



NETAJI SUBHAS OPEN UNIVERSITY

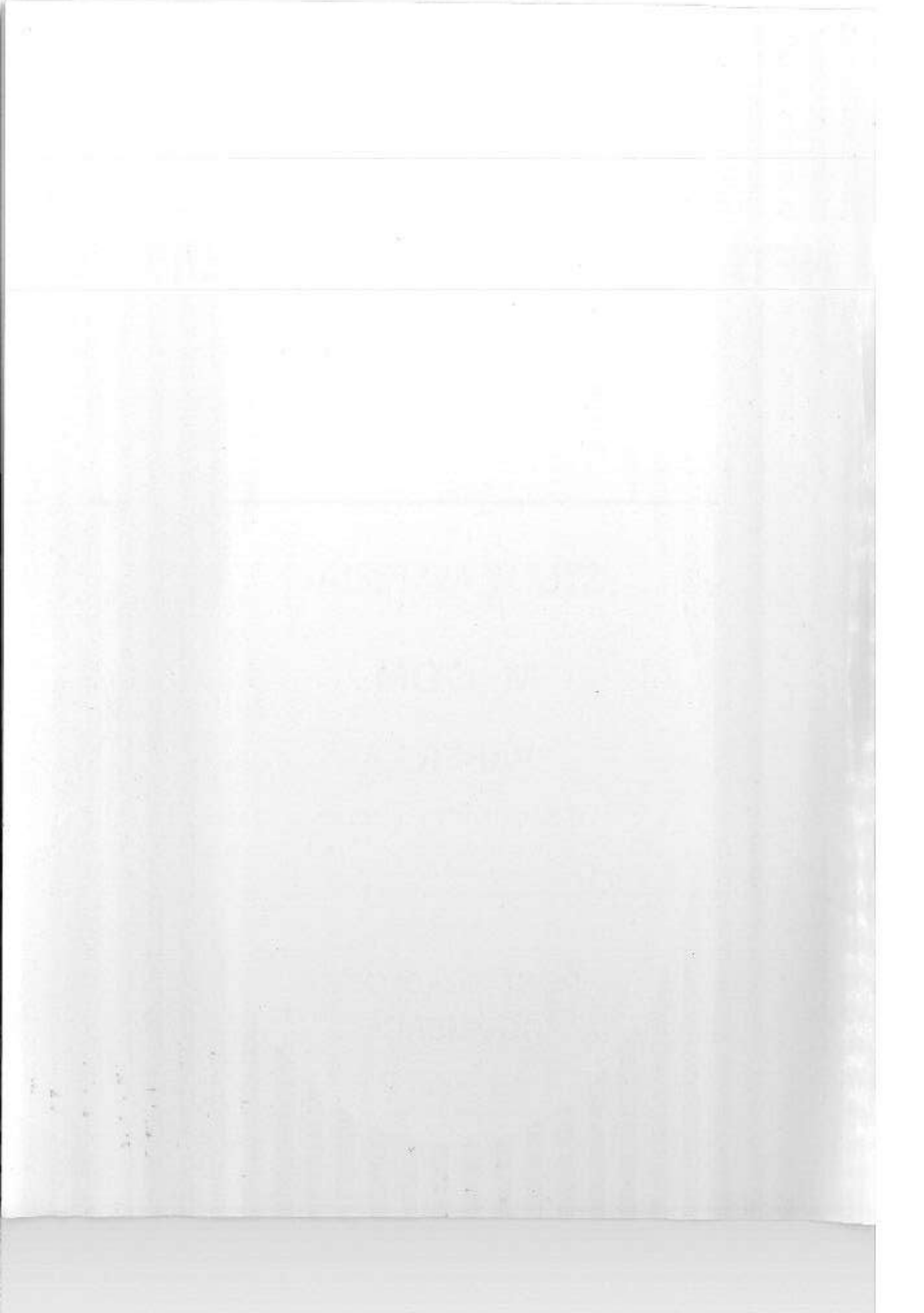
STUDY MATERIAL

M. COM.

PAPER - 6

Accounting Theory

**POST GRADUATE
COMMERCE**



PREFACE

In the curricular structure introduced by this University for students of Post-Graduate degree programme, the opportunity to pursue Post-Graduate course in any Subject introduced by this University is equally available to all learners. Instead of being guided by any presumption about ability level, it would perhaps stand to reason if receptivity of a learner is judged in the course of the learning process. That would be entirely in keeping with the objectives of open education which does not believe in artificial differentiation.

Keeping this in view, study materials of the Post-Graduate level in different subjects are being prepared on the basis of a well laid-out syllabus. The course structure combines the best elements in the approved syllabi of Central and State Universities in respective subjects. It has been so designed as to be upgradable with the addition of new information as well as results of fresh thinking and analysis.

The accepted methodology of distance education has been followed in the preparation of these study materials. Cooperation in every form of experienced scholars is indispensable for a work of this kind. We, therefore, owe an enormous debt of gratitude to everyone whose tireless efforts went into the writing, editing and devising of a proper lay-out of the materials. Practically speaking, their role amounts to an involvement in 'invisible teaching'. For, whoever makes use of these study materials would virtually derive the benefit of learning under their collective care without each being seen by the other.

The more a learner would seriously pursue these study materials, the easier it will be for him or her to reach out to larger horizons of a subject. Care has also been taken to make the language lucid and presentation attractive so that they may be rated as quality self-learning materials. If anything remains still obscure or difficult to follow, arrangements are there to come to terms with them through the counselling sessions regularly available at the network of study centres set up by the University.

Needless to add, a great deal of these efforts is still experimental—in fact, pioneering in certain areas. Naturally, there is every possibility of some lapse or deficiency here and there. However, these do admit of rectification and further improvement in due course. On the whole, therefore, these study materials are expected to evoke wider appreciation the more they receive serious attention of all concerned.

Professor (Dr.) Subha Sankar Sarkar
Vice-Chancellor

Seventh Reprint : December, 2018

Printed in accordance with the regulations of the Distance Education Bureau of the
University Grants Commission.

POST-GRADUATE : COMMERCE
[M. COM.]

Paper – 6
Modules 1 & 2
Accounting Theory

: Course Writing :
Prof. Dipti Kr. Chakravorty

: Editing :
Prof. Arun Kr. Basu

Notification

All rights reserved. No part of this book may be reproduced in any form without permission in writing from Netaji Subhas Open University.

Mohan Kumar Chattopadhyay
Registrar

POST-GRADUATE COMPARATIVE BIOLOGY

Page 10

Tables 1 & 2

Tables 3 & 4

Tables 5 & 6

Tables 7 & 8

Tables 9 & 10

Tables 11 & 12

Tables 13 & 14

Tables 15 & 16

Tables 17 & 18

Tables 19 & 20

Tables 21 & 22

Tables 23 & 24

Tables 25 & 26

Tables 27 & 28

Tables 29 & 30

Tables 31 & 32

Tables 33 & 34

Tables 35 & 36

Tables 37 & 38

Tables 39 & 40

Tables 41 & 42

Tables 43 & 44

Tables 45 & 46



Module

1

Unit 1	<input type="checkbox"/> Accounting Theory—its Nature, Foundation & Classification	7-18
Unit 2	<input type="checkbox"/> Capital and Income	19-37
Unit 3	<input type="checkbox"/> Cash Flow Accounting	38-47
Unit 4	<input type="checkbox"/> Conceptual Framework for Accounting and Reporting	48-60

Module

2

Unit 5	<input type="checkbox"/> Disclosure in Reporting	61-77
Unit 6	<input type="checkbox"/> Government Accounting	78-100
Unit 7	<input type="checkbox"/> Social Accounting	101-109
Unit 8	<input type="checkbox"/> Value Added Reporting	110-116



MINISTRY OF EDUCATION
GOVERNMENT OF INDIA

For the Government of India
New Delhi

Subject: _____

1

Part I: Introduction to the subject.

Part II: Theoretical aspects of the subject.

Part III: Practical aspects of the subject.

Part IV: Theoretical aspects of the subject.

Part V: Practical aspects of the subject.

Part VI: Theoretical aspects of the subject.

Subject: _____

2

Part I: Introduction to the subject.

Part II: Theoretical aspects of the subject.

Part III: Practical aspects of the subject.

Part IV: Theoretical aspects of the subject.

Unit 1 □ Accounting Theory-Its Nature, Foundation & Classification

Structure

- 1.0 Introduction**
- 1.1 Meaning and Nature of Accounting Theory**
- 1.2 Foundation of Accounting Theory**
 - 1.2.1 Measurement Aspect**
 - 1.2.2 Decision-making Aspect**
- 1.3 Classification of Accounting Theory**
 - 1.3.1 Structural or Syntactical Theories**
 - 1.3.2 Interpretational or Semantical Theories**
 - 1.3.3 Behavioural or Pragmatic Theories**
- 1.4 Accounting Environment**
 - 1.4.1 Economic Environment**
 - 1.4.2 Social Environment**
 - 1.4.3 Legal or Statutory Environment**
- 1.5 Exercise**
- 1.6 References**

1.0 Introduction

Until very recently, accounting was regarded as what the accountants did. That is, accounting was just an art and artist was at liberty to do whatever he liked. As a result, myriads of alternative approaches were developed for the measurement or reporting of the same phenomenon. It was said "you ask ten accountants and they all will give you different sets of accounting figures". For this, accounting information produced earlier was neither comparable nor reliable. This had been going on upto the beginning of the twentieth century, and in the year 1929 when the New York Stock Exchange crashed or in the year 1930 when the world experienced an unprecedented depression, the accounting profession was brought to a challenge by both accounting and non-accounting people. Then possibly, we started to think for the first time that no discipline can develop in a scientific manner unless it has a sound theoretical base. Accounting has a procedural orientation no doubt, but until and unless we put a conceptual emphasis on it, accountants themselves will find it

difficult to justify their actions if faced by any challenge from inside or outside the profession. Actually, this answer to 'why' was not available earlier and the accountants were busy to give answer to the questions starting with 'what' or 'how'. Thus, accounting was just a rule-based discipline which can be memorised, not conceptualised. In the search for a defence by accountants who are now liable to a number of clients and in the face of a strong criticism by even the laymen, accountants started during 1920s and 1930s to develop a body of knowledge that can be recognised as accounting theory. This body of knowledge also started to gain ground very rapidly, as the accountants were relieved to a large extent having got a defence to satisfy the people of conflicting interests. No more could the owners pressures the accountants to show less-profit to deprive the workers or governments of their legitimate shares. No more could the directors stress for inflated profit that would help them in having higher remuneration. All accountants started to show more or less the same amount of accounting profit. Comparability and reliability of accounting information were mostly ensured with this development of accounting theory during 1920s and 1930s. The historical cost was then the basis for accounting as this could be documented easily with vouchers etc. to ensure reliability of accounting information. But during the 1960s, the theory so far developed was brought again to challenge in face of soaring prices, as the accounting information then started to lose much of its relevance, though reliability of it was beyond any question. Hence, we found in the 1960s the development of a newer type of accounting theory which is popularly known as 'valuation theory'. With these two sets of theories we constantly try to draw a balance between the reliability and relevance criteria of accounting information. We are yet to reach the optimum balance and perhaps no discipline has been able to do so. At least we can now explain or justify the accounting actions. Specialists of other disciplines have also been convinced now that accounting is based on logic and sound reasoning. We have a long way to go in this respect. But what we have got in the mean time is not negligible.

1.1 Meaning and Nature of Accounting Theory

Accounting theory as G. D. Roy defines it, is a body of knowledge that explains and justifies the accounting functions. What is deduced from the definition is that accounting theory will give answer to why- we have measured, recognised and reported one accounting event in a particular way and whether that adopted way is justified or not from the viewpoint of the objective of accounting. According to E. S. Hendriksen, accounting theory is a set of broad principles that provides a general

frame of reference by which accounting practices can be evaluated, and guides the development of new practices. That is, accounting theory has actually twin objectives- evaluation of old practices and promotion of new practices. While evaluating the old ones, the theory may either revise or replace them and at the same time it may add fresh ones to them. The theory, thus, attempts to build up a "developed as well as largely acceptable set of conceptual and ideological interpretations of accounting functions, together with guidelines appropriate for their executions. It was difficult earlier to convince people, both inside and outside the profession, merely by saying that "this has been the practice". Now theory has attempted to provide us with a solid and reasonable argument by which we can logically convince people as to what is what or why this is so.

But the fact is that, unlike in most other disciplines, in accounting there is no generally accepted theory. There are rather a number of accounting theories to explain the same phenomenon. For this, we see that, instead of convincing the users of accounting information as to why one event or phenomenon has been accounted for in a particular way, it is rather confusing them. This is because we have got different approaches to the formulation of accounting theory. The approaches that we see usually in this respect are as follows :

- (i) Authoritarian approach
- (ii) Ethical approach
- (iii) Sociological approach
- (iv) Economic approach
- (v) Behavioural approach etc.

We know that the authoritarian approach imposes theory from the fourteenth floor which may not have any practical consequences. The ethical approach focuses on the concept of 'fairness', whereas the sociological approach on the concept of 'social welfare'. The economic approach focuses on the concept of 'general economic welfare', whereas behavioural approach emphasizes the relevance to decision-making by the users. So, if we look from different angles, our interpretations cannot but be different. Because of these differences the Committee on Concepts and Standards formed by the American Accounting Association (AAA) arrived at the following conclusion :

1. No single governing theory of financial reporting is rich enough to encompass the full range of user-environment specifications effectively, and hence.

2. There exists in the financial accounting literature not a theory of financial accounting, but a collection of theories which can be arranged over the differences in user-environment specifications.

Not only the approaches, but also the methodology or process of formulating accounting theory is not what it should be. Greater emphasis has so far been given on deriving a theory from the practice of accountants. That means the inductive approach has been mostly followed hitherto that has just codified the existing practices instead of evaluating and revising them. At present, deductive approach is also used in some cases to the formulation of accounting theory. A number of regulatory bodies have been set up at present both at national and international levels. The Institute of Chartered Accountants of India (ICAI), and the International Accounting Standards Board (IASB) are worth mentioning in this regard. These bodies are pronouncing accounting principles and procedures every now and then based on deductive principle and the practitioners and individual enterprises are being 'influenced' by those pronouncements. But till today, most of those pronouncements are voluntary in nature and hence, the compliance with them by individual enterprises is not yet so significant. However, the position is changing rapidly. There has been a world-wide trend at present to follow the pronouncements of some regulatory bodies in pursuit of harmonization of accounting practices. But all in the accounting profession must recognise that accounting theory is not, probably never will be, a stable phenomenon. Hence, diversity and at the same time an attempt towards harmonization will always be there.

1.2 Foundation of Accounting Theory

We have seen from the discussion in earlier section that accounting theory can never be said to be stable. It has been rather changing continuously in keeping pace with the changes in socio-economic conditions. Thus, gradually or over time the structure of accounting theory has undergone a number of changes, and obviously each of those structures has been built on some new and different foundations. So, the accounting theory that has been developed up-to-date does not have only one foundation. At least three key-factors can be named here which can be termed as the foundations of accounting theory. Earlier, the basic objective of accounting was to measure the income for owners. The question of measurement was then the key-factor or foundation of accounting theory. Gradually, the emphasis has been shifted to communication of information and then to the decision-usefulness of information. These three phenomena can be called as the foundations of accounting theory till today.

1.2.1 Measurement Aspect

Accounting is generally defined as the measurement of financial information and presentation of this information in a meaningful and understandable form. But so long the businesses were only the sole proprietors' firms, the communication part of accounting was not as challenging as it is today. The sole proprietor being the only owner, he could have access to accounting information during the process of measurement itself and as a result, no further process was needed to present the information in suitable formats. Thus, for a long time the accountants have focussed their attention on measurement of profits. Accounting theory that developed during those days, for obvious reason, was based only on this aspect of measurement.

Measurement is the assignment of numerical values to represent specific attributes of selected subjects or events. Attributes means the traits or aspects of an element to be quantified or measured, such as historical cost or proceeds, current cost or proceeds etc. Thus, the theory that deals with the measurement of attributes attempts to explain the problem of assessing and evaluating data, the significance of which can be correctly stated and accurately represented. While doing so the theory writers had to face mainly three problems associated with the measurement. They are:

1. What events or objects should be measured
2. What standard Of scale should be used
3. What should be dimensions of the 'unit of measurement

The objects selected must reflect the objectives of business decisions clearly without ambiguity. An ideal measurement scale should be one that is stable over time. And the unit of measurement should encompass only those objectives that are measurable in true sense. These being the normative theories of measurement, the measurement scale in current practice has been the normal units of money. This scale is simpler than any other units of measure. This measuring rod is reliable as well. Hence, the accounting theory authenticates this practice. At low rates of change in general purchasing power, the scale of nominal units of money creates no problem. But during soaring prices or deflation, the scale may require adjustment. A number of accounting theories have been developed to that end. But the accounting people are not yet prepared to measure information in a way that may produce data useful or relevant for future decisions. The attitude of accountants should, however, be changed so that measurement possesses a high degree of predictive ability.

1.2.2 Information needs

Accounting gradually moves away from its traditional procedural base encompassing record-keeping and such related work as the preparation of budgets and final accounts, towards a role which emphasizes its social importance. It is interesting to contrast definitions which were accepted a little time ago with more recent statements. According to definitions made in 1950s. "The central purpose of accounting is to make possible the periodic matching of costs and revenues". This concept, i.e., the measurement aspect, is the nucleus of accounting theory no doubt but rapidly we have extended the boundaries of accounting and at the same time have redefined the scope of the subject. Accordingly, the purpose of accounting has been 'to provide information to different segments of society.' According to this latter viewpoint, the scope of accounting should not be restricted to the private use of information. Rather, the significance of such information may be seen in the context of various groups having vested interests in business organisations. Thus, the communication part of accounting has become of greater importance and for obvious reason, the theory starts to veer round that. Ultimately, we see that along with measurement aspect, the communication of information to interested parties has become a foundation to accounting theory.

Along with the needs of information by different parties, a number of problems crop up as to how to meet the diversified needs of diverse and sometimes conflicting groups of interest. Needs are not identical but special purpose reporting to each group is not feasible from the viewpoint of cost and benefit. Moreover, if a number of reports are issued, the users may be confused as to the credibility of the information. Hence, one multipurpose report, instead of a number of special purpose reports, is stressed upon. But this is not also an easy task. Groups are diverse and the sophistication levels in the same group are also different.

The next problem that needs solution in this respect is the existence of multiplicity in accounting practices. It is said that accounting profit is what the accountants measure it to be. If different accountants are employed to compute profits from the same set of transactions and events, there is little likelihood that they will arrive at the same figure. Thus, the comparability of information supplied becomes the problem. This problem has not been solved completely as yet. But the diversity in accounting practices has narrowed down to a large extent as this subject has become the core of accounting literature and research.

1.2.3 Decision-making Aspect

Users need information not for information's sake. They need information because they feel that information will help them in making effective decisions.

Decisions are always addressed to future. But traditional accounting, that depends largely on historical cost data, usually gives information relating to the past. It is argued that historical cost basis is an objective basis of accounting, and as the historical cost can easily be documented with vouchers, receipts etc., the information produced as such is reliable. For a long time the accountants were more concerned with this reliability criterion of information, as the users were also interested then mainly in stewardship accounting, i.e., in knowing whether the managers are doing effectively as stewards of their resources or not. Thus, the users, mainly the owners, were interested mostly in analysing past events instead of predicting the future. But in the past four decades, the changing social attitude, developments in technology, quantitative methods and the behavioural sciences all combined to shift attention from historical emphasis to decision theory. The essential purpose of accounting now is providing information for decision-making. Thus, in addition to reliability has the relevance of accounting information for decision-making become another corner stone towards the development of accounting theory. This need for decision-making actually paved the way for the great valuation debate of the 1960s.

It is during this period of the 1960s that several major theoretical works in accounting emerged. Much research interest during this period was devoted to an examination of valuation approaches as alternatives to historical cost-based valuation. Although some researchers were still attempting a theoretical justification of historical cost, there were others who demonstrated active interest in developing alternatives so that users get necessary information relevant and useful for their decision purposes. CPP accounting, current entry or exit price accounting, present value accounting and many of the line were developed with the same object in view. None of them is free from limitations. The major single criticism lodged against them is that they are subjective in nature and hence not reliable. This reliability-relevance tangle has some truth no doubt, but still these developments are described as the works of a golden age in the history of accounting, and the thing that acts as the foundation to the development of these valuation theories is undoubtedly the decision-making aspect of accounting.

1.3 Classification of Accounting Theories

There are several ways of classifying accounting theories. Taking foundation of accounting theories as the basis, we may classify accounting theories in the line of discussion of the earlier section, i.e., as measurement theory, information theory and decision theory. Having taken 'the time' as a basis some have classified accounting theories as pre-industrialisation theories, post-industrialisation theories and the modern

theories of accounting. According to the function of accounting, the accounting theories have again been classified as stewardship accounting theory, decision usefulness theories and social responsibility accounting theories. Accounting centres have also been the focal point at the time of classifying accounting theories. In that case accounting theories have been grouped as business accounting theory, government accounting theory and national income accounting theories. But the most useful frame of reference, according to E. S. Hendriksen, is to classify theories as :

1. Structural or syntactical theories
2. Interpretational or semantical theories
3. Behavioral or pragmatic theories.

1.3.1 Structural or Syntactical Theories

These theories attempt to explain how accountants would react to certain situations or how they would report specific events. Actually, until very recently, accounting meant what accountants did. Thus, different accountants used to react to same situation differently. They used to report the same event in different manners. Hence, a general framework for accounting was badly needed. The structural or syntactical theories have been developed to meet that end. These theories try to evaluate first the current practices of accountants. Then they codify some of the practices as generally acceptable and simultaneously they prescribe some new procedures or principles that the accountants in general would follow while measuring or reporting any accounting event. Thus, structural theories are made up of both descriptive and normative theories whereby the accountants can have a guideline as to how one journal or ledger book is to be opened, what should be the format of the balance sheet or the -profit and loss account, what of historical and current cost should be treated as the basis for accounting measurement or what of cost and market price should be used for valuing stocks. Structural theories in this way outline the scope and boundary of accounting and simultaneously they specify the limit beyond which the accountants must not go. This does not mean that structural theories provide no flexibility to the accountants. They rather explain the situations that will help the accountants to choose the proper alternative.

1.3.2 Interpretational or Semantical Theories

Structural theories of accounting provide for a large number of symbols, terms, formats or technical languages to help a systematic and scientific measurement and presentation of accounting information. But an accounting structure, although logically

formulated, does not convey meaningful interpretations unless the symbols and words representing descriptions or measurement are related empirically to real world phenomena. It is often said that existing financial reports are documents which are prepared by accountants for accountants. That means the people outside accounting profession cannot understand what accountants mean to say through accounting reports. Hence, accounting writers or researchers delve upon this interpretational aspect and ultimately we get a number of theories, known as interpretational theories, that help the users understand the structural theories of accounting. Recent attempt by the US FASB (Financial Accounting Standards Board) to provide a meaningful interpretation to different terms that are used in financial statements is an example of the aforesaid interpretational theories. Earlier attempts in this direction were made by Canning, Edwards and Bell, Sprouse and Moonitz and many other accounting personalities or accounting bodies. They all endeavoured to find ways to improve the ability of accounting information to be interpreted in terms of human observation and experience. Empirical studies, however, reveal that these interpretational theories are not so successful as yet, because different terms and concepts of accounting get different meanings even today depending upon the perception of different users or different environment. So, the development of theories is not enough. But they should be verified or tested by researches to determine whether users of accounting information understand and correctly interpret the information producers' intended meaning.

1.3.3 Behavioural or Pragmatic Theories

The Behavioural Theories attempt to measure and evaluate the economic, psychological and sociological effects of alternative accounting procedures and reporting media. This kind of accounting theories is still in its infancy no doubt, but there is a great scope and need for development of theories that may help in creating a behavioural change on the part of users. Not only the interpretation but also the efficient use of accounting information has been now the objective of accounting theories. For this, attempts are needed to seek answers to some basic questions like who are the users of financial statements, what is the type of specific information wanted by them, whether the statements meet those needs or not? Since the middle of twentieth century it is being realized that accounting is useful not merely to assess the results of past performance but also that it can be more useful in decision-making by the management, present and potential investors, creditors, government and others. The most important facet of decision-making is the ability for proper prediction. So, if accounting has to be decision-oriented, it must help

prediction by users, and for this the accounting information should be so designed as to reflect a trend of occurrence of some events having analysed which the users may take decisions for future. Researches are being conducted in such behavioural areas of accounting. The progress is not so significant, but very soon perhaps we shall break through the barrier.

