historical-cost accounting statements. The Indian Shipping concerns should, therefore, adopt this accounting technique.

Condensed Profit & Loss Accounts		Historical	rical		Pri	ce-level adju	Price-level adjusted (Uniform)	(m)
	1978-79	1979-80	1980-81	1981-82	1978-79	1979-80	1980-81	1981-82
Operating Revenue Less Operating costs Depreciation on fleet	2912 <b>5</b> 25331 4351	40623 33117 4617	50168 39953 5028	53177 45 <b>52</b> 1 5562	43390 37737 7570	51865 42282 7176	53970 42981 7903	<b>5</b> 232 <b>6</b> 44793 8884
Operating Profit Add-Net Non-operating Revenue	(-) 557 565	2889 1051	5188 658	2094	(-) 1917 $842$	2407	3086 (	-) 1351 2214
Profit before Interest Less Interest	3709	3941 4126	5846 4010	4344	(-) 1075 5526	3749 5268	3794	863 3813
Profit before Tax Less income Tax	(-) 3701 (	) 185	1836	469	(-) 6601 (	-) 1519	(-) 520	2950
Profit after tax Add Holding gain on monetary items	(-) 3701	( <u>-</u> ) 185	1836	469	(-) 6601 4337	1519	(-) 520 $11985$	2950 1342
Net Profit	(-) 3701	( <del>-</del> ) 185	1836	469	(-) 2264 (-	-) 15709	11465	9091
CONDENSED BALANCE SHEETS LIABILITIES								
Equity Capital Fund (a	7837	10179	13015	13018	26922	39402	56424	58391
Non-monetary Liabilities (current) (b) Monetary Liabilities Non-current	4513 67214 6439	4014 70476 8016	4702 69500 9605	5890 66053 12331	6723 97255 9317	\$125 84049 <b>956</b> 0	5058 70831 9 <b>7</b> 89	5796 66053 12331
(3)	73653	78492	79105	78384	106571	93609	80620	78384
Total $(a+b+c)$	86003	92685	96822	97.291	140216	138136	142102	142571
ASSETS Fleet (Net) Fleet (Net) Current non-monetary Assets-Non-current	68745 7196 3423	65936 13468 3974	76341 5563 4743	5832 4561 6052	119602 10908 5099	102476 19487 5074	119985 6634 5102	121121 4648 5955
(b)	10619	17442	10306	10613	16008	24561	11737	10604
Monetary Assets=Current (c) Total (a+b+c)	86003	92685	96822	10846	9606	11099	10370	10846
						actoci	Cor	Contd. Page 51

_		78-79	79-80	80-81	81-82	78 <b>-</b> 7	79-8	0 80-	81 81-82
i)	Depreciation					• •		•	
ii)	on Operating Revenue % Profit margin on operating	14.9	11.4	10.0	10.5	17.4	13.8	14.6	17.0
:::\	revenue %	() 12.7	<b>(—)</b> 0.5	3.7	0,9	(—) 5.2	30.3	21. <b>2</b>	<b>(-)</b> 3.1
ŕ	revenue % Turnover of Net worth (times)	3.72	4.51	4.33	4.09	1.61	1.56	1.13	0.91
==	Operating reven	rth )							
iv)	Rate of Return onet worth %	n (—) 47.2	(—) 2.1	15.8	3.6	<b>(-)</b> 8.4	47.4	23.9	(—) 2.8
=	Net profit  Average net wor	·th )							
,	Rate of Return of Long term investment % Net profit + Int	0	5.1	<b>7</b> .2	5.4	2.6	16.9	12,6	1.8
=	Net profit + Int  Average long-  Investment	term							
vi)	Debt to Equity R	atio 10 0	8.1	6.4	6.5	4.2	2.5	1.5	1,4
vii)	Debt Service Rat	io <b>0.2</b>	1.0	1.5	1.1	0.6	4.0	3.7	0.6

### Notes:

- Figures in condensed profit and loss A/cs and Balance Sheets are approximated to lakh rupees. Totals are individually approximated.
- 2. Ratios except (iii) are approximated to one decimal point. Ratio (iii) is approximated to two decimal points.
- 3. Average age of fleet comes to be a follows:

Fleet on	Age in years	months
31. 3. 79	5	0
31. 3. 80	5	8
31.3.81	6	1
31. 3. 82	6	5

TABLE -2

	Wholesale p	Wholesale price Index		on Factor
	Annual Average	March 31	Annual Average	March 31
1977- <b>7</b> 8		182.6		1.51588
1978-79	105.8	191.3	1.48977	1.44694
1979-80	216.8	232.1	1.27675	1.19259
1980-81	257.3	271.6	1.07579	1.01915
1981-82	281.3	276.8	0.98400	1.00000
1974				
March 31	159.		1.3	739 <b>7</b> 9
July 31 1975	178 1		1.:	55418
February 28	176.	176.1		57183
October 31	173.	3	1.5	59723

Sources; Reserve Bank of India Bulletin and Monthly commentary on Indian Economic conditions published by Indian Institute of Public Opinion.

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# Current Purchasing Power Accounting & Current Cost Accounting Methods— An Empirical Study

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The authors compare CPP and CCA with HC method. For this purpose, they select the financial statements of an automobile manufacturing company in Tamilnadu for the financial year 1973-74,

The official index of wholesale prices (base 1970-71=100) stood at 357.00 as on June 29, 1985 as against 344.8 during the last week of March, 1985 and 337.8 a year ago. Further there is a continuous increase in the index numbers of wholesale prices in the recent past six years as given below.

TABLE — 1

Movement of wholesale price index

Year	Index
1979-80	217.6
1980-81	257.3
1981-82	281.3
1982-83	288.6
1983-84	315.5
1984-85	337.8

### Distorted figures of financial statements

It is clear from the above table that the inflation trend has

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become one of the realities of economic life. The economic activities of a business are recorded by an accounting system that applies money as the common scale for measuring all activities. As the 'money scale' of measurement is continuously undergoing changes, historical accounting reports distort figures. Prepared profit and loss accounts, balance sheets, budgets and standard costs and prices based on historical cost data, give distored figures and can not be used correctly to manage the business. The magnitude of these distortions for a business get into all activities and the decision making process becomes a ridiculous one. As a result, a feeling is cropping up in India among accountants, members of professional bodies and academics that it is incorrect to treat the profit of a business as the difference between selling price and historic cost. So there is a strong desire in the minds of accountants and others to find a reasonable solution in order to show a true and fair profit of a business.

### Inflation accounting methods

There are two best known systems of inflation accounting. One is Current Purchase Power Accounting (CPPA) and the other one is Current Cost Accounting (CCA). CPPA is also described as General price level accounting method. It is a method of restating financial statements in units of general purchasing power. Such restatement changes the unit in which amounts are stated to reflect alterations in the purchasing power of money as measured by general index number.

# Steps involved in conversion under Current Purchase Power method

- i) Select suitable index to present general price level changes.
- ii) Convert opening balance sheet of a particular financial year with the help of selected index. This involves taking the historical balances of all items except retained reserves and converting them into Current Purchase Power terms. For this conversion, the items are grouped under four heads as follows. (a) Gross fixed assets including depreciation figures, (b) stock, (c) net monetary items—they are current assets less stocks and long and short term liabilities, and (d) the equity figure. Finally the difference between the total of converted assets and liabilities is taken as retained surplus.
- iii) Convert closing balance sheet of a particular financial year. Here also, all items except retained reserves are being converted into Current Purchase Power terms.

- iv) Find out the retained reserves earned for a year in Current Purchase cower terms by comparing the converted retained reserves of opening and closing balance sheets.
- v) Convert figures in Profit and Loss Account like sales, purchases, stocks, depreciation, operating expenses and other items like tax, interest and dividends. The vital aspect is calculation of gain or loss on all monetary items Now, the result of net profit after interest, tax and dividend worked out in converted Profit and Loss account must agree with the converted retained reserve earned during the year.

The application of the above steps has been done to convert the financial statements of an Automobile manufacturing company Ltd. in Tamilnadu for a period of one financial year 1.4 1973 to 31.3.1974. Revised Index Numbers of wholesale prices (taking 1970-71=100) has been used to make necessary conversion of the historical figures into Current Purchase Power terms.

Based on the indices shown in the Appendix I, the whole conversion procedure pertaining to opening balance sheet as on 1.4.1973 has been done (details of workings are ignored). The converted opening balance sheet in CPP terms as well as in CCA figures with its historical cost figures are presented as follows.

Statement I

Opening Balance Sheet of an Automobile Manufacturing
Company Ltd., Tamilnadu as on 1.4.1973.

(Rupees in Lakhs).

	(respect in Easting).		
	Historical	СРР	CCA
Gross fixed assets	1,498.10	3,321.58	2,172.53
Less Depreciation	728.77	1,723 32	1,110.40
Net fixed assets	769.33	1,598.26	1,062.13
Closing stock	1,473.40	2,013.26	1,498.15
Receivables	<b>5</b> 35.10	669.93	535.10
Cash	45.10	56.46	45.10
Investments	44 60	55.84	44.60
Total	2,867.53	4,393.75	3,185.08

	Historical	CPP	CCA
Long term liabilities	360.20	450.96	360.20
Short term liabilities	31.33	39.22	31.33
Other current liabilities	1,173.50	1,469.19	1,173.50
Equity	778.80	1,873.60	778.50
Reserves	523.70	560.78	247.15
Revaluation reserves			594.40
Total	2,867.53	4,393 75	3,185.08

Steps followed in the conversion of items in Profit and Loss Account into CPP terms are described below. Besides the conversion of sales, purchases, stocks, depreciation and other items, the holding gain or loss in monetary items is also worked by opening Memorandum Monetary Items Control Account. The converted Profit and Loss Account is shown in the following statement. The detailed workings are shown in Appendix II.

Statement II

Profit and Loss Account for the year ended 31.3.74

(Rupees in Lakhs)

	Historical			In CPP terms	
Sales	6,413.60			7,131.20	
Opening Stock	1,473.40		2,013.26		
Purchases	5,422.94		<b>6,029.7</b> 0		
Closing Stock	(2,012.80)		(2,238.01)		
		4,883.54		5,804.95	
Gross Profit	•	1,530.06		1,326.25	
Less Operating expenses					
Current repairs	57.30				
Salaries and wages	445.50				
Welfare expenses	38.00				
Other expenses	133.60				
Ç		674.40	_	749.86	
		855.66	_	576.39	
Less Depreciation		108.06		231.69	

		747.60		344.70
Add Gain on monetary items		-		288.28
Net Profit		747.60		632.98
Less Interest	85.10		94.62	
Tax	413.70		459.99	
Dividend	98.50		98.50	
	<del></del>	597.30		653.11
Net Profit after interest, tax and dividend		150.30		(20.13)

We have seen items like depreciation and closing stock in CPP terms in the converted Profit & Loss Account. For their calculation, the necessity arises to prepare converted closing balance sheet as on 31.3.1974. This step is similar to the step of conversion of opening balance sheet figures. The converted closing balance sheet for the financial year 1973-74 has been presented in the following statement:

Statement III

Closing Balance Sheet as on 31.3.74

( Rupees in Lakhs. )

	Historical	In CPP terms	In CCA terms
Gross fixed assets Less Depreciation	1,620.90 836.83	3,321.58 1,955.01	2,925.76 1 610.43
Net fixed asset	784.07	1,520.31	1,315.33
Closing stock	2,012.80	2,238.01	2,171.14
Receivables	597.90	597.90	597.90
Cash	319.10	319.10	319.10
Investments	44.60	44.60	44.60
Total	3,758.47	4,719.92	4,448.07
Long term borrowings	350.00	350.00	350.00
Short term borrowings	30.00	30.00	30.00
Other current liabilities	1,925.67	1,925.27	1,925.67
Equity	778.80	1,873.60	778.80
Reserve	674.00	540.65	27,74
Revaluation reserve			1,335.86
	3,758.47	4,719.92	4,448.07

At this stage the converted opening balance sheet, closing balance sheet and profit and loss account are available. With these supplementary information in CPP terms, a critical evaluation is being done in the following paragraphs.

First, the net worth under historical cost is largely understated as appearing from Table 2.6

TABLE—2

Net worth as on 31.3. 1974.

Net worth items	Historical Rs. in lakhs	In CPP terms Rs. in lakhs
(i) Equity capital	778.80	1,873.60
(ii) Retained reserves	674.00	540.65
Net worth's total figure	1,452.80	2,414.25
Increase over HC method	<del>_</del>	66.18%

The understatement of networth will certainly twist the results of financial ratios worked out on it. It is hardly possible to take vital management decisions based on historic figures.

A simple test of applying current ratio on historical as well as converted figures is attempted in the following lines. Current ratio is of primary importance to the short term creditor, as it measures the borrower's ability to meet his current obligations.

TABLE—3

Elements of current assets and current liabilities in historical and CPP figures

Item	Opening Balance Sheet as on 1.4.1973		Closing Balace Sheet as on 31.3 1974	
	(Rs. in Historical	In CPP	(Rs. 1) Historica	n lakhs)
	11131011041	terms	1110001100	terms
Closing stock	1,473.40	2.013.26	2,012.80	2,238.01
Receivables	535.10	669.93	597.90	597.90
Cash	45.10	56.46	319.10	319.10
Short term Investments	44.60	55.84	44.60	44.60
Total Current assets	2,098.20	2,795.49	2,974,40	3,199.61

Short term liability Current liabilities	31.33 1,173.50	39.22 1,469.19	30.00 1,925.67	30 <b>.</b> 00 1 <b>,</b> 925 <b>.67</b>
Total Current Liabilities	1,204.83	1,508.41	1,955.67	1,955.67
Current Ratio (Current Assets/Current Liabilities)	1.74	1.85	1.52	1.64

It is observed on both opening and closing dates, the current ratio based on CPP figures is higher than the current ratio on historical figures. Certainly improved current ratio will project a better picture of the concern to the short term lenders and this will go in a long way for the fruitful management of working capital. As on 31.3.1974 the increase in current ratio based on CPP terms over the historical current ratio works out 5.26%. Though the percentage is negligible in this financial year, increasing trend of inflation will wider the gap between the current ratio of historical and CPP figures.

Secondly the impact of taxation after adjustment of profits ruling at the end of financial year has been assessed by working out the taxation as a percentage of taxable profits.

TABLE—4
Impact of taxation for 1973-74

	<u> </u>	
		Rs. in Lakhs
Pre interest,	, pre tax profits:	
	on historic basis	747.60
	in CPP terms	632.98
	Less interest (Historic)	85.10
Taxable pro	fits:	
	on historic basis	662.50
	In CPP terms	547.88
	Less taxation (Historic)	413.70
Taxation as	a percentage of taxable profits:	
	On historic basis	62.45
	in CPP terms	75.51

Before commencing the analysis, it may be noted that historic amounts of interest and tax have been deducted to measure the paid

tax as a percentage of taxable profits. Taxation as a percentage of taxable profits works out 62.45 and 75.51 based on historical and CPP figures respectively. The workings reveal that the management of the automobile manufacturing company made an extra payment of tax to the tune of 13.06 per cent only in one financial year.

Thirdly, a review of the net cash flow during 1973-74 has been made. It is known that the figure of net cash flow for a financial year would be highly useful for future projection and preparation of cash budget. The calculation of net cash flow has been made in a simple way by applying the rule of net cash flow

=(Net profit plus depreciation) - Dividend

TABLE—5

Appropriation of profits and net cash flow after adjustment to prices ruling at the end of 1974

(Rupees in lakhs)

Profit after interest and taxation on historic figures 248.80 in CPP terms 78.37 Less: Dividend 98,50 Retained profit: on historic basis 150.30 in CPP terms (20.13)Depreciation: on historic basis 108.06 in CPP terms 231.69 Net cash flow (Net Profit & Depreciation)-Dividend on historic basis 258.36 in CPP terms 211.56 Capital employed = (Total Assets — Current Liabilities) on historic basis 1.802.80 in CPP terms 2,764.25 Net Cash flow as a percentage of capital employed on historic basis 14.33 in CPP terms 7.65

From this table it is observed that the net cash flow in CPP terms is much lower (Rs. 211.56 lakhs in CPP and Rs. 258.36 lakhs in historic) than historical figures and this would be making a huge impact in the preparation of cash budgets and projected statements.

Moreover, the necessity of taking cost conscious efforts in the following financial years has been exhibited by the calculation of net cash flow as a percentage of capital employed. It is 7.65% compared to 14.33% on historical figures.

It is clear from the above table that there is a huge difference in the amount of capital employed and this fact makes a great impact on the company's profitability also as shown in Table 6.

TABLE—6
Profitability as a per cent to capital employed

Capital employed in historic cost	Rs.	1,802.80 lakhs
in CPP terms	Rs.	2,764.25 lakhs
Profit before interest, tax and divi	dend	
in historic cost	Rs.	747.60 lakhs
in CPP terms	Rs.	632.98 lakhs
Profitability: Profit as a percent	of capital employed	
in historic cost		41.47%
in CPP terms		22.89%

Though the capital employed in CPP term is higher by 53.33% over historical figures, earned net profit before interest, tax and dividend have gone down in CPP terms. The difference in profitability is accounted by the increase in the inflationary rate, that is, a change in the general purchasing power.

Although a lot of useful information is derived from the converted financial statements in CPP terms, there are very strong objections in following CPP method. One is that the converted equity figure by means of a general index number bring out nothing. In the words of Bryan Lund, "It is not possible to derive from the supplementary statements the success or otherwise of the managers of a business in safeguarding the shareholders' funds against the effects of inflation." It is emphasised that CPP supplementary information is a mere logical extension of historical figures

Secondly, the fixed assets are being converted based on the general price index ignoring the specific price prevailing in the market which would be useful for the replacement of fixed assets once their "employed period" comes to an end. Existing closing stock at the end of financial year is also converted into CPP terms ignoring

<sup>1.</sup> Bryan Lund, "The Manager and inflation accounting", Accountancy-October 1974, p. 36.

the economic fact prevailing in the market. As a result, the manufacturing company has to make necessary further provision for replacement of its fixed assets and stocks. Moreover converted profit in CPP terms could never be taken as distributable profit since the index used for conversion is not related to the purchasing power of the organisation, as opposed to general purchasing power.

### **CCA Method**

The second best method of inflation accounting is current cost accounting. CCA is a "form of accounting where all assets are shown at current replacement cost (entry value) or current selling price or net realisable value (exist value) and all liabilities are shown at present value".2

CCA is in accord with economic thinking about real profits and is a valuable management tool as well as a means of removing the distortions of inflation from financial statements. "There is a significant difference between the profit objectives under historical cost and current cost: under the first approach, the business aims for an adequate require on assets at historical costs, under the second, it strives for a return in excess of alternative investment on shareholders equity, at current value".3

Conversion into CCA figures and its procedural steps

There are four steps in the CCA procedure that are followed here. One is conversion of three items in opening balance sheet namely gross fixed assets, cumulative depreciation and stocks. The conversion of opening balance sheet items is to be made to current values as at the date of that same balance sheet, i. e. opening balance sheet date.

The second step is the conversion of items in the closing balance sheet to current values at the closing balance sheet date.

The third step is the preparation of a current profit and loss account by calculating cost-of-sales adjusted (COSA), depreciation for a year and current profit.

<sup>2.</sup> Quoted by Sidney Davidson, Clyde P. Stickney and Roman L. Weil.

<sup>3.</sup> Pieter Bakker and Edward G. Pringle "Better Business decisions through use of current value information" in Current Value Accounting Edited by Warren Chippindale and Philip L. Defliese, AMACOM, New York, p. 16.

The fourth step is the preparation of Appropriation account. Each single transaction pertaining to these items must be valued on a current cost basis. In practice, if particular current cost information is not available, a form of approximation may be used. The approximation is usually made with reference to specific index number that measures the changing price of the class of items in which the specific item falls. In this study, gross fixed assets of the automobile manufacturing company limited has been converted into its current cost value by referring to specific index of "Machinery and Transport Equipment" and for the stocks held by the company specific index pertaining to "Motor Vehicles and Parts" have been employed. The details of the specific index has been given in appendix-III.

The entire workings of the conversion, its procedures, converted financial statements are presented in appendix-X. It is quite vital thing to bring to the readers' notice that the general reserve (Retained reserve) has come down to Rs. 27.74 (in lakhs) after making necessary allowance in order to maintain the source of income. Moreover in this calculation holding gains or losses are not considered at all.

Evaluation of converted financial statements under CCA method

The evaluation is carried out on four aspects. One is the assessment of net worth.

Net worth (Equity plus retained reserve) as per historical cost records is Rs. 1,452.80 (in lakhs). As per CCA method it amounts to Rs. 806.54 in lakhs. The reason for the remarkable decline in the net worth figure is traced to the increase in the specific indices of fixed assets and stocks. The fight against the particular inflation by the business concern has caused for the allocation of Rs. 741.76 (in lakhs) to the credit of Revaluation Reserve Account by appropriating the above sum from Appropriation account.

Secondly current ratio is worked out on the basis of historical and CCA figures. There is a negligible difference in the resuts of current ratios. Workings on current ratios may be referred to in Appendix-IV. It is worthy to note that all monetary items are expressed in its original value under historical method as well as CCA method and no amount of holding gains or losses is taken into account. The minor difference in current ratios is caused by the conversion of stock figures only with reference to specific index.

Thirdly, the impact of taxation based on historical and CCA method has been presented in Appendix-V. The managing authorities of the company would be taken aback since payment of tax exceeds the taxable profit in CCA method. The impact of taxation works out 141.30%. Certainly in course of time this "unwanted" payment of tax will finally erode the entire capital employed in the company. The presentation of accounts in CCA method will motivate the taxation authorities to seriously think over the causes of impact of taxation and to enact suitable amendement to tax laws in order to relieve the management of corporate sector from harsh realities.

Fourthly, the net cash flow after adjustment to specific price indices ruling at the end of financial year 1974 has been presented in Appendix-VI including its workings. Net cash inflow is Rs. 258.36 lakhs in the historical accounting method and there is a cash outflow of Rs. 45.37 lakhs when the figures are presented in CCA terms. Even before making the declaration of dividend there is a loss of Rs. 120.91 lakhs in CCA terms. Consequently declaration of dividend itself is made out of capital which is quite against the provisions of companies Act. Further, the declaration of dividend increases the loss which finally results in outflow of net cash. Certainly, this real position will alert the managing authorities to take necessary steps in maintaining intactness of the value of employed capital and make them to find out the business ways and means for the improvement in the value of capital as well as income of the company.

Fifthly, it is observed by the authors that the management of the company is having a loosing battle against the particular inflation affecting the automobile business. The profitability of the company before payment of interest, tax and declaration of dividend is very meagre. This situation is also shown in Appendix-VII.

As a result of these evaluated points, it may be said that the CCA is based on an economic theory of value, seeks a correct profit, gives a correct valuation and is practically applicable. The readers' attention is drawn to the fact that the CCA methods' link with value and profit is quite admirable one.

### CCA and its demerits

Nevertheless, the CCA is having certain practical difficulties.

Suppose the entry value or replacement of an asset is not contemplated, the CCA adjustment loses its meaning. Further if there have been significant technological changes with regard to the asset to be revalued, adjustment by use of a specific index may be questioned, especially since specific indices seldom, if ever, make adequate allowance for technological progress, and changes in technology are an important, ever present element in our dynamic economy and a major obstacle to the effective use of specific indices for revaluation purposes. Besides, the preparation of adjusted statements in CCA requires more time and involves a lot of arithmethic.

APPENDIX I

Financial year average of index numbers of wholesale prices in India—representing all commodities.

	Financial year average index			
Financial Year	Base 1952-53=100	Base 1961-62=100	Base 1970-71=100	
(1)	(2)	(3)	(4)	
1965-66	165.0	131.6	72.7	
1966 <b>-67</b>	191.3	149.9	82.8	
1967-68	212.4	167.3	92.4	
1968-69	210.2	165.4	91.3	
1969-70	212.6	171.6	94.8	
1970-71	226,6	181.1	100.0	
1971-72	235.7	188.4	105.6	
1972-73	259.1	207.1	116.2	
1973-74	318.0	254.2	139.7	
1974- <b>7</b> 5	391.6	313.0	174.9	
1975-76	378.8	302.8	178.0	
1976-77	388.7	310.7	175.6	

Source: Monthly Bulletins Published by the office of the Economic Adviser,
Ministry of Industry, Government of India, New Delhi.

## APPENDIX II

Details of workings in the conversion of items appearing in historical Profit and Loss account.

