

# ACCOUNTING EDUCATION

**Dr. Preeti Grover**



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# Contents

<i>Preface</i> .....	<i>vii</i>
<b>Chapter 1    Introduction</b> .....	<b>1</b>
<b>Chapter 2    Accounting for Investments</b> .....	<b>20</b>
<b>Chapter 3    Accounting Standards</b> .....	<b>57</b>
<b>Chapter 4    Cost Accounting</b> .....	<b>86</b>
<b>Chapter 5    Financial Accounting</b> .....	<b>104</b>
<b>Chapter 6    Construction Contract</b> .....	<b>131</b>
<b>Chapter 7    Theory of Management Accounting</b> .....	<b>145</b>



# Preface

Accounting education plays a pivotal role in preparing individuals for careers in finance, business, and beyond. One crucial aspect of accounting education involves providing students with a solid foundation in financial principles, including concepts such as financial reporting, taxation, auditing, and managerial accounting. By imparting these fundamental skills and knowledge, accounting education equips students with the tools they need to analyze financial data, make informed decisions, and effectively communicate financial information to stakeholders.

Moreover, accounting education emphasizes the development of critical thinking and problem-solving skills. Students learn to apply accounting principles and techniques to real-world scenarios, allowing them to identify, analyze, and solve complex financial problems. By engaging in hands-on exercises, case studies, and simulations, students develop the analytical and decision-making skills necessary to succeed in the dynamic and rapidly evolving field of accounting.

Furthermore, accounting education fosters ethical awareness and professional integrity among students. Given the importance of trust and transparency in financial reporting, accounting programmes emphasize the ethical responsibilities of accountants and the need for adherence to professional codes of conduct. Students learn about ethical dilemmas commonly faced in the accounting profession and develop the moral reasoning skills needed to navigate these challenges ethically and responsibly.

Additionally, accounting education recognizes the importance of technological proficiency in today's digital age. With the increasing use of accounting software, data analytics tools, and cloud-based platforms, students must be proficient in



technology to excel in their careers. Accounting programmes incorporate training in relevant software and technology to ensure that students are well-prepared to leverage technological advancements in the accounting profession.

Moreover, accounting education prepares students for the globalized nature of modern business. With companies operating across borders and international accounting standards becoming increasingly prevalent, students need a global perspective to succeed in the accounting profession. Accounting programmes incorporate international accounting standards and practices, expose students to cross-cultural business environments, and provide opportunities for international study and collaboration to develop students' global competencies.

This book accounting education plays a vital role in equipping students with the knowledge, skills, and ethical values needed to succeed in the accounting profession. By providing a strong foundation in financial principles, fostering critical thinking and problem-solving skills, promoting ethical awareness and professional integrity, emphasizing technological proficiency, and preparing students for the globalized business environment, accounting education prepares students for rewarding careers in finance, business, and beyond.

The book on Accounting Education provides a comprehensive overview of foundational principles, advanced topics, and practical applications in the field, preparing students for successful careers in finance and accounting.

*–Author*

# 1

## Introduction

In all activities (whether business activities or non-business activities) and in all organizations (whether business organizations like a manufacturing entity or trading entity or non-business organizations like schools, colleges, hospitals, libraries, clubs, temples, political parties) which require money and other economic resources, accounting is required to account for these resources.

In other words, wherever money is involved, accounting is required to account for it.

Accounting is often called the language of business. The basic function of any language is to serve as a means of communication. Accounting also serves this function.

## ACCOUNTING

### MEANING OF ACCOUNTING

Accounting, as an information system is the process of identifying, measuring and communicating the economic information of an organization to its users who need the information for decision making. It identifies transactions and events of a specific entity.

A transaction is an exchange in which each participant receives or sacrifices value (*e.g.*, purchase of raw material).

An event (whether internal or external) is a happening of consequence to an entity (*e.g.*, use of raw material for production). An entity means an economic unit that performs economic activities.

## DEFINITION OF ACCOUNTING

American Institute of Certified Public Accountants (AICPA) which defines accounting as “the art of recording, classifying and summarizing in a significant manner and in terms of money, transactions and events, which are, in part at least, of a financial character and interpreting the results thereof”.

## OBJECTIVE OF ACCOUNTING

Objective of accounting may differ from business to business depending upon their specific requirements.

*However, the following are the general objectives of accounting:*

- *To keeping systematic record:* It is very difficult to remember all the business transactions that take place. Accounting serves this purpose of record keeping by promptly recording all the business transactions in the books of account.
- *To ascertain the results of the operation:* Accounting helps in ascertaining result *i.e.*, profit earned or loss suffered in business during a particular period. For this purpose, a business entity prepares either a Trading and Profit and Loss account or an Income and Expenditure account which shows the profit or loss of the business by matching the items of revenue and expenditure of the some period.
- *To ascertain the financial position of the business:* In addition to profit, a businessman must know his financial position *i.e.*, availability of cash, position of assets and liabilities, *etc.* This helps the businessman to know his financial strength. Financial statements are barometers of health of a business entity.
- *To portray the liquidity position:* Financial reporting should provide information about how an enterprise obtains and spends cash, about its borrowing and repayment of borrowing, about its capital transactions, cash dividends and other distributions of resources by the enterprise to owners and about other factors that may affect an enterprise’s liquidity and solvency.
- *To protect business properties:* Accounting provides upto date information about the various assets that the firm possesses and the liabilities the firm owes, so that nobody can claim a payment which is not due to him.
- *To facilitate rational decision-making:* Accounting records and financial statements provide financial information which help the business in making rational decisions about the steps to be taken in respect of various aspects of business.
- *To satisfy the requirements of law:* Entities such as companies, societies, public trusts are compulsorily required to maintain accounts as per the law governing their operations such as the Companies Act, Societies Act, and Public Trust Act, *etc.* Maintenance of accounts is also compulsory under the Sales Tax Act and Income Tax Act.

## IMPORTANCE OF ACCOUNTING

- *Owners:* The owners provide funds or capital for the organization. They possess curiosity in knowing whether the business is being conducted on sound lines or not and whether the capital is being employed properly or not. Owners, being businessmen, always keep an eye on the returns from the investment. Comparing the accounts of various years helps in getting good pieces of information.
- *Management:* The management of the business is greatly interested in knowing the position of the firm. The accounts are the basis, the management can study the merits and demerits of the business activity. Thus, the management is interested in financial accounting to find whether the business carried on is profitable or not. The financial accounting is the “eyes and ears of management and facilitates in drawing future course of action, further expansion, *etc.*”
- *Creditors:* Creditors are the persons who supply goods on credit, or bankers or lenders of money. It is usual that these groups are interested to know the financial soundness before granting credit. The progress and prosperity of the firm, two which credits are extended, are largely watched by creditors from the point of view of security and further credit. Profit and Loss Account and Balance Sheet are nerve centres to know the soundness of the firm.
- *Employees:* Payment of bonus depends upon the size of profit earned by the firm. The more important point is that the workers expect regular income for the bread. The demand for wage rise, bonus, better working conditions *etc.*, depend upon the profitability of the firm and in turn depends upon financial position. For these reasons, this group is interested in accounting.
- *Investors:* The prospective investors, who want to invest their money in a firm, of course wish to see the progress and prosperity of the firm, before investing their amount, by going through the financial statements of the firm. This is to safeguard the investment. For this, this group is eager to go through the accounting which enables them to know the safety of investment.
- *Government:* Government keeps a close watch on the firms which yield good amount of profits. The state and central Governments are interested in the financial statements to know the earnings for the purpose of taxation. To compile national accounting is essential.
- *Consumers:* These groups are interested in getting the goods at reduced price. Therefore, they wish to know the establishment of a proper accounting control, which in turn will reduce to cost of production, in turn less price to be paid by the consumers. Researchers are also interested in accounting for interpretation.
- *Research Scholars:* Accounting information, being a mirror of the financial performance of a business organization, is of immense value to the research scholar who wants to make a study into the financial operations of a particular firm. To make a study into the financial

operations of a particular firm, the research scholar needs detailed accounting information relating to purchases, sales, expenses, cost of materials used, current assets, current liabilities, fixed assets, long-term liabilities and share-holders funds which is available in the accounting record maintained by the firm.

## **FUNCTIONS OF ACCOUNTING**

- *Record Keeping Function:* The primary function of accounting relates to recording, classification and summary of financial transactions-journalisation, posting, and preparation of final statements. These facilitate to know operating results and financial positions. The purpose of this function is to report regularly to the interested parties by means of financial statements. Thus accounting performs historical function *i.e.*, attention on the past performance of a business; and this facilitates decision making programme for future activities.
- *Managerial Function:* Decision making programme is greatly assisted by accounting. The managerial function and decision making programmes, without accounting, may mislead. The day-to-day operations are compared with some predetermined standard. The variations of actual operations with pre-determined standards and their analysis is possible only with the help of accounting.
- *Legal Requirement function:* Auditing is compulsory in case of registered firms. Auditing is not possible without accounting. Thus accounting becomes compulsory to comply with legal requirements. Accounting is a base and with its help various returns, documents, statements, *etc.*, are prepared.
- *Language of Business:* Accounting is the language of business. Various transactions are communicated through accounting. There are many parties-owners, creditors, government, employees, *etc.*, who are interested in knowing the results of the firm and this can be communicated only through accounting. The accounting shows a real and true position of the firm or the business.

## **ADVANTAGES OF ACCOUNTING**

*The following are the advantages of accounting to a business:*

- It helps in having complete record of business transactions.
- It gives information about the profit or loss made by the business at the close of a year and its financial conditions. The basic function of accounting is to supply meaningful information about the financial activities of the business to the owners and the managers.
- It provides useful information for making economic decisions,
- It facilitates comparative study of current year's profit, sales, expenses, *etc.*, with those of the previous years.

- It supplies information useful in judging the management's ability to utilise enterprise resources effectively in achieving primary enterprise goals.
- It provides users with factual and interpretive information about transactions and other events which are useful for predicting, comparing and evaluation the enterprise's earning power.
- It helps in complying with certain legal formalities like filing of income tax and sales-tax returns. If the accounts are properly maintained, the assessment of taxes is greatly facilitated.

### **LIMITATIONS OF ACCOUNTING**

- *Accounting is historical in nature:* It does not reflect the current financial position or worth of a business.
- Transactions of non-monetary nature do not find place in accounting. Accounting is limited to monetary transactions only. It excludes qualitative elements like management, reputation, employee morale, labour strike, *etc.*
- Facts recorded in financial statements are greatly influenced by accounting conventions and personal judgements of the Accountant or Management. Valuation of inventory, provision for doubtful debts and assumption about useful life of an asset may, therefore, differ from one business house to another.
- Accounting principles are not static or unchanging-alternative accounting procedures are often equally acceptable. Therefore, accounting statements do not always present comparable data
- Cost concept is found in accounting. Price changes are not considered. Money value is bound to change often from time to time. This is a strong limitation of accounting.
- Accounting statements do not show the impact of inflation.
- The accounting statements do not reflect those increase in net asset values that are not considered realised.

## **MEANING AND DEFINITION OF BOOK- KEEPING**

### **MEANING**

Book- keeping includes recording of journal, posting in ledgers and balancing of accounts. All the records before the preparation of trail balance is the whole subject matter of book- keeping. Thus, book- keeping may be defined as the science and art of recording transactions in money or money's worth so accurately and systematically, in a certain set of books, regularly that the true state of businessman's affairs can be correctly ascertained. Here it is important to note that only those transactions related to business are recorded which can be expressed in terms of money.

## DEFINITION

- “Book- keeping is the art of recording business transactions in a systematic manner”. A.H. Rosenkamph.
- “Book- keeping is the science and art of correctly recording in books of account all those business transactions that result in the transfer of money or money’s worth”. R.N.Carter

## OBJECTIVES OF BOOK- KEEPING

- Book- keeping provides a permanent record of each transactions.
- Soundness of a firm can be assessed from the records of assets and abilities on a particular date.
- Entries related to incomes and expenditures of a concern facilitate to know the profit and loss for a given period.
- It enables to prepare a list of customers and suppliers to ascertain the amount to be received or paid.
- It is a method gives opportunities to review the business policies in the light of the past records.
- Amendment of business laws, provision of licenses, assessment of taxes, *etc.*, are based on records.

## METHODS OF ACCOUNTING

*Business transactions are recorded in two different ways.*

- *Single Entry:* It is incomplete system of recording business transactions. The business organization maintains only cash book and personal accounts of debtors and creditors. So the complete recording of transactions cannot be made and trail balance cannot be prepared.
- *Double Entry:* In this system every business transaction is having a two fold effect of benefits giving and benefit receiving aspects. The recording is made on the basis of both these aspects. Double Entry is an accounting system that records the effects of transactions and other events in at least two accounts with equal debits and credits.

## STEPS INVOLVED IN DOUBLE ENTRY SYSTEM

- *Preparation of Journal:* Journal is called the book of original entry. It records the effect of all transactions for the first time. Here the job of recording takes place.
- *Preparation of Ledger:* Ledger is the collection of all accounts used by a business. Here the grouping of accounts is performed. Journal is posted to ledger.
- *Trial Balance preparation:* Summarizing. It is a summary of ledger balances prepared in the form of a list.
- *Preparation of Final Account:* At the end of the accounting period to know the achievements of the organization and its financial state of affairs, the final accounts are prepared.

## ADVANTAGES OF DOUBLE ENTRY SYSTEM

- *Scientific system*: This system is the only scientific system of recording business transactions in a set of accounting records. It helps to attain the objectives of accounting.
- *Complete record of transactions*: This system maintains a complete record of all business transactions.
- *A check on the accuracy of accounts*: By use of this system the accuracy of accounting book can be established through the device called a Trail balance.
- *Ascertainment of profit or loss*: The profit earned or loss suffered during a period can be ascertained together with details by the preparation of Profit and Loss Account.
- *Knowledge of the financial position of the business*: The financial position of the firm can be ascertained at the end of each period, through the preparation of balance sheet.
- *Full details for purposes of control*: This system permits accounts to be prepared or kept in as much detail as necessary and, therefore, affords significant information for purposes of control, etc.
- *Comparative study is possible*: Results of one year may be compared with those of the previous year and reasons for the change may be ascertained.
- *Helps management in decision making*: The management may be also to obtain good information for its work, specially for making decisions.
- *No scope for fraud*: The firm is saved from frauds and misappropriations since full information about all assets and liabilities will be available.

## MEANING OF DEBIT AND CREDIT

The term 'debit' is supposed to have derived from 'debit' and the term 'credit' from 'creditable'. For convenience 'Dr' is used for debit and 'Cr' is used for credit. Recording of transactions require a thorough understanding of the rules of debit and credit relating to accounts. Both debit and credit may represent either increase or decrease, depending upon the nature of account.

## TYPES OF ACCOUNTING

### TYPES OF ACCOUNTS

The object of book-keeping is to keep a complete record of all the transactions that place in the business.

*To achieve this object, business transactions have been classified into three categories:*

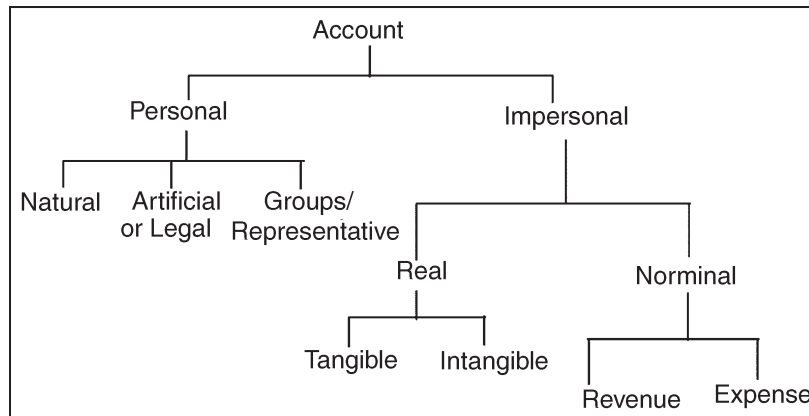
1. Transactions relating to persons.
2. Transactions relating to properties and assets
3. Transactions relating to incomes and expenses.



The accounts falling under the first heading are known as 'personal Accounts'. The accounts falling under the second heading are known as 'Real Accounts', The accounts falling under the third heading are called 'Nominal Accounts'.

The accounts can also be classified as personal and impersonal.

*The following chart will show the various types of accounts:*



## PERSONAL ACCOUNTS

Accounts recording transactions with a person or group of persons are known as personal accounts. These accounts are necessary, in particular, to record credit transactions.

*Personal accounts are of the following types:*

- *Natural persons:* An account recording transactions with an individual human being is termed as a natural persons' personal account. eg., Kamal's account, Mala's account, Sharma's accounts. Both males and females are included in it
- *Artificial or legal persons:* An account recording financial transactions with an artificial person created by law or otherwise is termed as an artificial person, personal account, *e.g.*, Firms' accounts, limited companies' accounts, educational institutions' accounts, Co-operative society account.
- *Groups/Representative personal Accounts:* An account indirectly representing a person or persons is known as representative personal account. When accounts are of a similar nature and their number is large, it is better to group them under one head and open a representative personal accounts. *e.g.*, prepaid insurance, outstanding salaries, rent, wages, *etc.*

When a person starts a business, he is known as proprietor. This proprietor is represented by capital account for all that he invests in business and by drawings accounts for all that which he withdraws from business. So, capital accounts and drawings account are also personal accounts.

The rule for personal accounts is : Debit the receiver

Credit the giver

## REAL ACCOUNTS

Accounts relating to properties or assets are known as 'Real Accounts'. A separate account is maintained for each asset *e.g.*, Cash Machinery, Building, *etc.*,

*Real accounts can be further classified into tangible and intangible:*

- **Tangible Real Accounts:** These accounts represent assets and properties which can be seen, touched, felt, measured, purchased and sold. *e.g.*, Machinery account Cash account, Furniture account, stock account, *etc.*
- **Intangible Real Accounts:** These accounts represent assets and properties which cannot be seen, touched or felt but they can be measured in terms of money. *e.g.*, Goodwill accounts, patents account, Trademarks account, Copyrights account, *etc.*

The rule for Real accounts is : Debit what come in

Credit what goes out

## NOMINAL ACCOUNTS

Accounts relating to income, revenue, gain expenses and losses are termed as nominal accounts. These accounts are also known as fictitious accounts as they do not represent any tangible asset. A separate account is maintained for each head or expense or loss and gain or income. Wages account, Rent account Commission account, Interest received account are some examples of nominal account

The rule for Nominal accounts is : Debit all expense and losses

Credit all income and gains

## DISTINCTION BETWEEN BOOK-KEEPING AND ACCOUNTING

**Table. The Difference Between book-keeping and Accounting can be Summarized in a Tabular form as Under**

Basis of	Book-keeping	Accounting
Difference Transactions	Recording of transactions in books of original entry.	To examine these recorded transactions in order to find out their accuracy.
Posting	To make posting in ledger	To examine this posting in order to ascertain its accuracy.
Total and Balance	To make total of the amount in journal and accounts of ledger. To ascertain balance in all the accounts.	To prepare trial balance with the help of balances of ledger accounts.

Income Statement and Balance Sheet	Preparation of trading, Profit and loss account and balance sheet is not book keeping	Preparation of trading, profits and loss account and balance sheet is included in it.
Rectification of errors	These are not included in book-keeping	These are included in accounting.
Special skill and knowledge	It does not require any special skill and knowledge as in advanced countries this work is done by machines.	It requires special skill and knowledge.
Liability	A book-keeper is not liable for accountancy work.	An accountant is liable for the work of bookkeeper.

## BRANCHES OF ACCOUNTING

The changing business scenario over the centuries gave rise to specialized branches of accounting which could cater to the changing requirements.

*The branches of accounting are:*

- Financial accounting;
  - Cost accounting; and
  - Management accounting.
- Now, let us understand these terms.

### FINANCIAL ACCOUNTING

The accounting system concerned only with the financial state of affairs and financial results of operations is known as Financial Accounting. It is the original form of accounting. It is mainly concerned with the preparation of financial statements for the use of outsiders like creditors, debenture holders, investors and financial institutions. The financial statements *i.e.*, the profit and loss account and the balance sheet, show them the manner in which operations of the business have been conducted during a specified period.

### COST ACCOUNTING

In view of the limitations of financial accounting in respect of information relating to the cost of individual products, cost accounting was developed. It is that branch of accounting which is concerned with the accumulation and assignment of historical costs to units of product and department, primarily for the purpose of valuation of stock and measurement of profits.

Cost accounting seeks to ascertain the cost of unit produced and sold or the services rendered by the business unit with a view to exercising control over

these costs to assess profitability and efficiency of the enterprise. It generally relates to the future and involves an estimation of future costs to be incurred. The process of cost accounting based on the data provided by the financial accounting.

## MANAGEMENT ACCOUNTING

It is an accounting for the management *i.e.*, accounting which provides necessary information to the management for discharging its functions. The Anglo-American Council on productivity, "Management accounting is the presentation of accounting information in such a way as to assist management in the creation of policy and the day-to-day operation of an undertaking."

It covers all arrangements and combinations or adjustments of the orthodox information to provide the Chief Executive with the information from which he can control the business *e.g.*, Information about funds, costs, profits, *etc.* Management accounting is not only confined to the area of cost accounting but also covers other areas (such as capital expenditure decisions, capital structure decisions, and dividend decisions) as well.

## ACCOUNTING CONCEPTS AND CONVENTIONS

### *Accounting Concepts*

The term 'concept' is used to denote accounting postulates, *i.e.*, basic assumptions or conditions upon the edifice of which the accounting super-structure is based.

*The following are the common accounting concepts adopted by many business concerns:*

- Business Entity Concept
- Money Measurement Concept
- Going Concern Concept
- Dual Aspect Concept
- Periodicity Concept
- Historical Cost Concept
- Matching Concept
- Realisation Concept
- Accrual Concept
- Objective Evidence Concept

### *Business Entity Concept*

A business unit is an organization of persons established to accomplish an economic goal. Business entity concept implies that the business unit is separate and distinct from the persons who provide the required capital to it. This concept can be expressed through an accounting equation, *viz.*,  $\text{Assets} = \text{Liabilities} + \text{Capital}$ . The equation clearly shows that the business itself owns the assets and in turn owes to various claimants. The business entity concept as applied in

accounting for sole trading units is different from the legal concept. The expenses, income, assets and liabilities not related to the sole proprietorship business are excluded from accounting. However, a sole proprietor is personally liable and required to utilize non-business assets or private assets also to settle the business creditors as per law.

Thus, in the case of sole proprietorship, business and non-business assets and liabilities are treated alike in the eyes of law. In the case of a partnership, firm, for paying the business liabilities the business assets are used first and if any surplus remains thereafter, it can be used for paying off the private liabilities of each partner. Similarly, the private assets are first used to pay off the private liabilities of partners and if any surplus remains, it is treated as part of the firm's property and is used for paying the firm's liabilities. In the case of a company, its existence does not depend on the life span of any shareholder.

### ***Money Measurement Concept***

In accounting all events and transactions are recode in terms of money. Money is considered as a common denominator, by means of which various facts, events and transactions about a business can be expressed in terms of numbers.

In other words, facts, events and transactions which cannot be expressed in monetary terms are not recorded in accounting. Hence, the accounting does not give a complete picture of all the transactions of a business unit. This concept does not also take care of the effects of inflation because it assumes a stable value for measuring.

### ***Going Concern Concept***

Under this concept, the transactions are recorded assuming that the business will exist for a longer period of time, *i.e.*, a business unit is considered to be a going concern and not a liquidated one. Keeping this in view, the suppliers and other companies enter into business transactions with the business unit. This assumption supports the concept of valuing the assets at historical cost or replacement cost. This concept also supports the treatment of prepaid expenses as assets, although they may be practically unsaleable.

### ***Dual Aspect Concept***

This basic concept of accounting, every transaction has a two-fold aspect, *Viz.*, 1. giving certain benefits and 2. Receiving certain benefits. The basic principle of double entry system is that every debit has a corresponding and equal amount of credit. This is the underlying assumption of this concept. The accounting equation *viz.*,  $\text{Assets} = \text{Capital} + \text{Liabilities}$  or  $\text{Capital} = \text{Assets} - \text{Liabilities}$ , will further clarify this concept, *i.e.*, at any point of time the total assets of the business unit are equal to its total liabilities. Liabilities here relate both to the outsiders and the owners. Liabilities to the owners are considered as capital.

***Periodicity Concept***

Under this concept, the life of the business is segmented into different periods and accordingly the result of each period is ascertained. Though the business is assumed to be continuing in future (as per going concern concept), the measurement of income and studying the financial position of the business for a shorter and definite period will help in taking corrective steps at the appropriate time. Each segmented period is called “accounting period” and the same is normally a year. The businessman has to analyse and evaluate the results ascertained periodically. At the end of an accounting period, an Income Statement is prepared to ascertain the profit or loss made during that accounting period and Balance Sheet is prepared which depicts the financial position of the business as on the last day of that period. During the course of preparation of these statements capital revenue items are to be necessarily distinguished.

***Historical Cost Concept***

The transactions are recorded in the books of account with the respective amounts involved. For example, if an asset is purchased, it is entered in the accounting record at the price paid to acquire the same and that cost is considered to be the base for all future accounting. It means that the asset is recorded at cost at the time of purchase but it may be methodically reduced in its value by way of charging depreciation. However, in the light of inflationary conditions, the application of this concept is considered highly irrelevant for judging the financial position of the business.

***Matching Concept***

The essence of the matching concept lies in the view that all costs which are associated to a particular period should be compared with the revenues associated to the same period to obtain the net income of the business. Under this concept, the accounting period concept is relevant and it is this concept (matching concept) which necessitated the provisions of different adjustments for recording outstanding expenses, prepaid expenses, outstanding incomes, incomes received in advance, *etc.*, during the course of preparing the financial statements at the end of the accounting period.

***Realisation Concept***

This concept assumes or recognizes revenue when a sale is made. Sale is considered to be complete when the ownership and property are transferred from the seller to the buyer and the consideration is paid in full.

*However, there are two exceptions to this concept, viz.,:*

1. Hire purchase system where the ownership is transferred to the buyer when the last instalment is paid and
2. Contract accounts, in which the contractor is liable to pay only when the whole contract is completed, the profit is calculated on the basis of work certified each year.

### ***Accrual Concept***

The revenue is recognized on its realization and not on its actual receipt. Similarly the costs are recognized when they are incurred and not when payment is made. This assumption makes it necessary to give certain adjustments in the preparation of income statement regarding revenues and costs. But under cash accounting system, the revenues and costs are recognized only when they are actually received or paid. Hence, the combination of both cash and accrual system is preferable to get rid of the limitations of each system.

### ***Objective Evidence Concept***

This concept ensures that all accounting must be based on objective evidence, *i.e.*, every transaction recorded in the books of account must have a verifiable document in support of its existence. Only then, the transactions can be verified by the auditors and declared as true or otherwise. The verifiable evidence for the transactions should be free from the personal bias, *i.e.*, it should be objective in nature and not subjective. However, in reality the subjectivity cannot be avoided in the aspects like provision for bad and doubtful debts, provision for depreciation, valuation of inventory, *etc.*, and the accountants are required to disclose the regulations followed.

### ***Accounting Conventions***

*The following conventions are to be followed to have a clear and meaningful information and data in accounting:*

- **Consistency:** The convention of consistency refers to the state of accounting rules, concepts, principles, practices and conventions being observed and applied constantly, *i.e.*, from one year to another there should not be any change. If consistency is there, the results and performance of one period can be compared easily and meaningfully with the other. It also prevents personal bias as the persons involved have to follow the consistent rules, principles, concepts and conventions. This convention, however, does not completely ignore changes. It admits changes wherever indispensable and adds to the improved and modern techniques of accounting.
- **Disclosure:** The convention of disclosure stresses the importance of providing accurate, full and reliable information and data in the financial statements which is of material interest to the users and readers of such statements. This convention is given due legal emphasis by the Companies Act, 1956 by prescribing formats for the preparation of financial statements. However, the term disclosure does not mean all information that one desires to get should be included in accounting statements. It is enough if sufficient information, which is of material interest to the users, is included.
- **Conservatism:** In the prevailing present day uncertainties, the convention of conservatism has its own importance. This convention follows the

policy of caution or playing safe. It takes into account all possible losses but not the possible profits or gains. A view opposed to this convention is that there is the possibility of creation of secret reserves when conservatism is excessively applied, which is directly opposed to the convention of full disclosure. Thus, the convention of conservatism should be applied very cautiously.

## **BASES OF ACCOUNTING**

*There are three bases of accounting in common usage. Any one of the following bases may be used to finalise accounts:*

1. Cash basis
2. Accrual or Mercantile basis
3. Mixed or Hybrid basis.

### ***Accounting on 'Cash Basis***

Under cash basis accounting, entries are recorded only when cash is received or paid. No entry is passed when a payment or receipt becomes due. Income under cash basis of accounting, therefore, represents excess of receipts over payments during an accounting period.

Government system of accounting is mostly on cash basis. Certain professional people record their income on cash basis, but while recording expenses they take into account the outstanding expenses also. In such a case, the financial statements prepared by them for determination of their income is termed as Receipts and Expenditure Account.

### ***Accrual Basis of Accounting or Mercantile System***

Under accrual basis of accounting, accounting entries are made on the basis of amounts having become due for payment or receipt. Incomes are credited to the period in which they are earned whether cash is received or not. Similarly, expenses and losses are detailed to the period in which, they are incurred, whether cash is paid or not.

The profit or loss of any accounting period is the difference between incomes earned and expenses incurred, irrespective of cash payment or receipt. All outstanding expenses and prepaid expenses, accrued incomes and incomes received in advance are adjusted while finalising the accounts. Under the Companies Act 1956, all companies are required to maintain the books of accounts just as to accrual basis of accounting.

### ***Mixed or Hybrid Basis of Accounting***

When certain items of revenue or expenditure are recorded in the books of account on cash basis and certain items on mercantile basis, the basis of accounting so employed is called 'hybrid basis of accounting'. For example, a company may follow mercantile system of accounting in respect of its export business. However, government subsidies and duty drawbacks on exports to be



received from government are recorded only when they are actually received *i.e.*, on cash basis. Such a method could be adopted because of uncertainty with respect of quantum, amount and time of receipt of such incentives and drawbacks. Such a method of accounting followed by the company is called the hybrid basis of accounting. In practice, the profit or loss shown under this basis will not be realistic.

Conservative people who prefer recognising income when received but cautious to provide for all expenses, whether paid or not prefer this system. It is not widely practised due to the inconsistency.

## ACCOUNTING TERMINOLOGY

It is necessary to understand some basic accounting terms which are daily in business world.

*These terms are called accounting terminology:*

- *Transaction*: “An event the recognition of which gives rise to an entry in accounting records. It is an event which results in change in the balance sheet equation. That is, which changes the value of assets and equity. In a simple statement, transaction means the exchange of money or moneys worth from one account to another account. Events like purchase and sale of goods, receipt and payment of cash for services or on personal accounts, loss or profit in dealings, *etc.*, are the transactions”. Cash transaction is one where cash receipt or payment is involved in the exchange. Credit transaction, on the other hand, will not have ‘cash’ either received or paid, for something given or received respectively, but gives rise to debtor and creditor relationship. Non-cash transaction is one where the question of receipt or payment of cash does not at all arise, *e.g.*, Depreciation, return of goods, *etc.*,
- *Debtor*: A person who owes money to the firm mostly on account of credit sales of goods is called a debtor. For example, when goods are sold to a person on credit that person pays the price in future, he is called a debtor because he owes the amount to the firm.
- *Creditor*: A person to whom money is owing by the firm is called creditor. For example, Madan is a creditor of the firm when goods are purchased on credit from him
- *Capital*: It means the amount (in terms of money or assets having money value) which the proprietor has invested in the firm or can claim from the firm. It is also known as owner’s equity or net worth. Owner’s equity means owner’s claim against the assets. It will always be equal to assets less liabilities, say:
- $\text{Capital} = \text{Assets} - \text{Liabilities}$ .
- *Liability*: It means the amount which the firm owes to outsiders that is, excepting the proprietors. In the words of Finny and Miller, “Liabilities are debts; they are amounts owed to creditors; thus the claims of those who are not owners are called liabilities”. In simple terms, debts repayable to outsiders by the business are known as liabilities.

- *Asset*: Any physical thing or right owned that has a money value is an asset. In other words, an asset is that expenditure which results in acquiring of some property or benefits of a lasting nature.
- *Goods*: It is a general term used for the articles in which the business deals; that is, only those articles which are bought for resale for profit are known as Goods.
- *Revenue*: It means the amount which, as a result of operations, is added to the capital. It is defined as the inflow of assets which result in an increase in the owner's equity. It includes all incomes like sales receipts, interest, commission, brokerage, *etc.*, However, receipts of capital nature like additional capital, sale of assets, *etc.*, are not a part of revenue.
- *Expense*: The term 'expense' refers to the amount incurred in the process of earning revenue. If the benefit of an expenditure is limited to one year, it is treated as an expense (also known as revenue expenditure) such as payment of salaries and rent.
- *Expenditure*: Expenditure takes place when an asset or service is acquired. The purchase of goods is expenditure, whereas cost of goods sold is an expense. Similarly, if an asset is acquired during the year, it is expenditure, if it is consumed during the same year, it is also an expense of the year.
- *Purchases*: Buying of goods by the trader for selling them to his customers is known as purchases. As the trade is buying and selling of commodities, purchase is the main function of a trade. Here, the trader gets possession of the goods which are not for own use but for resale. Purchases can be of two types, viz., cash purchases and credit purchases. If cash is paid immediately for the purchase, it is cash purchases. If the payment is postponed, it is credit purchases.
- *Sales*: When the goods purchased are sold out, it is known as sales. Here, the possession and the ownership right over the goods are transferred to the buyer. It is known as 'Business Turnover' or sales proceeds. It can be of two types, viz., cash sales and credit sales. If the sale is for immediate cash payment, it is cash sales. If payment for sales is postponed, it is credit sales.
- *Stock*: The goods purchased are for selling, if the goods are not sold out fully, a part of the total goods purchased is kept with the trader until it is sold out, it is said to be a stock. If there is stock at the end of the accounting year, it is said to be a closing stock. This closing stock at the year end will be the opening stock for the subsequent year.
- *Drawings*: It is the amount of money or the value of goods which the proprietor takes for his domestic or personal use. It is usually subtracted from capital.

- *Losses*: Loss really means something against which the firm receives no benefit. It represents money given up without any return. It may be noted that expense leads to revenue but losses do not. (e.g.) loss due to fire, theft and damages payable to others,
- *Account*: It is a statement of the various dealings which occur between a customer and the firm. It can also be expressed as a clear and concise record of the transaction relating to a person or a firm or a property (or assets) or a liability or an expense or an income.
- *Invoice*: While making a sale, the seller prepares a statement giving the particulars such as the quantity, price per unit, the total amount payable, any deductions made and shows the net amount payable by the buyer. Such a statement is called an invoice.
- *Voucher*: A voucher is a written document in support of a transaction. It is a proof that a particular transaction has taken place for the value stated in the voucher. Voucher is necessary to audit the accounts.
- *Proprietor*: The person who makes the investment and bears all the risks connected with the business is known as proprietor.
- *Discount*: When customers are allowed any type of deduction in the prices of goods by the businessman that is called discount. When some discount is allowed in prices of goods on the basis of sales of the items, that is termed as trade discount, but when debtors are allowed some discount in prices of the goods for quick payment, that is termed as cash discount.
- *Solvent*: A person who has assets with realizable values which exceeds his liabilities is solvent.
- *Insolvent*: A person whose liabilities are more than the realizable values of his assets is called an insolvent.

## ACCOUNTING EQUATION

As indicated earlier, every business transaction has two aspects. One aspect is debited other aspect is credited. Both the aspects have to be recorded in accounts appropriately. American Accountants have derived the rules of debit and credit through a 'novel' medium, i.e., accounting equation.

*The equation is as follows:*

- Assets = Equities

The equation is based on the principle that accounting deals with property and rights to property and the sum of the properties owned is equal to the sum of the rights to the properties. The properties owned by a business are called assets and the rights to properties are known as liabilities or equities of the business. Equities can be subdivided into equity of the owners which is known as capital and equity of creditors who represent the debts of the business known as liabilities. These equities may also be called internal equity and external equity. Internal equity represents the owner's equity in the assets and external represents the outsider's interest in the asset.

*Based on the bifurcation of equity, the accounting equation can be restated as follows:*

$$\text{Assets} = \text{Liabilities} + \text{Capital}$$

(Or)

$$\text{Capital} = \text{Assets} - \text{Liabilities}$$

(Or)

$$\text{Liabilities} = \text{Assets} - \text{Capital}.$$

The equation is fundamental in the sense that it gives a foundation to the double entry book-keeping system. This equation holds good for all transaction and events and at all periods of time since every transaction and events has two aspects.

## PRINCIPLES OF ACCOUNTING

The word ‘Principle’ has been differently viewed by different schools of thought. The American Institute of Certified Public Accountants (AICPA) has viewed the word ‘principle’ as a general law of rule adopted or professed as a guide to action; a settled ground or basis of conduct of practice” Accounting principles refer, to certain rules, procedures and conventions which represent a consensus view by those indulging in good accounting practices and procedures. Canadian Institute of Chartered Accountants defined accounting principle as “the body of doctrines commonly associated with the theory and procedure of accounting, serving as an explanation of current practices as a guide for the selection of conventions or procedures where alternatives exist.

Rules governing the formation of accounting axioms and the principles derived from them have arisen from common experiences, historical precedent, statements by individuals and professional bodies and regulations of Governmental agencies”. To be more reliable, accounting statements are prepared in conformity with these principles. If not, chaotic conditions would result. But in reality as all the businesses are not alike, each one has its own method of accounting. However, to be more acceptable, the accounting principles should satisfy the following three basic qualities, *viz.*, relevance, objectivity and feasibility. The accounting principle is considered to be relevant and useful to the extent that it increases the utility of the records to its readers. It is said to be objective to the extent that it is supported by the facts and free from personal bias. It is considered to be feasible to the extent that it is practicable with the least complication or cost. Though accounting principles are denoted by various terms such as concepts, conventions, doctrines, tenets, assumptions, axioms, postulates, *etc.*, it can be classified into two groups, *viz.*, accounting concepts and accounting conventions.