1.4 Accounting Environment

Accounting is substantially a product of its own environment. We have noted that as the environment changes, accounting structure, systems, processes also change. This is the major testimony of the fact that accounting is solely dependent on the environment in which it is to operate. Socio-economic environment in particular has a great influence on accounting structures and processes. This environment is made of, inter alia, interrelated micro and macro socio-economic activities. Since accounting covers the entire administration or management of information for all socio-economic activities in both micro and macro economic sectors, a clean analysis and assessment of this accounting environment is of prime importance. The environment in developing and underdeveloped economics is different from that prevailing in developed economics. Naturally we find sophisticated accounting systems in developed countries compared to simple and obsolete systems in use in underdeveloped economics. So, the efficiency or otherwise of accounting theory cannot be evaluated in an isolated way. The economic, social as well as the legal environment of the concerned accounting theory must be analysed to understand the latter properly.

1.4.1 Economic Environment

With the economic development of a country, the accounting systems assume higher significance. For centuries after the system of double entry book keeping appeared, accounting was devoid of methodology or any form of theory. It was only after the industrial revolution of the nineteenth century that we saw a move from book-keeping to accounting—a move away from the relatively simple recording and analysis of transactions towards a comprehensive accounting information systems. Consistent with mass production techniques and high capital investment, there have been refinements in cost and management accounting in the twentieth century. More recently, the cross-border flow of capital has increased tremendously. As a result, the need for international harmonization of accounting has got now a new impetus. Along with the introduction of value-added tax (VAT) in Indian tax structure, the value added accounting has got a new dimension. From all these, it may be said that economic environment has a notable influence on the development of accounting theories and practice.

1.4.2 Social Environment

Along with economic events, a number of social phenomena like poverty, social security, ecology etc. have also a significant bearing on accounting measurement and reporting. This area is referred to as social accounting. Even corporate bodies today have to take social aspects into consideration. Environmental pollution, product or service contributions to consumers and society, human resources as well as community development have come within the domain of corporate social accounting and reporting. It is now well recognised that corporate activities have economic as well as social impacts on society. Hence, instead of limited study of revenues and expenses alone, we have reached a stage where the analysis of social cost and social benefit is considered more significant. This is undoubtedly the result of social impact on accounting theory.

1.4.3 Legal or Statutory Environment

Economic, social and legal-all jointly contribute to the making of the environment as a whole. But so far as the components are separately concerned, possibly the legal environment plays the superior role. The positions of debtors and creditors, of which *Dr.* and *Cr.* are the abbreviations, have invariably a legal implication that evidently dominates accounting. Laws of contracts and properties invariably govern such positions. Moreover, enactments on partnership, companies etc. and judicial pronouncements on the nature of profit, goodwill and the like have added considerably to this supremacy enjoyed by law in shaping accounting forms. Law is held so overriding among all environmental factors, that continuation of a market fostered by a particular social philosophy is warranted only on the continuation of a particular legal system. In the USA, however, the private sector is dominant. The statements of concepts and standards issued from time to time by the FASB and guidelines issued by the AICPA, NAA and others have self-regulating mechanisms. The role of the US Securities and Exchange Commission (SEC) is partly supportive and partly regulatory. But in developing countries, such private bodies are not so effective and hence, there is need for an active regulatory role to be played by governments. However, too much control by the government may hamper the functioning of capital market and economic development. So, a balance between the two extremes has to be struck depending upon the stage of economic and social development in a country.

It will, thus, be seen that since accountancy operates in a socio-economic framework as a 'service' function, the socio-economic activities and policies have a major bearing on accounting structures and processes. Socio-economic influences, the professional and institutional structures and the legal and statutory requirements are important factors in any assessment of a country's accounting system.

1.5 Exercise

A. Short-answer type questions :

1. What are the approaches to the formation of accounting theory?
2. How will you define 'accounting theory'?
3. Define deductive and inductive approaches in the context of accounting theory.
4. Give a brief note on structural theory for accounting.
5. How does legal environment influence the development of accounting theory?
6. Distinguish between accounting theory and accounting practice.

B. Long-answer type questions :

1. Explain meaning of accounting theory. Discuss the factors that have led to the development of accounting theory?
2. Discuss the foundation of accounting theory. What kind of accounting theory have we got upto now having based on that foundation?
3. Give a classification of accounting theory. How do those different kinds of accounting theories help in achieving the objectives of accounting?
4. "Accounting environment has a vital role to play in the development of accounting theory." Discuss.
5. Explain the nature of accounting theory currently in use. What are the limitations of this kind of accounting theory?
6. "The multitude of approaches to accounting theory represents confusion about the scope and limitations of accounting." Do you agree with the statement? Explain.

1.6 References

1. L. S. Porwal—Accounting Theory
2. E. S. Hendriksen—Accounting Theory
3. Glautier and Underdown—Accounting Theory
4. A. K. Basu—Rediscovering the Balance Sheet.

Unit 2 □ Capital and Income

Structure

2.0 Concept of Capital

2.1 Accounting Concept of Capital

2.2 Economic vs. Accounting Concept of Capital

2.3 Maintenance of Capital

2.3.1 Maintenance of Nominal / Financial Capital

2.3.2 Maintenance of Physical Capital

2.3.3 Real Capital Maintenance

2.4 Concept of Income

2.4.1 Economic Concept of Income

2.4.2 Accounting Concept of Income

2.5 The Principles of Realisation/Revenue Recognition

2.6 Principles of Matching Allocation of Cost

2.6.1 Historical Cost Convention

2.6.2 Current Purchasing Power Method

2.6.3 Current Replacement Cost Method

2.6.4 Net Realisable Value Method

2.6.5 Discounted Cash Flow Method

2.6.6 Deprival Value Concept

2.6.7 Valuation of Liabilities

2.7 Balance Sheet Approach Vs. Matching Approach

2.8 Exercise

2.9 References

2.0 Concept of Capital

That capital is the most important factor in production is accepted equally by accountants and economists. But as to the interpretation or meaning of the term 'capital', they apparently differ. This difference is not only between accountants and economists, but among accountants also there is divergence of opinion as regards the concept of capital. So, let us first see the accountants' opinion or accounting concept

of capital. Then, we may try to identify the areas of differences between the accounting capital and economic capital.

2.1 Accounting Concept of Capital

Ordinarily, accounting capital refers to what is invested in the business by the proprietors or owners. Supply of finance by other contributors to the businesses is named as loan or anything else. Only the proprietors' contribution gets the status of capital under this concept. As per the provisions of Companies Act also, capital is represented by the number of shares of certain denominations, which is nothing but the contribution of owners alone. The proprietors being at the focal point, this concept is known as the 'proprietary approach to capital'. According to this approach, capital is denoted practically by the claim of the owners to the firm's wealth, not by their contribution. However, at the beginning of a business- the contribution by owners' and 'claim of them' refer to the same amount. But after a few years, retained earnings, which are in true sense the earnings of owners, are added to the contributions, and claims of owners are increased in this way to some extent. Actually, this proprietary capital has the sense where the proprietary concept of accounting is adopted. Today we are more concerned with the entity concept of accounting. Capital assumes a different meaning under this concept.

There are many accountants who distinguish capital from sources of capital. According to them, a business firm may find it necessary to finance its capital needs from different sources but this will not alter the role that capital plays in the process of generation of income. Thus, capital represents here all the assets or wealth that have been devoted to the task of generating income. The assets may be financed fully by owners or partly by borrowing and partly by owners' contribution. So, this approach to capital is known as 'total asset approach' or 'total equity approach'.

There is one more interpretation to the term 'capital'. And, this is actually the most popular concept of capital. This is also one kind of 'assets approach' to capital. But instead of taking all the assets, it deducts therefrom the amount of 'current liabilities'. Current liabilities are payable on demand. As such, equivalent wealth or asset is required to be kept idle instead of using it for production purposes. In that sense, current liabilities cannot involve themselves in generating income, which is practically the basic criterion for considering something as capital. So, the 'capital' here means only the owners' capital plus long-term debt. In other words, total assets less current liabilities represent the 'capital' here. Net assets means assets less liabilities.

These different concepts of capital have their own merits and demerits. In fact, each of them is appropriate for an specific objective or purpose. What is proper for a particular purpose may not be so in a different context. For example, to measure management efficiency, total asset approach to capital is appropriate, whereas from the viewpoint of measuring the stability of the firm, the net asset approach or proprietary approach to capital is the best.

2.2 Economic vs. Accounting Concept of Capital

In economics, capital is defined as "the produced means of production". In other words, it is the stock of man-made equipment that is used for further production. Thus, the machinery, furniture, material which are the output of any past production process and is now used as input in the present production process are the constituents of economic capital. The phrase 'for production' is equally available in economists' and accountants' definitions of capital. But the accountants do not strictly adhere to the phrase 'produced means'. Hence, land is excluded from economic capital, though in accounting it is included in assets that comprise capital. Another point of difference between economists and accountants is as to the inclusion of financial assets as capital. Financial assets like debtors, receivables, bank etc. are considered as capital under the total assets approach of accountants. But economists take into account only the real goods in determining the amount of capital.

Not only in concept but also in valuation or measurement principles the accounting capital and economic capital do differ. While valuing assets, the accountants depend on the historical entry prices of the assets. The economists, on the other hand, value the assets having based on anticipated net inflows from the assets. However, at present there has been an attempt to bring a reconciliation between these two concepts of capital. Accountants are now using value-based measurements in many areas and this is bringing them closer to the economists. The economists have also to understand that their measurement principles are too subjective to be reliable or useful. Land when becomes ready to be used in any firm can be treated as produced means. Economists themselves therefore feel the question of inclusion or exclusion of land to / from capital is somewhat arbitrary. Financial assets when considered from the social point of view are automatically vanished, as for example, debtors of one firm are the creditors of others and they both are eliminated on consolidation. So, we may conclude that actually there is no difference between accounting and economic capital. The difference appears only because the accountants work in individual firms and the economists' workplace is the society as a whole.

2.3 Maintenance of Capital

Capital that is used in business is consumed in the process of production. A part of capital, known as working capital, is usually fully consumed whereas the fixed capital that is invested in durable assets like machinery is consumed in piecemeal way. Whatever it may be, the capital that is invested initially does not remain intact during or after one production cycle. It is converted ultimately into the revenue, and the revenue if taken away fully by owners for their personal use, the firm will not have sufficient capital to maintain the same level of operation. So, a part of the resource that amounts to consumed capital should be set aside and only the balance if any may be used for personal consumption. The first part of revenue is known as return of capital or recovery of capital and the second one as return on capital or income. This setting aside of return of capital is known technically as maintenance of capital which is actually a must if one firm is to repeat its production process or to maintain the going concern status.

Thus, we understand what the term 'capital maintenance' refers to. If an enterprise has at the end of a period the same amount of capital that it had at the period's beginning &, its capital is maintained. If after a production process the entity is at break even point or at zero income level, the capital is believed to be maintained. Capital is eroded if there is loss or if there is distortion in the measurement of profit. The second situation is more dangerous because a part of capital may be distributed as surplus without any knowledge of it. So, the concept of capital maintenance provides practically the starting point in determining income. The concept being so vital a number of approaches have been developed for it. At present, there are three dominant approaches to capital maintenance.

2.3.1 Maintenance of Nominal / Financial Capital

Of the three approaches to capital maintenance, maintenance of nominal capital is the oldest one. This is the most dominant view as well. In fact, most people are inclined to view capital in financial-nominal term, i.e., they want to measure profit only after the money value of investment is recovered. If the net assets of the enterprise are worth as many monetary units at the end of the period as the firm's net assets were worth at the period's beginning, capital is said to be maintained under this approach. The capital at the end of the period may be computed having based on different valuation approaches, but in real practice the nominal capital concept is said to be followed when historical cost constitutes the primary method of valuation.

According to Mitchell and Revsine, the nominal financial capital is a neutral information set or an internally consistent and valid measure. But it has its drawbacks as well. During inflation in particular it may give rise to a distorted picture and a part of real capital may be distributed as income. As a result the ability of the enterprise to maintain its current level of operations may be impaired.

2.3.2 Maintenance of Physical Capital

The physical capital maintenance concept focuses on the maintenance of the productive capacity of the enterprise. An enterprise is said to have maintained its physical capital if it has the same level of physical assets at the end of a period as at the period's beginning. There are again three approaches to the maintenance of physical capital itself—(i) maintenance of identical physical assets, (ii) maintenance of the capacity to produce identical volume of goods, and (iii) maintenance of the capacity to produce the same value of goods and services. The exponents of second approach are of view that completely identical assets may not be available year after year. According to them, it is sufficient if same volume of product can be produced with the existing assets. The third approach again seeks to achieve something more than what is called for in the second approach. Here value of the product is the focal point. When technology is changing very rapidly, old-fashioned goods of the same quantity may not yield same value. So, if we stick to 'identical physical assets' rule, obsolescence may lead to capital erosion. To survive in stiff competition may not also be easy.

The concept of physical capital maintenance is not a well-defined concept in accounting. According to Chambers and Sterling, this concept may have its applicability if only a number of conditions are satisfied. In real practice those conditions are hardly met. If financial assets are dominant or if asset-mix is continuously changing, the physical capital concept is difficult to apply.

2.3.3 Real Capital Maintenance

Physical capital concept being impractical in most situations, the concept of real capital maintenance has come into being. It is concerned with maintaining the purchasing power of the initial capital. If the capital at the end of a period can purchase the goods of same quantity and quality as it could at the beginning, the capital is said to be maintained in real sense. During inflation, purchasing power of money comes down. So, more financial capital is required to purchase the same kind of goods. This figure is found out under this system by some adjustments having based

on a price index. If inflation factor is zero, no adjustment is necessary. Nominal capital and real capital does not show any difference in that situation.

The approaches or concepts of capital maintenance as such are not equally feasible in all situations. Where physical capital maintenance is impractical, real capital maintenance may be used. But if inflation factor is insignificant, nominal capital maintenance may not be unjustified.

2.4 Concept of Income

The central theme of the accounting system is to determine income, which is considered to be the most important single objective of the firm. As a data generating system, the conventional accounting model is designed in such a way 'so as to highlight profit or income of business firm. So, concept of income is actually the focal point of accounting theory.

The term 'income' itself is a controversial one. The said controversy does not remain confined to accountants and economists alone. It is observed in other areas as well. Various terms like 'earnings', 'income', 'profit' or 'business income' are used interchangeably to denote more or less the something. The term 'income' however bears a broader view because any kind of factor remuneration like wages, rent, interest or profit can easily go by the name of 'income'. In accounting also the term 'income' may be preferable, because profit here consists of both return to organisation and remuneration of capital. However, we shall use both the terms to convey the idea. The way in which this concept is described in economics and accounting is outlined below.

2.4.1 Economic Concept of Income

Economists themselves are not unanimous as to any single concept of income. According to Adam Smith 'income' means net revenue that remains free after maintaining first fixed and secondly circulating capital. Haig stated that "Income is a flow of satisfaction, of intangible psychological experiences.....". Fisher, on the other hand, believed that capital is a potential service and services actually yielded by capital and what is consumed is income. Later on, Hicks also stressed on consumption while defining the term 'income', because his conclusion was, "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 beginning". Perhaps for this reason G. D. Roy remarked, "economists have a tendency to consider income of an individual more as a consumer than a producer". Keynesian definition is, however,

to some extent different as, according to him, $Y = C + I$, where Y stands for income, C for consumption and I for investment.

This 'consumption' or 'consumption plus investment' theory of income is more or less similar to the dividend and retained profit as viewed by accountants. There is also agreement between accountants and economists that income would be available only after maintaining the capital intact. But there is considerable disagreement as regards the valuation of capital that will necessarily result in different sets of income. Economists value the capital of the firm at two points in time, compare two values, and the excess, if any, is treated as income by them. The capital is valued on the basis of discounted future net receipts. That is, long before the sale or production income is recognised by economists. Estimated receipts may differ from actual receipt. Discount rate may fluctuate. Hicksian well-offness at two separate points of time is also very difficult to measure, as Hicks himself pointed out that one cannot compare alternatives which are not available together at the same time. Hence, under condition of certainty only the economic concept of income can be said to be ideal. In the presence of uncertainty, which is the general rule, the concept loses reliability because of its essentially subjective nature.

2.4.2 Accounting Concept of Income

According to accountants, business income or profit is an excess of revenue earned over its cost. The term 'revenue' has, however, many meanings. But what is most common of them consists of debtors, cash or receivables acquired in exchange of sale of goods and services produced. Closing stock in that sense is not a part of revenue. It is rather a negative 'cost'. In addition to this conventional definition of business income, accountants do also define profit as an increase of net assets or wealth at the end of an accounting period over what it was at the beginning with necessary adjustments for additions and withdrawals of capital. These two approaches to accounting income are known respectively as Matching Approach or Revenue-expense Approach and Asset-Liability Approach or Balance Sheet Approach. Mathematically, the first approach may be shown as-

$$\pi_t = R_t - E_t,$$

and the second approach may be depicted as-

$$\pi_t = N\omega_t - N\omega_{t-1} + D_t - I_t,$$

where π_t stands for profit, t for time, R for revenue, E for expenses, $N\omega$ for net worth, D for Dividend and I for fresh investment. Net worth again means assets less liabilities, i.e., capital.

Regardless of the approach adopted to measure the accounting income, it has always a time dimension. Accounting income or profit invariably means periodic income or profit. A few terminable venture-like enterprises are no doubt in existence. But in general, it is incumbent to consider the class of enterprises that have perpetual existence. In such cases, there is no alternative to the measurement of income at the interval of some arbitrary and, preferably, equal periods. At the end of such periods, the net resources of the business are not converted into cash ensuring a cash-ending basis of accounting like that of terminable venture. A part of resources is to be recognised as revenue, and the balance to be carried forward. The question of deferring the expenses that are not related to current period's recognised revenue, does also arise simultaneously. Valuation of the carried forward stock of resources is also not an easy task. That is, the convention of accounting period gives birth to a lot of accounting problems, and we cannot avoid them while measuring accounting income. In case of Revenue-Expense Approach to income, the recognition of revenue and matching of expenses appear quite naturally to be the core problems. And, in case of Asset-Liability Approach, valuation of assets and liabilities at two points of time becomes necessarily the basic problem. So, at this point it will not be out of place to have a brief discussion on them.

2.5 The Principles of Realisation / Revenue Recognition

On the date when we measure the periodic income there are likely to be many incomplete cycles and events. Finished goods and work-in process-both may be there. A part of finished goods may be sold. A portion of sale may not be realised in cash. Hence, the question arises, which is actually a crucial or critical question in accounting theory, as to when we should recognise that income has come into being. Economists usually recognise income at the event of creation of product. But the difficulty as to the valuation of that product debar accountants to take this point as the event of revenue recognition. The value at which the product can be sold in future may differ from the estimated value on the date of production. This uncertainty about both time and the amount of expected receipts and absence of evidence for verification of measurement, make accountants defer recognition of measurement of revenue till the arrival of sale point. Moreover, if the appreciation in value is considered distributable profit, management will have nothing to pay to owners as dividend other than the nuts or bolts of machinery or equipment. For all this, we interpret revenue, in accordance with the principles of realisation, as the outflows of product and inflow of cash or near-cash items in exchange of them at the sale point. The advantage of this interpretation is that the appearance of revenue, the act of its

recognition and the event of testifying its measurement, which is now ex-post, synchronise at the same moment.

But the principle of realisation is not free from its limitations. By focusing on only realised revenues, it may lead in some cases to absurd results. Suppose, two investors each has Rs. 1000 to invest. Each invests the amount in a company. The shares of the company double in value by the end of a period. On the last day of the period the first investor sells his share for Rs. 2000 and re-invest it in another company. The second investor holds his shares in former company valued at Rs. 2000. Both are equally well-off, but under the principle of realisation it will be seen that the first investor has earned an income of Rs. 1000, and the second one has not earned anything.

2.6 Principles of Matching! Allocation of Cost

The matching principle constitutes the central plank of the revenue-expense approach to profit. Under this approach, costs of resources consumed in the generation of revenues should be matched against the revenues. The principle requires costs to be expensed and reported in the same accounting period as the revenues they helped generate. Although the matching notion has its applicability in many areas of accounting operations, it is usually discussed in the context of matching revenues with expenses. The idea underlying the principle of matching is very simple. Expense and revenue has a cause-and-effect relationship. Expense is, as if, an effort and revenue is the accomplishment. Accordingly, if these two are not associated neither the analysis of cause-and-effect nor the efficiency of effort can logically be judged. Hence in accounting; profit is defined as the excess of revenue after matching the relevant cost. Cost in this context may be divided into two groups-expired cost and unexpired cost. Cost that is matched against revenue is actually the expired cost because no further benefit can be generated from it. Unexpired cost is not charged against current revenue on the assumption that benefit therefrom will generate later. Thus, matching principle in a sense is the principle for allocation of cost among different accounting periods.

This allocation principle or matching principle involves estimates, judgements. It is to be assumed that costs being deferred will contribute to future revenues. The operation of the matching principles also requires forecasting of future revenues. But this goes against the principles of objectivity in accounting. This may be the reason for which the matching principle is no longer regarded as the fundamental principle of accounting. Because matching is an arbitrary process, many are in favour discarding it. According to these people, if a meaningful concept of profit is to be developed,

attention should be shifted to assets and liabilities. That is, they are favouring the balance sheet approach to accounting, which was actually the only method of profit measurement in ancient time. During the first half of the twentieth century, the importance of the balance sheet was gradually reducing and the profit and loss account was being treated as the most significant financial statement. Now again we are trying to shift towards the balance sheet, and hence the revenue-expense approach to profit is being replaced by the asset-liability approach. But this approach is not beyond criticism as the effects of cost convention create a lot of problem here. The convention as such may be summarised below.

2.6.1 Historical Cost Convention

The asset-liability approach to profit measurement requires the valuation of assets and liabilities or net wealth at two points of time. Central to this valuation process is still the historical cost which conflicts clearly with the going-concern convention of valuation when the value of money itself is changing. This method of valuation seriously distorts the measurement of income, particularly during inflation. The distortion results from the difference between the historical cost and the current cost which is a function of the time gap between the acquisition and utilisation of assets. Under conditions of rising prices, the historical cost may bear no resemblance to the current cost of assets. As a result of that income is overstated. The principles of conservatism is also contrasted thereby, as even if there is clear indication of cost enhancement we do not make provision thereof.

This historical cost convention creates a particular problem during inflation when money units of different purchasing power are brought together in the accounting process, as if they were money units of same value. Such arithmetic is quite incorrect, for it involves adding together amounts expressed in different measurement scales. Put another way, historical cost 'mixes apples and oranges'. Owing to this additive problem the values that we obtain having based on historical cost do give us a distorted figure of net wealth. Profit measured on the basis of that net wealth is bound to be distorted therefor.

The main advantage which is claimed for historical cost valuation is that it is verifiable, and hence it satisfies the criterion of objectivity. It may be argued, however, that if it is only the objectivity which the accounting is seeking, it should restrict itself to counting cash, since this asset is only one in respect of which complete objectivity is possible. As soon as accountants move away from it, he is dealing with subjective factor. Consequently, true objectivity is not possible under historical cost valuation also. Having based on this argument possibly, a number of alternative valuation processes have been developed. The important ones of them are :

- (a) Current Purchasing Power Method (CPP)
- (b) Current Replacement Cost Method (RC)
- (c) Net Realisable Value Method (NRV)
- (d) Discounted Cash Flow Method (DCF), and
- (e) Deprival Value Method.

It will not be out of place to discuss all these methods in the context of income determination under the balance sheet approach. Because net wealth is the focal point of this approach, and each of the aforesaid methods of asset-valuation attempts to give us a fair and relevant measure of net wealth.

2.6.2 Current Purchasing Power Method

If the value of money is changing, it is clear that money standard of measurement ceases to be efficient. Financial reports should be adjusted, therefore, for the effects of changes in the value of money. If this is done it will help—

- (i) to provide a more accurate basis for assessing the value of a shareholder's investment in a company;
- (ii) to enable more meaningful comparison to be made between the reported results of successive years; and
- (iii) to enable more meaningful inter-company comparisons to be effected.

The CPP method attempts to perfect historical cost accounting by conversions money amounts to a common purchasing power unit of measurement. In CPP measurement, the figure generated by the historical cost accounting model are adjusted using appropriate price index numbers. The underlying rationale for index number adjustment is that two items should be measured with the same scale of monetary unit so that the additive problem of historical cost basis is avoided and the resultant figures get a meaningful total. It will however, be mistaken to believe that this method can rectify valuation errors. This rather measures only the balance sheet amounts with a common measuring unit so that they are amenable to mathematical computation. The current purchasing power adjustment is done based on the following formula :

$$\text{CPP Value} = \frac{\text{Historical Cost} \times \text{Current Price Index Number}}{\text{Historical Price Index Number}}$$

The steps to be taken for the purpose are as follows :

- (i) Determination of historical values based on actual transaction / past transaction prices.
- (ii) Determination of appropriate price index number.
- (iii) Determination of CPP value based on formulae stated above.

