

MAR GREGORIOS COLLEGE OF ARTS & SCIENCE

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DEPARTMENT OF COMMERCE

SUBJECT NAME: MANAGEMENT ACCOUNTING

SUBJECT CODE: CPZ6B

SEMESTER: VI

PREPARED BY: PROF.T. PAPITHA

Course Objectives: To enable the students to get knowledge about the various techniques of Management Principles. To make the students to get practical skill in solving management problems.

Unit I: Introduction Management Accounting - Meaning - Scope - Importance - Limitations - Management Accounting Vs Cost Accounting - Management Accounting Vs Financial Accounting. **Unit II:** Financial Statement Analysis and Interpretation of Financial Statements - Nature and Significance - Types of Financial Analysis - Tools of Analysis - Comparative Statements - Common size Statement - Trend Analysis.

Unit II: Financial Statement Analysis- Analysis and Interpretation of Financial Statements - Nature and Significance - Types of Financial Analysis - Tools of Analysis - Comparative Statements - Common size Statement - Trend Analysis.

Unit III: Ratio Analysis Meaning - Advantages - Limitations - Types of Ratios - Liquidity Ratios - Profitability Ratios - Turnover Ratios - Capital Structure Ratios - Leverage Ratios - Calculation of Ratios.

Unit IV: Cash Flow Analysis & Marginal Costing Meaning of Cash Flow Statements - Advantages - Limitations - Preparation of Cash Flow Statement - Types of Cash flows - Operating, Financing and Investing Cash flows. Application of Marginal Costing in Decision Making - Make or Buy - Shutdown or Continue - Exploring New Markets.

Unit V: Budgetary Control & Capital Budgeting Control. Budgetary Control - Meaning - Preparation of various Budgets - Cash Budget - Flexible Budget - Production Budget - Sales Budget. Capital Expenditure Control - Meaning of Capital Budgeting - Assessment of Capital Expenditure through Pay Back Method, Net Present Value Method and Accounting Rate of Return Method.

Suggested Readings

1. Maheshwari, S.N., Management Accounting, Sultan Chand & Sons
2. Murthy A and Guruswamy S, Management Accounting- Theory & Practice, Vijay Nicole Imprints Pvt. Ltd. Chennai
3. Charles T. Horngren and Gary Sundem, N, Introduction to Management Accounting, Prentice Hall
4. Sharma and Shashi K. Gupta, Management Accounting, Kalyani Publishers
5. Reddy, T.S. & Dr. Hari prasad Reddy, Y, Management Accounting, Margham Publications, Chennai.
6. Hansen - Mowen, Cost Management Accounting and Control, South Western College

E-Resources www.accountingcoach.com

www.accountingstudyguide.com

www.futureaccountant.com

www.thestudentcpa.com

UNIT I
INTRODUCTION
BASIC OF MANAGEMENT ACCOUNTING

INTRODUCTION

A business enterprise must keep a systematic record of what happens from day to-day events so that it can know its position clearly. Most of the business enterprises are run by the corporate sector. These business houses are required by law to prepare periodical statements in proper form showing the state of financial affairs. The systematic record of the daily events of a business leading to presentation of a complete financial picture is known as accounting. Thus, Accounting is the language of business. A business enterprise speaks through accounting. It reveals the position, especially the financial position through the language called accounting.

WHAT IS MANAGEMENT ACCOUNTING?

Management accounting is 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 management groups such as shareholders, creditors, regulatory agencies and tax authorities.

SCOPE OF MANAGEMENT ACCOUNTING

The scope of management accounting covers all the tools and techniques which help the management in effective discharge of their functions. The scope, therefore is very wide and broad based, covering mainly the following aspects of management accounting.

Financial Accounting: Financial accounting provides the data base on the basis of which management accounting processes information to management to serve their needs. Proper designed financial accounting system forms the very base on which management accounting prepares relevant and analytical report to facilitate management decision making. Management accounting assembles and presents the financial accounting data in meaningful terms for resolution of managerial issues. Hence, without the back up by Financial Accounting feeding system, management accounting functions are not possible.

Cost Accounting: Cost accounting provides the most sophisticated techniques of Marginal Costing, Budgetary Control, Standard Costing, inter firm comparison which enables Management Accounting to provide necessary information for effective decision making and control. Costing accounting helps in performance appraisal and formulation of pricing policies with costing information. It is in fact the integral arm of

management without the support system of costing accounting, the inefficiencies in various operations cannot be highlighted to management.

Tools and Techniques of Management control: Management accounting makes a detailed analysis and interpretation of financial statements through the tools of comparative statements, trend ratios, ratio analysis and fund flow statement. Accounting Ratios help in the evaluation of operating performance and in judging the liquidity and solvency of the enterprise. Fund flow statement focuses on the management of funds in the operations of the business variance analysis aims at controlling the various elements of costs, reporting the adverse variation for management action.

Statistical and Quantitative Techniques: A number of statistical tools and technique is like linear programming; regression analysis facilitates in providing information in a meaningful manner for effective control and decision making. Hence management accounting also includes these techniques in its scope.