# 2

## Accounting for Investments

- *Applicability*: Mandatory for all enterprises. Investments are classified as Long Term Investments and Short Term Investments.
- Current Investment is intended to be held for not more than one year and readily realisable.
- Long term Investment is an investment other than a current investment.

The carrying amount of current investments is lower of cost and fair value. It is prudent to carry investments individually at the lower of cost and fair value. But, such comparison can also be made category-wise. The carrying amount of long-term investments is carried at cost. However, when there is permanent decline in the value of a long-term investment, the carrying amount is reduced to recognize the decline. The carrying amount of long-term investments should be determined on individual basis. Any reduction or reversal of reduction in value of investment is adjusted through P&L A/c.

### **COST OF INVESTMENTS**

The cost of an investment should include acquisition charges such as brokerage, fees and duties.

*If an investment is acquired:*

- By issue of shares or other securities; then the investments should be valued at the fair value of the issued security. (*i.e.*, Issue price determined by statutory authority)
- By exchange of another asset; then the investments should be valued at fair value of the asset given up or asset acquired, whichever is more clearly evident.

***Investment Property***

Investment Property is investment in land or buildings that is not intended to be occupied substantially for use by, or in the operations of, the investing enterprise. An investment property is classified as long-term investment.

***Disposal of Investments***

On disposal, the difference between the carrying amount and the disposal proceeds, net of expenses, is recognized in the profit and loss statement.

***Reclassification of Investments***

Long-term to short-term: Transfers from one class to another class are made at lower of cost and carrying amount at the date of transfer. Current to long-term: Transfers are made at lower of cost and fair value at the date of transfer.

***Disclosure:***

- Accounting policies for determination of carrying amount
- Classification of Investments
- The amounts included in Profit and loss statement
  - Profits or losses on disposal and changes in carrying amount of current and longterm investments
  - Interest, dividends (showing separately dividends from subsidiary) and rentals on investments showing separately such income from current and long term investments.
  - Gross Income should be disclosed (*i.e.*, The amount of TDS should be shown under advance taxes paid)
- Aggregate amount of quoted and unquoted investments giving the aggregate market value of quoted investments.

**ACCOUNTING FOR RETIREMENT BENEFITS**

The following is the text of Accounting Standard (AS) 15, 'Accounting for Retirement Benefits in the Financial Statements of Employers', issued by the Council of the Institute of Chartered Accountants of India. The Standard will come into effect in respect of accounting periods commencing on or after 1.4.1995 and will be mandatory in nature.<sup>2</sup> The 'Statement on the Treatment of Retirement Gratuity in Accounts' issued by the Institute will stand withdrawn from the aforesaid date.

**INTRODUCTION**

- This Statement deals with accounting for retirement benefits in the financial statements of employers.
- *Retirement benefits usually consist of:*
  - Provident fund
  - Superannuation/pension
  - Gratuity

- Leave encashment benefit on retirement
- Post-retirement health and welfare schemes
- Other retirement benefits.

This Statement applies to retirement benefits in the form of provident fund, superannuation/pension and gratuity provided by an employer to employees, whether in pursuance of requirements of any law or otherwise. It also applies to retirement benefits in the form of leave encashment benefit, health and welfare schemes and other retirement benefits, if the predominant characteristics of these benefits are the same as those of provident fund, superannuation/pension or gratuity benefit, *i.e.*, if such a retirement benefit is in the nature of either a defined contribution scheme or a defined benefit scheme as described in this Statement. This Statement does not apply to those retirement benefits for which the employer's obligation cannot be reasonably estimated, *e.g.*, ad hoc ex-gratia payments made to employees on retirement.

### **Definitions**

*The following terms are used in this Statement with the meanings specified:*

- Retirement benefit schemes are arrangements to provide provident fund, superannuation or pension, gratuity, or other benefits to employees on leaving service or retiring or, after an employee's death, to his or her dependants.
- Defined contribution schemes are retirement benefit schemes under which amounts to be paid as retirement benefits are determined by contributions to a fund together with earnings thereon.
- Defined benefit schemes are retirement benefit schemes under which amounts to be paid as retirement benefits are determinable usually by reference to employee's earnings and/or years of service.
- Actuary means an actuary within the meaning of sub-section (1) of section (2) of the Insurance Act, 1938.
- Actuarial valuation is the process used by an actuary to estimate the present value of benefits to be paid under a retirement benefit scheme and the present values of the scheme assets and, sometimes, of future contributions.
- Pay-as-you-go is a method of recognising the cost of retirement benefits only at the time payments are made to employees on, or after, their retirement.

### **EXPLANATION**

Retirement benefit schemes are normally significant elements of an employer's remuneration package for employees. It is, therefore, important that retirement benefits are properly accounted for and that appropriate disclosures in respect thereof are made in the financial statements of an employer. Provident fund benefit normally involves either creation of a separate trust to which contributions of both employees and employer are made periodically or



remittance of such contributions to the employees' provident fund, administered by the Central Government. Superannuation/pension benefit (hereinafter referred to as 'superannuation benefit') is basically of two types.

- The first type of benefit is known as defined contribution scheme. Under this type of benefit, the employer makes a contribution once a year (or more frequently in some cases) towards a separately created trust fund or to a scheme administered by an insurer. These contributions earn interest and the accumulated balance of contributions and interest is used to pay the retirement benefit to the employee. Superannuation available under defined contribution scheme has relevance to only total of accumulated contributions and interest and bears no relationship, whatsoever, with the final salary or number of years of service put in by an employee. The defined contribution scheme for superannuation/pension is, in most respects, similar to the provident fund, so far as the accounting treatment is concerned. It also presupposes payment of contributions every year, either once in a year or more frequently.
- The second type of superannuation scheme is the defined benefit scheme. Under this scheme, the benefit payable to the employee is determined with reference to factors such as a percentage of final salary (*e.g.*, the average of one, three or five years' salary), number of years of service and the grade of the employee. The contribution required to finance such a scheme is actuarially determined and is generally expressed as a percentage of salary for the entire group of employees covered by the scheme. For defined benefit superannuation/pension schemes, a trust fund can be created or an arrangement can be negotiated with an insurer so that the annual contributions, calculated actuarially, can be made each year. In such a case, benefits to employees on entitlement would be paid by the trust fund or by the insurer. Alternatively, the superannuation benefit can be paid by the employer as and when an employee leaves.

Gratuity benefit is in the nature of a defined benefit. Gratuity can be paid by the employer as and when an employee leaves. Alternatively, a trust fund can be created, or an arrangement can be negotiated with an insurer so that the annual contributions, calculated actuarially, can be made each year. Benefits to employees on entitlement would in such a case be paid by the trust fund or by the insurer. In certain cases, a retirement benefit scheme may stipulate the basis of contributions on which the benefits are determined and, because of this, may appear to be a defined contribution scheme. However, the provisions of the scheme may also result in the employer being responsible for specified benefits or a specified level of benefits. In this case, the scheme is, in substance, a defined benefit scheme and should be accounted for accordingly. While provident fund schemes are generally contributory schemes from the point of view of employees, gratuity schemes are non-contributory.

The superannuation schemes, on the other hand, can be contributory or noncontributory. Defined benefit schemes, especially those that promise benefits



related to remuneration at or near retirement, present significant difficulties in the determination of periodic charge to the statement of profit and loss. The extent of an employer's obligation under such schemes is usually uncertain and requires estimation. In estimating the obligation, assumptions may need to be made regarding future conditions and events which are largely outside the employer's control. As a result of various factors that frequently enter into the computation of retirement benefits under defined benefit schemes and the length of the period over which the benefits are earned, allocation problems arise in determining how the costs of the retirement benefits should be recognised in the financial statements of the employer. Furthermore, long-term uncertainties may give rise to adjustments of estimates of earlier years that can be very significant in relation to current service cost.

The cost of retirement benefits to an employer results from receiving services from the employees who are entitled to receive such benefits. Consequently, the cost of retirement benefits is accounted for in the period during which these services are rendered.

Accounting for retirement benefit cost only when employees retire or receive benefit payments (*i.e.*, as per pay-as-you-go method) does not achieve the objective of allocation of those costs to the periods in which the services were rendered.

### ***Funding***

When there is a separate retirement benefit fund, it is sometimes assumed that the amount paid by an employer to the fund during an accounting period provides an appropriate charge to the statement of profit and loss. While, in many cases, the amount funded may provide a reasonable approximation of the amount to be charged to the statement of profit and loss, there is a vital distinction between the periodic funding of retirement benefits and the allocation of the cost of providing these benefits. The objective of funding is to make available amounts to meet future obligations for the payment of retirement benefits. Funding is a financing procedure and in determining the periodical amounts to be funded, the employer may be influenced by such factors as the availability of money and tax considerations. On the other hand, the objective of accounting for the cost of a retirement benefit scheme is to ensure that the cost of benefits is allocated to accounting periods on a systematic basis related to the receipt of the employees' services.

### ***Accounting***

In respect of retirement benefits in the form of provident fund and other defined contribution schemes, the contribution payable by the employer for a year is charged to the statement of profit and loss for the year. Thus, besides the amount of contribution paid, a shortfall of the amount of contribution paid compared to the amount payable for the year is also charged to the statement of profit and loss for the year. On the other hand, if contribution paid is in excess

of the amount payable for the year, the excess is treated as a pre-payment. In respect of gratuity benefit and other defined benefit schemes, the accounting treatment depends on the type of arrangement which the employer has chosen to make.

- If the employer has chosen to make payment for retirement benefits out of his own funds, an appropriate charge to the statement of profit and loss for the year is made through a provision for the accruing liability. The accruing liability is calculated just as to actuarial valuation. However, many enterprises which employ only a few persons do not calculate the accrued liability by using actuarial methods. They calculate the accrued liability by reference to some other rational method *e.g.*, a method based on the assumption that such benefits are payable to all employees at the end of the accounting year.
- In case the liability for retirement benefits is funded through creation of a trust, the cost incurred for the year is determined actuarially. Many employers undertake such valuations every year while others undertake them less frequently, usually once in every three years. If actuarial valuations are conducted every year, the annual accrual of retirement benefit cost can be easily determined. If, however, the actuarial valuations are not conducted annually, the actuary's report specifies the contributions to be made by the employer on annual basis during the inter-valuation period. This annual contribution (which is in addition to the contribution that may be required to finance unfunded past service cost) reflects proper accrual of retirement benefit cost for each of the years during the inter-valuation period and is charged to the statement of profit and loss for each such year. Where the contribution paid during a year is lower than the amount required to be contributed during the year to meet the accrued liability as certified by the actuary, the shortfall is charged to the statement of profit and loss for the year. Where the contribution paid during a year is in excess of the amount required to be contributed during the year to meet the accrued liability as certified by the actuary, the excess is treated as a prepayment.
- In case the liability for retirement benefits is funded through a scheme administered by an insurer, it is usually considered necessary to obtain an actuarial certificate or a confirmation from the insurer that the contribution payable to the insurer is the appropriate accrual of the liability for the year. Where the contribution paid during a year is lower than the amount required to be contributed during the year to meet the accrued liability as certified by the actuary or confirmed by the insurer, as the case may be, the shortfall is charged to the statement of profit and loss for the year. Where the contribution paid during a year is in excess of the amount required to be contributed during the year to meet the accrued liability as certified by the actuary or confirmed by the insurer, as the case may be, the excess is treated as a pre-payment.

### ***Actuarial Principles***

A number of actuarial valuation methods have been developed by the actuarial profession to estimate employer's obligations under defined benefit schemes. While these methods are primarily designed to calculate funding requirements, they are also frequently used to determine retirement benefit costs for accounting purposes. The actuarial method selected for determining accrual of liability and the assumptions made can have a significant effect on the expense to be recorded in each accounting period. Therefore, in carrying out a periodical valuation, an actuary chooses a suitable valuation method and, in consultation with the employer, makes appropriate assumptions about the variable elements affecting the computations.

The assumptions relate to the expected inflow from future contributions and from investments as well as to the expected outgo for benefits. The uncertainty inherent in projecting future trends in rates of inflation, salary levels and earnings on investments are taken into consideration by the actuary in the actuarial valuations by using a set of compatible assumptions. Usually, these projections are extended until the expected date of death of the last pensioner in case of a superannuation scheme, expected date of death, *etc.* of the beneficiary in case of family pension, and expected service in case of gratuity and are, accordingly, long-term.

### ***Past Service Cost and Review of Actuarial Assumptions***

An actuarially determined past service cost arises on the introduction of a retirement benefit scheme for existing employees or on the making of improvements to an existing scheme, *etc.* This cost gives employees credit for benefits for services rendered before the occurrence of one or more of these events. Views differ as to how to account for this cost. One view is that this cost should be recognised as soon as it has been determined.

Others believe that the entitlement giving rise to past service cost is in return for services to be rendered by employees in future and therefore this cost ought to be allocated over the periods during which the services are to be rendered. In making an actuarial valuation, the actuary may sometimes effect a change in the actuarial method used or in the assumptions adopted for determining the retirement benefit costs. Any alterations in the retirement benefit costs so arising are charged or credited to the statement of profit and loss for the year or, alternatively, spread over a period not more than the expected remaining working lives of the participating employees. A change in the actuarial method used for determining the retirement benefit costs constitutes a change in an accounting policy and is disclosed accordingly.

### ***Retired Employees***

When a retirement benefit scheme for retired employees is amended, due to inflation or for other reasons, to provide additional benefits to retired employees, any additional costs are charged to the statement of profit and loss of the year.

### ***Disclosures***

In view of the diversity of practices used for accounting of retirement benefits costs, adequate disclosure of method followed in accounting for them is essential for an understanding of the significance of such costs to an employer. Retirement benefit costs are sometimes disclosed separately for statutory compliance. In other cases, they are considered to be an element of employee remuneration and their separate disclosure is not usually made.

## **SEGMENTAL REPORTING**

- A Business Segment is a distinguishable component of an enterprise that is engaged in providing an individual product or service or a group of related products or services and that is subject to risks and returns that are different from those of other business segments.
- A Geographical Segment is a distinguishable component of an enterprise that is engaged in providing products or services within a particular economic environment and that is subject to risks and returns that are different from those of components operating in other economic environments.
- The risks and returns of an enterprise are both by the geographical location of production or service facilities and other assets of an enterprise and location of its customers. The definition allows geographical segments to be based on any of the two.
- A Reportable Segment is a business segment or a geographical segment identified on the basis of foregoing definitions for which segment information is required to be disclosed by the standard.
- Enterprise Revenue is revenue from sales to external customers as reported in the statement of profit and loss. (*i.e.*, Sales made to external customers by all segments)
- Segment Revenue is the aggregate of revenue directly attributable to segments revenue reasonably allocated to segment; and revenue from transactions with other segments.
- Segment Expense is the aggregate of operating expense directly attributable to segment expenses reasonably allocated to segment; and expenses relating to transactions with other segments. However, Segment revenue/expense does not include:
  - Extraordinary items as defined in AS-5
  - Interest or dividend (including earned/incurred on loans to other segment) unless the operations of the segment are primarily of a financial nature
  - Gains on sales of investments or on extinguishments of debt (Capital gain/loss) unless the operations of the segment are primarily of a financial nature.

- General administration expenses, head office expenses and other expenses that arise at the enterprise level and relate to the enterprise as a whole.
- Segment Result is segment revenue less segment expenses.
- Segment Assets are those operating assets that are employed by a segment in its operating activities and that either are directly attributable the segment or can be allocated to the segment on a reasonable basis.
- Segment Liabilities are those operating liabilities that result from operating activities and that either are directly attributable the segment or can be allocated to the segment on a reasonable basis.

### **PRIMARY SEGMENT AND SECONDARY SEGMENT**

One among the two, Business Segment and Geographical Segment, is primary segment and other becomes secondary segment. The reporting requirements for the primary and secondary segments are different.

### **BASIS FOR IDENTIFYING PRIMARY AND SECONDARY SEGMENTS**

*Risks and returns are the main criteria for identifying primary and secondary segments:*

- If the risks and returns of an enterprise are affected predominantly by differences in the products, business segments are recognized as primary segments and geographical segments as secondary segments and vice versa.
- If the risks and returns of an enterprise are affected both by differences in the products as well as differences in the locations in which it operates, then the enterprise should use business segments as its primary segment and geographical segment as its secondary segment.
- If risks and returns of an enterprise are affected neither by differences in products/services nor by differences in geographical areas of operations, the management may elect any of the two as primary with other being secondary segment.

### **REPORTABLE SEGMENTS**

*A business segment or geographical segment should be identified as reportable segment if:*

- Its revenue from sales to external customers and from transactions with other segments is 10% or more of the total revenue, external and internal, of all segments; or
- Its segment result, whether profit or loss, is 10% or more of- the combined result of all segments in profit, or the combined result of all segments in loss, whichever is greater in absolute amount; or
- Its segment assets are 10% or more of the total assets of all segments.

A business/reportable segment that is not a reportable segment, may be recognized as reportable segment despite its size at the discretion of the

management of the enterprise. If total external revenue attributable to reportable segments constitutes less than 75% of the total enterprise revenue, additional segments should be identified as reportable segments, even if they do not meet 10% thresholds, until at least 75% per cent of the total enterprise revenue is included in reportable segments. A segment identified as a reportable segment in the immediately preceding period because it satisfied the relevant 10% thresholds should continue to be a reportable segment for the current period notwithstanding that its revenue, result, and assets no longer meet the 10% thresholds.

### **PRIMARY REPORTING FORMAT**

*The following disclosures are required for each reportable segment of primary segment:*

- Segment revenue, (with classification of external and internal)
- Segment result
- Total carrying amount of segment assets
- Total amount of segment liabilities
- Total cost incurred during the period to acquire segment assets
- Depreciation and amortisation recognized as expense, and
- Total non cash expenses other than Dep. And amortisation recognized as expense.

Disclosures required pursuant to clause (6) and (7) above, need not be made in respect of a segment, if the enterprise reports cash flows arising from operating, investing and financing activities for such segment. An enterprise should present a reconciliation between the information disclosed for reportable segments and aggregated information in the enterprise financial statements (in respect of clause 1 to 4 above)

### **SECONDARY REPORTING FORMAT**

#### ***Where Primary Segments are Business Segments***

Segment revenue from external customers for each geographical segment whose revenue from sales to external customers is 10% or more of enterprise's revenue; The total carrying amount of segment assets for each geographical segment whose segment assets is 10% or more of the total assets of all geographical segments; New assets acquired for each geographical segment whose segment assets is 10% or more of the total assets of all geographical segments.

#### ***Where Primary Segments are Geographical Segments based on Location to Customers***

If locations of assets are different from locations of customers, then the enterprise is required to report the following segment information for each asset based geographical segment whose revenue from sales to external customers is 1% or more of enterprise revenue or whose segment assets are 10% or more of total enterprise assets

- The total carrying amount of segment assets by geographical location of the assets; and
- New segment assets acquired by location of assets.

### ***Other Disclosures***

In measuring and reporting segment revenue from transactions with other segments, inter-segment transfers should be measured on the basis that the enterprise actually used to price those transfers. The transfer-pricing basis should be disclosed in the financial statements.

An enterprise should indicate the types of products and services included in each reported business segment and indicate the composition of each reported geographical segment, primary and secondary, if not otherwise disclosed in the financial statements.

## **BORROWING COSTS**

### **DEFINITIONS**

*The following terms are used in this Standard with the meanings specified:*

- Borrowing costs are interest and other costs incurred by an enterprise in connection with the borrowing of funds.
- A qualifying asset is an asset that necessarily takes a substantial period of time to get ready for its intended use or sale.

*Borrowing costs may include:*

- Interest and commitment charges on bank borrowings and other short-term and long-term borrowings;
- Amortisation of discounts or premiums relating to borrowings;
- Amortisation of ancillary costs incurred in connection with the arrangement of borrowings;
- Finance charges in respect of assets acquired under finance leases or under other similar arrangements; and
- Exchange differences arising from foreign currency borrowings to the extent that they are regarded as an adjustment to interest costs.

### **RECOGNITION**

Borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset should be capitalised as part of the cost of that asset.

The amount of borrowing costs eligible for capitalisation should be determined in accordance with this Standard. Other borrowing costs should be recognised as an expense in the period in which they are incurred. Borrowing costs are capitalised as part of the cost of a qualifying asset when it is probable that they will result in future economic benefits to the enterprise and the costs can be measured reliably. Other borrowing costs are recognised as an expense in the period in which they are incurred.



***Borrowing Costs Eligible for Capitalisation***

The borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset are those borrowing costs that would have been avoided if the expenditure on the qualifying asset had not been made. When an enterprise borrows funds specifically for the purpose of obtaining a particular qualifying asset, the borrowing costs that directly relate to that qualifying asset can be readily identified. It may be difficult to identify a direct relationship between particular borrowings and a qualifying asset and to determine the borrowings that could otherwise have been avoided. Such a difficulty occurs, for example, when the financing activity of an enterprise is co-ordinated centrally or when a range of debt instruments are used to borrow funds at varying rates of interest and such borrowings are not readily identifiable with a specific qualifying asset.

As a result, the determination of the amount of borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset is often difficult and the exercise of judgement is required. To the extent that funds are borrowed specifically for the purpose of obtaining a qualifying asset, the amount of borrowing costs eligible for capitalisation on that asset should be determined as the actual borrowing costs incurred on that borrowing during the period less any income on the temporary investment of those borrowings. The financing arrangements for a qualifying asset may result in an enterprise obtaining borrowed funds and incurring associated borrowing costs before some or all of the funds are used for expenditure on the qualifying asset. In such circumstances, the funds are often temporarily invested pending their expenditure on the qualifying asset. In determining the amount of borrowing costs eligible for capitalisation during a period, any income earned on the temporary investment of those borrowings is deducted from the borrowing costs incurred. To the extent that funds are borrowed generally and used for the purpose of obtaining a qualifying asset, the amount of borrowing costs eligible for capitalisation should be determined by applying a capitalisation rate to the expenditure on that asset. The capitalisation rate should be the weighted average of the borrowing costs applicable to the borrowings of the enterprise that are outstanding during the period, other than borrowings made specifically for the purpose of obtaining a qualifying asset. The amount of borrowing costs capitalised during a period should not exceed the amount of borrowing costs incurred during that period.

**EXCESS OF THE CARRYING AMOUNT OF THE QUALIFYING ASSET OVER RECOVERABLE AMOUNT**

When the carrying amount or the expected ultimate cost of the qualifying asset exceeds its recoverable amount or net realisable value, the carrying amount is written down or written off in accordance with the requirements of other Accounting Standards. In certain circumstances, the amount of the write-down or write-off is written back in accordance with those other Accounting Standards.



### ***Commencement of Capitalisation***

*The capitalisation of borrowing costs as part of the cost of a qualifying asset should commence when all the following conditions are satisfied:*

- Expenditure for the acquisition, construction or production of a qualifying asset is being incurred;
- Borrowing costs are being incurred; and
- Activities that are necessary to prepare the asset for its intended use or sale are in progress.

Expenditure on a qualifying asset includes only such expenditure that has resulted in payments of cash, transfers of other assets or the assumption of interest-bearing liabilities. Expenditure is reduced by any progress payments received and grants received in connection with the asset. The average carrying amount of the asset during a period, including borrowing costs previously capitalised, is normally a reasonable approximation of the expenditure to which the capitalisation rate is applied in that period. The activities necessary to prepare the asset for its intended use or sale encompass more than the physical construction of the asset.

They include technical and administrative work prior to the commencement of physical construction, such as the activities associated with obtaining permits prior to the commencement of the physical construction. However, such activities exclude the holding of an asset when no production or development that changes the asset's condition is taking place.

For example, borrowing costs incurred while land is under development are capitalised during the period in which activities related to the development are being undertaken. However, borrowing costs incurred while land acquired for building purposes is held without any associated development activity do not qualify for capitalisation.

### ***Suspension of Capitalisation***

Capitalisation of borrowing costs should be suspended during extended periods in which active development is interrupted. Borrowing costs may be incurred during an extended period in which the activities necessary to prepare an asset for its intended use or sale are interrupted. Such costs are costs of holding partially completed assets and do not qualify for capitalisation.

However, capitalisation of borrowing costs is not normally suspended during a period when substantial technical and administrative work is being carried out. Capitalisation of borrowing costs is also not suspended when a temporary delay is a necessary part of the process of getting an asset ready for its intended use or sale.

For example, capitalisation continues during the extended period needed for inventories to mature or the extended period during which high water levels delay construction of a bridge, if such high water levels are common during the construction period in the geographic region involved.

### ***Cessation of Capitalisation***

Capitalisation of borrowing costs should cease when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are complete. An asset is normally ready for its intended use or sale when its physical construction or production is complete even though routine administrative work might still continue. If minor modifications, such as the decoration of a property to the user's specification, are all that are outstanding, this indicates that substantially all the activities are complete. When the construction of a qualifying asset is completed in parts and a completed part is capable of being used while construction continues for the other parts, capitalisation of borrowing costs in relation to a part should cease when substantially all the activities necessary to prepare that part for its intended use or sale are complete. A business park comprising several buildings, each of which can be used individually, is an example of a qualifying asset for which each part is capable of being used while construction continues for the other parts. An example of a qualifying asset that needs to be complete before any part can be used is an industrial plant involving several processes which are carried out in sequence at different parts of the plant within the same site, such as a steel mill.

### **DISCLOSURE**

*The financial statements should disclose:*

- The accounting policy adopted for borrowing costs; and
- The amount of borrowing costs capitalised during the period.

## **RELATED PARTY DISCLOSURES**

Related party is considered to be related if at any time during the reporting period one party has the ability to control the other party or exercise significant influence over the other party in making financial and/or operating decisions. The following related party relationships are covered under AS-18:

Enterprises that directly, or indirectly through one or more intermediaries, control, or are controlled by, or are under common control with the reporting enterprise (*e.g.*, Holding companies, subsidiaries and fellow subsidiaries)

Associates and joint ventures of the reporting enterprise Individuals owning, directly or indirectly, an interest in the voting power of the reporting enterprise that gives them control or significant influence over the enterprise, and relatives of any such individual; Key management personnel and relatives of such personnel; and Enterprises over which any person described in (4) or (5) is able to exercise significant influence.

### **KEY MANAGEMENT PERSONNEL**

Those persons who have the authority and responsibility for planning, directing and controlling the activities of the reporting enterprise.

*The following are not deemed to be related party:*

- Two companies simply because they have common director
- A single customer/supplier with whom an enterprise transacts a significant volume of business merely by virtue of the resulting economic dependence
- Providers of finance
- Trade Unions
- Public Utilities
- Government departments and Government sponsored bodies

### ***Disclosure***

If there have been transactions between related parties, during the existence of a related party relationships, the reporting enterprise should disclose the followings:

- Name of the transacting related party
- Description of the relationship
- Description of nature of transaction
- Volume of transaction (Amount wise or proportion wise)
- Any other information necessary for understanding financial statements
- Outstanding (Amount wise or proportion wise) and any provision for doubtful debt due from such party
- Amounts written off or written back in respect of debts due from or to related parties.

*The followings are the examples of the related party transactions:*

- Purchase or sale of goods
- Rendering or receiving services
- Purchases or sales of fixed assets
- Licence agreements
- Leasing or hire purchase agreements
- Guarantees and collaterals
- Management contracts including for deputation of employees.

## **LEASE**

A lease is a contract calling for the lessee (user) to pay the lessor (owner) for use of an asset. A rental agreement is a lease in which the asset is tangible property. Leases for intangible property could include use of a computer programme (similar to a license, but with different provisions), or use of a radio frequency (such as a contract with a cell-phone provider). A gross lease is when the tenant pays a flat rental amount and the landlord pays for all property charges regularly incurred by the ownership from lawnmowers and washing machines to handbags and jewelry.

A cancelable lease is a lease that may be terminated solely by the lessee or solely by the lessor. A non-cancelable lease is a lease that cannot be so terminated. In common parlance, “lease” may connote a non-cancelable lease, whereas “rental agreement” may connote a cancelable lease.

The lease will either provide specific provisions regarding the responsibilities and rights of the lessee and lessor, or there will be automatic provisions as a result of local law. In general, by paying the negotiated fee to the lessor, the lessee (also called a tenant) has possession and use (the rental) of the leased property to the exclusion of the lessor and all others except with the invitation of the tenant. The most common form of real property lease is a residential rental agreement between landlord and tenant. The relationship between the tenant and the landlord is called a tenancy, and the right to possession by the tenant is sometimes called a leasehold interest. A lease can be for a fixed period of time (called the term of the lease) but (depending on the terms of the lease) may be terminated sooner.

A lease should be contrasted to a license, which may entitle a person (called a licensee) to use property, but which is subject to termination at the will of the owner of the property (called the licensor). An example of a licensor/licensee relationship is a parking lot owner and a person who parks a vehicle in the parking lot. A license may be seen in the form of a ticket to a baseball game. The difference would be that if possession is subject to ongoing, recurrent payments and is generally not subject to termination except for misconduct or nonpayment, it is a lease; if it's a one-time entrance onto someone else's property, it's probably a license. The seminal difference between a lease and a license is that a lease generally provides for regular periodic payments during its term and a specific ending date. If a contract has no ending date then it may be in the form of a perpetual license and still not be a lease.

Under normal circumstances, owners of property are at liberty to do what they want with their property (for a lawful purpose), including dealing with it or handing over possession of the property to a tenant for a limited period of time. If an owner has surrendered possession to another (*i.e.*, the tenant) then any interference with the quiet enjoyment of the property by the tenant in lawful possession is itself unlawful.

Similar principles apply to real property as well as to personal property, though the terminology would be different. Similar principles apply to sub-leasing, that is the leasing by a tenant in possession to a sub-tenant. The right to sub-lease can be expressly prohibited by the main lease, sometimes referred to as a "master lease".

## HISTORY

Over the centuries, leases have served many purposes and the nature of legal regulation has varied just as to those purposes and the social and economic conditions of the times. Leases, for example, were mainly used for agricultural purposes until the late 18th century and early 19th century when the growth of cities in industrialised countries had made leases an important form of landholding in urban areas.

The modern law of landlord and tenant in common law jurisdictions retains the influence of the common law and, particularly, the *laissez-faire* philosophy

that dominated the law of contract and property law in the 19th century. With the growth of consumerism, consumer protection legislation recognised that common law principles, which assume equal bargaining power between the contracting parties, create hardships when that assumption is inaccurate.

Consequently reformers have emphasised the need to assess residential tenancy laws in terms of protection they provide to tenants. Legislation to protect tenants is now common.

## GENERAL TERMS

A Lease is a legal contract, and thus enforceable by all parties under the Contract Laws of the applicable jurisdiction. But, since it also represents a conveyance of possessory rights to real estate, it is a hybrid sort of contract that involves qualities of a deed. Some specific kinds of leases may have specific clauses required by statute depending upon the property being lease, and/or the jurisdiction in which the agreement was signed or the residence of the parties.

*Common elements of a lease include:*

- Names of the parties of the agreement.
- The starting date and duration of the agreement.
- Identifies the specific object (by street address, VIN, or make/model, serial number) being leased.
- Provides conditions for renewal or non-renewal.
- Has a specific consideration (a lump sum, or periodic payments) for granting the use of this object.
- Has provisions for a security deposit and terms for its return.
- May have a specific list of conditions which are therein described as Default Conditions and specific Remedies.
- May have other specific conditions placed upon the parties such as
  - Need to provide insurance for loss
  - Restrictive use
  - Which party is responsible for maintenance

All kinds of personal property (*e.g.*: cars, furniture...) or real property (raw land, apartments, single family homes, and business property (including wholesale and retail)) may be leased. As a result of the lease, the owner (lessor) grants the use of the stated property to the lessee.

## TYPES OF TENANCIES

### *Fixed-term Tenancy or Tenancy for Years*

A fixed-term tenancy or tenancy for years lasts for some fixed period of time. It has a definite beginning date and a definite ending date. Despite the name “tenancy for years”, such a tenancy can last for any period of time—even a tenancy for one week may be called a tenancy for years. At Common law the duration did not need to be certain, but could be conditioned upon the happening of some event, (*e.g.*, “until the crops are ready for harvest” or “until the war is over”). In

many jurisdictions that possibility has been partially or totally abolished. A fixed term tenancy comes to an end automatically when the fixed term runs out or, in the case of a tenancy that ends on the happening of an event, when the event occurs. If a holdover tenant remains on the property after the termination of the lease, s/he may become a tenant at sufferance because the lessor/landlord has suffered (or allowed) the tenant to remain as a tenant instead of evicting him or her. Such a tenancy is generally “at will,” meaning the tenant or the landlord may terminate it at any time, upon the providing of proper statutory notice.

### ***Periodic Tenancy***

A periodic tenancy also known as a tenancy from year to year, month to month, or week to week, is an estate that exists for some period of time determined by the term of the payment of rent. An oral lease for a tenancy of years that violates the Statute of Frauds (by committing to a lease of more than—depending on the jurisdiction—one year without being in writing) may actually create a periodic tenancy, depending on the laws of the jurisdiction where the leased premises are located. In many jurisdictions the “default” tenancy, where the parties have not explicitly specified a different arrangement, and where none is presumed under local or business custom, is a month-to-month tenancy.

Either the landlord or the tenant may terminate a periodic tenancy when the period or term is nearing completion, by giving notice to the other party as required by statute or case law in the jurisdiction. Neither landlord nor tenant may terminate a periodic tenancy before the period has ended, without incurring an obligation to pay for the months remaining on the lease. Either party must give notice if it intends to terminate a tenancy from year to year, and the amount of notice is either specified by the lease or by state statute. Notice is usually, but not always, at least one month, especially for the year to year periodic tenancy.

Durations of less than a year must typically receive notice equal to the period of the tenancy - for example, the landlord must give a month’s notice to terminate a tenancy from month to month.

However, many jurisdictions have increased these required notice periods, and some have reduced the capacity of a landlord to use them drastically. For jurisdictions that have local rent control laws, a landlord’s ability to terminate a residential tenancy is substantially reduced. For example, in California, the cities of Los Angeles, Santa Monica, West Hollywood, San Francisco, and Oakland have “rent stabilization ordinances” that limit a landlord’s ability to terminate a periodic tenancy, among other restrictions.

The notice must also state the effective date of termination, which, in some jurisdictions, must be on the last day of the payment period. In other words, if a month-to-month tenancy began on the 15th of the month, in a jurisdiction with a last day requirement the termination could not be effective on the 20th of the following month, even though this would give the tenant more than the required one month’s notice.

### ***Tenancy at Will***

A tenancy at will is a tenancy which either the landlord or the tenant may terminate at any time by giving reasonable notice. Unlike a periodic tenancy, it isn't associated with a time period. It may last for many years, but it could be ended at any time by either the lessor or the lessee for any reason, or for no reason at all. Proper notice, as always with landlord/tenant law, must be given, as set forth in the state's statutes. If there is no formal lease, the tenancy at will is the one that usually exists. In rare cases it may occur where the tenancy is not for consideration.

Under the modern common law, a tenancy at will without compensation is very rare, partly because it comes about only if the parties expressly agree that the tenancy is for no rent, commonly where a family member is allowed to live in a home (a nominal consideration may be required) without any formal arrangements. In most residential tenancies for a fixed term, for consideration, the tenant may not be removed except for cause, even if there is no written lease. Many residential leases convert to "at will" tenancy subject to 30-days notice. Alternatively, a tenancy at will (without a specific time limit) may exist for a temporary period where a tenant wishes to take possession of a property and the landlord agrees, but there is insufficient time in which to negotiate and complete a new lease. In this case, the tenancy at will is terminated as soon as a new lease is negotiated and signed. The parties may also agree on the basis that if the parties fail to enter into a new lease within a reasonable time period, then the tenant must vacate the premises.

If a lease exists at the sole discretion of the landlord, the law of the jurisdiction may imply that the tenant is granted, by operation of law, a reciprocal right to terminate the lease at will. However, a lease that explicitly exists at the will of the tenant (*e.g.*, "for as long as the tenant desires to live on this land") generally does not imply that the landlord may terminate the lease; rather, such language may be interpreted as granting the tenant a life estate or even a fee simple.

*A tenancy at will is broken, again by operation of law, if the:*

- Tenant commits waste against the property;
- Tenant attempts to assign the tenancy;
- Tenant uses the property to operate a criminal enterprise;
- Landlord transfers his/her interest in the property;
- Landlord leases the property to another person;
- Tenant or landlord dies.

The specifics of these rules differ from jurisdiction to jurisdiction. Subject to any notice required by law, a tenancy at will also comes to an end when either the landlord or the tenant acts inconsistently with a tenancy. For example, the changing of locks by the landlord is an indication of the end of the tenancy, as is the vacation of the premises by the tenant. However, in some jurisdictions, such as California, a landlord is prohibited from using a "self help" remedy, such as changing the locks, to terminate a tenancy, particularly a residential tenancy. Doing so may constitute a "constructive eviction" and expose the landlord to civil and criminal liability.



### ***Tenancy at Sufferance***

A tenancy at sufferance (sometimes called a holdover tenancy) exists when a tenant remains in possession of a property after the expiration of a lease, and until the landlord acts to eject the tenant from the property. Although the tenant is technically a trespasser at this point, and possession of this type is not a true estate in land, authorities recognize the condition in order to hold the tenant liable for rent. The landlord may evict such a tenant at any time, and without notice.

The landlord may also impose a new lease on the holdover tenant. For a residential tenancy, this new tenancy is month to month. For a commercial tenancy of more than a year, the new tenancy is year to year; otherwise it is the same period as the period before the original lease expired. In either case, the landlord can raise the rent, so long as the landlord has told the tenant of the higher rent before the expiration of the original lease.

### **FORMALITIES**

Formal requirements for a lease are determined by the law and custom of the jurisdiction in which real property is located. In the case of personal property, it is determined by the law and custom of the jurisdiction in which the rental agreement is made. A tenancy for a duration greater than one year must be in writing in order to satisfy the Statute of Frauds.