For the purpose of CPP accounting, however, It IS necessary to distinguish between two classes of items-monetary and non-monetary items. Monetary items are those which are fixed by contract in monetary terms. Cash, debtors, loans or claims to specified sums of money are the examples of monetary items, whereas fixed assets and stocks, shareholders' equities are non-monetary items. Monetary items do not require CPP adjustment as automatically their purchasing power comes down or goes up along with deflationary or inflationary trends. As in case of non-monetary items this does not spontaneously happen, they should be adjusted based on some general price index.

The CPP accounting attempts to remove the major objection to historical cost valuations that the latter does not recognise the fact that unit of measurement changes when price levels change. Objectivity, as required in financial accounting is also maintained here as primarily this is based on historical cost and the price level adjustments are also verifiable by reference to the index used to measure changes in the purchasing power of money.

But CCP accounting is not also free from its limitations. As stated earlier, companies still should continue to publish accounts on a historical cost basis, and CPP accounting can be presented only on supplementary basis. These two types of information in same statement will, according to Sandilands Report, confuse the users of financial reports. There is not general agreement as to what is the best inflation index to use in CPP adjustment process. Moreover, the general price indices that we use here assume that price of all goods will move toward same direction at an identical rate. But only by coincidence this can happen. Indeed, there is no reason why the prices of different goods may not move in opposite direction. Again, it is criticised on the ground that CPP-adjusted figures do not necessarily maintain the service potential of capital. For all these reasons, accountants have tried with some other valuation methods. They are discussed below one by one.

2.6.3 Current Replacement Cost Method

An asset's current replacement cost is what a firm would require to replace the asset on a given date. Hence, under current replacement cost method assets are stated in the balance sheet at their current replacement value, i.e., which would have to be paid for bringing the similar assets into the business. This replacement cost basis of measurement has attracted a lot of support in recent years as it attempts to maintain the service potential of capital as we need in a going concern. This is also considered to pass both the additivity and usefulness test. Moreover, this is often justified as a reasonable surrogate for net present value.

In view of all the above, the replacement cost basis is no doubt an improvement over the historical cost basis of measurement, but there are some serious problems associated with it. The underlying assumption behind this method is that the firm is continuously replacing its assets. But this is not always a valid assumption. It is also criticised for the reason that it violates the realisation test. Thirdly, this method is completely inapplicable as active second-hand markets are almost non-existent for used equipment or partially produced products. Then, how shall we assess the replacement cost of assets that are in use in the firm? For this reason, most are avoiding this method and of opinion that this method may be theoretically sound, but in practice it cannot gain ground.

2.6.4 Net Realisable Value Method

Net Realisable Value Method is also known as Current Exit Price Method whose objective is to report assets on the balance sheet at their current realisable value. An asset's current realisable value means the cash amount that the asset could fetch if sold currently in the ordinary course of business. R. J. Chambers is the staunch supporter of this method of asset valuation. R. R. Sterling is another accounting writer who holds strongly that this method is an objective and dependable measure of value. According to them, net realisable value serves a very useful purpose in providing a basis for assessing the adaptive ability of a firm in a changing business environment. When environment changes, a firm is to change its asset-mix for survival and growth. Whether the firm is able to do this or not is determined greatly by the amount of cash that its assets can command. Thus, in dynamic situation, which is at present a rule of the day, the present method is best-suited. By contrast, replacement cost accounting is suitable only in a relatively static situation that is at present totally non-existent. A further argument in favour of realisable value lies in its relevance to the needs of creditors. Creditors while extending credit facilities, be it with security of assets or not, take into account the current cash equivalent of assets held by the company. It is also argued that, as this concept leads to realisable instead of realised profit, the profit as such is an acceptable surrogate for economic income. Net realisable value doesnot require arbitrary cost allocation practices.

Thus, net realisable value has a number of advantages no doubt, but it cannot be denied that it does not adhere to the going concern concept. This is effectively a break-up basis of accounting which is usually adopted at the time of liquidation or winding up of the business. Moreover, assets that are now used in different firms, are mostly specific in nature to the respective firms. Other ones may not get so much benefit having purchased the same. As a result, the assets are likely to have low realisable value, and in some cases no value though the assets continue to provide benefit to the respective enterprises.

2.6.5 Discounted Cash Flow Method

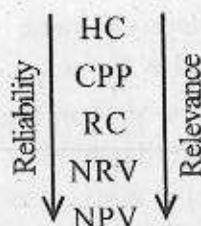
Under this method, the value of an asset is obtained by calculating the discounted net cash inflows expected to be derived from the asset. The value as such is known as economic value or net present value. This is called economic value of asset because economists do value the assets or capital based on this method. The determination of this kind of value requires the projection of future cash flows related to the asset and discounting those cash flows to the present value using an appropriate discounting rate. The steps to be taken, therefore, to reach this value may be shown as below :

- (a) Estimation of future net cash inflows
- (b) Determination of timing of those inflows
- (c) Determination of discount rate
- (d) Computation of discounted values
- (e) Determination of asset value which is the sum total of all the discounted amounts.

If it is to be shown algebraically, it will appear as follows : $P = \frac{F}{(1+i)^n}$ where P = present value of asset, F = future cash inflows, i = discount rate and n = number of years.

Although the logic of the discounted cash flow is impeccable, it has some serious practical problems of its own. Estimating future cash flows and also the discount rate is highly subjective, particularly in this age of uncertainty. In fact, the formidable problem that lies with this method relates to the estimation of cash flows of a single asset. Cash flows are virtually impossible to estimate except when they are contractually fixed. In most businesses cash flows result from a number of assets working together. Contribution of human asset is tremendous in this respect. As a result, it is rather absurd to identify or isolate the cash flows produced by a single asset. On this point at least accountants cannot accept economic values of assets. This may be an ideal basis for measuring the value of an entity as a whole. But there also remains the subjectivity as to the estimation of future cash flows and that of discount rate.

Thus, we see that both the accountant and economist are continuously in search of a relevant and reliable basis for the valuation of assets. But the discussion so far made exhibits that none of the methods fulfils simultaneously the reliability and relevance criteria. Rather, it appears that these two criteria are, as if, mutually exclusive so far as at least the usefulness of several valuation methods is concerned.



As we move from historical cost basis to net present value method, relevance will move with us in the same direction, whereas the reliability will move towards opposite direction. That is, when we try to get one in any of the method of asset-valuation we cannot but sacrifice the other almost proportionately. So, none of the methods is self-sufficient or unmixed blessing in the context of supplying useful information as to profit or capital. In view of this, we have get a mixed measurement approach that has been coined as Deprival Value Concept.

2.6.6 Deprival Value Concept

Deprival value concept is actually a mixed measurement system that is developed within the broad framework of current value accounting. As we have seen earlier, the current value of an asset can be determined based on replacement cost, net realisable value or net present value. Though for some assets these alternative measures give the same value, in many cases the differences may be significant. In the latter cases, one should select the method which will produce more relevant value of assets. It is said that current value of an asset is at its most relevant point when it reflects the loss that the entity would suffer if it were deprived of the asset involved, J.C. Bonbright is said to be the father of this concept, though he developed it for some other purpose. The amplified version of the concept initiated by Bonbright has come to be known as deprival value. According to the accounting writers, this deprival value of an asset can never be more than the amount needed to replace it. This is because if the owner were deprived of an asset he could restore his original Position by buying a new asset. Thus, the replacement cost is vital here. But before that we must determine whether the asset is worth replacing or not. An asset's, if not replaced, is either used or sold in the market. In that case, if the owner is deprived of the asset then the loss of the owner will be equal to the recoverable amount from the asset either by use (NPV) or by sale (NRV). So, while computing the deprival value of an asset we are to determine first the recoverable amount from the asset. This will obviously be higher of NPV and NRV. Then it will be necessary to know how much it would cost to replace the asset. If the replacement cost is lower, we

will replace the asset and the deprival value will then be the replacement cost. Otherwise the higher of NPV and NRV will come out to be the deprival value.

As historical cost has no role to play in finding out deprived value, it does not suffer from additive problems or the like. In most cases, replacement cost becomes the deprival value and hence the latter is relevant as well as useful for decision-making. Where replacement is not viable, the basis of measurement is shifted to recoverable amount. In pure replacement cost system this flexibility is not available. In that sense deprival value is better than replacement cost. Still, its critics are not small in number. It is alleged that the deprival value is an unrealistic concept, as actually the firm is not deprived of the asset. This may give birth to what is known in economics as 'psychic income'. Moreover, as different assets under this concept may be valued under different methods, the aggregate of balance sheet will suffer to some extent from the additivity problem.

2.6.7 Valuation of Liabilities

Balance sheet approach to accounting income requires not only the valuation of assets, but also that of liabilities. But the fact is that the amounts payable in respect of most liabilities are determined by contract or agreement. Hence, though it is argued in some corners that liabilities should also be valued having based on same reasoning as in case of assets, in practice liabilities are valued based on their contractual amounts. Assets and liabilities being valued in this way may give us the net wealth of an enterprise on a particular date. By comparing such net wealth at two points of time we may get the surplus or deficit in net wealth over a period of time. This is income under balance sheet approach.

2.7 Balance Sheet Approach vs. Matching Approach

We have put forward two approaches to income measurement: Asset-Liability Approach and Revenue-Expenses Approach. Under the transaction or matching approach, accounting income is determined by matching revenues and expenses. But revenues are denoted by resource (or asset) inflows and expenses by resource outflows. Expired costs refer to expenses. But the measures of cost expirations are derived mainly on the basis of recorded values of assets. So, different measures of revenues and expenses are likely to arise from adoption of different methods of valuation of assets. As for example, if expired costs are measured on the basis of historical costs of assets we will get one measure expense (on depreciation etc.) and this expense will differ significantly if, instead of using historical costs, some other current costs

are used, So, due to additive or allocation problem if transaction approach is subjective or arbitrary, the balance sheet approach is equally so or *vice versa*. All the problems lie in the concept of accounting period. As we want period income instead of lifetime income, we cannot avoid subjectivity. No forecasting, no estimation, no allocation, no valuation problem arise in case of lifetime profit. So, whatever concept we lead of capital valuation adopt, the result will be the same. That is, finally all roads to Rome, but that life time profit is available only after the liquidation of business or only in case of venture-like businesses. But as we are concerned more with going concern we must bear with the subjective periodic profit. However, the users of accounting information must be well aware of this limitation of periodic profit. They will be able then to make some adjustments that is necessary to suit their individual problems to different situations. Some accountants prefer therefore the cash profit, instead of the profit measured on accrual basis. This point will be discussed in the next chapter.

2.8 Exercise

A. Short answer type questions :

1. Name the approach that takes the aggregate of all assets as capital.
2. How are 'net assets computed?
3. What are the constituents of residual equity?
4. Name three approaches to capital maintenance?
5. What are the alternatives to historical cost approach to asset valuation?
6. What do you mean by proprietary approach to capital?
7. Distinguish between proprietary capital and entity capital.
8. Can money be treated as capital?
9. Real capital is also one kind of financial capital-Do you agree? Give reasons.
10. What do you mean by transaction approach to income?
11. Define balance sheet approach to income measurement.
12. Give a brief description of net present value method.
13. Discuss in brief the features of the current purchasing power method (CPP) of asset valuation.

B. Long-answer type questions :

1. Explain the accounting concept of capital. How does it differ from the economic concept of capital? How would you reconcile the two concepts?

2. (a) 'The concept of capital maintenance is at the centre of accounting theory.' Do you agree? Explain.
(b) Discuss different approaches to capital maintenance.
3. Critically examine the different approaches to capital maintenance. How does capital maintenance affect profit?
4. 'Historical cost convention poses a number of problems to income measurement.' Discuss.
5. Alternative approaches to historical cost measurement may be relevant but not reliable-Discuss.
6. Distinguish between accounting concept and economic concept of income. How do accountants themselves differ in measuring accounting income?

[Hints : Economists are interested in the overall income of the society but accountants measure the income of individual enterprise. Different interested groups have legal claims on reported income. So unlike economists, they rely more on reliability than on relevance. Economists claim that their income is more relevant, but as Canning himself observes economists income is subjective, and subjective figure cannot be relevant or useful.

Economists speak of 'psychic income or real income consisting of goods and services. But accountants always speak money income, be it the real income expressed in money value or the nominal income in terms of money units.

Accounting income refers mainly to net income to stockholders or to equity. But in economics all the factor costs like wages, rent etc. are also treated as income, though in hands of other people.

Economists generally treat capital gains as windfall income but accountants never include it in income statement.]

7. Discuss the relationship between capital and income. Illustrate in this context two terms-return of capital and return on capital.

[Hints : Return of capital means recovery of capital and return on capital means income.

Capital is stock of benefit, income is flow of benefits.

Capital is, as if, a tree, income is its fruits.

Capital is embodiment of potential services, income IS enjoyment of services.

Capital is like a reservoir of water, profit is the flow of excess water out of it.

Capital and income are so closely related that if one is distorted due to wrong measurement or faulty approach, the other will also be distorted. If return of capital is measured wrongly, return on capital will also show a distorted figure, as they are two slices of one thing—revenue. Balance sheet and profit and loss account exhibit this fact very clearly. If net profit in profit statement is inflated for any reason, capital will also be inflated or *vice versa*].

2.3 References

1. Glautier and Underdown—Accounting Theory
2. Mukherjee & Roy (ed.)—Studies in Accounting Theory”
3. G. C. Sinha (ed.)—Studies in Accounting Thought
4. A. K. Basu—Rediscovering The Balance Sheet
5. Vernon Kam—Accounting Theory

Unit 3 □ Cash Flow Accounting

Structure

- 3.0 Cash Flow Accounting—Its Rationale**
- 3.1 CFA-Meaning & Features**
- 3.2 Historical Cost Accounting Vs. Cash Flow Accounting**
- 3.3 Status of CFA**
- 3.4 Exercise**
- 3.5 References**

3.0 Cash Flow Accounting—Its Rationale

As Lawson has emphatically remarked, "Cash flow accounting (CFA) constitutes the analytical framework for linking past, present and prospective financial performance. It is therefore a vehicle which may be used to disclose the past development of the finances of business. Alternatively, it may be used as a system for disclosing the determinants of the true return shareholders are likely to receive in the future. Cash flow accounting may therefore also be regarded as an aid to investor decision-making."

From this it is crystal clear that CFA at present has a vital role to play. The question that needs to be examined is whether the present accrual-allocation based historical cost accounting is playing a useful role in assisting decision-making. Many studies have been conducted on this aspect and the general opinion of the studies is that historical cost accounting is not really helpful in investment, credit and similar other decisions. Here lies the importance of CFA which is the most objectively prepared allocation-free accounting. It is not affected by how reference flows are partitioned between periods. CFA, is an objective basis that takes care of both liquidity and profitability of a firm. It is also claimed by Hicks that CFA goes beyond accruals accounting to recognise all other future real cash flows, including the current value accounting concepts of future exit values for an asset and future replacement value to replace the asset. The CFA has been advocated particularly by Lee and Lawson of UK. In recent years this is being strongly supported by the accountants and economists due to the following reasons :

1. CFA, by providing the total estimated cash available to the company in future from all sources, encourages the origination of capital expenditure proposals in the company to make optimal use of the available cash.

2. Financial reports prepared on cash flow basis would provide capital expenditure decision-maker with numbers that can be used for projecting cash flows.

3. The future dividend stream can be easily forecasted from the cash flow statements (CFS). The shareholders thus will be in a position to take decision whether to sell off, or hold or further acquire the shares of firm.

4. The amount of internal cash available for financing the projects or working capital gap can be easily assessed and hence the share to be financed from outside can be estimated.

5. The creditors are also interested in cash flows while advancing loans to the company to know the credit status or viability of the company to repay them in time. Conventional accounting system has been found to be inadequate in supplying the information to them.

6. Managerial accountability would be greatly improved as the managers will not be able to 'window dress' the accounts under CFA. Under conventional accounting they can easily manipulate profits with the help of subjective accrual-based accounting.

7. CFA can serve a very useful purpose in evaluating the financial adaptability of the enterprise. That means with the help of CFA, a firm gets the ability to raise new capital at necessity, repay debt at short notice, obtain cash by selling assets without disturbing continuing operations, and achieve a rapid improvement in the net cash inflows generated from operations.

8. CFA also takes care of price level variations. This thus solves the controversy regarding the superior method of incorporating the effect of inflation.

9. A better set of share prices would emerge if more specific information of expected future cash flows is given on a regular basis. CFA performs this vital role.

10. Finally, it avoids the possibility of variability and manipulations which can result in case of the allocation-based accounting.

This being the importance of CFA in modern time, it is necessary to acquire some knowledge over its concept, nature and acceptability. The next sections touch upon these themes.

3.1 CFA-Meaning and Features

Cash flow accounting should not be confused with cash basis of accounting. It rather takes both cash basis and accrual basis into its system but completely rejects allocation as the basis. Besides cash and accrual as bases, it also takes into account the current value accounting concept for balance sheet purposes. Hicks explains CFA in the following words :

The CFA which means recording not only the cash receipts and disbursements of the period, but also the future cash flows owned to or by the firm as a result of selling or transferring title to certain goods. Both of these are real cash flows. To reject them would be ridiculous, particularly since the 'name of the game' in decision-making is future cash flows, and accruals are one type of future cash flows. CFA thus takes into account both cash basis and accrual basis of accounting and also goes beyond them to recognise all other future real cash flows, including the current value accounting concept of future exit values for an asset (cash inflow) and the future replacement value to replace an asset (cash outflow). Indeed, if one looks at capital budgeting and cash budget one may find cash flow concepts coming into play.

What appears from the above is that CFA considers cash flow on accrual basis and recommends a cash flow theory of accounting approach to the statement of financial position and the statement of changes in financial position, and the deletion of the income statement. Rayman, however, argued that financial reporting should be based upon traditional valuation methods as well as cash flow accounting so that the objectivity of the cash flow accounting can be segregated from the subjectivity of the traditional accounting.

If a complete cash flow accounting system is maintained, the transactions would be entered in the account books of a company when cash is received or paid out, and the income would be basically the difference between all cash received and all cash paid irrespective of the purpose. Further, the cash spent on acquisition of fixed assets would be charged in full to the year of acquisition and depreciation would be automatically abandoned for the purpose of published accounts. Then, the cash spent on acquisitions of materials, fuel, inventories and all other factors would be charged in full at the point of outgoing. But upto now such a complete CFA has not gained any ground. Currently, we are preparing a cash flow statement (CFS) and submitting it before appropriate authority along with conventional financial statements.

The cash flow statement, though described as a basic financial statement, is as a matter of fact, a derived statement. The data presented in this statement are all derived from the profit and loss account and the balance sheet. It has been developed mainly in order to overcome some of the limitations of the accrual-based data presented in the balance sheet and profit and loss account. A few authors have, however, suggested models whereby CFS can be prepared directly by deducting trading payments from trading receipts and adjusting thereto the non-trading receipts and payments. But they also are content with only the preparation of a cash flow statement for an arbitrary period, instead of claiming for a complete recording of transactions on day-to-day basis under CFA system. Thus, to mean CFA we still refer to just the CFS. The CFS exhibits the real net cash flows (RNCF) in a year. This RNCF may be obtained by using the following model that has been designed based on the formula given by a number of accounting writers on this issue.

$$\text{RNCF} = S - R \pm I - T - D \pm K \pm L \pm A \pm M, \text{ where}$$

S = Actual and most readily realizable cash inflows from sale

R = Actual and most readily payable cash outflows for operating expenses

I = Real cash flows as interest

T = Cash outflow for taxation

D = Cash outflow as dividend

K = Real cash flows for issue repayment of securities

L = Real cash flows for long term loan

A = Real cash flows for assets sold / purchased

M = Real cash flows for miscellaneous items.

The most important component of the CFS is operating cash flows and this is obtained by the first two items, i.e., S and R, of the model. There are, however, two alternative approaches to presenting cash flow from operating activities—the direct approach and the indirect approach. The approach followed in the model is actually the direct approach. According to the second approach, the net profit figure is the starting point in the computation of cash from operations. Revenue and expense items not affecting cash are added or subtracted to arrive at the net cash provided by operating activities. The indirect approach is easier to apply than the direct one. But the formats as set by the (CA) in AS-3 or by the SEBI in its guidelines all are designed based on the direct approach. As the Indian companies are guided by the professional pronouncements of the ICAI and the direction of the SEBI, it is quite natural that companies of our country will be inclined to adopt the direct approach

to CFS presentation. For this, we give below the format as prescribed by the ICAI. The SEBI-format in this respect is more or less the same.

Cash Flow statement
(as per AS-3)

	Rs.	Rs.
1. Cash flows from operating activities		
(a) Cash inflows (sale)	* *	
(b) Cash outflows (wage etc.)	<u>* *</u>	
		* *
2. Cash flows from investing activities		
(a) Cash inflows (sale of asset, investment or interest received)	* *	
(b) Cash outflows (Purchase of asset or investment)	<u>* *</u>	
		* *
3. Cash flows from financing activities		
(a) Cash inflows from issue of share etc.	* *	
(b) Cash outflows for redemption, payment of dividend etc.	<u>* *</u>	
		<u>* *</u>
4. Net increase or decrease in cash (1 + 2 + 3)		* *
Add cash at the beginning		* *
Cash at the end		<u><u>* *</u></u>

3.2 Historical Cost Accounting vs. Cash Flow Accounting

That historical cost accounting fails to provide relevant information, particularly in times of soaring prices, is known to one and all. During inflation the historical cost charged against revenue cannot recover the exhausted capital fully. Thus, the return on capital is inflated leading thereby to payment of dividend out of capital. This will result in capital erosion which may be termed as the beginning for the end of the firm. Still we resort to historical cost accounting on the plea that this is verifiable and objective. But while arguing in this way in favour of historical cost accounting we do perhaps forget that it is quite possible to illustrate the existence of subjective element in the accounts prepared having based on historical cost.

Historical cost accounting is an accrual-based allocation accounting. At the time of allocation of historical cost over a number of accounting periods, the accountants have to take, into account a numbers of accounting concepts like materiality, relevance, conservatism etc. All will agree that these concepts are nothing but the matters of opinion of different degrees. When we defer cost to match it against future revenues, we cannot but make forecast as to the time and amount of future revenues. Valuation of stock at cost or market price whichever is lower has also a subjective phenomenon. Usually, we follow the realisation principle. But in case of long-term contracts, we recognise revenue arbitrarily before completion of work. A. K. Basu has therefore rightly stated that the measures of wealth and profit provided by the balance sheet and the profit and loss account are just matters of opinion, whereas the only fact in business is cash. So, on the question of objectivity cash flow accounting is no doubt superior to historical cost accounting. Reporting results prepared on historical cost allocation basis can be influenced to a major degree, even in the bounds of professionally accepted practices for the selection of alternative accounting methods, by the self-interest of those controlling the organisation. But this problem of dubious allocation is avoided to a large extent in cash flow basis of accounting. Moreover, the cash flow accounting, by its inherent nature, recognizes time value of money and automatically takes account of inflation. Thus, during inflation also there is no chance of distortion of reporting results in CFA, though this is quite natural under historical cost-based accounting.

Historical cost accounting places too much emphasis on income that distorts the real cash flows in financial statements with the result that the users face a lot of difficulty in applying the information given for decision making. The investors particularly need cash flow measures because they invest cash in anticipation of receiving back cash flows sufficient to justify their investment. In that sense cash flow accounting can be said to be more useful to users in comparison to the conventional historical cost accounting. It is said that earnings or income should be viewed as only a surrogate to cash flow information. So, if earnings do not tell how well a project or division or corporation is doing in terms of cash flows, then the concept and measurement of earnings will be useless.

Historical cost-based accounts emphasize only on past figures preventing directors and managers concerned with shaping various policies and diverse decisions, from taking accurate predictions about the future. They have therefore voiced their dissatisfaction with the conventionally prepared accounting statements. CFA, on the

other hand, is helpful to them as it reports the historic, current and forecasted cash flow data together with assumptions for forecasts and explanations for material deviations.

One of the major limitations of historical cost accounting is that it is not easily understandable by less skilled or unsophisticated users. It is said that accountants prepare accounts only for accountants: But CFA simplifies the financial statements to a large extent by reducing the use of accounting terminology and methodology: Besides, since the financial statements prepared on historical cost basis allow a lot of flexibility in the reported income and financial position, the general users become rather confused. CFA, in that case, tells everything in a straight way enhancing the understandability and comparability of accounting information to users.