Sales in converted figure = historical figure × Index at closing balance sheet date

Mid-year index

Mid year index = 
$$\frac{139.7 + 174.9}{2} = 157.3$$

$$=6,413,60 \times 174.9/157.3$$
 = Rs. 7,131.20

Opening stock = Rs. 
$$1.473.40 \times \frac{174.9}{128.0}$$
 = Rs. 2,013.26

Purchases = Rs. 
$$5,422.94 \times 174.9/157.3$$
 = Rs.  $6,029.70$   
Closing stock = Rs.  $2,012.80 \times 174.9/157.3$  = Rs.  $2,238.01$ 

Operating expenses:

Current repairs : Rs. 57.30
Salaries and wages : Rs. 445.50
Welfare expenses : Rs. 38.00
Other expenses : Rs. 133.60

Total Rs.  $674.40 \times 174.9/157.3 = Rs. 749.86$ 

Depreciation:

Closing converted balance: Rs. 1,955.01 Opening converted balance: Rs. 1,723.32

Difference: Rs. 231.69

Interest: Rs.  $85.10 \times 174.9/157.3 = Rs. 94.62$ Tax: Rs.  $413.70 \times 174.9/157.3 = Rs. 459.99$ 

## APPENDIX III

Index numbers of wholesale prices (1970 = 100)

Machinery & Transport equipment (For the valuation of Fixed assets)	Motor Vehicles and Parts (For the Valuation of stocks)	
(2)	(3)	
79.47 105.3	108.3	
	equipment (For the valuation of Fixed assets) (2) 79.47	

1	2	3
1972-73	112.1	119.3
1973-74	122.7	127.1
1974-75	156.4	161 8
1975-76	172.6	177.3
1976-77	170.1	173.4
19 <b>77-78</b>	171.9	177.4
1978-79	183.9	193.2
1979-80	215.9	240.3
1980-81	239.4	278.1

Source: Reserve Bank of India Bulletins, Bombay 400 001. 1977, 1978, 1979, 1980, 1981.

APPENDIX IV

Current ratios based on the figures of historical and current cost accounting

Particulars	Opening Balance Sheet as on 1.4.1973		Closing Balance Sheet as on 31.3.1974	
	Historical	CCA	Historical	CCA
	Rs.	Rs.	Rs.	Rs.
Closing stock	1,473 40	1,498.15	2,012.80	2,171.14
Receivables	535.10	535.10	<b>5</b> 97.90	597 90
Cash	45.10	45.10	319.10	319.10
Short term investments	44.60	44.60	44.60	44 60
Current assets	2,098.20	2,122.95	2,974.28	3,132.74
Short term liabilities	31.33	31.33	30.00	30.00
Other current liabilities	1,173.50	1,173.50	1,925.67	1,925.67
Current liabilities	1,204.83	1,204.83	1,955.67	1,955 67
Current ratio	1.74	1.76	1.52	1.60

APPENDIX V

Impact of taxation in CCA
accounting records (Rupees in Lakhs)

	Historical Rs.	CCA Rs.
Profit before interest, tax and dividend	747.60	377 89
LESS Interest in historic amount	85.10	85.10
Taxable profit	662.50	292.79
LESS: Tax in historic amount	413.70	413.70
Profit after interest and tax	248.80	(120.91)
Taxation as a percentage of taxable profits	62.45%	141.30%

## APPENDIX VI

Statement showing the appropriation of profits and net cash flow after adjustment to prices ruling at the end of 1974 (Rupees in lakhs)

<u>-</u> ·	Historic Rs.	CCA Rs.
Profit after interest and taxation	248.80	(120 91)
LESS Dividend in historic figure	98.50	98.50
Retained profit	150.30	(219.41)
ADD: Depreciation	108 06	174.04
Net cash flow (Net profit plus Depreciation)- Dividend	258.36	(45.37)
Capital employed (Total assets-liabilities)	1,802.80	2 492 40
Net Cash flow as a percentage of Capital employed	14.33%	(1.82%)

## **APPENDIX VII**

Profitability of automobile manufacturing company limited (Rupees in lakhs)

	Historical Rs.	CCA Rs.
Capital employed	1,802.80	2,492.40
Profit before interest, tax and dividend	747 60	377.89
Profitability: Profit as a percent of capital employed	41.47%	15. 6%

# A Search for a Concept of Income for Taxation

Tarak Chandra Saha\*

After discussing the limitations of the conventional accounting concept of income the author considers the case of economists' concept. He argues that in spite of its theoretical superiority and conceptual precision it poses certain operational problems that cannot be overcome in reality. Accordingly, he fevours the concept of income developed by Edwards and Bell. The 'Value-added' concept is also suggested as an alternative.

Accounting is a data generating system. It provides useful information for making decisions and evaluating the past performance of an enterprise. Another important but subsidiary objective in developing income data is to provide a sound and equitable basis for taxation. The central theme of the accounting system is to determine 'income' which is considered to be the most important single objective of the firm. The conventional accounting system, however, provides us with a monostructure<sup>1</sup> for income determination and the single outcome of such an income determination process is assumed to serve the purposes of the multiple users, external and internal. An user, however, enjoys certain freedom in making minor adjustments in order to make the outcome of the income determination process suitable for his use, keeping the basic structure of the determination process unaltered. The taxable income of an enterprise is also determined, under the law, in the same process. Very little attention has been paid so far in developing a conceptual framework for the purpose of income determination for tax purposes which will be fundamentally different from the process of income determination for other purposes.

At the very outset we should address ourselves to the question

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<sup>1.</sup> R. V. Mattessich, Accounting and Analytical Methods, Richard D. Irwin, 1964.

as to why an entity parts with a part of its income as tax payable to the government. Let us look upon a business entity as an organisation satisfying the basic characteristic features of a 'system'. Since it is a 'system' it is definitely embedded in an environment<sup>2</sup>. Its survival, stability and growth, therefore, will depend upon the nature of support it receives from the environmental elements. environmental elements extend their support in expectation of receiving certain benefits in the shape of goods and services from the organisation in return. The relationship between an organisation and its environment is, therefore, a relationship of dependence and The environment of an organisation, as we know, exchange. consists of countably infinite number of elements each of which influences the organisation and is influenced by it. The government is surely one of the most important elements of the environment. It gives support to an organisation by providing various infrastructural facilities and other variety of services for the survival. growth and stability of an organisation and in return it has every right to demand a part of the enterprise income as tax. Tax, therefore, may be conceived of as a factor payment like other factor payments made by the enterprise to the different claimants landlord etc.<sup>3</sup>. Considered such as employees, from point of view, an enterprise should pay a part of the total 'value addition' achieved during a period through the concerted efforts of the various factors of production including the govt. as tax to the government. Periodic income for tax purposes, therefore, coinsides with the total value addition achieved during the Conceptually any process of measurement of income for period. tax purposes should then be based on some sort of a total valuation approach and such measurement must be in real terms.

The concept of income as envisaged in the conventional accounting process is the outcome of a legalistic-dognatic system designed primarily for external reporting in order to meet some legal requirements. Subject to the limitations imposed by the so-called principles, postulates and conventions, income is determined by what is essentially a patchwork of ad hoc statutory provisions and judicial interpretations thereof. The income so determined is

<sup>2.</sup> J. D. Thompson, Organisation in Action, McGraw-Hill, 1967.

<sup>3.</sup> Eldon S. Hendriksen, Accounting Theory, Khosla Publishing House, 1984.

subjected to certain modifications for deriving the income for tax purposes. Such modifications usually take the form of inclusions or exclusions of items keeping the basic approach in tact. The items to be included or excluded are subject to the specific provisions of law. The basic concept of income which is subjected to such modifications suffers from certain serious shortcomings which cannot be overcome by such inclusions and exclusions as are contemplated in the legal provisions. The conventional accounting income determination which is very much influenced by the principles of realisation and objectivity is the outcome of a 'matching approach' and not 'total valuation approach'. As we know, all 'value additions' achieved during a period through operating and holding activities are not recognised in the books of accounts as and when they arise. Value accretions of one period may be recognised at a subsequent period when realised. Periodic income determination. under the conventional accounting system is bound to be underestimated or overestimated. Moreover income determined through the conventional accounting system is measured in money terms and not in real terms.

Since the conventional accounting concept of income suffers from such limitations as mentioned above and fails to reveal the total value addition achieved during a period a part of which is to be paid to the government as 'factor payment' in the shape of tax, we may consider the case of economists' concept of income as an alternative for the purpose.

Economists like Fisher<sup>4</sup>, Hicks<sup>5</sup> Simons<sup>6</sup>, Haig<sup>7</sup>, and Alexander<sup>8</sup> presented concepts of income having subtle as well as substantive differences indicating thereby that there is no unanimity among the economists regarding the concept of income as such. It is not

<sup>4.</sup> I. Fisher, The Nature of Capital and Income, Macmillan, 1906.

J. R. Hicks, Value and Capital, Clarendon Press, 1946, reprinted in Readings in the Concept and Measurement of Income, R.H. Parker and G.C. Harcourt (eds.), Cambridge University Press, 1969.

<sup>6.</sup> H. C. Simons, The definition of income in Readings in the Concept and Measurement of Income, R. H. Parker, G.C. Harcourt, op. cit.

R.M. Haig, "Concept of Income—Economic and Legal Aspecis, The Federal Income Tax (1921)", reprinted in Readings in the Economics of Taxation, (ed.), R.A. Musgrave and C.S. Shoup, 1970.

<sup>8.</sup> S.S. Alexander, "Income Measurement in a Oynamic Economy" in Studies in Accounting Theory, W.T. Baxter and S. Davidson, Sweet and Maxwell, 1962.

possible for us to consider each of them in detail. It does not appear to be fruitful either, since some of the concepts are far from the type of objectivity needed for our purpose. Fisher, for example, expressed income in psychic terms. His ideas centres around the individual but not around a business entity and the concept of psychic income creates measurement problems of insurmountable nature rendering the concept totally unsuitable for our purpose. It is rather the Hicksian concept of income which deserves careful attention considered from the view point of our requirement. Hicks defines a man's income as the maximum value which he can consume during a week and still expect to be as well off at the end of the week as he was at the begining. Though this definition has been expressed in terms of an individual, this can very well be extended to a firm with minor modifications keeping the basic tenets of the definition in tact Following Hicks we can say that the income of a firm during a period to -t1 is the difference between the value of the firm in real terms at t<sub>1</sub>, and the same at t<sub>0</sub>, such value being equal to the present value of the future net receipts estimated upto the expectational horizon of the measurer Obviously the above definition is conceptually precise in so far as it is based on a total valuation approach and measurement is done in real terms. But when we are in search of a concept of income for taxation purposes the economists' concept of income as indicated above does not help us very much. Inspite of its theoretical superiority and conceptual precision, it poses certain operational problems which cannot be overcome in reality. The concept is obviously entirely subjective in nature having no inter-personal or inter-temporal uniqueness. the veracity of such income for a 'going concern' measured for a particular period can never be established at any point of time. In addition, measurement of such income involves extremely difficult problems of forecasting of net receipts over the expectational horizon and determination of the time value of money which is to be used as the discounting factor. In fact, the economists have paid their entire attention to attain high degree of theoretical precision of the concept ignoring totally its operational feasibility. Since the economists' concepts do not appear to be operationally feasible, it cannot be accepted as an alternative for our purpose unless it is modified to some extent in order to make it operationally feasible. This leads us to the consideration of the concept of 'Realisable Profit' as enunciated by Edwards and Bell9.

E.O. Edwards and Philip W. Bell, The Theory and Measurement of Business Income, University of California Press, 1973.

In order to remove the operational difficulties in the measurement of periodic income as suggested by the economists, Edwards and Bell proposes to replace the subjective value of the firm based on the present value of future net receipts by the market value of the firm presuming in the process that such market value is an approximate surrogate of the subjective value.

The 'Realisable Profit' is defined as a measure of the periodic changes in the capital of the firm when this is measured in 'exit value' terms. It is based on the measurement of opportunity cost. The Realizable Profit is expressed as under:

Realizable Profit for the period  $t_0 - t_1 = \frac{\text{Exit value of the}}{\text{firm at } t_1} = \frac{\text{Exit value of the}}{\text{firm at } t_0}$ 

This concept is developed by retaining the 'virtues' of the economic concept of profit and making it operationally feasible. It reflects the 'total value addition' during a period. It is made 'objective' by using 'maket value' (exit value) in place of subjective value. The realizable profit generates many vital information. The most useful and vital information relates to the economic decision, i.e. whether the firm will continue in its existing form or it would be better off in an alternative form. In order to remove the 'heterogenous' character of the profit and ventilate thereby the hidden information, Edwards and Bell also seggregated the 'Realizable Profit' into Realizable Operating Profit and Realizable Holding gain<sup>10</sup>. This aspect may be expressed as under:

RP = ROP + RHG

Where RP is the realizable profit of a period, ROP is the Realizable Operating Profit, and R.H.G. is the Realizable Holding Gains for the period.

ROP = Exit value of the assets

( entering into production process) at the end of the period  Exit value of such assets at the beginning

RHG=Exit value of the assets held — Exit value of such assets at the end of the period at the beginning

Though this approach of measurement compromises to some extent the theoretical precision of the economists' concept of income,

<sup>10.</sup> E. O. Edwards and Philip W. Bell, Ibid.

it removes the operational difficulties of measurement to a great extent. It also retains the basic properties of measurement in real terms based on a total valuation approach. This concept of 'Realisable Profit', therefore, can be considered as a suitable alternative to the conventional accounting concept. It may, however, be noted that one may find it difficult to calculate the market value of a firm as a whole in real terms at two different points of time and it is suggested that this area should draw considerable attention of the researchers in order to find out ways and means to overcome the difficulties.

Alternatively the 'value-added' concept of income which has drawn considerable attention in recent times may be taken up for the pupose of taxation. It is defined as the "selling price of firm's product less cost of goods and services acquired by transfer".11 In this approach an enterprise is viewed as having a large number of claimants such as employees, owners, creditors and government. It is a pie which is divided among these different recipients. So the value added income includes wages, rent, interests, taxes, dividends and retained earnings. The measure of Net Value-Added (NVA) would help to calculate Value-Added Tax (VAT). It is expressed as Gross Value Added less depreciation. A large number of western countries are applying VAT for the purpose of sales-tax. Goods produced pass through different hands before these are finally consumed by the households or firm. The frequency of movements of the products depends on the nature of the products. The burden of tax, therefore, vary from products to products. The problem will be easier if the tax is to be imposed on the value added in each unit rather than on sales value represting total units and value-added. VAT will solve the problem of taxation on production for more than once. 12 India is also considering the introduction of VAT.

<sup>11.</sup> Hendriksen, E. S., ibid.

<sup>12.</sup> Alan A. Tait, 'Value Added Tax', McGraw-Hill, 1972.

## Concept of Income for Taxation

Dr. H. S. Kulshrestha\*

The author suggests 'gross profit' as an appropriate concept of income. He argues that it is based on the profitability of trade in which a firm is engaged and not on the profitability of that firm itself. This avoids the passing over of the result of inefficiency to the society and permits the firms to fully enjoy the fruits of their efficiency.

Concept of income has been dealt with both in depth and diversity by the economists, jurists and the legislators in their own way. No where this concept is so much disputed and controversial as in the context of taxation. The controversy becomes more complex and complicated when the income from business—trading. industrial or otherwise—is involved. The income-tax law has provisions regarding the admissibility of certain expenses incurred for carrying on that business. But there is still enough scope to the tax authorities for exercising their discretion in respect of many of the expenses. It brings in a sort of vagueness in what both the parties, i. e. tax authorities and the assessees, think of income. None will disagree with the opinion that concept of income for taxation is not the sole domain of the tax lawyers, economists or the legislators. Accounting which is more objective and realistic than its parent science, i.e. economics, is also concerned and competent to deal with this concept. In fact, accounting is based on reasoning and makes an extensive use of relevance. This paper aims at suggesting and discussing an appropriate concept of income to be used as a basis for taxing the income of business concerns. It may, however, be noted that in doing so concept of income for taxation is not the same as concept of taxable income.

As is evident from the very title of the paper, the concept of income may differ on the basis of the objective in view. In other words, the term income may be used with different connotations in

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the context of different objectives. And, it is definitely in keeping with the principle of objectivity in accounting. The other accounting technique to which the attention of the readers may be drawn for a proper appreciation of the concept of income advocated here is the controllability of cost. This concept of controllability of cost is very well manifested in the use of Direct costing for control and performance evaluation. Hence, it will not be out of place to emphasise that the use of Direct costing as against Absorption costing or Total costing is justified simply because the process of absorption or allocation of overhead expenses is quite subjective. Allocations of the overhead expenses, even if they are judiciously and impartially made, become controversial and so unacceptable to some. Evidently. this is because they are based upon or, at least, influenced personal opinion, approximations and estimates. Many of these expenses representing on cost or indirect cost are actually incurred after they have been allocated to various object of costing.

Turning to the main theme of the paper, it may be pointed out that similar controversy and difference of opinion ending ultimately in legal disputes arise between the tax authorities and the assessees on the admissibility or otherwise of expenses representing the indirect cost or managed cost in a wider sense of the term. Thus, using net profit as the basis of taxation presumes the deduction of those expenses whose admissibility may be disputed. Secondly, the indirect expenses are not conditioned by the nature or type of the trade or industry. On the contrary, they being the administrative cost. are the result of managerial decisions and so depend largely on the efficiency or inefficiency of the management. So, indirectly the exchequer and finally the society suffers on account of the bad or inefficient spending by the management of the business concern. This also implies that efficient business units are penalised for their efficiency giving undue benefit to the firms not so good in spending.

It is for these basic considerations that it is proposed to consider gross profit and not the net profit as the concept of income for taxation. In fact, while taxing the individuals or H. U. F. it is the total income received which forms the basis of taxation. The standard deduction allowed provided under rules is fixed and not influenced by the actual amount spent by the assessee concerned. Even in the case of income from property the gross income represented by municipal valuation or the actual rent received whichever

is greater forms the basis of taxation and it is out of this income that expenses at the prescribed rates are allowed to be deducted. It is probably because of mere convention and not due to some valid cause that in case of income from business the net profit earned forms the basis of taxation after adding back to it expenses which are inadmissible under rules. Among the admissible expenses, however, there are some for which absolute amount or their percentage to some other item is not prescribed. Although, starting from gross profit and deducting the admissible expenses in a particular case take us to the same amount as starting with net profit and adding back the inadmissible expenses; but the point to be noted is that all admissible expenses are not the same in all cases nor are all of them required to bear a given proportion to a particular item. For example, amounts of rent, salaries and other similar expenses are admissible irrespective of their amount or the scale of operation. As such, the idea of using gross profit as the basis of taxation carries sense and is worth considering. The rate of taxation no doubt be comparatively lower, or as an alternative, some definite amount or a percentage of some other item be allowed as deductions therefrom.

Thus, the proposed concept of income for taxation for business concerns is based on the profitability of trade in which that concern is engaged and not on the profitability of that concern itself. This avoids the passing over of the result of inefficiency to the society and permits the firms to fully enjoy the fruits of their efficiency. It is true that the gross profit earned by a business is not its income in the economic sense, nor is it so from a layman's point of view. But one has to realise that the objective of taxation in case of business should be to levy tax on the income which a firm should have earned rather than the income which it actually earns.

Having discussed the rationale for the proposed concept of income, it will be worthwhile to appreciate the advantages of adopting this concept for taxation. The main merits of using gross profit as the basis for taxation are its simplicity and avoidance of disagreement between assessee and the tax authorities. This will, in its turn, result in expeditious tax assessent without uncalled for appeals which ultimately will save the assessee from so much botheration and waste of time and money. On the other hand, it will reduce the administrative cost of the government in collecting its revenues

from taxes on business income. Further, the tendancy of overstating the expenses on the part of business concerns will be checked, because gross profit will be determined only by charging the direct costs which are not so much capable of being manipulated. The tax authorities can easily check it because the gross profit as related to turnover is almost the same in all business units engaged in the same trade. This will reduce the checking work of the tax authorities significantly.

An important advantage from social point of view which accrues from gross profit concept of income is that society does not pay for the inefficiency of the marginal units or for the tendency of certain firms overstating their expenses. This is justified because the manner of spending by individual business concern should not reduce or increase its tax liability.

It is evidently clear that gross profit is not claimed to be the income of a business concern. It is simply proposed to be used as a basis for taxation. The proposal, therefore, is likely to face two main criticisms. One is that when it is not the net earning of the business it may not be possible for that business to pay the taxes when total indirect expenses exceed the gross profit. An answer to this is already given in the above discussion. The other one may be that adding back to the net profit all inadmissible expenses also give us a sort of gross profit and so the concept advocated here is not different. The criticism would have been in its place had the amount or percentage of all the indirect and administrative expenses is prescribed under rules. But it is not so and tax authorities exercise a lot of discretion in deciding the admissibility or otherwise of these expenses. As such, the gross profit concept of income for taxation has practically the same advantages as net profit concept provided in the latter case the amount or percentage of each indirect expense is prescribed and all expenses are like standard deductions. Although both of them reduce the subjectivity or discretion by tax authorities, it is only through the former that the assessment work is simple, economic, less time consuming and convenient to all concerned.

# Concept of Income under Indian Income Tax Law

R. L. Tamboli\*

The author considers concept of income from economists' view point, accountants' view point, and legal view point as emerging from leading Indian cases. After making critical evaluation of the position under the Income Tax Act, the author concludes that "income is merely a 'word' and there is 'no concept' of income as such in the tax laws."

## Introduction: Is there really a concept?

The term "income" is used in a variety of meanings. Obviously it can not serve the purpose in all cases equally well. Under the Income Tax laws the scope of the term "income" is not only broad and general but also vague. Consequently this has caused confusion leading to a number of court cases. The objective of this paper is to broadly examine the concept of income under the Indian Income Tax Law.

The term "concept" is defined as an idea underlying a class of things or general notion or opinion and the term "income" is expressed as "money received during a given period (as salary, profit from trade, interest from investments, etc.)" in the Oxford Advanced Learners' Dictionary of Current English. If we consider both these definitions together then we can read a certain point of view which is nearest to the existing meaning of income under the current tax laws of India. However, before touching the concept of income under the tax laws we shall look into the different view points and

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opinions expressed by learned judges, leading authors, tax practitioners and consultants.

### Economists' View Point

Precise definition of income has been a subject of considerable debate amongst the economists\*. According to Haig (1921), for example, 'income is the money-value of the net accretion to economic power between two points of time'. Another comprehensive definition of income was given by Henry Simon (1938). According to him, 'Personal income may be defined as the algebraic sum of (a) the market value of rights exercised in consumption and (b) the change in the value of the store of property rights between the beginning and end of the period in question'. Hicks' (1974) definition takes income as the 'maximum amount of money which the individual can spend this week, and still be able to spend the same amount in real terms in each ensuing week'.

It will be clear from the above that the economists have defined "income" in terms of price level changes and capital gains on long term assets. While these definitions may be useful in ascertaining the income by way of capital gains but they cannot be used for taxation purposes.

### Accountants' View Point

'Income' to the Accountants is the difference in the value of wealth at two points of time or the value of change (favourable or unfavourable) in wealth caused by business transactions, during a particular period of time. This relationship is expressed as:

 $I = W_1 - W_0$ 

where

I = Income

W<sub>1</sub> = Amount of wealth at the end of a particular period of time

 $W_0 = Amount of wealth at the beginning of a particular period of time.$ 

The Committee on Accounting Concepts and Standards of the American Accounting Association defined "income" as 'the realised net income of an enterprise which measures its effectiveness

<sup>\*</sup>Quoted by Simon James & Christopher Nobes; The Economics of Taxation; Heritage Publishers, New Delhi, 110002 (1984)

as an operating unit and is the change in its net assets arising out of (a) the excess of deficiency of revenue compared with related expired cost, and (b) other gains or losses to the enterprise from sales, exchanges or other conversions of assets...' The Committee stressed on matching costs with revenue. In other words, income is expressed as the difference between cost and revenue during a particular period of time of a business, or excess of revenue over operating expenses for a particular period of time of the business can be expressed as "income" of that business for the period. This may be shown as

i = r - ewhere i = income r = revenue e = expenses

Thus, the income is a "functions of cost and revenue" of the business for a given period of time.

The term income is better known as 'net profit', which is the excess of 'gross profit' over 'operating expenses', while the gross profit is the excess of 'sales revenue' over the 'cost of goods sold'. The AICPA Committee on Terminology (Accounting Terminology Bulletin No. 4) defined expenses, in its broadest sense, as 'all expired costs which are deductible from revenue". In narrower sense, 'expenses' refer to such items as operating, selling or administrative expenses, interest and taxes.

Similarly, negative income is called loss and is defined as (1) the excess of all expenses over revenues for a period, or (2) the excess of all or the appropriate portion of the cost of assets over related proceeds, if any, when the items are sold, abandoned, or either wholly or partially destroyed by casualty or otherwise written off. The losses which are deducted from revenues are expenses in the broad sense of the term.