### **TERM**

The term of the lease may be fixed, periodic or of indefinite duration. If it is for a specified period of time, the term ends automatically when the period expires, and no notice needs to be given, in the absence of legal requirements. The term's duration may be conditional, in which case it lasts until a specified event occurs, such as the death of a specified individual. A periodic tenancy is one which is renewed automatically, usually on a monthly or weekly basis. A tenancy at will lasts only as long as the parties wish it to, and may be terminated by either party without penalty.

It is common for a lease to be extended on a "holding over" basis, which normally converts the tenancy to a periodic tenancy on a month by month basis. It is also possible for a tenant, either expressly or impliedly, to give up the tenancy to the landlord. This process is known as a "surrender" of the lease.

### **RENT**

Rent is a requirement of leases in some common law jurisdiction, but not in civil law jurisdiction. In England it was held in the case of *Ashburn Anstalt v Arnold* that rent was not a requirement for there to be a lease, however the court will more often construe a licence where no rent is paid as it is seen as evidence for no intention to create legal relationship. There is no requirement for the rent to be a commercial amount. "Pepper corn" rent or rent of some nominal amount is adequate for this requirement.



## CAR RENTAL

A car rental agreement may include various restrictions on the way a renter can use a car, and the condition in which it must be returned. For example, some rentals cannot be driven off-road, or out of the country, or towing a trailer, without specific permission. In New Zealand you may have to specifically endorse a promise that the car will not be driven onto Ninety-Mile Beach (because of the hazardous tides).

There will certainly be a requirement to show a driver's license, and only those drivers appearing on the contract may be authorized to drive. It may include an option to purchase auto insurance (motor insurance, UK), if the renter does not already have a policy to cover rentals—another important consideration for multiple drivers. Some agencies may even require a bond payable if the car is not returned in order, often held in the form of a credit-card authorization—voided if the car is returned per agreement. A renter should be advised that he or she will be responsible for any parking or traffic violations incurred upon the vehicle during the rental period. There should also be advice on handling thefts, accidents, break-downs, and towing.

Further terms may include added fees for late returns, drop-off at a different location, or failure to top up the petrol immediately before the return.

Finally, there may be provisions for making a non-refundable deposit with a booking, terms for payment of the initial period (with discounts, vouchers, *etc.*), extended periods, and any damages or other fees that accrue prior to the return.

## REAL ESTATE RENTAL

A rental agreement is often called a lease, especially when real estate is rented. In addition to the basics of a rental (who, what, when, how much), a real estate rental may go into much more detail on these and other issues. The real estate may be rented for housing, parking a vehicle(s), storage, business, agricultural, institutional, or government use, or other reasons.

- *Who*: The parties involved in the contract, the lessor (sometimes called the owner or landlord) and the lessee (sometimes called the renter or tenant) are identified in the contract. A housing lease may specify whether the renter is living alone, with family, children, room-mate, visitors. A rental may delineate the rights and obligations of each of these. For example, a “sub-let” to a stranger might not be permitted without permission of the landlord. This also applies to whether or not pets may be kept by the renter. On the other hand, the renter may also have specific rights against intrusions by the landlord (or other tenants), except under emergency circumstances. A renter is in possession of the property, and a landlord would be trespassing upon the renter's rights if entry is made without proper notice and authority (*e.g.*, 24 hours' notice, daytime, knock first, except for emergency repairs, in case of fire, flood, *etc.*).

- *What:* Rented real estate may include all or part of almost any real property, such as an apartment, house, building, business office(s) or suite, land, farm, or merely an inside or outside space to park a vehicle, or store things. The premises rented may include not only specific rooms, but also access to other common areas such as off-street parking, basement or attic storage, laundry facility, pool, roof-deck, balconies, *etc.* The agreement may specify how and when these places may be used, and by whom. There may be detailed description of the current condition of the premises, for comparison with the condition at the time the premises are surrendered.
- *When:* the term of the rental may be for a night (*e.g.*, a hotel room), weeks, months, or years. There may be statutory provisions requiring registration of any rental that could extend for more than a specified number of years (*e.g.*, seven) in order to be enforceable against a new landlord.

A typical rental is either annual or month-to-month, and the amount of rent may be different for long-term renters (because of lower turnover costs). Leaving a long-term lease before its expiration could result in penalties, or even the cost of the entire agreed period (if the landlord is unable to find a suitable replacement tenant, after diligent pursuit). If a tenant stays beyond the end of a lease for a term of years (one or more), then the parties may agree that the lease will be automatically renewed, or it may simply convert to a tenancy at will (month-to-month) at the pro-rated monthly cost of the previous annual lease. If a tenant at will is given notice to quit the premises, and refuses to do so, the landlord then begins eviction proceedings. In many places it is completely illegal to change locks on doors, or remove personal belongings, let alone forcibly eject a person, without a court order of eviction. There may be strict rules of procedure, and stiff penalties (triple damages, plus attorneys' fees) for violations.

- *How much:* Rent may be payable monthly, annually, or in advance, or as otherwise agreed. A typical arrangement for tenancy at will is "first and last month's rent" plus a security deposit. The "last month's rent" is rent that has yet to be earned by the landlord.

### ***Deposit***

The security deposit is often handled as an escrow deposit, owned by the tenant, but held by the landlord until the premises are surrendered in good condition (ordinary wear and tear excepted). In some states, the landlord must provide the tenant with the name and account number of the bank where the security deposit is held, and pay annual interest to the tenant. Other regulations may require the landlord to submit a list of pre-existing damage to the property, or forfeit the security deposit immediately (because there is no way to determine whether a prior tenant was responsible).

### ***Insurance***

In order to rent or lease in many apartment buildings, a renter (also referred to as a “lessee”) is often required to provide proof of renters insurance before signing the rental agreement. There is a special type of the homeowners insurance in the United States specifically for renters—HO-4. This is commonly referred to as renter’s insurance or renter’s coverage. Similar to condominium coverage, referred to as a HO-6 policy, a renter’s insurance policy covers those aspects of the apartment and its contents not specifically covered in the blanket policy written for the complex. This policy can also cover liabilities arising from accidents and intentional injuries for guests as well as passers-by up to 150' of the domicile. Renter’s policies provide “named peril” coverage, meaning the policy states specifically what you are insured against.

*Common coverage areas are:*

- Fire or Lightning
- Windstorm
- Smoke
- Vandalism or Malicious Mischief
- Theft
- Accidental Discharge of Water

Additional events including riot, aircraft, explosion, smoke, hail, falling objects, volcanic eruption, snow, sleet, and weight of ice may also be covered.

### **SUBLEASE**

In real estate law, sublease (or, less formally, sublet) is the name given to an arrangement in which the lessee in a lease assigns the lease to a third party, thereby making the old lessee the sublessor, and the new lessee the sublessee, or subtenant. This means they are renting the property and renting it out at the same time. For example, the owner of an office building may lease the whole building to a management company. This company may then sublease parts of the building to other people. The management company is said to sublet the property to the individual tenants by means of a sublease. In this event, the management company (which was previously the lessee under the original lease) becomes the sublessor, and the individual tenants are subtenants or sublessees.

The sublessor remains liable to the original lessor for any damage to the property and for payment of rent. Often the original lessee requires a lower rent payment from the sublessee than what he or she may have originally paid, leaving a partial amount of the rent left up to the original lessee.

It is sometimes illegal to charge the subtenant more than the original amount in the sublessee’s contract (for instance, in a rent control situation where the rental amount is controlled by law). Subletting of social housing is generally illegal, whatever the rent charged to the subtenant; in the UK it is officially described as a category of housing fraud. A sublease can also apply to vehicles as an alternate type of car rental. In a vehicle sublease, a lessee or vehicle

owner can assign a lease to a third party and by way of contractual agreement for specific dates. Although this arrangement is not popular, it is a growing trend in the travel industry as a less expensive alternative for travellers and locals.

### **HEAD LEASE**

A head lease is a lease between a tenant and a landlord in which overall contractual responsibility is given to one identifiable tenant called the head lessee. This form of lease normally relates to an entire building which is multi-tenanted and subleased, and is usually for a longer term than the subleases.

## **EARNINGS PER SHARE**

### **OBJECTIVE**

The objective of this Standard is to prescribe principles for the determination and presentation of earnings per share which will improve comparison of performance among different enterprises for the same period and among different accounting periods for the same enterprise. The focus of this Standard is on the denominator of the earnings per share calculation.

Even though earnings per share data has limitations because of different accounting policies used for determining 'earnings', a consistently determined denominator enhances the quality of financial reporting.

### **SCOPE**

- This Standard should be applied by all companies. However, a Small and Medium Sized Company, as defined in the Notification, may not disclose diluted earnings per share (both including and excluding extraordinary items).
- In consolidated financial statements, the information required by this Statement should be presented on the basis of consolidated information.

In the case of a parent (holding enterprise), users of financial statements are usually concerned with, and need to be informed about, the results of operations of both the enterprise itself as well as of the group as a whole. In the case of such enterprises, this Standard requires the presentation of earnings per share information on the basis of consolidated financial statements as well as individual financial statements of the parent. In consolidated financial statements, such information is presented on the basis of consolidated information.

### **DEFINITIONS**

*For the purpose of this Standard, the following terms are used with the meanings specified:*

- An equity share is a share other than a preference share.
- A preference share is a share carrying preferential rights to dividends and repayment of capital.

- A financial instrument is any contract that gives rise to both a financial asset of one enterprise and a financial liability or equity shares of another enterprise.
- A potential equity share is a financial instrument or other contract that entitles, or may entitle, its holder to equity shares.
- Share warrants or options are financial instruments that give the holder the right to acquire equity shares.
- Fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction.

Equity shares participate in the net profit for the period only after preference shares. An enterprise may have more than one class of equity shares. Equity shares of the same class have the same rights to receive dividends. A financial instrument is any contract that gives rise to both a financial asset of one enterprise and a financial liability or equity shares of another enterprise.

*For this purpose, a financial asset is any asset that is:*

- Cash;
- A contractual right to receive cash or another financial asset from another enterprise;
- A contractual right to exchange financial instruments with another enterprise under conditions that are potentially favourable; or
- An equity share of another enterprise.

A financial liability is any liability that is a contractual obligation to deliver cash or another financial asset to another enterprise or to exchange financial instruments with another enterprise under conditions that are potentially unfavourable.

*Examples of potential equity shares are:*

- Debt instruments or preference shares, that are convertible into equity shares;
- Share warrants;
- Options including employee stock option plans under which employees of an enterprise are entitled to receive equity shares as part of their remuneration and other similar plans; and
- Shares which would be issued upon the satisfaction of certain conditions resulting from contractual arrangements (contingently issuable shares), such as the acquisition of a business or other assets, or shares issuable under a loan contract upon default of payment of principal or interest, if the contract so provides.

## PRESENTATION

An enterprise should present basic and diluted earnings per share on the face of the statement of profit and loss for each class of equity shares that has a different right to share in the net profit for the period. An enterprise should present basic and diluted earnings per share with equal prominence for all periods

presented. This Standard requires an enterprise to present basic and diluted earnings per share, even if the amounts disclosed are negative (a loss per share).

## MEASUREMENT

### *Basic Earnings Per Share*

Basic earnings per share should be calculated by dividing the net profit or loss for the period attributable to equity shareholders by the weighted average number of equity shares outstanding during the period.

### *Earnings–Basic*

For the purpose of calculating basic earnings per share, the net profit or loss for the period attributable to equity shareholders should be the net profit or loss for the period after deducting preference dividends and any attributable tax thereto for the period. All items of income and expense which are recognised in a period, including tax expense and extraordinary items, are included in the determination of the net profit or loss for the period unless an Accounting Standard requires or permits otherwise. The amount of preference dividends and any attributable tax thereto for the period is deducted from the net profit for the period (or added to the net loss for the period) in order to calculate the net profit or loss for the period attributable to equity shareholders.

*The amount of preference dividends for the period that is deducted from the net profit for the period is:*

- The amount of any preference dividends on non-cumulative preference shares provided for in respect of the period; and
- The full amount of the required preference dividends for cumulative preference shares for the period, whether or not the dividends have been provided for. The amount of preference dividends for the period does not include the amount of any preference dividends for cumulative preference shares paid or declared during the current period in respect of previous periods.

If an enterprise has more than one class of equity shares, net profit or loss for the period is apportioned over the different classes of shares in accordance with their dividend rights.

### *Per Share–Basic*

For the purpose of calculating basic earnings per share, the number of equity shares should be the weighted average number of equity shares outstanding during the period. The weighted average number of equity shares outstanding during the period reflects the fact that the amount of shareholders' capital may have varied during the period as a result of a larger or lesser number of shares outstanding at any time. It is the number of equity shares outstanding at the beginning of the period, adjusted by the number of equity shares bought back or issued during the period multiplied by the time-weighting factor. The time-weighting factor is the

number of days for which the specific shares are outstanding as a proportion of the total number of days in the period; a reasonable approximation of the weighted average is adequate in many Illustration attached to the Standard illustrates the computation of weighted average number of shares. In most cases, shares are included in the weighted average number of shares from the date the consideration is receivable, for example:

- Equity shares issued in exchange for cash are included when cash is receivable;
- Equity shares issued as a result of the conversion of a debt instrument to equity shares are included as of the date of conversion;
- Equity shares issued in lieu of interest or principal on other financial instruments are included as of the date interest ceases to accrue;
- Equity shares issued in exchange for the settlement of a liability of the enterprise are included as of the date the settlement becomes effective;
- Equity shares issued as consideration for the acquisition of an asset other than cash are included as of the date on which the acquisition is recognised; and
- Equity shares issued for the rendering of services to the enterprise are included as the services are rendered

In these and other cases, the timing of the inclusion of equity shares is determined by the specific terms and conditions attaching to their issue. Due consideration should be given to the substance of any contract associated with the issue. Equity shares issued as part of the consideration in an amalgamation in the nature of purchase are included in the weighted average number of shares as of the date of the acquisition because the transferee incorporates the results of the operations of the transferor into its statement of profit and loss as from the date of acquisition. Equity shares issued during the reporting period as part of the consideration in an amalgamation in the nature of merger are included in the calculation of the weighted average number of shares from the beginning of the reporting period because the financial statements of the combined enterprise for the reporting period are prepared as if the combined entity had existed from the beginning of the reporting period. Partly paid equity shares are treated as a fraction of an equity share to the extent that they were entitled to participate in dividends relative to a fully paid equity share during the reporting period.

## **DISCLOSURE OF ACCOUNTING POLICY**

Any change in accounting policies which has a material effect in the current period or which is reasonably expected to have material effect in later periods should be disclosed. In the case of a change in accounting policies, which has a material effect in the current period, the amount by which any item in the financial statements is affected by such change should also be disclosed to the extent ascertainable. Where such amount is not ascertainable, the fact should be indicated.



*Fundamental Accounting Assumption: (GCA):*

- Going Concern
- Consistency
- Accrual

*The following are examples of the areas in which different accounting policies may be adopted by different enterprises:*

- Methods of depreciation
- Methods of translation of foreign currency
- Valuation of inventories
- Valuation of investments
- Treatment of retirement benefits
- Treatment of contingent liabilities, etc.

## **VALUATION OF INVENTORY**

*Inventories are assets:*

- Held for sale in ordinary course of business;
- In the process of production for such sale (WIP);
- In the form of materials or supplies to be consumed in the production process or in the rendering of services.

*However, this standard does not apply to the valuation of following inventories:*

- WIP arising under construction contract;
- WIP arising in the ordinary course of business of service providers;
- Shares, debentures and other financial instruments held as stock in trade; and
- Producers' inventories of livestock, agricultural and forest products, and mineral oils, ores and gases to the extent that they are measured at net realizable value in accordance with well established practices in those industries.

Inventories should be valued at the lower of cost and net realizable value.

*The cost of inventories should comprise:*

- All costs of purchase
- Costs of conversion
- Other costs incurred in bringing the inventories to their present location and condition.

*The costs of purchase consist of:*

- The purchase price
- Duties and taxes (other than those subsequently recoverable by the enterprise from the taxing authorities like CENVAT credit)
- Freight inwards and other expenditure directly attributable to the acquisition.

Trade discounts (but not cash discounts), rebates, duty drawbacks and other similar items are deducted in determining the costs of purchase. The costs of conversion include direct costs and systematic allocation of fixed and variable production overhead. Allocation of fixed overheads is based on the normal capacity



of the production facilities. Normal capacity is the production, expected to be achieved on an average over a number of periods or seasons under normal circumstances, taking into account the loss of capacity resulting from planned maintenance.

### UNDER RECOVERY

Unallocated overheads are recognized as an expense in the period in which they are incurred.

*Example:*

Normal capacity	= 20000 units
Production	= 18000 units
Sales	= 16000 units
Closing Stock	= 2000 units
Fixed Overheads	= ₹60000/-
Then, Recovery rate	= ₹60000/20000 = ₹3 per unit
<b>Fixed Overheads will be bifurcated into three parts</b>	
Cost of Sales	: 16000 × 3 = 48000
Closing Stock	: 2000 × 3 = 6000
Under Recovery	: ₹6000 (to be charged to P/L)

(Apparently it seems that fixed cost element in closing stock should be 60000/18000 × 2000 = ₹ 6666.67. but this is wrong as per AS-2)

### OVER RECOVERY

In period of high production, the amount of fixed production overheads is allocated to each unit of production is decreased so that inventories.

*Example:*

Normal capacity	= 20000 units
Production	= 25000 units
Sales	= 23000 units
Closing Stock	= 2000 units
Fixed Overheads	= ₹60000/-
Then, Recovery Rate	= ₹60000/20000 = ₹3 per unit
But, Revised Recovery Rate	= ₹ 60000/25000 = ₹ 2.40 per unit
Cost of Sales	: 23000 × 2.4 = ₹55200
Closing Stock	: 2000 × 2.4 = ₹ 4800

### JOINT OR BY PRODUCTS

In case of joint or by products, the costs incurred up to the stage of split off should be allocated on a rational and consistent basis. The basis of allocation may be sale value at split off point or sale value at the completion of production. In case of the by products of negligible value or wastes, valuation may be taken at net realizable value. The cost of main product is then joint cost minus net realizable value of by product or waste. The other costs are also included in the cost of inventory to the

extent they contribute in bringing the inventory to its present location and condition. Interest and other borrowing costs are usually not included in cost of inventory. However, AS-16 recommends the areas where borrowing costs are taken as cost of inventory.

*Certain costs are strictly not taken as cost of inventory:*

- Abnormal amounts of wasted materials, labour, or other production costs;
- Storage costs, unless those costs are necessary in the production process prior to a further production stage;
- Administrative overheads that do not contribute to bringing the inventories to their present location and condition; and
- Selling and Distribution costs.

### **COST FORMULA**

- Specific identification method for determining cost of inventories
- Specific identification method means directly linking the cost with specific item of inventories. This method has application in following conditions:
  - In case of purchase of item specifically segregated for specific project and is not ordinarily interchangeable.
  - In case of goods of services produced and segregated for specific project.
- Where Specific Identification method is not applicable
- The cost of inventories is valued by the following methods:
  - FIFO (First In First Out) Method
  - Weighted Average Cost

### **COST OF INVENTORIES IN CERTAIN CONDITIONS**

*The following methods may be used for convenience if the results approximate actual cost:*

- *Standard Cost:* It takes into account normal level of consumption of material and supplies, labour, efficiency and capacity utilization. It must be regularly reviewed taking into consideration the current condition.
- *Retail Method:* Normally applicable for retail trade. Cost of inventory is determined by reducing the gross margin from the sale value of inventory.
- *Net Realisable Value:* NRV means the estimated selling price in ordinary course of business, at the time of valuation, less estimated cost of completion and estimated cost necessary to make the sale.

### **COMPARISON BETWEEN NET REALIZABLE VALUE AND COST OF INVENTORY**

The comparison between cost and net realizable value should be made on item-by-item basis. (In some cases, group of items-by-group of item basis)

*For Example:*

	Cost	NRV	Inventory Value as per AS-2
Item A	100	90	90
Item B	100	115	100
Total	200	205	<del>200</del> 190

## RAW MATERIAL VALUATION

If the finished goods, to which raw material is applied, is sold at profit, RAW MATERIAL is valued at cost irrespective of its NRV level being lower to its costs.

## CASH FLOW STATEMENT

- *Definitions:* Cash comprises cash on hand and cash at bank. (Demand Deposits with bank) Cash Equivalents are:
  - Short Term
  - Highly Liquid Investments (Maturity around 3 months)
  - Subject to insignificant risk of changes in value.
  - Cash Flows are inflows and outflows of cash and cash equivalents.
  - Cash Flow Statement represents the cash flows during the specified period by operating, investing and financing activities.
  - Operating Activities are the principal revenue-producing activities of the enterprise and other activities that are not investing activities and financing activities.
- *Example:*
  - Cash receipts from sales of goods/services
  - Cash receipts from royalties, fees and other revenue items
  - Cash payments for salaries, wages and rent
  - Cash payment to suppliers for goods
  - Cash payments or refunds of Income Tax unless they can be specifically identified with financing or investing activities
  - Cash receipts and payments to future contracts, forward contracts when the contracts are held for trading purposes.
  - Investing Activities are the acquisition and disposal of long-term assets and other investments not included in cash equivalents.
  - Cash payments/receipts to acquire/sale of fixed assets including intangible assets
  - Cash payments to acquire shares or interest in joint ventures (other than the cases where instruments are considered as cash equivalents)
  - Cash advances and loans made to third parties (Loan sanctioned by a financial enterprise is operating activity)
  - Dividends and Interest received
  - Cash flows from acquisitions and disposal of subsidiaries

- Financing Activities are activities that result in changes in the size and composition of the owners' capital (including preference share capital in the case of a company) and borrowing of the enterprise.
- Cash proceeds from issue of shares and debentures
- Buy back of shares
- Redemption of Preference shares or debentures
- Cash repayments of amount borrowed.
- Dividend and Interest paid

An enterprise should report separately major classes of gross cash receipts and gross cash payments arising from investing and financing activities.

*However, cash flows from following activities may be reported on a net basis:*

- Cash receipts and payments on behalf of customers
- Cash collected on behalf of, and paid over to, the owners of properties.
- Cash flows from items in which turnover is quick, the amounts are large and the maturities are short.
- Purchase and sale of investments
- *For Financial Enterprise:*
  - Cash receipts and payments for the acceptance and repayment of deposits with a fixed maturity date.
  - Deposits placed/withdrawn from other financial enterprises
  - Cash advances and loans made to customers and the repayment of those advances and loans.

## FOREIGN CURRENCY CASH FLOWS

Cash flows arising in foreign currency should be recorded in enterprise' reporting currency applying the exchange conversion rate existing on the date of cash flow. The effect of changes in exchange rates of cash and cash equivalents held in foreign currency should be reported as separate part of the reconciliation of the changes in cash and cash equivalents during the period.

## EXTRAORDINARY ITEMS

These items should be separately shown under respective heads of cash from operating, investing and financing activities. Investing and financing transactions that do not require the use of cash and cash equivalents should be excluded from a cash flow statement.

*For Example:*

- The conversion of debt to equity
- Acquisition of an enterprise by means of issue of shares

## OTHER DISCLOSURE

- Components of cash and cash equivalents.
- Reconciliation of closing cash and cash equivalents with items of balance sheet.
- The amount of significant cash and cash equivalent balances held by the enterprise, which are not available for use by it.

## CONTINGENCIES AND EVENTS OCCURRING AFTER THE BALANCE SHEET DATE

- *Contingency*: A contingency is a condition or situation, the ultimate outcome of which, gain or loss, will be known or determined only on the occurrence, or non-occurrence, of one or more uncertain future events.

### ACCOUNTING TREATMENT

*If it is likely that a contingency will result in:*

- *Loss*: It is prudent to provide for that loss in the financial statements.
- *Profit*: Not recognized as revenue (However, when the realization of a gain is virtually certain, then such gain is not a contingency and accounting for the gain is appropriate.)

*The estimates of the outcome and of the financial effect of contingencies are determined:*

- By the judgment of the management by review of events occurring after the balance sheet date.
- By experience of the enterprise in similar transaction
- By reviewing reports from independent experts

If estimation cannot be made, disclosure is made of the existence and nature of the contingency. Provisions for contingencies are not made in respect of general or unspecified risks.

The existence and amount of guarantees and obligations arising from discounted bills of exchange are generally disclosed by way of note even though the possibility of loss is remote.

*The amount of a contingent loss should be provided for by a charge in the statement of profit and loss if:*

- It is probable that future events will confirm that, after taking into account any related probable recovery, an asset has been impaired or a liability has been incurred as at the balance sheet date, and
- A reasonable estimate of the amount of the resulting loss can be made.

If either of aforesaid two conditions is not met, *e.g.*, where a reasonable estimate of the loss is not practicable, the existence of the contingency should be disclosed by way of note unless the possibility of loss is remote.

*Such disclosure should provide following information:*

- The nature of the contingency;
- The uncertainties which may affect the future outcome;
- An estimate of the financial effect or a statement that such an estimate cannot be made.

### EVENTS OCCURRING AFTER THE BALANCE SHEET DATE

Events occurring after the balance sheet date are those significant events, both favourable and unfavourable, that occur between the balance sheet date

and the date on which the financial statements are approved by the Board of Directors in case of a company, and, by the corresponding approving authority in the case of any other entity.

### ***Adjusting Event***

Those, which provide further evidence of conditions that, existed at the balance sheet date. Actual adjustments in financial statements are required for adjusting event.

#### *Exceptions:*

- Although, not adjusting event, Proposed dividend are adjusted in books of account.
- Adjustments are required for the events, which occur after balance sheet date that indicates that fundamental accounting assumption of going concern is no longer, appropriate.

### ***Non-Adjusting Events***

Those, which are indicative of conditions that arose subsequent to the balance sheet date. No adjustments are required to be made for such events. But, disclosures should be made in the report of the approving authority of those events occurring after the balance sheet date that represent material changes and commitments affecting the financial position of the enterprise.

#### *Such disclosure should provide following information:*

- The nature of the events
- An estimate of the financial effect, or a statement that such an estimate cannot be made.

## **NET PROFIT OR LOSS FOR THE PERIOD, PRIOR PERIOD ITEMS AND CHANGES IN ACCOUNTING POLICY**

All items of income and expense, which are recognized in a period, should be included in the determination of net profit or loss for the period unless an Accounting Standard requires or permits otherwise. The net profit or loss for the period comprises the following components, each of which should be disclosed on the face of the statement of profit and loss:

- Profit or loss from ordinary activities; and
- Extraordinary items.

Ordinary Activities are any activities, which are undertaken by an enterprise as part of its business, and such related activities in which the enterprise engages in furtherance of, incidental to, or arising from, these activities. When items of income and expenses within profit or loss from ordinary activities are of such size, nature that their disclosure is relevant to explain the performance of the enterprise for the period, the nature and amount of such items should be disclosed properly.

*Examples of such circumstances are:*

- Disposal of items of fixed assets
- Litigation settlements
- Legislative changes having retrospective application
- Disposal of long term investments
- Reversal of provisions

Extraordinary items are income or expense that arises from events or transactions that are clearly distinct from the ordinary activities of the enterprise and, therefore, are not expected to recur frequently or regularly.

*Examples of events or transactions that generally give rise to extraordinary items for most enterprises are:*

- Attachment of property of the enterprise;
- An earthquake

However, claims from policyholders arising from an earthquake do not qualify as an extraordinary item for an insurance enterprise that insures against such risks. Extraordinary items should be disclosed in the statement of profit and loss as a part of net profit or loss for the period. The nature and the amount of each extraordinary item should be separately disclosed in the statement of profit and loss in a manner that its impact on current profit or loss can be perceived.

## **PRIOR PERIOD ITEMS**

Prior period items are income or expenses that arise in the current period as a result of ERROR or OMISSIONS in the preparation of the financial statements of one or more prior periods. The nature and amount of prior period items should be separately disclosed in the statement of profit and loss in a manner that their impact on the current profit or loss can be perceived.

## **CHANGES IN ACCOUNTING POLICY**

Accounting policies are the specific accounting principles and the methods of applying those principles adopted by an enterprise in the preparation and presentation of financial statements.

*A change in an accounting policy should be made only if the adoption of a different accounting policy is required:*

- By statute
- For compliance with an accounting standard
- If it is considered that the change would result in a more appropriate presentation of the financial statements of the enterprise.

Any change in accounting policy which has a material effect, should be disclosed. Such changes should be disclosed in the statement of profit and loss in a manner that their impact on profit or loss can be perceived. Where the effect of such change is not ascertainable, the fact should be indicated. If a change is made in the accounting policies which has no material effect on the financial statements for the current period but which is reasonably expected to have material effect in later periods, the fact of such change should be appropriately disclosed in the period in which the change is adopted.

*The following are not changes in accounting policies:*

- The adoption of an accounting policy for events which differ in substance from previously occurring events *e.g.*, introduction of a formal retirement gratuity scheme by an employer in place of ad hoc ex-gratia payments to employees on retirement; and
- The adoption of a new accounting policy for events or transactions which did not occur previously or that were immaterial.

## **CHANGE IN ACCOUNTING ESTIMATE**

The nature and amount of a change in an accounting estimate which has a material effect in the current period, or which is expected to have a material effect in subsequent periods, should be disclosed. If it is impracticable to quantify the amount, this fact should be disclosed. The effect of a change in an accounting estimate should be classified using the same classification in the statement of profit and loss as was previously for the estimate. For example, the effect of a change in an accounting estimate that was previously included as an extraordinary item is reported as an extraordinary item.

## **CLARIFICATIONS**

- Change in accounting estimate does not bring the adjustment within the definitions of an extraordinary item or a prior period item.
- Sometimes, it is difficult to distinguish between a change in an accounting policy and a change in accounting estimate. In such cases, the change is treated as a change in an accounting estimate, with appropriate disclosures.

## **DEPRECIATION ACCOUNTING**

Depreciation is a measure of the wearing out, consumption or other loss of value of a depreciable asset arising from use, passage of time or obsolescence through technology and market changes.

Depreciation is allocated so as to charge a fair proportion of the depreciable amount in each accounting period during the expected useful life of the asset. Depreciation includes amortisation of assets whose useful life is predetermined. The depreciable amount of a depreciable asset should be allocated on a systematic basis to each accounting period during the useful life of the asset.

*Depreciable assets are assets which:*

- Are expected to be used during more than one accounting period; and
- Have a limited useful life; and
- Are held by an enterprise for use in the production or supply or for administrative purposes

Depreciable amount of a depreciable asset is its historical cost, or other amount substituted for historical cost less the estimated residual value. Useful life is the period over which a depreciable asset is expected to be used by the enterprise. The useful life of a depreciable asset is shorter than its physical life.



*There are two method of depreciation:*

1. Straight Line Method (SLM)
2. Written Down Value Method (WDVM)

The depreciation method selected should be applied consistently from period to period. The change in method of depreciation should be made only if; The adoption of the new method is required by statute; OR For compliance with an accounting standard; OR If it is considered that change would result in a more appropriate preparation of financial statement; or When there is change in method of depreciation, depreciation should be recalculated in accordance with the new method from the date of the assets coming into use. (*i.e.*, retrospectively) The deficiency or surplus arising from such recomputation should be adjusted in the year of change through profit and loss account.

Such change should be treated as a change in accounting policy and its effect should be quantified and disclosed. The useful lives of major depreciable assets may be reviewed periodically.

Where there is a revision of the estimated useful life, the unamortised depreciable amount should be charged over the revised remaining useful life. (*i.e.*, PROSPECTIVELY) Any addition or extension which becomes an integral part of the existing asset should be depreciated over the remaining useful life of that asset.

The depreciation on such addition may also be applied at the rate applied to the existing asset. Where an addition or extension retains a separate identity and is capable of being used after the existing asset is disposed of, depreciation should be provided independently on the basis of estimate of its own useful life.

Where the historical cost of a depreciable asset has undergone a change due to increase or decrease in the long term liability on account of exchange fluctuations, price adjustments, changes in duties or similar factors, the depreciation on the revised unamortised depreciable amount should be provided prospectively over the residual useful life of the asset.

*This accounting standard is not applied on the following items:*

- Forests and plantations
- Wasting assets
- Research and development expenditure
- Goodwill
- Live stock

*Disclosure Requirements:*

- The historical cost
- Total depreciation for each class charged during the period
- The related accumulated depreciation
- Depreciation method used (Accounting policy)
- Depreciation rates if they are different from those prescribed by the statute governing the enterprise

# 3

## Accounting Standards

Accounting is the art of recording transactions in the best manner possible, so as to enable the reader to arrive at judgments/come to ceases, and in this regard it is utmost necessary that there are set guidelines. These guidelines are generally called accounting policies.

The intricacies of accounting policies permitted Companies to alter their accounting principles for their benefit. This made it impossible to make comparisons. In order to avoid to have a harmonised accounting principle, Standards needed to be set by recognised accounting bodies. This paved the way for Accounting Standards to come into existence.

### **OBJECTIVE OF ACCOUNTING STANDARDS**

Objective of Accounting Standards is to standarize the diverse accounting policies and practices with a view to eliminate to the extent possible the non-comparability of financial statements and the reliability to the financial statements. The Institute of Chartered Accountants of India, recognizing the need to harmonize the diversre accounting policies and practices, constituted at Accounting Standard Board (ASB) on 21st April, 1977.

### **COMPLIANCE WITH ACCOUNTING STANDARDS ISSUED BY ICAI**

Sub-section (3A) to section 211 of Companies Act, 1956 requires that every Profit/Loss Account and Balance Sheet shall comply with the Accounting Standards. 'Accounting Standards' means the standard of accounting recomended by the ICAI and prescribed by the Central Government in consultation with the National Advisory Committee on Accounting Standards (NACAS) constituted under section 210(1) of companies Act, 1956.

*Accounting Standards Issued:*

- *Disclosure of Accounting Policies:* Accounting Policies refer to specific accounting principles and the method of applying those principles adopted by the enterprises in preparation and presentation of the financial statements.
- *Valuation of Inventories:* The objective of this standard is to formulate the method of computation of cost of inventories/stock, determine the value of closing stock/inventory at which the inventory is to be shown in balance sheet till it is not sold and recognized as revenue.
- *Cash Flow Statements:* Cash flow statement is additional information to user of financial statement. This statement exhibits the flow of incoming and outgoing cash. This statement assesses the ability of the enterprise to generate cash and to utilize the cash. This statement is one of the tools for assessing the liquidity and solvency of the enterprise.
- *Contingencies and Events occurring after the balance sheet date:* In preparing financial statement of a particular enterprise, accounting is done by following accrual basis of accounting and prudent accounting policies to calculate the profit or loss for the year and to recognize assets and liabilities in balance sheet. While following the prudent accounting policies, the provision is made for all known liabilities and losses even for those liabilities/events, which are probable. Professional judgement is required to classify the likelihood of the future events occurring and, therefore, the question of contingencies and their accounting arises. Objective of this standard is to prescribe the accounting of contingencies and the events, which take place after the balance sheet date but before approval of balance sheet by Board of Directors. The Accounting Standard deals with Contingencies and Events occurring after the balance sheet date.
- *Net Profit or Loss for the Period, Prior Period Items and change in Accounting Policies:* The objective of this accounting standard is to prescribe the criteria for certain items in the profit and loss account so that comparability of the financial statement can be enhanced. Profit and loss account being a period statement covers the items of the income and expenditure of the particular period. This accounting standard also deals with change in accounting policy, accounting estimates and extraordinary items.
- *Depreciation Accounting:* It is a measure of wearing out, consumption or other loss of value of a depreciable asset arising from use, passage of time. Depreciation is nothing but distribution of total cost of asset over its useful life.
- *Construction Contracts:* Accounting for long term construction contracts involves question as to when revenue should be recognized and how to measure the revenue in the books of contractor. As the period of construction contract is long, work of construction starts in

one year and is completed in another year or after 4-5 years or so. Therefore question arises how the profit or loss of construction contract by contractor should be determined. There may be following two ways to determine profit or loss: On year-to-year basis based on percentage of completion or On completion of the contract.