In view of so many problems associated with earnings statements prepared under historical cost accounting and a number of advantages of cash flow accounting, people like Hicks have outlined a number of reasons for rejecting the former in favour of the latter. But such a hasty decision is perhaps not desirable. A study of different proposals on cash accounting reveals that it will take time before it is acceptable to conservative accounting profession. Moreover, it needs to be stressed that cash flow for a single period has little relevance. A comparison of cash flows over several periods is necessary to begin to observe the behaviour and frequency of non-recurring flows. Accrual based historical cost accounts of a single period, on the other hand, is sufficient to provide necessary information as to recurring and non-recurring expense and revenue. Besides, the historical cost accounting smooths out the income or cash flows of different years with the help of judicious allocation technique, whereas the cash flow accounting may exhibit a highly uneven picture from year to year. So, it is suggested that CF A information should be reported as supplementary to the historical cost-based profit and loss account and balance sheet.

3.2 Status of CFA

In view of importance of CFS in measuring liquidity and solvency position of a firm, it has been made mandatory as part of an essential component of annual accounts in many countries, viz., Australia, Canada, Japan, Newzealand, the UK, the USA etc. But in India a CFS does not form part of financial statement to be prepared under the Companies Act, 1956.

But many companies-particularly the listed ones have started incorporating CFS in their annual accounts. One reason for such a trend in corporate accounting

practices in India is that, as per SEBI guidelines, a listed company is required to prepare, among others, a cash flow statement and get it audited. The ICAI has also revised its accounting standard relating to CFS on the basis of IAS-7 issued by IASC. Following the international trend, a standard on CFS has replaced AS-3 which deals with Funds Flow Statement. The revised AS-3 is recommendatory.

In the USA, Statement No. 95 issued by FASB in 1987 required companies to prepare CFS from the year 1988. The IASC issued in 1992 a standard on Statement of Changes in Financial Position which deals with cash flow statement. Since international accounting requirements are quite similar with respect CFS according to Statement No. 95 of FASB and AS-3 of ICAI, a brief discussion on any of them may be worthwhile.

According to the aforesaid requirements a CFS is required to be classified into three heads, namely :

- (a) Cash flows from operating activities,
- (b) Cash flows from investing activities, and
- (c) Cash flows from financing activities.

According to Statement No. 95 of FASB, some cash flows relating to financing or investing activities are grouped as operating activities. Examples are : payment of interest on term loan, interest and dividend received. These items are classified as operating cash flows because they normally appear in the income statement. In India, separate treatments have been suggested in the SEBI guidelines and in AS-3, for financial and non-financial companies. For example, 'according to AS-3, for a financial company, cash flows arising from interest paid, and' interest and dividend received should be classified as cash flows from operating activities. In case of other companies, interest paid should be shown under financing activities while interest and dividend received should be shown under investing activities. There is however, no difference in the treatment of dividend paid which should be shown under financing activities in all cases.

Compared to AS-3, SEBI guidelines in this respect are quite flexible. According to SEBI, cash flows from interest and dividend received and paid should each be disclosed separately. Each should be classified in a consistent manner from period to period as either, operating, investing or financing activities. Interest paid and interest and dividend received are usually classified as operating cash flows for financial institutions. However, there is no consensus on the classification of these cash flows for other companies. Interest paid and interest received may be classified as operating cash flows because they enter in to the determination of net profit or

loss. Alternatively, interest paid and interest and dividend received may be classified in financing cash flows and investing flows respectively because they are costs of obtaining financial resources or returns on investments. Dividends paid may be classified as a financing cash flow because they are cost of obtaining financial resources. Alternatively, dividends paid may be classified as a component of cash flows from operating activities in order to assist users to determine the ability of a company to pay dividends out of operating cash flows.

The IASC has adopted a flexible approach regarding classification of the above items. It allows companies to choose the procedure they like but a consistency in practice is required to be maintained. The ICAI or SEBI is also not so rigid as to the methods of presentation of CFS by reporting companies. This is evidenced by the fact that most of the listed companies in India use indirect method for preparation of CFS, though ICAI and SEBI prefer the direct method. In the USA also, inspite of the preference of FASB to direct method most companies there are found to use the indirect method of CFS presentation. Companies favour indirect method for two reasons : (i) it is simple and easy to prepare and (ii) it focuses on the difference between net income and net cash flows from operating activities.

3.4 Exercise

A. Short answer type questions :

1. Distinguish between cash flow accounting and cash basis of accounting.
2. How does CFA take care of inflationary effect?
3. Name the accounting standard issued by ICAI that deals with CFS.
4. Has the IASC any accounting standard on CFS? If so, mention it.
5. What is SEBI?
6. What do you mean by listing companies?
[Hints : Companies listed in any stock market]
7. What are the alternative methods for presenting cash from operations?
8. Define 'indirect method' for presenting cash from operations.
9. Define cash flow accounting. How does it differ from accrual accounting?
10. How do SEBI guidelines differ from IASC requirements as to the presentation of interest and dividend in CFS?
11. Offer an outline of the cash flow model that is based on the direct method of CFS.
12. State the objectives of CFA.

B. Long answer-type questions :

1. Define CFA. What is the justification for CFA?
2. Offer your arguments for and against the replacement of historical cost accounting by cash flow accounting.
3. Discuss the basic features of cash flow accounting. Suggest a format of CFA on basis of its features.
4. What are the advantages of CFA over accrual basis of accounting? Do you agree that the accrual basis of accounting should be dispensed with right now?
5. What is CFS? What is the present status of CFS in India and abroad?

3.5 References

1. L. S. Porwal-Accounting Theory
2. Mukherjee & Roy-Studies in Accounting Theory
3. B. Banerjee-Financial Policy and Management Accounting
4. Indian Journal of Accounting-June & December, 1982, December 1987.

Unit 4 □ Conceptual Framework for Accounting and Reporting

Structure

- 4.0 Introduction**
- 4.1 Meaning and Characteristics**
- 4.2 Purpose and Benefit of Conceptual Framework**
- 4.3 Nature and Scope**
 - 4.3.1 Objective of Financial Statements**
 - 4.3.2 Nature of Financial Statement**
 - 4.3.3 Qualitative Characteristics of Accounting Information**
 - 4.3.4 Constraints on Qualitative Information**
- 4.4 Exercise**
- 4.5 References**

4.0 Introduction

Until very recently there did not exist any unified theory on accounting and reporting acceptable to all. A number of stray attempts have been made in the past to develop such theory. It has been felt for long that the whole work needs to be done under a broad overall structure named as the 'Conceptual Framework for Financial Accounting and Reporting. This term was coined by the American Institute of Certified Public Accountants (AICPA). Actually, the first attempt towards the formation of this structure was taken up by the AICPA itself. Several accounting writers have also conducted their study in the pursuit of developing a framework. Concerted efforts were made only after the formation of the Financial Accounting Standards Board (FASB) in the USA in the mid-seventies. The FASB issued a number of conceptual documents to establish a conceptual framework for accounting. These are known as Statements of Financial Accounting Concepts (SFACs). They together have been known as the Conceptual Framework for Accounting and Reporting in the USA. Later, the International Accounting Standards Board (IASB), which was earlier known as the IASC, undertook the task of developing a conceptual framework. In 1989 the IASC published such a framework which was adopted by the IASB in 2001. In Australia, three Statements of Accounting Concepts were

published in 1990 and these were treated as the Conceptual Framework of that country. The Accounting Standards Board of the UK published its Statement of Principles for Financial Reporting in 1999. The Institute of Chartered Accountants of India has also published in the mean-time a Framework for the Preparation and Presentation of Financial Statements. Thus, there has been now a world-wide wave towards the development of a conceptual framework for accounting and reporting.

4.1 Meaning and Characteristics of Conceptual Framework

A conceptual framework has been defined by Miller, Redding and Bahnson as "a collection of broad rules, guidelines, accepted truths and other broad ideas" about the field. In respect of accounting, it may be defined as a constitution, a coherent system of inter-related objectives and fundamentals that can lead to consistent standards and that prescribes the nature, function, and limits of financial accounting and financial statements. The objectives identify the goals and the purposes of accounting. The fundamentals are the underlying concepts of accounting that guide the selection of transactions, events and circumstances to be accounted for, their recognition and measurement, and the means of summarising and communicating them to interested parties. These basic accounting fundamentals will be the basis for the development of financial accounting and reporting standards. These are the ground work, the basis, the foundation upon which the superstructure of standards can be created. The conceptual work, it is therefore said, is intended to act as a constitution for the standard-setting process. The concepts will establish the objectives and fundamentals. The objectives and fundamentals will be used in developing standards of accounting and reporting. In turn the standards will help in developing principles and procedures. The complete process as such can be termed as conceptual framework which has at least four levels of detail as follows.

(a) It sets out the objectives of financial reporting and leaves it to the rule-makers to construct rules that are in conformity with these objectives.

(b) It sets out the basic general principles that should govern financial reporting, the detailed rules are developed by the rule-makers within the limit set by these principles.

(c) It lays down all the necessary rules based on axioms and the application of deductive logic.

(d) It serves as a form of technical dictionary that define's the concepts used by accountants.

There are two fundamental ways in which the aforesaid broad rules are developed: deduction and induction.

(a) **Deduction:** When this approach is used, the aim is to set out a logically complete system consisting of a set of axioms, whereby the detailed rules of financial reporting may be derived from the axioms by the application of deductive logic, in the same way that the theorems of geometry are derived from its axioms.

(b) **Induction :** In this approach, the conceptual framework is based on the existing practice of accountants. However, the inductive approach involves much more than a simple description of what accountants do; it involves an analysis of the great diversity and variety of practice with the aim of discerning the underlying principles which are then presented in the form of a comprehensive and coherent framework.

An alternative way of classifying a conceptual framework is according to whether its objective is normative or positive. A normative framework seeks to prescribe the rules that should be followed. A positive framework limits itself to describing existing practices without judging whether it is good or bad. Thus, a normative framework is a prescription for future practice; a positive framework is a description of present practice. In principle, framework based on deduction cannot be positive, as deduction is based on logical reasoning and not on observation of the real world. Frameworks that use the inductive approach are generally positive, but it is not impossible for such a framework to include normative elements as it seeks to recommend the best features of present practice.

4.2 Purpose and Benefit of Conceptual Framework

From the definition of conceptual framework it is clear that framework as such is a must if the accounting standards are to be based on solid foundation. Other benefits that may be expected from having a conceptual framework are listed below.

(a) **Economizing of effort :** Once the framework is put in place, the subsequent development of standards would be easier. Many financial reporting problems have common elements and they need not have to be thought through afresh each time they are encountered.

(b) **Gain in Consistency :** Standards developed on the basis of an agreed framework may be expected to be more consistent with one another than would standards that are developed based on adhoc arrangements.

(c) **Improved Communication :** Improved communication, both within the standard-setting body, and between the standard-setting body and the outsiders, should

be the result of setting down agreed definitions of concepts such as 'assets'. Earlier these agreed definitions were lacking. For example, as Solomons remarks, the term 'materiality' was widely used by accountants but not always to mean the same thing.

(d) **Defence against Politicization** : Given the fact that the accounting standards have an impact on the wealth and welfare of many people, it is expected that those affected by standards will seek to influence the standard-setting body in its decisions. It is generally agreed that the standard-setting body should take into account the concerns of such persons who will help develop a standard more relevant and practical. That is one of the reasons for the elaborate process of consultation that all standard-setting bodies practise. However, there is a danger that outsiders may be able to exert such powerful pressure on the standard-setting body that they are able to secure the inclusion in a proposed standard of particular points on which they place importance. The problem is aggravated by the fact that only those directly affected by the proposed standard are likely to make a serious effort to influence the standard-setting body; the great majority of persons are only slightly affected and do not bother. Such political interference is highly undesirable for a number of reasons.

(i) It leads to inconsistency between standards. This is almost inevitable if each standard is drafted to meet the interests of a different lobby. Inconsistency is not only intellectually unpleasing, but it can lead to practical problems as well. At the very least, inconsistency has a negative impact on the comparability of financial reporting, which is one of the prime objective of standards.

(ii) At the extreme, it results in standards being based on no principle other than to serve the interest of the most influential and powerful parties.

(iii) The role of the standard-setting body is to apply the principles of financial reporting in an even-handed neutral fashion in the interests of society as a whole. On occasions, it should stand up to particular interests and proclaim that what they are arguing is wrong, as being contrary to the fundamental principles of financial reporting.

The aforesaid analysis suggests that a conceptual framework is a weapon to be used by the experts in financial reporting to defend their territory against unwelcome intruders. However, the specific purposes that a conceptual framework may serve are given below.

* To assist the standard-setting body in the development of new standards and in its review of existing standards and in reducing the number of permitted treatments in standards.

- * To assist standard-setters in dealing with topics that have yet to form the subject of a standard.
- * To assist auditors in forming an opinion as to fairness of financial reporting.
- * To assist users in interpreting the information contained in financial statements.
- * To provide those interested in the work of standard-setters with information about its approach to the formulation of standards.

The framework, as the IASB states, will be thus helpful for the whole range of persons interested in financial reporting, standard-setters, preparers, auditors, users and even the general public.

4.3 Nature and Scope of the Conceptual Framework of Accounting

The leading accounting standard-setting bodies of the world formulated the conceptual frameworks for accounting and reporting. However, the frameworks so far formulated are more or less same so far as at least the elements and scope of the framework is concerned. The frameworks usually deal with :

- The objective of financial statements.
- The qualitative characteristics' that determine the usefulness of information in financial statements.
- The definition, recognition and measurement of the elements from which financial statements are formulated.
- The basic assumptions of accounting.
- The application of the basic principles of accounting.
- The impact of constraints that have on accounting information.

The frameworks are usually concerned with general purpose financial statements which are prepared and presented annually and are directed towards the common interest needs of a wide range of users. 'Special purpose financial reports, for example, prospectuses and computations prepared for taxation purposes are outside the scope of this framework. Nevertheless, the framework may be applied in the preparation of such special purpose reports where their requirements permit.

Financial statements form part of the process of financial reporting. A complete set of financial statements normally includes a balance sheet, an income statement or profit and loss account, a statement of changes in financial position and those notes and other statements and explanatory material that are an integral part of the financial

statements. They may also include supplementary schedules and information based on or derived from such statements.

The frameworks apply to the financial statements of all commercial, industrial and business enterprises, whether in the public or the private sectors. The enterprise for which there are users who rely on the financial statements as their major source of financial information, falls within the purview of conceptual framework. Users in this context include present and potential investors, employees, lenders, suppliers and other trade creditors, customers, governments and the public.

4.3.1 Objective of Financial Statements

It has been stressed on several occasions that objectives are the basis on which the superstructure of accounting theory can be created. It is because of the awareness of the importance of objectives that all of the conceptual frameworks formulated so far have outlined at the very outset the objectives of financial statements. Objectives as set in different frameworks are more or less the same. The American framework was developed before that of the IASB and undoubtedly had a strong influence on the contents of the latter. Indian framework again has been developed taking IASB's framework as the basis. So, it is sufficient to mention the objectives of financial statements of anyone of the frameworks. However, we shall point out here the objectives as given in IASB's framework, as this has a world-wide application. Objectives as given in SFAC No.1 of USA may also be mentioned in this context as it is treated as the pioneer in the field.

According to IASB's Framework, the objectives of financial statements are as follows.

1. The objective of financial statements is to provide information about the financial position, performance and changes in financial position of an enterprise that is useful to a wide range of users in making economic decisions.
2. Financial statements prepared for this purpose meet the common needs of most users. However, financial statements do not provide all the information that users may need to make economic decisions since they largely portray the financial effects of past events and do not necessarily provide non-financial information.
3. Financial statements also show the results of the stewardship of management, or the accountability of management for the resources entrusted to it. Those users who wish to assess the stewardship or accountability of management do so in order that they make economic decisions. These decisions may include, for example, whether to hold or sell their investment in the enterprise or whether to reappoint or replace the management.

The conceptual framework of the FASB is set out in seven Statements of Financial Accounting Concepts (SFACs). Of the seven Statements two are related to the objectives of financial reporting. From this we may infer the importance of the objectives of financial reporting in the conceptual framework for accounting and reporting in the USA. After the consideration of the Trueblood Committee Report and the responses to the discussion memorandum (DM) on the report, the FASB issued Tentative Conclusions on objectives of Financial Statements of Business Enterprises in 1976. Two years later, the FASB issued SFAC No.1 that laid down the following objectives of financial reporting:

1. Financial reporting should provide information that is useful to present and potential investors and creditors and other users in making rational investment, credit and similar decisions.
2. Financial reporting should provide information to help present and potential investors and creditors and other users in assessing the amounts, timing and uncertainty of prospective cash receipts from dividends or interests and proceeds from sale, redemption, maturity of securities or loans.
3. Financial reporting should provide information about the economic resources of an enterprise, the claims to those resources and the effects of transactions and circumstances that change resources and claims to those resources.
4. Financial reporting should provide information about the financial performance of an enterprise during a period. Investors and creditors often use information about the past to help in assessing the prospects of an enterprise.
5. Financial reporting should provide information about how an enterprise obtains and spends cash, about its borrowings, repayment of borrowings, about its' capital transactions, cash dividends and other distributions that may affect an enterprise's liquidity or solvency.
6. Financial reporting should provide information about how management of an enterprise has discharged its stewardship responsibility to owners for the use of enterprise resources entrusted to it.
7. Financial reporting should provide information that is useful to managers and directors in making decisions in the interest of owners.

Over and above these two premier bodies. The Corporate Report of UK, The Stamp Report of Canada, The Framework for the preparation and Presentation of Financial Statements of India and many other researchers in the field have provided for the objectives of financial reporting. As all are more or less the same, we need not repeat them. Some have, however, suggested the need for some additional

information like a Statement of Value Added, an Employee Report, a Statement of money exchanges with government, a Statement of transactions in foreign currency, a Statement of future prospects.

4.3.2 Nature of Financial Statements

In order to achieve the objectives as set out in different conceptual frameworks, the financial statements must portray the financial effects of all the transactions for relevant period by grouping them into broad classes according to their economic characteristics. The broad classes in the balance sheet, as per IASB Framework, are assets, liabilities and equities, and the elements in the income statement are income and expenses. The presentation of these elements in the balance sheet and the income statement involves a process of subclassification. For example, assets and liabilities may be classified by their nature or function in the business of the enterprise in order to display information in the manner most useful to users for purposes of making decisions.

The conceptual frameworks provide us with the concepts of assets, liabilities, equities, income and expenses along with the principles of their recognition and measurement. Concepts are essential for proper recognition or measurement of financial items. So, the conceptual frameworks have discussed the concepts in detail. But when the framework's authors come to deal with the topics that have a direct influence on the practical task of preparing financial statements, they back away from committing themselves. If the frameworks had expressed a definite opinion either for or against a particular measurement base, this would have had immediate practical implications for all accountants. Instead, they have pointed out a number of different measurement bases like historical cost, current cost, realisable value and present value. Concepts of capital and capital maintenance have an important bearing on the measurement of income and assets. Having recognised this, the IASB Framework has dealt with it in detail. But there also it has pointed out and defined a number of concepts like financial capital concept, real capital concept and physical capital concept without giving a clear choice for anyone of them. Probably the IASB was unable to reach a consensus on any topic that had a direct impact on practice. A rather similar criticism has been levelled against the authors of the FASB's conceptual framework. In this case, the criticism is that FASB's Statement No. 5 on recognition and measurement of information simply reproduces conventional accounting practice and is not logically derived from the more radical concepts developed in the earlier statements. The IASB cannot be criticised on this score. It did not opt for conventional practice. It has mentioned a number of measurement bases like current cost etc. which are far away from the convention

All the frameworks have identified the users of financial statements along with their information needs. From this, one may easily assess what kind of quantitative characteristics financial information must have. Investors want to assess the ability of enterprise to pay dividends. The employees intend to know basically the capacity of the enterprise to provide remuneration, retirement benefits and employment opportunities. Lenders are interested in information that enables them to determine whether the loans and interest will be paid when due. Suppliers want to determine whether amounts owing to them will be paid in time. Customers, government and public have also interest in the financial information about an enterprise. What is discernible from this information need of different users is that the financial statements need provide the following quantitative information.

1. Information concerning profitability
2. Information in relation to liquidity
3. Information as to stability
4. Information to measure managerial efficiency
5. Information as to the quality and supply of product
6. Information concerning social responsibility.

4.3.3 Qualitative Characteristics of Accounting Information

Qualitative characteristics of information are those that help distinguish better information from inferior information.

These are the attributes that make the information provided in financial statements useful to the users. The primary characteristics of useful information are relevance and reliability. The information will be relevant when it contains some other important qualities like predictive value, feedback value, timeliness and materiality. And, to ensure that information is reliable, it must comprise qualities like verifiability, neutrality and representational faithfulness. All these desirable qualities help in decision-making. However, sometimes a trade-off has to be made, e.g. the information may not be completely reliable but it may be very much relevant, which can also make it useful for decision-making. While making this trade-off we must understand the relative advantages of one quality over others. So that we can make this comparison, all the conceptual frameworks formulated so far have given an elaborate discussion on each of the qualities. A brief description of the qualities is provided below.

Relevance : To be useful, information must be relevant to decision-making. If the information is not connected to a decision, it cannot be useful, regardless of its

other qualities. Information will have quality of relevance when it influences the economic decision of users by helping them evaluate past, present or future events, or confirming or correcting their past evaluations.

Reliability : Information is reliable if it is free from bias and if it faithfully represents what it purports to represent. Accounting information is reliable to the extent that users can depend upon the information to represent "the economic conditions that it aims to represent.

Understandability : An essential quality of the information provided in financial statements is that it is readily understandable by users. For this purpose, the users are assumed, however, to have a reasonable knowledge of business and economic activities, and a willingness to study the information with reasonable diligence.

Materiality : The relevance of information is affected by its nature and materiality. An information is material if its omission or misstatement could influence the economic decision of users taken on the basis of the financial statement.

Faithful representation : To be reliable, information must represent faithfully the transactions and other events it either purports to represent or could reasonably be expected to represent. Thus, for example, a balance sheet should represent faithfully the transactions and other events that result in assets, liabilities and equity, and the income statement must represent faithfully the transactions that result in income and expenses.

Neutrality : To be reliable, information contained in financial statement must be neutral, that is, free from bias. Financial statements are not neutral if by the selection or presentation of information, they influence the making of a decision or judgement in order to achieve a predetermined result or outcome.

Prudence : The preparers of financial statements have to contend with the uncertainties that inevitably surround many events and circumstances, such as the collectivity of doubtful receivables the probable useful life of plant and equipment etc. Such uncertainties are recognised by the disclosure of their nature and by the exercise of prudence in the preparation of financial statements. Prudence is the inclusion of a degree of caution in making estimates required under conditions of uncertainty, such that assets or income are not overstated and liabilities or expenses are not understated. This is also known as conservatism. However, the exercise of prudence does not allow the creation of hidden reserves or excessive provisions, the deliberate understatement of assets or income or the deliberate overstatement of liabilities or expenses.

Completeness : To be reliable, the information in financial statements must be complete with the bounds of materiality and cost. An omission may cause information to be false and misleading and thus unreliable and deficient in terms of its relevance.

Comparability : Users must be able to compare the financial statements of an enterprise through time in order to identify its trend in its financial position and performance. Users must also be able to compare the financial statements of different enterprises in order to evaluate the relative financial position, performance and changes in financial position. Hence, the measurement and display of financial effect of transactions must be carried out in a consistent way throughout an enterprise and for different enterprises.

So, we get a number of qualitative characteristics that the accounting information should possess. But there are certain features in the real world which limit the applicability of the qualitative characteristics mentioned so far.

4.3.4 Constraints on Qualitative Information

There are mainly three factors that stand on the way of presenting qualitative information to users. They are timeliness, cost and tangle among qualitative characteristics themselves.

Timeliness : In general, the sooner that users are informed about transactions, the more useful is the information. Again, there is a clear relationship between the speed with which the information is supplied and its reliability. The hasty work can lead to mistake as sometimes happen when enterprises cut corners in order to present their annual accounts as soon as possible after the year end. In order to provide timely and relevant information, it may often be necessary to report before all aspects of transactions are known. Thus, the information will not satisfy the qualitative characteristics like reliability and completeness. The information not being reliable and complete, cannot also claim to be relevant or useful.

Cost : Financial reporting is an economic activity and, in principle, in deciding how much effort to expend on it, the costs should be compared with the benefits. It is self-evident that financial statements can be made more reliable and more timely if more resources are allocated to their preparation. But an enterprise would allocate additional resources if it feels that extra benefit received by it is higher than the cost. The problem here is that cost is incurred by the enterprise but the benefit is received by users, not by the enterprise. The enterprise may be indirectly benefitted but that benefit is very difficult to measure. Hence, the management does not like to incur extra cost for financial statements and, as a result, the qualitative characteristics remain unachievable.

Balance between Qualitative Characteristics : We have mentioned the need for a balance between cost and benefit. However, this need to balance one characteristic against another *is* much more pervasive. In fact, there appears to be a general rule that if excessive weight is given to one characteristic, this will have a negative impact on others. Given below are few examples in this regard.

(a) **Relevance vs. Consistency :** In order to produce more relevant financial statements, it may be necessary to change an enterprise's accounting policies. This would mean that the accounts are no longer comparable with those of previous years.