## View Under Leading Indian Cases

Meaning and scope of income has been very closely examined by learned judges in India. It may be useful to quote the definitions given in the certain leading Indian cases here:

(i) Income is "annual or periodical yield in money or reducible to a money value arising from the use of real or personal

property or from labour of services rendered." [ Jyoti Prasad Singh Deo, Inre (1921) 1 ITC 103, Pat.]

- (ii) "Income" in its broadest connotation, refers to monetary return "comming in" and is conceptually contradictory to "loss". Section 4 taxes income and not loss which can be carried forward under certain circumstances specified in sections 70 to 80 (both inclusive)-[CIT V. Jaora Oil Mill, (1981) 129 ITR 423, 425 (MP).]
- (iii) The income-tax being a tax on the real income computed as per the provisions of the Act of a person earned during the previous year relevant to the assessment year in question, the receipts of capital nature during the same period and other exempted as per the provisions of the Act are not liable to be taxed. [CIT V. Krishna Industrial Corporation Ltd. (1973) 92 ITR 261, 271 (AP)]
- (iv) "Income" may be defined as the gain derived from land, capital or labour, or any two or more of them. Even in its ordinary economic sense, the expression "income" includes not merely what is received or what comes in by exploiting the use of a property but also what one saves by using it oneself. That which can be converted into income can be reasonably regarded as giving rise to income. [Bhagwan Das Jain V. Union of India (1981) 128 ITR 315, 318, 321 (SC)].\*

Similarly in various cases, such as K. Ramabrahman & Sons P. Ltd., Shree Jori Merchants Association, and Padmaraje R. Kadambande etc the learned judges reached the conclusion that "income is anything which can properly be described as income and is taxable under the Act unless expressly exempted." In the case CIT V. Jaora Oil Mill 1981 the learned judge expressed that "income include & whatever is income construed in its natural or ordinary sense. There are also artificial categories added to the definition". But barring those artificial categories, the natural concept would determine the quality of income" as observed by the learned judge in CIT V. Express News Paper Ltd (1980) 124, ITR, 117, 129 (Mad.).

## Meaning Under the Income Tax Act

Income Tax Act is, undoubtedly, directly concerned with income. But it defines "Income" vaguely, at random, and in unsystematic

<sup>\*</sup>Chaturvedi and Pithisaria; Income Tax Law, Third Edition Vol. 1 Eastern Law House, Calcutta, (1982).

manner. Under the Act's Section 2 (24) income includes profit and gains, dividends, voluntary contributions (in case of trusts), value of any benefit or perquisite or profit in lieu of salary, compensation, income derived by a trade, professional or similar association from specific services performed for its members, recovery of past losses, expenses, bad debts and depreciation, the value of any benefit or perquisite arising from business or the exercise of a profession, capital gains profit and gains of any insurance business, annuity and winnings from lotteries, crossword puzzles, races including horse races, card games and other games of any sort or from gambling of any form or nature whatsover.

Similarly the term "Agricultural income" has been defined in the Act as a sum of any rent or revenue derived from agricultivable land situated in India and used for agricultural purposes and any income derived from such land by agriculture or agricultural process/performance to make the goods or agricultural saleable, any income derived from a building being used for agricultural purposes (with certain terms and specifications). 14 of the Income Tax Act gives six heads of income viz: A-salary, B-interest on securities, C-income from house properties, D-profits and gains of business or professions. E-capital gains, F-income from other sources, for the purpose of charges of income tax. The above definition of "Income" does not fully cover two important heads namely (i) Interest on securities, and (ii) Income from house property. Moreover apparently the above heads may appear similar and as components of "income" but in practice it generates lot of confusion, ambiguity and obscurity.

### Overall Observations

Thus income under the Income Tax Law is a periodical monetary return 'comming in' with some sort of regularity or expected regularity from definite sources. The source need not be continuously productive but must be one whose object is the production of a definite return excluding anything in the nature of a windfall as observed by the learned judge in the case of Shaw Wallace & Co.

Broad conclusions emerging from the definitions and leading cases cited above may be summarised as follows.

- (i) Income may accrue/arise or realise in the form of either money /cash or/and in kind. Income received in kind would be valued in terms of cash as prescribed under the provisions of the relevant tax laws.
- (ii) Income may be received either in lumpsum and/or in instalments during the previous year.
- (iii) Mere accounting entry or relief from any expense is not income.
- (iv) Reward in case of lost article (to the finder) has no income element.
- (v) A stream of cash inflows may be considered income depending upon the nature and circumstances, but a contingent receipt is not an income until and unless the contingency takes place during the previous year.
- (vi) A receipt of money may be considered income following either realisation convention or accrual convention approved by the tax authority. For tax purposes, it is sufficient that the assessee has a legal right to receive the income.
- (vii) Income may be either legal or/and illegal, but both are taxable in different manners as prescribed under the tax laws.
- (viii) Gifts of personal nature, testimonial payments, birthday gifts and donations for noble causes are not income considering the nature and circumstances under which they are received.
- (ix) Income under dispute of title is also liable to tax in the hands of the recipient.

#### Critical Evaluation

The scope of income under the income tax laws is formidabyl wide and vague and plausible in nature rather than an axiomatic one. Profits, gains, revenue, receipts, yields, dividends are not synonymous with 'income'. The Act distinguishes income from these words. Rather these are to be cluded within the meaning of "income" but are not synonymous with income. It was observed in Jyoti Prasad Singh Deo, in re (1921) 1 ITC 103, 106 (Pat), by learned judge, that income may be expressed in two ways viz. "plus income", and "minus income". In CIT Karamchand Prem Chand Ltd. (1960) 40 ITR 106 (SC), it was mentioned that 'profits and gains' represent "plus income" whereas losses represent "minus income".

Similarly in case of CIT Vs Harprasad & Co. P. Ltd. (1975, 99 ITR 118, 124-5,SC) the hon'ble justice observed that "loss is negative profit. Both positive and negative profits are of a revenue character. Both must enter into computation, whereever it becomes material, in the same mode of the taxable income of the assessee." Distinguishing between taxable receipts and nontaxable receipts, it has been suggested that the taxable receipts may be considered income for the taxation purposes. In Mehboob Productions P. Ltd. Vs CIT 1977, it was pronounced that "the question whether any particular receipt is income or not depends on the nature of the receipt and the true scope and effect of the relevant taxing provisions". Similarly in the case of Lal Chand Gopal Das Vs CIT (1963) 48 ITR 324 336 (All.), it was decided that "taxing a receipt they must find that it is income, and they cannot so find unless they have some material to justify the finding."

Even after several amendments, legal cases and lengthy debate there are no clear-cut views about the important aspects of agricultural income such as building, rent or revenue derived from land, agricultural work, performance or process and sale of agricultural products and crops and even situation of agricultural land, etc. It resulted in tax avoidance and tax evasion. The ambiguity, confusion, complication in the definition of income under the Act is due to the fact that it is inclusive, not conclusive in nature. A lot of issue like what is income, how, when, where and by whom it is to be assessed, and the tax to be levied and collected have no definite and clear answers.

Several amendments are made through the finance acts from time to time to plug loopholes, evasions and avoidance tricks used by tax payers. This has made the tax laws more complicated creating scope for tax practitioners, tax managers and research scholars.

## **Summary and Conclusions**

The present complexities and uncertainties in the income tax laws including vague definition of income have generated haphazard income taxation in India. The definition of income in the tax laws is item enumerative, unprecise and infinite in nature. For example, Subsection 1 of section 5 of the Act defines income as..... "all income from whatever source derived." A concept is supposed to be pervasive in application, highly admissible by

most of the persons in any given conditions and circumstances but "income" is considered with lots of ifs and buts throughout the tax laws. Hence it may be concluded that income is merely a "word" and there is "no concept" of income as such in the tax laws.

Due to vague definitions "taxation" has become a difficult and monotonous subject. It is very difficult to retain in memory its invariable amendments by way of ommissions, modifications, and additions every year by the Finance Act.

Various canons of taxation namely (i) equity, (ii) certainty, (iii) convenience and (iv) efficiency (i.e. priciple of neutrality) suggested by Adam Smith can be followed in "Taxation on Income" only if there is a clear-cut concept of "income" in our tax laws.

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## **Parameters of International Accounting**

Dr. Mukund Lal\*
Dr. Chhote Lal\*\*

The authors argue that objectives of the nation are better served if information relating to international transactions are presented in the suggested format. For communication and comparison with other countries they suggest that a nation's annual accounts be drawn up on the basis of uniform concepts and practices. They also suggest appropriate price level adjustments for bringing the accounting information on a common footing.

International Accounting refers to accounting systems and procedures of identifying, measuring and communicating international economic transactions taking place between nations with a view to permitting informed judgements and decisions by the nations concerned. Here 'international transaction' means any business inter-change between residents of two countries and inter-governmental dealings. These transactions may either be 'real' involving trade in goods and services or they may be 'financial' involving transfers of purchasing power.<sup>1</sup>

There has been tremendous growth in the magnitude and direction of international business during the last few decades. As a result, the nations are now interested not only in securing equilibrium in the balance of payments, but are equally interested in examining the operational efficiency and productivity of their international business so as to formulate their future economic policies.<sup>2</sup> If the formulation of such policies are to be based on

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R.H. Masen, R.R. Miller and D. R. Weigel: The Economics of International Business, 1975, pp. 69-70.

<sup>2. &</sup>quot;Comparison of a pair of balances of payments covering a given period shows changes in the country's trading position. Such information could clearly be significant for the determination of trade and commercial policies. The effect of such changes on employment and production will also be relevant to monetary and fiscal policy..... Also revealed will be any alteration in the country's net position as a lender or borrower, with implications for further income or outgo on this account"—P. T. Ellsworth: The International Economy, 1969, pp. 299-300.

hard facts and logical decision-making, it is essential that the past performance of the nations be recorded, analysed and presented in a systematic manner. Here comes the international accounting in operation.

In view of what has been stated above, the main objectives of international accounting may be enumerated as follows:

- (1) To exhibit the results of international economic transactions having taken place during a particular period, say, a financial year;
- (2) To portray the picture of owings and belongings of a nation due to international economic transactions at the end of the above period; and
- (3) To guide the nation in the formulation of future economic policies—both internal and external, so as to improve its efficiency in the handling of international transactions.

In a business organization, the transaction takes place between two entities. Likewise, in the international sphere the economic transactions take place between two nations. Thus, the common accounting system and procedures followed by private enterprises in recording and presenting information reflecting operational efficiency and state of affairs may be adhered to in regard to international transactions as well. In view of this fact, the records relating to international transactions should also be maintained and exhibited in the same manner, with minor differences as may be necessitated by environmental conditions, in which business transactions are recorded and presented. Thus, while doing so, due care must be exercised to appreciate the nature of international transactions as distinguished from purely business transactions.<sup>3</sup>

Now the question arises whether the nation is required to maintain separate books of accounts for the preparation of periodical Income and Expenditure Account or Revenue Account and Statement of Affairs. The authors feel that no additional recording of international transactions is required for the purpose as the desired

<sup>3. &</sup>quot;It is true that firm goals are narrower than national economic policy and they normally follow rather than lead national economic policies. But since business firms are a part of the public interest that influences and directs national policies, reciprocal cause and effect relationships exist."—Frederick D S., Choi and G.G. Mueller: An Introduction to Multinational Accounting, 1978, p. 38.

information may be available in the various break-ups of the balance of payments accounts of a nation<sup>4</sup> which are already based on elaborate double entry system, most closely akin, but not identical to a corporation's income statement.

The balance of payments of a country is at present considered to be the most important document containing information relating to international economic transactions. Although the format of the balance of payment differs from country to country, it is equally true that its basic element and structure is found to be more or less the same everywhere. However, the balance of payment fails to serve our desired objectives due to some of the deficiencies given below:

- 1. It includes, besides revenue items, the exchange of different types of 'real' or 'financial' assets and, thus, it can best serve the purpose of a Funds Flow Statement rather than a Revenue Account.
- 2. Since the items in the balance of payments are often picked up independently by the government, there is usually a time-lag between the debit and the corresponding credit entries which necessitates the inclusion of a residual account, commonly known as 'Errors and Omissions.'
- 3. The balance of payments provides a summary of actual funds received or paid and, as such, it fails to show the total income or expenditure of the nation because of the omission of accruals.
- 4. The balance of payments does not exhibit the opening balances of different accounts in the absence of which it is difficult to appraise the correct position of owings and belongings of a nation at the end of the financial period.

In the opinion of the authors, the objectives of the nation, as elaborated earlier, may be better served if the information relating to international transactions which are already recorded on the double entry system are re-grouped and presented (after taking into consideration the accruals and the opening balances) in the following form periodically, say, annually\*.

<sup>4. &</sup>quot;All foreign transactions of an economy are simply its balance of payments which is a summary statement of all the transactions of its residents with the residents of the rest of the world"—P. T. Elsworth., ibid, p. 282.

<sup>\*</sup>The suggested format is based on India's Balance of Payments Account as available in the official records. Appendix—A show the format in which data are currently published in India.

## Suggested Format of Annual Accounts for International Transactions

## Part A REVENUE ACCOUNT

for the year ending.....

Partic	culars	Amount (Rs. in crores)		Particulars	Amount (Rs. in crores)
To Import (consumer goods) ,, Non-monetary gold movement (purchases of gold)		•		orts n-Monetary Gold nt ( sale of gold )	
" Invisi	bles:	,,	" Invisibles:		
(i) F	Foreign Travel Inco	ome	(i)	Foreign Travel	Income
• ,	ransportation expenditure		(ii)	Transportation	Income
(iii) I	nsurance Expendit	ure	(iii)	Insurance Incom	ne
(iv) I	nvestment Expend	iture	(iv)	Investment Inco	me
` '	Fovt. Expenditure : included elsewhere	not	(v)	Govt. Income nincluded elsewho	
- /	Miscellaneous Expe are.	endi-	(vi)	Miscellaneous I	ncome
(vii) T	ransfer Expenditu	re	(vii)	Transfer Incon	ne
<b>(</b> 2	ı) Official			(a) Official	
(1	o) Private			(b) Private	
To Excess of Expendi	f Income over ture	В	y Exce Inco	ess of Expenditur me	e over
Total	_	T	otal		

## Part B STATEMENT OF AFFAIRS

as on.....

		Owings	(Rs. in crores)	Belongings	(Rs. in crores)
		anding on the last previous year	the last d	goods in hand as on late of the previous	
Add:	the	year  Loans excluding P. L. 480 rupees	go Receivab	mports of capital bods during the year bles on the last date evious year	
	(b)	Ioans Grants excluding P. L. 480 Title I Grants	Add: Re	eceivables created uring the year	
Less:	Pan	P. L. 480 Title I (Gross) ments made during year	year (a) Private	ear	
	(a) (b) (c)	Private Government Amortisation payment Repurchase of	(c) (d Reserves Less: D	Repurchase of rupees  Banking capital (Receipts)  with I.M.F.  Drawings	
	` ,	rupee from I.M.F.  Banking Capital (payments)	income	f Expenditure over nd Omissions	
Excess	of II	of SDR ncome over c Omissions			
Total		_	Total		

It is to be noted that format suggested above is a preliminary exercise in the direction of international accounting of a nation's transactions and it may require many sophistications when it is put in practice. Besides the following assumptions, many other assumptions will have to be taken while dealing with the different international transactions which may pose challenges of different degrees that the nation will have to encounter.

It may be noted that in the above format, total exports have been treated as revenue income, while the imports have been broken into two parts—revenue and capital, representing imports of consumer goods and capital goods, respectively. There is accounting justification behind it. Exports are generally made of saleable goods which result in revenue income, whereas imports may either be consumable within a year or the consumption period may extend beyond one year.

Further, 'Errors and Omissions' have got to be shown in the Statement of Affairs till improved techniques are found out to match the timings of debit and credit transactions.

It is noteworthy to mention that under each of the heads shown in Income and Expenditure Accounts, accrual system has to be followed to arrive at the correct amount of excess of income over expenditure or vice versa.

Regarding the proposed Statement of Affairs, it may be clarified that the opening balances of borrowings, receivables, capital goods owned and reserve with I.M.F. would be essential so as to show the position of total owings and belongings on the date of the preparation of Statement of Affairs.

## Need for Standardised Concept and Practices

With a view to facilitating communication and comparison with other countries, it is necessary that a nation's annual accounts are drawn up on the basis of uniform concepts and practices. This will necessitate standardisation of concepts with a view to bringing uniformity in the method of presentation. Although differences exist in the format of Balance of Payments of different countries depending upon the nature of international transactions handled and the conventions followed by them, most of the differences are related to the grouping of items, their nomenclature and the method of presentation. The basis of accounting is a double entry system.

Hence, it is the contention of the authors that if standardised concepts and practices could be used in the preparation and presentation of the annual accounts of different nations, they are likely to be more uniform and comparable. This may help the nations, considerably in taking many international economic decisions on a sound basis.

## Price Level Changes and International Accounting

One of the objectives of international Account is to facilitate inter-period comparison of transactions between nations. But in this age of world-wide inflation when the value of money has been continuously exhibiting a declining trend, the interperiod comparison of transactions between nations would be misleading unless appropriate price level adjustments are done with a view to bringing the accounting information on a common footing. This will, therefore, require the use of an internationally acceptable methodology for the construction of a suitable price index which could be employed for adjusting the changes in the price level. Such a methodology should be simple but more effective so that it could be put to use by all the various countries in the world.

The methodology suggested in the paper for the comparison of international transactions by converting the Balance of Payments Account into Reserve Account and Statement of affairs needs further exploration in minor details. At the same time, it is to be noted that the suggested scheme is not intended to replace the Balance of Payments Account, but to supplement it with a view to obtaining more useful managerial information for the purposes of planning and control.

### APPENDIX-A

## Proforma of India's Balance of Payments Account (Adjusted)

(including delails of Invisibles on Current Account)

	Amount
Heads	(Rs. in crores)
	crores)

- 1. Imports c. i. f.
  - a) P. L 480 Title I
  - b) Others
- 2. Exports f. o. b.
- 3. Trade Balance (2-1)
- 4. Non-monetary gold movement (net)
- 5. Invisibles:
  - (i) Receipts:
    - Foreign Travel
       Transportation

    - 3) Insurance
    - 4) Investment Income
    - 5) Govt. not included elsewhere6) Miscellaneous

    - 7) Transfer Payment
      - a) Official
      - b) Private
  - (ii) Payments
    - Foreign Travel
       Transportation

    - 3) Insurance
    - 4) Investment Income
    - 5) Govt. not included elsewhere
      6) Miscellaneous
      7) Transfer Payments

    - - a) Official
      - b) Private
  - (iii) Net (i)-(ii)
    - 1) Foreign Travel
    - 2) Transportation3) Insurance

    - 4) Investment Income
    - 5) Govt. not included elsewhere
    - 6) Miscellaneous
    - 7) Transfer Payment
      - a) Official
      - b) Private
- 6. Current Accounts (Net)

(3+4+5 (iii))

## (Appendix—A Continued)

Heads	Amount (Rs. in crores)
7. Capital Transactions:	
(a) Private	
(i) Receipts	
(ii) Payments	
(iii) Net (i)—(ii)	
(b) Government	
(i) Receipts	
(ii) Payments	
(iii) Net (i) $-$ (ii)	
(c) Amortisation payments (Gross)	
(d) Re-purchase of rupees from I.M.F.	
(e) Banking, Capital (Net)	
8. Errors and Omissions	
9. Total Deficit (i)/Surplus (+) (6 to 8)	
Financed by:	
10. External Assistance	
(a) Loans (excluding P. L. 480 rupees loans)	
<ul><li>(b) Grants (excluding P. L. 480 Title I grants</li><li>(c) P. L. 480 Title I (gross)</li></ul>	<b>5</b> )
Total $(a+b+c)$	
11. Drawings from the I. M. F. (Gross)	
12. Allocation of SDRs	
13. Decline in Reserve (+)/Increase ()	
Total (10 to 13)	

Note: Details regarding India's Balance of Payments are published in the official records in above form,

# Uniform Accounting as an Approach to International Accounting—An Overview

Dr. J. B. Sarkar\*

In the context of the growth of multinationals and investors beyond the geographical horizon and diverse legal requirements as per corporate laws difficulties are now faced by such firms for reporting on a uniform basis to the different interested parties. The present article is an approach concomitant thereto.

Accounting as obtains today nearly five hundred years after the formulation of its basic principles for the first time by Luca Pacioli, Franciscan Frair, university teacher and scholar in his book 'Suma de Arithmetica Geometria Proportionalita' meaning, "Everything about Arithmetic, Geometry and Proportion" is characterised by:

- (a) Microlevel approach: Free enterprise economies, including those with a small degree of Government interference, entrust much of their economic well being to the business activities of individuals and those of individual business firms. Therefore, a fundamental orientation exists in these economies to the individual cells of economic activities which are mostly in the corporate forms. In the situation it is only natural that accounting as a service function to business would seek to orient itself to the same micro considerations that are so strongly represented in its environment.
- (b) Pragmatism: Accounting system is the major quantitative information system in almost every organisation.<sup>2</sup> An effective

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<sup>1.</sup> S. Sengupta, A Text Book of Accountancy, Chatterjee Publishers, Calcutta, p. 1.

Charles T. Horngreen, Accounting For Management Control: An Introduction. (Eastern Economy Edition) Prentice Hall of India Private Ltd., New Delhi, 1975, p. 3.

accounting system provides information for three broad purposes: (i) internal reporting to managers for use in planning and controlling current operation; (ii) internal reporting to managers, for use in strategic planning, that is, the making of special decisions and in the formulation of over all policies and long-range plans, and (iii) external reporting to stock-holders, government and other outside parties. The over all consequence of these has been that accounting as the process of identifying, measuring and communicating economic information to perform informed judgements and decisioning by the users of information, have always its focus on the requirements of the entity where it is introduced.<sup>3</sup>

- (c) Subservience to national economic policies: Not to speak of controlled economies, a market oriented economy also requires a degree of administrative direction from its government if it is to produce optimal or near optimal results without major cyclical or other economic disturbances. Firms are the major economic entities through which government's programme on economic policies are given practical shape. If this proposition is accepted and pursued to its practical implication it implies that accounting as a major quantitative information system in the business entities has to be tailored in a manner that it can serve as an instrument of national economic policies. The use of investment allowances to channelise private investment in the desired areas of economic growth in the developing economies is one of the many instances to exemplify the point.
- (d) Relatively lesser role of scientific reasoning in building up of the present structure of Accounting: Accounting is the language of business Factors, such as the importance of judgement and estimates in the maintenance and promotion of sales; necessity to organise human resources, the most important business intangibles; the influence of environment; natural, social, political and legal, both inside and outside a country upon business, have always been considered more of an art than a science. Accounting being the language of business, had, therefore, hardly any scientific exercises in its structure building. Though the position has started changing since sixties through programme of accounting

<sup>3.</sup> Gerhard G. Muller, International Accounting, Amerind Publishing Co. Pvt. Ltd., New Delhi, p. 38.

research, nevertheless customs, conventions and practice under the coverage of Generally Accepted Accounting Principles, still predominate in the present structure of accounting.

## 2. The issue

When Accounting remains characterised, as enumerated above, it is natural, that it will have reflection on the final output of the system, namely the Income Statement and the Balance Sheet. And the same will be asymmetrical in respect of valuation and measurement contents in them both intra and inter industry enterprises. It is this asymmetry in the valuation and measurement contents of the income Statement and Balance Sheet—the final output of Accounting system—the universal reporting mechanism of the business enterprises, that leads to the consideration of 'Uniform Accounting' as an approach to International Accounting – a topic which of late has assumed importance because of some important developments across the world.

First one of them is the growth of Multinational Corporations, that is, the enterprises of which ownership, management, production and marketing extend over more than one country, as is the case with General Motors, Exxon, Ford Motor, Gulf Oil USA, Unilever British - Netherlands, Philips - Netherlands, Volkswagen -West Germany, ICI - Britain etc. to say the least.<sup>4</sup> Such Corporations often find it time consuming and costly to establish a branch or a subsidiary in another country by organising a new enterprise. Consequently, many business expansions into other countries now utilise the route of acquiring an existing business. This process involves finding a suitable company which might be acquired, negotiating the appropriate amount of consideration for acquisition and establishing planning, control and reporting techniques to enable effective management by the parent company. All these actions touch up on accounting information. Particular difficulties usually arise with accounting data existing prior to the acquisition and prepared on a basis often substantially different from that familiar to the parent company management.

<sup>4.</sup> Kamal Vir, "Multinational Corporations in Indian Perspective", Lokudyog, Vol. XVI No. 3 June, 1982. BPE, New Delhi, p. 35.

The second one is the growth of international investment, both private and institutional. The magnitude of such investment can be visualised from the singular instance that at the end of 1965, total market value of the 268 foreign securities — stocks and bonds listed on the New York Stock Exchange was in excess of US 11 billion.<sup>5</sup> Similar position is obtained in other countries also. Accounting information again plays a key role in these institutional investment activities.