- *Revenue Recognition*: The standard explains as to when the revenue should be recognized in profit and loss account and also states the circumstances in which revenue recognition can be postponed. Revenue means gross inflow of cash, receivable or other consideration arising in the course of ordinary activities of an enterprise such as:- The sale of goods, Rendering of Services, and Use of enterprises resources by other yeilding interest, dividend and royalties. In other words, revenue is a charge made to customers/clients for goods supplied and services rendered.
- *Accounting for Fixed Assets*: It is an asset, which is:- Held with intention of being used for the purpose of producing or providing goods and services. Not held for sale in the normal course of business. Expected to be used for more than one accounting period.
- *The Effects of Changes in Foreign Exchange Rates*: Effect of Changes in Foreign Exchange Rate shall be applicable in Respect of Accounting Period commencing on or after 01-04-2004 and is mandatory in nature. This accounting Standard applicable to accounting for transaction in Foreign currencies in translating in the Financial Statement of foreign operation Integral as well as non-integral and also accounting for forward exchange. Effect of Changes in Foreign Exchange Rate, an enterprises should disclose following aspects:
  - Amount Exchange Difference included in Net profit or Loss;
  - Amount accumulated in foreign exchange translation reserve;
  - Reconciliation of opening and closing balance of Foreign Exchange translation reserve.
- *Accounting for Government Grants*: Governement Grants are assistance by the Govt. in the form of cash or kind to an enterprise in return for past or future compliance with certain conditions. Government assistance, which cannot be valued reasonably, is excluded from Govt. grants. Those transactions with Governement, which cannot be distinguished from the normal trading transactions of the enterprise, are not considered as Government grants.
- *Accounting for Investments*: It is the assets held for earning income by way of dividend, interest and rentals, for capital appreciation or for other benefits.
- *Accounting for Amalgamation*: This accounting standard deals with accounting to be made in books of Transferee company in case of amalgamation. This accounting standard is not applicable to cases of acquisition of shares when one company acquires/purchahses the share of another company and the acquired company is not dissolved and its

separate entity continues to exist. The standard is applicable when acquired company is dissolved and separate entity ceased exist and purchasing company continues with the business of acquired company

- *Employee Benefits:* Accounting Standard has been revised by ICAI and is applicable in respect of accounting periods commencing on or after 1st April 2006. the scope of the accounting standard has been enlarged, to include accounting for short-term employee benefits and termination benefits.
- *Borrowing Costs:* Enterprises are borrowing the funds to acquire, build and install the fixed assets and other assets, these assets take time to make them useable or saleable, therefore the enterprises incur the interest (cost on borrowing) to acquire and build these assets. The objective of the Accounting Standard is to prescribe the treatment of borrowing cost (interest + other cost) in accounting, whether the cost of borrowing should be included in the cost of assets or not.
- *Segment Reporting:* An enterprise needs in multiple products/services and operates in different geographical areas. Multiple products/services and their operations in different geographical areas are exposed to different risks and returns. Information about multiple products/services and their operation in different geographical areas are called segment information. Such information is used to assess the risk and return of multiple products/services and their operation in different geographical areas. Disclosure of such information is called segment reporting.
- *Related Party Disclosure:* Sometimes business transactions between related parties lose the feature and character of the arms length transactions. Related party relationship affects the volume and decision of business of one enterprise for the benefit of the other enterprise. Hence disclosure of related party transaction is essential for proper understanding of financial performance and financial position of enterprise.
- *Accounting for Leases:* Lease is an arrangement by which the lessor gives the right to use an asset for given period of time to the lessee on rent. It involves two parties, a lessor and a lessee and an asset which is to be leased. The lessor who owns the asset agrees to allow the lessee to use it for a specified period of time in return of periodic rent payments.
- *Earning Per Share:* Earning per share (EPS) is a financial ratio that gives the information regarding earning available to each equity share. It is very important financial ratio for assessing the state of market price of share. This accounting standard gives computational methodology for the determination and presentation of earning per share, which will improve the comparison of EPS. The statement is applicable to the enterprise whose equity shares or potential equity shares are listed in stock exchange.

- *Consolidated Financial Statements:* The objective of this statement is to present financial statements of a parent and its subsidiary(ies) as a single economic entity. In other words the holding company and its subsidiary(ies) are treated as one entity for the preparation of these consolidated financial statements. Consolidated profit/loss account and consolidated balance sheet are prepared for disclosing the total profit/loss of the group and total assets and liabilities of the group. As per this accounting standard, the consolidated balance sheet if prepared should be prepared in the manner prescribed by this statement.
- *Accounting for Taxes on Income:* This accounting standard prescribes the accounting treatment for taxes on income. Traditionally, amount of tax payable is determined on the profit/loss computed as per income tax laws. This accounting standard, tax on income is determined on the principle of accrual concept. This concept, tax should be accounted in the period in which corresponding revenue and expenses are accounted. In simple words tax shall be accounted on accrual basis; not on liability to pay basis.
- *Accounting for Investments in Associates in consolidated financial statements:* The accounting standard was formulated with the objective to set out the principles and procedures for recognizing the investment in associates in the consolidated financial statements of the investor, so that the effect of investment in associates on the financial position of the group is indicated.
- *Discontinuing Operations:* The objective of this standard is to establish principles for reporting information about discontinuing operations. This standard covers “discontinuing operations” rather than “discontinued operation”. The focus of the disclosure of the Information is about the operations which the enterprise plans to discontinue rather than disclosing on the operations which are already discontinued. However, the disclosure about discontinued operation is also covered by this standard.
- *Interim Financial Reporting (IFR):* Interim financial reporting is the reporting for periods of less than a year generally for a period of 3 months. As per clause 41 of listing agreement the companies are required to publish the financial results on a quarterly basis.
- *Intangible Assets:* An Intangible Asset is an Identifiable non-monetary Asset without physical substance held for use in the production or supplying of goods or services for rentals to others or for administrative purpose.
- *Financial Reporting of Interest in joint ventures:* Joint Venture is defined as a contractual arrangement whereby two or more parties carry on an economic activity under ‘joint control’. Control is the power to govern the financial and operating policies of an economic activity so as to obtain benefit from it. ‘Joint control’ is the contractually agreed sharing of control over economic activity.

- *Impairment of Assets:* The dictionary meaning of ‘impairment of asset’ is weakening in value of asset. In other words when the value of asset decreases, it may be called impairment of an asset. As per AS-28 asset is said to be impaired when carrying amount of asset is more than its recoverable amount.
- *Provisions, Contingent Liabilities and Contingent Assets:* Objective of this standard is to prescribe the accounting for Provisions, Contingent Liabilities, Contingent Assets, Provision for restructuring cost.
  - *Provision:* It is a liability, which can be measured only by using a substantial degree of estimation.
  - *Liability:* A liability is present obligation of the enterprise arising from past events the settlement of which is expected to result in an outflow from the enterprise of resources embodying economic benefits.
- *Financial Instrument:* Recognition and Measurement comes into effect in respect of Accounting periods commencing on or after 1-4-2009 and will be recommendatory in nature for an initial period of two years. This Accounting Standard will become mandatory in respect of Accounting periods commencing on or after 1-4-2011 for all commercial, industrial and business Entities except to a Small and Medium-sized Entity. The objective of this Standard is to establish principles for recognizing and measuring Financial assets, financial liabilities and some contracts to buy or sell non-financial items. Requirements for presenting information about financial instruments are in Accounting Standard.
- *Financial Instrument–Presentation:* The objective of this Standard is to establish principles for presenting financial instruments as liabilities or equity and for offsetting financial assets and financial liabilities. It applies to the classification of financial instruments, from the perspective of the issuer, into financial assets, financial liabilities and equity instruments; the classification of related interest, dividends, losses and gains; and the circumstances in which financial assets and financial liabilities should be offset. The principles in this Standard complement the principles for recognising and measuring financial assets and financial liabilities in Accounting Standard Financial Instruments:
- *Financial Instruments, Disclosures and Limited revision to accounting standards:* The objective of this Standard is to require entities to provide disclosures in their financial statements that enable users to evaluate:
  - The significance of financial instruments for the entity’s financial position and performance; and
  - The nature and extent of risks arising from financial instruments to which the entity is exposed during the period and at the reporting date, and how the entity manages those risks.



## **UNDERSTANDING CORPORATE FINANCIAL STATEMENTS AND REPORTS**

### **CORPORATE FINANCIAL STATEMENTS**

High-profile accounting scandals at several large corporations in recent months have generated a new public focus on corporate financial statements. Are they accurate and reliable? Do they provide a realistic picture of the state of a company's business operations? Regulators and accounting institutes in the U.S., and other countries are now developing new rules governing how companies report on their finances—including controversial items such as future revenue streams and executive stock options.

While the accounting scandals have raised many technical and political issues, corporate financial statements are still an invaluable source of information for trade unionists, community researchers, and anyone else conducting independent research on private corporations. For the vast majority of corporations, official financial statements still provide a useful and accurate overview of a company's business dealings, and can provide progressive critics of that corporation with many useful arguments.

And with the advent of on-line financial reporting, it is now easier than ever to obtain company financial statements—at any time of the day (or, for many hard-working activists, any time of the night).

### **Where to Obtain Corporate Financial Reports**

A crucial distinction between two basic types of corporations must be kept in mind when trying to obtain corporate financial statements. “Public corporations” (not to be confused with publicly-owned corporations) are those whose shares are traded on a public stock exchange (like the TSE, the NYSE, or the NASDAQ). Because they have sold shares to the public market, these companies are obliged by securities regulators (public officials who monitor and regulate the actions of the stock market) to disclose various types of corporate information.

This obligation ensures that investors in those shares are at least somewhat protected against unethical behaviour and scams. “Private corporations” (again, not to be confused with privately-owned corporations) are those which do not offer their shares for sale on a public stock exchange. They are owned by a single investor, or by a small group of usually tight-knit investors (such as members of a certain family).

Private corporations are not obliged to release their financial statements, executive compensation, or other internal data, and hence it is usually much harder to obtain data on these companies. Unfortunately, this means that many Canadian companies are allowed to keep their financial statements secret. For example, most small businesses are private corporations.

Most of the Canadian subsidiaries of foreign multinational companies are also private (since they are usually owned 100% by the parent firm, and hence



the Canadian subsidiary does not offer any shares for public trading); while the foreign parent firm is probably itself a public corporation (meaning you can obtain financial statements on the operations of the parent firm), its public statements do not usually break out the separate profit-and-loss statements for Canadian or other national subsidiaries.

Fighting for laws which would require private companies to divulge at least basic financial data would, in the long-run, be an important way of promoting more transparency and democracy in the Canadian economy. Since the actions of these companies are often important to the well-being of the whole community, we should be entitled to information regarding how these companies are financed and how they perform.

Audited financial statements of any publicly-traded company are included in their annual and quarterly reports, which will be mailed to you on request from the company's head office (usually through the Investor Relations department). They can also usually be found in a good business library (such as a university business school, or a public reference library). With the advent of the Internet, however, the best way to attain financial data is now on-line. Most public corporations post their basic financial statements on their corporate web sites. Even better, securities regulators in both Canada and the U.S., have established on-line repositories of financial statements of public corporations.

The Canadian site is called the SEDAR site; the U.S., site is called the EDGAR site. In addition to the basic quarterly and annual financial statements, these public sites also contain information which companies do not usually post on their own corporate web sites (including annual information forms, management proxy statements which include details about executive compensation, and other compulsory securities filings).

The annual information forms (which in the U.S., are called 10-K forms) are an especially useful source of additional information about a company's activities, its competitive position, its locations of business, and (sometimes) its labour relations (including number of unionised employees and which unions it deals with). Most companies' annual reports will also publish (usually at the back of the report) an unaudited historical summary of the company's main performance indicators (typically for a 5-year or 10-year period).

These summaries are a useful way to obtain data for a longer time period than is covered by the formal annual financial statements (which usually only provide 2 or 3 years of financial data for comparison). The historical summaries are not always contained in the SEDAR and EDGAR versions of filed financial statistics; you often need to download the company's full annual report to find this summary.

More recent breaking news about a company is available in company news releases. These are usually posted on each company's own web site (typically in a part called "Newsroom"), and are also commonly posted with a news agency. News releases also must be posted to the SEDAR and EDGAR web sites, but usually with a delay of 2-3 days.

Some particularly juicy additional information is provided in an annual management proxy statement which is mailed to shareholders, and also posted on the SEDAR and EDGAR sites. This proxy statement includes data on the shareholdings and compensation of directors and executives. To cast doubt on the motivations of a company's management and directors, it is often useful to point out how much money these individuals are earning thanks to their company's actions.

The proxy statement also usually contains useful information regarding the total return (including both dividends and share price appreciation) that has been enjoyed by the company's shareholders over various time horizons, compared to the average total return of the stock market as a whole.

### **Understanding the Income Statement**

A company's income statement reports the revenues, expenses, and net profits of the company, over a certain period of time (*e.g.*, a year or a 3-month quarter). It is roughly equivalent to the annual budget of a government or organisation.

*Some of the key indicators reported on the income statement include:*

- Revenues are simply the annual incoming revenue flow, usually broken into different categories (reflecting the different lines of the company's business).
- Operating expenses include the expenses directly associated with the firm's day-to-day operations, including wages and salaries, benefits, supplies, parts, raw materials, rents and leases, *etc.* This is sometimes called the company's "cost of sales".
- Operating profit equals revenues minus direct operating expenses, before deducting certain overhead costs (such as interest expenses, R&D costs, restructuring charges, *etc.*) which are associated with the firm's overall existence (rather than with its specific day-to-day operations). A strong operating profit is a sign of the inherent underlying profitability of the company's real business activity.
- Other deductions are then subtracted from the company's operating profit, to generate an estimate of its final bottom-line profitability. Two of the most important of these are interest costs and depreciation. Interest costs are the actual cash payments made to banks and other lenders (including bondholders) from whom the company has borrowed money to finance its various activities. Depreciation, on the other hand, is an imaginary charge that reflects the gradual wearing out of the actual machinery, equipment, buildings, and other real assets which the firm uses in its business. The company doesn't actually have to "pay" anyone for this wear-and-tear, but it does have to recognise in its income statement the inevitable decline in the value of these assets.
- Special one-time charges are also sometimes deducted at this stage of the income statement, including one-time payouts for severance costs and other expenses associated with layoffs or downsizing, or one-time

“write-offs” of capital value by companies who are experiencing chronic losses. In some cases, a researcher will want to analyse a company’s profits before these special one-time charges, in cases where you want to demonstrate the continuing viability of a company’s core business.

- Net income before tax equals the overall final profit of the company after all these various charges are considered.
- Net income is the company’s final profit, after deducting a charge for income tax. If the company has generated a before-tax loss, sometimes the income tax charge is positive, since the company can set these losses against other profits (historical or anticipated) to reduce its tax payments; this is called a “tax recovery.” Some income statements will provide additional details on how this net income is distributed between different categories of the company’s owners. For example, many companies have “preferred shareholders,” who may receive a special dividend out of the company’s profits, before any remaining profits are ascribed to the company’s other or “common” shareholders. But if it is the profitability of the company that you are interested in, not the well-being of a particular group of shareholders, then you will want to analyse the company’s net income before any distributions to preferred shareholders.

### **A Special Note on Income Taxes**

Progressive corporate researchers are often interested in how much income tax a company has paid, sometimes to make a case that the company is not “paying its way” in society. Income taxes are reported on a company’s income statement, as a deduction from before-tax profit. A company’s investors are only interested in how much money the company makes after all corporate obligations (including taxes) have been paid, so they are only interested in after-tax net income. But progressives are often interested in what share of social expenses (for social programmes, infrastructure, *etc.*) is shouldered by the corporations who benefit from those expenses. Unfortunately, however, progressives often misinterpret corporate income tax data, as reported in corporate financial statements.

What is reported on the income statement is a company’s hypothetical tax liability, resulting from its operations for the previous year. But there is almost always a big difference between what the company reports as income tax on its income statement, and what it actually paid to the government for that year. This is because business accountants and the government use different methods for estimating the cost of depreciation of capital equipment and certain other costs, which all go into the calculation of corporate income tax liabilities.

The government allows most companies to write off (or depreciate) the value of new investments, faster than they actually wear out (in physical or economic terms). Sometimes this occurs as a result of a deliberate government policy

(what is known as “accelerated depreciation,” which government hopes will encourage companies to invest more); sometimes it is simply the result of different depreciation formulas (for example, the government might specify “straight-line” depreciation, while the business accountants specify a “declining balance” method). The end result is that there is always a difference between what a company actually owes to the government in income taxes, and what the business accountants estimate the company would normally have to pay given their own judgement about the longevity of capital equipment, *etc.*

Remember, the supposed goal of the financial statement is to provide investors with as accurate a picture as possible of the true inherent profitability of a company, so the accountants will be interested in how long a machine actually lasts—and less in how fast the government actually allows the company to write it off.

Thus the amount that the company “charges” itself for income tax on its income statement is a hypothetical amount (just like the depreciation deduction is a hypothetical deduction). The amount of cash which a company actually paid the government is usually reported somewhere else in a company’s annual report—either as a footnote to the audited financial statements, or as a supplementary table in the report’s Management Discussion and Analysis part. Sometimes these reports on taxes paid will even break the tax payments down by jurisdiction (*i.e.*, how much is paid in Canada, *versus* other countries). Remember, these tables typically report only a company’s income tax payments; they do not usually include other taxes which a company pays (such as payroll taxes, sales taxes on purchased inputs, or capital taxes).

The distinction between what a company charges itself for income tax on its income statement, and what it actually pays to government, gives rise to one of the most widely misunderstood terms in corporate financial analysis: corporate deferred taxes. Companies, like individuals, are legally required to pay their taxes when they are due, and are subject to interest payments and legal action if they do not. Most companies pay their taxes fully when they are due. “Deferred taxes” do not refer to taxes which companies are “late” in paying.

Rather, deferred taxes reflect the cumulative difference between what companies think they would normally have had to set aside (given their accountants’ estimates about depreciation, *etc.*) and what they were actually required to pay under the tax law.

If a company was required to pay less than it otherwise would have, its “deferred tax” liability increases. In essence, the company’s deferred tax liability is a way of setting money aside for future years, when actual income taxes due will exceed the company’s own hypothetical estimate of future income taxes—because by that time the company will be charging itself more in left-over depreciation than the government rules allow on its actual tax returns, and hence its actual tax liabilities will be higher than its hypothetical liabilities according to the business accountants’ own best guesses about depreciation. Companies which have not invested much in new equipment in recent years, are already

paying more income tax than their own accountants' estimates; for these companies, the deferred tax liability is shrinking. Some companies, in the note which reports on their taxes actually paid, will provide a useful step-by-step reconciliation of the hypothetical figure reported in the income statement, with the amount which the company actually owed.

Some progressives believe that the gap between accountants' own estimates of depreciation and the depreciation rules set out in tax law constitute a form of subsidy to corporations; others are not concerned with this issue, arguing that faster tax depreciation is a good way to encourage more business investment. What is certainly true is that the tendency to identify "deferred corporate taxes" with legally-due taxes which companies have somehow escaped paying, is quite wrong.

And in any case, progressives have to be very careful in using corporate financial reports to estimate how much tax a company has paid. Useful data on how much income taxes companies in general pay in Canada, and the relationship of those taxes to before-tax corporate profits, can be obtained from Statistics Canada and the federal Department of Finance.

## UNDERSTANDING THE BALANCE SHEET

A company's balance sheet lists all of the assets of the company: money in the bank, money that is owed to the company (accounts receivable), equipment, property, inventories of finished product, and raw materials on hand. It also lists the liabilities of the company: money that is owed to others, accounts payable, and other debts.

It lists this information for the company at a certain point in time (*e.g.*, usually the last day of the period covered by the report - *e.g.*, December 31).

Where the income statement gives a summary of a company's inflows and outflows over a certain time period, the balance sheet provides a "snapshot" of a company's underlying financial strength at a certain moment.

The major categories reported on the balance sheet include:

- *Assets are divided into various categories:* Current assets (including cash or other highly liquid financial assets, accounts receivable, and the value of inventories), and fixed assets or investments. The fixed assets item includes the "book" value of the company's accumulated purchases of property and equipment: that is, what the company paid for those assets, less their estimated depreciation over the years they have been used. This book value may differ from the actual usefulness or resale value of those assets.
- *Liabilities are also divided into current and long-run:* Current liabilities include accounts payable, and the value of debt and interest on debt that is due within the next year. Another major liability is the company's long-term debt (that which comes due later than one year from the present).
- *Shareholder's equity is a special kind of liability:* The shareholders' equity, in essence, is what the company "owes" to its own shareholders.

It is equal to the value of the company's assets, minus what the company owes to people or businesses other than its own shareholders. Another term for this value is the "net worth" of the company. A company's shareholders' equity should (by definition) equal the value of any initial equity funds advanced by the shareholders (through public offerings of new stock or other financing methods), plus the cumulative value of the company's retained earnings (that is, that portion of the company's past profits which were not paid back to shareholders in the form of dividends). Because equity is treated as a liability, the company's total assets and total liabilities (including shareholders' equity) are always equal. If a company's accumulated liabilities (excluding shareholders' equity) are greater than its total assets, then shareholders' equity is negative. Usually, a company will only have negative shareholders' equity if it has experienced a string of losses, which have more than wiped out the value of the equity which shareholders put into the company (through their initial investments in the company) and any accumulated profits which the company earned in earlier, happier times. A company with negative equity is usually (but not always) facing a serious risk of bankruptcy.

### Cash Flow Statement

A third important financial statement included in any set of financial reports is the cash flow statement. The cash flow statement is sometimes called the statement of "changes in financial position." Like the income statement, it measures a company's financial performance over a certain period of time (such as a year, or a three-month quarter).

However, the cash flow statement measures only actual inflows and outflows of dollars, not any of the hypothetical charges or revenues (like depreciation, or deferred taxes) that are included on the income statement. It thus provides a more accurate picture than the income statement of the actual money raised by a company's operations.

For this reason, many investors and analysts are more interested in cash flow, than in a company's official net income.

*The main items covered in the cash flow statement include:*

- Cash generated from operating details the actual cash surplus raised by a company's day-to-day business. This is sometimes referred to, for short, as a company's "cash flow". It will equal the company's net aftertax profit (from the income statement), adjusted for any noncash revenues or expenses which were included on the income statement. For example, depreciation (which is an imaginary charge deducted from revenue in the income statement) is added back in, on this statement, as are deferred taxes, one-time non-cash charges and provisions, and other non-cash charges.
- Cash provided by financing activities reports on any net cash that was raised by the company from financial markets—such as new



loans from banks or bondholders, or new equity funds raised from the stock market (through new issues of the company's shares), less the costs associated with raising those funds. Companies usually raise new funds to pay for new investments (such as expansion in operations, or new equipment or facilities). One item which appears in this part with a negative sign is the regular dividend payout to a company's existing shareholders. Since dividends are considered to be a continuing "cost" of previous efforts to raise money from shareholders, they are deducted here from the sum of the company's other financing activities.

- Cash used in investing activities describes how the company spent some of its cash on new investments – such as investments in new equipment or buildings, acquisition of other companies, and other investments. The first two segments of the cash flow statement are usually positive (since they usually, but not always, indicate how the company "raised" money). The third segment is usually negative (since it usually, but not always, indicates that the company "spent" money on incremental investments). The overall balance of the three parts of the cash flow statement therefore shows whether the net effect of these three components was positive or negative. If the net balance is positive, then the company finished the period with more cash (or highly liquid cash alternatives) in the bank than it started with. Its cash balance (which was reported as one type of asset on the balance sheet) grew. If the cash flow balance was negative, this means that the company's cash balance shrank during the period.

The bottom of the cash flow statement will usually summarise how much cash the company started the period with, the net change in cash, and then the closing cash balance. Researchers and analysts are often interested in the cash flow situation of companies which are in financial distress. Even healthy companies, of course, may experience a negative change in cash during the year—if, for example, they are expanding rapidly and therefore spending more on new investments than they actually raise from their internal cash flow and from new financing.

But in the long-run, of course, a company cannot keep spending more money than it takes in. For companies in trouble, analysts want to keep an eye on the current amount of cash in the bank (to be sure the company has enough funds on hand to cover its bills). In fact, if the company's auditors think that cash-on-hand may not be sufficient to pay the bills (including anticipated operating losses) in the next few months, they will issue what is called a "going concern" warning that is attached to the audited financial statement.

They are warning investors, in other words, that the company's cash stockpile may not be enough to pay the company's bills, which usually forces the company to seek bankruptcy protection (hence eliminating its status as a "going concern").

## Executive Compensation

Data on executive compensation is published (for Canadian public companies) in an annual proxy circular which is mailed to shareholders with the annual report. The best place to find this circular (if you are not a shareholder) is on the SEDAR or EDGAR web sites (since companies will not mail it to nonshareholders who request the annual report). For major companies, executive compensation may also have been reported in the newspapers, or listed on one of the annual reports on executive compensation published by the Globe and Mail, the Toronto Star, or other business publications. An executive's total compensation is composed of a number of different components, including their direct cash salary, any cash bonus they may have received (typically based on the company meeting or exceeding certain financial or operational targets set out by the company's board of directors), and the value of other incentives. The most important of these other incentives in recent years has been stock options, which allow an executive to purchase new shares of the company at a pre-set price. These options will have a positive value to the executive if the trading price of the company's shares exceeds the option's "hit price".

For example, an option to buy a new share at \$10 is hypothetically "worth" \$5 if the current market value of the company's shares is \$15. However, to actually receive that value (*i.e.*, to convert its hypothetical value into real value), the executive must "exercise" the option: that is, they must make the share purchase, then usually immediately re-sell the share (to pocket the \$5 cash profit). If the company's share price rises or falls, then the value of the stock option rises or falls accordingly. If the share price falls below \$10, then the option becomes worthless (since it is then cheaper to buy the share on the open market, than by using the option).

The value of stock options can change dramatically with share prices. For example, John Roth, the former CEO of Nortel Networks, once owned stock options worth nearly a billion dollars (when Nortel shares were trading at over \$100 each); now those options are worthless, with Nortel shares trading for \$2 to \$3.

Whether a stock option has any value, therefore, depends on the actual current trading price of the company's shares, and the "hit price". Executives are typically offered options at different hit prices each year (depending on what the shares were trading at that year), so calculating the total value of stock options is no easy task. And reporting on the value of executive stock options is a controversial subject.

The simplest approach is to simply report the value of any stock options which an executive exercised during the previous year. Canadian management proxy statements will usually report if an executive cashed in any stock options during the previous year, and the total gain attained as a result of that exercising.

The problem with this approach is that most executives typically hold onto most or all of their stock options until they retire. They then cash in their options in a big lump which inflates their apparent compensation for that year, but this



“lump” actually constitutes a form of cumulated compensation for all the years they worked as CEO. This has led some commentators to complain that reporting the value of exercised options overstates the compensation of those executives who cashed in during a particular year, but underestimates the compensation of those who held onto their options (since they received a form of compensation with hypothetical but potentially huge value, that is not included in executive compensation tables based solely on exercised options).

This has led some analysts to develop ways of estimating up-front the likely ultimate value of stock options that are issued (but not necessarily exercised) in a particular year (using complex mathematical formulas, such as the “Black Scholes” model and other approaches).

This approach is equally controversial, however, because the estimates derived from these forecasting models will not generally bear any relationship to the cash which the executives ultimately receive (although they may reflect, to a better extent, the amount that optimistic executives think they may receive, and hence be a more accurate measure of the incentive power of the options).

In this author’s view, it is still more accurate to estimate total executive compensation by including the actual cash value of exercised stock options, while keeping in mind that those options will be exercised at irregular, “lumpy” intervals. Canadian management proxy statements also typically report the total value of an executive’s unexercised stock options as of the end of the last fiscal year.

A table will list the number of options held (divided into those that are currently exercisable and those that are not), and the value of those stock options given the share price that prevailed at the end of the fiscal year (broken into the same two categories).

The change in value of cumulated stock options to an executive (again, were they to be exercised) can therefore be roughly estimated by multiplying the number of stock options held at the end of the last fiscal year, by the change in the company’s share price since that time. This is only approximate, because we don’t know the precise hit values for each group of options; it is a safer methodology to follow when share prices are rising, than when they are falling.

Another controversy related to executive stock options has been raised by the recent accounting standards. Note that, in cash terms, stock options are a way of compensating a company’s executives that is essentially “free” to the company.

The actual cash pocketed by the executive comes from the stock market, not from the company’s own coffers. All the company had to do was print up some extra share certificates. But most financial analysts now believe this is a very misleading practice, since eventually a company’s shareholders do pay a price for these options (in the form of the depressing effect of new share issues on the trading value of existing company shares). Thus calls have been growing in recent months for companies to start “expensing” executive stock options, by recording some estimated cost associated with them on their current financial

statements. This debate is all well and good, but tends to obscure what this author feels are the bigger controversies associated with stockbased executive compensation.

Stock options (whether they are expensed or not) give rise to outrageously high compensation for executives—which may be “worth it” from the perspective of shareholders (who directly receive the same benefits when a company’s share price soars), but raise large questions about equity and democracy for broader society. Moreover, the reliance on stock options as the main form of executive compensation has obviously tightened the relationship between executives and shareholders, and pushed executives to be more ruthless and unforgiving in their actions to boost the stock market wealth of their corporations—regardless of the consequences of their actions on the company’s employees, the broader community, and the environment. The rise of stock option compensation is an important factor explaining the more aggressive face of modern business.

### **Other Corporate Data**

There are many other types of information which can be gleaned from corporate financial statistics by a sharp-eyed researcher.

*Some of the most useful items include the following:*

- Average employee compensation can sometimes be calculated, allowing for a comparison to be made between executive salaries and worker salaries. You could estimate average annual income for a certain category of members based on your knowledge of their base rate and an assumption about average annual hours of work. Or sometimes the company will list its average employee compensation in a note to its financial statements. You might be able to estimate indirectly the company’s average compensation, if they break out total labour costs on the income statement (note that this will include benefit costs) and report average total employment (usually in the unaudited 5-year or 10-year review). Finally, you can estimate average incomes for the industry as a whole by consulting Statistics Canada data; most helpful here is their Employment, Earnings, and Hours publication (catalogue 72- 002). Multiply the industry’s average weekly earnings by 52, or for hourly workers multiply the average hourly wage by the average weekly hours by 52. This can provide another measure of average compensation in an industry, for purposes of comparison to executives or to other industries.
- Dividend payouts are that share of the company’s net income which is paid out to shareholders, usually on a quarterly basis. This is reported on the company’s cash flow statement. It is usually also reported in any historical statistical summary contained in the annual report. Sometimes the dividend payment is reported in newspapers on a per share basis; to calculate the total payout, you must multiply this by the

average total number of shares outstanding (which is also be reported in the company's historical statistical summary). The "yield" of a share is the percentage return to its owner from dividend payouts; it is like a guaranteed minimal cash return to the shareholder, even without considering any possible rise in the company's share price. Sometimes progressives will argue that a company is giving away too much money in dividends, rather than investing in new facilities or expansions in the company's real business.

- Retained earnings are that share of a company's net income which is not disbursed to shareholders in the form of dividends, but rather is retained inside the company to use for future investments. In general, progressives would want to see a company retain more of its earnings internally, thus becoming available for future investments, rather than being paid out to shareholders.

### Performance Measures

Corporate financial statements contain much data which a researcher can use to judge whether the company is doing well or not, and whether its long-term business outlook is positive or negative.

This judgement, in turn, can inform numerous progressive arguments—such as supporting union demands for collective bargaining progress, or community demands that the company dedicate more funds to community development or environmental protection.

*Some of the more common performance indicators include the following:*

- Profit margin is the company's net income measured as a share of its revenue. A common version of this approach is to measure operating income as a share of total revenue; this is called the operating margin. High-tech or risky businesses need higher profit margins to generate profit rates equal to those of lower-tech or more predictable businesses.
- Profit rate is the company's net income measured as a percentage of its capital stock. Because there are many different ways of measuring a company's capital stock, there are many different ways of measuring the profit rate. They generally fall into the two following categories.
- Return on capital indicates the return the company is generating for the collective of investors who have supplied the company with capital (including both lenders and shareholders). This profit rate measures the core profitability of the company's capital, which is useful in analysing the broad distribution of its total income between labour, suppliers, and "capital" (including both debt capital and equity capital). The capital stock can be approximated as the company's total assets (in which case the profit rate is known as the "return on assets"), or as the company's long-term assets only (usually measured as total assets minus current liabilities, in which case the profit rate becomes the "return on invested capital"). Because we are measuring the total return

to capital, we add interest payments back into the numerator of this measure (since interest payments are a form of income for capital); we also usually add back any one-time charges which were deducted in calculating net income (since we are interested in measuring the underlying profitability of the company's core day-to-day operations). Return on capital is also usually expressed in before-tax terms. A company which generates a before-tax return on capital of 10 per cent is doing well: this implies that each dollar of invested capital is generating 10 cents of net worth per year, which can then be divided among lenders (interest), shareholders (dividends and share price appreciation), and government (taxes).

- Another measure of a company's profitability, this time with particular reference to its shareholders, is the return on equity: net income divided by shareholder's equity (from the balance sheet). This shows the return that the company is generating for its ultimate owners; it is always expressed in after-tax terms. Return on equity will exceed return on capital if the company is successful in "leveraging" borrowed capital to generate additional profit for the company. For companies which have experienced difficult financial times, the equity base (which is the denominator in calculating return on equity) can become depleted (by repeated losses). This means that the return on equity measure can become misleadingly high (in either positive or negative numbers), and should be interpreted with caution. A company which generates a 10 per cent return on equity for its owners is doing well: the shareholders are earning a profit which is significantly higher than the returns generated by lower-risk investments (such as bonds).
- Debt-equity ratio is a way of measuring how much of a company's assets are owned by its actual shareholders, and how much is owed to banks or other lenders. It is sometimes phrased in percentage terms (*e.g.*, a 40:60 debt-equity ratio means that the company's assets are 40% debt and 60% equity). Alternatively, it can sometimes be phrased as a direct ratio (*e.g.*, a 2:1 debt-equity ratio means that the company has twice as much debt as equity, or in other words that its assets are 66% debt and 33% equity).
- Total return to a company's shareholders measures the total rate of return that a financial investor has received by purchasing one of the company's shares. It equals the rise (or fall) in the market value of that share, plus the value of dividends received. For example, suppose a share cost \$20 at the beginning of the year, its owner received a total of \$2.00 in four quarterly dividends, and the share price rose to \$24 at the end of the year. The shareholder thus received a total return during that year of 30% (equal to \$2 in dividends plus \$4 in share price appreciation, divided by the initial investment of \$20). In most cases, the most important factor in total return is the change in share price.

So to make the total return “look” high (and hence show that shareholders have done very well by the company), pick a starting point when the share price was low. For some major companies, total return over various time periods is published in financial sources like the Standard and Poor’s monthly stock market guides (available at university business libraries, among other places). More laborious is to calculate it yourself, by going back to the company’s annual reports for information on dividends, and to the financial papers (or the Globe and Mail or Financial Post corporate directories) for information on share prices. Some summary data on recent total return is usually published in the annual proxy circular.

- Price-earnings ratio is a way of capturing whether a particular company is viewed favourably by financial markets. It is the ratio of a company’s share price, to the current annual level of after-tax earnings (net income), expressed on a per share basis (*i.e.*, after-tax income divided by the number of shares in circulation). Price-earnings ratios thus fluctuate every day with the value of a company’s shares. It is usually reported (in a column labelled P/E) in the stock market tables of the newspaper. A company with good long-run prospects will have a higher P/E ratio than less strategically positioned companies. But the P/E ratio also reflects overall stock market sentiments, not just the performance of one company.
- Productivity is a measure of how much the average employee produces (per hour or per year). It is often useful to contrast the growth of productivity with the growth of employee compensation (since the latter usually rises more slowly than the former). Productivity can sometimes be measured in physical terms: *e.g.*, vehicles assembled per worker, or available passenger miles flown per worker. Calculate this by dividing the company’s data on total “production” by average total employment (or average employment of production workers, if that number is available). In this case, it is appropriate to compare the growth of physical productivity to the growth of real (after inflation) earnings. In other cases, it is only possible (or more appropriate) to measure productivity in value terms: *e.g.*, sales per employee, or value added per employee. In this case, productivity can be compared to nominal earnings (or else both productivity and average earnings can be deflated and compared in real terms). In some cases, productivity data is available from independent sources (such as the Harbour report on the auto industry).
- Unit labour cost is another way of measuring changes in the relationship between wages and productivity. Dividing total labour costs by the firm’s total revenue will indicate the proportion of each dollar’s worth of output that is “eaten up” by labour. The unit labour cost is a ratio between zero and one; it is higher for firms which employ more direct

labour in production, and rely relatively less on purchases of parts and materials, and the use of machinery and equipment. If this ratio is falling, then productivity is growing faster than wages and benefits, and it can be argued that the company's workers are not "sharing fairly" in the company's success.

## **CORPORATE REPORT**

Corporate Report was an American Thoroughbred racehorse. A descendant of Damascus, he was sired by Private Account by breeder Equigroup Thoroughbreds. Corporate Report was a grade one stakes winning millionaire that will be remembered most for his striking win in the Travers Stakes and a solid runner-up finish to Dual Classic winner Hansel in the 1991 Preakness Stakes.

Corporate Report was a late bloomer due to some shin conditions late in his two year-old season and did not race that year. He was a colt that was very consistent but not flashy. In fact by the time his career ended many considered him the ultimate bridesmaid having won a million dollars in purse earnings during his racing years primarily on second place finishes.

In the early part of his three year-old season he broke his maiden race and then trainer D. Wayne Lukas decided that they would take him down to Oaklawn Park Race Course and put him on the Arkansas track up through the Triple Crown trail. After winning an allowance race, Corporate Report placed second in the grade two Rebel Stakes. He was entered in the grade two Arkansas Derby and ran a very good race to place second to a little known horse called Olympio.

His owners at Overbrook Farm were encouraged by the two graded stakes placing and with a nudge from Lucas decided to enter him into the 117th Kentucky Derby in 1991. In that race, Corporate Report shot to just off the lead and battled on the front end in third for most of the race. Coming down the long Churchill Downs's stretch, the fast pace got to him and many closers past him in the lane as he faded to ninth. That would be the only time in his career that he would finish out of the money and not earn a check. Strike the Gold and Best Pal would finish one-two that day.

Neither Overbrook Farm or D. Wayne Lukas lost any confidence in this colt and wheeled him right back in three weeks in the second jewel of the Triple Crown. The three the top finishers of the Derby and the Arkansas Derby winner Olympio took most of the public support relinquishing Corporate Report to an 11-1 longshot in the grade one Preakness Stakes. All eight colts broke from the starting gate in good order. Passing the stands for the first time Corporate Report battled with Olympio for the lead with stalker Hansel just one length back.

Corporate Report led around the clubhouse turn and down most of the back stretch. Just prior to the far turn Hansel engaged Corporate Report for a fight on the front end. Then Hansel redeemed his Derby performance by pouring it on down the lane and winning by an incredible seven lengths. Corporate Report fought off challenges by Olympio, then Best Pal and finally Mane Minister to



capture the place spot and \$100,000 in purse money. The Derby winner, Strike the Gold was never a factor and finished a distant sixth.

In addition to runner-up finishes in the Preakness Stakes, Arkansas Derby and Rebel Stakes, Corporate Report also placed second in the grade one Haskell Invitational at Monmouth Park later that summer and placed second in the grade two Swaps Stakes at Hollywood Park in the autumn.

It was a tour de force for Corporate Report, who ran ninth in the Derby, second in the Preakness and fourth in the Belmont Stakes. On a muggy summer afternoon before 48,170 spectators at old Saratoga Race Course, he led almost wire to wire, fought off a rousing challenge from Hansel in the homestretch and beat him in a photo finish by the margin of a neck.