Inflation Accounting: This is also referred as revaluation accounting which is concerned in maintaining capital in real terms and accordingly profit is calculated. This involves the exercise of revaluing the assets at current prices and shows the increase/decrease in the value of capital. On the assumption that the monetary unit value is unstable; the impact on capital is ascertained as a result of changes in value of money. This is therefore another technique which falls within the orbit of management accounting.

Tax Accounting: Tax planning is another important area which has a serious impact on the profitability of the concern. Without proper planning of tax, the profits of the enterprise are hijacked which affects adversely the business operations. Hence, it an important activity of management accounting.

Management Reporting: Management report forms the integral aspect of management accounting system. They identify the areas where management attention is desired for corrective action. Decision making is facilitated based on the information provided by the report. The reports should portray all the relevant aspects concerning the operative efficiency of the business. Report has to be well designed and frequent to help the management. This is an essential part of management accounting.

ROLE OR IMPORTANCE OR SIGNIFICANCE OF MANAGEMENT ACCOUNTING

In the present complex business world, management accounting has become an integral part and useful tool of management system. The report prepared and data edited on the basis of management accounting become the foundation of successful operation of managerial activities. The role of management accounting as a tool of management can be studied under following headings:

Increase in Efficiency: Management accounting increases efficiency of various business activities. The targets of different departments are fixed in advance on the basis of forecasting and planning and later on actual performance is compared with them. This process helps in measuring and increasing the efficiency of the enterprise.

Proper Planning: Planning is a primary function of management and management accounting has an important role in making it proper. Management is able to plan various activities with the help of accounting information. On the basis of information provided by management accountant, the work-load of each and every individual is fixed in advance and the activities of the concern are planned in a systematic manner.

Measurement of Performance: Management accounting also plays an important role in measurement and management of work performance through the techniques of standard costing and budgetary control.

Effective Management Control: Efficiency of management depends upon its effective control and from this point of view also management accounting has its specific role. Nowadays the function of control has become a continuous process.

Improved Services to Customers: The installation of various types of control through management accounting leads to reduction in cost and price and maintenance of standard level of quality of goods produced and services rendered.

Maximizing Profits: The thrust of various techniques of management accounting is to control cost of production and to increase operational efficiency. It all results in maximizing the profits.

Prompt and Correct Decision: Management accounting provides continuous information and analysis is to various levels of management in respect of various aspects of business operations. It helps in prompt and correct decision by management.

Reduction in Business Risks: The collection and analysis of historical information in management accounting provides knowledge to the management in respect of nature of fluctuations and their causes and effects. Management can prepare such plans which may minimize the impact of trade cycle or seasonal fluctuations and consequently reduction in various types of business risks.

LIMITATIONS OF MANAGEMENT ACCOUNTING:

Management accounting is not free from limitations limits its effectiveness:

Data Base: Management accounting depends for data on the financial and cost records. If the financial and cost accounting contains incorrect and inaccurate information; management accounting also gets affected to that extent. Discrepancies of financial and cost accounting penetrates into the management accounting system giving unreliable results. Therefore, efficiency of management accounting system depends upon the efficiency of system followed for recording and compiling financial and cost records.

Intuitive Decision making: Many times, management is prone to take decisions without reference to information provided by management accounting system. They are tempted to take decision in an easy and short cut manner rather than on scientific basis. They may base their decision on mere guess work and ignore the information provided by management accounting system.

Absence of Objectivity: Management accounting provides both qualitative and quantitative information which offers scope for subjective element. The report is

therefore influenced by opinion judgment based on personal bias and prejudice. These make the reports more subjective rather than objective.

Developing discipline: Management accounting is still a new and developing. It has yet to sharpen its tools and techniques and seek perfection in its application. As an evolving discipline it is subject to certain obstacles and impediments which are to be cleared before it emerges as a fully developed science.

Expensive proposition: It is an expensive proposition to install the system with necessary facilities and highly skilled persons. Therefore, small concerns cannot afford to adopt it. Only large concerns can take advantage of it; where the benefits outweigh the cost in many ways.

Wide scope: Management accounting embraces many disciplines and its scope is very wide. Hence it requires a thorough knowledge and understanding of many subjects to make the data more meaningful and informative. This makes the task of management accounting difficult.

Resistance: This subject demands a change in the method and style of working which may meet opposition and non-co-operation from certain vested interests. It may be construed by some persons as tool for their exploitation. They dislike being guided in decision making through scientific approach. Proper education of the system is necessary to help them break away from the traditional style of working.

Cannot replace Management: Management accounting with all its tools and techniques can only facilitate decision making process for the management. It cannot be treated as an alternative or substitute for management. Ultimately it depends on the management for execution. Therefore, it is only a tool in the hands of management and cannot replace management. Management accounting processes quantitative data and collaborates with qualitative data. Only qualitative and unquantified data cannot be easily processed by management accounting.

DIFFERENCE BETWEEN MANAGEMENT ACCOUNTING AND COST ACCOUNTING

Base	Cost accounting	Management accounting
Object	An object of cost accounting to find out a cost of a product or a service.	An object of Management accounting is to make available various information to the management for planning and other activities.