The third one is the growing international interdependence as manifest in the regional pact like the European Common Market. Whether it is a question of shifting factors of production, locating enterprises in certain geographic areas or striving for harmonisation of taxation system, accounting information and analysis becomes directly involved.

## 3. Uniform Accounting

Uniform Accounting as a system for International Accounting stands for uniform treatment of accounting methods, procedures and concepts (i.e. a single inventory method say for Fertiliser Industry, a uniform treatment of research and development expenses for Drug and pharmaceutical industry and the like). It includes standardisation of valuation applicable to accounting and specified treatment of accounting events like business combinations, inception of pension plans, receipt of subsidies from Government or tax concessions etc. For the purpose there will have to be a uniform plan of accounting stipulating procedures relevant to complete process of accounting i.e. initial recording of transaction to be accounted for, the classification and summarisation of these transactions, and finally the reporting of accounting data to users of financial information. Thus, it will generally include a model or standard financial statement forms to be used for the reporting function of accounting. A uniform plan of accounting may be again national or sectional. If it is national, it will have to be general enough in scope, to permit its adoptation to all economic units in a given country without the loss of their salient features. In other words, the basic scheme will be wide enough to allow for use in all the branches of industry from heavy manufacturing and extracting and extracting to retail and service

<sup>5.</sup> New York Stock Exchange, Fact Book, 1966, p. 9.

business. Similarly, it will need to have the facility to encompass small firms as well as giant industrial concerns.

If it is a sectional one, it will have to be geared to a specific industry requirements. That is to say it will have to be developed with a particular industry in mind and provide for economic, organisational and other peculiar characteristics of the industry.

## 4. Approaches to Uniform Accounting

There may be three different approaches to Uniform Accounting. These are: (a) the Business Approach, (b) the Economic Approach and (c) the Technical Approach.

## a) The Business Approach

In business approach to uniformity, orientation is specifically to particular users of accounting data. It takes full account of business characteristics and the business environment under which data are collected, processed and communicated. It is essentially a pragmatic approach, and it relies heavily on convention. logical starting point for a business-approach-based uniformity effort is a comprehensive survey of accounting procedures employed by the accounting entities to be served by the uniformity scheme. Nature of transaction, relative frequency of transactions and timing and measurement difficulties of transactions all are important parameters to which such a survey pays attention. Parallel enquiry is made into what the users of accounting reports require for their purposes and what relative weights are to be attached to individual or control figures. After the survey steps, inductive reasoning is used to evolve an accounting system structure constrained by more important transaction characteristics and the relative weights assigned to bits of accounting information important to the users of information.<sup>7</sup> This leads to the design of a uniform chart of accounts for its subsequent inclusion in the uniform plan of accounting. A uniform chart of accounts is nothing but a classification device. It assigns classes and sub-classes to account categories and provides general guidelines on how appropriate account classification is to be achieved for each account appearing in a given system of accounting. Normally an alphabetic or numeric code is used to identify an account class or sub-class.

<sup>6.</sup> Garhard G. Muller, Op. cit., p. 93.

<sup>7.</sup> Garhard G. Muller, Op. cit., p. 95.

### b) The Economic Approach

Economic approach to accounting uniformity is in essence a macro approach. It has a social order premise because it is fundamentally linked to public policy. Implementation of this approach is normally based on Public Law and is enforced through Public agencies or Commissions. Technical accounting considerations become secondary when economic approach obtains. National policy consideration becomes upper most in determining extent and degree of uniformity to be achieved. In economic approach again there may be different bases, such as the desire for the central control of industrial activities as was the case in the Nazi Germany between 1937-45; desire for central planning the succese of which depends upon the availability of good and dependable accounting data concerning activities of firms as there is a high degree of interdependence among different segments of an necessity for government interference with private economy: business particularly when the government is to assist them in various The policies arising out of these conditions cannot be administered fairly unless they can be based on specifically stipulated accounting procedures.

### c) The Technical Approach

This approach first of all is analytical one as it attempts to derive uniformity schemes from the basic tenets of double entry Book-Keeping.

A logical starting point for the approach is a comprehensive flow chart of the generalised accounting process. From this a general unifrom chart of Accounts is developed, which provides a double entry structure for the flow process. From there the components of the structure are analysed for theoretical contents and rules of guidelines are devised for interaction between components and sets of components (i.e. Accounts and Class of Accounts). At this stage certain assumptions are postulated and their impositions on the previously evolved structure furnish a total uniform plan of accounting.

### 5. Conclusion

Uniform Accounting as a system cannot possibly be denounced on the ground that it is an exercise in the mental realm only.

The same has been tried though not with same degree of rigor in different countries. Instances on the point are the system Accounting that obtained under Nazi Germany, the system that now obtains in France and Sweeden. The same cannot be said altogether unknown in the other countries of Europe, America, Asia and other continents. Form Accounts that now obtain in respect of public utilities in these countries can very well be claimed as instances of Sectional Uniform Accounting. national plane the system appears appealing for a number of advantages that are inherent in the system, namely—(i) the scientifisity of its approach: (ii) easy comparability of financial data of enterprises that it affords for locating effective and ineffective use of the scarce resources of a nation; (iii) easy transferability of accounting know-how with the move of accounting personnel from one firm to another; (iv) scope for better training of the accounting students; (v) easy collection of the reliable national statistics: (vi) facility for national economic planning and control: (vii) scope for more equitable economic legislation and (viii) finally. the facility that it affords for regional economic integration.

But the fact that activities and its processes are never identical in all respects among firms and as such attempt for Uniform Accounting in reality is an exercise to treat alike what are basically different, can very well be a strong ground to discount its success in the international setting. This possibility is further reinforced by the fact that even if we accept Uniform Accounting as a workable proposition in the national context, there cannot be any point to plead for uniformity of accounting amongst business firms of the different countries of the world, particularly when they are not working under identical socio-political and economic set up. Moreover, in the national sphere also particularly in the country where the same has been tried, government directly or indirectly had to administer its adoption by firms. any conceivable plan of uniform accounting in the international setting would require formation of informal body of the Professional Accountants like the International Accounting Standards Committee to administer it. But here again the apprehension is that various pressure groups may be at work frustrating the very objective for which such bodies may be set up.

# International Harmonisation of Accounting Practices—Issues and Controversies

Dr. K. R. Sharma\*

In this paper, the author highlights the basic issues and controversies in connection with the harmonisation of accounting practices at international level.

### Introduction

The accountants' bodies in various countries have, during the last 50 years, issued statements of 'good accounting practices' for their members, to narrow the areas of differences and variety in accounting practices. While some countries like France, Germany, Sweden, etc. have laid greater emphasis upon rigid uniformity, others like the U. K., the U.S.A., Canada, Australia etc. have attempted to narrow areas of discretion in practices regarding depreciation, stock valuation, exchange transaction, deferred tax, extra-ordinary items, expenditure on research and development, associated companies, etc. keeping in view the legal requirement of 'true and fair' view.<sup>2</sup> Similar efforts are being made to evolve uniformity in accounting practices at international level also.

The approach to uniformity at national and international level has been through common agreement among the accountants. In some countries these changes have been also incorporated in statutes for effective control over business and economy.

Much money, effort and time have been invested by numerous professional accountants, their national institutions and international

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Choi, F. D. S. and Mueller, G. G, An Introduction to Multinational Accounting, (Prentice Hall, New Jersey, 1978) pp. 44-46.

Norkett, Paul, Accountancy for non-accountants, Vol I (Butler and Tanner, London, 1981) p. 231.

organisations towards the goal of international accounting harmony. Prominent among these are International Congresses of Accountants (ICA) and International Conferences on Accounting Education (ICAE) held every 5 years, International Federation of Accountants (IFAC), Inter-American Accounting Association (IAA), Confederation of Asian and Pacific Accountants (CAPA), Accountants International Study Group (AISG), International Committee for Accounting Cooperation (ICAC), etc.

### Why Uniformity?

Protagonists of uniformity argue that it affords simplicity in recording and classifying financial data, manipulating the data towards financial reports and finally undersanding and interpreting these reports.

Uniformity is also deemed essential for comparability or interfirm comparisons by the investors. Without uniformity, the investors, the public and the government may find it difficult to understand to what extent the multiplicity of accounting information faithfully represent the real business situations.<sup>3</sup>

International nature of industrial and commercial communities has also placed increasing pressure upon the accounting theorists to see their task in a wider context. International pattern of investment, financing and ownership now all create interest in comparability of vital sources of corporate economic intelligence which accounting reports provide. 4

Doubts are raised by some people regarding the wisdom of adopting internationally uniform accounting practices. It is argued that differences in national accounting background and traditions, needs of economic and legal environments, the challenge of state sovereignity and the problems of developing countries are formidable barriers due to which nations will continue to resist conformity to a universal system. Internationally uniform accounting may thus remain a myth.

<sup>3.</sup> Idem.

<sup>4.</sup> Choi, F. D. S. and Mueller, G. G., op. cit., pp 44-45.

Solomons, D. "Synthesis" in Bromwish, M. and Hopwood, A. G. (Ed.), Accounting Standards, Setting-An International Perspective (Pitman, 1983) pp. 174-175.

The object of the present paper is to present this problem in historical perspective and highlight the basic issues and controversies in harmonisation of accounting practices at international level.

### Historical Perspective

The recent history of active professional discussion of the issue starts with the first International Congress of Accountants, held in St. Louis in 1904. Major thurst was of course provided by the proposals of Jacob Kraayenhof, at the annual meeting of the American Institute of CPAs in San Francisco in 1959. He suggested establishment of a standing committee in various countries for the search and study of accounting standards, promote wide spread discussion of areas of disagreement, establish closer international accounting cooperation and ultimately work for international accounting standards and theory based upon global assumptions.

Similar proposals were discussed at practically every forum of accountants and finally in June, 1973 the International Accounting Standards Committee (IASC) was set up with head quarters in London, to formulate and publish, in the public interest, standards to be observed in the presentation of audited financial statements and to promote their world wide acceptance and observance. The work of IASC is without doubt the most promising development so far, with respect to achieving international uniformity. Many countries of the world have adopted these accounting standards. The World Federation of Stock Exchanges has advised its members to insist upon conformity with IASC standards in listing agreements.

The United Nations (UNO) and the Organisation for European Cooperation and Development (OECD) have also attempted to lay down codes and guidelines regarding accounting reports of multinational corporations, so that the host countries may obtain maximum benefit by providing bases to multinationals and also control their exploitation. In 1976, OECD approved 'Guidelines for

<sup>6.</sup> Choi, F. D. S. and Mueller, G. G., op. cit., p. 155.

<sup>7.</sup> Pomeranz, Felix, "International Accounting Organisation", in Holzer, Hp (Ed)
International Accounting (Harper & Row, New York, 1984) pp. 493-494.

<sup>8.</sup> Choi, F. D. S, and Mueller, G. G., op. cit., p. 160.

Multinational Enterprises', laying down standards and contents of disclosures in their annual statements of accounts. Acting upon the recommendations of the Commission of Transnational Corporations, the Economic and Social Council of the United Nations, established in 1979 an inter governmental group of experts and mandated it to work towards the long term objective of formulating internationally comparable accounting and reporting standards. The above efforts have proved very useful in harmonisation of accounting informations published by multinational enterprises.

### Issues in International Harmonisation

The above efforts have undoubtedly raised hopes and have resulted in better understanding of the problem. But the task is formidable and unless there is proper understanding of issues and controversies and efforts made to resolve them, the objective may remain a distant goal. The issues are:

(i) What should be the optimum form, content and scope of accounting information, to meet the requirements of users.

This issue has relevance because various objectives of accounting do not have same weightage in all countries. This is due to differences in socio-economic background of the reporting entities. For instance in Ango-American countries information need of investors is given the highest weight.<sup>11</sup> In west Germany and some other European countries protection to creditors receives higher priority.<sup>12</sup> Reporting for employees and social accounting reports do not have the same weightage in both the free enterprise and the socialist countries. This makes achievement of a really meaningful international uniformity an extremely complex task. Accounting practices are often a reflection of profoundly rooted economic and social institutions and traditions.<sup>13</sup> Therefore they cannot be designed

Zund, Andre, "Bndeavours towards the harmonisation of standars of accounting and reporting in the OECD and UNO a critical appraisal", in Bromwish, Michael and Hopwood, A. G. (Ed.) op. cit. pp. 107-108.
 Bromwich, Michael and Hopwood, A. G. (Ed.)

<sup>10.</sup> Ibid, pp. 111-116.

<sup>11.</sup> Sprouse, R. T, "Standard setting: the American Experience", in Bromwich M. and Hopwood, A. G. (Ed.) op. cit., pp 42-56.

<sup>12.</sup> Wysocki, K. V. "Research into the processes of accounting standard setting in the Federal Republic of Germany", in Bromwich, M. and Hopwood, A. G., op. cit., pp 57-67.

<sup>13.</sup> Zimmerman V. K. "Introducing the International Dimension of Accounting", in Holzer H. P. (Ed.) op. cit., pp. 6-9.

without keeping in view the economic and social structures to which they relate. Complete harmonisation in international accounting practices is not possible, nor should it be insisted upon. Within broad uniformity there should be enough scope for regional and even national requirements.

(ii) How to resolve the conflict regarding constituents' preference for financial accounting practices?

Choice of a financial accounting practice is in effect a social choice, like choice of distribution of wealth in a society, as it also results in wealth transfers. Several examples have been provided for this in recent years. For instance, it is argued that historical cost accounting has led to misleading indicators of economy-wide profitability and relative profitabity of various sectors.<sup>14</sup> adoption of the practice of price level adjustment in accounting will lead to shifting of resources from relatively less profitable sectors and ultimately result in more efficient allocation of resources and an increase in economy-wide productivity. 15 Similarly, fear was expressed that the International Accounting Standard No. 9, which required disclosure of research and development activities deter further investment in reasearch and development by firms. 16

At times the allegations about harmful effects of a practice may be motivated to ensure that the practice is not adopted. In such cases independent research is extremely critical and should be promoted. Emperical investigations should not only precede adoption of a practice but form basis of amendments to and withdrawal of practices if such a need arises. Academic forums should debate social and technical implications of current accounting practices and suggest reforms and changes.

(iii) How to measure the utility of harmonisation in the field of accounting practices? Harmonisation of accounting practices is seen as an object in itself. Its wider implications including the cost aspect is more or less neglected. The economic consequences of an accounting practice faced by a firm can be different

<sup>14.</sup> Whittington, G, "The role of research in setting accounting standards: the case of inflation accounting", in Bromwich, M. and Hopwood, A. G. (Ed.), op. cit., p. 141.

<sup>15.</sup> Beawer, W., "Research on monitoring the accounting standard setting process", in Bromwich, M. and Hopwood, A. G. (Ed.), op. cit., p. 155.

<sup>16.</sup> Ibid, p. 157,

not only from country to country but also within the same country. It is true that utility and cost measurements are difficult in this area, yet the additional benefits of extra information should cover their costs. Feedback regarding the actual consequences is essential in policy formulation and interpretation. For this the accounting bodies should have access to independent research regarding the costs and benefits of various accounting practices.

### (iv) How to coordinate the efforts at different level in the process of harmonisation?

In most of the countries the bodies of accountants have taken initiative for harmonisation at national level. The IASC, EEC, OECD and the UN are engaged in the same at international level. Even when the needs of economies at different stages of development and the regional differences are recognised, the multiplicity of agencies is surely not desirable. It is realised that the progress can be faster if there were fewer hands on the wheel. Moreover there should be regular interaction between the individuals and organisations engaged in this task at different levels.

### (v) How to ensure adoption of uniform accounting practices?

The accounting practices must be acceptable to be enforceable. The acceptability can come only from relevance and reliabitily of the information generated. Sanction and force for the observance of uniform practices will also come from realisation of their necessity and utility. For instance, availability of new capital or investment might well depend upon the observance of uniform accounting practices. Stock exchanges and consumer groups might have enough boycott potential to make adoption of such practices advisable. This will ensure adoption of uniform accounting practices in the long run. In the mean time the accounting bodies should endeavour to popularise them through their members and they should form part of study of Accountancy.

### Conclusions.

The above analysis has thrown into bolder relief the need and importance of internationally uniform accounting practices. As long as the products of the accounting process were used largely within the confines of a single country, a uninational approach to accounting practices seemed justified and even desirable. But with

the advent of the multinational enterprises and their global investment and financing strategies together with the interdependence of nations through trade and economic assistance programmes, conditions have been created wherein lack of internationally uniform accounting practices may lead to atleast some misallocation of economic resources and some sub-optimisation of social welfare. Internationally uniform accounting for all situations may not be a reasonable goal for the time being but large multinational corporations should certainly conform to certain well defined accounting practices.

## Accounting for Foreign Currency Translation—Related Issues

Dr. (Mrs.) S. Rathore\*

The author discusses problems emanating from fluctuations in exchange rates in connection with the preparation of consolidated financial statements by multinational companies. The determination of the rate to be used in translating foreign currency balances and the treatment of the translation gains or losses are identified as being the two major issues stemming from exchange rate fluctuations. After examining the various alternative approaches to the resolution of the issues, the author concludes that the objectives of foreign currency translation has a major bearing on the choice of the translation method and the treatment of translation gains or losses.

One of the most controversial technical issues with which multinational enterprises are faced while preparing consolidated financial statements incorporating the results of both domestic and foreign operations, is accounting for foreign currency translation. The process of relating various foreign currency balances to single currency equivalents is termed as translation. Preparation of consolidated financial statements necessitates the expression of their accounts as well as those of their subsidiaries in terms of a homogeneous currency. Accordingly a single currency framework is required which has traditionally been the reporting currency of the parent company. The need to translate also arises when reporting international branch and subsidiary activities, recording foreign currency transactions and for reporting the results of independent operations abroad.

The problem associated with currency translation mainly stems from the fact that foreign exchange rates used to effect the translation process are seldom stable as their values tend to vary in response

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to the raher complex forces of demand and supply. Until 1971, the Bretton Woods system, provided for some control over these complex forces. Under the system, currencies of the member countries that adhered to the International Monetary Fund agreement were anchored to a common standard of value which used to be gold and certain reserve currencies readily convertible in gold. The Governments of the member countries were under a commitment to limit the fluctuations of their exchange within prescribed limits. The monetary authorities of the countries concerned intervened in numerous ways to stabilize the respective exchange rates whenever it appeared that the limits were likely to be exceeded. If the exchange rate fluctuation could not be controlled the respective country was under pressure to devalue or revalue its currency accordingly in relation to other currencies.

This system, however, came to an abrupt end in 1971 and the fixed exchange rates were abandoned. A system of floating exchange rates now prevails complicating the problems of multinational companies foreign exchange translation and conversion procedures. When exchange values fluctuate, the number of translation rates that can be used to implement the translation process are increased. Exchange gains and losses also arise as a result of currency gyrations thereby making the assessment of the multinational operation difficult. We can distinguish atleast three translation rates in a system of floating rates:

- (i) Current rate
- (ii) Historical rate and
- (iii) Average rate.

Current rate denotes the rate prevailing as of the financial statement date e.g. if a company is reporting on the financial year basis then the rate in effect on 31st March. The historical rate, however, refers to the exchange rate prevailing when a foreign currency asset was first acquired or a foreign currency liabitity first incurred. On the other hand, average rates are simply variations of current or historical rates.

Fluctuating exchange rates generally give rise to two major issues relevant to accounting for foreign currency translation. The first issue relates to the question which rate should be used to translate foreign currency balances to domestic currency. Treatment of translation gains and losses is the other important issue.

### Rate to be used for foreign currency translations

A variety of methods are used by companies operating internationally to express in terms of their domestic currencies the assets and hiabilities, revenues and expenses that have been stated in a foreign currency. The translation methods may be classified into two: (1) those employing a single translation rate and (2) those employing multiple rates.

(1) Single Translation Rate Method: —Under this option a single exchange rate i.e. the current or closing rate is applied to all foreign currency assets and liabilities. As regards foreign currency revenues and expenses they are generally translated at exchange rates prevailing when these items are recognised. For the sake of expediency, however, these items are translated by an appropriately weighted average of current exchange rates for the period.

This method enjoys certain advantages. It is perhaps the simplest of all methods. Besides as all foreign currency financial statement items are multiplied by a constant, it preserves in the consolidated statements the original financial results and relationships of the individual consolidated entities. Thus it is only the form not the nature of the foreign accounts that is changed.

The biggest shortcoming of this method is that it violates the basic purpose of consolidating financial statements which is to present the results of operations and financial position of a parent and its subsidiaries from a single currency perspective (i.e. retain the reporting currency of the parent company as the unit of measure) for the benefit of the parent company shareholders whereas the consolidated accounts prepared according to this method reflect the currency perspective of each country whose results make up the consolidated totals e. g., if an asset is acquired by a foreign subsidiary for 2,000 F. C. (Foreign currency) when the exchange rate in F. C. = 1 = \$1, its historical cost measured from a dollar perspective is \$ 2,000 from the local currency perspective also it remains \$ 2,000. If, however, the rate of exchange changes to FC 5= \$ 1 the historical cost of the asset from a dollar perspective (historical rate translation) would continue to be \$ 2,000. If the local currency is retained as the unit of measure, the value of the asset would be expressed as \$ 400 (current rate translation). Another significant

disadvantage of this method is that translating all foreign currency balances by the current rate gives rise to translation gains and losses every time exchange rates change. Showing such exchange adjustment in curret income would significantly distort reported measures of performance. Besides translation of a historical cost number by a current market determined exchange rate produces a result that neither resembles historical cost nor current market value.

- (2) Multiple Rate Methods:—The alternative methods available are multiple rate methods which utilize a combination of historical and current exchange rates in the translation process. There are three approaches under this method:—
- (i) Current—noncurrent method: Under this approach the current rate is applied for translating the current assets and current liabilities of the foreign subsidiary into the parent company's reporting currency. On the other hand the noncurrent assets and liabilities are translated at historical rates. With regard to items in the income statement except depreciation and amortization expenses, all other items are translated at average rates applicable in each month of operation or on the basis of weighted averages covering the whole period under review. The historical rates in effect when the related assets were acquired are applied to depreciation and amortization charges.

The method is not free from shortcomings. It lacks adequate conceptional judgement besides fluctuating exchange rate may produce translation that distort operating results between accounting periods. An example is treatment of conversions. On the other hand, translation of long term debt at historical rates shields interim periods from the impact of fluctuating currencies while binding to year of settlement with what could amount to significant gains or losses.

(ii) Monetary — nonmonetary methods: Late Prof. Somuel R. Hepworth originally expressed this method in a research monograph entitled 'Reporting Foreign Operations'. According to it, monetary assets and liabilities representing rights to receive or obligations to pay a fixed number of foreign currency units in the future i. e. cash, receivables and payables including long-term debt are translated at the current rate. The historical rate is applied to translate non-monetary assets such as fixed assets, long term investments and inventories. This translation method thus relates exchange risks

to the composition of a firm's current assets. It is superior to the current-noncurrent method in that it also reflects changes in the domestic currency equivalent of long term debt in the period in which they occur thus producing what may be considered a more timely indicant of exchange rate effects.

It also relies on a classification scheme to dertermine appropriate translation rates. The characteristics of assets and liabilities that determine their financial statement classifications are not necessarily relevant for selecting appropriate translation rates. The other criticism levied against this method is that non-monetary assets and liabilities are measured on different bases i. e. historical prices or current prices under different circumstances and applying a historical rate for translation purposes may not always be appropriate. The FASB SFAS No. 8 also states, "Translating nonmonetary items at a past rate produces reasonable results if the items are stated at historical cost but not if they are stated at market price in foreign currency," Thus items like investments and inventories should be treated as monetary assets if they are shown at market price. Besides, matching sales at current prices and translation rates against cost of sales measured at historical costs and translation rates often results in distorted profit margins. For example, during a period when a given foreign currency appreciates relative to the parent currency, cost of goods sold expressed in the given foreign currency will be translated at a lower historical rates as compared to foreign currency revenues thereby producing a jump in parent currency gross profit. reverse will be the case when the foreign currency depreciates relative to parent country currency.

(iii) Temporal method: A third approach is the temporal method according to which translation is a restatement of a given value i. e. it is simply a measurement conversion process. Thus under this principle receivables and payables are translated at the current rate. Assets carried on foreign statements at historical cost are translated at the historical rate. Assets carried at current values (i.e., inventories) are translated at current rates. In case of revenue and expense items they are translated at rates that prevailed when the underlying transactions took place. Where such transactions are voluminous average rates would be inappropriate.

This method is very similar to the monetary-nonmonetary method except that it removes the defect in the later when the asset valuation base is different.