Two and a half lengths back in third place came Fly So Free, last year's juvenile champion, and three lengths back in fourth place was the favourite, Strike the Gold, who won the Derby but lost today for the fourth straight time. And this time, the front runner for horse of the year lost with a new jockey, Angel Cordero Jr. Corporate Report after a very long and successful breeding career and stallion operations all over the country is now standing at Erfle Thoroughbreds in North Dakota standing for only \$1,500.

## ACCOUNTING CYCLE AND STATEMENTS OF FINANCIAL INFORMATION

### ACCOUNTING CYCLE

The primary objectives of the accounting function in an organization are to process financial information and to prepare financial statements at the end of the accounting period. Companies must systematically process financial information and must have staff who prepare financial statements on a monthly, quarterly, and/or annual basis. To meet these primary objectives, a series of steps is required. Collectively these steps are known as the accounting cycle.

#### The Steps of the Cycle

- *Collect and analyse data from transactions and events:* As transactions and events related to financial resources occur, they are analysed with respect to their effect on the financial position of the company. As an example, consider the sales for a day in a retail establishment that are collected on a cash register tape. These sales become inputs into the accounting system. Every organization establishes a chart of accounts that identifies the categories for recording transactions and events.
- *Journalize transactions:* After collecting and analyzing the information obtained in the first step, the information is entered in the general journal, which is called the book of original entry. Journalizing transactions may be done continually, but this step can be done in a batch at the end of the day if data from similar transactions are being sorted and collected, on a cash register tape,

for example. At the end of the day, the sales of \$4,000 for cash would be recorded in the general journal in this form: Cash-4000/Sales-4000

- *Post to general ledger:* The general journal entries are posted to the general ledger, which is organized by account. All transactions for the same account are collected and summarized; for example, the account entitled “Sales” will accumulate the total value of the sales for the period. If posting were done daily, the “Sales” account in the ledger would show the total sales for each day as well as the cumulative sales for the period to date. Posting to ledger accounts may be less frequent, perhaps at the end of each day, at the end of the week, or possibly even at the end of the month.
- *Prepare an unadjusted trial balance:* At the end of the period, double-entry accounting requires that debits and credits recorded in the general ledger be equal. Debit and credit merely signify position—left and right, respectively. Some accounts normally have debit balances (*e.g.*, assets and expenses) and other accounts have credit balances (*e.g.*, liabilities, owners’ equity and revenues).

As transactions are recorded in the general journal and subsequently posted to the ledger, all amounts recorded on the debit side of accounts (*i.e.*, recorded on the left side) must equal all amounts recorded on the credit side of accounts (*i.e.*, recorded on the right side). Preparing an unadjusted trial balance tests the equality of debits and credits as recorded in the general ledger. If unequal amounts of debits and credits are found in this step, the reason for the inequality is investigated and corrected before proceeding to the next step. Additionally, this unadjusted trial balance provides the balances of all the accounts that may require adjustment in the next step.

- *Prepare adjustments:* Period-end adjustments are required to bring accounts to their proper balances after considering transactions and/or events not yet recorded. Under accrual accounting, revenue is recorded when earned and expenses when incurred. Thus, an entry may be required at the end of the period to record revenue that has been earned but not yet recorded on the books. Similarly, an adjustment may be required to record an expense that may have been incurred but not yet recorded.
- *Prepare an adjusted trial balance:* As with an unadjusted trial balance, this step tests the equality of debits and credits. However, assets, liabilities, owners’ equity, revenues, and expenses will now reflect the adjustments that have been made in the previous step. If there should be unequal amounts of debits and credits or if an account appears to be incorrect, the discrepancy or error is investigated and corrected.
- *Prepare financial statements:* Financial statements are prepared using the corrected balances from the adjusted trial balance. These are one of the primary outputs of the financial accounting system.



- *Close the accounts:* Revenues and expenses are accumulated and reported by period, either a monthly, quarterly, or yearly. To prevent their not being added to or comingled with revenues and expenses of another period, they need to be closed out—that is, given zero balances—at the end of each period. Their net balances, which represent the income or loss for the period, are transferred into owners' equity. Once revenue and expense accounts are closed, the only accounts that have balances are the asset, liability, and owners' equity accounts. Their balances are carried forward to the next period.
- *Prepare a post-closing trial balance:* The purpose of this final step is two-fold: to determine that all revenue and expense accounts have been closed properly and to test the equality of debit and credit balances of all the balance sheet accounts, that is, assets, liabilities and owners' equity.

### Computerized Accounting System

A computerized accounting system saves a great deal of time and effort, considerably reduces (if not eliminates) mathematical errors, and allows for much more timely information than does a manual system. In a real-time environment, accounts are accessed and updated immediately to reflect activity.

The need to test for equality of debits and credits through trial balances is usually not required in a computerized system accounting since most systems test for equality of debit and credit amounts as they are entered.

If someone were to attempt to input data containing an inequality, the system would not accept the input. Since the computer is programmed to post amounts to the various accounts and calculate the new balances as new entries are made, the possibility of mathematical error is markedly reduced. Computers may also be programmed to record some adjustments automatically at the end of the period. Most software programmes are also able to prepare the financial statement once it has been determined the account balances are correct. The closing process at the end of the period can also be done automatically by the computer.

Human judgment is still required to analyse the data for entry into the computer system correctly. Additionally, the accountant's knowledge and judgment are frequently required to determine the adjustments that are needed at the end of the reporting period. The mechanics of the system, however, can easily be handled by the computer.

### BALANCE SHEET

A balance sheet is a snapshot of a business' financial condition at a specific moment in time, usually at the close of an accounting period. A balance sheet comprises assets, liabilities, and owners' or stockholders' equity. Assets and liabilities are divided into short- and long-term obligations including cash accounts such as checking, money market, or government securities. At any

given time, assets must equal liabilities plus owners' equity. An asset is anything the business owns that has monetary value. Liabilities are the claims of creditors against the assets of the business.

### **What is a Balance Sheet Used for?**

A balance sheet helps a small business owner quickly get a handle on the financial strength and capabilities of the business. Is the business in a position to expand? Can the business easily handle the normal financial ebbs and flows of revenues and expenses? Or should the business take immediate steps to bolster cash reserves? Balance sheets can identify and analyse trends, particularly in the area of receivables and payables. Is the receivables cycle lengthening? Can receivables be collected more aggressively? Is some debt uncollectable? Has the business been slowing down payables to forestall an inevitable cash shortage? Balance sheets, along with income statements, are the most basic elements in providing financial reporting to potential lenders such as banks, investors, and vendors who are considering how much credit to grant the firm.

### ***Assets***

Assets are subdivided into current and long-term assets to reflect the ease of liquidating each asset. Cash, for obvious reasons, is considered the most liquid of all assets. Long-term assets, such as real estate or machinery, are less likely to sell overnight or have the capability of being quickly converted into a current asset such as cash.

### ***Current Assets***

Current assets are any assets that can be easily converted into cash within one calendar year. Examples of current assets would be checking or money market accounts, accounts receivable, and notes receivable that are due within one year's time.

- *Cash*: Money available immediately, such as in checking accounts, is the most liquid of all short-term assets.
- *Accounts receivables*: This is money owed to the business for purchases made by customers, suppliers, and other vendors.
- *Notes receivables*: Notes receivables that are due within one year are current assets. Notes that cannot be collected on within one year should be considered long-term assets.

### ***Fixed Assets***

*Fixed assets include land, buildings, machinery, and vehicles that are used in connection with the business:*

- *Land*: Land is considered a fixed asset but, unlike other fixed assets, is not depreciated, because land is considered an asset that never wears out.
- *Buildings*: Buildings are categorized as fixed assets and are depreciated over time.

- *Office equipment*: This includes office equipment such as copiers, fax machines, printers, and computers used in your business.
- *Machinery*: This machines and equipment used in your plant to produce your product. Examples of machinery might include lathes, conveyor belts, or a printing press.
- *Vehicles*: This would include any vehicles used in your business.
- *Total fixed assets*: This is the total dollar value of all fixed assets in your business, less any accumulated depreciation.

### ***Total Assets***

The total dollar value of both the short-term and long-term assets of your business.

### ***Liabilities and Owners' Equity***

This includes all debts and obligations owed by the business to outside creditors, vendors, or banks that are payable within one year, plus the owners' equity.

*Often, this side of the balance sheet is simply referred to as "Liabilities":*

- *Accounts payable*: This is comprised of all short-term obligations owed by your business to creditors, suppliers, and other vendors. Accounts payable can include supplies and materials acquired on credit.
- *Notes payable*: This represents money owed on a short-term collection cycle of one year or less. It may include bank notes, mortgage obligations, or vehicle payments.
- *Accrued payroll and withholding*: This includes any earned wages or withholdings that are owed to or for employees but have not yet been paid.
- *Total current liabilities*: This is the sum total of all current liabilities owed to creditors that must be paid within a one-year time frame.
- *Long-term liabilities*: These are any debts or obligations owed by the business that are due more than one year out from the current date.
- *Mortgage note payable*: This is the balance of a mortgage that extends out beyond the current year. For example, you may have paid off three years of a fifteen-year mortgage note, of which the remaining eleven years, not counting the current year, are considered long-term.
- *Owners' equity*: Sometimes this is referred to as stockholders' equity. Owners' equity is made up of the initial investment in the business as well as any retained earnings that are reinvested in the business.
- *Common stock*: This is stock issued as part of the initial or later-stage investment in the business.
- *Retained earnings*: These are earnings reinvested in the business after the deduction of any distributions to shareholders, such as dividend payments.

***Total Liabilities and Owners' Equity***

This comprises all debts and monies that are owed to outside creditors, vendors, or banks and the remaining monies that are owed to shareholders, including retained earnings reinvested in the business.

**PROFIT AND LOSS ACCOUNT****The Meaning of Profit**

The starting point in understanding the profit and loss account is to be clear about the meaning of “profit”. Profit is the incentive for business; without profit people wouldn’t bother.

Profit is the reward for taking risk; generally speaking high risk = high reward (or loss if it goes wrong) and low risk = low reward.

People won’t take risks without reward. All business is risky (some more than others) so no reward means no business. No business means no jobs, no salaries and no goods and services.

This is an important but simple point. It is often forgotten when people complain about excessive profits and rewards, or when there are appeals for more taxes to pay for example more policemen on the streets. Profit also has an important role in allocating resources (land, labour, capital and enterprise). Put simply, falling profits (as in a business coming to an end eg black-and-white TVs) signal that resources should be taken out of that business and put into another one; rising profits signal that resources should be moved into this business. Without these signals we are left to guess as to what is the best use of society’s scarce resources.

People sometimes say that government should decide (or at least decide more often) how much of this or that to make, but the evidence is that governments usually do a bad job of this, *e.g.*, the Dome.

**The Task of Accounting - Measuring Profit**

The main task of accounts, therefore, is to monitor and measure profits.

**Profit = Revenue Less Costs**

So monitoring profit also means monitoring and measuring revenue and costs.

*There are two parts to this:*

1. *Recording financial data:* This is the ‘book-keeping’ part of accounting.
2. *Measuring the result:* This is the ‘financial’ part of accounting. If we say ‘profits are high’ this begs the question ‘high compared to what?’

*Profits are ‘spent’ in three ways:*

1. Retained for future investment and growth.
2. Returned to owners a ‘dividend’.
3. Paid as tax.

## Parts of the Profit and Loss Account

The Profit and Loss Account aims to monitor profit.

It has three parts:

1. *The Trading Account*: This records the money in (revenue) and out (costs) of the business as a result of the business 'trading' *i.e.*, buying and selling. This might be buying raw materials and selling finished goods; it might be buying goods wholesale and selling them retail.
2. *The Profit and Loss Account proper*: This starts with the Gross Profit and adds to it any further costs and revenues, including overheads. These further costs and revenues are from any other activities not directly related to trading. An example is income received from investments.
3. *The Appropriation Account*: This shows how the profit is 'appropriated' or divided between the three uses.

## Uses of the Profit and Loss Account

- The main use is to monitor and measure profit. This assumes that the information recording is accurate. Significant problems can arise if the information is inaccurate, either through incompetence or deliberate fraud.
- Once the profit(loss) has been accurately calculated, this can then be used for comparison ie judging how well the business is doing compared to itself in the past, compared to the managers' plans and compared to other businesses.
- There are ways to 'fix' accounts. Internal accounts are rarely 'fixed', because there is little point in the managers fooling themselves (unless fraud is going on) but public accounts are routinely 'fixed' to create a good impression out to the outside world. If you understand accounts, you can usually (not always) spot these 'fixes' and take them out to get a true picture.

## Example Profit and Loss Account

*An example profit and loss account:*

	£'000	£'000
Revenue	12,500	10,000
Cost of Sales	7,500	6,000
Gross Profit	5,000	4,000
Gross profit margin (gross profit/revenue)	40%	40%
<i>Operating Costs</i>		
Sales and distribution	1,260	1,010
Finance and administration	570	555
Other overheads	970	895
Depreciation	235	210
Total Operating Costs	3,035	2,670

Operating Profit (gross profit less operating costs)	1,965	1,330
Operating profit margin (operating profit/revenue)	15.7%	13.3%
Interest	(450)	(475)
Profit before Tax	1,515	855
Taxation	(455)	(255)
Profit after Tax	1,060	600
Dividends	650	400
Retained Profits	410	200

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# 4

## Cost Accounting

Cost accounting is an approach to evaluating the overall costs that are associated with conducting business. Generally based on standard accounting practices, cost accounting is one of the tools that managers utilize to determine what type and how much expenses is involved with maintaining the current business model. At the same time, the principles of cost accounting can also be utilized to project changes to these costs in the event that specific changes are implemented.

When it comes to measuring how wisely company resources are being utilized, cost accounting helps to provide the data relevant to the current situation. By identifying production costs and further defining the cost of production by three or more successive business cycles, it is possible to note any trends that indicate a rise in production costs without any appreciable changes or increase in production of goods and services.

By using this approach, it is possible to identify the reason for the change, and take steps to contain the situation before bottom line profits are impacted to a greater degree.

Product development and marketing strategies are also informed by the utilization of cost accounting. In terms of product development, it is possible to determine if a new product can be produced at a reasonable price, considering the cost of raw materials and the labour and equipment necessary to product a finished product. At the same time, marketing protocols can make use of cost accounting to project if the product will sell enough units to make production a viable option.

Cost accounting is helpful in making a number of business decisions. By weighing the actual costs *versus* the anticipated benefit, cost accounting can help a company to avoid launching a product with no real market, prevent the purchase of unnecessary goods and services, or alter the current operational model in a manner that will decrease efficiency. Whether utilized to evaluate the status of a department within the company or as a tool to project the feasibility of opening new locations or closing older ones, cost accounting can provide important data that may impact the final decision.

## ORIGINS

Cost accounting has long been used to help managers understand the costs of running a business. Modern cost accounting originated during the industrial revolution, when the complexities of running a large scale business led to the development of systems for recording and tracking costs to help business owners and managers make decisions.

In the early industrial age, most of the costs incurred by a business were what modern accountants call “variable costs” because they varied directly with the amount of production. Money was spent on labour, raw materials, power to run a factory, *etc.* in direct proportion to production. Managers could simply total the variable costs for a product and use this as a rough guide for decision-making processes.

Some costs tend to remain the same even during busy periods, unlike variable costs, which rise and fall with volume of work.

Over time, the importance of these “fixed costs” has become more important to managers. Examples of fixed costs include the depreciation of plant and equipment, and the cost of departments such as maintenance, tooling, production control, purchasing, quality control, storage and handling, plant supervision and engineering. In the early twentieth century, these costs were of little importance to most businesses.

However, in the twenty-first century, these costs are often more important than the variable cost of a product, and allocating them to a broad range of products can lead to bad decision-making. Managers must understand fixed costs in order to make decisions about products and pricing.

*For example:* A company produced railway coaches and had only one product. To make each coach, the company needed to purchase \$60 of raw materials and components, and pay 6 laborers \$40 each. Therefore, total variable cost for each coach was \$300. Knowing that making a coach required spending \$300, managers knew they couldn’t sell below that price without losing money on each coach. Any price above \$300 became a contribution to the fixed costs of the company.

If the fixed costs were, say, \$1000 per month for rent, insurance and owner’s salary, the company could therefore sell 5 coaches per month for a total of \$3000, or 10 coaches for a total of \$4500, and make a profit of \$500 in both cases.



## ELEMENTS OF COST

- Material
  - Direct material
  - Indirect material
- Labour
  - Direct labour
  - Indirect labour
- Overhead
  - Indirect material
  - Indirect labour

*They are grouped further based on their functions as:*

- Production or works overheads
- Administration overheads
- Selling overheads
- Distribution overheads

## CLASSIFICATION OF COSTS

Classification of cost means, the grouping of costs according to their common characteristics.

The important ways of classification of costs are:

- *By nature or element:* Materials, labour, expenses
- *By functions:* Production, selling, distribution, administration, R&D, development, as direct and indirect
  - *By variability:* Fixed, variable, semi-variable
  - *By controllability:* Controllable, uncontrollable
  - *By normality:* Normal, abnormal

## STANDARD COST ACCOUNTING

In modern cost accounting, the concept of recording historical costs was taken further, by allocating the company's fixed costs over a given period of time to the items produced during that period, and recording the result as the total cost of production. This allowed the full cost of products that were not sold in the period they were produced to be recorded in inventory using a variety of complex accounting methods, which was consistent with the principles of Generally Accepted Accounting Principles. It also essentially enabled managers to ignore the fixed costs, and look at the results of each period in relation to the "standard cost" for any given product.

*For example:* if the railway coach company normally produced 40 coaches per month, and the fixed costs were still \$1000/month, then each coach could be said to incur an overhead of \$25. Adding this to the variable costs of \$300 per coach produced a full cost of \$325 per coach.

This method tended to slightly distort the resulting unit cost, but in mass-production industries that made one product line, and where the fixed costs were relatively low, the distortion was very minor.

*For example:* if the railway coach company made 100 coaches one month, then the unit cost would become \$310 per coach ( $\$300 + (\$1000/100)$ ). If the next month the company made 50 coaches, then the unit cost = \$320 per coach ( $\$300 + (\$1000/50)$ ), a relatively minor difference. An important part of standard cost accounting is a variance analysis, which breaks down the variation between actual cost and standard costs into various components (volume variation, material cost variation, labour cost variation, *etc.*) so managers can understand why costs were different from what was planned and take appropriate action to correct the situation.

### The Development of Throughput Accounting

As business became more complex and began producing a greater variety of products, the use of cost accounting to make decisions to maximize profitability came under question. Management circles became increasingly aware of the Theory of Constraints in the 1980s, and began to understand that “every production process has a limiting factor” somewhere in the chain of production. As business management learned to identify the constraints, they increasingly adopted throughput accounting to manage them and “maximize the throughput dollars” (or other currency) from each unit of constrained resource.

*For example:* The railway coach company was offered a contract to make 15 open-topped streetcars each month, using a design that included ornate brass foundry work, but very little of the metalwork needed to produce a covered rail coach. The buyer offered to pay \$280 per streetcar. The company had a firm order for 40 rail coaches each month for \$350 per unit. The company accountant determined that the cost of operating the foundry *vs.*

*The metalwork shop each month was as follows:*

Overhead Cost by Department	Total Cost	Hours Available per Month	Cost per hour
Foundry	\$7,300.00	160	\$45.63
Metal shop	\$3,300.00	160	\$20.63
Total	\$10,600.00	320	\$33.13

The company was at full capacity making 40 rail coaches each month. And since the foundry was expensive to operate, and purchasing brass as a raw material for the streetcars was expensive, the accountant determined that the company would lose money on any streetcars it built. He showed an analysis of the estimated product costs based on standard cost accounting and recommended that the company decline to build any streetcars.

Standard Cost Accounting	Streetcars	Rail coach	Analysis
Monthly Demand	15	40	
Price	\$280	\$350	
Foundry Time (hrs)	3.0	2.0	
Metalwork Time (hrs)	1.5	4.0	

Total Time	4.5	6.0
Foundry Cost	\$136.88	\$91.25
Metalwork Cost	\$30.94	\$82.50
Raw Material Cost	\$120.00	\$60.00
Total Cost	\$287.81	\$233.75
Profit per Unit	\$(7.81)	\$116.25

However, the company's operations manager knew that recent investment in automated foundry equipment had created idle time for workers in that department. The constraint on production of the railcoaches was the metalwork shop. She made an analysis of profit and loss if the company took the contract using throughput accounting to determine the profitability of products by calculating "throughput" (revenue less variable cost) in the metal shop.

Throughput Cost Accounting Contract	Decline Contract	Take Analysis
Coaches Produced	40	34
Streetcars Produced	0	15
Foundry Hours	80	113
Metal shop Hours	160	159
Coach Revenue	\$14,000	\$11,900
Streetcar Revenue	\$0	\$4,200
Coach Raw Material Cost	\$(2,400)	\$(2,040)
Streetcar Raw Material Cost	\$0	\$(1,800)
Throughput Value	\$11,600	\$12,260
Overhead Expense	\$(10,600)	\$(10,600)
Profit	\$1,000	\$1,660

After the presentations from the company accountant and the operations manager, the president understood that the metal shop capacity was limiting the company's profitability. The company could make only 40 rail coaches per month.

But by taking the contract for the streetcars, the company could make nearly all the railway coaches ordered, and also meet all the demand for streetcars. The result would increase throughput in the metal shop from \$6.25 to \$10.38 per hour of available time, and increase profitability by 66 per cent.

## ACTIVITY-BASED COSTING

Activity-based costing (ABC) is a system for assigning costs to products based on the activities they require. In this case, activities are those regular actions performed inside a company.

"Talking with customer regarding invoice questions" is an example of an activity inside most companies. Accountants assign 100% of each employee's time to the different activities performed inside a company (many will use surveys to have the workers themselves assign their time to the different activities). The accountant then can determine the total cost spent on each activity by summing

up the percentage of each worker's salary spent on that activity. A company can use the resulting activity cost data to determine where to focus their operational improvements.

For example, a job-based manufacturer may find that a high percentage of its workers are spending their time trying to figure out a hastily written customer order.

Via ABC, the accountants now have a currency amount pegged to the activity of "Researching Customer Work Order Specifications". Senior management can now decide how much focus or money to budget for resolving this process deficiency. Activity-based management includes (but is not restricted to) the use of activity-based costing to manage a business.

While ABC may be able to pinpoint the cost of each activity and resources into the ultimate product, the process could be tedious, costly and subject to errors.

As it is a tool for a more accurate way of allocating fixed costs into product, these fixed costs do not vary according to each month's production volume. For example, an elimination of one product would not eliminate the overhead or even direct labour cost assigned to it. ABC better identifies product costing in the long-run, but may not be too helpful in day-to-day decision-making.

## LEAN ACCOUNTING

Lean accounting has developed in recent years to provide the accounting, control, and measurement methods supporting lean manufacturing and other applications of lean thinking such as healthcare, construction, insurance, banking, education, government, and other industries. There are two main thrusts for Lean Accounting.

The first is the application of lean methods to the company's accounting, control, and measurement processes. This is not different from applying lean methods to any other processes. The objective is to eliminate waste, free up capacity, speed up the process, eliminate errors and defects, and make the process clear and understandable.

The second (and more important) thrust of Lean Accounting is to fundamentally change the accounting, control, and measurement processes so they motivate lean change and improvement, provide information that is suitable for control and decision-making, provide an understanding of customer value, correctly assess the financial impact of lean improvement, and are themselves simple, visual, and low-waste. Lean Accounting does not require the traditional management accounting methods like standard costing, activity-based costing, variance reporting, cost-plus pricing, complex transactional control systems, and untimely and confusing financial reports.

*These are replaced by:*

- Lean-focused performance measurements
- Simple summary direct costing of the value streams
- Decision-making and reporting using a box score

- Financial reports that are timely and presented in “plain English” that everyone can understand
- Radical simplification and elimination of transactional control systems by eliminating the need for them
- Driving lean changes from a deep understanding of the value created for the customers
- Eliminating traditional budgeting through monthly sales, operations, and financial planning processes (SOFP)
- Value-based pricing
- Correct understanding of the financial impact of lean change

As an organization becomes more mature with lean thinking and methods, they recognize that the combined methods of lean accounting in fact creates a lean management system (LMS) designed to provide the planning, the operational and financial reporting, and the motivation for change required to prosper the company’s on-going lean transformation.

## MARGINAL COSTING

This method is used particularly for short-term decision-making.

*Its principal tenets are:*

- $\text{Revenue (per product)} - \text{variable costs (per product)} = \text{contribution (per product)}$
- $\text{Total contribution} - \text{total fixed costs} = (\text{total profit or total loss})$

Thus, it does not attempt to allocate fixed costs in an arbitrary manner to different products. The short-term objective is to maximize contribution per unit.

If constraints exist on resources, then Managerial Accounting dictates that marginal cost analysis be employed to maximize contribution per unit of the constrained resource.

## DIFFERENTIAL AND INCREMENTAL COSTING

### DIFFERENTIAL COSTING

Decisions involve choosing between alternatives. In business, each alternative will have certain costs and benefits that must be compared to the costs and benefits of the other available alternatives.

A difference in cost between any two alternatives is known as differential cost.

A difference in revenue between any two alternatives is known as differential revenues. Differential cost includes both cost increase (incremental cost) and cost decrease (decremental cost). In general the difference (cost and revenue) between alternatives are relevant in decision making. Those items that are the same under all alternatives can be ignored.

The accountant's differential cost concept can be compared to the economist's *marginal cost* concept. In speaking of changes in cost and revenue, the economists employ the term *marginal cost and marginal revenue*.

The revenue that can be obtained from selling one more unit of product is called marginal revenue, and the cost involved in producing one more unit of a product is called marginal cost.

The economists marginal cost is basically the same as the accountant's differential concept applied to a single unit of output.

*Example:* Differential cost can be either variable or fixed. To illustrate assume that a company is thinking about changing its marketing method from distribution through retailers to distribution by door to door direct sale. Present cost and revenues are compared to projected costs and revenues in the following table.

Description	Retailer Distribution (Present)	Direct SaleDistribution (Proposed)	Differential Costs and Revenues
Revenue (variable)	\$700,000	\$800,000	\$100,000
	-----	-----	-----
Cost of goods sold (V)	350,000	400,000	50,000
Advertising (V)	80,000	45,000	(35,000)
Commissions (F)	-0-	40,000	40,000
Warehouse depreciation (V)	50,000	80,000	30,000
Other Expenses (F)	60,000	60,000	-0-
	-----	-----	-----
Total	540,000	625,000	85,000
	-----	-----	-----
Net Operating Income	\$160,000	\$175,000	\$15,000
	=====	=====	=====
F = Fixed V = Variable			

According to the above analysis, the differential revenue is \$100,000 and the differential cost is \$85,000, leaving a positive differential net operating income of \$15,000 under the proposed marketing plan. The net operating income under the present distribution is \$160,000, whereas the net operating income under door to door direct selling is estimated to be \$175,000. Therefore the door to door direct distribution method is preferred, since it would result in \$15,000 higher net operating income.

Note that we would have arrived at exactly the same conclusion by simply focusing on the differential revenue, differential cost, and differential net operating income, which also shows a net operating advantage of \$15,000 for the direct selling method. The company can ignore other expenses of \$60,000. Because it has no effect on the decision. If it were removed from the calculation, the door to door selling method would still be preferred by \$15,000. This is an extremely important principle in management accounting.

### Using Those Empty Seats

Many corporate jets fly with only one or two executives on board. Priscilla Blum wondered why some of the empty seats could not be used to fly cancer patients who specialized treatment outside their home area. Flying on a regular commercial airline can be an expensive and grueling experience for cancer patients. Taking the initiative, she helped found the Corporate Angle Network, an organization that arranges free flights on some 1,500 jets from over 500 companies. Since the jets fly anyway, filling a seat with cancer patient does not involve any significant incremental cost for the companies that donate the service. Since its founding in 1981, the Corporate Angel Network has arranged over 14,000 free flights.

## OPPORTUNITY COST

### Definition

Opportunity cost is the potential benefit that is given up when one alternative is selected over another. To illustrate this important concept, consider the following examples:

*Example 1:* Vicki has a part-time job that pays her \$200 per week while attending college. She would like to spend a week at the beach during spring break, and her employer has agreed to give her the time off, but without pay. The \$200 in lost wages would be an opportunity cost of taking week off to be at the beach.

*Example 2:* Suppose that Neiman Marcus is considering investing a large sum of money in land that may be a site for future store. Rather than invest the funds in land, the company could invest the funds in high-grade securities. If the land is acquired, the opportunity cost will be the investment income that could have been realized if the securities had been purchased instead.

*Example 3:* You are employed in a company that pays you \$30,000 per year. You are thinking about leaving the company and returning to school. Since returning to school would require that you give up \$30,000 salary. The forgone salary would be an opportunity cost of seeking further education.

Opportunity cost is not usually entered in the accounting records of an organization, but it is a cost that must be explicitly considered in every decision a manager makes. Virtually every alternative has some opportunity cost attached to it.

## SUNK COST

### Definition

A sunk cost is a cost that has already been incurred and that cannot be changed by any decision made now or in future.

*Example:* Sunk costs cannot be changed by any decision. These are not differential costs and should be ignored in decision making. To illustrate



a *sunk cost*, assume that a company paid \$50,000 several years ago for a special purpose machine. The machine was used to make a product that is now obsolete and is no longer being sold.

Even though in hindsight the purchase of the machine may have been unwise, no amount of regret can undo that decision. And it would be folly to continue making the obsolete product to recover the original cost of the machine. In short, the \$50,000 originally paid for the machine has already been incurred and cannot be differential cost in any future decision. For this reason, such costs are said to be sunk costs and should be ignored in decision making.

## INCREMENTAL COSTING

### What is Incremental Costing

Incremental cost is the cost associated with increasing production by one unit. Because some costs are fixed and other variable, the incremental cost will not be the same as the overall average cost per unit. The cost figure can be used for a variety of economic calculations, most notably the point at which increasing production ceases to be efficient.

A very simple example would be a factory making widgets where it takes one employee an hour to make a widget. As a simple figure, the incremental cost of a widget would be the wages for the employee for an hour plus the cost of the materials needed to produce a widget. A more accurate figure could include added costs, such as shipping the additional widget to a customer, or the electricity used if the factory has to stay open longer.

The incremental cost total is always made up of purely variable costs. It represents the added costs that would not exist if the extra unit was not made. That means that many fixed costs such as rent on a factory or buying a machine are not usually represented.

However, if an economist wanted to be extremely precise, they might include some element of these fixed costs where they could specifically link them to the production of the extra unit.

For example, producing even one extra widget would cause a tiny bit extra wear and tear on the machine.

In many cases, the average cost of a unit will be higher than the incremental cost. This is because the average cost takes account of fixed costs. For example, if a company spends a set sum on machines each year, this cost will be represented in the average cost of each unit produced on those machines. It will not be included in the incremental cost because producing one extra unit does not require any more spending on buying machines.

Where this happens, the incremental cost is lower than the existing average cost and thus increasing production by one unit slightly lowers the average cost: this is known as economy of scale.



## **MARGINAL AND ABSORPTION COSTING**

### **CHARACTERISTICS**

Marginal costing is also termed as variable costing, a technique of costing which includes only variable manufacturing costs, in the form of direct materials, direct labour, and variable manufacturing overheads while determining the cost per unit of a product. Where as Absorption costing, is a costing technique that includes all manufacturing costs, in the form of direct materials, direct labour, and both variable and fixed manufacturing overheads, while determining the cost per unit of a product. It is also referred to as the full- cost technique.

In the costing of product/service, a marginal costing technique considers the behavioural characteristics of costs (segregations of costs into fixed and variable elements), because per unit variable cost is fixed and total costs are variable in nature, where as total fixed costs are fixed and per unit fixed cost is variable in nature and furthermore variable costs are controllable in nature, while total fixed costs are un-controllable in nature.

Marginal costing is useful for short-term planning, control and decision-making, particularly in a business where multi-products are produced. In marginal costing technique, the contribution is calculated after deducting variable costs from sales value with reference to each product or service, in order to calculate the total contribution from all products/services which are made towards the total fixed costs incurred by the business. As the fixed costs are treated as period costs, are deducted from total contribution to arrive at net profit.

In the context of costing of a product/service, an absorption costing considers a share of all costs incurred by a business to each of its products/services. In absorption costing technique; costs are classified according to their functions. The gross profit is calculated after deducting production costs from sales and from gross profit, costs incurred in relation to other business functions are deducted to arrive at the net profit.

Absorption costing gives better information for pricing products as it includes both variable and fixed costs. Marginal costing may lead to lower prices being offered if the firm is operating below capacity. Customers may still expect these lower prices as demand/capacity increases.

### **Profit Statements**

The net profit shown by marginal costing and absorption costing techniques may not be the same due to the different treatment of fixed manufacturing overheads. Marginal costing technique treats fixed manufacturing overheads as period costs, where as in absorption costing technique these are absorbed into the cost of goods produced and are only charged against profit in the period in which those goods are sold. In absorption costing income statement, adjustment pertaining to under or over-absorption of overheads is also made to arrive at the profit.

## TERMS

### Product and Period Costs

- *Product costs*: The costs of manufacturing the products;
- *Period costs*: These are the costs other than product costs that are charged to, debited to, or written off to the income statement each period.

*A Case Example on Marginal and Absorption Costing:*

**Table. Data for a Quarter for a Manufacturing Company**

Level of Activity	60%	100%
Sales and Production(Units)	36,000	60,000
	Rs. ('000)	Rs. ('000)
Sales	432	720
Production costs:		
(Variable and fixed)	366	510
Sales, distribution and administration costs (Variable and fixed)	126	150

The normal level of activity for the current year is 60,000 units, and fixed costs are incurred evenly throughout the year.

There were no stocks of the product at the start of the quarter, in which 16,500 units were made and 13,500 units were sold. Actual fixed costs were the same as budgeted. Then, various calculations regarding Absorption vs. Marginal costing can be worked out as under:

	Production Costs (Rs.)	Sales etc costs (Rs.)
Total costs of 60,000 units (fixed plus variable)	5,10,000	1,50,000
Total costs of 36,000 units (fixed plus variable)	3,66,000	1,26,000
Difference = variable costs of 24,000 units	1,44,000	24,000
Variable costs per unit	Rs.6	Re.1
	Production Costs (Rs.)	Sales etc. Costs (Rs.)
Total costs of 60,000 units	5,10,000	1,50,000
Variable costs of 60,000 units	3,60,000	60,000
Fixed costs	1,50,000	90,000

*The rate of absorption of fixed production overheads will therefore be:*

$$\text{Rs. } 1,50,000 \div 60,000 = \text{Rs. } 2.50 \text{ per unit.}$$

- The fixed production overhead absorbed by the products would be 16,500 units produced  $\times$  Rs. 2.50 = Rs. 41,250
- Budgeted annual fixed production overhead = Rs.1,50,000

	Rs.
Actual quarterly fixed production overhead = budgeted quarterly fixed production overhead (1,50,000 ÷ 4)	37,500
Production overhead absorbed into production [see (i) above]	41,250
Over-absorption of fixed production overhead	3,750

- Profit statement for the quarter, using Absorption Costing

	Rs.	Rs.	Rs.
Sales (13,500 × Rs.12)			1,62,000
Costs of production (no opening stocks)			
Value of stocks produced (16,500 × Rs. 8.50)		1,40,250	
Less value of closing stock			
(3,000 units × full production cost of Rs. 8.50)		(25,500)	
		1,14,750	
Sales etc costs			
Variable (13,500 × Re. 1)	13,500		
Fixed (1/4 of Rs. 90,000)	22,500		
		36,000	
Total cost of sales		1,50,750	
Less over-absorbed production overhead		3,750	
			1,47,000
Profit			15,000

- Profit statement for the quarter using Marginal Costing

	Rs.	Rs.
Sales (13,500 × Rs.12)		1,62,000
Variable costs of production (16,500 × Rs. 6)	99,000	
Less value of closing stocks (3,000 × Rs. 6)	18,000	
Variable production cost of sales	81,000	
Variable sales etc. costs (13,500 × Re.1)	13,500	
Total variable cost of sales (13,500 × Rs. 7)		94,500
Contribution (13,500 × Rs. 5)		67,500
Fixed Costs: Production	37,500	
Sales etc.	22,500	
		60,000
Profit		7,500

## ABSORPTION AND MARGINAL COSTING SYSTEMS

A popular topic for examination at Foundation Level has been the preparation of profit statements in both absorption and marginal costing formats, and the reconciliation of the profits reported by the two systems.

*Example:* A company sells a single product at a price of £14 per unit. Variable manufacturing costs of the product are £6.40 per unit. Fixed manufacturing overheads, which are absorbed into the cost of production at a unit rate (based on normal activity of 20,000 units per period), are £92,000 per period. Any over-absorbed or under-absorbed fixed manufacturing overhead balances are transferred to the profit and loss account at the end of each period, in order to establish the manufacturing profit.

*Sales and production (in units) for two periods are as follows:*

	Period 1	Period 2
Sales	15,000	21,600
Production	18,000	21,000

*Required:*

- Prepare a trading statement to identify the manufacturing profit for Period 2 using the existing absorption costing method.
- Determine the manufacturing profit that would be reported in Period 2 if marginal costing was used.
- Explain, with supporting calculations, why the manufacturing profit is.

## ABSORPTION COSTING PRINCIPLES

In product/service costing, an absorption costing system allocates or apportiones a share of all costs incurred by a business to each of its products/services. In this way, it can be established whether, in the long run, each product/service makes a profit. This can only be a guide. Arbitrary assumptions have to be made about the apportionment of many of the costs which, given that some costs will tend to remain fixed during a period, will also be dependent on the level of activity.

An absorption costing system traditionally classifies costs by function. Sales less production costs (of sales) measures the gross profit (manufacturing profit) earned. Gross profit less costs incurred in other business functions establishes the net profit (operating profit) earned.

Using an absorption costing system, the profit reported for a manufacturing business for a period will be influenced by the level of production as well as by the level of sales. This is because of the absorption of fixed manufacturing overheads into the value of work-in-progress and finished goods stocks. If stocks remain at the end of an accounting period, then the fixed manufacturing overhead costs included within the stock valuation will be transferred to the following period.