(b) **Relevance vs. Prudence :** One aspect of conflict between relevance and reliability is well-known to all in relation to the timeliness of information. Another aspect is conflict between relevance and prudence, a constituent quality of reliability. Many experts claim that the needs of users are best served by providing them with unbiased information, and not with information that has been preprocessed in the name of prudence so as to report assets at less than their most likely value.

(c) **Prudence vs. Consistency :** In many situations it is impossible to be both consistent and prudent. An example is an enterprise which in order to be prudent places a relatively low estimate on the expected life of a fixed asset. In the early years of the asset's life, profits tend to be stated prudently because of high depreciation charge. However, in the later years: there will be no depreciation in the income statement as the asset has been fully written off. Hence, the profits will then be overstated.

These conflicts among various qualitative characteristics greatly complicate the task of the standard-setters as well as that of the preparers of accounts. The fundamental conflict is between relevance and reliability. Accountants would like financial statements to be both highly relevant and fully reliable. However, the harsh reality of life is, more of one will generally mean the less of the other.

4.4 Exercise

A. Short-answer Type Questions

1. Give the full name of SFACs.
2. Mention the year in which the FASB started to publish conceptual framework.
3. In which year was the IASB's Framework published?
4. Name two fundamental ways in which the broad rule of accounting are developed.

5. What is the name of the IASC at present?
6. Name two fundamental qualitative characteristics of accounting information.
7. Define conceptual framework.
8. What do you mean by deduction and induction in the context of conceptual framework formulation?
9. How are the normative and positive frameworks developed?
10. How does political interference affect the standard-setting process?
11. What kinds of quantitative information financial statement must disclose?
12. Comment on the reliability-relevance tangle of accounting information.

B. Long-answer Type Questions :

1. What are the characteristics of conceptual framework?
2. For what purpose are the conceptual frameworks formulated? What are the benefits that are derived from it?
3. What is the scope of conceptual framework of accounting? What are the main elements of financial statements?
4. Discuss the objectives of financial statements as laid down in the conceptual frameworks.
5. Give an account of the qualitative characteristics of accounting information. Why is it impossible to achieve the qualitative characteristics fully?

4.5 References

1. L. S. Porwal-Accounting Theory
2. J. Flower-Global Financial Reporting
3. D. K. Chakravorty-Development of Corporate Accounting in India
4. G. D. Roy-The Conceptual Framework of Accounting, IJA, June & December, 1983

Unit 5 □ Disclosure in Reporting

Structure

- 5.0 Introduction**
- 5.1 Meaning of Disclosure**
- 5.2 Importance of Disclosure**
- 5.3 Problems of Disclosure**
- 5.4 Form and Arrangement of Financial Statements**
 - 5.4.1 The Balance Sheet**
 - 5.4.2 The Profit and Loss A/c**
 - 5.4.3 The Cash Flow Statement**
- 5.5 Economic Value Added**
 - 5.5.1 Concept of EVA**
 - 5.5.2 Computational Methodology of EVA**
 - 5.5.3 Importance of EVA Information**
 - 5.5.4 Limitations of EVA**
- 5.6 Exercise**
- 5.7 References**

5.0 Introduction

The concept of disclosure is of great significance in the accomplishment of financial statements objectives and in contributing to the efficient allocation of resources through sound economic decisions. It is well-known that accounting has two broad functions—firstly, measuring and arraying the economic data and secondly, communicating the results of this process to interested parties. Initially, the first phase encompassing record-keeping and preparation of accounts was the basic objective of accounting. But now the purpose of accounting has been redefined as business enterprises have multiplied, in number and size, the supply of the capital and the related risk. Particularly since the introduction of corporate form of business, a considerable public interest has been created about business activities. From financial statements, the investors today want to know whether to relinquish, retain or further acquire the investment; employees and workers about continuity of employment and

future prospects; managers to judge their efficiency and performance; creditors and debenture-holders to judge credit-status; suppliers about utilisation of their material and product; consumers about regular supplies at reasonable prices; government as a tax receiver simultaneously to exercise control and to see how far social objectives are being attained. Thus, the communication part of accounting has become now of greater importance and there has been thus an obvious need- for reliable information which different parties can use to acquire essential knowledge of the way in which business enterprises are behaving in relation to their interests. This question of disclosure has been so important that a number of regulatory bodies have to veer round it so that different interested parties can get full, fair or at least adequate information from financial statements to make their economic decisions sound and proper. If we go through the company legislation of our country we shall see 'that the legal provisions are not so much relating to preparation of accounts as they are as to the presentation or disclosure of accounting information. The pronouncements of accounting profession are also mostly related to disclosures in financial statements. The conceptual framework that has been formulated by the Institute of Chartered Accountants of India does also relate mainly to the presentation of financial statements. In view of all these, it may be said that there has been now a growing need for communication of information. But the major questions are (1) for whom is the information to be disclosed, (2) how much information to be disclosed, and (3) what are the problems associated with these questions? In next sections, we shall try to give answers to these questions.

5.1 Meaning of Disclosure

Disclosure can be defined as a process through which a business enterprise communicates with the external parties. The American Accounting Association defines disclosure as "the movement of information from the private domain into the public domain". Such a conversion of private information into public information can take place in financial statements or through non-accounting channels there are three concepts of disclosure generally proposed, viz., adequate, fair and full disclosure. Of these three, the most commonly used concept is the concept of adequate disclosure. Fair and full disclosures are more positive no doubt. But fair disclosure implies an ethical sense which is for obvious reason rather implicable, and full disclosure that implies presentation of all information is also not feasible in practice. E. S. Hendricksen defines disclosure as "the presentation of information necessary for the optimum operation of efficient capital market". This also implies that adequate information should be disclosed to permit the prediction of future trends and the variability and covariability of future return with the

market. But this adequacy of disclosure cannot be tested accurately and precisely since no definite test to measure it exists in financial reporting. Generally we call one disclosure as adequate if it is helpful to users in making economic decisions. But if the users are not homogeneous problems will crop up. However, it is felt that effective reporting must possess some characteristics if it is to satisfy user needs. These characteristics may be listed as follows.

1. Relevance
2. Materiality
3. Understandability
4. Comparability
5. Consistency
6. Reliability
7. Freedom from bias.

The above mentioned characteristics make reportable information useful no doubt. But there are some constraints on the achievement of these qualitative characteristics. The pursuit of one characteristic may work, against the other characteristics. For example, if one sticks largely on relevance of accounting information, the reliability criterion may not be satisfied then. So, desirable trade off among them should be determined and they should be arranged in terms of their relative importance. This actually is needed for adequate disclosure, otherwise it could have been called as full or fair disclosure. However, it is contended that there is no difference among full, fair or adequate disclosure, because what is adequate for an investor may be termed in other words as fair or full disclosure for him.

5.2 Importance of Disclosure

It is the fact that different sections of people like shareholders, lenders, creditors, employees, customers, government and even the general public are now interested in the financial reports of business enterprises. According to T. A. Lee, there is an obvious need for reliable information which the aforesaid users can use to acquire an essential knowledge of the way in which the business enterprise is behaving in relation to their interest. By perceiving enterprise behaviour through communicated information, interested parties can use this knowledge to amend or adopt their own behaviour vis-a-vis the enterprise concerned. Since the investors, existing or potential, are the dominant users, the primary function of information disclosure is to facilitate investment decisions. But in addition to aiding investment decision-making, the

disclosure is directed today to assist in evaluations for the extension of credit or to judge the quality of management's performance in the past. The disclosure at present is useful to so many users because of the following diversified functions of disclosure in reporting.

1. It provides information useful to investors and creditors for predicting, comparing and evaluating potential cash flows to them in terms of amount, timing and related uncertainty.
2. It provides information to users for predicting, comparing and evaluating enterprise earning power.
3. It supplies information useful in judging management's ability to utilise enterprise resources effectively in achieving the primary enterprise goal.
4. It provides information useful for the productive process.
5. It reports on those activities of the enterprise affecting society which can be determined and described or measured and which are important to the role of enterprise in its social environment.

In view of the above, a theoretical approach to external reporting has emerged in recent years which is termed as 'expanded disclosure'. The proponents of this approach argue that expanded disclosure is frequently a reasonable means of resolving accounting controversies and reporting problems. The arguments in support of this adequate or expanded disclosure are the following.

First, investors and creditors use and therefore need a broad information set to assess the level and likelihood of future cash flows.

Second, accountant's limited knowledge of users' preference and behaviour makes it difficult to defend a single reporting option against available competing alternatives. As a consequence, it is argued that these difficult choice can be avoided by presenting more detailed disclosure.

Third, the market efficiency doctrine supports the data expansion approach. The investment market is sensitive to many forms of information, some of which are not incorporated in the accounting system or financial reports. As long as there are sufficient disclosures the users will be able to measure the limitations and interpret the information accordingly.

Fourth, increased disclosure would be helpful in resolving traditional measurement controversies. Reporting historical and current-cost data, for example, eliminates the controversy over inflation accounting.

Fifth, adequate disclosure in annual reports is expected, in the long run, to enhance market price of company's share in the investment market. Higher prices of company shares resulting from the full disclosure will have a favourable impact on company's cost of capital. It has often been observed that there is a connection between transparency in corporate reporting and cost of capital.

Sixth, adequate disclosure will tend to minimise the fluctuations in company's share prices. Fluctuations in share prices occur because of the ignorance prevailing in the investment market. If the securities market is in possession of full information, the ignorance and uncertainty will be reduced and share prices will tend to maintain equilibrium.

Seventh, with the help of detailed disclosure, the present and prospective employees may be able to assess risk and growth potential, job security and future promotional possibilities. Labour unions and individual employees may use reported information as a basis for making contractual wage and employment benefit demands.

Eighth, customers, like employees, may use financial statement data to predict the likelihood and/or timing of a firm going bankrupt or being unable to meet its commitment. This information may be important in predicting the availability of supporting services or continuing supplies of goods over an extended period of time.

In view of this importance of reported information it is said that disclosure is an essential part of the working of a free and fair economic system. Obviously, there are limits imposed, for example, by the need to preserve commercial confidentiality in a competitive situation. But the bias must always be towards disclosure, with the burden of proof thrown on those who defend secrecy. The more people can see what is happening, the less likely they are to harbour general suspicious - and the less opportunity there is for concealing improper or even criminal activities. Openness or transparency in company affairs is the first principle in securing responsible behaviour.

5.3 Problems of Disclosure

We have seen from the preceding section that adequate disclosure is a necessity, not a luxury. But it would not be out of place to mention here that there are a large number of problems or constraints that stand on the way of adequate disclosure. The major problems are discussed in brief as follows.

Multiplicity in accounting and reporting practices : Alternative forms of reporting may affect the quality of users' decisions and information presented in misleading, unsuitable form will not achieve the purpose of disclosure. But due to

lack of uniformity in accounting as well as reporting practices the comparability and understandability of disclosure in reporting is being largely affected. Accounting standard setting bodies and other financial reporting regulatory agencies have attempted to reduce this diversity in preparation and presentation of accounting information. But problems persist.

Information overload : The appeal of data expansion is being resisted largely on physiological considerations. Beyond some point, additional data could add confusion to the users' mind and make it physically impossible for them to consider and impound incremental messages. For this, the preparers of financial reports do pick and choose the information that they think more useful to users and, instead of resorting to full disclosure, they are imposing their choice on the users. This in no way is justified. But information overload is compelling them to do so.

Cost of disclosure : It is a recognised fact that even modest increase in disclosure is not without cost. Hence, the desirability of expanded disclosure is unclear when the question is examined from the traditional perspective of the economic consequences of information. Conversely, it is stressed to identify and disclose only those types of information that can provide significant benefits to business report users. In short, the benefit-cost analysis (BCA) for disclosure focuses on informative disclosure, instead of full disclosure. On this argument perhaps the company legislation of India has provided for 'abridged report' with the provision for supplying detail information only on demand.

Dependence on multipurpose report : Financial accounting information is used by a variety of groups and for diverse purposes. Only special purpose reports can satisfy specialised or particular needs of individual users. But issuing separate reports for different users is not feasible, either economically or otherwise. So, we prepare multipurpose report on the assumption that the interest of a large number of users coincides. However, the wide variety of users of general purpose report make it difficult to envision a single set of published statements so structured as to simultaneously provide all necessary information to all possible users. The legal and accountancy profession have therefore consistently recognised investors, present and potential, as the primary users of financial reports, and as a result, many other interested persons like employees, customers, suppliers etc. are till now being largely neglected.

Investors of different sophistication levels : Selection of investors as dominant user-group raises further questions about the nature of primary audience. Within the investor-group, there exist a wide range of sophistication levels. Some investors have little knowledge in business and accounting. On the contrary, there are some sophisticated investors such as institutional investors, security analysts or the individual

sophisticated investors. Hence, what should actually be the degree of sophistication in annual reports, is still an unsettled question in accounting. Some feel that annual report should be prepared for sophisticated readers while others opine that we should develop a technique for presenting information to the lay man. Being fallen in tangle, the preparers sometimes give unnecessary details as to some simple information, and sometimes fail to give required information to clarify a critical event.

Changes in Price-level : Changes in the value of money has added to the difficulty of presenting a comparable and relevant set of accounting information. The traditional accounting system is based on historical cost convention and hence the value of income and assets as shown in financial statements loses much of its relevance. Regulators have suggested therefore to present supplementary statements showing current cost figures of expenses and assets. But the presentation of two statements simultaneously—one based on historical cost and other on current cost may confuse the users. Moreover, the current cost statements will not have the verifiability or objectivity. Thus, comparing of financial statements of different companies will pose another problem, and wary investors will be in a fix while finding out the more profitable firms.

Conflict of Objectives : Last but not the least important constraint on effective reporting is the conflict of objectives in reporting. The pursuit of one characteristic of reporting may work against the other characteristics. It is difficult to design financial statements which may be relevant to user needs on the one hand and free from bias towards any particular user group. Relevance and reliability are probably the most fundamental qualitative characteristics of disclosure. But unfortunately, an emphasis on reliability may go against relevance and vice versa. So, the qualitative characteristics should be arranged in terms of their relative importance in each case. Desirable trade off among them should be determined. But this is not also an easy task.

Thus, the problems of disclosure or the constraints on effective reporting are manifold. Several professional bodies, accounting and commerce associations accounting legislations—all are trying continuously to improve the position. Partly for this all-round effort and partly due to environmental influence, the reporting today has expanded a lot, both in quantity and quality. However, it cannot be denied that much has to be done as yet to reach the optimum level.

5.4 Form and Arrangement of Financial Statements

The subject of presentation of financial statements has always been regarded as a central aspect of financial reporting. Financial statements are accounting reports

prepared in order to communicate information about the financial performance, financial position and cash flows of a firm to external parties. There was a time when financial statements used to account for the totality of financial reporting. But the situation has changed significantly in recent years. Large volume of information is now provided outside basic financial statements. This has, however, not diminished in any way the importance of financial statements. Financial statements are still viewed as the core of financial reporting. Orderly and systematic form and arrangement of financial statements is required if financial reporting is to be useful and effective. Bad presentation results in misinformation, impinging on the ability of the financial statements users to take informed and intelligent economic decisions.

There are differences among countries as to the mode of presentation of financial statements. There are many countries that have prescribed financial statements allowing flexibility within the formats. Some countries are also there where financial statements are presented in highly standardised forms. There are still some other countries that allow preparers to determine the formats of their own choice. The preparers have, however, to follow some prescribed principles as to the classification of financial statement items and to make some specific disclosures with respect to assets, liabilities, equity, revenues and expenses. In India, the major part of financial statements consists of a balance sheet, a profit and loss account, a cash flow statement and a statement of accounting policies and explanatory notes. In the case of balance sheet and cash flow statement, the formats have been provided by legislation, though the flexibility as to them is allowed. But for the profit and loss account and the statement of accounting policies, the Indian companies are at liberty to design their formats, although they are to follow some principles as to the contents of them. A brief description of the form and contents of these financial statements is given below.

5.4.1 The Balance Sheet

The balance sheet is a primary financial statement. It is aimed at providing information about the financial status of the entity at the end of the accounting period. There are two forms of presenting the balance sheet; the horizontal form and vertical form. Part II of Schedule VI to the Indian Companies Act, 1956 has provided for these forms of balance sheet. It is the vertical form which has become more popular. At the international level, the IASC has no mandatory format for classifying and ordering the balance sheet items. But IAS 1 provides a list of line items that the face of balance sheet should include. In the appendix to the standard, the IASC, however, has provided an illustrative format which is in the line of the vertical form

as provided in Schedule VI of the Indian Companies Act. However, the Indian firms can adopt any of the two forms, though it is felt by a large group of professional and academic accountants that the vertical form has a number of advantages over the T- form. This does not mean that the vertical form as annexed to the Companies Act is free from its limitations. The classification of fixed assets as tangible and intangible, leasehold and freehold, mortgaged or otherwise is lacking in the existing format. This poses difficulty in assessing the real asset position of a concern. Investment in social asset which is not owned' by the company should also be separately mentioned. Reserves are also to be shown classifying categorically as capital and revenue, realised and unrealised etc. Hence, the present vertical form should be modified to an extent having regard to the current needs of users.

5.4.2 The Profit and Loss Account

The profit and loss account is also a key financial statement. Its purpose is to provide information relating to the financial performance and progress of the entity. Part I of Schedule VI annexed in the Companies Act, 1956 has provided for a list of items that will form the body of the profit and loss account. However, it has not given any outline as to what should be the format of the profit and loss account. In practice, there are many alternative formats for presenting the profit and loss account information. One format presents the items of the profit and loss account based on horizontal arrangements. But this traditional format has now lost much of its appeal. The current tendency is to present items based on vertical format. The IASC allows both of these approaches. It however maintains that the choice between the approaches should be based on that which most fairly presents the elements of the firm's performance. Since there is no specific format of the profit and loss account either in Indian Companies Act or in the guideline of IASC, there is hardly any uniformity in the Indian corporate sector in the preparation and presentation of the profit and loss account. We should therefore suggest that a format of the profit and loss account should be outlined very soon by amendments to the Companies Act. The format need not require details of every item to be disclosed, but must require distinct disclosure of operating income, operating expenses, profit before and after tax, provisions, proposed dividend and appropriations. Distinct disclosure of 'expenses on employee welfare' and 'social overheads' are also highly essential from the point of view of changed socio-economic environment. But while suggesting a format by any of the legal provisions, there should be scope for initiativeness in the profit and loss account. Creativity may be encouraged by allowing preparation of account in such a format which may be as near to the suggested format as circumstances permit.

5.4.3 The Cash Flow Statement

The cash flow statement is a relatively new addition to the list of components of published company accounts. It has been developed mainly in order to overcome some of the limitations of the accrual-based data presented in the balance sheet and the profit and loss account. The measures of wealth and profit provided by the balance sheet and profit and loss account are just matters of opinion. But cash is a fact. So, the cash flow statement has come to be regarded as a very useful device for presenting a clearer view of the reporting entity's current state of financial health. The statement has also demonstrated its usefulness in offering a better indication about the future cash-generating capacity of the entity.

[Details about it is given in Chapter 3]

Over and above these three major components of financial statement, a large variety of other information is now disclosed through annual reports. Some of these disclosures are legally required, some are voluntarily reported. There are again some disclosures which are mandatory for listed companies but voluntary for others. A list of these three kinds of, information is given below.

Mandatory items	Voluntary items	Items mandatory for listed companies but voluntary for others
1. Notice of meeting	1. Maps, charts	1. Corporate governance
2. Directors' report	2. Summary of results	2. Fund/Cash flow statement
3. Energy conservation	3. Financial calendar	
4. Profit & loss account	4. Five/Ten year data	
5. Balance sheet	5. Employment report	
6. Accounting policies & notes	6. Export-import details	
7. Auditors' report	7. Awards for excellence	
	8. Value added statement	
	9. EVA	
	10. Future projection	

From the above, it is clear that accounting regulatory agencies have prescribed for only a minimum disclosure through annual reports. The reason is possibly the existence of different types of industries and business interests for which one set of

standards may not be suitable. Much has therefore been left for individual companies. Regulators, however, encourage companies to try with newer and improved modes of presentation of financial reports. There also exist arrangements for awarding prizes to companies showing excellence in the presentation of financial reports. Companies themselves have also understood that a better presentation of financial information is of utmost necessity today to attract capital or to earn goodwill in a competitive market. So, during last ten years there has been actually a noticeable development in the form and arrangement of financial statements in India and abroad.

5.5 Economic Value Added (EVA)

Of the several voluntary items disclosed through financial statement, EVA has come to be recognised as a very useful and a challenging component. Analysis of performance of any business entity is traditionally based on its ability to earn on the investment made by the stakeholders in the business. Two relative measures, viz., (i) Return on Capital Employed (ROCE) or Return on Investment (ROI), and (ii) Return on Net Worth (RONW) have originated based on these principles. While these concepts are time tried and tested, but they are ineffective parameters in explaining whether return covers cost of capital or not. These measures fail to reflect the efficiency in usage of capital and adequacy of profit vis-a-vis cost of funds that have been deployed to earn the profit. Maximisation of shareholders wealth is linked to basic proposition that return on capital employed should be more than that of cost of capital, both debt and equity. This maximisation of shareholders' wealth is indeed the commonly focussed in finance literature until recently. Of late, a new concept has been evolved that judges the value the firm as created for its stakeholders over a period of time. This new concept is referred to as Economic Value Added (EVA), which is a registered trade mark of Stern, Stewart & Co. of USA.

5.5.1 Concept of EVA

EVA is a way to determine the value created for the shareholders of a company. It simply is the residual income (RI) after charging the company for cost of capital in full. It considers the earnings in excess of expected return of the shareholders. EVA is just the amount by which a company's pre-interest but after tax net operating profit (NOPAT) exceeds the charge of total capital, both the equity and borrowed. Technically defined, EVA is the net operating profit after tax but before interest reduced by weighted average cost of capital ($WACC$) multiplied by the respective capital employed.

$$\begin{aligned}\text{EVA} &= \text{NOPAT} - \text{Capital Charge or Cost of Capital Employed} \\ &= \text{NOPAT} - (\text{WACC} \times \text{Invested Capital})\end{aligned}$$

Thus, it measures corporate performance in terms of changes 'in value. It is a value-based performance measure and an owner-oriented management tool. It essentially seeks to measure the actual rate of return, a risk adjusted actual rate as against the required rate. It is not something altogether new but the peculiarity is that the old concept of RI is modified and extended to a complete framework. In its new incarnation, it is fully refined and developed as a theoretically sound value-based tool for the measurement of performance, firm valuation, wealth maximisation, future valuation and several wider applications. In essence, EVA is a way both to legitimize and institutionalize the running of business. Return on investment (ROI) is another significant yardstick for the measurement of profitability or performance of a firm. But ROI is based on profit and due to lack of uniform concept of profit, the determination of ROI is also debatable. Moreover, ROI if seen as performance indicator may influence the investment decisions in two adverse ways. A project yielding a low ROI than the overall ROI will not be implemented even in case of idle funds. On the other hand, in case of unit with extremely low ROI, any project yielding more than the current ROI will be accepted. EVA, on the other hand, exhibits the real earnings avoiding the limitations of ROI. There are subtle differences between EVA and other performance indicators as well. For example, earnings per share (EPS) tells nothing about the cost of generating those profits.

If the cost of capital is, say 15%, then a 14% earning is actual a reduction, not a gain, in economic value. Profits used in Return on Assets (ROA) also increase taxes, thereby reducing cash flow, so that engineering profits through accounting tricks can drain economic value. ROA is a more realistic measure of economic performance, but it ignores the cost of capital. Leading firms can obtain capital at low costs, via favourable interest rates and high stock prices, which they can then invest in their operations at decent rate of return on assets. That tempts them to expand without paying attention to 'real return, EVA. Discounted cash flow (DCF), however, is very close to EVA, with the discount rate being the cost of capital.

5.5.2 Computational Methodology of EVA

EVA is the difference between return on capital employed (RaCE) and weighted average cost of capital (i.e. spread) multiplied by average capital employed. So, the process to be followed for computation of EVA may be as follows.

Step 1 : Calculate NOPAT after making necessary adjustments to accounting profit.

Step 2 : Compute WACC

Step 3 : Calculate ROCE

Step 4 : Calculate Spread, i.e. difference between ROCE and WACC

Step 5 : Compute average capital employed

Step 6 : Compute EVA, i.e. multiply spread by average capital.