### Which method is most suitable

Now the question before us is which method is best. In fact the quest for a single comprehensive translation method has engaged the energies of accountants for a number of years. I personally feel that no method can be singled out as ideal. It will be determined by the purpose for which translation is undertaken and the circumstances underlying foreign exchange translations.

The purpose of translation may be viewed at from the parent company perspective or the local unit perspective. When viewed from the parent company perspective, the foreign operations are treated as an extension of parent company operations and exist mainly as a source of domestic currency cash flows. Hence the object of translation is to change the unit of measure for finacial statements of foreign subsidiaries from one defined in terms of a foreign currency to one defined in terms of the domestic currency. In sush circumstances the temporal approach would be appropriate as it changes only measurements in foreign currency without changing the basis of measurement.

On the other hand, when the accounts of foreign subsidiaries are translated in a manner that retains the local currency as a unit of measure (i. e. foreign entities are viewed at from a local company perspective) the current rate method (single rate) is appropriate, as it simply changes the medium of expression. There is no change in the nature of accounts.

The current rate method would also be appropriate when the accounts of an independent company are merely translated for the convenience of foreign shareholders or other external users. This method would also be most suited when price level adjusted accounts are to be translated to another currency.

It must be very clear, however, that no translation rate is appropriate between highly unstable and highly stable currencies. Translation of one to another will not produce meaningful results under any method.

### Treatment of translation gains and losses

Another related problem which deserves our attention is treatment of translation gains and losses. There are basically three approches to these translation adjustments:—

- 1. No deferral
- 2. Major deferral and
- 3. Hybrid.
- 1) No deferral approach: Under this approach the translation gains and losses are immediately recognised in the income statement. Proponents of this method argue that deferral is misleading and artificial. Besides it is also difficult to implement. This method, however, introduces a random element to earnings that could result in significant earnings gyrations every time changes occur in exchange rates. Besides inclusion of 'paper' gains and losses could mislead statement readers.
- 2) Major deferral approach: Those who criticize the inclusion of such gains and losses in current income propose that these adjustments should be accumulated separately as a part of consolidated equity. Deferring translations gains or losses marks the behaviour of exchange rate changes. It is agreed that exchange rates are historical facts and financial statement users are best served by accounting for the effects of such exchange rate fluctuations when they occur. Even the FAS No. 8 supported this view.
- 3) Deferral and amortization: The third approach is a hybrid treatment in between the two previous approaches. Under it the translation gains and losses are amortized over the life of the related balance sheet items. On the assumption that cost of an asset includes the sacrifice required to discharge related liabilities the translation loss if any would be treated as part of the related asset's cost (under single transaction perspective) and amortized to expense over the asset's useful life. Besides since fixed assets are generally translated at historical rates, depreciation charges that are lower than what they would have been if translated at current rates offset or 'cover' the reduction in income from amortizing the deferred translation loss over the asset's life.

### Which adjustment approach is best

Of the three approaches which is most appropriate will again be determined by the objectives of translation. Where the translation is from the parent company perspective it would be advisable to adjust translation gains or losses in current income. As a foreign subsidiary is viewed as an extension of the parent, maximization of the parent company's domestic currency equity in the foreign operation is of paramount importance. Hence translation gains and losses which reflect increases or decreases in domestic currency equity of the foreign investment ought to be recognised in consolidated income.

If, however, a local company perspective is maintained reflection of a translation adjustment in current income is unwarranted for the objection is to preserve relationships in the foreign currency statements. Adjustments in the current income for translation gains or losses would have the effect of distorting financial relationships and possibly mislead rather than enlighten users of such information.

Thus, to conclude, it may be said that the objectives of translation have an inportant bearing on the choice of the translation method to be adopted and the treatment of gains or losses arising therefrom.

# World Bank vis-a-vis International Accounting and its role in Harmonisation

Dr. N. Das Gupta\*

The author examines the accounting practices envisaged by the World Bank and its Affiliates with a view to seeing how such practices might contribute to bringing harmonisation at the international level.

International contacts among nations are rapidly expanding today through the media of international trade, aids and loans on both Governmental and Non-Governmental levels. All nations—developed and under-developed, are fast expanding their economic relations with one another. Such contacts are established:

- (i) On country to country basis (declining since early 1970, Finance and Development, March 1985, p. 31).
- (ii) Through International (Multinational) Corporations opening their subsidiaries and branches in different countries.
- (iii) Through World Bank and its Affiliates (IDA and IFC).
- (iv) Through other International Agencies, Organisations and Funds, viz., African Development Bank, Asian Development Bank, European Investment Bank, Inter-American Development Bank, International Fund for Agricultute, Islamic Development Bank, and so on.

Unless the economic and financial information is adequately made available and correctly understood by people of the world, it will not facilitate a smooth flow of international investment. It is the function of accounting to provide such information but accounting should speak sense in such a way that all nations understand it in the same sense in which it is used and meant for. In other words, this can be achieved by bringing harmonisation in International Accounting.

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The main agencies which have been making efforts in this direction are:

- 1. International Accounting Standards Committee (I. A. S. C.)
- 2. International Federation of Accountants (I. F. A. C.)
- 3. U. N. O.
- 4. World Bank
- I. A. S. C. function is to formulate and issue standards on accounting and its practice and to promote their world-wide acceptance. Uptil now, it has issued 25 standards. I.F.A.C. function is to issue standards on Auditing and its practice, and uptil now, it has issued 19 standards. Both of them are only indirectly assisting in bringing harmonisation in accounting and auditing field since the acceptance of their standards is purely voluntary.

The last two ones—U.N.O. and the World Bank, are directly connected with the bringing out of harmonisation in accounting field. U. N.O. 's recommendations requiring adoption of International Accounting Standards and disclosure of financial and non-financial information meant for Trans-National Corporations are not having much impact since their adoption is not obligatory.

I, therefore, have confined myself in this paper with the accounting which has been envisaged by the World Bank and its affiliates, whose adoption is compulsory for all their borrowers.

### Accounting Laid Down by World Bank

The projects financed by the World Bank and its affiliates are implemented in the borrower's country:

- (i) Directly by the borrowers.
- (ii) By financially autonomous or semi-autonomous bodies.
- (iii) Through Govt. or Semi-Govt. bodies.

### (i) Accounting for projects directly implemented by the Borrower

The following principles are required to be followed:

- (1) The books of accounts are to be kept in such a manner as to show complete and proper record and their effect on financial performance and status,
- (2) The accounts are maintained in accordance with generally accepted international standards,

- (3) Full accountability for all funds subscribed by the borrower itself, other lenders and the Bank,
- (4) Adequate disclosure in the financial statements of all material information,
- (5) A true and fair view of financial performance and status presented by financial statements,
- (6) A clear statement in financial statements of accounting policies, standards and practices adopted, and
- (7) The financial statements and supplementary information should be on a basis consistent with that of the preceding period.

### Relaxation from the above

A laxity from the above ones has also been provided to the borrower if he wants to prepare financial statements in accordance with the generally accepted accounting practices based on the rules, procedure and conventions of accounting commonly used in the borrower's country provided he complies with the following:

- 1. Disclosure of all variations from generally accepted accounting standards and practices and their effect on financial performance or position of the project. Such variations can relate to:
  - (i) any understatement of assets and overstatement of liabilities that may be permitted by local laws and accounting on a basis other than historical cost;
  - (ii) equalisation of income over several accounting periods;
  - (iii) omission of certain gains or losses in determination of income;
  - (iv) the use of reserve accounting when full details of movement in and realised profits on reserves may not be disclosed; and
  - (v) the treatment of foreign exchange profits or losses in a manner that does not disclose the impact in the year of account.
- 2. Attachment of supplementary statements indicating all the items which are required as per World Bank requirements

to show the financial performance and status of the project adequately but are not required as per local laws, viz..

- (i) Value of assets required to be revalued periodically,
  - (ii) Adoption of accounting methods to disclose the impact of all changes in prices,
  - (iii) the disclosure of deferred liabilities, and so on.

#### Financial Statement

The following are required to be prepared annually for each linancial year:

### 1. Income Statement:

It should show the following duly classified category-wise, but not limited to:

- (i) Operating revenue or net receipts from sales by categories of sales or service charges;
- (ii) Operating expenses by category, e. g., labour, supplies, administration, power generation and its distribution;
- (iii) Depreciation:
- (iv) Income from other sources:
- (v) Taxes on income;
- (vi) Interest and financing costs; and
- (vii) Net income
- 2. A Statement of appropriation of profits or surpluses showing allocation of surpluses or deficits.
- 3. The Balance Sheet at the close of the reporting period containing fixed, current, and other assets, together with liabilities and surpluses, particularly long-term and short-term debts, paid-up equity, and accumulated earnings.

It should be prepared to show the capital structure, the liquid position, or the reserves and the nature and business of the entity.

- 4. Supplementary Financial Statement appropriate to the project, showing the following:
  - a. A summary of fixed assets and the basis for their valuation, distinguishing between assets in service and construction work in progress, and accounting for changes during the year;

- b. Depreciation provision assets-wise and accumulated depreciation including an explanation of the methods and rates of depreciation used;
- c. A summary showing major categories of inventories and the basis of their valuation;
- d. In case of development banking and credit institution, a summary of sub-borrowers' accounts giving the short-term and long-term positions;
- e. Information about costs of sales, labour costs and other Important items in the Income Statement;
- f. A summary of accounts receivables and accounts payable showing their age and amount outstanding against Govt. and non-Govt. parties;
- g. A Summary of long term debts, including lenders' terms, amount outstanding, amounts still to be disbursed, and currencies of repayment and the assets pledged;
- h. An analysis of any debt revaluation, method used, and the effect on the entity's financial position;
- i. A statement of non-operating revenues and expenses by major items;
- j. A schedule of investments of surplus funds of including pension or reserve funds, other than in (d) above;
- k. Deferred liabilities and adequacy of reserves; and
- 1. Cash and bank balances.

### 5. Sources and Application of Funds:

A statement showing the sources of funds used to finance debt service, working capital, expansion of the entity, and payment of dividends and other distributions for the period is to be attached.

### 6. Interim Financial Statements:

These statements would be in all respects similar to the annual financial statements including Fund Flow statement and supplementary financial statements except that they would be unaudited and should be designed to assist the management of the project to maintain regular control of project performance.

### (ii) Where Project is implemented through Autonomous or Semi-Autonomous entity

- 1. Annual financial Statements about the Autonomous or Semi-autonomous entity similar on the lines as indicated (i) above but they should also contain sufficient details to identify the financial performance and status of the concerned project. It means it should have also all details about the concerned project similar on the lines as required under (i) above.
- 2. Consolidated financial statements: In this case consolidated financial statements will also be required to be attached disclosing consolidated result of the entity's operations and its financial position.

### (iii) Where the project is implemented by National or Local Governments:

- 1. Statement of receipts and expenditure prepared in the local budgetary and accounting formats for the project, and where applicable, the entity concerned. [This is done in place of interim financial reports and annual financial statements.]
- 2. Explanatory notes and/or supplementary financial statements giving the information requied to comply with generally accepted accounting practices to convert them into Accrual Accounting and to distinguish between capital and revenue expenditure.
- 3. Financial reports about the project showing the peformance in the fiscal year and accumulated status from the commencement of the project. This can be shown in either of the following manners:
  - (i) in the form of balance sheet, or
  - (ii) as memorandum entries in the statement of Receipts and Expenditure of the current year.

### General

All these financial statements prepared by any types of borrower should normally provide comparative figures for the preceding fiscal year and should be a companied by appropriate supporting schedules and explanatory notes, e.g., unusual conditions that

affected the performance. They should be prepared in the currency of the borrower's country with the basis for translation of any foreign exchange transactions or commitments explicitly stated.

### Effect of Auditing on Accounting System

Besides many other points which the auditor is required to examine, the following points, which the auditor is to examine, have a bearing on Accounting System, and as such, the borrower, (whom-so-ever, category he may belong), while laying down the accounting system should further keep regard to them:

- 1. The effectiveness of related system such as Inventory Control and Data Processing.
- 2. The adequacy and competence of Accounting staff.
- 3. Capital commitments and contingent liabilities.
- 4. Currency devaluation and revaluation effecting Foreign Currency transactions.

#### **Evaluation**

It appears from the above study that the Accounting laid down by the World Bank is not deficient in any respect, and on the other hand covers nearly all the good points which a present accountancy system needs, e.g. revaluation of assets period-cally, impact of price changes on performance and status, disclosure of deferred liabilities, conversion of Governmental system of accounting into Accrual Accounting, attachment of supplementary statement fulfilling World Bank accounting conditions where the borrower's own country system of accounting followed, and so on.

At present, in 133 countries out of 148 members of the World Bank, 3818 projects in private and public or jointly, carrying a total expenditure of 135219 millions of dollars covering all fields—agriculture, industry, transportation, forestry, education, health, power, irrigations, etc., are going on where such accounting is followed.<sup>1</sup>

It may not be out of place to mention that the Organisation of Economic Cooperation and Development (OECD), who is striving for Harmonisation of Accounting System among their members,<sup>2</sup> might also follow the accounting laid down by the World Bank.

<sup>1.</sup> As on June, 30, 1984. The World Bank Annual Report, 1984, Page 212.

<sup>2.</sup> The Chartered Accountant, Sept. 1985, p. 253

To recapitulate, I would say that the efforts of the World Bank by laying down one type of international accounting to bring harmonisation in the international field are commendable. The days are not far off when this system may percolate to large corporations at the national level. The multinational corporations would, instead of preparing different sets of accounts—one for national use and another for international use,—like to have only one set of accounts. But the process is a slow and gradual one.

# Report on XII Annual Conference of the Indian Accounting Association and all India Seminar on Accounting

The XII Annual Conference of the Indian Accounting Association and All India Seminar on Accounting was organised under the auspices of the Department of Accountancy and Business Statistics, University of Rajasthan, Jaipur, on 5th and 6th October, 1985.

One Organising Committee and seventeen Functional Committees were constituted for the purpose. Professor R. P. Agrawal, Vice-Chancellor, University of Rajasthan, was the Patron, Dr. M. C. Khandewal, Professor and Head, Department of Accountancy and Business Statistics, was Conference Secretary and Shri M. C. Sharma, Staff Secretary of the Department, was Joint Conference Secretary. The Organising Committee consisted of 44 eminent persons as its members.

The Conference was attended by 203 odd number of delegates including academicians from Universities and Colleges, Chartered Accountants, Cost Accountants and Business Executives.

The Conference was inaugurated by His Excellency Air Chief Marshal O. P. Mehra, P. V. S. M. (Retd.), the Governor of Rajasthan, at 10 A. M. on 5th October, 1985 at University Maharani's College, Jaipur.

The Conference was divided into three technical sessions and all of which were held at R. A. Poddar Institute of Management, University of Rajasthan, Jaipur. The details of the Technical Sessions are given on pages 128—137.

In addition to technical Sessions one cultural evening was also held at 7 P. M. of 5th October, 1985, Maharani's College, Jaipur.

The General Body Meeting of the members of the All India

Accounting Association was held at R. A. Poddar Institute of Management on 6th October, 1985 with Dr. S. P. Gupta, President of the Association, as Chairman. Professor Mukund Lal, Professor of commerce, B. H. University, Varanasi, submitted his report as Secretary of the Association.

The valedictory function was held at 4 P. M. with Shri Sukumar Bhattacharya, newly elected President of the Association, as Chairman. The valedictory address was given by Shri P. N. Shah, President, South Asian Federation of Accountants, and past President of the Chartered Accountants of India.

# First Technical Session on 'Accounting for Price Level Changes'

Shri F. C. Rustagi, President, Messrs J. K. Synthetics, was the Chairman and Dr. (Mrs.) S. Rathore, Reader, University of Delhi, and Dr. V. K. Dangayach, Assistant Professor, University of Rajasthan, acted as rapporteurs. In all, 57 papers were submitted but due to constraint of time only 21 papers could be presented.

The session opened with Dr. N. M. Khandelwal of Saurashtra University, Rajkot, putting certain posers for deliberations by the learned delegates. He opined that the major motivational force behind the demand for inflation accounting has been the keen desire to reduce tax liability. Therefore, it would be rejected outright by the users of accounting during periods of declining price level.

Dr. Bhabatosh Banerjee, Professor of Commerce, Calcutta University, analysed the developments in India with regard to price level changes from three angles i. e., at the academic level, the professional level and the Government level. He also highlighted the corporate practices in India. At the end, Dr. Banerjee suggested the appointment of a high-powered committee (on the lines of Sandilands Committee of U. K.) to study the problem before introducing any solution. Dr. V. K. Dangayach and Shri M. C. Sharma, Assistant Professor, University of Rajasthan, dealt with attempts in U. K. to reform historical cost accounting for inflation effects. They dealt with exposure drafts 8, 18 and 24 which preceded the S. S. A. P. 16.

Dr. B. M. Bhadada, Associate Professor, University of Jodhpur, examined the Indian corporate accounting practices for changing prices and weaknesses, identified barriers and visualized the prospects of introducing price level accounting techniques in the Indian corporate sector. The need for reflecting price level changes and the suitability of the current cost approach was discussed by Sri Ranjan Kumar Bal and Sri P. Misra of Utkal University. They

suggested the formation of a committee in India with government support to suggest a concrete method of accounting to adjust to changing prices. Shri Ashok K. Bohra, Assistant Professor at Jodhpur University, was of the opinion that growing inflation adjustments would lead to misleading and manipulated decisions. He, therefore, feels that the government, professional bodies like ICAI, ICSI and ICWAI should not take any interest and if necessary Companies Act be amended suitably.

The American response to inflation was discussed by Professor B. M. L. Nigam of Delhi University. He opined that the U.S. model well suits developed and developing countries rather than a comprehensive price level accounting till a complete unanimity has been achieved. A comparison of historical cost and current purchasing power methods was undertaken by Dr. H. C. Mehrotra and Dr. D. K. Kulshreshtha. They pointed out the shortcomings and inadequacies of the HC method and the superiority of the CPP method over it. Dr. D. C. Sharma, Associate Professor, Kurukshetra University, also highlighted some of the limitations of the existing system of corporate reporting and suggested the setting up of a high powered committee to study all the facets of the problem and suggest suitable guidelines. Dr. B. M. Agarwal, Associate Professor. University of Rajasthan, outlined a framework for innovations in accounting records.

The international response to inflation accounting was reviewed by Dr. (Mrs.) S. Rathore, Reader, University of Delhi. for Brazil and Argentina, where price level statements were primary. in all other countries their adjustments are given by way of supplementary statements. The CCA was moe popular. Professor Balasubbaiah and Dr. V. Alagappan of Madurai University compared CCA and CPP methods and opined that CPP is merely an extension of historical cost method. Sri G. Soral, Assistant Professor, Udaipur University, analysed the impact of adjustments for price level changes on accounting results as obtained by historical cost accounting in Indian Shipping Companies. Miss Sangeeta Gupta, Assistant Professor. University of Rajasthan, was of the view that inflation accounting is a subtle attempt to protect the interest of shareholders only and not the interest of the community. Dr. by Prof. Y. Ranga Rao of Andhra paper was presented

University. Dr. Prabhakar Rao, Associate Professor, Andhra University, dealt with depreciation. The need for inflation accounting in India was also discussed by Shri Rajesh Kothari of Rajasthan University.

Shri Chanabhati of Saurashtra University dealt with the praccal utility of accounting for price level changes and presented a case study of Tata Chemicals Limited. He was of the view that accounting for price level changes may have a number of theoretical arguments in its favour but on its practical consideration there is little possibility of its acceptance by corporate management in India. Shri M. C. Gupta and Dr. Mohan Lal Mani, Assistant Professor of Rajasthan University, were of the view that economic growth can be achieved only if there is a realistic appraisal of companies. Hence, companies should disclose the loss of purchasing power of equity capital, amount of confiscatory taxes on inflated income, the real earnings and dividend trends after deducting inventory profits and extra depreciation that it will take to stay on a current cost basis. Shri Samir Abutayeh, a student of M. Com. final year of the University of Rajasthan, feels that CCA-CPP are not capable of solving the problem because of certain limitations and we need to define approaches of accounting, economics and management to establish new techniques of economic accounting.

A lively and interesting discussion followed the presentation Professor S. M. Shukla of Kanpur University objected to the use of the word "for" in the title "accounting for price level changes" and interpreted 'accounting' as 'book-keeping'. Dr. S. P. Gupta, President of the IAA, expressed the view that CCA techniques evolved in other countries may be adopted with modificatins. Before we make a statutory provision we must examine the sector in which it would be applicable Professor B. Banerjee of Calcutta University, while referring to Professor Shukla's observation defended the title, 'Accounting for Price Level Changes,' and with regard to meaning of 'accounting' stated that accounting is now interpreted as the process of identifying, measuring and communicating economic information to permit informed judgments and decisions by the users of the information. Dr. Mukund Lal of Benaras Hindu University, the General Secretary of the IAA, felt price level changes were absolutely necessary for planning and control. Dr. G. C. Sharma

of Utkal University, while referring to the importance of accounting as an information system, felt that such adjustments be given as a primary and not as a supplementary one. Professor H. C. Mehrotra felt that inflation accounting is also essential for other sectors, like sole trader and firms, but the matter would become complicated due to lack of funds. Dr. D. N. Das Gupta of Gujrat University opined that Companies Act does not prohibit adoption of inflation accounting; it is opposed by the accountants as it would mean more work for them. Dr. K. P. Sharma of Udaipur, spoke on considering inflation in the context of national accounting from the point of the government and society as a whole. Dr. R. N. Goyal from Delhi University dealt with Indian corporate practice only. He stated that by examining what companies are doing and what they should do, we can arrive at a conclusion.

Dr. D. C. Jain questioned the feasibility and necessity of keeping records of price level changes at all the three stages of accounting. Professor M. C. Khandelwal referred to the Indian context where large number of businessmen practise the Indian system. He suggested that taxation authorities should accept the price level adjusted accounts. Dr. R. N. Tambolli of Sukhadia University, Udaipur, felt that if we wish to convey a true and fair view price level changes is essential. Interfirm and intrafirm comparisons and sound managerial decisions also necessitate accounting for price level changes.

The Chairman, Shri F. C. Rustagi, in his concluding remarks stated that most of the companies were underreporting. For internal purposes many Indian companies are continuously revaluing their assets; even insurance policies are taken on the basis of replacement costs. He pointed out that we must consider the impact of inflation accounting with reference to government policy. The government would be left with no taxes. Besides, he opined consumer prices would further increase. He suggested that imparting some education in this field is essential to create an atmosphere at initial stages. Information ought to be given as a supplementary basis. But even this, he felt, would not be possible without statutory backing.

The session ended with a vote of thanks, proposed by Dr. D. C. Jain, to the Chair.

# Second Technical Session (Seminar) on 'Concept of Income Under Tax Laws'

The Session was chaired by Shri Sukumar Bhattacharya, Chartered Accountant and one of the eminent tax consultants of the Country. Dr. H. S. Pareek, Lecturer, Agrawal College, Jaipur, and Dr. D Bhandari, Assistant Professor, Department of Accountancy and Business Statistics, acted as rapporteurs. In all, 9 papers were contributed. Professor M. C. Khandelwal, Organising Secretary and Head of the Department, Accountancy and Business Statistics, University of Rajasthan, introduced Shri Bhattacharya to distinguished participants. Dr. S. P. Gupta, and Professor Mukund Lal, respectively President and Secretary of the Association, also graced the occasion by their presence.

At the very outset, Shri N. M. Ranka, a leading Advocate of the Supreme Court of India, was invited to deliver a key note address. While giving a comprehensive account of the various facets of Income which included 'Illegal Income', 'Deemed Income' etc., taxable under the Income Tax Act, Shri Ranka in his scholarly presentation pointed out that the relevant act has neither laid down the standard rate of profit nor the norms of expenditure. Tax is, therefore, levied on the real income and not on hypothetical income.

The other delegates who presented their papers in this session include Shri H. L. Verma, Shri V. K. Jain, Shri R. L. Tamoli, Shri V. K. Agrawal, Shri G. S. Mehta, Shri Lal Chand Chandak, Dr. K. K. Chawala and Shri T. C. Shah.

Conflicting views were expressed by the participants on the 'Concept of Income'. Some of them thought that it was a narrow concept, while others viewed it differently, but the consensus emerged that the concept of income under tax laws is hardly any concept. Suggestions were, however, made that status of not-ordinarily residut should be abolished and any process of measurement

of income for tax purposes should be based on some sort of total valuation approach and such measurement must be in real terms.

Shri Sukumar Bhattacharya, the Chairman of the Session, while elaborating the quantitative and qualitative aspects of income, highlighted the relevance of time and place in measuring income. Based on evidence drawn from the judgments of the Supreme Court, Shri Bhattacharya expressed his concern on the growing divergence of the concept of income under the accounting principles and Income Tax systems.