## ABSORPTION COSTING PROFIT STATEMENT

The first stage in the preparation of absorption costing profit statements is the measurement of the gross profit (manufacturing profit) earned. This requires the calculation of unit production costs, including the establishment of absorption rates for manufacturing overheads.

Referring to the example being used for illustration in this article (see earlier), variable manufacturing costs per units are given in the question (at £6.40 per

unit). Fixed manufacturing overheads of £92,000 per period are to be absorbed at a unit rate (based on normal production activity of 20,000 units per period). The fixed manufacturing overhead absorption rate is therefore £4.60 per unit (£92,000 ÷ 20,000 units) giving a total manufacturing cost of £11.00 per unit (£6.40 + £4.60).

The use of normal activity as the basis for overhead absorption is similar to the use of budgeted activity. It is to be expected that actual activity (and indeed actual expenditure also) will be different to normal/budget thus giving rise to overhead over or under absorption. It is important that this is highlighted in profit statements. The use of normal (or budgeted) activity and expenditure to establish the absorption rate not only helps to focus attention on overhead recovery but also has the effect of 'normalising' per unit product/service costs.

Referring again to the example, fixed manufacturing overheads will be over-absorbed in Period 2 because the actual production of 21,000 units exceeds the normal activity, the basis used to establish the absorption rate, by 1,000 units. The extent of the over-absorption (the balance remaining in the fixed manufacturing overhead account) is, therefore, £4,600 (1,000 units at £4.60 per unit). This amount will be transferred to the profit and loss account in order to establish the manufacturing profit. It will have a positive effect (i.e., it will be added to profit) because more manufacturing overhead has been absorbed into stock in the period than has been incurred (see the entries in the fixed manufacturing overhead account demonstrated later in examples).

The Examiner's Report for the June 2000 Paper 3 noted that the over-absorption of fixed manufacturing overhead caused problems for many candidates. It was frequently not identified. Where it was calculated, it was at times described as 'under-absorbed' or was at least treated as such in terms of its impact on the manufacturing profit. Other candidates wrongly calculated the over/under-absorption based upon the difference between sales and production quantities, rather than upon the difference between actual production and normal production. Preparation of the remainder of the trading statement (to identify the manufacturing profit for Period 2 using absorption costing) should be straightforward (see Example 2). The manufacturing cost of sales (the transfer out of the finished goods stock account) is simply the 21,600 units sold in the period (which at a selling price of £14.00 per unit yields total sales for the period of £302,400) multiplied by the unit manufacturing cost of £11.00.

*Example:*

Period 2 Trading Statement:	£000	
Sales	302.4	(21,600 units at £14.00 per unit)
Manufacturing cost of goods sold	<u>237.6</u>	(21,600 units at £11.00 per unit)
Manufacturing profit (before adjustment)	64.8	(21,600 units at £3.00 per unit)
Fixed manufacturing overhead over-absorbed	<u>4.6</u>	(1,000 units at £4.60 per unit)
Manufacturing profit (after adjustment)	<u>69.4</u>	

The Examiner's Report noted that there were many examples (in the examination scripts marked) of candidates matching the cost of the goods produced in the period (not the manufacturing cost of the goods sold) with sales.

Many examination candidates also got into difficulty because they attempted to introduce stock into the profit statement.

There is generally no requirement to do this (unless opening and closing stocks are valued at a different rate per unit) but such an approach should (but often did not) lead to the same profit result.

In this example, no details of stock are provided in the question, but it could be assumed, for example, that 3,000 units were in stock at the end of Period I (production of 18,000 units less sales of 15,000 units). Finished goods stock at the end of Period 2 would then be 2,400 units due to the excess of sales over production of 600 units in that period.

*Example:*

A trading statement including stock would be.		
<b>Period 2 Trading Statement</b>	£000	
Sales	302.4	
Manufacturing cost of goods sold:		
Opening stock of finished goods	33.0	(3,000 units at £11.00 per unit)
Cost of goods produced	231.0	(21,000 units at £11.00 per unit)
Closing stock of finished goods	<u>(26.4)</u>	(2,400 units at £11.00 per unit)
	<u>237.6</u>	
Manufacturing profit (before adjustment)	64.8	
Fixed manufacturing overhead over-absorbed	<u>4.6</u>	

In the adapted question used for illustration is no information provided about costs incurred in other business functions (selling, administration, distribution) and thus it is not possible to complete the profit statement. If information on other costs was available, the costs incurred in the period would simply be deducted from the adjusted manufacturing profit to arrive at net profit.

## MARGINAL COSTING PRINCIPLES

In product/service costing, a marginal costing system emphasises the behavioural, rather than the functional, characteristics of costs. The focus is on separating costs into variable elements (where the cost per unit remains the same with total cost varying in proportion to activity) and fixed elements (where the total cost remains the same in each period regardless of the level of activity).

Whilst this is not easily achieved with accuracy, and is an oversimplification of reality, marginal costing information can be very useful for short-term planning, control and decision-making, especially in a multi-product business.

In a marginal costing system, sales less variable costs (regardless of function) measures the contribution that individual products/services make towards the total fixed costs incurred by the business.

The fixed costs (regardless of function) are treated as period costs and, as such, are simply deducted from contribution in the period incurred to arrive at net profit.

## MARGINAL COSTING PROFIT STATEMENT

Referring back to Example 1, as there is no information regarding non-manufacturing costs, it may be assumed that sales less variable manufacturing costs measures contribution. NB.

If any variable costs are incurred in non-manufacturing functions then they would also be deducted from sales in the measurement of contribution. The trading statement for Period 2, assuming that a marginal costing system was in place instead.

*Example:*

Period 2 Trading Statement:	£000	
Sales	302.40	
Variable cost of goods sold	<u>138.24</u>	(21,600 units at £6.40 per unit)
Contribution	164.16	(21,600 units at £7.60 per unit)
Fixed manufacturing overhead	<u>92.00</u>	
Manufacturing profit	<u>72.16</u>	

Costing approach is more straightforward. The Examiner's Report noted that candidates generally had rather more success with the marginal costing statement in part (b) than with the absorption costing statement in part (a), although some confusion between the two was demonstrated.

In practice, the marginal costing profit statement would be completed by the further deduction of fixed costs incurred in other functions.

## PROFIT RECONCILIATION

The net profit reported by absorption and marginal costing systems may not be the same owing to the differing treatment of fixed manufacturing overheads.

As has been demonstrated above, whilst marginal costing systems treat fixed manufacturing overheads as period costs (i.e., a charge against profit in the period incurred), in absorption costing systems they are absorbed into the cost of goods produced and are only charged against profit in the period in which those goods are sold.

As a result, if quantities produced and sold in a period are not the same (i.e., if the levels of work-in-progress or finished goods stock change) a different profit will be reported by the two systems.

The differing profits can be reconciled, and the difference explained, by an analysis of the product of the stock change and the fixed manufacturing overhead absorption rate. Thus, in answer to part (c) of Example 1:

Period 2 finished goods stock reduction 600 units  $\times$  fixed manufacturing overhead absorption rate, £4.60 per unit = £2,760 difference in profit i.e., the difference between the absorption costing manufacturing profit of £69,400 and the marginal costing manufacturing profit of £72,160.



Absorption costing has a lower profit because more goods are being taken out of stock (including a charge for fixed manufacturing overhead) than are going into stock. This is demonstrated by the entries in the respective cost accounting systems.

*Example:* In the absorption costing system.

**Table. Fixed Manufacturing Overhead Account**

<b>Incurred</b>	<b>£92,000</b>	<b>Absorbed into £96,600 finished goods —</b>
Over-absorbed – to P&L A/c (1,000 units at £4.60/unit)	£4,600	(21,000 units at £4.60/unit)
	£96,600	£96,600

**Table. Finished Goods Stock Account**

Fixed mfg o'hd absorbed	£96,600	Cost of sales (fixed mfg o'hd only)	£99,360
		(21,600 units at £4.60/unit)	

**Table. The Total Fixed Manufacturing Overhead  
Charged Against Profit in the Period =**

Overhead in cost of sales	£99,360
Less over-absorption	£4,600
	£94,760

**Table. In the marginal costing system.**

	<b>Fixed Manufacturing</b>	<b>Overhead Account</b>
Incurred	£92,000	P&L A/c-period cost
	£92,000	

Absorption costing £94,760 less marginal costing £92,000 = £2,760 more fixed manufacturing overheads and less profit in absorption costing.

The difference in profit between absorption and marginal costing systems is nothing to do with overhead over/under absorption, a popular misconception amongst examination candidates. Despite an over-absorption of £4,600, which is a positive adjustment to the absorption costing profit, the profit was nevertheless less than the marginal costing profit.

*To emphasise again:* The difference in reported profit demonstrated above, which can only be a timing difference, is due to changes in the level of finished goods stock which in an absorption costing system moves overhead, and therefore profit, from one period to another. *As a general rule:* If production quantity > sales quantity then absorption costing profit > marginal costing profit. If production quantity < sales quantity then absorption costing profit < marginal costing profit.

Many candidates, when answering examination questions on this topic, do appreciate that the different treatment of fixed manufacturing overhead is the reason for profit differences but they are rarely able to reconcile the profits.

# 5

## Financial Accounting

### GENERALLY ACCEPTED ACCOUNTING PRINCIPLES

Generally Accepted Accounting Principles (GAAP) is a term used to refer to the standard framework of guidelines for financial accounting used in any given jurisdiction which are generally known as Accounting Standards. GAAP includes the standards, conventions, and rules accountants follow in recording and summarizing transactions, and in the preparation of financial statements.

Financial Accounting is information that must be assembled and reported objectively. Third-parties who must rely on such information have a right to be assured that the data are free from bias and inconsistency, whether deliberate or not. For this reason, financial accounting relies on certain standards or guides that are called “Generally Accepted Accounting Principles” (GAAP).

Principles derive from tradition, such as the concept of matching. In any report of financial statements (audit, compilation, review, *etc.*), the preparer/ auditor must indicate to the reader whether or not the information contained within the statements complies with GAAP.

- *Principle of regularity*: Regularity can be defined as conformity to enforced rules and laws.
- *Principle of consistency*: This principle states that when a business has once fixed a method for the accounting treatment of an item, it will enter all similar items that follow in exactly the same way.
- *Principle of sincerity*: This principle, the accounting unit should reflect in good faith the reality of the company’s financial status.

- *Principle of the permanence of methods*: This principle aims at allowing the coherence and comparison of the financial information published by the company.
- *Principle of non-compensation*: One should show the full details of the financial information and not seek to compensate a debt with an asset, a revenue with an expense, *etc.*
- *Principle of prudence*: This principle aims at showing the reality “as is”: one should not try to make things look prettier than they are. Typically, a revenue should be recorded only when it is certain and a provision should be entered for an expense which is probable.
- *Principle of continuity*: When stating financial information, one should assume that the business will not be interrupted. This principle mitigates the principle of prudence: assets do not have to be accounted at their disposable value, but it is accepted that they are at their historical value.
- *Principle of periodicity*: Each accounting entry should be allocated to a given period, and split accordingly if it covers several periods. If a client pre-pays a subscription (or lease, *etc.*), the given revenue should be split to the entire time-span and not counted for entirely on the date of the transaction.
- *Principle of Full Disclosure/Materiality*: All information and values pertaining to the financial position of a business must be disclosed in the records.
- *Principle of Utmost Good Faith*: All the information regarding to the firm should be disclosed to the insurer before the insurance policy is taken.

Many countries use or are converging on the International Financial Reporting Standards (IFRS), established and maintained by the International Accounting Standards Board. In some countries, local accounting principles are applied for regular companies but listed or large companies must conform to IFRS, so statutory reporting is comparable internationally, across jurisdictions.

## PURPOSE OF FINANCIAL ACCOUNTING

The purpose of accounting is to provide the information that is needed for sound economic decision-making. The main purpose of financial accounting is to prepare financial reports that provide information about a firm’s performance to external parties such as investors, creditors, and tax authorities. Managerial accounting contrasts with financial accounting in that managerial accounting is for internal decision-making and does not have to follow any rules issued by standard-setting bodies. Financial accounting, on the other hand, is performed according to Generally Accepted Accounting Principles guidelines.

### CPA’S

The primary accounting professional association in the U.S., is the American Institute of Certified Public Accountants. The AICPA prepares the Uniform

CPA Examination, which must be completed in order to become a certified public accountant. To be eligible to become a CPA, one needs an undergraduate degree in any major with 150 credit hours of course work. Of these 150 credit hours, a minimum of 36 credit hours must be in accounting. Only about 10% of those taking the CPA exam pass it the first time.

## **ACCOUNTING STANDARDS**

In order that financial statements report financial performance fairly and consistently, they are prepared according to widely accepted accounting standards. These standards are referred to as Generally Accepted Accounting Principles, or simply GAAP. Generally Accepted Accounting Principles are those that have “substantial authoritative support”.

## **ACCRUAL VS. CASH METHOD**

Many small businesses utilize an accounting system that recognizes revenue and expenses on a cash basis, meaning that neither revenue nor expenses are recognized until the cash associated with them actually is received. Most larger businesses, however, use the accrual method.

Under the accrual method, revenues and expenses are recorded according to when they are earned and incurred, not necessarily when the cash is received or paid.

For example, under the accrual method revenue is recognized when customers are invoiced, regardless of when payment is received. Similarly, an expense is recognized when the bill is received, not when payment is made. Under accrual accounting, even though employees may be paid in the next accounting period for work performed near the end of the present accounting period, the expense still is recorded in the current period since the current period is when the expense was incurred.

## **UNDERLYING ASSUMPTIONS, PRINCIPLES, AND CONVENTIONS**

*Financial accounting relies on the following underlying concepts:*

- *Assumptions:* Separate entity assumption, going-concern assumption, stable monetary unit assumption, fixed time period assumption.
- *Principles:* Historical cost principle, matching principle, revenue recognition principle, full disclosure principle.
- *Modifying Conventions:* Materiality, cost-benefit, conservatism convention, industry practices convention.

## **FINANCIAL STATEMENTS**

*Businesses have two primary objectives:*

1. Earn a profit
2. Remain solvent

Solvency represents the ability of the business to pay its bills and service its debt. The four financial statements are reports that allow interested parties to evaluate the profitability and solvency of a business.

*These reports include the following financial statements:*

- Balance Sheet
- Income Statement
- Statement of Owner's Equity
- Statement of Cash Flows

These four financial statements are the final product of the accountant's analysis of the transactions of a business. A large amount of effort goes into the preparation of the financial statements.

The process begins with bookkeeping, which is just one step in the accounting process. Bookkeeping is the actual recording of the company's transactions, without any analysis of the information. Accountants evaluate and analyse the information, making sense out of the numbers.

*For the reports to be useful, they must be:*

- Understandable
- Timely
- Relevant
- Fair and Objective

## DOUBLE ENTRY ACCOUNTING

Financial accounting is based on double-entry bookkeeping procedures in which each transaction is recorded in opposite columns of the accounts affected by the exchange. Double entry accounting is a significant improvement over simple and more error-prone single-entry bookkeeping systems.

## FUNDAMENTAL ACCOUNTING MODEL

*The balance sheet is based on the following fundamental accounting equation:*

$$\text{Assets} = \text{Liabilities} + \text{Equity}$$

This model has been used since the 18th century. It essentially states that a business owes all of its assets to either creditors or owners, where the assets of a business are its resources, and the creditors and owners are the sources of those resources.

## TRANSACTIONS

*To record transactions, one must:*

- Identify an event that affects the entity financially.
- Measure the event in monetary terms.
- Determine which accounts the transaction affects.
- Determine whether the transaction increases or decreases the balances in those accounts.
- Record the transaction in the ledgers.

Most larger business accounting systems utilize the double entry method. Under double entry, instead of recording a transaction in only a single account, the transaction is recorded in two accounts.

## THE ACCOUNTING PROCESS

Once a business transaction occurs, a sequence of activities begins to identify and analyse the transaction, make the journal entries, *etc.* Because this process repeats over transactions and accounting periods, it is referred to as the accounting cycle.

## RELATIONSHIP WITH FINANCIAL ACCOUNTS

The basic difference between financial and cost accounting has been elaborately discussed. We have seen that financial accounting is oriented towards external reporting and aims at providing information to shareholders, investors, Government and other outside agencies. All transactions, such as purchase, sales, receipts and payments pass through financial accounts. Cost Accounting, on the other hand, is concerned with internal reporting, and aims at providing elaborate information for planning, control and decision-making. Cost accounting information is for internal use. It is essentially utilisation accounting. For example, material is purchased from supplier.

*The two transactions, i.e., 'receiving materials from the supplier' and 'payment to supplier' pass through financial accounts, viz.*

1. Purchases a/c Dr.  
    To Sundry creditors a/c Cr.
2. Sundry creditors a/c Dr.  
    To Bank a/c Cr.

The transactions result in outflow of cash and inflow of materials in stores. When materials are issued from stores for production on the authority of material requisition note, no financial accounting is involved, but cost accounting starts from that point giving details of utilisation of materials. If use of materials can be recorded in cost accounts, how to account for it under double entry bookkeeping system? How can 'use' be accounted for, when 'receipt' is not in cost accounts? Through the purchase journal entry, material has entered in the stores, but there is no stores or material account as such in financial accounts. Hence, for storage and utilisation of material, a material account has to be created for internal control. In cost accounts, a material control account is necessary, which will be debited with the receipt and credited with issue of material. If this is done, double entry bookkeeping will be complete. But how to debit with store receipt value? It has already been accounted for in financial books.

The only way is to create a link between financial account and cost accounts with the help of a cost ledger control account in financial books and general ledger adjustment account in the cost ledger. Various inputs such as material, labour and expenses which are paid for and accounted in financial books will enter into cost accounting system through general ledger adjustment account, pass through the manufacturing process *i.e.*, work-in-process account, and produce finished goods, the value of which will be transferred to financial account through cost of goods sold account. If costing profit and loss is to be

ascertained, then cost of goods sold account shall be included in cost ledger and sales value shall be collected through general ledger adjustment account. The net profit or loss will then be transferred to financial account through general ledger adjustment account.

## USE OF CONTROL ACCOUNTS

Control accounts are the total accounts which summarises the totals of individual accounts. For example, when materials are purchased, the entry is made in the voucher register, debiting materials and crediting accounts payable. The total of materials column is posted at the end of the period in the material control a/c, while individual items purchased are entered in the subsidiary ledger *i.e.*, stores ledger cards. The total of the balances of individual stores ledger cards shall agree with the balance in the material control account in the cost ledger. Control accounts, thus, act as a double check on the accuracy of the balances. In cost accounts, subsidiary ledgers are maintained in respect of material, work-in-progress and finished goods in the same way as debtors and creditors ledgers are maintained in the financial accounts.

## INTERLOCKING ACCOUNTS

Under the integrated system, financial and cost accounting departments operate using only one set of books. Under nonintegrated accounts, two separate sets of books are maintained by financial accounts and cost accounts departments.

When separate sets of accounts are maintained, they are required to be interlocked so that periodical reconciliation is possible. Interlocking accounting system is, therefore, defined as 'a system in which the cost accounts are distinct from the financial accounts, the two sets of accounts being kept continuously in agreement by the use of control accounts or made readily reconcilable by other means'.

It is pertinent to note that with the use of computer, two separate sets of books can be easily avoided. A suitable programming can take care of any type of reporting that is necessary for the internal as well as external requirements. However, before taking up integrated accounts, let us discuss about cost control accounts under non-integrated accounting system.

## COST CONTROL ACCOUNTS

*The following important ledgers are usually maintained in the cost department:*

- *Cost ledger:* This is the principal ledger and records nominal accounts and to some extent real accounts.
- *Stores ledger:* This is a subsidiary ledger and records store accounts—maintaining a separate account for each item in the store.
- *Work-in-progress ledger:* This is a subsidiary ledger and records cost incurred and value of output produced during a period. Each job, unit, process or batch is assigned a job or work order number, and all expenses and production are recorded separately for each one of them.



- *Finished goods ledger:* This is a subsidiary ledger and records the receipt and issue of completely finished products. A separate account is opened for each type of product.

Each of the four ledgers are made self-balancing by maintaining general ledger adjustment account in cost ledger and control accounts of subsidiary ledgers. In the cost ledger, the control accounts of the subsidiary ledger will appear along with the following important control accounts, which are generally maintained:

### GENERAL LEDGER ADJUSTMENT ACCOUNT

This is also termed as cost ledger control account or financial ledger control account. This account maintains the link with financial account, and completes the double entry. For input items such as, material, labour and expenses, this account is credited and respective control account debited.

*For example, for purchase of materials, in financial books, the entries will be:*

Purchases a/c	Dr. Rs. 1000
Cost ledger control a/c (Memorandum entry only)	(Dr. Rs. 1000)
To Sundry creditors a/c	Cr. Rs. 1000

*In the COST books, the entries will be:*

Stores ledger control a/c	Dr. Rs. 1000
To General Ledger adjustment a/c	Cr. Rs. 1000

*Similarly, for incorporating payment of wages in the cost books, the entries will be:*

Wages control a/c	Dr. Rs. 1000
To General ledger adjustment a/c	Cr. Rs. 1000

Any transfer from cost books to financial books for transactions such as, return of materials from stores, transfer of capital work performed by the factory, transfer of costing profit and loss, *etc.* is entered in this account. It should be noted that cost ledger control account in financial book is a memorandum account only, and does not form a part of the double entry accounting. It is clear from the above that 'general ledger adjustment account' in cost ledger and "cost ledger control account" in financial ledger make the system interlocking or self-balancing.

### STORES LEDGER CONTROL ACCOUNT

This account is debited for receipt of materials as per goods received note and credited for issue of materials as per material requisition note. The balance of the account indicates the stock value of materials lying in the stores, and agrees with the total balances of individual store accounts.

**WORK-IN-PROGRESS CONTROL ACCOUNT**

This account is debited with the cost of production *i.e.*, direct material, direct wages, direct expenses, and production overheads recovered, and credited with the value of finished goods completed and transferred to finished goods control a/c. The balance of this account indicates the value of incomplete jobs or other cost units. At the end of a period, aggregate of balances in individual job or work order accounts in subsidiary ledger must agree with the balance of this account.

**FINISHED GOODS LEDGER CONTROL ACCOUNT**

This account is debited with the cost of completed units and credited with the costs of units sold. The balance in this account represents the costs of finished goods at any given time.

**WAGES CONTROL ACCOUNT**

Gross wages paid is debited to this account. Direct wages are then transferred to work-in-progress account, while indirect wages are transferred to respective overheads control accounts, *viz.* production, administration, selling and distribution and research and development.

Since whatever amount of wages debited to this account is distributed between work-in-progress account and overheads accounts, this account indicates 'nil' balance. This account is in effect a 'clearance' account, and not a control account as it does not control a subsidiary ledger.

**PRODUCTION/FACTORY OVERHEAD ACCOUNT**

This account is debited with the cost of indirect material, indirect labour and indirect expenses incurred, and is credited with the amount of overheads applied or recovered. The debit balance at the end of accounting period indicates under-recovery, and credit balance shows overrecovery. The balance is transferred to overheads adjustment account for further accounting of under- or over-absorbed overheads.

**ADMINISTRATION OVERHEAD ACCOUNT**

This account is debited with all administrative expenses and credited with overheads recovered from finished goods. The difference in this account, if any, is transferred to overheads adjustment account as is done in case of production overheads.

**SELLING AND DISTRIBUTION OVERHEADS ACCOUNT**

All selling and distribution expenses are debited to this account. The account is credited with overheads recovered from cost of goods sold. Difference, if any, is transferred to overhead adjustment account.

**COST OF SALES ACCOUNT**

Cost of goods sold and selling and distribution overheads are debited to this account. The account is closed by transferring to costing profit and loss account.

## OVERHEADS ADJUSTMENT ACCOUNT

Under-absorbed or over-absorbed overheads are debited or credited to this account from respective overheads control accounts.

*Depending upon the method of disposal adopted, any balance in the account is transferred either:*

- To costing profit and loss account for writeoff, or
- To overheads suspense accounts for carry over to the next period.

## COSTING PROFIT AND LOSS ACCOUNT

This account is debited with the cost of sales, under-recovery of overheads, abnormal losses, *etc.* and credited with sales, value of goods sold, over-absorbed overheads, abnormal gains, *etc.*

The balance represents net profit or loss, and is transferred to general ledger adjustment account. This profit or loss shall be reconciled with the financial profit or loss.

## SPECIMEN BOOK-KEEPING ENTRIES

### TRANSACTIONS RELATING TO MATERIAL

- Material amounting to Rs. 58,300 of which Rs. 1,700 relate to a special job, are purchased on credit.

<b>In financial books:</b>		
Purchases a/c	Dr.	58300
Cost ledger control a/c (Memorandum)	Dr.	58300
To sundry creditors	Cr.	58300
<b>In cost books:</b>		
Stores ledger control a/c	Dr.	56600
Work-in-progress control a/c	Dr.	1700
To general ledger adjustment a/c	Cr.	58300
<i>Note: Cost ledger records transaction on usage basis. Special job account in work-in-progress ledger gets direct debit for Rs. 1700, while balance amount is debited to stores ledger control account.</i>		
<ul style="list-style-type: none"> <li>• Return to supplier Rs. 200</li> </ul>		
<b>In financial books:</b>		
Sundry creditors a/c	Dr.	200
To purchases return a/c	Cr.	200
To cost ledger control a/c (Memorandum)	Cr.	200
<b>In cost books:</b>		
General ledger adjustment a/c	Dr.	200
To Stores ledger control a/c	Cr.	200

- Cash Purchase of Rs. 1000

**In financial books:**

Purchases a/c	Dr.	1000
Cost ledger control a/c (Memorandum)	Dr.	1000
To cash	Cr.	1000

**In cost books:**

Stores ledger control a/c	Dr.	1000
To general ledger adjustment a/c	Cr.	1000

- Stores issued to production Rs. 54700

**In financial books:**

No entry.

**In cost books:**

Work-in-progress control a/c	Dr.	54700
To stores ledger control a/c	Dr.	54700

*Note:* Individual job order number will be debited with the amounts as cited in the material requisition notes summary, and individual stores accounts will be credited from the materialwise summary of the MRN.

- Stores issued to maintenance account Rs. 2500

**In financial books:**

No entry.

**In cost books:**

Production overheads control a/c	Dr.	2500
To stores ledger control a/c	Cr.	2500

- Materials returned from production or service cost centres to stores, or material transfers from one job to another will have no effect in financial book, as no financial transaction is involved. Similarly, when sundry creditors are paid for the supplies, no entry is made in the cost ledger, as it does not involve any use of materials, but is a pure financial transaction.

**TRANSACTIONS RELATING TO LABOUR**

- Salaries and wages amounting to Rs. 62100 gross are earned by the employees, and deductions of Rs. 5400 as provident fund. Rs. 2400 as ESIC and Rs. 4300 as Income Tax are made from the gross amount:

**In financial books:**

Salaries and wages a/c	Dr.	62100
Cost ledger control a/c (Memorandum)	Dr.	62100
To provident fund a/c	Cr.	5400
To ESIC a/c	Cr.	2400

To Income-tax a/c	Cr.	4300
To cash a/c	Cr.	50000
<b>In cost books:</b>		
Salaries and wages control a/c	Dr.	62100
To general ledger adjustment a/c	Cr.	62100

*Note:* In cost ledger, gross salaries and wages amount is only adopted. It has nothing to do with deductions.

- Salaries and wages analysis book indicates the following breakup:

Direct wages	Rs.	38600
Indirect factory wages	Rs.	9500
Administrative salaries	Rs.	9700
Selling and distribution salaries	Rs.	4300

<b>In financial books:</b>		
No entry.		

<b>In cost books:</b>		
Work-in-progress ledger control a/c	Dr.	38600
Production overheads control a/c	Dr.	9500
Administrative overheads control a/c	Dr.	9700
Selling and distribution overheads control a/c	Dr.	4300
To salaries and wages control a/c	Cr.	62100

*Note:* In work-in-progress ledger, individual job cards will be debited with direct wages. Salaries and wages control account acts a clearance account.

## TRANSACTIONS RELATING TO OVERHEADS

- Expenses to the extent of Rs. 25400 were incurred on credit for various services obtained as follows: manufacturing Rs. 12000, administrative Rs. 8000 and selling and distribution Rs. 5400:

<b>In financial books:</b>		
Sundry expenses	Dr.	25400
Cost ledger control a/c (Memorandum)	Dr.	25400
To sundry creditors a/c	Cr.	25400
<b>In cost books:</b>		
Production overheads control a/c	Dr.	12000
Administrative overheads control a/c	Dr.	8000
Selling and distribution overhead control a/c	Dr.	5400
To general ledger adjustment a/c	Cr.	25400

- Rs. 900 paid cash for services rendered to factory Rs. 400 and office Rs. 500

<b>In financial books:</b>		
Expenses a/c	Dr.	900
Cost ledger control a/c (Memorandum)	Dr.	900
To cash a/c	Cr.	900
<b>In cost books:</b>		
Production overheads control a/c	Dr.	400
Administrative overheads control a/c	Dr.	500
To general ledger adjustment a/c	Cr.	900
<ul style="list-style-type: none"> <li>Rs. 24000 paid to creditors for services</li> </ul>		
<b>In financial books:</b>		
Sundry creditors a/c	Dr.	24000
To cash a/c	Cr.	24000
<b>In cost books:</b>		
No entry required.		

Regarding absorption of overheads, and transfer of under-or over-absorbed overheads, no entry needs to be passed in the financial account. In cost ledger, each of the overhead control account will be credited with overhead applied, and the difference between actual overheads expenses incurred and applied overheads will be transferred to overhead adjustment account at the end of the period. The net balance will be transferred to costing profit and loss account, or carried over to next accounting period or applied on cost of sales, finished good inventory and work-in-progress inventory by using a supplementary rate, depending on which decision is taken by the management.

## COST LEDGER ACCOUNTS

To emphasize cost ledger accounts, let us take up the following problem. Illustration: Midland Engineering Co's cost ledger indicates the following opening balance as on 1.1.2001:

	Rs.	Rs.
General ledger adjustment account		15200
Stores ledger control account	8700	
Work-in-progress ledger control account	4300	
Finished goods ledger control account	2200	
	15200	15200
At the year-end, the following information is obtained:		
Purchase for stores		57600
Purchase for special jobs		1700
Direct wages	38600	
Indirect factory wages	9500	
Administration salaries	9700	

Selling and distribution salaries	4300	62100
Production expenses		12400
Administration expenses		8500
Selling and distribution expenses		5400
Stores issued to production		54700
Store issued to maintenance		2500
Returns to supplier		200
Production overheads absorbed by production		24500
Administration overheads absorbed by finished goods		15200
Selling and distribution overheads recovered on sales		9600
Products finished during the year		117700
Finished goods sold at cost		132300
Sales		150000

You are required to record the entries in the cost ledger for the year and prepare a trial balance.

Costledger					
Dr.	General Ledger Adjustment Account				Cr.
2001	Rs.	2001			Rs.
Dec. 31 To Stores Ledger		Jan. 1	By Balance b/d		15200
Cont. a/c Returns	200	Dec. 31	By Stores Ledger		
" 31 To Costing Profit & Loss a/c – Sales	150000	" 31	Control a/c		57600
" 31 To Balance c/d	17800	" 31	By Work-in-progress		
		" 31	Control a/c – Spasial job		1700
		" 31	By salaries and Wages		
		" 31	Control a/c		62100
		" 31	By Production Overhead a/c		12400
		" 31	By Administration		
		" 31	Overhead a/c		8500
		" 31	By Selling and Distribution		
		" 31	Overhead a/c		5400
		" 31	By Costing Profit & loss a/c		5100
	168000				16800
		2002			
		Jan.1	By Balance		17800

Dr.	Stores Ledger Control Account				Cr.
2001	Rs.	2001			Rs.
Jan. 1 To balance c/d	8700	Dec. 31	By workin-progress		
Jan. 31 To general ledger			ledger cont. a/c		54700
adjustment a/c	57600	Dec. 31	By general ledger		
		Dec. 31	By general ledger		
			adj. a/c – returns		200
		Dec. 31	By production		2500
			overhead a/c		
Dec. 31 By balance c/d	8900				
	66300				66300
2002					



Jan. 1	To balance b/d	8900			
<hr/>					
<b>Dr.</b>	<b>Salaries and Wages control Account</b>				<b>Cr.</b>
<b>2001</b>		<b>Rs.</b>	<b>2001</b>		<b>Rs.</b>
<hr/>					
Dec. 31	To general ledger adjustment a/c	62100	Dec. 31	By work-in-progress ledger cont. a/c	38600
			Dec. 31	By production overhead a/c	9500
			Dec. 31	By admm. overhead a/c	9700
Dec. 31	By S and D overhead a/c	4300			
		62100			62100
<hr/>					
<b>Dr.</b>	<b>Work-in-progress ledger control account</b>				<b>Cr.</b>
<b>2001</b>		<b>Rs.</b>	<b>2001</b>		<b>Rs.</b>
<hr/>					
Jan. 1	To balance bd	4300	Dec. 31	By Finished goods ledger cont. a/c	117700
Dec. 31	To gen. led. adj. a/c	1700			
Dec. 31	To stores led. cont. a/c	54700	Dec. 31	By balance c/d	6100
Dec. 31	To sal. and wages control a/c	38600			
Dec. 31	To prod. overhead a/c	24500			
		123800			123800
<hr/>					
2002					
Jan. 1	To balance b/d	6100			
<hr/>					
<b>Dr.</b>	<b>Finished Goods Ledger Control Account</b>				<b>Cr.</b>
<b>2001</b>		<b>Rs.</b>	<b>2001</b>		<b>Rs.</b>
<hr/>					
Jan. 1	To balance b/d	2200	Dec. 31	By cost of sale	132300
Dec. 31	To administration Overhead a/c	15200	Dec. 31	By balance c/d	2800
Dec. 31	To work-in-progress ledger control a/c	117700			
		135100			135100
<hr/>					
2002					
Jan. 1	To balance b/d	2800			
<hr/>					
<b>Dr.</b>	<b>Production overhead Account</b>				<b>Cr.</b>
<b>2001</b>		<b>Rs.</b>	<b>2001</b>		<b>Rs.</b>
<hr/>					
Dec. 31	To general ledger adj. a/c	12400	Dec. 31	By work-in-progress ledger control a/c	24500
Dec. 31	To stores ledger	2500			

Dec. 31	To sal. and wages cont. a/c	9500		
Dec. 31	To overhead adj. a/c	100		
		24500		24500
2002				
Jan. 1	To balance b/d	2800		

Dr.		Administration Overhead Account		Cr.
2001	Rs.	2001		Rs.
Dec. 31	To general ledger adj. a/c	8500	Dec. 31	By finished goods ledger control a/c
Dec. 31	To sal. and wages	9700	Dec. 31	To overhead adjt. a/c
		18200		18200

Dr.		Selling and Distribution Account		Cr.
2001	Rs.	2001		Rs.
Dec. 31	To general ledger adj. a/c	5400	Dec. 31	By Cost of sales a/c
Dec. 31	To sal. and wages cont. a/c	4300	Dec. 31	To overhead adjt. a/c
		9700		9700

Dr.		Cost of sales Account		Cr.
2001	Rs.	2001		Rs.
Dec. 31	To selling and distrn. overhead a/c	9600	Dec. 31	By Cost of sales a/c account transfer
Dec. 31	To finished goods ledger control a/c	9700		141900
		132300		
		141900		141900

Dr.		Overhead Adjustment Account		Cr.
2001	Rs.	2001		Rs.
Dec. 31	To administration account over over a/c- under abs.	3000	Dec. 31	By production overhead absorbed
Dec. 31	To selling and distrn. overheads a/c – under	100	Dec. 31	By costing P&L a/c
				3000

3100			3100		
Dr.			Cr.		
Costing Profit and Loss Account					
2001		Rs.	2001		Rs.
Dec. 31	To Cost of sales a/c	141900	Dec. 31	By general ledger adj. – sales	150000
Dec. 31	To overhead adjust	3000			
Dec. 31	To general ledger adj. a/c–profit	5100			
		150000			150000

Trial Balance as on December 31, 2001

	Debit Rs.	Credit Rs.
General ledger adjustment account		17800
Stores ledger control account	8900	
W-I-P ledger control account	6100	
Finished goods ledger control account	2800	
	17800	17800

### CAPITAL ORDER—REPAIR ORDER

In a manufacturing organisation, improvement to existing plant, machinery, tools building, *etc.* are frequently carried on by the factory's own staff and workmen.

Totally new equipment, machinery or building are also fabricated by own people. These are all in the nature of capital expenditure. Hence, a capital work order is normally raised and all expenses are collected under the capital work order number. On completion of the project, expenses are transferred from work-in-progress through the following journal entry.

Capital work order a/c	Dr.
To Work-in-progress ledger control a/c	Cr.

At the end of the period, the asset will be transferred from cost accounts to financial account by means of the following entry.

General ledger adjustment a/c	Dr.
To capital order a/c	Cr.

Normally, material, labour and direct expenses are debited to capital work order. Overheads are not charged to capital assets unless specifically incurred for the Capital work order.

Similarly, special repair and maintenance work is undertaken by the factory. A repair order is issued, in which is recorded all expenditure incurred on that special job.

When the repair is completed, the repair work order will be closed by transferring from Work-in-progress Ledger means of the following journal entry.

Special repair and maintenance a/c	Dr.
To Work-in-progress ledger control a/c	Cr.

If the special repair has been undertaken for factory and offices, the total expenses can be distributed accordingly, such as,

Production overheads a/c	Dr.
Administration overhead a/c	Dr.
To Special repairs and maintenance a/c	Cr.

## RECONCILIATION OF COST AND FINANCIAL ACCOUNTS

Where accounts are maintained on the integral accounts system, there are no separate cost accounts and financial accounts. Hence, the question of reconciliation of cost and financial accounts does not arise. However, where separate sets of books are maintained for cost accounting and financial accounting system, it is imperative that periodically the two accounts are reconciled. A memorandum of reconciliation is prepared, indicating the reasons for difference between the results disclosed by each system.