The originators of EVA, Stern-Stewart, & Co., have found out 164 adjustments to accounting profit for the computation of NOPAT. In simple words, the finance charge of debt should be added back, as the cost of capital used for calculating EVA includes both cost of equity and cost of debt. Therefore, to calculate EVA, from return on capital employed net operating profit including finance charges of debt (i.e. interest) should be considered.

$$\text{WACC} = \frac{K_e (\text{Equity Capital} + \text{Reserve}) + K_d (\text{Long Term Debt})}{\text{Capital Employed}} \times 100$$

K_d or cost of debt is taken at the effective rate of interest, net of taxes while K_e is the return expected by the investors to compensate them for the variability in returns caused by fluctuating earnings and share prices. The estimation of the return expected by the investors is, however, a difficult task. To cope with the difficulties of determining cost of equity, there are many theories. Of the various methods used for the purpose, the capital assets pricing model (CAPM) is considered to be the best. CAPM is the most widely used method of calculation of cost of equity. Under this approach, expected return to the shareholders is taken as the cost of equity to the company. Shareholders will obviously claim something more than the risk-free rate (RF), that may be termed as risk-premium (RP). This RP again is measured with reference to excess 'return in the market' (RM) over risk free rate multiplied by beta. Thus, the expected return (ER) or cost of equity (K_e) may be shown as below.

$$\begin{aligned}\text{ER} &= \text{RF} + \text{RP} \\ &= \text{RF} + \beta(\text{RM} - \text{RF})\end{aligned}$$

Beta (β) here is a relative measure of volatility that is determined by comparing the return on a share to the return on the stock market. In simple terms, the greater the volatility, the higher the beta and more risky the share. If the change in share price exactly correspond to the change in the stock market index, a stock is considered as at par with the market as regards risk. In this case, the company will have a beta of one. It is thus the slope of regression line or regression co-efficient. Beta value depends upon the movement of share price in response to change in index. Beta represents the most widely accepted measure of the extent to which the return on a financial

asset fluctuates with the return on the market portfolio. Thus, if R_F is taken to be 12.5%, R_M as 21.5% and beta as 0.8, then the cost of equity will be as follows.

$$K_e = 12.5\% + 0.8 (21.5 - 12.5)\% = 19.7\%.$$

Then we are to calculate the ROCE and the average capital employed. These tasks are not so difficult. Finally, we are to compute EVA using the formula given in section 5.5.1.

5.5.3 Importance of EVA Information

The last few years have seen the growing popularity of EVA as a measure of shareholder's value creation. This is because EVA information is considered as more useful to users for their portfolio management. However, to understand why implementation of EVA is necessary, we may outline following uses of EVA information.

Savings are allocated primarily on the basis of expected return and risk, and the economic value added represents extra value added over the expectation of investors in the market place. Hence, when a firm maximizes the EVA, it ensures that its decision is consistent with the risk-return preferences of the investors. This suggest that EVA information will allocate resources optimally.

Second, EVA acts as a management discipline. When a company uses EVA to set compensation, it seems to be; a powerful tool that gets managers to deploy capital for maximum gain. To align managerial initiative with shareholders' expectations, Stern & Stewart linked EVA to managerial incentive, which ultimately may help in maximizing shareholders' wealth.

Third, the ROI or other traditional measures of profitability encourage the management to take decision that will boost the bottom line. The first cut for the purpose is likely to be the cost related to R & D and market development which do not result in an immediate increase in profit. This approach will inhibit growth and eventually will destroy shareholders' value. In contrast, the EVA process requires that the expenses like R & D or market development be capitalised. This approach, thus, ensures that growth is not sacrificed for the sake of short-term result.

Fourth, EVA was created in the wake of reckless spree of diversification. The basis of this diversification should be the belief that it can invest funds more efficiently than the market. NOPAT or PAT can not act as a basis of such belief, because they do not take into account the cost of capital as a whole. Whereas, the very architecture of EVA promotes the creation of shareholders' value, not the growth that comes at the expense of shareholders' fund.

Fifth, EVA is a superior measure of corporate performance; other measures depict only the returns the products or projects manage to generate. Whether the return is lower or higher than the company's cost of capital is not indicated by those measures. A company's EVA, however, will increase only if its products and projects generate a rate of return higher than its cost of capital.

All these advantages make EVA an ideal tool for equity analysis. Investors like EVA because it is a running score showing how well managers are performing their primary task and creating wealth. Since EVA standardises financial information it provides a common platform for equity analysts/investors to compare various companies across the globe. Hence, it is observed that EVA has moved from buzzword to financial phenomenon. As a performance measure, as an analytic tool, and as a management discipline, EVA is cropping up all over.

5.5.4 Limitations of EVA

EVA by laying high emphasis upon improvement in earnings while minimizing the cost of funds creates an atmosphere for maximizing the return on capital employed and also maximization of shareholders' equity. However, while chasing this lofty objective it creates certain unique problems. Some of these problems are discussed here.

1. EVA is dependent upon market valuation of equity. The value the market assigns on equity of a company reflects its perception about the prospects of profitability and growth and not its performance in the past.

2. EVA is biased in favour of large enterprises. It represents incremental earning above a base level set by cost of capital employed. Thus, large enterprises earning at a rate slightly above the cost of capital have higher EVA than small enterprises earning at a rate much higher than cost of capital.

3. In case of an enterprise with rate of return near the cost of capital a slight improvement in earning may result in proportionately higher rise in BVA. This makes EVA a poor measure for comparing business performance of different enterprises operating at different stages of growth.

4. Stern-Stewart & Co. recommends 164 adjustments to the accounting figures for a realistic estimate of EVA. These adjustments truly complicate the calculation of EVA. These 164 adjustments require indepth data. This involves additional costs. The increase in the number of adjustments also increase the subjectivity involved in measuring EVA. Thus, it may not be said that EVA provides objective or reliable information to users.

5. It is very difficult to quantify all the value enhancement activities of a firm without involving a lot of subjective estimates. It is also difficult to measure exactly the risk-free rate of return, beta and risk premium.

6. EVA is calculated having based on NOPAT or PAT. Thus, it does not remove the limitations of the accounting profit.

7. EVA ignores inflation. So, as in case of historical cost-based profit, the EVA information also appears to be irrelevant, particularly in the age of inflation.

8. As EVA is expressed in absolute terms it is affected by investments in new assets and may turn to be low or negative for new firms although they may possess good prospects or their current ROI may be better than others. For interfirm comparison also the EVA cannot be used as it is expressed in absolute terms.

The above limitations reduce the informative value of EVA. Companies find it very useful but the challenge is how to measure and apply the tool. Some have suggested that to make EVA relatively comparable it should be expressed in terms of EVA per unit of capital employed. This new variable is termed as Economic Value Added Per Rupee of Investment (EVAPRI). There are also others who suggest for Cash Value Added (CVA) or Total Business Return (TBR) for judging the relative growth prospects of companies. It is thus clear that researches and endeavours are in progress to rationalise further the concept of EVA. It, however, goes without saying that the concept of EV A has enhanced the usefulness of accounting information to a large extent.

5.6 Exercise

A. Short-answer Type Questions :

1. What do you mean by disclosure in the context of corporate financial reporting?
2. What are the primary components of financial statements?
3. What accounting standard deals with cash flow statement?
4. What is transparency in financial reporting?
5. Name two components of financial reporting that are mandatory for listed companies.
6. What is spread in the context of EVA?
7. What is NOPAT?
8. Define risk premium in the context of cost of equity.
9. What is EVAPRI?

10. 'What do you mean by the term 'full disclosure'?
11. What is the main function of the balance sheet?
12. What are the contents of profit and loss account?
13. Distinguish between mandatory and voluntary of disclosure's.
14. Who are sophisticated readers of financial statements?
15. How does EVA differ from ROI?
16. Enumerate the steps for the computation of EVA.
17. What do you mean by WACC?
18. Define Beta in the context of cost of equity.

B. Long-answer Type Questions :

1. What do you mean by adequate disclosure? What is its importance?
2. Discuss the constraints that stand on way of adequate disclosure.
3. Enumerate the importance of financial statements. What are the usual forms and arrangements of financial statements?
4. Explain the recent trends in corporate financial disclosures in India.
5. Give a brief note on the concept of EVA. Explain its computational methodology.
6. 'EVA is an ideal tool for equity analysis.' Critically examine this statement.
7. What are the advantages and limitations of EVA?

5.7 References

References

1. Jawahar Lal—Annual Reports.
2. D. K. Chakravorty—Development of Corporate Reporting in India.
3. B. Banerjee—Regulation of Corporate Accounting and Reporting in India.
4. B. Banerjee & A. K. Basu—Corporate Financial Reporting.
5. Indian Journal of Accounting—December-1998, December-2001, June-2003.

Unit 6 □ Government Accounting

Structure

- 6.0. Government Accounting—A Historical Perspective
 - 6.1 Is Government Accounting a Single Entry System
 - 6.2 Commercial Accounting Vs. Government Accounting
 - 6.3 Purpose of Government Accounting
 - 6.4 Fund Accounting
 - 6.4.1 Budgetary Aspect of Govt. Operations
 - 6.4.2 Recognition of Revenue and Expenditure
 - 6.4.3 Interfund Transfers
 - 6.5 Classification of Government Accounting in India
 - 6.5.1 Consolidated Fund
 - 6.5.2 Public Account
 - 6.5.3 Contingency Fund
 - 6.6 Legislative Control of Accounts in India
 - 6.6.1 Vote of Accounts
 - 6.6.2 Parliamentary Approval for Expenditure
 - 6.6.3 Excess and Exceptional Grants
 - 6.7 Control of Cash in Government of India
 - 6.8 Form of Government Accounts in India
 - 6.9 Exercise
 - 6.10 References

6.0 Government Accounting—A Historical Perspective

The present day system of accounting—be it government or commercial, accounting, has evolved over a long period of time. If we make an in-depth study of treatise like the four vedas, *Ramayana*, *Sukra-niti*, *Mahabharata*, *Kautilya Arthasastra* etc., we shall see that from time immemorial we have in India a system of government accounting. According to *Sukra-niti*, two types of accounts, namely income-expenditure accounts and descriptive or documentary accounts were maintained. According to *Kautilya Arthasastra*, the king himself and the ministers, heads of the departments, officers, employees and such other government servants

had to maintain systematic accounts of their departments. There used to be a central accounts department for the whole country, which was known as 'Aksapatala'. The superintendent of accounts of the country was known as 'Aksapatalamadhyaksa'. The superintendent used to maintain account books for national income, expenditure and balances, to ensure disclosure in accounts, to prepare integrated accounts and to prepare final accounts. The accounts were maintained daily, for group of five days, fortnightly, monthly, four monthly and annually, and reconciliation was done for the respective periods so as to know the net result of income, expenditure and balance. In addition to account books of income, expenditure and balances, the superintendent used to maintain the account books of various departments, of income and expenditure of various products, and of receipts and payments in connection with peace and war with allies and enemies. The superintendent used to present the accounts before the king, which included the duties of all the department heads, funds receivable from villages, funds deposited with the treasury, collectible funds etc. The promotion and salary increments of employees were based on such accounts, 354 days and nights constituted one working year and the year ended on the full moon day of the month. All the officers related with accounting were expected to reach central accounts department on that day with sealed account books and balances in sealed containers. After hearing the totals of incomes, expenditures and balances, the superintendent would cause the balances taken away to the treasury. Consequent upon the checking of accounts as to their appropriateness, the public would hear and get convinced with all the state practices related with income, expenditure and balances.

In earlier times, accounts were kept, however, in a chronological order of transactions. It was not easy to find out if there was any omission in recording a transaction. If noticed, it was difficult to locate errors the system of accounting prevalent was a system somewhat akin to recording proceedings of a meeting. Gradually, the accounting pages were divided vertically in two parts—the left hand side and right hand side. This enabled an automatic check on the accuracy of records—accuracy in the sense that omissions and errors came to light easily, when the totals of left hand side did not agree with the totals of the right hand side. It did not mean that each transaction was recorded on the same page twice. Having identified the entities affected by the transaction, one entry was posted at the left hand side of one entity and the same was posted at the right hand side of other entity. This actually culminated in modern double entry system of book-keeping that traces its roots to the book published in the year 1494 by Luca Pacioli. Along with the introduction of this double entry system, accounting, be it government or commercial, has acquired its present day importance. In the mean time, the socio-economic environment of our

country had undergone a radical change. Investment in commercial as well as in government activities has increased enormously over time. In order to keep pace with these socio-economic changes accounting has also changed noticeably in its boundary and scope. The double entry system of accounting, however, has always been at the core of accounting development in India and abroad.

6.1 Is Government Accounting a Single Entry System?

There is a generally held view that government accounts are kept on single entry system. Government of India publications do also state at different places that government accounts are kept on single entry basis. This has caused unnecessary confusion because it gives an impression as if government accounts are less than complete, particularly when it is realised that nowhere else single entry system of accounts is accepted as desirable or complete system for any large organisation. But such a wrong belief loses its grounds when we go deep into government accounting.

Paragraph 17 of the Introduction of Indian Government Accounts and Audit states :

The mass of the government accounts is kept on single entry. There is, however, a portion of the accounts which is kept on the Double Entry System, the main purpose of which is to bring out by a more scientific method the balance of accounts in regard to which government acts as a banker, remitter, borrower or lender. Such balances are of course worked out in the subsidiary accounts of single entry compilations as well but their accuracy can be guaranteed only by a periodical verification with the balances brought out in the double entry system.

Rule 19 of the Government Accounting Rules 1990 states :

The accounts of government are based, in the main, on the single entry system and the double entry system will be applied only in regard to the maintenance of a set of technical accounts called the Journal, Ledger and Trial Balance Sheet. The main purpose of the Journal and Ledger is to bring out by a scientific method, the balances of accounts in regard to which government acts as a banker, remitter, borrower or lender,...

According to the Memorandum dated 27th April, 1982 of the Ministry of Works and Housing, Government of India, the cost of stores not paid for in the same month in which they are received shall be accounted through a new suspense minor head in the Public Account of India under the major head 'Suspense Accounts'. This suspense minor head will be cleared when supplies received the actually paid for. It means that two entries will be passed; debit the major head Public Works Suspense for goods received and credit the liability head called Material Purchase Settlement Suspense Account.

Account Code for Accountants General states that the transactions of each month should be journalised by the following entries.

- (1) Sundry Accounts (personal accounts) Dr. to Revenue Receipts and Sundry Accounts for the revenue and receipts of the month.
- (2) Service Expenditure and Sundry Accounts Dr. to Sundry Accounts for the disbursements of the month.

From the code, itself it is clear that in cases where necessary the double entry system is applied in government accounts. So, it is perhaps wrong to deduce that government accounting is a single entry system of accounting. Single entry, we know, has usually two connotations-Pure Single Entry and Single Entry in the Popular Sense. We may now examine whether government accounts can be grouped under any kind of Single Entry System or not. According to William Pickles, under Pure Single Entry system, the two fold aspect of each transaction as considered in the double entry system is ignored. The essential characteristic of this system is keeping of personal accounts only, that is no real accounts or nominal accounts find a place in the books of accounts. But government accounts keep details of nominal accounts and real accounts of the year. Therefore government accounts do not fit into this definition of pure single entry. So far as the Single Entry in the Popular Sense is concerned, only a cash book is kept there. No Day Books are maintained under this system even though the business is not on entirely cash basis. Government accounts are but entirely on cash basis except for minor credit transactions. For goods purchased on credit, regular double entries are passed in government accounts. Single Entry in popular sense either does not maintain any personal accounts or maintains full personal accounts but no nominal accounts. In government accounts, however, both the personal accounts but no nominal accounts. In government accounts, however, both the personal and nominal accounts for each year are kept. In short, whenever the system employed in such that a trial balance cannot ensue from the books it cannot be accurately described as double entry system. In case of government accounting, a trial balance easily ensues from the books in Accountant General's office. From all these, it is reasonable to infer that government accounts go much beyond the scope of the definition of single entry system.

One wonders therefore whether the reason for calling government system of accounts as single entry system is, based on the simple promise. Commercial accounts and double entry system is one and same thing, and that if commercial accounts are double entry, then government accounts are no double entry, as these are not commercial accounts. Government accounts rather have all the characteristics which are basic and essential to double entry system and therefore, to call them single entry system either in part or in whole is neither reasonable nor helpful in understanding

the system. However, by and large government accounts are kept on cash basis. Only those balances in accounts are carried forward from year to year in which government acts as a banker, remitter, borrower or lender. The other accounts are closed to an omnibus account called 'Government Account' at the close of each financial year. It can never be argued that cash basis of accounting is not double entry system. So, finally it may be said that government accounts are kept on the modern system of double entry.

It is indeed true that government accounts and commercial accounts are not one and the same thing. A lot of difference lies in between the two. We shall touch upon this difference in the next section.

6.2 Commercial Accounting vs. Government Accounting

Commercial system of accounts is generally taken in popular sense to mean double entry system of accounts. Commercial enterprises are set up to earn profit. Thus, a belief may be there that double entry system of accounting is suitable for profit-making enterprises. But the concept of profit or loss has not, been built in the system of double entry. The system only helps in working out the profit or loss. In organisations not-for-profit, accounts are also kept on double entry system to indicate the financial position. So, in government accounts the double entry system is equally applicable, and as a matter of fact government accounting applies double entry system wherever it is necessary. In the commercial world of double entry system, however, transactions are entered in the books of accounts even when there is no movement of cash. To work out 'true' profit or loss, such entry is necessary. But in government there is no place for profit or loss in non-commercial activities. Therefore, as a matter of policy, government has found it helpful to work on cash basis. It is actually no use on the part of the government to know and record the amount of revenues that may be recovered on a distant day in the future. What is important is how much cash is in hand and available for spending on useful activities. For this, government accounts are mostly kept on cash basis, though commercial accounts are usually maintained on accrual basis. However, entire government accounts are not kept on cash basis; 'and there are few exceptions to this rule. Commercial accounts are also not maintained completely on accrual basis and the principles of realisation there sometimes debar the accountants from recording the accruals.

The concept of assets is important for a business entity for its credit-worthiness. Owners, investors and creditors want to know the value of assets for analysis for

different purposes. So, every business entity prepares a balance sheet generally at the end of a year. But the concept of showing physical assets in a balance sheet year after year in the accounts of government has been considered unnecessary. Many of the physical assets are of such importance to the nation that it is neither 'possible to sell them nor for anyone to buy them. For example, the national highways and bridges. It serves no useful purpose to display the cost of these assets in the annual accounts of the government. Therefore, unlike in commercial accounts, governments do not show the cost of physical assets at the end of each year. This is one major difference between commercial accounts and government accounts. However, statements are published showing the total expenditure on assets over the years without indicating their depreciated value over the years.

The commercial accounts are reduced at the end of a financial year to two main statements-the profit and loss account and balance sheet. Government accounts are similarly reduced to two accounts or statements. One of them is called Government Account. It is the net result of all income and expenditure including expenditure on capital accounts. The other accounts represent cases where government has either to receive or pay in cash for the amounts already borrowed or loans granted. Whatever account is not closed to Government Account that is carried forward and is called Closing to Balance. One may broadly say that Government Account has taken the place of Profit and Loss Account, with the major difference that capital expenditure, other than loans granted is also debited to Government Account. So, this is more akin to Income and Expenditure Account prepared by societies, trusts etc. Its net balance is carried forward from year to year.

The major difference between commercial accounts and government accounts may be summed up as follows :

1. Commercial accounts record transactions both where cash is received and paid and where there is no movement of cash but transactions are on credit. In government accounts, barring a few exceptions, only cash transactions are recorded.
2. Commercial accounts show in balance sheet the cost or value of physical assets held by business enterprises. In government accounts the cost of physical assets is not carried forward from year to year.
3. Commercial accounts are designed to measure the profit or loss. In government accounts there is no concept of profit or loss.
4. An equation of assets and liabilities of a commercial concern after the accounts for the year are closed will be the following.

Physical assets + intangible assets + financial assets = Payables + Owners' equity.

In government accounts, the equation will be :

Government Account + Receivables = Payables.

6.3 Purpose of Government Accounting

Commercial accounts and government accounts are actually two corner stones that help the analysis of the entire economy of a country. The scope and boundary of commercial accounts has been enhanced to a large extent along with the introduction of large scale production and sale. The government accounts cannot but follow suit, as along with the increase in commercial operations, the quantum and varieties of government revenues and expenditure have also been increased a lot. In India, the government has the largest volume of monetary transactions requiring maintenance of detailed accounts. Of the Gross Domestic Product (GDP) round about 20% moved into the Central and State Government coffers from taxation, duties etc. In addition, there is revenue from non-taxation measures like fees, fines etc. Above all, government is the largest borrower in the country. Hence, it goes without saying that accuracy is required in keeping a large volume of accounts, otherwise, it may not be a practical proposition to find out details of different kinds of revenues and expenses. This being the mission of government accounting, the purposes for which the accounting information is required in government may be outlined as below.

The first purpose is to know the revenues, tax revenues or non-tax revenues during a year. This information must be in sufficient details so that it may be easy to estimate revenues in future years, and also to decide what increase or decrease in revenue is practicable or desirable. This information on revenues can be available only when the taxes and the other revenues are segregated in detail; if these were lumped together, it would not be possible to know the details of each of the revenues.

The second purpose is to know the expenditure on different items. The Parliament and the Legislatures having authorised the governments to spend different amounts on different activities, they have a right to know what is the actual expenditure on each of the activities. The government accounting serves this objective.

The third essential purpose is to ascertain how much loans and deposits the government has to repay its creditors and how much of these the government has to receive from debtors. Government borrows huge amounts and it must know how much is outstanding at a given time. Similar is the case for its lending. Without a

systematic and scientific government accounting, this information cannot be easily available.

In day-to-day management, the most important factor is to know how much cash is available and what are the likely receipts and expenditures in the near future. This is essential for the preparation of annual budget or Five-yearly Plan Budget of our country.

6.4 Fund Accounting—the Basis of Govt. Accounting

Accounting for government units is given the general description of fund accounting to distinguish it from accounting for commercial entities. Different funds are established for the specific functions that a government must provide. Most funds obtain resources from taxes on property, income or commercial sales. They may also obtain resources as grants from other government agencies, from fines or licenses, and from charges for services. Each fund must make its expenditures in accordance with its specified purposes. The term 'expenditures' refer to the outflow of resources in funds providing government services. Each fund has its own asset and liability, and its own revenue and expenditures. So, separate financial statements are prepared for each fiscal period for each fund. In this manner, the interested parties may assess the financial performance of each fund in the fulfillment of the specific purpose for which it is established.

Governmental entities use three kinds of fund—Governmental Fund, Fiduciary Fund and Proprietary Fund. Accounts for Proprietary Fund are maintained on the basis of commercial accounting. So, the fund accounting refers mainly to other two kinds of fund. Governmental Funds may again be classified into General Fund, Special Revenue Fund, Capital Projects Fund and Debt Service Fund. General Fund includes transactions for general government services provided by the executive, legislative and judicial operations of the government. The proceeds of specific revenue sources that are legally restricted for specified purposes are accounted for in the Special Revenue Fund. Financial resources to be used for the acquisition or construction of capital projects are accounted for in the Capital Projects Fund. The accumulation of resources for, and the payment of, general long term debt principal and interest is accounted for in the Debt Service Fund.

Each of the governmental fund should prepare a statement of revenue, expenditures and changes in fund position. This statement replaces the combined income statement and statement of changes in retained earnings of a commercial enterprise. The general form of this statement is as follows.

Statement of Revenue, Expenditures and Changes in Fund

Revenue	* * *
Expenditures	* * *
Excess of revenue over expenditure	* * *
Other financing sources or uses	* * *
Excess of revenue & others over expenditures & others	* * *
Fund balance at beginning of fiscal period	* *
Fund balance at the end of fiscal period	* * *

The balance sheet for each of the governmental funds includes the following classifications.

Balance Sheet for a Governmental Fund

Current Liabilities	* * *	Current Assets	* * *
Fund Balance :			
Reserved	* *		
Unreserved	* *	* * *	
Total Liabilities & Fund Balance	* * *	Total Assets	* * *

Long-term productive assets or long-term liabilities are not reported within the individual funds. Separate, non-fund accounting reports are used for the government unit's long term productive assets and long term debt. Short-term debt, such as vouchers payable, tax anticipation notes payable are included in the governmental funds. Fund balance reports the difference between the assets and liabilities of the fund. It is divided between unreserved, which is the amount that may still be expended, and reserved, which is the amount that is restricted from being expended.

6.4.1 Budgetary Aspect of Government Operations

Budgets are used in governmental accounting to assist in management control and to provide the legal authority to levy taxes, collect revenue and make expenditures in accordance with the budget. A government unit may have several types of budget. Operating budgets specify expected revenue from the various sources provided by law. The operating budgets also include expected expenditures for various line items such as payrolls of employees, supplies and goods and services to be obtained from outside the government unit. Operating budgets are used in the general, special revenue and debt service funds. Capital budgets are used for capital projects funds.