The Session ended with a vote of thanks to the Chair and other participants.

# Third Technical Session on "International Accounting"

Dr. K. S. Mathur, Retired Professor, Department of Accountancy and Business Statistics, University of Rajasthan, was the Chairman and Dr. B. M. Bhadada, Associate Professor, M.L. Sukhadia University and Shri S. G. Sharma, Assistant Professor, University of Rajasthan, were the rapporteurs. In all 22 papers covering various aspects of International Accounting were submitted. However, 17 papers were read and commented upon.

Dr. Mukund Lal and Dr. Chhote Lal of Varanasi University explained the various dimensions of parameters of international accounting and suggested a format for the annual account (for international transactions) and stressed for standardisation of concepts and practices and incorporation of price level changes. Dr. K. R. Sharma of M. L. Sukhadia University, Udaipur, explained the relevance of bringing harmonisation in international accounting practices. He also raised some issues regarding various approaches towards bringing out uniformity in international accounting practices. Dr. N. Das Gupta of South Gujarat University covered accounting for projects sponsored at the level of international bodies like IMF and World Bank.

Dr. H. S. Pareek from Jaipur critically examined and explained the various points and standards exposure drafts issued by IASC and advocated for the adoption of liberal approach specially in developing countries while laying down emphasis on uniform standards. He specifically pointed out that the accounting standards should be applied in respect of those companies which are registered in stock exchanges. Dr. J. B. Sarkar Reader, Department of Commerce, University of Burdwan. West Bengal, advocated for uniform accounting system. Dr. Shashi Kumar Baijal and Dr I. C. Kashyap in their paper, International Accounting Problems in Multinational Corporations, pointed out legal and motivational barriers in adopting international accounting standards. To resolve these his suggestions are problems some of (i) serious research and analytical attention to international dimensions of

accounting and (ii) full support for international developments in regard to auditing standards.

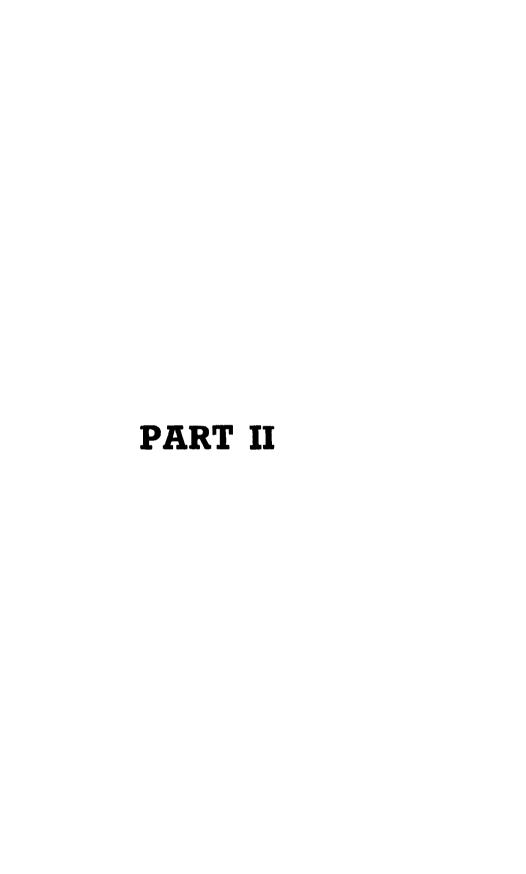
- Dr. R. K. Jaimini from Jaipur in his paper "Accounting Problems of International Corporations" specifically brought to the light that one of the important problems in the field of international accounting is related with the choice of a currency of account. He explained various basis, ownership basis, and division basis, etc. for the same. Dr. M. K. Goyal, Jaipur, in his paper "Accounting as the International Language of Business" stated that there are no clear sets of international standard of accounting, auditing and financial reporting. He advocated for five-point programme for developing standards, as suggested by Gerhard G. Muller in his book "International Accounting" (pp. 245-246). Dr. (Mrs.) S. Rathore of Delhi University explained three currency translation rates, viz. current rate, historical rate and average rate, and suggested for devising a comprehensive translation method.
- Shri S. G. Sharma and Dr. S. S. Modi in their paper entitled "International Accounting: Why and What for" pointed out the purposes for which international accounting is needed. They were of the view that more important is the application of international accounting standars. the specially in context of developing countries like ours. Shri S. P. Bansal in his paper entitled "International Accounting" explained the obligations and aims of IASC. He was of the view that information disclosed in financial statements should take in view (i) shareholders' interest, (ii) secured and unsecured loan, (iii) share issued for purchase consideration, (iv) investment and (v) sundry debtors, etc.
- Dr. K. G. Gupta and Dr. D. K. Kulshreshtha in their paper entitled "Standardisation of International Accounting" emphasised the needs for developing uniformity in financial statements. Dr. Gupta drew the attention of the house on the new dimensions on accounting, namely, social accounting, human resource accounting, etc., at international level In this direction he put forth a number of suggestions. Shri Lalit Gupta of Jodhpur in his paper on "International Management Accounting" explained relevance of bringing uniformity tn accounting systems in different multinational entities. Shri Bhanwar Singh Rajpurohit of Jodhpur in his paper, "Depreciation

and International Accounting Standard", described depreciation accounting practices adopted by multinational corporations and validity of reported earnings by such corporations. He emphasised on devising depreciation method industrywise. Dr. B. R. Saini of Rajasthan in his paper, Uniformity in International Accounting, explained three approaches, namely, Business approach, Economic approach and Technical approach, in bringing about uniformity in international accounting practices for similar types of transactions. Dr. G. C. Sirkar of North Bengal University in his paper "Portfolio Accounting in Commercial Banking-Study of International Disclosure Trend" highlighted the various items of balance sheet preparation practices in different countries of the world.

In the discussion session that followed the presentation of papers, a large number of members participated. Dr. S. M. Shukla initiated the discussion. He preferred terms like bi-national, trinational or multinational accounting to International Accounting. However, Dr. K. R. Sharma and Dr. Mukund Lal explained the term 'International Accounting' with different interpretation. Dr. B.M.L. Nigam raised a very pertinent issue that so far much literature has been brought out on international financial accounting standard; there is a need for developing international accounting standards in the fields of cost accounting and management accounting. Shri R. L. Tamboli talked about time, cost, quality and methods related with the adoption of international accounting standards.

Dr. K. S. Mathur, the Chairman of the session, summarised the proceedings with the remarks that international accounting is a very wide term. It would have been better if we would have limited to some specific issues on international accounting. He, however, appreciated the various issues raised by the learned paper writers and speakers. He said that when the international accounting bodies like the World Bank, the ERC, the IMS etc., provide loans they dictate and decide their own methods of accounting. Since standards have already been laid down by IASC, we should confine our studies to these standards, so that we can contribute something concrete as regards the development and understanding of international accounting. Professor Mathur also talked about the need for developing international accounting standard for non-profit organisations. Regarding implementation of standards by various member countries, a clear-cut guidelines suitable for the purpose should be laid down. In case difficulty arises, in the application of single standard method in a country, another alternative method should be clearly indicated for bringing out uniformity to certain extent. Finally, he observed about the feasibility aspect of the application of the standard by giving examples of Malaysia and some African countries. He also pointed out that the IASC should take a liberal view and so suggest some alternatives for resolving specific difficulty under specific situation.

The session ended with a vote of thanks to the Chair.



# Foreign Currency Translation: Past, Present and Future

Dr. Kathleen Bindon\*

The author examines two important issues in foreign currency translation, namely, which translation method to use and how to handle the resulting exchange gains and losses, compares the objectives of translation of FASB Statements 8 and 52 and reports the results of a survey of financial executives of multinational corporations.

The treatment of foreign currency translation as per Statement 52 appears inconsistent to the author with current generally accepted accounting principles. While the temporal method is deemed to be the most appropriate translation method, given an historical cost accounting model, the suggestion of the dissenting members of the FASB to allow use of the currant rate to translate foreign inventories is a practical compromise which is acceptable. This is particularly true in light of the results of the study made by the author.

#### Introduction

Foreign currency translation has been and continues to be one of the most troublesome issues confronted by the Financial Accounting Standards Board (the FASB) and its predecessors. It was one of the seven projects on the FASB's initial technical agenda in April 1973. In 1975, Statement of Financial Accounting Standards No. 8, "Accounting for the Translation of Foreign Currency Transactions and Foreign Currency Financial Statements," was issued. To say that Statement 8 was controversial is an understatement.

Two primary objections to Statement 8 were raised. First, critics stated that the immediate recognition in income of all exchange gains and losses would lead to fluctuations in reported earnings.

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Second, the required use of the temporal method was criticized primarily because of the translation of inventory at the historical rate. The immediate recognition of all exchange gains and losses was the most often criticized aspect of Statement 8. For many companies, the exchange gain or loss did, in fact, cause earnings to fluctuate. In 1976, the first year Statement 8 was in effect, R. J. Reynolds, Inc. had a foreign exchange loss of \$ 14 per share in the first quarter and then turned around to report a second-quarter gain of \$.01 per share. For 1976 annual income, Reynolds reported a foreign exchange loss of \$ 14.1 million, compared with a \$ 10.6 million foreign exchange gain for 1975. Other companies experienced even larger swings in reported earnings due to the immediate recognition of all foreign exchange gains and losses. For 1975, Dow Chemical reported a \$ 20.1 million foreign exchange gain and then a \$ 40 million loss for 1976.

In January 1979, the FASB undertook a project to reconsider Statement 8. After two Exposure Drafts, Statement of Financial Accounting Standards No. 52, "Foreign Currency Translation" was issued in December 1981.

The requirements contained in Statements 8 and 52 are in almost complete opposition to one another. This article will discuss the translation issue, compare the objectives of translation of Statements 8 and 52, report the results of a survey of financial executives of multinational corporations, and conclude by making recommendations as to an alternative approach to resolve the foreign currency translation issue which is more consistent with current generally accepted accounting principles.

# Foreign Currency Translation

Foreign currency translation involves two separate, but related issues: 1) which translation method to use; and, 2) how to handle the resulting exchange gains and losses. There are four basic translation methods, current/noncurrent, monetary/nonmonetary, temporal and current rate.

TABLE I
Exchange Rates Employed In Different Translation Methods
for Specific Balance Sheet Items

	Current/ Noncurrent	Monetary/ Nonmonetary	Temporal	Current
Cash	Cª	С	С	C
Accounts receivable	C	C	C	$\boldsymbol{c}$
Inventories				
Cost	C	$\mathbf{H}$	Н	C
Market	C	Н	C	C
Investments				
Cost	$\mathbf{H}^{b}$	H	Н	C
Market	Н	Н	$\mathbf{C}$	C
Fixed assets	H	H	H	$\mathbf{C}$
Other assets	Н	H	H	C
Accounts payable	C	C	C	C
Long-term debt	Н	C	$\mathbf{C}$	$\mathbf{C}$
Common stock	Н	Н	H	C
Retained earnings	*C	*	*	*

<sup>&</sup>lt;sup>a</sup>C= Current rate

Table I indicates the translation rate which would be used to translate balance sheet items under each of these methods. In practice, prior to Statement 8, many firms used a modified monetary/nonmonetary method for translating foreign currency financial statements. This method translates inventory at the current rate and all other items at the rate specified by the monetary/nonmonetary method.

All of the four basic methods have been allowed at one time or another for translating financial statements. The current/non-current method was the first one specified by an official accounting body.¹ Little attention was directed to any theoretical justification for use of this method; rather, it developed out of convenience and followed the standard balance sheet division between current and noncurrent items.

bH= Historical rate

c<sub>\*</sub> = residual, balancing figure

<sup>1. &</sup>quot;Foreign Operations and Foreign Exchange," ARB No. 4 AIA, New York, 1939.

The current/noncurrent method was the only official choice for over twenty years. In 1965, when the Accounting Principles Board issued Opinion No. 6, "Status of Accounting Research Bulletins," in an attempt to correct deficiencies in earlier Accounting Research Bulletins, one of the topics dealt with was foreign currency translation. Paragraph 18 stated:

Paragraphs 12 and 18 (of ARB 43) state that long-term receivables and long-term liabilities should be translated at historical exchange rates. The Board is of the opinion that translation of long-term receivables and long-term liabilities at current exchange rates is appropriate in many circumstances,2

The change allowed the use of the monetary/nonmonetary method. The choice of either the current/noncurrent or monetary/nonmonetary translation methods was available until the issuance of Statement 8 in 1975. At that time, the FASB removed any choice by requiring all firms to use the temporal method developed by Leonard Lorensen in Accounting Research Study No. 12, "Reporting Foreign Operations of U.S. Companies in U.S. Dollars."

The primary differences between the temporal method and the current/noncurrent method are that the former requires translation of inventory (carried at historical cost) at the historical rate and the translation of long-term debt at the current rate. The temporal method is essentially the same as the monetary/nonmonetary method under historical cost accounting. However, as most firms were using the modified monetary/nonmonetary method and therefore were translating inventory at the current rate, the temporal method was different in that it required inventory to be translated at the historical rate.

Statement 52 also allows no choice in translation method but requires the current rate method for translation of most foreign currency financial statements. In cases where the dollar is determined to be the functional currency, the temporal method is retained. Statement 52 defines the functional currency as the currency of the primary economic environment in which the entity operates and

 <sup>&</sup>quot;Study of Accounting Research Bulletins", APB Opinion No. 6, AICPA, New York, 1965, para. 18.

<sup>3.</sup> Leonard Lorensen, "Reporting Foreign Operations of U. S. Companies in U. S. Dollars," ARS No. 12, AICPA, New York, 1972.

generates net cash flows. Regardless of which translation method is used, exchange gains and losses will result, assuming fluctuating exchange rates. The issue of how to handle these gains and losses also must be resolved.

There is general agreement that the effects of exchange rate changes from completed transactions should be recognized in income as they occur. The controversy has revolved around how to report the exchange gains and losses which arise from translation of financial statement items. The issue is whether these gains and losses should be reported in income immediately as they occur or should be deferred for future recognition.

Prior to Statement 8, many companies were deferring translation adjustments. Of 186 companies reporting translation adjustments. in 1973, one-third were deferring the adjustments.<sup>4</sup> Statemen 8 required the immediate recognition of all exchange gains and losses, including those arising from translation of financial statement items. Whith fluctuating exchange rates, this treatment can result in earnings fluctuations.

Immediate recognition of all exchange gains and losses received abundant and almost consistently negative comments from the financial community. David Saks, vice president of the Wall Street brokerage firm of Drexel Burnham had this to say about Statement 8, "The new regulation has done a stupid thing. It has caused unnecessary earnings volatility....."

Immediate recognition will cause biggest difference in earnings for firms who previously had been deferring exchange gains and losses due to translation. As John Shank explains:

A firm that had been deferring some or all of its exhange gains and losses will now show a more erratic trend in reported earnings, as all ups and downs in exchange rates go directly to the bottom line. The more material these items are to the firm, the more significant the "yo-yo" effect will be 6

Statement 52 also changed the reporting of adjustments resulting from translation of foreign currency financial statements.

<sup>4.</sup> Accounting Trends and Techniques, AICPA, New York, 1975.

 <sup>&</sup>quot;Shifting Rates Throw Earnings Out of Kilter, Business Week", April 12, 1976, p. 28.

John K. Shank, "FASB Statement 8 Resolved Foreign Currency Accounting— Or Did It?" Financial Analysts Journal, July/August 1976, p. 59.

Instead of the immediate recognition required by Statement 8, these adjustments will be charged or credited directly to stockholders' equity and shown as a separate component. In most cases, adjustments resulting from foreign currency transactions, such as a U. S. company's borrowing in foreign currencies, will continue to be reflected immediately in income.

The reversal in choice of translation method from the temporal method in Statement 8 to the current rate method in Statement 52 can be traced to a change in the objectives of translation. The objectives of translation for each statement are discussed in the following section.

## Objectives of Translation

According to Statement 8, the major issue raised in translating foreign statements is "whether or not the statements should be translated, either for some or all foreign operations, in a manner that changes the unit of measure from the local currency to the dollar." In addressing this issue, the Board considered the objectives summarized in Table 2. The FASB resolved the major issue mentioned above by accepting objectives A and C and rejecting the other three.

### TABLE-2

# Objectives of Translation Considered by Statements No. 8

- A. To present the financial statements of the enterprise in conformity with U. S. generally accepted accounting procedures that would apply had all assets, liabilities, revenue, and expenses been measured and recorded in dollars.
- B. To retain in the enterprise's financial statements the accounting principles that are accepted in the foreign country for assets, liabilities, revenue and expenses measured in the foreign currency.
- C. To have a single unit of measure for financial statements that include translated foreign amounts; that is not only to express in dollars the assets, liabilities, revenues, or expenses that are measured or denominated in foreign currency, but also to measure them in dollars.
- D. To retain as a unit of measure each currency in which assets, liabilities, revenue, and expense are measured; that is, to express in dollars the assets, liabilities, revenues and expenses that are measured in foreign currencies but to retain the foreign currency as units of measure.
- E. To produce an exchange gain or loss that is compatible with the expected economic effect of a rate change on business activities conducted in a currency other than the dollar.

 <sup>&</sup>quot;Accounting for the Translation of Foreign currency Transactions and Foreign Currency Financial Statements," FAS No. 8, FASB, October 1975.

Much controversy centered around the conflicting perspectives of objectives C and D. Objective C represents a parent perspective in that statements are translated and presented as if the activities had occured in the U.S. and in dollars. Objective D represents a local perspective, retaining the foreign currencies as units of measure. Achieving this objective requires the use of the current rate method. Also, objective D implies the use of multiple units of measure in that the foreign currency of each foreign operation becomes the unit of measure when translating the foreign currency financial statements.

In rejecting objective D, the FASB identified three specific reasons why it was inappropriate:

- 1. To use more than one unit of measure in a single set of financial statements raises questions about describing the results.............. In the Board's judgment, the notion of a single enterprise that underlies consolidated financial statements requires a single unit of measure.
- 2. Since attempting to use a foreign currency as the unit of measure both produces results not in conformity with generally accepted accounting principles and creates conceptual and practical problems, the Board concluded that the dollar, not the local currency of the foreign operation, should be the unit of measure.
- 3. The Board believes that to be consistent with the purpose of consolidated financial statements as presented in ARB No. 51, paragraph 1, the translation process should reflect the transactions of the entire group, including foreign operations, as though the transactions were of a single enterprise.8

In considering objective E, the FASB recognised that the temporal method can produce results that are incompatible with expected economic results and ultimately rejected objective E because it would not follow generally accepted accounting principles and could not be achieved without major changes in the present accounting model. The FASB further stated that it did not intend to use translation procedures to effect major changes in the accounting model presently in use.

The Board combined objectives A and C into one overall objective of foreign currency translation:

<sup>8.</sup> Ibid., Paragraph 92, 93 and 88.

For the purpose of preparing an enterprise's financial statements, the objective of traslation is to measure and express (a) in dollars and (b) in conformity with U. S. generally accepted accounting principles the assets, liabilities, revenues, or expenses that are measured or denominated in foreign currency.9

An examination of the objectives of translation as presented in Statement 52 reveals some drastic differences from those contained in Statement 8. Table 3 summarizes the objectives considered by the FASB this time. Objective (a) was adopted as the basis objective.

### TABLE-3

## Objectives of Translation Considered by the Exposure Draft

- a. To provide information that is generally compatible with the expected economic effects of a rate change on an enterprise's cash flows and equity
- b. To present the consolidated financial statements of an enterprise in conformity with U.S. generally accepted accounting principles
- To reflect in consolidated financial statements the financial results and relationships of the individual consolidated entities as measured in their functional currencies.
- d. To use a single unit of measure for financial statements that include translated foreign amounts.

In 1975, when Statement 8 was issued, this same objective was rejected because it would not follow generally accepted accounting principles and could not be fulfilled without major changes in the present accounting model. There is no explanation in the Exposure Drafts or in Statement 52 as to how the present accounting model has changed in less than six years to now permit the implementation of this objective. Nor, alternatively, is there any reference to the possibility that the FASB may have been in error in 1975 in its definition of the present accounting model. The FASB does indicate that the adoption of objective (a) as the basic objective of translation was "responsive to the pervasive criticism that translation results under Statement 8 do not reflect the underlying reality of foreign operations." 10

According to the FASB, objective (b) is implicit in, and basic to, all of its activities and was not singled out as a separate objective of foreign currency translation. This statement glosses

<sup>9.</sup> Ibid., Paragraph, para. 6

<sup>10. &</sup>quot;Foreign Currency Translation," FAS No. 52, FASB, December 1981, para 71.

over the point that when Statement 8 was issued, the FASB considered that the use of multiple units of measure was not appropriate for consolidated statements. At that time, the FASB contended that the single enterprise notion underlying consolidated financial statements requires a single unit of measure and that multiple units of measure lead to difficulty in describing and interpreting the results presented in the consolidated financial statements.

In discussing the acceptance of objective (b) for Statement 52, the FASB concluded that for many foreign operations adhering to the single unit of measure concept was artificial and illusory. In the deliberations over the new translation standard, therefore, the FASB has changed its position relative to the importance of the single enterprise concept which historically has been the underlying basis of consolidated financial statements. At the present time, the FASB decided that information about financial position and performance is most relevant when foreign currency financial statements are restated to dollars using the current rate translation method.

Objective (c) also was accepted and introduced the functional currency concept. The functional currency concept leads to the possibility of multiple functional currencies, conceivably as many as there are foreign operations denominated in different foreign currencies.

By accepting objective (c) which represents a local perspective, the FASB had to reject objective (d) as it represents a parent perspective. Part of the FASB's reasoning is as follows:

By requiring all foreign transactions to be remeasured into equivalent U.S. dollars as if they all had occurred in dollars, the "single unit of measure" approach obscures the fact that foreign entities acquire assets, incur and settle liabilities, and otherwise conduct their operations in multiple foreign currencies.11

It would seem that this same reasoning may have been considered by the FASB when it was preparing Statement 8, yet, at that time, it was not deemed significant enough to permit consideration of anything other than one unit of measure, the dollar.

In summary, in Statement 52, the FASB decided that translated financial statements of each entity of an enterprise should accomplish the following objectives:

a. Provide information that is generally compatible with the expected

<sup>11.</sup> Ibid., paragraph 75.

- economic effects of a rate change on an enterprise's cash flows and equity.
- b. Reflect in consolidated statements the financial results and relationships of the individual consolidated entities as measured in their functional currencies in conformity with U.S. generally accepted accounting principles 12

Since Statement 52 changes the aspects of Statement 8 which consistently were the most criticized, immediate recognition of translation gains and losses and the use of the temporal method, it could be expected that Statement 52 will be widely accepted. There is some evidence to indicate that this is not the case. The next section discusses the results of a survey of financial executives of large U.S. multinational corporations and presents a summary of their reactions to the changes made by Statement 52.

## Survey of Multinational Financial Executives

In a research project which studied inventory practices and foreign currency translation, the author surveyed financial executives of the 150 largest U.S. multinational firms. These firms were ranked in order of size of foreign revenue for 1978. The major objective of the study was to determine the effect on reported consolidated earnings of translating inventory at the historical rate rather than at the current rate. Only firms having at least one manufacturing or retailing facility abroad were eligible to participate in the study. It was determined that 21 of the 150 firms did not meet the eligibility criterion.

Of the 129 eligible firms, 78 responded by filling in and returning the questionnaire, for a response rate for eligible firms of 60.4%. The executives filling out the questionnaires were either controllers, assistant controllers or individuals at similar responsibility levels. Some characteristics of the 78 firms who responded are discussed below.

The firms varied widely in the geographic dispersion of their foreign operations. Firms reported foreign operations in anywhere from just one to over 100 foreign countries, with a mean of 33 countries. The average length of time the firms had been engaged in foreign operations was 45 years. The commitment to foreign operations,

<sup>12.</sup> Ibid., paragraph 5.

measured as foreign sales to total sales, ranged from 2% to 83%, with a mean of 34.2%. The average dollar value of foreign assets ranged from just less than \$ 84 million to \$ 341 million, with a mean of \$ 232.1 million.

While financial institutions were ineligible to participate in the overall study due to their lack of foreign manufacturing or retailing facilities, eight financial institutions did provide information on foreign currency translation in general and on specific questions related to the Exposure Draft.<sup>13</sup>

Agreement was sought regarding the two major aspects of the Exposure Draft: 1) the use of the current rate translation method; and 2) the reporting of the translation adjustment as a component of stockholders' equity. The summary of the 86 responses received to these questions is presented in Table 4 Agreement with the current rate method was indicated by 48 respondents (56.9%) with 34 (39 5%) disagreeing and 4 (4.6%) stating neither agreement or disagreement. Although a majority was in favour of the current rate method, this number was not as high as might have been expected in view of the intense criticism of Statement 8's choice of the temporal method. This result may be due to the fact that not many firms have used the current rate method and if a change is to be made they would prefer to return to a translation method with which they are familiar, such as the modified monetary / nonmonetary method. As can be seen from Table 4, over half of the respondents who did not agree with using the current rate method

TABLE-4 Summary of Responses to Questions on the Exposure Draft Percent of Total Firms Frequency In favour of the current rate method: 55.9 48 Yes 39.5 No 34 2.3 Not yet determined 2 No official position 2 2.3 Totals: 86 100.00%

<sup>13.</sup> Although this survey was conducted based on the Exposure Draft, the issues addressed pertain to Statement 52 as well.