The difference between the sets of accounts arises because of the following reasons:

- *Items included only in financial accounts:* There are number of items which appear only in financial accounts, and not in cost accounts, since they do not relate to the manufacturing activities, such as,
  - Purely financial charges, reducing financial profit
    - (a) Losses on capital assets
    - (b) Stamp duty and expenses on issue and transfer of stock, shares and bonds
    - (c) Loss on investments.
    - (d) Discount on debentures, bonds, *etc.*
    - (e) Fines and penalties,
    - (f) Interest on bank loans.
  - Purely financial income, increasing financial profit
    - (a) Rent received
    - (b) Profit on sale of assets
    - (c) Share transfer fee
    - (d) Share premium
    - (e) Interest on investment, bank deposits.
    - (f) Dividends received.
  - Appropriation of profit: Donations and charities.
- *Items included only in the cost accounts:* There are very few items which appear in cost accounts, but not in financial accounts. Because, all expenditure incurred, whether for cash or credit, passes through the financial accounts, and only relevant expenses are incorporated in cost

accounts. Hence, only item which can appear in cost accounts but not in financial accounts is a notional charge, such as,

- Interest on capital, which is not paid but included in cost accounts to show the notional cost of employing capital, or
- Rent *i.e.*, charging a notional rent of premises owned by the proprietor.
- Items accounted for differently in cost accounting and financial accounting
  - *Overhead*: In cost accounts, overheads are applied to cost units at predetermined rates based on estimates, and the amount recovered may differ from actual expenses incurred. If such under- or over-recovery of overheads are not charged off to costing profit and loss account, the profits on two sets of books will differ.
  - *Stock valuation*: In financial accounts, stock is valued at lower of cost or market value. In cost accounts, stock is valued at cost adoption one of the methods, such as FIFO, LIFO, average, *etc.*, which is suitable to the unit. Thus, there may be difference in stock valuation, which will reflect difference in profit between the two sets of books.
  - *Depreciation*: If different basis is adopted for charging depreciation in cost accounts as compared to financial accounts, the profits will vary.

A. Nilesh & Co. Trading and Profit and Loss Account for the Year Ending 31st. December, 2001. (In Rupees)					
To Opening stock:		By Sales (5000 units)	5000		
– Raw materials	2700	By Closing stock			
– Work-in-progress	3500	– Raw materials	2400		
– Finished goods	4600	– Work-in-progress	4100		
	10800	– Finished stock	3600	10100	
To Purchases	14200				
To Direct wages	11800				
To Factory expenses	8500				
To Gross profit c/d	14800				
	60100			60100	
To Office expenses	1200	By Gross profit b/d	14800		
To Office salaries	2400	By Dividend received	900		
To Salesmen's salaries	2100	By Interest on deposit	200		
To Selling expenses	1600	By Share transfer	400		
To Loss on sale of assets	500	By Rent received	400		
To Fines	200				
To Interest on mortgage	600				
To Net profit	7100				
	16900			16900	

The cost account reveals a profit of Rs. 5780.

*Reconcile the financial and cost profits using the following information:*

- In cost accounts, opening stock is valued at Rs. 10,260 and closing stock as Rs. 94,900.
- Depreciation in cost accounts is Rs.600 as against Rs. 520 taken in financial a/c
- Overhead recovery rates are as follows:
  - *Production overhead: @ 75% of direct wages*
  - *Office overhead: @ 100% of factory cost*
  - *Selling and distribution overhead: @ Re. 1 per unit sold.*

**Solution:**

<b>Reconciliation Statement</b>			
	<b>Rs.</b>	<b>Rs.</b>	<b>Rs.</b>
Profit as per cost accounts			5780
Add: (i) Income not Taken in cost a/cs:			
Dividend received	900		
Interest on deposit	200		
Share transfer fees	200		
Discount received	400		
Rent Receivaed	400	2100	
(ii) Difference in strock valuation:			
Opening: (10800–10260)	540		
Closing stock: (10100–9490)	610	70	
(iii)Difference in Depreciation:			
changed: (600–520)		80	
(iv)Overabsorption of overhead:			
production applied- 75% of 11800	8850		
Actual expenses	8500	350	
Selling and distribution overhead applied @Re. 1 of 5000 units	5000		
Actual expenses	4900	100	2700
			8480
Less: (i) Items not charged in cost a/cs:			
Loss on sale of assets	500		
Fines	200		
Interest on mortgage	600	1300	
(ii) Under-absorption of office overheads:			
applied @ 10% on 35200	3520		
actual expenses	3600	80	1380
Profit as per financial profit and loss a/c			7100

## INTEGRATED ACCOUNTS

In the present age of computerisation the maintenance of two sets of books for cost accounting and financial accounting separately by two parts is dispensed with. Instead, integral or integrated accounts is being adopted, wherein only one set of books is operated, recording both financial and cost accounts. This eliminates the necessity of operating cost ledger control account in financial ledger, and general ledger adjustment account in cost ledger.

The usual personal accounts and real accounts are maintained, but under the system, the nominal accounts follow the principles of cost accounting system. The fundamental principle is to eliminate duplicate entries and to maintain the essentials of the transactions. For examples, “purchase of raw materials of Rs. 1000 on credit”. The transaction would appear in financial and cost ledger under nonintegrated accounts as follows:

<b>In financial books</b>		
Purchases a/c	Dr.	Rs. 1000
Cost ledger control a/c (Memorandum)	Dr.	Rs. 1000
To creditors a/c	Cr.	Rs. 1000
<b>In cost books</b>		
Stores ledger control a/c	Dr.	Rs. 1000
To general ledger adjustment a/c	Cr.	Rs. 1000
<i>Under integrated accounts, the transaction will appear as:</i>		
Stores ledger control a/c	Dr.	Rs. 1000
To creditors a/c	Cr.	Rs. 1000

It will be observed that the essential elements of the transaction such as receipt of material and liability to pay to the creditor are accounted for.

Similarly “payment of wages Rs. 5000”, shall be recorded under integrated accounts as:

Wages control a/c	Dr.	Rs. 5000
To cash/bank a/c	Cr.	Rs. 5000

*Instead of the following entries under nonintegrated accounts:*

### Cost Accounting Records

<b>In financial books</b>		
Wages a/c	Dr.	Rs. 5000
Cost ledger control a/c (Memorandum)	Dr.	Rs. 5000
To Cash/bank a/c	Cr.	Rs. 5000
<b>In cost books</b>		
Wages control a/c	Dr.	12000
To general ledger adjustment a/c	Cr.	25400



*The advantages of the integrated accounts are as follows:*

- As there is only one set of accounts the need for reconciliation between cost and financial books does not arise. This will save a lot of clerical cost.
- There is no duplication of recording and effort. Hence, the system is economical.
- There is automatic check on the correctness of cost data. Hence, this will generate more confidence in cost records and information.
- As cost accounts are posted straight from the books of original entry, there is no delay in obtaining cost data.
- Centralised accounting under integrated system results in economy. It also widens the outlook of the accountant and his staff, who can have a better perspective than before.

*Let us take an illustration of integrated accounts. Illustration:*

- ABC Co Ltd. operates a system of integrated accounting. At the beginning of the year the balances in the integrated ledger are as follows:

	Dr. (Rs.)	Cr (Rs.)
Fixed assets	2,00,000	
Issued share capital		3,00,000
Profit and loss		80,000
Depreciation provision		30,000
Debtors control	50,000	
Trade creditors control		20,000
Expense creditors control		15,000
Bank	25,000	
Stores control	95,000	
W.I.P control	35,000	
Finished goods control	40,000	
	4,45,000	4,45,000

**During the year transaction were as follows:**

Stores purchased		4,00,000
Stores returned to suppliers		10,000
Stores issued to production		3,20,000
Stores issued to production maintenance		30,000
Wages and salaries paid-		
Production wages: direct	1,50,000	
Indirect	35,000	
Production salaries	20,000	
Administration salaries and wages	80,000	
Sales department salaries and wages	30,000	3,75,000
Production wages: direct, accrued		2,500

Indirect, accrued		500
Paid to expense creditors		1,70,000
Production expenses	65,000	
Direct expenses	5,000	
Administration expenses	60,000	
Selling expenses	30,000	
Distribution expenses	20,000	
Administration expenses prepaid	5,000	
Depreciation provision (charge to production) 10%		
Production overhead recovered		1,72,000
Selling overhead recovered		88,000
Distribution expenses recovered		51,000
Administration overhead are charged to P&L a/c		
Output at cost of production		6,35,000
Goods sold at cost of production		6,30,000
Sales		10,00,000
Payment by debtors		9,80,000
Payment to creditors		3,73,000
Discount received		12,000
Discount allowed		15,000
Transfer to general reserve		50,000

Enter these transactions in the integrated ledger and then prepare the profit and loss account and balance sheet.

Dr.	Fixed assets a/c		Cr.
	To Balance b/d		2,00,000

Dr.	Issued share capital a/c		Cr.
	By balance b/d		3,00,000

Dr.	Profit and loss appropriation a/c		Cr.
To Transfer to general reserve	50,000	By balance c/d	80,000
To balance c/d	1,23,500	By profit and loss a/c	93,500
	1,73,500		1,73,500
		By balance b/d	1,23,500

Dr.	Provision for depreciation a/c		Cr.
To balance c/d	50,000	By balance b/d	30,000
		By prodn. od.	20,000
control a/c			
	50,000		50,000
		By balance b/d	50,000

Dr.	Debtors control a/c		Cr.
To balance b/d	50,000	By bank	9,80,000
To sales a/c	10,00,000	By Discount allowed	15,000
		By balance c/d	55,000
	10,50,000		10,50,000
To balance b/d	55,000		
Dr.	Trade creditors control a/c		Cr.
To stores control a/c	10,000	By balance b/d	20,000
To bank	3,73,000	By stores control a/c	4,00,000
To discount received	12,000		
To balance c/d	25,000		
	4,20,000		4,20,000
		By balance b/d	25,000
Dr.	Expense creditors control a/c		Cr.
To bank a/c	1,70,000,	By balance c/d	15,000
To balance c/d	25,000	By production overheads	65,000
		By work-in-progress	5,000
		By admn. overheads	60,000
		By selling overheads	30,000
		By distrn. overheads	20,000
	1,95,000		1,95,000
		By balance c/d	25,000
Dr.	Bank a/c		Cr.
To balance b/d	25,000	By wages & sal. control a/c	3,75,000
To sundry debtors	9,80,000	By expenses creditors a/c	1,70,000
		By sundry creditors a/c	3,73,000
		By balance c/d	87,000
	10,05,000		10,05,000
Dr.	Stores control a/c		Cr.
To balance c/d	95,000	By S/Creditors-	10,000
To sundry creditors control a/c	4,00,000	By WIP control a/c	3,20,000
		By prodn. Od.	30,000
		By balance c/d	1,35,000
	4,95,000		4,95,000
To balance c/d	1,35,000		

<b>Dr.</b>	<b>Work-in-progress a/c</b>		<b>Cr.</b>
To balance b/d control a/c	35,000	By Fin. goods	6,35,000
To store control a/c	3,20,000	By balance c/d	49,500
To salary/wages control a/c	1,52,500		
To Expense creditors	5,000		
To production ovd. control			
a/c-overheads applied	1,72,000		
	6,84,500		6,84,500
To balance c/d	49,500		
<b>Dr.</b>	<b>Finished goods control a/c</b>		<b>Cr.</b>
To balance b/d	40,000	By cost of sales a/c	6,30,000
To work-in-progress control a/c	6,35,000	By balance c/d	45,000
	6,75,000		6,75,000
To balance b/d	45,000		
<b>Dr.</b>	<b>Production overhead control a/c</b>		<b>Cr.</b>
To stores control a/c	30,000	By work-in-progress a/c	1,72,000
To salaries and wages cont. a/c	55,500		
To expense creditors a/c	65,000		
To depreciation	20,000		
To overheads adjustment a/c	1,500		
	1,72,000		1,72,000
<b>Dr.</b>	<b>Salaries and wages a/c</b>		<b>Cr.</b>
To bank a/c progress a/c	3,75,000	By work-in-	1,52,500
To accrued wages overheads	3,000	By production	55,500
		By Admn. overhead	80,000
control		By selling overhead	60,000
		By distribution	30,000
overheads			
	3,78,000		3,78,000

<b>Dr.</b>	<b>Accrued wages a/c</b>		<b>Cr.</b>
To balance b/d control a/c	3,000	By salary & wages	3,000
	3,000		3,000
		To balance b/d	3,000
<b>Dr.</b>	<b>Administration overhead a/c</b>		<b>Cr.</b>
To salaries and wages control a/c	80,000	By administration overheads prepaid a/c	5,000
To expense creditors cont. a/c	60,000	By profit and loss a/c	1,35,000
	1,40,000		1,40,000
<b>Dr.</b>	<b>Selling overheads control a/c</b>		<b>Cr.</b>
To salaries and wages control a/c	60,000	By cost of sales a/c applies	88,000
To expense creditors a/c	30,000	By overheads adj.	2,000
	90,000		90,000
<b>Dr.</b>	<b>Distribution overhead control a/c</b>		<b>Cr.</b>
To salaries and wages control a/c	30,000	By cost of sales a/c	51,000
To expense creditors control a/c	20,000		
To overheads adj. a/c	1,000		
	51,000		51,000
<b>Dr.</b>	<b>Cost of sale a/c</b>		<b>Cr.</b>
To finished goods control a/c	6,30,000	By profit and loss a/c transfer	7.69,000
To selling & distrn. control a/c	88,000		
To distribution ovd. control a/c	51,000		
	7,69,000		7,69,000
<b>Dr.</b>	<b>Sales a/c</b>		<b>Cr.</b>
To profit and loss a/c- transfer	10,00,000	By sundries	10,00,000
	10,00,000		10,00,000
<b>Dr.</b>	<b>Discount allowed a/c</b>		<b>Cr.</b>
To debtor's control a/c	15,000	By profit and loss a/c	15,000
	15,000		15,000

Dr.	Discount received a/c		Cr.
To profit and loss a/c- transfer	12,000	By sundry creditor's control a/c	12,000
	12,000		12,000

Dr.	Overhead adjustment a/c		Cr.
To selling overhead overhead control	2,000	By production a/c	1,500
To profit and loss a/c-transfer	500	By dist. overhead control a/c	1,000
	2,500		2,500

Dr.	Profit and loss a/c		Cr.
To cost of sales a/c	7,69,000	By sales	10,00,000
To admin. overhead control a/c	1,35,000	By discount received	12,000
To discount allowed	15,000	By overheads adj. a/c	500
To balance trns. to apprn. a/c	93,500		
	10,12,500		10,12,500

Blance Sheet as at...

Particulars	Assets Rs	Liabilities Rs.
Share capital		3,00,000
General reserve		50,000
Fixed assets	2,00,00	
Profit and loss account		1,23,500
Depreciation provision		50,000
Debtors' control	55,000	
Trade creditors control		25,000
Expenses creditors control		25,000
Bank	87,000	
Stores control	1,35,000	
Work-in-progress control	49,500	
Finished goods control	45,000	
Prepaid expenses	5,000	
Accrued salaried and wages		3,000
<b>Total</b>	<b>5,76,500</b>	<b>5,76,500</b>

## BASICS OF COMPUTERISATION OF ACCOUNTS

A computer can be applied to almost all types of accounting functions. It is a “a data processor that can perform substantial computation, including arithmetic and logic operations, without intervention by a human operator during the run”. With the increase in the size of the organisation and the number of transactions, most of the accounting operations are now mechanised. Earlier it was punched card accounting system, and now it is a computer including personal or mini computer. Whether it is a Punched Card accounting or a computer, the fundamental requirement of data processing is the same. In any data processing system, whether the manual or mechanised.

*The basic functions involved are:*

- Collecting and recording facts,
- Analysing and classifying the facts, and
- Summarising and the interpreting them.

*The prerequisites for a data processing system are as follows:*

- A proper system of codification of all activities, departments, products and expense transactions.
- There should be prompt, accurate and systematic preparation and maintenance of basic documents, such as Stores Receipt Notes, Material Requisition Note, Material Transfer Note, Time Card, Job Card, Idle Time Card, Vouchers, *etc.*
- Data base should be created out of the basic documents, which should be processed in convenient batches. Each batch should have a control total for both quantity and value, so that after processing the results can be compared with the original documents.
- Thus, there should be a procedure for ensuring reconciliation of total as per printed tabulation with that as per books of accounts. This is necessary because based on these data, various information and reports will generate.
- Data processing should be completely integrated.

Needless to mention, that a complete classification and codification of materials, labour, operations and utilities is required to prepare the data base from the original documents, which will indicate unit code, transaction code, source code, quantity and rate. Such coding structure will depend on the nature of business, size of the organisation, reporting requirement, *etc.*

# 6

## Construction Contract

A Construction contract is a contract specifically negotiated for the construction of an asset or a combination of assets that are closely interrelated or interdependent in terms of their design, technology and function or their ultimate purpose or use.

### **RECOGNITION OF CONTRACT REVENUE AND CONTRACT COST**

When the outcome of a construction contract can be estimated reliably, contract revenue and contract cost should be recognized as revenue and expenses by reference to the stage of construction. (This accounting standard recommends the use of percentage of completion method). When the outcome of a construction contract cannot be estimated reliably,

- Revenue should be recognized only to the extent of contract costs incurred of which recovery is probable. (*i.e.*, Revenue recognized = Costs Incurred)
- Contract costs should be recognized as an expense in the period in which they are incurred.

*The outcome of a construction contract can be estimated reliably when all the following conditions are satisfied:*

- Total contract revenue can be measured reliably;
- The receipt of revenue is probable;
- The contract costs to complete the contract can be measured reliably;
- The stage of completion at the reporting date can be measured reliably;
- The contract costs attributable to the contract can be clearly identified.



*Contract Revenue should comprise the initial amount of revenue agreed in the contract; and variations in amount to be received:*

- To the extent that it is probable that they will result in revenue; and
- They are capable of being reliably measured. (Contract can be of two kinds: Fixed Price contract and Cost Plus contract)

*Contract Costs should comprise:*

- Costs that relate directly to the specific contract;
- Costs that are attributable to contract activity in general and can be allocated to the contract.
- At any stage of contract, when it is probable that total contract costs will exceed total contract revenue, the expected loss should be recognized as an expense immediately. The amount of such loss is determined irrespective of:
  - Whether or not work has commenced on the contract;
  - The stage of completion of contract activity; or
  - Whether outcome of contract is estimated or not
- When an uncertainty arises about the collectability of an amount already included in contract revenue, and already recognized in the statement of profit and loss, the uncollectable amount or the amount in respect of which recovery has ceased to be probable is recognized as an expense rather than an adjustment of the amount of contract revenue.
- Contract costs that relate to future activity, are recognized as an asset provided it is probable that they will be recovered. Such asset is classified as Contract WIP.
- The stage of completion of a contract may be determined by following ways;
  - Surveys of work done
  - Completion of physical proportion of the contract work
  - The proportion that contract costs incurred for work performed upto
  - The reporting date bear to the estimated total contract costs
- When a contract covers a number of assets, the construction of each asset should be treated as a separate construction of each asset should be treated as separate construction contract when
  - Separate proposals have been submitted for each asset;
  - Each asset has been subject to separate negotiation
  - The costs and revenues of each asset can be identified
- A group of contracts, whether with a single customer or with several customers, should be treated as a single construction contract when
  - The group of contracts is negotiated as a single package;
  - The contracts are very closely interrelated
  - The contracts are performed concurrently or in a continuous sequence.

- The recognition of revenue and expenses in construction contract is based on reliable estimate. This estimate may vary from one accounting year to another accounting year. The effect of change in estimate should be treated as per AS-5. *i.e.*, It should not be treated as prior period item or extraordinary item.
- *Disclosure:*
  - Contract Revenue recognized as revenue
  - Method used to determine the contract revenue
  - Method used to determine the stage of completion
  - Contract costs incurred + Recognised Profit–Recognised Loss
  - Amount of advances received
  - Amount due from customers
  - Amount due to customers

## REVENUE RECOGNITION

Revenue is the gross inflow of cash, receivables or other consideration arising in the course of the ordinary activities of an enterprise from the sale of goods, from the rendering of services, and from the use by others of enterprise resources yielding interest, royalties and dividends.

- *Revenue Includes:*
  - Proceeds from sale of goods
  - Proceeds from rendering of services
  - Interest, royalty and dividends.
- *Sale of goods:*
  - Revenue from sales should be recognized when
  - All significant risks and rewards of ownership have been transferred to the buyer from the seller.
  - Ultimate reliability of receipt is reasonably certain.
- *Rendering of Services:* Revenue from service transactions is usually recognized as the service is performed, either by proportionate completion method or by the completed service contract method.
- *Proportionate Completion Method:* This is a method of accounting, which recognises revenue in the statement of profit and loss proportionately with degree of completion of services under a contract. Revenue is recognised by reference to the performance of each act. The revenue recognised under this method would be determined on the basis of contract value, associated costs, number of acts or other suitable basis.
- *Completed Service Contract Method:* This is a method of accounting, which recognises revenue in the statement of profit and loss only when the rendering of services under a contract is completed or substantially completed. Revenue under this method is recognised on completion or substantial completion of the job.
- *Revenue from Interest:* Recognised on time proportion basis

- *Revenue from Royalties*: Recognised on accrual basis in accordance with the terms of the relevant agreement.
- *Revenue from Dividends*: Recognised when right to receive is established
- *Subsequent Uncertainty In Collection*: When the uncertainty relating to collectability arises subsequent to the time of sale or the rendering of services, it is more appropriate to make a separate provision to reflect the uncertainty rather than to adjust the amount of revenue originally recorded.
- *Disclosure*: An enterprise should disclose the circumstances in which revenue recognition has been postponed pending the resolution of significant uncertainties.

### EXAMPLES

- *On sale, buyer takes title and accepts billing but delivery is delayed at buyer's request*: Revenue should be recognised notwithstanding that physical delivery has not been completed.
- *Delivery subject to installations and inspections*: Revenue should not be recognised until the customer accepts delivery and installation and inspection are complete. However, when installation process is very simple, revenue should be recognised. For example, Television sale subject to installation.
- *Sale on approval*: Revenue should not be recognised until the goods have been formally accepted or time for rejection has elapsed or where no time has been fixed, a reasonable time has elapsed.
- *Sales with the condition of 'money back if not completely satisfied'*: It may be appropriate to recognize the sale but to make suitable provision for returns based on previous experience.
- *Consignment sales*: Revenue should not be recognised until the goods are sold to a third party.
- *Installment sales*: Revenue of sale price excluding interest should be recognised on the date of sale.
- *Special order and shipments*: Revenue from such sales should be recognized when the goods are identified and ready for delivery.
- *Where seller concurrently agrees to repurchase the same goods at a later date*: The sale should not be recognised, as this is a financial arrangement.
- *Subscriptions received for publications*: Revenue received or billed should be deferred and recognised either on a straight-line basis over time or where the items delivered vary in value from period to period, revenue should be based on the sales value of the item delivered.
- *Advertisement commission received*: It is recognised when the advertisement appears before public.
- *Tuition fees received*: Should be recognised over the period of instruction.

- Entrance and membership fees Entrance fee is generally capitalized If the membership fee permits only membership and all other services or products are paid for separately, the fee should be recognised when received. If the membership fee entitles the member to services or publications to be provided during the year, it should be recognised on a systematic and rational basis having regard to the timing and nature of all services.
- *Sale of show tickets*: Revenue should be recognised when the event takes place.
- *Guaranteed sales of agricultural crops*: When sale is assured under forward contract or government guarantee, the crops can be recognised at net realizable value although it does not satisfy the criteria of revenue recognition.

*The accounting standard is not applicable for:*

- Revenue arising from construction contracts
- Revenue arising from hire purchase, lease agreements
- Revenue arising from Government grants and subsidies
- Revenue of Insurance companies arising from insurance contracts
- Profit or loss on sale of fixed assets
- Realised or unrealized gains resulting from changes in foreign exchange rates

## ACCOUNTING FOR FIXED ASSETS

Financial statements disclose certain information relating to fixed assets. In many enterprises these assets are grouped into various categories, such as land, buildings, plant and machinery, vehicles, furniture and fittings, goodwill, patents, trade marks and designs. This standard does not deal with the specialised aspects of accounting for fixed assets that arise under a comprehensive system reflecting the effects of changing prices but applies to financial statements prepared on historical cost basis.

*This standard does not deal with accounting for the following items to which special considerations apply:*

- Forests, plantations and similar regenerative natural resources;
- Wasting assets including mineral rights, expenditure on the exploration for and extraction of minerals, oil, natural gas and similar non-regenerative resources;
- Expenditure on real estate development; and
- Livestock.

Expenditure on individual items of fixed assets used to develop or maintain the activities covered in (i) to (iv) above, but separable from those activities, are to be accounted for in accordance with this Standard. This standard does not cover the allocation of the depreciable amount of fixed assets to future periods since this subject is dealt with in Accounting Standard 6 on 'Depreciation Accounting'. This standard does not deal with the treatment of government

grants and subsidies, and assets under leasing rights. It makes only a brief reference to the capitalisation of borrowing costs and to assets acquired in an amalgamation or merger. These subjects require more extensive consideration than can be given within this Standard.

### ***Definitions***

*The following terms are used in this Standard with the meanings specified:*

- Fixed asset is an asset held with the intention of being used for the purpose of producing or providing goods or services and is not held for sale in the normal course of business.
- Fair market value is the price that would be agreed to in an open and unrestricted market between knowledgeable and willing parties dealing at arm's length who are fully informed and are not under any compulsion to transact.
- Gross book value of a fixed asset is its historical cost or other amount substituted for historical cost in the books of account or financial statements. When this amount is shown net of accumulated depreciation, it is termed as net book value.

### **EXPLANATION**

Fixed assets often comprise a significant portion of the total assets of an enterprise, and therefore are important in the presentation of financial position. Furthermore, the determination of whether an expenditure represents an asset or an expense can have a material effect on an enterprise's reported results of operations.

### **IDENTIFICATION OF FIXED ASSETS**

The definition in paragraph 6.1 gives criteria for determining whether items are to be classified as fixed assets. Judgement is required in applying the criteria to specific circumstances or specific types of enterprises. It may be appropriate to aggregate individually insignificant items, and to apply the criteria to the aggregate value. An enterprise may decide to expense an item which could otherwise have been included as fixed asset, because the amount of the expenditure is not material. Stand-by equipment and servicing equipment are normally capitalised.

Machinery spares are usually charged to the profit and loss statement as and when consumed. However, if such spares can be used only in connection with an item of fixed asset and their use is expected to be irregular, it may be appropriate to allocate the total cost on a systematic basis over a period not exceeding the useful life of the principal item. In certain circumstances, the accounting for an item of fixed asset may be improved if the total expenditure thereon is allocated to its component parts, provided they are in practice separable, and estimates are made of the useful lives of these components. For example, rather than treat an aircraft and its engines as one unit, it may be better to treat the engines as a separate unit if it is likely that their useful life is shorter than that of the aircraft as a whole.

## COMPONENTS OF COST

The cost of an item of fixed asset comprises its purchase price, including import duties and other non-refundable taxes or levies and any directly attributable cost of bringing the asset to its working condition for its intended use; any trade discounts and rebates are deducted in arriving at the purchase price.

*Examples of directly attributable costs are:*

- Site preparation;
- Initial delivery and handling costs;
- Installation cost, such as special foundations for plant; and
- Professional fees, for example fees of architects and engineers.

The cost of a fixed asset may undergo changes subsequent to its acquisition or construction on account of exchange fluctuations, price adjustments, changes in duties or similar factors.

Administration and other general overhead expenses are usually excluded from the cost of fixed assets because they do not relate to a specific fixed asset. However, in some circumstances, such expenses as are specifically attributable to construction of a project or to the acquisition of a fixed asset or bringing it to its working condition, may be included as part of the cost of the construction project or as a part of the cost of the fixed asset.

The expenditure incurred on start-up and commissioning of the project, including the expenditure incurred on test runs and experimental production, is usually capitalised as an indirect element of the construction cost. However, the expenditure incurred after the plant has begun commercial production, *i.e.*, production intended for sale or captive consumption, is not capitalised and is treated as revenue expenditure even though the contract may stipulate that the plant will not be finally taken over until after the satisfactory completion. If the interval between the date a project is ready to commence commercial production and the date at which commercial production actually begins is prolonged, all expenses incurred during this period are charged to the profit and loss statement. However, the expenditure incurred during this period is also sometimes treated as deferred revenue expenditure to be amortised over a period not exceeding 3 to 5 years after the commencement.

## SELF-CONSTRUCTED FIXED ASSETS

In arriving at the gross book value of self-constructed fixed assets, the same principles apply as those described in paragraphs 9.1 to 9.5. Included in the gross book value are costs of construction that relate directly to the specific asset and costs that are attributable to the construction activity in general and can be allocated to the specific asset. Any internal profits are eliminated in arriving at such costs.

## **NON-MONETARY CONSIDERATION**

When a fixed asset is acquired in exchange for another asset, its cost is usually determined by reference to the fair market value of the consideration given. It may be appropriate to consider also the fair market value of the asset acquired if this is more clearly evident. An alternative accounting treatment that is sometimes used for an exchange of assets, particularly when the assets exchanged are similar, is to record the asset acquired at the net book value of the asset given up; in each case an adjustment is made for any balancing receipt or payment of cash or other consideration. When a fixed asset is acquired in exchange for shares or other securities in the enterprise, it is usually recorded at its fair market value, or the fair market value of the securities issued, whichever is more clearly evident.

## **IMPROVEMENTS AND REPAIRS**

Frequently, it is difficult to determine whether subsequent expenditure related to fixed asset represents improvements that ought to be added to the gross book value or repairs that ought to be charged to the profit and loss statement. Only expenditure that increases the future benefits from the existing asset beyond its previously assessed standard of performance is included in the gross book value, *e.g.*, an increase in capacity. The cost of an addition or extension to an existing asset which is of a capital nature and which becomes an integral part of the existing asset is usually added to its gross book value. Any addition or extension, which has a separate identity and is capable of being used after the existing asset is disposed of, is accounted for separately.

## **AMOUNT SUBSTITUTED FOR HISTORICAL COST**

Sometimes financial statements that are otherwise prepared on a historical cost basis include part or all of fixed assets at a valuation in substitution for historical costs and depreciation is calculated accordingly. A commonly accepted and preferred method of restating fixed assets is by appraisal, normally undertaken by competent valuers. Other methods sometimes used are indexation and reference to current prices which when applied are cross checked periodically by appraisal method. The revalued amounts of fixed assets are presented in financial statements either by restating both the gross book value and accumulated depreciation so as to give a net book value equal to the net revalued amount or by restating the net book value by adding therein the net increase on account of revaluation. An upward revaluation does not provide a basis for crediting to the profit and loss statement the accumulated depreciation existing at the date of revaluation. Different bases of valuation are sometimes used in the same financial statements to determine the book value of the separate items within each of the categories of fixed assets or for the different categories of fixed assets.

In such cases, it is necessary to disclose the gross book value included on each basis. Selective revaluation of assets can lead to unrepresentative amounts



being reported in financial statements. When revaluations do not cover all the assets of a given class, it is appropriate that the selection of assets to be revalued be made on a systematic basis. For example, an enterprise may revalue a whole class of assets within a unit. It is not appropriate for the revaluation of a class of assets to result in the net book value of that class being greater than the recoverable amount of the assets of that class. An increase in net book value arising on revaluation of fixed assets is normally credited directly to owner's interests under the heading of revaluation reserves and is regarded as not available for distribution.

A decrease in net book value arising on revaluation of fixed assets is charged to profit and loss statement except that, to the extent that such a decrease is considered to be related to a previous increase on revaluation that is included in revaluation reserve, it is sometimes charged against that earlier increase. It sometimes happens that an increase to be recorded is a reversal of a previous decrease arising on revaluation which has been charged to profit and loss statement in which case the increase is credited to profit and loss statement to the extent that it offsets the previously recorded decrease.

## **RETIREMENTS AND DISPOSALS**

An item of fixed asset is eliminated from the financial statements on disposal. Items of fixed assets that have been retired from active use and are held for disposal are stated at the lower of their net book value and net realisable value and are shown separately in the financial statements. Any expected loss is recognised immediately in the profit and loss statement. In historical cost financial statements, gains or losses arising on disposal are generally recognised in the profit and loss statement.

On disposal of a previously revalued item of fixed asset, the difference between net disposal proceeds and the net book value is normally charged or credited to the profit and loss statement except that, to the extent such a loss is related to an increase which was previously recorded as a credit to revaluation reserve and which has not been subsequently reversed or utilised, it is charged directly to that account. The amount standing in revaluation reserve following the retirement or disposal of an asset which relates to that asset may be transferred to general reserve.

## **VALUATION OF FIXED ASSETS IN SPECIAL CASES**

In the case of fixed assets acquired on hire purchase terms, although legal ownership does not vest in the enterprise, such assets are recorded at their cash value, which, if not readily available, is calculated by assuming an appropriate rate of interest. They are shown in the balance sheet with an appropriate narration to indicate that the enterprise does not have full ownership thereof. Where an enterprise owns fixed assets jointly with others (otherwise than as a partner in a firm), the extent of its share in such assets, and the proportion in the original cost, accumulated depreciation and written down value are stated in the balance sheet.



Alternatively, the pro rata cost of such jointly owned assets is grouped together with similar fully owned assets. Details of such jointly owned assets are indicated separately in the fixed assets register. Where several assets are purchased for a consolidated price, the consideration is apportioned to the various assets on a fair basis as determined by competent valuers.

## **FIXED ASSETS OF SPECIAL TYPES**

Goodwill, in general, is recorded in the books only when some consideration in money or money's worth has been paid for it. Whenever a business is acquired for a price (payable either in cash or in shares or otherwise) which is in excess of the value of the net assets of the business taken over, the excess is termed as 'goodwill'. Goodwill arises from business connections, trade name or reputation of an enterprise or from other intangible benefits enjoyed by an enterprise. As a matter of financial prudence, goodwill is written off over a period. However, many enterprises do not write off goodwill and retain it as an asset.

## **DISCLOSURE**

Certain specific disclosures on accounting for fixed assets are already required by Accounting Standard 1 on 'Disclosure of Accounting Policies' and Accounting Standard 6 on 'Depreciation Accounting'.

*Further disclosures that are sometimes made in financial statements include:*

- Gross and net book values of fixed assets at the beginning and end of an accounting period showing additions, disposals, acquisitions and other movements;
- Expenditure incurred on account of fixed assets in the course of construction or acquisition; and
- Revalued amounts substituted for historical costs of fixed assets, the method adopted to compute the revalued amounts, the nature of any indices used, the year of any appraisal made, and whether an external valuer was involved, in case where fixed assets are stated at revalued amounts.

## **ACCOUNTING FOR GOVERNMENT GRANTS**

This Accounting Standard includes paragraphs set in bold italic type and plain type, which have equal authority. Paragraphs in bold italic type indicate the main principles.

## **INTRODUCTION**

This Standard deals with accounting for government grants. Government grants are sometimes called by other names such as subsidies, cash incentives, duty drawbacks, etc.

*This Standard does not deal with:*

- The special problems arising in accounting for government grants in financial statements reflecting the effects of changing prices or in supplementary information of a similar nature;

- Government assistance other than in the form of government grants;
- Government participation in the ownership of the enterprise.

### ***Definitions***

*The following terms are used in this Standard with the meanings specified:*

- Government refers to government, government agencies and similar bodies whether local, national or international.
- Government grants are assistance by government in cash or kind to an enterprise for past or future compliance with certain conditions. They exclude those forms of government assistance which cannot reasonably have a value placed upon them and transactions with government which cannot be distinguished from the normal trading transactions of the enterprise.

### **EXPLANATION**

The receipt of government grants by an enterprise is significant for preparation of the financial statements for two reasons. Firstly, if a government grant has been received, an appropriate method of accounting therefor is necessary. Secondly, it is desirable to give an indication of the extent to which the enterprise has benefited from such grant during the reporting period. This facilitates comparison of an enterprise's financial statements with those of prior periods and with those of other enterprises.

### ***Accounting Treatment of Government Grants***

#### ***Capital Approach versus Income Approach***

Two broad approaches may be followed for the accounting treatment of government grants: the 'capital approach', under which a grant is treated as part of shareholders' funds, and the 'income approach', under which a grant is taken to income over one or more periods.

*Those in support of the 'capital approach' argue as follows:*

- Many government grants are in the nature of promoters' contribution, *i.e.*, they are given with reference to the total investment in an undertaking or by way of contribution towards its total capital outlay and no repayment is ordinarily expected in the case of such grants. These should, therefore, be credited directly to shareholders' funds.
- It is inappropriate to recognise government grants in the profit and loss statement, since they are not earned but represent an incentive provided by government without related costs.

*Arguments in support of the 'income approach' are as follows:*

- Government grants are rarely gratuitous. The enterprise earns them through compliance with their conditions and meeting the envisaged obligations. They should therefore be taken to income and matched with the associated costs which the grant is intended to compensate.

- As income tax and other taxes are charges against income, it is logical to deal also with government grants, which are an extension of fiscal policies, in the profit and loss statement.
- In case grants are credited to shareholders' funds, no correlation is done between the accounting treatment of the grant and the accounting treatment of the expenditure to which the grant relates.

It is generally considered appropriate that accounting for government grant should be based on the nature of the relevant grant. Grants which have the characteristics similar to those of promoters' contribution should be treated as part of shareholders' funds. Income approach may be more appropriate in the case of other grants. It is fundamental to the 'income approach' that government grants be recognised in the profit and loss statement on a systematic and rational basis over the periods necessary to match them with the related costs. Income recognition of government grants on a receipts basis is not in accordance with the accrual accounting assumption. In most cases, the periods over which an enterprise recognises the costs or expenses related to a government grant are readily ascertainable and thus grants in recognition of specific expenses are taken to income in the same period as the relevant expenses.