Budgets are such an important control vehicle for governmental funds that they are often entered into the formal accounting records. For example, assume that on first day of the new fiscal period, the government approves the operating budget for the general fund, providing for Rs. 9,00,000 in revenue and Rs. 8,50,000 in expenditures. Approval of the budget provides the legal authority to levy taxes and to appropriate resources for the expenditures. The term appropriation is the legal description of the expenditure authority. The entry made in the general fund's accounting records on that day is—

	Rs	Rs
Estimated Revenue	9,00,000	
Appropriations		8,50,000
Unreserved Fund Balance		50,000

The excess of estimated revenue over anticipated expenditures is the budget surplus, and it is recorded to Unreserved Fund Balance. Most budgets passed today have budget deficits in which expected expenditures exceed anticipated revenue. These budgets are recorded with a debit to Unreserved Fund Balance. Recording the budget in this way makes the budget a formal accounting control mechanism.

6.4.2 Recognition of Revenue and Expenditure

In commercial operations the accrual method of accounting is used. In government accounting also the same basis of accounting is followed. But sometimes the adaptation of this method, called modified accrual method is used.

Under modified accrual method, revenue is recorded when it becomes both measurable and available to finance expenditures of the current period. For example, taxes are recorded when they are levied, provided they are collectible within the current fiscal period, that is, they are available in current period to finance expenditure. If they are not so, they are recorded in a deferred revenue account. Revenue from another government unit is recorded when it becomes billable. Miscellaneous revenue, on the other hand, is recorded when the cash is received because it cannot be predicted properly. Thus, revenue may be recognised before, at or after the point of cash receipt. In different situations, recording is done in different ways as follows.

Case A : When revenue recognised before cash received

	Rs	Rs
(1) Receivable	1,00,000	
Revenue		1,00,000
(2) Cash	1,00,000	
Receivable		1,00,000

Case B : When revenue recognised and cash received at same time

	Rs.	Rs.
(3) Cash	1,00,000	
Revenue		1,00,000

Case C : When revenue recognised after cash received

(4) Cash	1,00,000	
Deferred Revenue		1,00,000
(5) Deferred Revenue	1,00,000	
Revenue		1,00,000

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

1. Cost for personal services, such as wages, salaries, are generally recorded in the period of payment because they are normal, recurring expenditure.
2. Goods and services obtained from outside are recorded as expenditure in the period in which goods or services are received.
3. Capital outlays are recorded as expenditure in the period of acquisition.
4. Interest is recorded in the period in which it is legally payable.

The expenditure process in governmental accounting comprises the following sequential steps.

1. Appropriation
2. Encumbrance
3. Expenditure
4. Disbursement.

Accounting for appropriation has been discussed in the preceding sub-section. The second one, i.e., encumbrance is a unique element in government accounting. When an order is placed for goods and services to be received from outside the governmental authority, the appropriation is encumbered with the estimated cost of the order. This is done to ensure that a period's expenditures do not exceed appropriations. Accounting for encumbrance is kept as follows.

Encumbrance

.....

Reserve for Encumbrances

.....

An expenditure and a corresponding liability are recorded when the governmental entity receives the goods or services. The encumbrance entry is then reversed and the expenditure is recorded for the actual cost in the following way.

- | | | |
|-----------------------------|-------|-------|
| 1. Reserve for Encumbrances | ..... |  |
| Encumbrances |  | ..... |
| 2. Expenditures | ..... |  |
| Vouchers payable |  | ..... |

When finally the cash is disbursed for expenditure, the following entry is made.

- | | | |
|------------------|-------|-------|
| Vouchers payable | ..... |  |
| Cash |  | ..... |

At the end of the fiscal year, the following adjusting entry is made to recognise the remaining inventory, if any and to restrict the fund balance for the non-expendable portion applicable to inventories.

- | | | |
|-------------------------|-------|-------|
| Inventory of Supplies | ..... |  |
| Reserve for Inventories |  | ..... |

During the next period, the entry is just reversed to recognise the use of the remaining inventory. That means, the expenditure is recognised only in the period in which the supplies are acquired, not in the period of use. This is known as the Purchase Method of Accounting for Inventories. In the Consumption Method, however, the expenditure is recognised in period of use, not in the period of purchase.

6.4.3 Interfund Transfers and Transactions

Two types of interfund transfers and two types of interfund transactions are found in governmental accounting. They are-Operating Transfers, Residual Equity Transfers, Quasi-external Transactions and Financing Transactions. Operating transfer means the transfer of resources from general fund into another fund to be used by the receiving fund for its own operations. If general fund transfers an amount to capital projects fund, the entries will be as follows.

In the books of general fund—

- | | | |
|----------------------------|-------|-------|
| (a) Operating Transfer Out | ..... |  |
| Cash |  | ..... |

In the books of Capital Projects Fund-

- | | | |
|-----------------------|--|-------|
| (b) Cash | | |
| Operating Transfer In |  | ..... |

If, after the completion of the project, there remains some residue in the capital project fund, it will transfer the balance back to general fund. This transfer is known as Residual Equity Transfer. In the books of general fund the entry will be as follows—

Cash

Residual Equity Transfer

from Capital Project Fund

In the books of Capital Project Fund, the entry will be just the reverse.

Quasi-external transactions are the transactions entirely within the government units. When 'A' fund makes some expenditure for 'B' fund, 'A' fund will show the amount as 'Due from B fund'. As and when cash is received from B fund, the account 'Due from B fund' is closed. In case of Financing Transactions also, i.e., in case of advancing loan from one fund to another, more or less the same entry, as we do in case of quasi-external transactions, is passed. Finally, the financial statements are prepared and presented in respect of each of the government fund. Two major financial statements are Balance Sheet and the Statement of Revenue. Expenditures and Changes in Fund Balance. Proforma of these two have been given earlier. If necessary, some additional supplementary reports are also prepared.

6.5 Classification of Government Accounting in India

For facility of control, the constitution of India provides for the following accounts :

- (i) Consolidated Fund,
- (ii) Public Account, and
- (iii) Contingency Fund

6.5.1 Consolidated Fund

Article 266 of the Constitution of India defines the Consolidated Fund. According to it, followings shall form one Consolidation Fund.

- (a) All revenues received by government
- (b) All loans raised by government by the issue of treasury bills, loans or wages and means advances.
- (c) All moneys received by government in repayment of loans.

The sources of inputs into the Consolidated Fund are clearly defined : (a) revenues (b) loans and ways and means advance and (c) recoveries of loans granted by government. The Constitution of India does not, however, mention whether grants form part of revenue. There are two kinds of grants : one is grant to States whose revenues are inadequate to meet their normal expenditure of running the government and these grants are as per the provisions of the Constitution. Obviously, these can be considered revenues of the receiving state. Then, there are grants which the government of India gives for Centrally Sponsored Schemes. These are also considered

revenues. Similar is the case of foreign aid in form of grants received by the Government of India.

No money out of the Consolidated Fund can be appropriated or spent except in accordance with law and for the purposes and in the manner provided in the Constitution.

6.5.2 Public Account

This Public Account is also a fund. Article 266(2) of the Constitution defines it as the receptor of all other public moneys received by or on behalf of the government. Any money which is not to go to the Consolidated Fund will be credited to Public Account. For payments out of the Public Account, approval of the Parliament or State Legislature is not required.

Rule 23 of the Government Accounting Rules, 1990 elaborates the concept of the Public Account. It says that in the Public Account the transactions relating to Debt (other than those included in the Consolidated Fund), Deposits, Advances, Remittances and Suspense shall be recorded. The transactions under Debt and Deposit make the government liable to repay the moneys received or creates a claim to recover the amounts paid. The transactions under the head Remittances and Suspense in the Public Account are booked only for a temporary period until these are transferred to the correct accounts in the Consolidated Fund or the Public Accounts. Some of the kind of transactions booked in the Public Account are Provident Fund, Savings Deposits and Certificates, Reserve Funds: Deposits and Advances. Provident Funds, Small Savings Deposits and Certificates are not considered loans to government. These accounts record receipts into and payments from these accounts to subscribers and depositors. Reserve Fund, on the other hand, is the money kept apart by some government department, the expenditure from which will not have any necessity to take approval from Parliament or State Legislatures. Any withdrawal from such funds are routed through Consolidated Fund. One of the important Reserve Funds is Central Road Fund. It is built up from excise and import duties on motor spirits, by transfer from the Consolidated Fund. This Fund is separated in this way from Consolidated Fund to know the balances available. Normally, the balances of only the loans or borrowings are available in Consolidated Fund, all other accounts are closed to one single account.

6.5.3 Contingency Fund

This fund is in the nature of an imprest. From this imprest, advances can be made for meeting unforeseen expenditure pending authorisation of such expenditure by Parliament or State Legislatures. The Contingency Fund is at the disposal of President/Governor, therefore only the government can issue authority for use of its money. No subordinate authority can, of itself, authorise its use.

The Accounts as such, mainly the Consolidated Fund, are divided into a number of Major and Minor Heads of Accounts. In fact, the basic unit for recording transactions in Government Accounts may be called the Major Head of Account. There are approximately 400 Major Heads at present. The Major Head of Accounts have a four digit code number and descriptions in words for each account. For example, accounts numbers from Code No. 0020 to 1606 are for tax revenues, non-tax revenues, grants and contributions received. Account numbers from Code No. 2011 to 5475 are for expenditure. Only Code No. 4000 is for capital receipts. These Major Heads of Accounts under the Consolidated Fund have been grouped upwards in Sub-sectors, Sectors and Divisions.

The Major Heads of Accounts have been divided into two broad divisions, namely Revenue Division and Capital Division. Revenue Division has one section for receipts and another section for expenditure. Revenue Division consists of all tax revenues, non-tax revenues, contributions and grants received in so far as receipts are involved. For payments it includes expenditure on revenue account of government; such expenditure is one which is not capital expenditure. Capital Division has one section for receipts which has only one Major Head of capital receipts, namely for receipts on sale of capital assets. The Division's another section is for expenditure. Then there are sections for Public Debt, Loans and Advances. The sections have, again, the sectors and sub-sectors. From Table I the classification as such will perhaps be more clear.

Table I
Consolidated Fund

Division	Section	Sector	Sub-sector	No. of Major Head
Revenue Division	(i) Receipt	(A) Tax Revenue	(a) Income Tax	6
			(b) Property Tax	6
		(B) Non Tax Revenue	(a) Interest	5
			(b) Dividend	4
	(ii) Expenditure	(A) General Service	(a) Organs of State	7
			(b) Fiscal Services	13
		(B) Social Service	(a) Education & Culture	8
			(b) Labour Welfare	9
Capital Division	(i) Receipt	Capital Receipt	—	1
	(ii) Expenditure	Capital Expenditure	—	7

Major Heads of accounts normally correspond to a distinct service provided by government, such as Agriculture, Defence etc. The Minor Heads represent the various programmes. Various schemes under a programme will be accounted under Subordinate Heads, also known as Sub-heads. Sub-schemes, if any, under a scheme are classified further as Detailed Head. Each Detailed Head has ultimately the lowest tier of classification called Object Head of expenditure, such as pay, dearness allowance etc.

6.6 Legislative Control of Accounts in India

As is well-known, the corner stone of government's financial business is the budget. Under Article 112 of the Constitution, the President shall in respect of every financial year cause to be laid before both the Houses of Parliament a statement of the estimated receipts and expenditure of the Government of India for that year, which is known popularly as Government Budget. The estimates of expenditure in the Budget show separately—

- (a) the charged expenditure on the Consolidated Fund,
- (b) the other expenditure to be met from the Consolidated Fund and must distinguish the expenditure on revenue account from other expenditure.

Though the Parliament may discuss charged expenditure, it has no power to reduce it. Such expenditure does not require its vote of approval. By its very nature, charged expenditure concept has been evolved to ensure independence of important Constitutional authorities, and for ensuring public faith and confidence that loans raised by government will definitely be repaid and interest on them is also assured.

Expenditure other than charged expenditure must distinguish between expenditure on revenue account and expenditure on other account. Any expenditure which is not on revenue account is deemed as on capital account. The Constitution does not define what is on revenue account. Two views are there about distinguishing expenditure on revenue account from other expenditure.

One view is that the expenditure met from revenues of government is the expenditure on revenue account. The revenue as such is distinct from the loans raised by government. Therefore, the expenditure met from this revenue must be shown separately. In the budget, the deficit or surplus on revenue account is shown separately. Another view is that capital expenditure must be distinguished from revenue expenditure. If we can define capital expenditure, we can then, by the process of elimination, ascertain revenue expenditure. Rule 30 of the Government Accounting Rules, 1990 broadly defines capital expenditure as expenditure incurred with the object

of either increasing concrete assets of a material and permanent character and it has been expressly authorised to be so classified by general or special orders of government.

In respect of expenditure on a capital scheme, where separate revenue and capital accounts are to be kept, an important principle is that replacement and renewal is revenue expenditure on the ground that depreciation is a revenue expenditure. However, if replacement or renewal results in any improvement of the asset, a suitable part of the expenditure may be considered capital expenditure.

An important conclusion to flow from the above analysis is that government accounting must be such as can show charged expenditure separately from the other expenditure and it must also show separately revenues, revenue expenditure and capital expenditure.

6.6.1 Vote on Account

The Parliament as well as State Legislatures have power to sanction expenditure for a part of the year pending consideration and approval for remaining part of the year. This is called vote on Account. Generally, it is taken for two months. However at the time of elections or soon thereafter, the vote on account is taken for three or four months also. The main purpose of Vote on Account is to keep the government functioning. Therefore, as a convention, it is not used to obtain approval for new service. There is a convention of not utilising Contingency. Fund for expenditure on new service while Lok Sabha is in session. A supplementary grant is presented, or a resolution be brought for approval.

6.6.2 Parliamentary Approval for Expenditure

Government presents before Parliament a document called Demands for Grants showing the estimates of expenditure. Charged expenditure is shown separately in each Demand for Grant. However, some estimates are exclusively for charged expenditure and these are called Appropriations. Generally, large government departments have more than one Demand for Grant, whereas the smaller departments do have only one Demand for Grant. A Demand for Grant shows the total amount required for expenditure on revenue account, capital account, grants to States and Union Territories and loans and advances for the service. Generally, Demand for Grant estimates and indicates Major Headwise, showing voted and charged expenditure separately, expenditure on capital account separately from revenue expenditure. In addition, the estimates are further split into Plan and Non-Plan expenditure as Plan expenditure has become an equally important part of classification.

6.6.3 Excess and Exceptional Grants

If any money has been spent on any service during a financial year in excess of the amount granted for that service for the year, then an excess grant is presented to both Houses of Parliament: As a convention this is done after the Public Accounts Committee (PAC) has presented its report to the Lok Sabha. The PAC would have examined the government departments about the reasons for the excess and would have made its recommendations in this regard.

The Vote of Credit is granted to meet an unexpected demand upon the resources of India (or State) when on account of the magnitude or the indefinite character of the service the demand cannot be stated with the details ordinarily given in the budget. Exceptional grant is one which forms no part of the current service of a financial year.

6.6 Control of Cash in Government of India

The Reserve Bank of India is the banker of the Union Government and State Governments except the Government of Sikkim and Government of Jammu and Kashmir. The Reserve Bank and the Central and the State Governments have entered into agreements about conduct of their cash business and the terms and conditions for doing so. The Reserve Bank is not paid anything for this service nor does it pay any interest on government balances. This is similar to the case of business enterprises keeping current accounts with banks. The Reserve Bank of India Act enjoins upon it to perform duties of banker to the Union and the State Governments. The Reserve Bank has appointed the State Bank of India (SBI) its agent to conduct government cash business at places where the RBI does not have its branches. Only lately other public sector banks have also been appointed to conduct government business. The other offices that are associated with conduct of cash in government are as follows.

Treasury : A treasury may be defined as Pay Office of government. A district treasury receives and pays money on behalf of and on the authority of different government offices situated in the district. Unless specifically authorised to deal directly with a Bank, government offices have to work only through government treasury. Treasury renders complete detailed account of receipts and payments to Accountant General of a State. When there were only a few banks in the past, government used to keep cash in its treasuries. Cash was received as well as disbursed there. However, with the development of banks, the cash business has been transferred to banks. A specified branch of a bank is attached to each treasury. A treasury has a few sub-treasuries under it. Each sub-treasury again has a separate

branch of a bank attached to it. In case there is no bank nearby, then it conducts cash business also. It is then known as non-banking sub-treasury. An insignificant number of non-banking sub-treasuries still exist.

Pay and Accounts Officer : This is the new name of treasuries in the Central Government. They not only perform the major function of treasuries in making payments through banks attached to them, they also prepare accounts in greater details than the treasuries.

Though there are three account entities as per the Constitution—Consolidated Fund, Contingency Fund and Public Accounts, there is only one cash account. The balances of these three different entities are merged into one cash balance. The RBI has an agreement with each of the State Governments and with the Union Government to the effect that they must keep a certain mutually agreed upon cash balance with RBI. In case the actual balance at any time is more than the stipulated minimum balance, then the RBI invests the surplus of the State Government in the Treasury Bills. These treasury bills earn interest on daily basis and these can be easily converted into cash at any time. When the balances of a State Government fall below the minimum balance, then the RBI first encashes the State Government investments in treasury bills. If there is still shortage, then the RBI grants 'Ways and Means Advances' to the State Government. These Ways and Means Advances carry a higher rate of interest on daily balances. These advances are still required by State Governments as the flow of neither receipts nor expenditure is even. On some days there may be surplus of cash, on other days it may be shortage. The RBI informs the concerned government of the cash balance at the close of accounts of cash. Hence, the need for Ways and Means Advances and the arrangement of investment of surplus funds.

Accountant General : Not only are the balances of a State Government with the RBI increase or decrease with the receipts and payments at the banks attached with various State treasuries, these balances are also operated upon by the Accountant General of other States. Each Accountant General is empowered to ask the RBI to reduce the cash balance of his state by corresponding increase in the balance of the Central Government on account of payment of interest on loans and repayment of principal to the Central Government. Similarly, moneys received or paid on behalf of the other State Governments are adjusted by sending suitable advices to RBI to adjust the balances of two State Governments. Mostly these are payments on accounts of pensions payable by one State Government but disbursed through the courtesy of another State Government treasury.

6.8 Form of Government Accounts in India

For government accounts, Article 150 of the Constitution confers the power to prescribe form of accounts jointly on the Central Government and the Comptroller and Auditor General of India (C & AG). Though the Government of India Act 1935 as an enabling provision provided for any State having a separate Auditor General, in the case of form of accounts, its section 168 laid down :

The accounts of the Federation shall be kept in such form as the C & AG may, with the approval of the Governor-General prescribe and in so far as the C & AG may, with the like approval give any directions with regard to the methods or principles in accordance with which any accounts of provinces ought to be kept, it shall be the duty of every Provincial Government to cause accounts to be kept accordingly.

The underlying idea has been that the general form of accounts be framed on a common basis for all the provinces. In 1950, the Constitution of India conferred this power jointly on the C & AG and the President of India. Article 150 laid down that the accounts of Union and of the States shall be kept in such forms as the C & AG may, with the approval of the President, prescribe. In 1976, however, the task of keeping Government of India accounts was taken over from the C & AG and the amended Article 150 then stated :

The accounts of the Union and of the States shall be kept in such form as the President may, in consultation with the C & AG, prescribe.

It is not known what shortcomings in the working of Article 150 led to this amendment. It would seem the amendment sought to provide for a formality of consultation without conferring on C & AG any power to veto or modify any proposal. However, this amendment had a short life. Article 150 was again amended in the year 1978, and the words "in consultation with" was substituted by "on the advice of". In a way it restores the position that had been in force since 1935 with greater emphasis on the wisdom and the advice of C & AG.

Of a number of accounts maintained by the government offices, the Suspense Accounts and Remittances are two major heads of accounts. The concept of Suspense Account in government seems much wider than in the commercial world. Government Suspense Accounts are of three kinds :

(a) Suspense Accounts which are a control mechanism and will ultimately get transferred to the Bank of the Government which is named in government accounting as Reserve Bank Deposits.

(b) Suspense Accounts are ultimately transferred to the regular accounts in the Consolidated Fund or the Public Account. That is, Suspense Accounts here work a temporary parking slots.

(c) Suspense Accounts which are in reality regular accounts and for them there is no other accounting head available. These accounts act to some extent as miscellaneous accounts.

So far as Remittances are concerned, there is one Major Head as Cash Remittances and Adjustment. Public Work Remittances is one Minor Head under that Major Head. Public work Remittances head has again a number of sub-heads one of which is "Other Remittances". How do these accounts work may be shown below by way of an example.

Director General, Supplies & Disposals (DGSD) of Government of India purchases materials for public works divisions belonging to State Governments. Soon after it pays for purchases, DGSD asks the RBI to reduce the balance of the State Government concerned. It sends the necessary documents to the AG of the State. On receipt of the advice from RBI, the AG debits the Sub-head Other Remittances—Items adjustable by Public Works. When material is received by public works division, it will pass an entry debiting the Stock by credit to the Material Purchase Settlement Suspense Account. On receipt of the documents from the Accountant General (AG), the public works division is required to clear the head Material Purchase Settlement Suspense Account by crediting the head Public Work Remittances—Items adjustable by Public Works.

Payment system in Union Government is : cheques are issued by Pay and Accounts Officer (PAO) drawn on public sector banks. These banks submit account of paid cheques to PAO and also ask RBI to reimburse this amount. RBI reimburses the amount to the Public Sector Banks and informs the PAO what it has done. As soon as PAO issues a cheque for an expense it will pass the following entry.

Debit	Expense Head
Credit	8670 Cheques & Bills [8670 is the relevant A/c No.]

When Public Sector Bank informs the PAO that the payment against cheque has been made, the PAO will make following entry ;

Minus Credit	8670 Cheques & Bills
Credit	8658 Suspense Account (RBI)
	108 Public Sector Bank Suspense.

8658 Suspense Account is a Major Head and 108 Public Sector Bank Suspense is one minor head under that. Same accounting effect is there in two accounts simultaneously. In the commercial accounting there is no such duality. When RBI informs the PAO of the amount paid to the Public Sector Bank, the following entry will be passed.

Minus Credit	8658 Suspense Account
	108 Public Sector Bank Suspense
Credit	Reserve Bank Deposit.

6.9 Exercise

A. Short-answer Type Questions :

1. What is fund accounting?
2. State the function of Debt Service Fund.
3. How many major heads are there in Government Accounts?
4. What is the function of Fiduciary Fund?
5. Who is PAO?
6. How is C & AG appointed?
7. Who is the Provincial Head of Government Accounts?
8. Who is authorised to prescribe form of government accounts.
9. What is Vote on Account?
10. Define Consolidated Fund.
11. What is the function of Suspense Account in government accounting?
12. Give a brief note on Exceptional Grant.
13. What is Contingency Fund?
14. Define Treasury.
15. What is "Interfund Transfers"?

B. Long-answer Type Questions :

1. What do you mean by government accounting? How does it differ from commercial accounting?
2. Give a brief note on the historical perspective of government accounting in India.
3. What is cash basis accounting? Is government accounting a cash basis accounting? Explain.

4. What is the objective of government accounting? Government Accounts are controlled largely by legislation-Discuss.
5. Explain the role of budgets in government accounting.
6. How is the government cash controlled through government accounting?
7. Give a brief description of the forms and procedures of Government Accounts in India.
8. Explain the concept of 'Fund Accounting'. How is Fund Accounting concept used in the preparation and presentation of government accounts?
9. How are the revenues and expenditures recognised and reported in Fund Accounting?

6.10 References

1. M. P. Gupta—Government Accounting
2. Govt. of India—Introduction to Indian Govt. Accounts & Audit
 - Account Code for Accountant General
 - Civil Accounts Manual
 - Form of Accounts of the Union and States Rules, 1983.
3. Baker; Lambke & King-i- Advance Financial Accounting

Unit 7 □ Social Accounting

Structure

- 7.1 Concept of Social Accounting**
- 7.2 Social Accounting Vs. Enterprise Accounting**
- 7.3 Objectives of Social Accounting**
- 7.4 National Income Measurement Methods**
- 7.5 Social Accounts**
- 7.6 Exercise**
- 7.7 References**

7.1 Concept of Social (National) Accounting

Social (national income) accounting is a set of principles and methods used to measure the income and production of a country. Put another way, social accounting is a set of systematically classified and integrated statistical statements which reflect the value of the total final output produced within a national boundary and present together details of distribution of factor incomes among different groups and final expenditure of the economy on consumption and investment. It tries to describe systematically and quantitatively the structure and activities of an economy during certain time span and the structure and activities of assets and liabilities at a particular time. Economic transactions between groups of individuals (households), business enterprises, government agencies and with the outside world are dealt with, quantitative data are recorded, measured, processed and consolidated into various versions designed to display the principal national aggregates and their interrelations in accounts and tables.

One of the principal developers of the national income accounting method used today was Simon Kuznets. His work in developing the system of national income accounting earned him the Nobel Prize in Economics. The newest version of System of National Accounts (SNA) has been prepared by the Inter-Secretariat Group on National Accounts, which consisted of five international organisation—UN, IMF, World Bank, OECD and Commission of European Communities.