## TABLE 4 (Contd.)

If not in agreement with current rate, method preferred:

Current / Noncurrent		_	
·	1\	5	13.2
Monetary / Nonmonetary ( Te	• /	8	21.1
Modified Monetary / Nonmor	•	21	55.2
All current with fixed assets Current for self-contained sub		i	2.6
Temporal for all others		3	7.9
Totals:	_	38	100.0
n favour of reporting translation	on gain or		
loss as an adjustment to s equity	tockholders'		
Yes		59	68.6
No		20	23.3
Possibly	•	2	2.3
Not yet determined		3	3.5
No official position		2	2.3

preferred to use the modified monetary/nonmonetary method. The temporal method, previously required by Statement 8, was chosen by the second largest number of those respondents not in favour of the current rate method.

There was a higher level of agreement with the reporting of the translation adjustment as a component of stockholders' equity. In view of the extensive criticism of immediate recognition of all foreign exchange gains and losses, as required by Statement 8, this level of agreement was not as high as might have been expected. Of the 86 respondents, 59 (68.6%) agreed, 20 (23.3%) disagreed and 8 (8.1%) took no position. Several of the respondents who indicated disagreement with reporting translation gains and losses as adjustments to stockholders' equity made comments such as:

We believe translation adjustments should flow through the income statement in keeping with the all-inclusive income concept.

We like the idea of eliminating earnings fluctuations, but don't like the violation of the "clean surplus."

Almost permanent deferral in the equity section of the balance sheet cannot be tolerated.

Violates articulation of the income statement and balance sheet. Builds up a meaningless charge to Retained Income.

Changes in balance sheet values are a risk of operating in foreign countries and should be reflected in the income statement

There were fewer written comments from those respondents who favored reporting translation gains and losses as a component of stockholders' equity, perhaps because they felt the reason was obvious, to remove the earnings fluctuation problem.

Since there was a higher level of agreement with reporting translation gains and losses as adjustmets to stockholders' equity than with using the current rate translation method, it would appear that some respondents are more interested in removing the potential earnings fluctuations caused by immediate recognition than in the translation method used. This feeling was summed up by one respondent as follows:

We don't care what translation method we have to use as long as we can get rid of the ridiculous earnings fluctuations introduced by FASB 8's requirement that translation gains and losses be recognized immediately in income!

The results obtained in this survey regarding reporting translation adjustments directly to stockholders' equity are quite similar to those of a recent survey of 300 U.S. multinational corporation treasurers. In that study, 38 of the 55 respondents (69%) responded that this is the appropriate theatment for translation gains and losses.<sup>14</sup>

As discussed earlier, the major objective of the author's research project was to determine the impact on reported consolidated earnings of translating inventory at the historical versus current translation rates. This project was undertaken to determine if the criticism of the use of the historical rate to translate inventory, as required by Statement 8's choice of the temporal translation method, was valid.

Ike Mathur and David Loy, "Foreign Currency Translation: Survey of Corporate Treasurers, Management Accounting, September 1981, pp. 33-38.

For inventories costed using first-in, first-out or average cost methods, no material changes in reported consolidated earnings were found due to translating inventory at the historical rate, as required by Statement 8. (Materiality was defined as a +5% change in earnings.) Last-in, first-out inventories could not be evaluated due to the difficulty in obtaining the historical rates originally used to translate LIFO layers. If LIFO inventories had been included in the study, it is likely that some material earnings changes would have been found,

#### Conclusion and Recommendations

Statement 52's objectives of translation which emphasize each separate entity are very different from the objective in Statement 8 which looked at the enterprise taken as a whole. That the issue of foreign currency translation is extremely difficult to resolve, is evidenced by the fact that FASB itself barely could come to an agreement. Both Exposure Drafts and Statement 52 only passed by a bare 4-3 margin with one of the dissenters being Chairman Kirk.

In a lengthy section of Statement 52 giving the views of the dissenting members, many criticisms of the new standard were made. The dissenters do not believe that the proposed standard improves financial reporting. In their opinion, financial reporting would have been improved by an approach which essentially retained Statement 8's translation method with an exception being translation of locally sourced inventory at the current rate. The dissenters also would retain immediate recognition of all translation gains and losses.

One other possibility in dealing with translated financial statements is not to consolidate them, which was proposed in a recent article by James Schweikart. In his opinion, consolidating translated information destroys the value of the information which has been combined. Schweikart recommends the use of carefully segmented reporting using unchanged foreign accounting information. While this approach has some intuitive appeal, there may be some difficulty in determining how to segment the information.

If unconsolidated presentation of foreign currency financial information is not a realistic possibility at this time, how should

<sup>15.</sup> James Schweikart, "We Must End Consolidation of Foreign Subsidiaries", Management Accounting, August 1981, pp. 15-18.

the FASB have proceeded with the foreign currency translation issue in order to be consistent with current generally accepted accounting principles? Adoption of the basic premise of the dissenting members of the FASB would have been a preferable step. It would not have been popular, however, as it would not have removed the impact of translation gains and losses from the income statement. It would seem consistent with the work of the Conceptual Framework project to retain immediate recognition of these gains and losses.

Statement of Financial Accounting Concepts No, 3, "Elements of Financial Statements of a Business Enterprise," (SFAC 3) offers some guidance as to why translation gains and losses should continue to be reported in income in the period in which they occur. In discussing transactions and events that change equity, two kinds were identified: 1) those which result from transfers between the enterprise and its owners; and 2) those which are included in comprehensive income. (Comprehensive income includes revenues and expenses, and gains and losses.) These are the only two ways in which equity can be changed due to changes in assets and liabilities.

Translation gains and losses certainly do not fall into the first category. To determine if they fall into the second category as part of comprehensive income, the definition of gains and losses needs to be examined, SFAC 3 describes how gains and losses occur. Included in the description is the following: "Gains or losses result from holding assets or liabilities while their values change, for example...from changes in foreign exchange rates".16

SFAC 3 also states that an item must have a relevant attribute that is capable of reasonable measurement or estimate. As changes in exchange rates are measurable, translation gains and losses appear to meet the requirements for recognition in income. Under Statement 52, however, they will not be recognized in income. Instead, they will be treated as adjustments directly to stockholders' equity, which does not seem to be consistent with SFAC 3.

<sup>16. &</sup>quot;Elements of Financial Statements of Business Enterprises," SFAC No. 3 FASB, December 1980, para.

It is even more difficult to accept the FASB's choice of the current rate translation method in view of the overwhelming rejection of this same method by the FASB at the time Statement 8 was issued. To preserve both the usefulness of consilidated information and the integrity of the concept of one consolidated entity, it is essential to use only one basis of measurement, the dollar. While it is possible to question the usefulness of the concept of the consolidated entity as it applies to entities with foreign operations, the concept nonetheless is the basis for current generally accepted accounting principles and should have been retained.

While the temporal method is deemed to be the most appropriate translation method, given an historical cost accounting model, the suggestion of the dissenting members of the FASB to allow use of the current rate to translate foreign inventories is a practical compromise which is acceptable. This is particularly true in light of the results of the recent study by this author, dicussed previously. No material changes in reported consolidated earnings were found for the sample firms when inventory was translated at the current rate. While these findings may not hold true for all firms, in all time periods, they indicate that the controversy over which translation rate to use for inventory may not be all that significant.

While the FASB has made up its mind, or at least four of the members have, and has issued Statement 52 incorporating the current rate translation method and the reporting of translation gains and losses as adjustment to stockholders' equity, this treatment of foreign currency translation is inconsistent with current generally accepted accounting principles. Unfortunately, Statement 52 may be more of a reaction to widespread criticism of an unpopular standard than a well-reasoned change.

# Asset Valuation, Capital Maintenance and Income Determination

Arun Kumar Basu\*

Periodic income of a continuing enterprise may be measured by combining any one of the several alternative methods of net asset valuation with any one of the alternative approaches to capital maintenance. Different combinations of these are likely to yield substantially different results. The author examines the alternative methods of net asset valuation and capital maintenance in order to suggest a suitable combination of them that produces income measures fully consistent with the needs of the users of external accounting reports.

But since there does not exist any uniformity of opinion regarding the information needs of the users of enterprise accounting reports, the author finds it difficult to arrive at any definitive conclusion as to how the controversies concerning the adoption of a suitable method of measurement of periodic income of a continuing enterprise should be resolved.

#### Introduction

A good deal of debate has been going on in the accounting world for a considerable period of time over the issue of deciding how the problems pertaining to the valuation of asset and capital maintenance should be viewed in the context of measurement of periodical incomes of continuing enterprises under conditions of persistent inflation. The measurement of periodic income is a theme of very crucial significance to financial accounting and in arriving at a measure of the income earned by a continuing enterprise during an accounting period it is necessary for the accountant to be concerned, in the first place, with determining how he should value assets and, secondly, with deciding which capital it is that he should attempt to maintain. The basis used by the accountant in valuing assets determines when income should be recognized and the role of the capital maintenance policy lies in determining how the resources recognized to

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have been generated by the enterprise during an accounting period should be apportioned between that representing return of capital and that which represents return on capital. Asset valuation is important only in the context of measurement of periodical income of a going concern; it has nothing to do with the activity of ascertaining the lifetime income of a business. The lifetime income of a business is normally computed through the adoption of a cash-to-cash basis of measurement. The policy adopted towards the maintenance of capital does, however, affect the determination of both periodic and lifetime incomes. Assets can be valued by using different valuation methods and there also exist several approaches to the maintenance of capital. Periodic income of a continuing enterprise can be measured through the combining of any one of the alternative methods of asset valuation with any one of the alternative approaches to capital maintenance. The different combinations of asset valuation and capital maintenance principles are quite likely to yield substantially different results. The pertinent question that can be raised in this connection is: Which particular method of asset valuation should the accountant combine with which alternative policy of capital maintenance so as to be able to produce income measures fully consistent with the needs of the users of accounting reports? The objective of undertaking this study is to explore the possibility of arriving at a basis for providing a satisfactory answer to this question. But before any detailed examination is made of the implications of the various capital maintenance and asset valuation alternatives it is first necessary to devote some amount of attention to the exploration of the real meaning of "capital" in the context of financial accounting and reporting.

## The Concept of Capital

The term "capital" is subjected to a variety of interpretations in financial accounting. The term is sometimes used to refer to the resources that the entity is holding at an instant of time and sometimes the term is used by accountants to signify the claims or interests in the entity resources. The resources that the accountant is able to recognize in accordance with the generally accepted principles of accounting are termed by him as "assets" and the financial interests in the assets are denoted in accounting by the term 'equities". Those who are in favour of adopting the proprietary

viewpoint are usually inclined to equate capital either with the entity net assets (i. e., assets less liabilities) or with the ownership equity, which consists of funds contributed by the owners and retained incomes. To those who are advocating the entity approach, capital appears to be something equivalent either to fixed assets plus working capital (i. e., current assets less current liabilities) or to all long-term sources of the enterprise assets. At times, the term is also used by the proponents of the entity concept to mean all the enterprise resources (or all the financial claims in the enterprise resources).

Since ownership equity does always act as the balancing factor in the fundamental accounting equation (Assets—Liabilities=Ownership Equity; or Assets = Ownership Equity+Liabilities), the money measures of capital that are derived from the recorded values of the enterprise assets are bound to be equal to the money measures of capital that are derived from the related values of the enterprise equities. But is it conceptually correct to equate capital with both assets and equities? Or, to put the question somewhat differently, if capital is believed to be equivalent to the things shown on the asset side of the balance sheet then will it also be appropriate to equate the same again with the objects exhibited on the balance sheet's equity side? The answer that one would be inclined to provide to this question depends on how one viewes the objects that are disclosed on the two sides of the entity balance sheets.

There exists a belief in certain quarters that it is the same business capital which is subjected to a dual classification in the entity balance sheet. Those who are accustomed to viewing things in this way do not generally find any serious flaw in the practice of equating capital with both assets and equities But this viewpoi t appears not to be acceptable to many modern theorists. Assets appear to many modern accountants to be conceptually very different from equities. Anthony [1983, p. 32] has observed in this context that the items shown on the equity side of the balance sheet "are sources of funds used to acquire capital, not capital itself. and (that) it is confusing to use the same word for the thing itself and for its source". By capital he means the economic resources of the business and assets appear to him to be those items of economic resources that are recognized in accounting. Chambers [ 1966, p. 114] has put forward a viewpoint which tends to maintain that the capital of an entity does subsist in its assets but equities do subsist only in rights in assets. Ideas similar to these ones have also been expressed by many other accounting writers of the present time.

Although the practice of equating capital with assets appears to be somewhat new in the field of accounting, there exists in economics a very long tradition of viewing enterprise capital from the perspective of wealth. But the economist's conception of enterprise wealth is different in some significant respects from the accountant's conception of enterpries assets. The economist normally conceives the enterprise wealth (capital) as the present value of a series of future incomes. When capital is viewed in this way it may then include both purchased and nonpurchased properties. The accountant, on the other hand, is required to confine his attention only to those objects that have resulted from past transactions. The valuation procedure used by the accountant is also different from that used by the economist. It should, however, be mentioned here that there are a number of accounting academics to whom the economic concept of capital appears to be an ideal concept and they do not find any reason as to why the accountant should refrain himself from undertaking efforts for making the concept operational in an accounting context.

The fact that the asset side of the balance sheet is viewed by many as a reflection of the enterprise's economic resources should not be taken to mean that all the items shown on the asset side of the enterprise balance sheet should always be representing objects or things capable of yielding economic benefits. may be included in the asset side of the balance sheet of an enterprise items representing unabsorbed past losses or past costs having no exchangeable properties. Such debit balances can hardly be treated as economic resources in the truest sense of the term. If the assets of a firm are, for conceptual considerations, looked upon as its capital it is then necessary for the accountant to see to it that his attention is directed only to those objects and proparties that have some ability to contribute to the firm's future cash flows. After decision is taken as to the items that should appropriately be excluded from the list of assets the question next comes up is that of deciding whether the accountant should adopt the proprietary viewpoint and, accordingly, subtract all external liabilities from the selected assets or he sholud accept the entity

viewpoint and, following which, deduct only the short-term liabilities from the assets included in his list in order to arrive at a measure of the firm's capital at a given time. Even though the entity concept is found to be superior to the proprietary concept in some significant respects, it is the latter which is still playing a dominating role in the matter of designing of the external accounting reports. Most of the classical treatises dealing with the theories and measurement of business income are also based on the proprietary concept. For purposes of this study too, capital will be viewed in a proprietary sense to denote the net worth of the business firm.

## Valuation of Capital

If capital is conceived as net asset then in arriving at a measure of its value it is necessary to attribute value measures to both the assets and liabilities of the firm. Since liabilities are mostly backed by contractual obligations, no serious problems are likely to be encountered in ascertaining the amounts at which the liabilities of the firm are to be stated. With a few exceptions, liabilities can be stated at their contractual amounts, i. e., the amounts at which they are to be settled. But the ascertainment of the amounts at which the assets of the firm are to be stated is indeed a very formidable task. Under the conventional system of enterprise accounting, assets are valued in most cases on the basis of their original acquisition costs. The main argument that is put forward by accountants in fovour of the adoption of historical transaction prices as the basis for valuation of assets is that the value measures that are derived from the process are more objective than those derivable from other processes.

Objectivity is desirable no doubt but it cannot be the sole criterion to be followed by the accountant in measuring the values at which the entity assets are to be recorded. A certain value measure may be objective in the sense that it can be verified from past transaction prices, but this does not necessarily mean that such an objectively determined value will also be useful in serving the information needs of those for whom the measurement is meant. If an accounting measure is incapable of serving any meaningful purpose then, regardless of whether the measure is an objectively determined one or not, there can exist no valid reason as to why

the accountant should undertake exercises in order to produce such a useless product. Historical-cost-based values may have relevance when there is no appreciable change in the level of prices, but in periods of rapid inflation the reliability of historical cost measurements is bound to be lost to a large extent. That the conventional historical cost system of accounting is deficient in many respects in generating useful value measures has been recognized for a long time and considerable efforts have also been made from various quarters for the development of an accounting system characterized by the exsitence of the ability to produce valid measures of capital and income during periods of persistent and rapid inflation. The major alternative asset valuation methods that have been proposed under the different accounting system are dicussed below:

## (1) The Current Purchasing Power (CPP) Method

Under this method of valuation, the historical cost figures of the assets of the entity are simply adjusted for changes in purchasing power of the unit of measurement. For purposes of making purchasing power adjustments the assets of the entity are first divided into monetary and nonmonetary categories. Monetary assets are those assets that are fixed in amount by contract (e.g., debtors, bills receivable, bank balances etc.). Because these assets are always stated in terms of current purchasing power, they require no conversion. But nonmonetary assets are restated to the price level of the date of measurement by means of conversion factors obtained by dividing the general price index of the date of measurement by the general price indices that existed on the dates when the respective assets were acquired.

The current purchasing power method of accounting was widely discussed in the literature in the sixties and seventies. Many professional accountancy bodies also came forward during this time to lend support to this accounting system through the publication of research studies and issuance of exposure drafts and standards. The Accounting Principles Board (APB)—the predecessor of the Financial Accounting Standards Board (FASB)—of the American Institute of Certified Public Accountants [APB, 1969] issued a statement in 1969 suggesting the reporting of general price-level adjusted data by means of supplementary report. Soon after the assumption of power in 1973 the FASB [1974] issued an Exposure Draft favouring

in external historical cost/constant dollar Information the financial reports. Some subsequent developments, however, forced the FASB authority to refrain itself from issuing an accounting standard to this effect. The UK Accounting Standards Steering Committee (now renamed as the Accounting Standards Committee) [ASC, 1974] moved a step further and issued in 1974 a provisional accounting standard requiring the implementation of current purchasing power adjusted historical cost financial statements. But before the accounting system was given a fair trial, the Sandilands Committee (a government sponsored inflation accounting committee) submitted its report recommending the adoption of a system of current cost accounting, and the provisional accounting standard had eventually to be abandoned.

The current purchasing power method of accounting is not basically very different from the historical cost system of accounting. It is based on the same principles that are followed in the conventional historical cost accounting. The figures of the historical cost financial statements are changed in a system of CPP accounting only because of a change in the dimension of the unit of measurement. The exercise is not designed to provide, as is wrongly understood by many, measures of the current values of the assets owned by the firm at the balance sheet date. If the prices of the assets being held by a firm are changing at rates significantly different from the rate of change in the general level of price, price-level adjustments cannot result in the production of any fruitful information regarding the current value of the firm's assets. The adjustments of accounts by means of a general price index number is sometimes opposed by many on the ground that there does not exist in the real world any such general price index number that has the ability to provide an accurate measure of changes in the purchasing power of the monetary unit.

# (2) The Current Entry Price Method

The current entry price method (also known as the "replacement cost" method) is one of the favoured alternatives to the existing historical cost method of asset valuation. Companies in the Netherlands have been using replacement value measurements in their annual accounts quite for a long time. Experiments with replacement costs are also going on in many other countries of the world. The replacement cost of an asset is usually defined as the amount

the firm is required to spend in replacing the asset in its present form. When identical assets are available in the market, the prices of such identical assets can be used in estimating the replacement costs of assets already held by the firm. But when identical assets are not available in the market, current prices of equivalent assets may be used as substitutes. There are, in fact, two alternative approaches to the use of the prices of equivalent assets in the valuation of an existing asset. According to one approach, the value of an existing asset can be computed by reference to the current price of an equivalent new asset which is able to render exactly the same service as is being obtained from the existing one. In accordance with the other approach, the value of the asset not currently available in the market can be computed in terms of the minimum cost the firm would have to pay for purchasing assets of equivalent productive capacity. The value measures that are obtainable under these two alternative approaches may or may not be identical.

Since the replacement cost method of valuation is designed to take account of changes in specific prices of the assets being held by a business firm, it is capable of yielding more valid measures of the current values of the firm's assets than the CPP method. Furthermore, replacement cost measurement appears to many (e.g., Carson [1949, p. 35]; Edwards and Bell [1961, pp. 90-92]; Ladd [1963, p. 44]; Sprouse [1966, pp. 113]) to be more compatible with the going concern assumption than the measurements produced by the conventional historical cost system of accounting. The traditionalists have, however, opposed the replacement cost of measurement on the ground of its being too subjective. The fact that the replacement cost system of valuation has a certain degree of permissiveness towards subjectivity can by no means be denied: but it has also to be recognized at the same time that replacement cost values are more useful than both historical cost and general price-level adjusted historical cost values in the context of making economic decisions. If accounting measures are to be of any real significance, the introduction of some elements of subjectivity into the process of accounting measurement becomes almost inevitable. Even historical cost data are not completely free from The process adopted under the conventional system subjectivity. of historical cost accounting in allocating the costs of long-lived assets can hardly be described as an objective one.

## (3) The Exit-Value (EV) Method

The EV method is another current-value oriented method of valuation of assets. Instead of using current buying prices, the method uses current selling prices as the basis of valuation of enterprise assets. The valuation method is also sometimes referred to as the "net realizable value" method. The FASB [1979, para 99] has defined net value realizable as "the amount of cash (or its equivalent) expected to be derived from sale of an asset, net of costs required to be incurred as a result of the sale". Current EVs are very useful in assessing the ability of the enterprise to adapt itself to changes in its operating environment. Businesses operating in rapidly changing conditions are required to alter the compositions of their assets quite frequently in order to be able to keep things moving in ways conducive to the attainment of their goals. of ease with which they can do this depends mostly on the realizability of their assets. The ability of a business firm to make quick adaptation to the changing needs of its operating environment is likely to be hindered to a great extent if it has assets whose current realizable values are very small.

Much of the credit for popularizing the EV as a theoretical alternative to the historical cost goes to Chambers [1966]. In his monumental work, Accounting, Evaluation and Economic Behaviour, Chambers has demonstrated with a masterly skill why EV measurement appears to be so appealing to him. Although Chambers' theory has been supported by some other accounting theorists, notable among whom is, of course, Sterling [1970], many have, however, found it difficult to accept exit price as the principal basis of asset valuation in the context of financial accounting and reporting. Exit prices may be very useful in valuing certain types of assets, but the rationale. For the use of the current exit price as a common basis for valuing all categories of enterprise assets is open to question.

## (4) The Net Present Value (NPV) Method

This method is founded on the well-known discounting principles of economics. According to the NPV principles, the value of an asset is the present value of the net cash inflows that the asset is expected to produce in the future. The determination of the NPVs of the assets an enterprise is holding at a particular point of

time requires, in the first place, obtaining estimates concerning the assets' future cash flows and, secondly, the ascertainment of the rate to be used for discounting purposes. Although the discounted cash flow method is regarded by many as being an ideal method of asset valuation, there are several practical difficulties which prevent business people from making practical experiments with present value measurements in the context of preparation of external accounting reports. The cash flows that are generated by a business firm is a joint product of many factors and it is not always possible to obtain an objective basis in allocating the cash flows of the firm to the Even if a workable basis is devised for different contributories. the purpose of estimation of the cash flows of individual assets. there still remains the problem of how to account for the difference between the present value of the net cash flows attributable to the firm as a whole and those that are attributable to its individual assets.

The NPV method is the least objective of the valuation methods suggested in the literature as alternatives to the historical cost. Some problems of very serious nature are likely to arise if assets are allowed to be reported by management in annual accounts at values which are subjective in nature. In order to be acceptable it is necessary for an accounting valuation system to have the ability to produce value measures amenable to the accounting tests of relevance, objectivity, reliability, and auditability. The NPV method of valuation does not, it is argued, succeed in satisfying all these tests.

## (5) The Value-to-the-Business Method

The "value to the business" concept of asset valuation has received a great deal of attention in the literature during the recent years. This is based on the concept of "deprival value" developed by Bonbright (1937). The deprival value of an asset was defined by Bonbright as "the adverse value of the entire loss, direct and indirect, that the owner might except to suffer if he were to be deprived of the asset" (p. 71). When an owner is deprived of an asset, it is quite likely that he will suffer a loss. The deprival value is a measure of the amount needed to put the owner in his original financial position. The FSAB [1979, para 99] has defined the value of an asset to its owner (i. e., the deprival value) as "the lower of (1) current cost and (2) recoverable amount, where recoverable

amount is measured at the higher of net realizable value and net present value of future cash flows". The Sandilands Committee [1975, para 219] recommended the use of this concept of valuation in valuing enterprise assets for balance sheet purposes, and it defined the value to the business of an asset as its written down current replacement cost, except in situations where the written down current replacement cost was higher than both the net present value and net realizable value, in which cash the value of the asset to the business was the economic value or net realizable value whichever was the higher.