### ***Recognition of Government Grants***

*Government grants available to the enterprise are considered for inclusion in accounts:*

- Where there is reasonable assurance that the enterprise will comply with the conditions attached to them; and
- Where such benefits have been earned by the enterprise and it is reasonably certain that the ultimate collection will be made.

Mere receipt of a grant is not necessarily a conclusive evidence that conditions attaching to the grant have been or will be fulfilled. An appropriate amount in respect of such earned benefits, estimated on a prudent basis, is credited to income for the year even though the actual amount of such benefits may be finally settled and received after the end of the relevant accounting period. A contingency related to a government grant, arising after the grant has been recognised, is treated in accordance with Accounting Standard (AS) 4, Contingencies and Events Occurring After the Balance Sheet Date. In certain circumstances, a government grant is awarded for the purpose of giving immediate financial support to an enterprise rather than as an incentive to undertake specific expenditure. Such grants may be confined to an individual enterprise and may not be available to a whole class of enterprises. These circumstances may warrant taking the grant to income in the period in which the enterprise qualifies to receive it, as an extraordinary item if appropriate. Government grants may become receivable by an enterprise as compensation for expenses or losses incurred in a previous accounting period. Such a grant is recognised in the income statement of the period in which it becomes receivable, as an extraordinary item if appropriate.

### ***Non-monetary Government Grants***

Government grants may take the form of non-monetary assets, such as land or other resources, given at concessional rates. In these circumstances, it is usual to account for such assets at their acquisition cost. Non-monetary assets given free of cost are recorded at a nominal value.

### ***Presentation of Grants Related to Specific Fixed Assets***

Grants related to specific fixed assets are government grants whose primary condition is that an enterprise qualifying for them should purchase, construct or otherwise acquire such assets. Other conditions may also be attached restricting the type or location of the assets or the periods during which they are to be acquired or held. Two methods of presentation in financial statements of grants (or the appropriate portions of grants) related to specific fixed assets are regarded as acceptable alternatives.

Under one method, the grant is shown as a deduction from the gross value of the asset concerned in arriving at its book value. The grant is thus recognised in the profit and loss statement over the useful life of a depreciable asset by way of a reduced depreciation charge. Where the whole, or virtually the whole, of the cost of the asset, the asset is shown in the balance sheet at a nominal value. Under the other method, grants related to depreciable assets are treated as deferred income which is recognised in the profit and loss statement on a systematic and rational basis over the useful life of the asset. Such allocation to income is usually made over the periods and in the proportions in which depreciation on related assets is charged. Grants related to non-depreciable assets are credited to capital reserve under this method, as there is usually no charge to income in respect of such assets.

However, if a grant related to a non-depreciable asset requires the fulfillment of certain obligations, the grant is credited to income over the same period over which the cost of meeting such obligations is charged to income. The deferred income is suitably disclosed in the balance sheet pending its apportionment to profit and loss account. The purchase of assets and the receipt of related grants can cause major movements in the cash flow of an enterprise. For this reason and in order to show the gross investment in assets, such movements are often disclosed as separate items in the statement of changes in financial position regardless of whether or not the grant is deducted from the related asset for the purpose of balance sheet presentation.

### ***Presentation of Grants Related to Revenue***

Grants related to revenue are sometimes presented as a credit in the profit and loss statement, either separately or under a general heading such as 'Other Income'. Alternatively, they are deducted in reporting the related expense. Supporters of the first method claim that it is inappropriate to net income and expense items and that separation of the grant from the expense facilitates

comparison with other expenses not affected by a grant. For the second method, it is argued that the expense might well not have been incurred by the enterprise if the grant had not been available and presentation

### ***Presentation of Grants of the Nature of Promoters' Contribution***

Where the government grants are of the nature of promoters' contribution, *i.e.*, they are given with reference to the total investment in an undertaking or by way of contribution towards its total capital outlay (for example, central investment subsidy scheme) and no repayment is ordinarily expected in respect thereof, the grants are treated as capital reserve which can be neither distributed as dividend nor considered as deferred income.

### ***Refund of Government Grants***

Government grants sometimes become refundable because certain conditions are not fulfilled. A government grant that becomes refundable is treated as an extraordinary item. The amount refundable in respect of a government grant related to revenue is applied first against any unamortised deferred credit remaining in respect of the grant. To the extent that the amount refundable exceeds any such deferred credit, or where no deferred credit exists, the amount is charged immediately to profit and loss statement. The amount refundable in respect of a government grant related to a specific fixed asset is recorded by increasing the book value of the asset or by reducing the capital reserve or the deferred income balance, as appropriate, by the amount refundable. In the first alternative, *i.e.*, where the book value of the asset is increased, depreciation on the revised book value is provided where a grant which is in the nature of promoters' contribution becomes refundable, in part or in full, to the government on non-fulfillment of some specified conditions, the relevant amount recoverable by the government is reduced from the capital reserve.

### ***Disclosure***

*The following disclosures are appropriate:*

- The accounting policy adopted for government grants, including the methods of presentation in the financial statements;
- The nature and extent of government grants recognised in the financial statements, including grants of non-monetary assets given at a concessional rate or free of cost.

# 7

## Theory of Management Accounting

Management accounting is generally understood as a process or as referring to the use of techniques. For example, the 1958 Committee on Management Accounting defines it as “the application of appropriate techniques and concepts in processing the historical and projected economic data of an entity to assist management in establishing a plan for reasonable economic objectives, and in the making of rational decisions with a view towards achieving these objectives.” Similarly the emergent conceptual framework of management accounting started by the National Association of Accountants defines it as the process of identification, measurement, accumulation, analysis, preparation, interpretation and communication of financial information used by management to plan, evaluate, and control within an organization and to assure appropriate use of and accountability for its resources. Management accounting also comprises the preparation of financial reports for non-management groups such as shareholders, creditors, regulatory agencies, and tax authorities.

Those techniques are further explicated as follows:

*Identification:* The recognition and evaluation of business transactions and other economic events for appropriate accounting action.

*Measurement:* The quantification, including estimates, of business transactions or other economic events that have occurred or may occur.

*Accumulation:* The disciplined and consistent approach to recording and classifying appropriate business transactions and other economic events.

*Analysis:* The determination of the reasons for, and the relationships of, the reported activity with other economic events and circumstances.

*Preparation and Interpretation:* The meaningful coordination of accounting and/or planning data to satisfy a need for information, presented in a logical format, and, if appropriate, including the conclusions drawn from those data.

*Communication:* The reporting of pertinent information to management and others for internal and external uses.

*Plan:* to gain an understanding of expected business transactions and other economic events and their impact on the organization.

*Evaluate:* To judge the implications of various past and/or future events.

*Control:* To ensure the integrity of financial information concerning an organization's activities or its resources.

*Assure accountability:* To implement the system of reporting that is closely aligned to organizational responsibilities and that contributes to the effective measurement of management performance.

A generally accepted definition of a theory, as it could apply to management accounting, is that a theory represents the coherent set of hypothetical, conceptual, and pragmatic principles for a field of inquiry. Accordingly, management accounting theory may be defined as a frame of reference in the form of a set of postulates and/or principles from different disciplines by which management accounting techniques are evaluated. The task of justifying the existence of a management accounting theory lies in the definition of appropriate postulates and principles. Given the differences in the objectives between management accounting and financial accounting, the postulates of financial accounting, with some exceptions, do not hold true for management accounting. In fact, the 1961 AAA Management Accounting Committee, charged with determining the relevance of financial accounting concepts to management accounting, concluded that the concepts underlying internal reporting differ in several important respects from those of external public reporting;

These differences are due to differences in the objectives of both areas; and it is justified to develop a separate body of concepts applicable to internal reporting.

There is a need, then, for the accounting profession to develop a conceptual framework in management accounting to guide the development and use of techniques. Similar to financial accounting, such a framework would include the following elements:

The *objectives* of management accounting as the first and important step for the development of the elements of the conceptual framework for management accounting.

*Qualitative characteristics* to be met as essential attributes of management accounting information.

*Management accounting concepts* as the foundation for the body of knowledge contained within the conceptual framework.

*Management accounting techniques* and procedures that constitute the internal accounting systems. Although these elements and the total integrated



framework have not yet been formalized through a deductive reasoning process, they do exist in the literature as separate attempts to resolve these issues. Each of the proposed elements of management accounting will be examined next.

## **MANAGEMENT ATTITUDES TOWARDS ACCOUNTING**

Attitudes have an important influence on the nature of a country's accounting principles. Indeed, the words "generally accepted" mean a consensus, a general acceptance, of how financial results are to be reported by a company to its shareholders. "General acceptance," unfortunately for the conduct of global business, is dependent on where a company is domiciled. The attitude of management in Belgium, Italy, and Switzerland is generally against disclosure of detailed financial results to the public.

Switzerland, in particular, is known for its privacy of financial dealings. At one time, a company domiciled in Switzerland with publicly traded shares was required to report only its financial results with regard to its operations in Switzerland. A publicly traded company doing \$1 million in business in Switzerland and \$1 billion outside Switzerland was required to report only on its financial results of doing \$1 million in business in Switzerland. This hardly provides a true and fair picture of the company's operations to a reader of its financial reports.

The concept of privacy is so pervasive in Switzerland that management may not even know who the shareholders and the bondholders are, because stock and bonds can be issued in bearer form. This means that the individual or firm possessing the shares or bonds is the owner of these securities. Dividends and interest payments are made to the individual who physically presents the shares or bonds for payment. One can appreciate the lack of incentive for disclosure in Switzerland if management itself does not know who the shareholders and bondholders are and the shareholders and bondholders themselves are not anxious to reveal their identities. It has been observed that only those who prepare the published financial statements of companies domiciled in Belgium, Italy, and Switzerland have a clear understanding of the actual financial results, not those who read the published reports.

On the other side of the coin, managements in Brazil, Finland, Indonesia, Philippines, South Africa, the United Kingdom, the United States, and Zimbabwe have a more positive attitude towards disclosure. It is more positive in comparison with the managements of companies in Belgium, Italy, and Switzerland—human beings are not prone to admitting to their errors. Managements are proud to boast of their accomplishments, but no management relishes reporting on its failures, or poor performance in the generation of profits. Nevertheless, the attitude of management in the United States, the United Kingdom, and in the other aforementioned nations is that it is in their best interests to have the public aware of the company's overall financial state.

They feel that this is a positive force in the public's participation in the buying of securities issued by their companies. However, these nations are



actually the exceptions to the rule. Although most managements of companies throughout the world may not be so negatively disposed as managements in Belgium, Italy, and Switzerland to public disclosure, most are not as positive in attitude as those in the United States and the United Kingdom. Most managements throughout the world are somewhat reluctant to have the financial results of the companies under their stewardship disclosed for public scrutiny. This attitude influences the development of what is generally accepted as accounting principles.

## **REGULATION AND SELF-REGULATION**

Accounting guidelines, or generally accepted principles, can be dictated by the government or can be the result of a consultative process among professional accounting organizations within a nation. Some countries have established their accounting principles relying on strong, professional, self-regulating organizations with relatively little government intervention such as Australia, Hong Kong, Ireland, Mexico, New Zealand, Zambia, and Zimbabwe. Thailand, the United Kingdom, and the United States have a strong reliance on professional self-regulating organizations, but a greater degree of government intervention. Belgium, Germany, and Japan have a high degree of government intervention, but with some participation by professional organizations. Finland, France, and Italy have a near total reliance on government agencies to guide the establishment of accounting principles. There are a few countries in the world, such as Portugal, South Africa, and Switzerland, where accounting principles have been only modestly influenced either by government or by professional organizations. It is interesting to note the varying role of government intervention for those nations where there is a strong bias against public disclosure. In Switzerland, as one might expect, the degree of government intervention in establishing accounting principles is low. However, the opposite is true in Belgium and Italy. Although one may argue over the particular roles of the government and professional societies in the setting of standards, the inescapable fact is that there is enormous variation among the nations of the world as to who is involved, and the respective degree of involvement.

\*Intangible asset and Goodwill Amortization is excluded from operating income in Germany. Also, Goodwill from consolidation and the equity method of accounting is not reflected on statements. EEC Directive #7, adopted in 1986, will require Goodwill disclosure and Amortization, and the equity method, on statements issued subsequent to 12-31-89.

## **NEED FOR AUDITS**

Differences in approaches to outside auditors are also noteworthy. Spain does not require an outside audit of private or public or government owned or controlled corporations. Put another way, Spain does not require outside auditors. On the other hand, France, Italy, Malaysia, New Zealand, the Philippines, South Africa, the United Kingdom, and Zimbabwe require an outside audit of all

corporate entities, public, private, or government owned. Brazil, Chile, Japan, Mexico, Portugal, and the United States do not require an outside audit of a private company, but public and government owned companies must be audited. Argentina, Colombia, Denmark, Finland, Hong Kong, Indonesia, Ireland, Switzerland, and Thailand require public and private corporations to be audited, but government owned or controlled companies are exempted from this requirement.

## **OUTSIDE INFLUENCES**

One country's financial reporting practices can be influenced by another. It is not surprising to realise that the accounting practices in Australia, Hong Kong, Ireland, Malaysia, South Africa, Zambia, and Zimbabwe are heavily influenced by accounting practices in the United Kingdom. The United States, as an excolony of Great Britain, has historically been under the influence of the United Kingdom, but has long since parted ways. The United States, in turn, has influenced the accounting practices in Brazil, Chile, Colombia, Indonesia, and the Philippines. Australia has practices in common with both the United Kingdom and the United States, because it has modified its original British inspired practices with the adoption of current American practices. Italy, Portugal, and Spain are influenced by French accounting practices. Japan adopted German accounting practices in the late nineteenth century and was forced to adapt to American standards after World War II. The nations that most strongly influence others are the United Kingdom and the United States, which, interestingly, have a strong influence on each other.

## **IMPACT OF LEGAL SYSTEMS**

In reviewing acceptable accounting practices around the world, one can observe that there are other influences that seem to play an important role in determining what is acceptable to a particular nation. One of these is the legal system. There are two principal forms of legal systems. Some nations practice a codification of law, where the written law attempts to cover every contingency. Any dispute can presumably be resolved by referring it the nation's code of law. The French Napoleonic Code epitomizes this approach to law.

The other major approach to law is common or case law. Here, legislation is written in more general language, leaving it to the courts to decide on the application of the law to particular situations. In common law countries, a case is tried by referring both to the law itself and to previous court cases that provide interpretation of the broader clauses and statements contained within the law. The United Kingdom epitomizes a nation that relies on a common body of law. The United States, along with the United Kingdom's other ex-colonies and members of the British Commonwealth, rely on common rather than a codified body of law.

The choice of the way to administer the laws of a nation influences accounting practices. Nations with a codified body of law are more apt to have an accounting

system that provides little in the way of interpretation by accounting practitioners. On the other hand, a system of law that is permitted to evolve through a succession of court interpretations is more apt to have an accounting system that is more flexible in the interpretation of its pronouncements and more accommodating to a changing financial environment.

The same can be said of political systems. A political system that calls for a centrally planned economy is more apt to have a less flexible accounting system with little leeway on how various financial results are to be interpreted in the preparation of financial statements. One of the many challenges facing eastern Europe today is developing an approach to accounting that is something more than a measure of satisfying a state inspired quota.

## **ROLE OF PUBLIC DISCLOSURE**

The nature of business ownership also impacts on the role of accounting within a nation. The United States has wide public participation in the ownership of its major companies. A government body has been established, the Securities and Exchange Commission (SEC), to test the adequacy and accuracy of published reports.

The SEC is also mandated to ensure adequate and timely disclosure of important matters to shareholders. The United States has an active body of financial analysts that scrutinize the financial reports of companies for the purpose of recommending the sale or purchase of the company's shares. The financial press is aggressive in its approach in analyzing the financial results of a company and reporting on its findings. Certain financial publications seem to take particular glee in seeking out opportunities to disagree with the pronouncements of management. The financial press, including a plethora of stock advisory services, publish reports that often contain a comparative financial analysis of companies within the same industry. In America, there is little escape from public scrutiny of management performance of publicly traded companies.

Public disclosure is important in the United States because public ownership of the stock holdings of companies is pervasive. With so many shareholders wanting to know what is going on in the companies in which they own, or are considering purchasing, stock, there is a market, so to speak, for public disclosure. There is also a market for public criticism of management performance. Public disclosure is quite low on the priority list in France, where private ownership is more common. Disclosure is not very forthcoming in Germany, where major shareholdings are held by banks. The German banks, with direct access to corporate information, do not have to rely on public disclosure by way of financial reports to realise what is going on in a company. The bank's close connection to a company is bonded by owning large blocks of shares in the company and sitting on its board of directors. Share ownership and board representation make bankers more than passive lenders of money. They can, and do, guide the destiny of a company. Being in such a position, the bankers need hardly rely on published financial information.

This kind of relationship between banks and corporate borrowers is not tolerated in the United States. Banks are regulated and, with certain exceptions, prohibited from owning stock in corporations, from having access to privileged information that is not properly disclosed, and from controlling the destiny of companies other than what is included in loan covenants. Banks may exercise control when a loan goes into default, but that is presumably temporary in nature, ceasing when a company has overcome its financial difficulties. Banks are normally required to eventually liquidate what shareholdings they may have received in a workout situation for a defaulted loan. Therefore, U.S., banks are dependent on audited financial reports in assessing whether to lend money to a corporation. The same is true for individuals and financial institutions in assessing whether to buy a new issue of stock or bonds from a corporation. All of this adds to the imperative for public disclosure in the United States and, for that matter, in the United Kingdom, which may be lacking in other nations.

Published financial statements are not as indispensable to the workings of the financial system in Japan as they are in the United States. In the United States, stock ownership is dispersed and companies rely on issuing new stock as a source of capital or obtaining loans from financial institutions, which cannot be done without certified and audited statements. Banks require such statements in making loans. This is not the case in Japan. Public ownership of stock represents a fairly small percentage of the shares of stock outstanding. For most Japanese companies, the majority of the stock is held by associated companies within a “heiretsu,” a galaxy of interlocking corporations. This mutual holding of shares both within the heiretsu and among the heiretsu is the bonding agent that keeps the heiretsu together and gives it its monolithic appearance to outsiders. Most of the shares of the heiretsu, and the companies making it up, will never find their way to the Tokyo stock exchange, because their purpose is not for trading or speculation but to maintain the corporate integrity of the heiretsu. With the majority of stock tucked away in safes, never to be removed, it is virtually impossible to have forced mergers and takeovers as is common in the United States and elsewhere in the world.

In the United States, bidding up the price of shares of most public corporations high enough will provide the bidder with the majority of shares as long as he or she has the financial wherewithal to purchase the shares. By obtaining a majority of shares, he or she is in a position to force a merger or a takeover of a company. Unfriendly acts of this type are virtually impossible in Japan, because bidding up the price of the stock does not provide the buyer with a majority of shares. The principal argument in favour of unfriendly takeovers is to unseat an entrenched, and seemingly irresponsible or incompetent management for the good of the shareholders.

In Japan, management is entrenched in the sense that no outsider can buy a sufficient amount of stock to unseat management. Although some may maintain that this gives management the opportunity to become complacent, one can hardly ascribe complacency to Japanese management. Japanese management

is kept on its toes by the intense domestic competition for market share among the heiretsu. Moreover, the Japanese system of having the majority of shareholdings safely tucked away frees them from the necessity of having their actions dictated by the next quarter's reported profits. Japanese management can focus on obtaining long-term market share rather than on enhancing short term reported profits. This is one of the contributing factors to the success of the Japanese in the world of global business.

Within each heiretsu, and indeed forming the central control mechanism, is a bank. The bank's purpose is to facilitate the corporate goals set forth by those running the heiretsu, which is a body made up of senior managers and bankers. Major corporate decisions also involve MITI, the influential Ministry of International Trade and Industry, which acts as a sort of clearinghouse among the leading six heiretsu. These six collectively represent much of Japan's industrial might. Even though they compete vigorously in the domestic market, they do, through the coordinating efforts of MITI and the mutual shareholding among the heiretsu of each other's stock, represent a common front to the world—what is called “Japan, Inc.”

Japan, Inc. is a sort of “insider's” world, where public disclosure has little meaning. Relatively little stock is sold for the purposes of raising capital. Most capital is raised in the form of debt by the associated bank within the heiretsu. The bank knows all it has to know because of its active coordinating activities in pursuing the goals of the heiretsu and its meaningful shareholdings and directorships of the hundreds of individual companies, subsidiaries, and associated companies within the heiretsu. Disclosure is made, but on the basis that those who really need to know the information already possess it. Individual Japanese investors appear satisfied with the system as it exists. The imperative, or necessity, to disclose financial information is weak in Japan as compared to the United States.

## **MANAGEMENT ACCOUNTING AND DECISION-MAKING**

Management accounting writers tend to present management accounting as a loosely connected set of decision-making tools. There is a high degree of consistency and standardization in methodology of presentation. The concepts and assumptions which form the basis of management accounting will be formulated in a comprehensive management accounting decision model. The formulation of theory in terms of conceptual models is a common practice. Virtually all in business administration use some type of conceptual framework or model to integrate the fundamentals being presented.

In economic theory, there are conceptual models of the firm, markets, and the economy. In management courses, there are models of organizational structure and managerial functions. In marketing, there are models of marketing decision-making and channels of distribution. Even in financial accounting, models of

financial statements are used as a framework for teaching the fundamentals of basic financial accounting. The model,  $A = L + C$ , is very effective in conveying an understanding of accounting. Management accounting texts are based on a very specific model of the business enterprise. For example, all texts assume that the business which is likely to use management accounting is a manufacturing business. Also, there is unanimity in assuming that the behaviour of variable costs within a relevant range tends to be linear. The consequence of assuming that variable costs vary directly with volume is a classification of cost into fixed and variable.

### **THE MANAGEMENT ACCOUNTING PERSPECTIVE OF THE BUSINESS ENTERPRISE**

*The management accounting view of business may be divided into two broad categories:*

1. Basic features and
2. Basic assumptions.

#### **Basic Features**

The business firm or enterprise is an organizational structure in which the basic activities are departmentalized as line and staff. There are three primary line functions: marketing, production, and finance. The organization is run or controlled by individuals collectively called management. The staff or advisory functions include accounting, personnel, and purchasing and receiving.

The organization has a communication or reporting system (*e.g.*, budgeting) to coordinate the interaction of the various staff and line departmental functions. The environment in which the organization operates includes investors, suppliers, governments (state and federal), bankers, accountants, lawyers, competitors, *etc.* This descriptive model shows that there are different levels of management. A commonly used approach is to classify management into three levels: Top management, middle management, and lower level management. The significance of a hierarchy of management is that decision-making occurs at three levels.

#### **Basic Assumptions in Management Accounting**

The framework of management accounting is based on a number of implied assumptions. Although no single work has attempted to identify all of the assumptions.

*Five categories of assumptions will be presented:*

1. Basic goals
2. Role of management
3. Nature of Decision-making
4. Role of the accounting department
5. Nature of accounting information



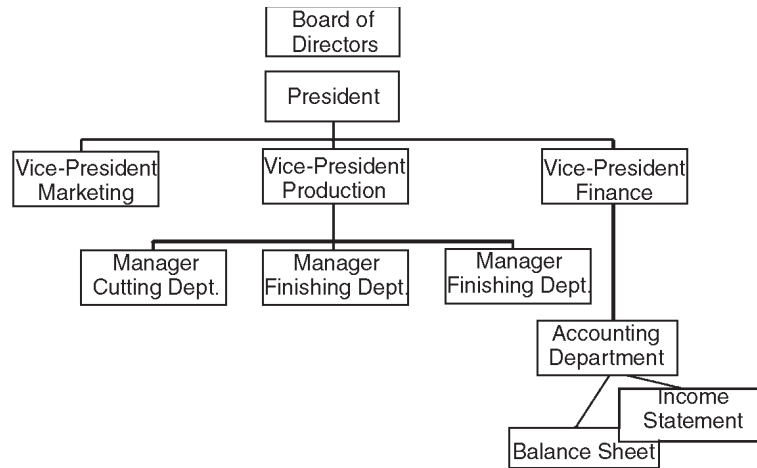


Fig. Conventional Organizational Chart.

### Basic Goal Assumptions

The basic goals or objectives the business enterprise may be multiple. For example, the goal may be to maximize net income.

Other goals could be to maximize sales, ROI, or earnings per share. Management accounting does not require a specific type of goal.

However, whatever form the goal takes, management will at all times try to achieve a satisfactory level of profit. A less than satisfactory level of profit may portend a change in management.

### Role of Management Assumptions

The success of the business depends primarily upon the skill and abilities of management—which skills can vary widely among different managers. The business is not completely at the mercy of market forces.

Management can through its actions (decisions) influence and control events within limits. In order to achieve desired results, management makes use of specific planning and control concepts and techniques.

Planning and control techniques which management may use include business budgeting, cost volume profit analysis, incremental analysis, flexible budgeting, segmental contribution reporting, inventory models, and capital budgeting models. Management, in order to improve decision-making and operating results, will evaluate performance through the use of flexible budgets and variance analysis.

### Decision-making Assumptions

A critical managerial function is decision-making. Decisions which management must make may be classified as marketing, production, and financial.

Decisions may also be classified as strategic and tactical and long-run and short-run. A primary objective of decision-making is to achieve optimum utilization of the business's capital or resources. Effective decision-making requires relevant information and special analysis of data.

### Accounting Department Assumptions

The accounting department is a primary source of information necessary in making-decisions. The accounting department is expected to provide information to all levels of management. Management will consider the accounting department capable of providing data useful in making marketing, production, and financial decisions.

### Nature of Accounting Information

In order for the accounting department to make meaningful analysis of data, it is necessary to distinguish between fixed and variable costs and other types of costs that are not important in the recording of business transactions.

Some but not all of the information needed by management can be provided from financial statements and historical accounting records. In addition to historical data, management will expect the management accountant to provide other types of data, such as estimates, forecasts, future data, and standards. Each specific managerial technique requires an identifiable type of information.

The accounting department will be expected to provide the information required by a specific tool. In order for the accounting department to make many types of analysis, a separation of costs into fixed and variable will be required. The management accountant need not provide information beyond the relevant range of activity.

### IMPLICATIONS OF THE BASIC ASSUMPTIONS

The assumption that there are three types of decisions, (marketing, production, and financial) requires that management identify the specific decisions under each category. The identification of specific decisions is critical because only then can the appropriate managerial accounting technique be properly used.

An understanding of financial statements is critical to the ability of management to make good decisions. Financial statements, although prepared by accountants, are actually created by management through the implementation of decisions. The historical data from which accountants prepare financial statements result from actual management decisions.

The reader and user of financial statements is not primarily the accountant but management. From a management accounting point of view, it is management rather than accountants that needs to have the greater understanding of financial statements.

*Some typical management decisions of a manufacturing business include:*

Marketing	Production	Financial
Pricing	Units of equipment	Issue of bonds
Sales forecast	Factory workers' wages	Issue of stock
Number of sales people	Overtime, second shift	Bank loan
Sales people	Replacement of equipment	Retirement of



compensation		bonds
Number of products	Inventory levels	Dividends
Advertising	Order size	Investment in
	securities	
Credit	Suppliers	

The income statement and the balance sheet can be viewed as a descriptive model for decision-making. Financial statements reflect success or lack of success in making decisions. Management can be deemed successful when the desired income has been attained and financial position is considered sound. To achieve managerial success management must manage successfully the assets, liabilities, capital, revenue and expenses. Financial statements, then, serve as a ready and convenient check list of decision-making areas.

*The basic balance sheet equation, of course, is:*

$$A = L + C.$$

A management accounting interpretation is that the assets or resources come from the creditors (liabilities) and the owners (capital). It is management responsibilities to manage both sides of the equation. That is, management must make decisions about both the resources (assets) and the sources of the assets (liabilities and capital). Each item on the balance sheet is an area of management. Stated differently each item on financial statements represents a critical area sensitive to mismanagement. Cash, accounts receivable, inventory, fixed assets, accounts payable, *etc.* can be too large or too small. Given this fact, then, for each item there must be the right amount or optimum. It is management's responsibility to make the best decision possible regarding each item on the financial statements. Gross mismanagement of any single item could either result in the failure of the business or the downfall of management.

*Following are some examples of decisions associated with specific financial statement items:*

Balance Sheet Items	Decision
Cash	Minimum level
Accounts receivable	Credit terms
Inventory	Order size
Fixed asset	Capacity size
Bonds payable	Amount and interest rate
Income Statement Items	
Sales	Price, number of products,
number of sales people	
Salesmen compensation	Salaries and commission rate
Advertising	Media, advertising budget

The statement that the management accountant will be required to furnish information not of a historical nature means that the accountant will have to deal with planned and estimated or future data.

Furthermore, much of this data will be not be found in the historical data bank from which the accountant prepares financial statements.

The management accountant may be required to do analysis requiring data of an economic nature. For example, analysis of pricing may require data about the company's demand curve. Labour cost analysis may require estimating the productivity of labour relative to various wage rates.

## **DECISION-MAKING IN MANAGEMENT ACCOUNTING**

In management accounting, decision-making may be simply defined as choosing a course of action from among alternatives. If there are no alternatives, then no decision is required. A basis assumption is that the best decision is the one that involves the most revenue or the least amount of cost. The task of management with the help of the management accountant is to find the best alternative.

*The process of making decisions is generally considered to involve the following steps:*

- Identify the various alternatives for a given type of decision.
- Obtain the necessary data necessary to evaluate the various alternatives.
- Analyse and determine the consequences of each alternative.
- Select the alternative that appears to best achieve the desired goals or objectives.
- Implement the chosen alternative.
- At an appropriate time, evaluate the results of the decisions against standards or other desired results.

From the descriptive model of the basic features and assumptions of the management accounting perspective of business, it is easy to recognize that decision-making is the focal point of management accounting.

The concept of decision-making is a complex subject with a vast amount of management literature behind it. How businessmen make decisions has been intensively studied.

*In management accounting, it is useful to classify decisions as:*

- Strategic and tactical
- Short-run and long-run

## **STRATEGIC AND TACTICAL DECISIONS**

In management accounting, the objective is not necessarily to make the best decision but to make a good decision. Because of complex interacting relationships, it is very difficult, even if possible, to determine the best decision. Management decision-making is highly subjective.

Whether a decision is good or acceptable depends on the goals and objectives of management. Consequently, a prerequisite to decision-making is that management have set the organization's goals and objectives.

For example, management must decide strategic objectives such as the company's product line, pricing strategy, quality of product, willingness to assume risk, and profit objective. In setting goals and objectives, it is useful to distinguish

between strategic and tactical decisions. Strategic decisions are broad based, qualitative type of decisions which include or reflect goals and objectives.

Strategic decisions are non-quantitative in nature. Strategic decisions are based on the subjective thinking of management concerning goals and objectives. Tactical decisions are quantitative executable decisions which result directly from the strategic decisions.

The distinction between strategic and tactical is important in management accounting because the techniques of management accounting pertain primarily to tactical decisions. Management accounting does not typically provide techniques for assisting in making strategic decisions.

*Examples of strategic decisions and tactical decisions from a management accounting point of view include:*

Decision Items	Strategic Decisions	Tactical Decisions
Cash	Maintain minimum level without excessive risk	Specific level of cash
Accounts receivable	Sell on credit	Specific credit terms
Inventory	Maintain safety stock	Specific level of inventory
Price	Be volume dealer by setting price lower than competition	Specific price

Once a strategic decision has been made, then a specific management tool can be used to aid in making the tactical decision. For example, if the strategic decision has been made to avoid stock outs, then a safety stock model may be used to determine the desired level of inventory.

The classification of decisions as strategic and tactical logically results in thinking about decisions as qualitative and quantitative.

In management accounting, the approach to decision-making is basically quantitative. Management accounting deals with those decisions that require quantitative data. In a technical sense, management accounting consists of mathematical techniques or decision models that assist management in making quantitative type decisions.

*Examples of quantitative decisions include:*

Decision	Quantitative Criterion
Price	Maximum income
Inventory order size	Minimum total inventory cost
Purchase of new equipment	Lowest operating costs
Credit terms	Maximum net income/sales
Sales people compensation	Minimum total compensation

## SHORT-RUN VERSUS LONG-RUN DECISION-MAKING

The decision-making process is complicated somewhat by the fact that the horizon for making decisions may be for the short-run or long-run. The choice

between the short-run or the long-run is particularly critical concerning the setting of profitability objectives. A fact of the real business world is that not all companies pursue the same measures of success.

*Profitability objectives which management might choose to maximize include:*

- Net income
- Sales
- Return on total assets
- Return on total equity
- Earnings per share

The decision-making process is, consequently, affected by the profitability objective and the choice of the long-run *versus* the short-run. If the objective is to maximize sales, then the method of financing a new plant is not immediately important. However, if the objective is to maximize short-run net income, then management might decide to issue stock rather than bonds to avoid interest expense. In the short-run, profits might suffer from expenditures for preventive maintenance or research and development.

In the long-run, the company's profit might be greater because of preventive maintenance or research and development.

Although the interests of management and the organization may be presumed to coincide, the possibility of making decisions for the short-run may cause a conflict in interests. An individual manager planning to make a career or job change might have a tendency to make decisions that maximize profitability in the short-run. The motivation for pursuing short-run profits may be to create a favourable resume. The tools in management accounting such as C-V-P analysis, variance analysis, budgeting, and incremental analysis are not designed to deal with long range objectives and decision.

Consequently, the results obtained from using management accounting tools should be interpreted as benefits for the short-run, and not necessarily the long-run. Hopefully, decisions which clearly benefit the short-run will also benefit the long-run. Nevertheless, it is important for the management accountant, as well as management, to beware of possible conflicts between short-run and long-run planning and decision-making.

## MANAGEMENT ACCOUNTING DECISION MODELS

Management accounting consists of a set of tools that have been proven to be useful in making decisions involving revenue and cost data. Even though many of the techniques appear to be simplistic in nature, they have proven to be of considerable value. The techniques which are all based on mathematical equations or mathematical relationships. All of the techniques may be regarded as mathematical decision-making models.

*For example, the foundation of C-V-P analysis is the equation:*

$$I = P(Q) - V(Q) - F.$$

The approach described concerning the use of financial statements as a checklist to identify decision-making areas may also be used to identify the appropriate

management accounting technique. For every item on financial statements, there is one or more appropriate management accounting technique. The following emphasizes the association of management accounting tools with specific financial statement items.

Financial Statement Items	Management Accounting Tools
<b>Balance Sheet:</b>	
Cash	Cash budget Capital budgeting models
Accounts receivable	Incremental analysis
Inventory	EOQ models, Safety stock model
Fixed assets	Incremental Analysis, Capital budgeting
<b>Income Statement:</b>	
Sales	C-V-P analysis, Segmental reporting Incremental analysis
Expenses	C-V-P analysis, Incremental analysis
Net income	Direct costing

- Comprehensive business budgeting
- Flexible budgeting and variance analysis
- Variance analysis
- Capital budgeting
- Incremental analysis
  - Keep or replace
  - Additional volume of business
  - Credit analysis
  - Demand analysis
  - Sales people compensation analysis
  - Capacity analysis
- Cost-volume-profit analysis
- Cost behaviour analysis
- Return on investment analysis
- Economic order quantity analysis
- Safety stock/lead time analysis
- Segmental reporting analysis

## DECISION-MAKING AND REQUIRED INFORMATION

The assumption that management will use management accounting tools in making decisions places a burden on the management accountant.

Each tool requires special information. The management accountant will be asked to provide the specialized information needed. Management accounting texts have traditionally emphasized the mechanics of techniques with little emphasis on how to obtain the necessary data. In many cases, the inability to obtain the required information has rendered a particular technique useless.

*The following emphasizes the kind of information required for certain selected tools:*

<b>Tools</b>	<b>Required Information</b>
Flexible budget	Variable cost rates
Variance analysis	Standard costs
EOQ models	Purchasing cost, carrying cost
Incremental analysis costs	Opportunity cost, escapable costs
Capital budgeting models	Future cash inflows, future cash outflows
Cost-volume-profit analysis	Variable cost percentage, fixed cost, desired income

## **COMPREHENSIVE MANAGEMENT ACCOUNTING DECISION MODEL**

As the discussion should make clear, decision-making is a complex network of interrelated decision variables. Management can face an overwhelming task if it tries to identify every variable and minute decision relationship.

One approach to dealing with complexity is the development of models, both mathematical and descriptive for the purpose of simulating only the relevant or more important variables.

Management accounting is, therefore, one approach to simplifying complex relationships by dealing with key variables and models based on restricting assumptions.

*The decision-making process discussed in this part leads to the cease from a management accounting perspective that there is a connecting link between the following:*

- Financial statement items
- Strategic and tactical decisions
- Management accounting techniques
- Decision-making information.

# ACCOUNTING EDUCATION

Accounting education is instrumental in preparing individuals for careers in finance, business, and related fields by providing them with a comprehensive understanding of financial principles, practices, and regulations. It encompasses a diverse range of topics, including financial accounting, managerial accounting, taxation, auditing, and financial reporting standards. Through a combination of theoretical knowledge and practical application, accounting education equips students with the skills and competencies necessary to analyze financial data, make informed decisions, and communicate effectively with stakeholders. Furthermore, accounting education emphasizes the development of critical thinking, problem-solving, and analytical skills. Students are challenged to apply accounting principles to real-world scenarios, analyze complex financial information, and formulate strategic recommendations. By engaging in hands-on exercises, case studies, and simulations, students develop the ability to navigate the intricacies of financial analysis and decision-making in diverse business environments. Additionally, accounting education instills ethical awareness and professional integrity in students. Given the importance of ethical conduct in the accounting profession, accounting programs emphasize the ethical responsibilities of accountants and the need for adherence to professional codes of conduct. Students learn about ethical dilemmas commonly encountered in accounting practice and develop the moral reasoning skills needed to address these challenges ethically and responsibly. Through a combination of rigorous coursework, practical experience, and ethical instruction, accounting education prepares students to excel in their careers and uphold the highest standards of integrity and professionalism in the field of accounting. The book on Accounting Education provides a comprehensive overview of foundational principles, advanced topics, and practical applications in the field, preparing students for successful careers in finance and accounting.



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