Accounting is a means of representing economic events of an economic unit. When such a unit is society, not individual enterprise, the accounting is called social

or national income accounting. The term 'social accounting' is often used to refer to corporate social accounting. Corporate social accounting is concerned with the recognition, measurement and reporting of information about corporate social performance. In recent years there have developed several methods of corporate social accounting. In this unit, we are concerned with macroeconomic social accounting.

7.2 Social Accounting vs. Enterprise Accounting

The procedures used to prepare and present social accounts are similar in many respects to the procedures followed in enterprise accounting. Like enterprise accounting, social accounting uses a double-entry approach. The pattern of accounts classification, e.g., revenue, expense, income, purchase, assets etc, shows similarity to that in enterprise accounting. However, the underlying principles vary. For example, in social accounting market values are commonly adhered to but in enterprise accounting historical cost is the dominant method of valuation. Historical cost is used in order to ensure that the measures are completely objective. In social accounting estimates and imputations are more widely used.

Enterprise accounts allow co-ordinated presentation of income and wealth through 'profit and loss account and balance sheet, but this is not done in social accounting. The framework of social accounting on the other hand consists of five interrelated versions or segments, e.g., (i) the national income and product account, (ii) the inter-industry account, (iii) the flow of funds account, (iv) the balance of payments account and (v) the national balance (sheet) account. The national income and product account and the national balance sheet are comparable to enterprise accounting's profit and loss account and balance sheet. The flow of funds account compares to the sources and application of funds statements. Input-output tables are also there in business accounting, but the balance of payment account has no comparable account in enterprise accounting.

7.3 Objectives of Social Accounting

Enterprise accounting helps us evaluate past activities and project the future. Similar is the case 'with social accounting. Here the basic objective is to measure national income, i.e., the result of the past economic activities of the economy and to plan for its future. The analysis of the past income reveals the relationship among the various components, i.e., consumption, savings and investment. Through

manipulating these variables attempts are made to improve the economic condition of a nation.

Today more and better systematized information about varied economic activities is required for various national and international purposes. More specifically, social accounts' aggregates and individual data are needed for measuring economic progress and for designing macro economic plans and policies. They play an important role in setting national goals, in guiding economic planning and budgeting and in structuring economic models. But the social accounts are required not only by the government, but they also are needed by industry, trade associations, stock exchanges, labour unions, banks and other institutions that need to have a clear picture of the activities and structure of the economy from which to draw necessary inferences; to design policies and strategies and to make decisions. To summarise, the following specific objectives may be attained with social accounting :

(1) It helps us understand how various transactions are interrelated, and gives us an idea of the working of the economy. Thus, the performance of the economy as a whole can be assessed with the help of it.

(2) National income is generally regarded as the most useful indicator of the performance of an economy. Generally a larger income is equated with an increase in the economic well-being of a country's population.

(3) It supplies data on time about the movement of the various economic variables without which national economic policy framing is impossible.

(4) It enables one to grasp better the variables and relations which require to be measured, understood, and used for the attainment of the national goals of economic stability, growth and equitable distribution.

(5) It serves a very useful purpose by providing information about allocation of primary income, the secondary distribution of income and the use of the disposable income.

(6) Various measures of national income are commonly used for assessing economic growth of a country overtime, as well as for comparing its economic position with those of other countries.

(7) It provides data on aggregate consumption, savings and investments, and Income distribution among the various factors. The data are used by economic policy practitioners in preparing macroeconomic plans and policies.

(8) Last but not the least, it reflects the position of foreign trade. That means, it gives us information as to the net balance of payment.

7.4 National Income Measurement Methods

From the concept and objectives of social accounting it appears that the main objective of such type of accounting is to measure the national income. Theoretically, it is true that national income represents the consolidated incomes of all inhabitants and industries within a territory. But national Income (NI) is not measured by means of aggregating incomes of all of them, because very few people maintain records of their earnings. Moreover, it is not possible to collect and combine these accounts, even if they are maintained. The purpose is fulfilled by other easier means.

There are three approaches to national income accounting : product approach, income approach and expenditure approach. They all yield identical measures of income because any output produced (product approach) is purchased by someone (expenditure approach) and yields income to someone (income approach).

Under the production method, aggregate values of all final goods and services produced within an economy in a period is considered the national income of the country for that period. But in the process of aggregation some problems are faced. Usually, no single firm produces final product procuring raw materials directly from nature firms usually procure their inputs which are the final output of other firms, process them further and produce new product. If we add the values of output of both the firms, something will be aggregated twice. To avoid this multiple counting we may add only just what additional values are created by individual firms instead of aggregating the values of their final products. This method of computing income is called value added method. The values added by each and every unit in the economy has to be aggregated to get the total value of gross national product or GNP.

Under the income method, we add together first the factor incomes like wages, rent, interest, profit including retained earnings and reserves for tax payment and reinvestment. Earnings in kind, such as rent on rent free quarters also should be included. Salaries of government employees and other costs incurred by the government have to be added. Mixed income of self-employed persons together with the value of goods used for self consumption should be added. Lastly, the net asset incomes from abroad has to be included.

Under the expenditure method, computation begins from the final expenditure of the economy on consumption and investment. For this reason, this method is also called consumption and investment method, GNP, according to this method, would be total of—

- i) Expenditure on private consumption
- ii) Expenditure on public consumption
- iii) Expenditure on gross private investment
- iv) Expenditure on gross public investment
- v) Difference between exports and imports.

Thus, it is evident that if money flows are measured at the point where households receive income, it is income method. On the contrary, if it is measured at the point where money flows from the producing sector to households, it is value added method. Finally, if it is measured at the point where money flows into the producing sector, it is the expenditure method. As has been stated earlier, all approaches will, yield the same result. That means—

$$\text{GNI} = \text{GNP} = \text{GNE}$$

Where GNI refers to Gross National Income, GNP to Gross National Product and GNE to Gross National Expenditure, then, the question may arise why we should use the three methods when anyone of them may serve the purpose. This is because in some cases it is easier to apply the income method, while in other cases product method may be more suitable. In some other cases the expenditure method may be found most convenient.

7.5 Social Accounts

The design of an accounting system depends on the needs for which such account is drawn. In enterprise accounting, for instance, the objective is to measure the impact of economic activities which brings change in wealth position. Accordingly, the accounts are classified in such a way that the factors responsible for such changes can be identified easily. Similar is the case in case of social accounting. The needs of social accounting are broadly the following:

- (a) How effective are the producing centres?
- (b) How is the income appropriated by the individuals and the government?

(c) How much of appropriated income is saved and invested for capital formation? and

(d) What is the position of foreign trade?

With a view to fulfilling the needs as stated above, following accounts are usually opened in social accounting system :

(a) Business Enterprise Sector A/c

(b) Household Sector A/c

(c) Government Sector A/c

(d) Capital or Savings and Investment A/c

(e) Rest of the World Sector A/c.

The first account satisfies objective (a) and objective (b) is fulfilled jointly by next two accounts. Last two accounts are meant for showing the positions of capital formation and foreign trade respectively.

In enterprises, exchange based transactions occur. Every transaction results in movement of value from one centre to another. Account representing the centre wherefrom the movement starts is credited and the account for the centre where it reaches is debited. In a national boundary also there occur innumerable transactions. Accurate accounting requires proper recording of all. But it is not possible. Even if possible, it is not done in social accounting. In the case of enterprise accounting, recording of each transaction is indispensable for determining claims of individuals. But in national accounting the purpose is not to determine claim of anybody but to determine the impact of all transactions incurred within a country. That is why transactions, imputed or actual, incurred within a country may be classified into some major groups. They are to be grouped in a way that gives a meaningful picture of the structure of the economy with further distinctions as to types of transactions and classifications being made. The transactions belonging to each group must have certain homogeneity, defined in terms of the reasons for which accounts are kept. The classification of the transactions, as in case of enterprise accounting, rests on double-entry accounting, each transaction being classified twice and each item belonging to two accounts. How all these are done can be understood from the hypothetical transactions presented below.

Transactions :

(Figures are in Rs/Cr)

1. Business Enterprise Sector pays salaries & wages—800, rent—60, interest—40 to household sector.
2. Business Enterprise Sector distributes dividend to entrepreneurs who are householders—50.
3. Business Enterprise Sector provides depreciation—80.
4. Corporate tax to government—350.
5. Business Enterprise Sector uses a part of its production as fixed assets—310.
6. Business Enterprise Sector uses a part of its production as fixed assets—310.
7. Business Enterprise Sector sells consumer goods to government—200.
8. Business Enterprise Sector increases its holding of inventories by—250.
9. A net export surplus in Business Enterprise Sector—30.
10. Retention for further investment by Business Enterprise Sector—70.
11. Surplus of indirect tax over subsidies—30.
12. Govt. Sector pays salary—90.
13. Household Sector pays direct tax—40.
14. Saving of Household Sector—310.
15. Saving of govt. Sector—130.

In firm accounting, transactions are recorded in bay Books and then they are posted to ledgers But there is no such system in social accounting. Social accounts are presented in five tables in place of five accounts as stated earlier. Tables are, however, more or less same as the accounts mentioned above. Each group of transactions is recorded twice-once in the left hand side of one table and other in the right of another. Such double recordings in just opposite side provides cross-checking. There is neither any provision for journal entries, nor a system of debiting or crediting in social accounting. From the cross checking system of the tables, it may however be inferred that the technique of double entry is unconsciously used, though the name 'double entry' is not mentioned there. On that understanding, we may journalise the above transactions so that the objective of national accounting is easily understood.

Transaction Nos.	Journal
1 & 2	Business Enterprise Sector A/c ... Dr To Household Sector A/c
3 & 10	Business Enterprise Sector A/c ... Dr To Capital or Savings & Investment A/c
4 & 11	Business Enterprise Sector A/c ... Dr To Government Sector A/c
5	Household Sector A/c ... Dr To Business Enterprise Sector A/c
6 & 8	Capital or Savings & Investment A/c ... Dr To Business Enterprise Sector A/c
7	Govt. Sector A/c ... Dr To Business Enterprise Sector A/c
9	Capital or Savings & Investment A/c ... Dr To Rest of the World Sector A/c
12	Govt. Sector A/c ... Dr To Household Sector A/c
13	Household Sector A/c ... Dr To Govt. Sector A/c
14	Household Sector A/c ... Dr to Capital or Savings & Investment A/c
15	Govt. Sector A/c ... Dr to Capital or Savings & Investment A/c

If we prepare Business Enterprise Sector A/c having based on the journals passed above, we shall get the national income (gross) at market price. To get net national income (NNI) we are to deduct the amount of depreciation therefrom. However, the national income at market price and that at factor cost are not equal. When we speak of national income at market price we mean the value of social product and services which include the impact of subsidies and indirect taxes. But they do not add anything to incomes of inhabitants. So, to get national income at factor cost, the impact of subsidies and indirect taxes should be eliminated. That is,

national income at factor cost may be measured in two ways: (i) by adding the factor incomes like wages, rent etc. of (ii) by deducting indirect tax net of subsidies from the national income at market price.

7.6 Exercise

A. Short-answer Type Questions :

1. Define Social Accounting.
2. What are the various segments of social accounting.
3. What is corporate social accounting?
4. What do you mean by GNP and GNI?
5. Name the accounts that may be prepared in social accounting.
6. What is the difference between GNI and NNI?
7. Why does income equal output?
8. Distinguish between national income at market price and national income at factor cost.

B. Long-answer Type Questions :

1. Explain the basic features of social accounting.
2. How will you relate enterprise accounting with social accounting?
3. What is the nature and scope of social accounting?
4. Explain the alternative methods of measurement of national income.
5. Explain the product approach to national income accounting.

7.6 References

1. Accounting System in Third World Economies—A. J. H. Enthoven
2. National Income Accounts—Ruggles, N. & Ruggles, R.
3. Social Accounting for Developing Countries—P. L. Arya
4. National Accounting—G. C. Sinha (Business Studies, 1987)

Unit 8 □ Value Added Reporting

Structure

- 8.1 The Concept of Value Added**
- 8.2 Methods of Computing Value Added**
- 8.3 Controversial Issues**
- 8.4 Advantages of VAS**
- 8.5 Limitations of Value Added Accounting**
- 8.6 Exercise**
- 8.7 References**

8.1 The Concept of Value Added

The value added concept is a 'very familiar one in economics. It is used in the context of measurement of gross national product (GNP). Although it has long been used in the field of economics, the accounting use of the concept is a phenomenon of very recent origin. In fact, it is after the publication in 1975 by the Accounting Standards Steering Committee of the UK of a discussion paper called as "The Corporate Report" that the value added concept started attracting attention from the business community. The Corporate Report was prepared with an object of improving the usefulness of corporate financial reporting. One of the important conclusions drawn in the Report was that profits can no longer be regarded as the sole or premier indicator of business performance. It is mentioned in the Report that some additional indicators are needed to enhance the decision-making capability of financial reports. One of the proposed new statements is the value added statement (VAS).

The VAS is to be prepared on the basis of assumption that the business firm is a partnership made up of the employees, providers of capital, government and the firm itself. The partners render services with the help of which the utility of bought in goods is increased and thereby, the value is added. The employees lend their labour power which constitutes the most significant factor in value creation. Capital providers provide funds with the help of which productive resources are acquired. The government is there to provide the business firm with different types of infrastructure facilities. The business firm has to maintain a network essential in value creation. The VAS shows the everyone's slice in the total value created. Actually, the term 'value added' to the value which a company, by the joint efforts of its

constituents, adds to the value of its inputs. The VAS, in that sense, is the statement which shows the income of the company as an entity and how that is divided between the people who have contributed to its creation.

8.2 Methods of Computing Value Added

A measure of value added is the difference between the value of goods and services produced and the value of the bought in goods or services. The value created by a firm is measured under this system by the difference between the market value of goods turned out by the firm and the cost of the goods and materials purchased from other firm. As per another measure, the value created by an entity equals the payments it has made to the factors of production in the form of wages, rent, interest and profit. Thus, the value added may be arrived at two methods-(i) Subtractive Method and (ii) Additive Method. The subtractive method calculates value added as the residue of Sales Revenue after subtracting relevant input costs. The additive Method, on the other hand, sums up the application of value added to yield the same aggregate. In the conventional VAS, however, both the methods are used. In the first step, the value added is found out by using subtractive method. In the second step, the additive method is adopted to show the application of value added. The format of VAS thus stands as follows.

Statement of Value Added

Sales	* * *	
Less bought in goods and services	* * *	
Value Added		<u>* * *</u>
Application of Value-Added		
Employees	* *	
Providers of Capital	* *	
Government	* *	
The Enterprise	* *	
		<u>* * *</u>

8.3 Controversial Issues in Value Added Accounting

The accountant has to encounter a number of controversial issues in computing the value added income of a business firm. First of all, there is the issue of depreciation. The second one relates to unsold goods. Employees remuneration and government's share are other two areas of accounting confusion.

Depreciation Charge : Some accountants want to show depreciation as an application of value added as, according to them, the business is to get it for the maintenance of firm's assets. But this can easily be contested. Tangible fixed assets in respect of which depreciation is computed are normally acquired from outside firms. The value of these assets are included in 'Sales' of the vendor company. So, the logic demands that depreciation be included in bought-in items. But still, many are in favour of excluding depreciation from bought-in items. They argue that if depreciation, which is very much subjective, is taken with bought-in materials, the amount of value added so computed will suffer from subjectivity.

GVA and NVA : The problem may, however, be overcome if value added is computed in two stages. At the first stage, the value added may be computed excluding depreciation from bought-in materials. The amount so computed may be termed as gross value added (GVA). Then, we may deduct depreciation from OVA to arrive at net value added (NVA). For comparison purposes, the OVA and not the NVA that should be used.

Treatment of Unsold Goods : Value added is computed by subtracting the cost of bought-in materials from sales. When all the output produced is *sold*, there is no problem. But usually there shall be some unsold stock. Unsold stocks are normally stated at cost price. But then there will be understatement of value added. Again, if the unsold stock is valued at market price, the principle of realisation will be violated. The accountants are not unanimous on this point. Hence, this is a controversial issue.

Treatment of Tax : The treatment of taxation is a third important controversial issue in value added accounting. The types of taxes a business firm is required to pay are many and varied. They include income tax, stamp duty, local tax, excise duty etc. Some accountants are of view that all sorts of taxes payable to the government should be shown as the application of value added. Another group of accountants state that only income tax that is levied on the basis of profit should be shown as application of value added. Excise or custom duties are to be included with bought-in items. The latter practice seems to be quite logical.

Employee's Remuneration: Difference of opinion also prevails with regard to presentation of employees' share of value added. Some argue that employees' share of value added is the net pay after deducting tax at source. There are others who hold the view that net pay concept is confusing. According to them, net pay will not reveal the proper ratio of employee benefit to value added as the tax paid by employees is determined by many other factors other than the gross pay.

Besides the issues discussed above, there are also certain other controversial issues in value added accounting. They include government grants and subsidies, foreign currency losses, research and development cost, income from investment in financial assets etc. In the absence of standards, the diversity will persist. So, proper guideline is needed either in the Companies Act or in the pronouncement of the Institute of Chartered Accountants of India.

8.4 Advantages of Value Added Statement

If used intelligently, value added data can provide some useful insights into the wealth-generation process of the business firm. The Corporate Report states that it is the simplest and the most immediate way of putting profit into proper perspective. The Report further adds that there is evidence that the meaning and significance of profits are widely misunderstood and in time to come value added may come to be regarded as a preferable way of describing performance. The specific benefits of value added statement are enumerated below.

Objectivity: One of the important qualities possessed by value added data is objectivity. Unlike accounting profit, value added data are not influenced much by the personal judgement. Value added income is computed by differentiating between sales and bought-in materials, both of which are objectively determined measures as they are directly derived from transactions with third parties. Accounting profit is subjective because it contains the arbitrary figures of depreciation. But in VAS, depreciation is usually shown in the application part. So, the value added figure is not affected by the amount of depreciation. The manipulation of value added income is also not possible by manipulating stock valuation if sales constitute the basis of measurement of the value of output.

Universality : Value added data are capable of being used universally. Not only in business entities but also in non-business entities, they are equally applicable. As a matter of fact, value added can be the only reliable indicator of performance for those entities that do not exist to generate profit from their operations. There are some commercial entities, particularly those in the public sector, where the profit earning objective is of secondary importance. The performance of such entities can be measured more meaningfully if value added data are used instead of profit figures as the basis of performance measurement.

Better Measure of Performance : Profit may sometimes be inflated or deflated, fooling thereby the users. But the value added income cannot be manipulated in

this way. Besides, the profit figure cannot indicate properly whether the profit has been earned by enhanced productivity or by depriving the employees, government etc. Value added income in that sense is a better yardstick, because value added income increases only when the productivity of profitability of the firm increases.

Ensures Team Spirit : The VAS depicts clearly the slice of each partner in the pie. What percentage of total value created is given to the employees as wages or what percentage is going to pockets of owner-all are clearly shown in VAS. Thus, much of the misunderstanding between the owners and workers is removed, ensuring thereby a team spirit that ultimately adds to the profitability of the firm.

Equitable Basis for Taxation : Although the debate is still continuing, the value added tax has been recognised now almost in all corners as more equitable basis to levy tax. The value added tax (VAT) is levied on the value added income. The VAS is gaining more and more importance from that angle also.

Produces Several Useful Ratios : From VAS we can compute a number of ratios that are useful for many of the managerial and investment decisions. From conventional accounts those ratios are not easily available. First of all, there are ratios that indicate the relative shares of the parties who have taken part in the process of wealth-generation. Such ratios are computed by dividing the amounts allocated to systematic analysis of the behaviour of these ratios over a number of years it may be possible to draw some valuable conclusions about how the affairs of the business are being conducted. For example, the ratio of employees benefits to value added may give the management a clue in wage negotiations. In addition to the ratios referred above there are also a number of other value added-based ratios that are very much useful to the management as well as to outside users.

8.5 Limitations of Value Added Accounting

Value added accounting suffers from several shortcomings as performance measure in the context of external reporting. Because of these limitations, many accounting writers are not prepared to attach much importance to value added. And, this is perhaps the main reason why the VAS has not yet gained so much ground though more than 25 years have elapsed since the Corporate Report has suggested for it. Criticisms that are usually levelled against VAS are as follows.

Nothing New : Some accountants are of opinion that the data contained in VAS are not capable of adding something significant to the information content of basic financial statements, which are made up of the balance sheet, profit and loss account

and the cash flow statement. Much of the information that the VAS is designed to convey can be obtained by a careful analysis of the figures contained in profit and loss account. Some have even criticised value added accounting by saying that if it does add anything, it does add to confusion.

Confusing : The VAS is prepared and presented as supplementary to profit and loss account. But for obvious reason, the two may give some contradictory result as to the progress or economic condition of a firm. Even when the value added income of a firm is showing an increasing trend, its profit figure may exhibit a declining trend. This happens when cost of bought-in materials comes down but the labour cost goes up. In such a situation the wary investors will be confused as to whether to hold or relinquish the investment in the firm.

Minefield of Definitional Problems : Value added income can be measured either on the basis of cash flows or accruals. Unsold stock can be valued either at cost or at market price. Depreciation can be shown either as an application or as a part of bought in materials. Employees' remuneration or share of the government can also be presented in different ways. Thus, to the ordinary people, it may be difficult to interpret the figures. Truly speaking, the most serious limitation of value added data stems from this lack of uniformity in the matter of preparation and presentation of value added measures. Comparability of financial statements between firms is greatly impaired when VASs are prepared by firms using dissimilar principles and rules.

Ignores the Special Role of Profit : Value added accounting does not recognise the special role that profit plays in the field of business. In the VAS, profit is treated at par with other items. Profit is undoubtedly a part of value added, but value added maximisation does not necessarily lead to maximisation of profit. Profit is associated with the measurement of the efficiency of labour, capital as well as of management. Value added reporting tends to undermine the importance of profit.

Supports Inefficient Managerial Decisions : If value added income becomes the focal point, managers might be induced to increase such income even at the cost of profit. For example, a business firm can maximise value added by producing goods that could otherwise be procured from outside sources at lower costs. Such actions are detrimental to the profitability of the business-firm. But if management is given to understand that its performance is being judged in terms of value added, it may adopt this actually inefficient but apparently value generating decisions. The fate of a business firm whose value added is maximised in this way can easily be imagined.

8.6. Exercise

A. Short-answer Type Questions :

1. Define value added income.
2. What purpose does value added concept serve in economics?
3. What do you mean by Additive & Subtractive Methods in the context of VAI?
4. Name four contributors to the generation of VAI
5. Define GV A and NVA.

B. Long-answer Type Questions :

1. Explain the nature of value added accounting. Discuss the methods of computing value added income.
2. What was the objective of the issuance of UK Corporate Report? Explain the content of the Report?
3. Value added accounting suffers from a number of limitations-Explain these limitations.
4. Discuss the merits and demerits of value added accounting?

8.7. References

1. G. C. Sinha—Value Added Accounting
2. M. F. Morley—Value Added Statement
3. ASSC—The Corporate Report, UK, 1975
4. Indian Journal of Accounting, 1990 (Dec.), 1992 (June).



মানুষের জ্ঞান ও ভাবকে বইয়ের মধ্যে সঞ্চিত করিবার যে একটা প্রচুর সুবিধা আছে, সে কথা কেহই অস্বীকার করিতে পারে না। কিন্তু সেই সুবিধার দ্বারা মনের স্বাভাবিক শক্তিকে একেবারে আচ্ছন্ন করিয়া ফেলিলে বুদ্ধিকে বাবু করিয়া তোলা হয়।

— রবীন্দ্রনাথ ঠাকুর

ভারতের একটা mission আছে, একটা গৌরবময় ভবিষ্যৎ আছে, সেই ভবিষ্যৎ ভারতের উত্তরাধিকারী আমরাই। নূতন ভারতের মুক্তির ইতিহাস আমরাই রচনা করছি এবং করব। এই বিশ্বাস আছে বলেই আমরা সব দুঃখ কষ্ট সহ্য করতে পারি, অন্ধকারময় বর্তমানকে অগ্রাহ্য করতে পারি, বাস্তবের নিষ্ঠুর সত্যগুলি আদর্শের কঠিন আঘাতে ধূলিসাৎ করতে পারি।

— সুভাষচন্দ্র বসু

Any system of education which ignores Indian conditions, requirements, history and sociology is too unscientific to commend itself to any rational support.

— Subhas Chandra Bose

Price : ₹ 150.00

(Not for sale to the Students of NSOU)

Published by : Netaji Subhas Open University, DD-26, Sector-I, Salt Lake, Kolkata-700 064 &
Printed at : The Saraswati Printing Works, 2, Guru Prosad Chowdhury Lane, Kolkata 700 006