The historical cost of the asset has no role to play in determining the amount the deprived owner needs in placing himself in the same financial position as he was before. In determining the value to the owner of an asset the choice is restricted, as is observed from the definitions cited above, to three alternative value measures, namely, current replacement cost, net realizable value and net present value. However, it is the current replacement cost which is found in most cases to be the measure of an asset's value to its owner. This explains why the accounting system which is based on the value-to-the-business concept of asset valuation is regarded in various circles as being merely a modified version of the replacement cost model. But even though the value to the business of an asset in a great majority of cases is found to be equal to the asset's current replacement cost, the logic underlying the use of current replacement values in the value-to-the-business model of asset valuation is not identical to that underlying the use of the same values in a pure replacement cost valuation model. Replacement costs are used in the value-to-the-business scheme of valuation of enterprise assets when replacement of assets is desirable for the sake of receiving higher benefits either from use or from sale. however, it is found that the replacement of an asset currently being held by the business is not economical, the valuation basis is shifted from replacement cost to recoverable amount. This flexibility of shifting to more useful values when this is demanded by the prevailing circumstances is not there in the pure replacement cost system of valuation.

## Capital Maintenance

If an entity has at the end of an accounting period the same amount of capital that it had at the period's beginning it can then be said that the capital of the entity has been maintained. Capital maintenance has been viewed by Stabus [1975, p. 42] as "having the same amount of capital at the end of a period as at its beginning, so that the entity may 'break even,' or have zero income," The maintaining intact by an entity of its capital can be achieved in a number of ways. Capital can be preserved in monetary terms, in terms of power or in physical terms. Whether or not the capital of an entity is getting maintained cannot be judged unless there is an specification regarding the capital whose maintenance is being demanded.

Maintenance of money capital is achieved when the money value of the net asset (however such value is ascertained) of the entity at the end of a period is exactly equal to the money value of the entity's beginning-of-the period net asset. The proponents of the money capital concept of capital maintenance do not try to make any distinction between the monetary units that have higher purchasing power and those that have lesser purchasing power. They are satisfied if the quantity of money units invested in the business is kept intact. The traditional system of historical cost financial reporting is based on this notion of maintenance of money capital. The matching process, which lies at the heart of the determination of periodical incomes in the historical cost system of accounting. is designed to preserve the nominal value of investments through the recovering of the historical costs of the resources consumed during a period from the revenues that the period has generated. The concept of maintenance of money capital can, however, be used in conjunction with all other schemes of net asset valuation described above.

The money capital maintenance approach to the measurement of enterprise income is advocated by those who are inclined to believe that investors are mainly interested in the monetary return on their money investments. Investors, it is argued by such people, have their own mechanisms by means of which the financial returns are adjusted by them for both inflation and risks. The fact that these arguments do carry some weight cannot be totally denied. But it should also be admitted at the same time that the maintenance of money capital is not a sure safeguard, especially in periods of inflation, against the erosion of the enterprise's real economic power.

The purchasing-power concept of capital maintenance is based on the notion of the maintenance of the purchasing power of the monetary units representing the beginning-of-the-period net asset of the enterprise. Under this system, the beginning capital (net asset) is restated in terms of the purchasing power of the rupee at the end of the year, and this restated amount is then compared with the amount of the ending capital. If the ending capital is equal to the restated beginning capital it can then be said that the capital of the entity has remained intact in purchasing power terms. Arguments are sometimes put forward to the effect that the adoption of the CPP system of accounting does enable a firm to maintain its capital in purchasing power terms. But this may not always be true. The maintenance of the real purchasing power of the beginning investment is possible only when the current market value of the assets held by the entity at the end of the period is not less than the assets' CPP adjusted amounts.

The purchasing power approach to capital maintenance has been preferred by many to the approach of money capital maintenance because the former appears to them to be more appealing to the economic reality of the business than the latter. Maintenance of purchasing power rather than money amounts happens to be the requirement of the exit-value accounting model (CoCoA) that Chambers [1966, chapter 10] has developed. It has been observed by Chambers that when the general level of prices changes, the maintenance of the capital of the beginning of a period is represented by transforming the measure of start-of-the-period capital to its equivalent in units of the dimension prevailing at the end of the period (p. 264).

The Edwards and Bell model [Edwards and Bell, 1961, pp. 21-22] uses a concept of capital maintenance which is also based on the idea of maintenance of purchasing power. The capital that the model seeks to maintain is the starting capital expressed in end-of-period dollar. The asset valuation rule that the model prefers is, however, different from that used in the exit-value model. It is the current entry price which appears to Edwards and Bell to be the most useful basis for valuation of enterprise assets.

The capital that an entity is owning at a particular point of time

may be represented by two elements: physical assets and purchasing power (i.e., monetary assets less liabilities). In maintaining the capital in a continuing entity it is necessary, as it is put forward by Cowan [1975, p. 255], to make provision for the maintenance of each of these two elements. The capital that is represented by net monetary assets should, according to Cowan, be maintained in purchasing power terms and the capital that is represented by physical assets should, as it is argued by him, be maintained in physical terms.

Although much has been written during the recent years regarding the concept of physical capital maintenance, many accountants are still not sure as to what the concept actually signifies. Accountants are generally accustomed to measuring things in financial terms. Naturally, they may not feel much comfortable with the idea of maintenance of physical capital. Maintenance of physical capital does not necessarily mean that an enterprise must have at the end of an accounting period physical assets (equipment, buildings, inventory etc.) exactly identical to those possessed by it at the beginning of the period. If the entity has sufficient funds at the end of the accounting period by means of which it can acquire from the current market the physical assets that it has used up during the period, then also it can be said that the physical capital of the entity has been maintained intact.

Physical capital maintenance is viewed by some people as being a phenomenon equivalent to the maintenance of operating capability. Under the operating capability approach to the maintenance of physical capital, the main focus of attention is on the ability to produce the same volume of identical output of goods and services rather than on the preservation of the identical inventory of assets. When technology is fairly static, the maintenance by an entity of an identical productive ability is most likely to appear to be the same thing as that of the maintenance by the entity of an identical inventory of physical assets. But when technology is changing very rapidly, the two approaches are very likely to give substantially different measures of the capital values the entity is to maintain. The maintenance of the operating capacity of the entity is also sometimes interpreted to mean the maintenance of the entity's ability to produce the same value of output. The

maintenance of the same value of output requires, it may be pointed out here, giving consideration not only to the phenomena occurring in the input markets but also to the phenomena occurring in the output markets.

The concept of maintenance of physical capital is basically an entity-oriented concept. Most of those who have advocated the use of the concept of physical capital maintenance are concerned with the preservation of the physical resources or the productive capacity of the resources of the business firm. The manner in which the resources of the firm is financed is of no interest to them. The concept can, however, be used in a proprietary setting, but in order to be able to do this it is necessary to make some adjustments in respect of the funds borrowed by the firm in financing its resources.

## The Preferred Combination

In determining the amount of income earned by a continuing entity during an accounting year the accountant can combine. theoretically at least, any one of the six alternative methods of net asset valuation (including the one based on historical costs) discussed earlier with any one of the three approaches to capital maintenance considered in the preceding section. From the same set of economic events concerning the entity the accountant can, therefore, produce 18 different figures of income and this number can be increased further if account is taken of the possibility of interpreting each one of the several alternative approaches to net asset and capital maintenance valuation in more than one way. The income measure that can be derived from the application of a particular combination of net asset and capital maintenance valuation may be relevent to particular use but it may be quite irrelevant to other uses. Income measurement is not a purposeless accounting exercise. The accountant is required to measure enterprise income with a view to meeting certain needs. In order to arrive at a decision as to the income determination method the accountant should prefer it is necessary to have a clear understanding of the objectives of measuring income in the context of external financial reporting.

Many people have often argued that one of the principal objectives of measuring enterprise income is to provie guide for dividend decisions. In an effort to justify the position taken by them the proponents of the distributability approach to the viewing of

enterprise income do frequently refer to Hicks' classical income concept. In connection with developing a concept of individual income, Hicks [1946, p. 172] has observed:

The purpose of income measurement in practical affairs is to give people an indication of the amount they can consume without impoverishing themselves. Following out this idea it would seem that we ought to define a man's income as the maximum value which he can consume during a week, and still expect to be as well off at the end of the week as he was at the beginning.

Businesses are artificial entities and. naturally. question of their being engaged in an actual activity of making a consumption cannot arise. Resources can, however, be made available by such artificial entities for consumption to be made by others. This has prompted many to modify the Hicksian definition for making it operational in a business context. According to the modified version of the definition presented by the Committee [ 1975, para 98 ], a company's profit for a year is the maximum value which the company can distribute during the year, and still expect to be as well off at the end of the year as it was at the beginning.

The amount of capital (net wealth) that a company is holding at an instant of time is usually regarded as being a measure of how well off the company is at that moment of time. In the absence of there being any distribution of dividends or introduction of fresh capital during the year, the income of the company becomes equal to the amount by which its ending capital exceeds its starting capital. It is the beginning capital which is the real bench-mark for the measurement of income in the Hicksian system. When income can be computed simply by differentiating the beginning capital from the ending capital (duly adjusted for dividends and injections) any further reference to distributability seems not so essential. matter of fact, the linking of enterprise income to distributability does often lead to the creation of an impression that the concept of enterprise income and the concept of distributable income are, as if, identical. The premises that are underlying the concept of divisible income are in many respects different from the premises that are underlying the concept of enterprise income. Distribution decisions of companies are normally guided by a number of considerations and reported income happens to be only one of the several

factors the account of which are needed to be taken by companies in ascertaining the amounts they should distribute as dividends. Other factors that are playing a crucial role in the framing of corporate dividend policies include legal restrictions, availability of liquid resources, reinvestment opportunities, past practices, and policies pursued by competiting concerns. Accounting income can at best provide an upper limit to the amount a company can distribute without unconsciously allowing its capital to suffer from an erosion.

Measured income is widely used as an important indicator of management and enterprise performance. Management is accountable to the owners of the firm for an honest and efficient utilization of the resources entrusted to it. The efficiency and integrity with which management has utilized the resources kept at its disposal is normally judged by the amount of surpus wealth that it has created for the owners. Rates and ratios are frequently used in obtaining more meaningful than measures of how efficiently the firm has conducted its activity. The rate of return on capital employed (income/capital employed) is one of the important ratios used by the investment community in measuring enterprise performances.

Accountants favouring stewardship-oriented financial reporting require management to give a faithful representation of the facts that have occurred during the year. Accounting systems that permit management to provide biased information is vehemently oppossed by those who regard accountability as being the basic foundation of financial accounting. If accountability is accepted to be the main foundation of financial accounting then the income determination method that is based on the historical cost method of asset valuation and the principle of maintenance of money capital might be considered as the preferred method.

It is sometimes submitted by many accountants that the main concern in measuring business income should be to provide a basis for ascertaining the tax liability of the entity. The determination of the amount of tax to be paid is a matter of very crucial concern to many companies, for huge amounts of liquid resources are often needed in order to meet the tax-related obligations. The fact that there exists a need to make an advance estimate of the taxes to be paid is not probably disputed by anybody. What seems to be

objectionable is the idea of using the principles of determination of taxable incomes as a major guiding force in the measurement of accounting income. The principles for the determination of taxable incomes of businesses are determined by the government in ways conducive to the attainment of its economic and fiscal goals. If accounting income is computed by reference to the taxability criteria, the relevance of the income in providing guidelines for prudent economic decisions may greatly be lost.

Many accountants are inclined to subscribe to the view that the principal objective of measuring income in financial accounting should be to provide investors with information useful to them in forecasting the future incomes of the entity. Forecasting of future incomes of the entity is of utmost importance to investors because the forecasted data provide them with a rational basis for making decisions concerning buying, selling, and retention of the entity's shares. Investors are not normally expected to be interested in the things that have occurred in the past. Their principal concern lies in procuring information regarding the rewards (cash flows) likely to flow to them from the entity. Past phenomena may be of relevance to them only when they find that such phenomena have some bearing on the shape of the things likely to occur in the future. The reported income figure is possibly the most important piece of information investors can collect from the published accounts that has a bearing on the future income flows of the entity.

All the income measures that can be derived from the various possible combinations of net asset and capital maintenance valuation are not likely to have an identical predictive ability. The predictive ability of the income derived from the combining of the historical cost method of asset valuation with the money capital concept of capital maintenance is generally believed to be of a much poorer order than the predictive ability of the incomes derived from the combining of the current value method of asset valuation with the purchasing power or physical approach to capital maintenance. It has occured to Revsine and Weygands [1974, pp. 74-78] that the income measure derived from a combination of the current entry price method of asset valuation and the maintenance of the physical operating level has the greatest amount of capacity to forecast the future operating flows of the firm. According to the view expressed by these writers, if a firm is able to maintain its

physical operating level, which can be achieved if periodic income is computed through the subtracting from revenues of expenses measured on a replacement cost basis, the maintenance of its operating cash flows at the current level is almost ensured. The assumption that the writers make in developing this viewpoint is that the margin between input and output prices remains constant through time. Such an assumption can hold good, as can easily be imagined, only under a static condition. Under circumstances when technologies are changing very rapidly, the maintenance of the physical operating level can be of little assistance to the firm in maintaining its operating cash flows at the current level.

### **Conclusions**

The study was undertaken with a view to exploring the possibility of devising an acceptable basis for the resolution of the asset valuation and capital maintenance controversies in the context of measurement of periodical incomes of continuing business firms. But the ways things have appeared do not probably permit one to arrive at any definite conclusion as to how such controversies can be resolved. There does not exist any objective basis for knowing whether the principal purpose of measuring income in financial accounting is to provide information necessary for the evaluation of past performance or to provide data useful for the prediction of future income flows. Two different types of income measures are. perhaps, needed in order to serve these two different types of objectives. The fact that no single measure income is capable of serving all purposes equally well has promted many to believe that an alternative approach to the solution of the problems lies in disclosing in financial statements a number of income measures based on different bases of asset valuation and capital maintenance. Some others have suggested that the main concern in the preparation of financial statements should be shifted from income determination to the disclosure of all pertinent facts relating to the economic events of These proposals either for the inclusion of multiple income measures in external financial reports or for the expansion of the data base have, however, been opposed by many on the basis of a belief that the adoption of such a course of action would lead to the creation of a good deal of confusion in the minds of the users as to what to choose and what to reject.

The traditional practice of disclosing in financial statements data relating to enterprise wealth and income has, of late, been challenged by a section of accounting theorists according to whom the concepts of wealth and income are relevant only to individuals and not to business enterprises. It is the cash-flows which, in the opinion of those who are subscribing to such a belief, alone have relevance in the context of the business enterprise. The idea that income and wealth concepts are not at all relevant to the business has prompted these people to believe that there exists a need to replace the prevailing system of income and wealth reporting by a system of what has been described as "cash-flow" reporting. The main argument advanced by the cash-flowists in favour of the adoption of the cash-flow basis of financial reporting is that the cash-flow data (past and prospective) are capable of satisfying the needs of both of those who want stewardship-oriented information and those requiring decision-oriented information.

The cash-flow system of accounting is still in its infancy. Most accountants are not yet familiar with the idea of how the system does actually operate A lot of experiments of very serious nature have still got to be made in order to establish the validity of the claims that cash-flow information is really superior to the conventional value-oriented information. Meanwhile, efforts may be made by business firms to provide cash-fllow information by means of supplementary reports.

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## IAA: an "AAA Associate Organisation"

The members of the Indian Accounting Association (IAA) will be glad to know that the IAA is now an "Associate Organisation" of the American Accounting Association (AAA). The Executive Committee of the IAA welcomed, at a meeting held on 6th October 1985, at Jaipur, the proposal for a formal liaison between the AAA and the IAA received from Professor Stephen A. Zeff, President of the AAA.

The full contents of Professor Zeff's letter, dated August, 1985, are reproduced below for information of the members of the IAA.

Chief Editor

August 28, 1985

President
The Indian Accounting Association
Dear Sir:

In order to make more efficient use of academic resources and to enhance the contribution of our respective organizations, I am writing to propose a formal liaison between the AAA and your Association, A similar letter is being sent to seven other distinguished Associations composed predominantly of accounting academics. This proposal has been approved by the AAA's Executive Committee, and we sincerely hope that it might serve to strengthen our ties and promote programs and activities of mutual interest.

If your Association agrees to form this liaison, our wish is to designate it as an "AAA Associate Organization." We propose the following benefits of suc a liaison;

1. The AAA Associate Organization may nominate one (1) individual from its region to be considered for the overseas allotment (maximum of four in any year) for the AAA Doctoral Consortium, which is held immediately prior to the AAA Annual Meeting, in August. Payment of all travel costs to the North American coast would need to be borne by the AAA Associate Organization, by the candidate, or by a funding source other than the AAA or the Deloitte Haskins & Sells Foundation. The final selection of the overseas participants in the AAA Doctoral Consortium will be that of the Consortium Director. We propose that each AAA Associate Organization submit the name and resume of its nominee to the Consortium Director no later than March 31 of each year. The decision of the Consortium Director will be Conveyed by May 15. Further details will be provided later.

- 2. The AAA will invite the AAA Associate Organization's President or Chairperson to attend the AAA Annual Meeting, and will waive the registration fee. (The AAA cost would be limited to waiver of the registration fee.) The invited President or Chairperson would be introduced at the international Reception and at one of the membership luncheons.
- 3. The Annual Meeting, Congress, or Conference of each AAA Associate Organization will be announced in Accounting Education News, the AAA's membership Newsletter. In Addition, the Meeting/Conference proceedings volume and other publications issued by the AAA Associate Organization, as well as reports of any significant activities of the Associate Organization, will be announced in Accounting Education News.
- 4. The Table of Contents of the AAA Associate Organization's journal will be carried in *The Accounting Review* (which has a circulation of about 15,000).
- 5. During his or her term of office, the President or Chairperson of the AAA Associate Organization will be sent complimentary copies of AAA publications, including journals research studies, and Accounting Education News, whether or not the President or Chairperson is a member of AAA.
- 6. The AAA will, in a suitable publication, carry notices of North American universities interested in receiving non-North American visitors and of non-North Americans who would like to visit North American universities. AAA Associate Organizations' members will be given access to this column of notices.

Of each AAA Associate Organization, the AAA would, in turn, ask for the extension of reciprocal privileges.

We hope that the prospect of becoming an AAA Associate Organization will be attractive to you and your colleagues, and on behalf of the AAA's Executive Committee, I look forward to hearing from you.

Kind regards.

Sdl- Stephen A. Zeff President, AAA, & Professor of Accounting, Rice University, Texas.

### **BOOK REVIEW**

Inflation Accounting in a Developing Economy, L. S. Porwal and N. Mishra, Allied Publishers Pvt. Ltd., New Delhi, 1985, pp. viii+126, Price—Rs. 60.00

The book is a welcome addition to the accounting literature of our country which is particularly sparse in the area of accounting for changing prices. The same addition is, moreover, singularly important, because it deals with Indian conditions that provide together an instance of, what the title of the book itself suggests, a 'Developing Economy'.

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The contents of the book mainly consist of the results of an empirical study, which was very suggestively planned and carried on as a research project by the authors and, finally, completed, as stated by them, with the financial assistance received from the Indian Council of Social Science Research. Nevertheless, the justifications given in Chapter II for the accounting adjustments required in the face of price-risings at specifically high rates and the connotated summary-reporting in Chapter III, of the actual plans for the same as devised by important accounting bodies of the world particularly after the early sixties, make a concise, but conclusive, theoretical study of a great import. In fact, the said study is, rather, thickly packed with meticulously collected information and references that can not only initiate the new reader but also inspire the old ones.

After the introduction for the research study being given in Chapter I, an account of its findings has been distributed over the three chapters, marked from IV to VI, under the headings respectively of Corporate Practices, Corporate viewpoint and Viewpoint of External users. In spite of the authors' complaint of lack of adequate response from the prospective-respondents to the questionaries, which is the common experience of all researchers in the social-field, the 'samples' collected do not seem to be quite unrepresentative. For instance, it cannot be quite unexpected that the investigations have found the majority to favour inflation-accounting to remain supplementary to historical cost-accounting, consider it unworkable due principally to legal-constraints and leave its formal introduction to be decided by governmental agencies. Accordingly,

the detailed results of the investigation are also likely to be reliable so that the contents of the next two Chapters, i. e. Chs. VII & VIII captioned respectively as 'A case for a suitable system of Accounting, Cash-flow accounting', and 'conclusion' may be studied with confidence.

The 'methodology' resorted to in the work can be used as a 'model' by future researchers in the line. Further, those who are related with corporate activities in any way, either closely or remotely would gain by going through it. In fact a prior consultation of the book is a 'must' before any compulsory official plan for inflation accounting is undertaken for being drafted by any authority.

G. D. Roy

Past Professor of Accounting, Calcutta University and Past President, IAA.

Advanced Cost Accounting, V. K. Saxena and C. D. Vashist, Sultan Chand & Sons New Delhi (1st Edition, 1985), pp. 2015 (approx.), Price Rs. 115/

The voluminous book under review can very much be claimed to be a standard text book on Cost Accountancy for students preparing themselves for (i) B. Com., M. Com., and M. B. A. (or equivalent) examinations conducted by different Indian Universities/ Institutes of Management, etc., (ii) Chartered Accountancy, Company Secretaryship, Cost Accountancy (but not to the fullest extent if the standard set in the revised syllabus at the Final Level is considered), etc., examinations conducted by different leading professional bodies in India.

The book, written in a lucid language and supported by a number of relevant charts and diagrams at appropriate places, has three divisions, viz., the text, worked-out problems and exercises.

The authors, members of the profession of Cost Accountancy, have quite effectively communicated their understanding, enriched by real-life experience, of the fundamental concepts, various systems, methods, techniques and applications vis-a-vis the vast, complex,

dynamic and ever-emerging discipline of Cost Accountancy. However, the discussions should have been more exhaustive in some chapters/areas like Performance Budgeting, MIS and Data Processing, Value Analysis, Cost Reduction, Cost-benefit Analysis, Human Resource Accounting, EDP Audit, Quantitative Techniques (particularly, the Replacement Theory, Queueing Theory, and Simulation) etc., keeping the complex role of a modern Cost Accountant in mind.

The authors have tried to arrange different Chapters in such a way as to ensure that the level/standard increases gradually throughout the book. In the text division, there are some chapters containing portions for advanced readers and some chapters conclusively coming under Advanced Discussion and same is the case with the 'Worked-out Problems' division. The authors have sincerely tried to achieve the rather difficult task of coming out with one book which will cater to the needs of different levels of readers. But the size of the book has really become unwieldy. The book would have been more useful if the chapters in the text division were preceded or followed by summaries.

Sudipti Banerjea
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Management Accounting and Financial Control: By S. N. Maheswari; Fourth Edition, October, 1985, Sultan Chand & Sons; 23 Daryagani, New Delhi-110 062, Price: Rs. 70.00

This book may be said to be a hand book on Management Accounting and Financial management which conform to the latest practice of the subjects concerned. It contains seven Sections. Section 'A' deals with the scope and nature of Management Accounting and its limitations, Financial Accounting Principles, and Basic Cost Concept. Section 'B' contains details of Financial Statement Analysis and Interpretations with Ratio Tests, Interfirm comparison, Funds Flow satement and related issues including Cash Management etc. Section 'C' is itself a book on Financial Planning, Budgetary control and standard costing. Management Reporting is an important aspect of the book. Discussion on Marginal

costing, profit planning and Decisions involving alternative choices will satisfy the need of the students. But capital budgeting chapter of this section is not given so much attention as to its analysis and techniques. This is also reflected in section 'D' dealing with Funds Management; specially cost of capital, Leverage and Dividends.

The last two chapters include topics on Inventory Valuation, Depreciation Policy and Accounting for price level changes. The author has incorporated, in his treatise, SSAP Draft 16 regarding Inflation Accounting policies. This would give the readers some ideas on inflation accounting exposures.

It must be said to the credit of the book that it has put forward numerous advanced solved and unsolved problems on almost all the topics for the students with the latest examination problems and solutions. It would serve as a comprehensive text in Financial Management and Management Accounting to the Students appearing at various academic and professional examinations—more particularly to the M. Com., MBA, ICWA, CA Students.

Select Reference at the end of each chapter would be more useful to the readers if it is revised with the latest text books (Foreign & Indian).

The get-up, binding and paper of the book also deserve improvement in future.

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