Nature	In cost accounting both past and present data are used.	In the normally data are used for future policies and planning.
Scope	Cost accounting having a narrow scope because mainly it determines the cost.	Its scope is very wide, it includes financial account, cost account report to management etc.
Age	Cost accounting is an old method.	Management accounting is a modern concept.
Principles	In this some principles and methods are adopted and from time-to-time same principles are used.	In this for reporting to management no specific rule or principle is adopted.

DIFFERENCE BETWEEN MANAGEMENT ACCOUNTING AND FINANCIAL ACCOUNTING

1. Subject-matter	It is concerned with assessing the results of business as a whole.	It is concerned with assessing the activities of different units, departments and cost centers i.e., it examines efficiency not only of the whole enterprise but of different departments also.
2. Historical/ Futuristic	It is mainly concerned with the historical data.	It focuses its attention on future and uses historical data only for taking decisions for the future.
3. Compulsion	Generally, financial accounting is compulsory.	Management accounting is used voluntarily and generally its procedure is also not determined by law
4. Reporting	It is used to find out profitability and financial position of the concern	The main idea for preparing reports in this accounting is to provide information as per requirements of the management.
5. Description	It records only those transactions or events which can be expressed in monetary terms.	It covers all such monetary and non-monetary events which influence managerial decisions.
6. Quickness of Communication	The communication of information in this accounting is very slow and time consuming.	There is relatively more emphasis on quick and prompt communication of information.
7. Accounting Principles	They are prepared generally on the basis of certain accepted accounting principles and conventions.	No set accounting principles are followed in this accounting
8. Period	Generally, its duration is one year and this year is called as accounting year or financial year.	It collects and supplies information from time to time during the whole year.

9. Publication	As per Companies Act, every company is required to send a copy of its final accounts to the Registrar of Companies. Moreover, its publication is compulsory in case of Public Company.	They are prepared for the use of management only and thus they are not published.
10. Audit	These accounts can be got audited	There is no such provision in this accounting.
11. Scope	Its scope is limited	Its scope is much wider.

UNIT II

FINANCIAL STATEMENTS ANALYSIS

MEANING OF FINANCIAL ANALYSIS

The term 'Financial Analysis' Which is also known as 'analysis and interpretation of financial statements refer to process of determining financial strength and weaknesses of the firm by stabilizing relationship between the items of balance sheet, profit & loss a/c and other operative data. The purpose of financial analysis is to diagnose the information context in financial statement so as to judge the profitability and financial position of the firm.'

TYPES OF FINANCIAL ANALYSIS

Financial analysis can be classified into different categories depending upon

1. Information used
2. Method of operation followed in analysis or the modes operandi of analysis

TYPES OF FINANCIAL ANALYSIS

On the basis of used

On the basis of firms

On the basis of modus

External

Internal

Intra-firm analysis

Inter-firm analysis

Horizontal analysis

Vertical

TOOLS OR METHODS OF FINANCIAL ANALYSIS

A number of methods are used to study the relationship between different statements Following are the methods generally used for financial analysis

- Comparative financial statements
- Common size statements

- Trend analysis
- Fund flow analysis
- Cash flow analysis
- Ratio analysis
- Cost-volume-profit analysis

COMPARATIVE FINANCIAL STATEMENTS

The comparative financial statements are the statements of the financial position at different periods of time. The elements of financial position are shown in a comparative form to give an idea of the financial position of two or more periods. Generally, two financial statements (balance sheet and income statements) are prepared in comparative form for the purpose of financial analysis.

For example, when figure of sales of previous periods are given along with the figures of current period, the analyst will be able to see the trends of sales over different period of time.

THE COMPARATIVE STATEMENTS ARE-

- Balance sheet
- Income statement

COMPARATIVE BALANCE SHEET

Comparative balance sheet as on two different dates can be used for comparing assets and liabilities and finding out on increase or decrease in those items.

While interpreting comparative balance sheet, the interpreter is expected to consider the following points. Current financial position- For studying the current financial position, one should see the working capital for both the year.

A study of increase or decrease in current assets and current liabilities enable to see the current financial position.

- **Long term financial position-** The long-term financial position of the concern can be analyzed by studying the changes in fixed assets, long term liabilities & capital. An increase in fixed assets should be compared to the increase in long term loans and capitals.
- **Profitability of the concern-** The study of increase or decrease in retained earnings will enable the interpreters to see whether the profitability has improved or not.

COMPARATIVE INCOME STATEMENT-

The income statement shows net profit or net loss on accounts of operations of a business. The comparative income statement gives an idea of the progress of a business over a period of time. The interpretation of income statements will involve

- The increase or decrease in sales should be compared with the increase or decrease of cost of goods sold.
- The second step is to study the operational profits.
- The effect of non-operating expenses such as interest, loans on profit should be studied.

COMMON SIZE STATEMENTS

Common size statements are those in which the figures are converted into percentage on some common basis. The use of these helps in making inter period & inter firm comparison and also in highlighting upon the trends in performance, efficiency & financial position. However any material change in the techniques procedure & principles would render these statements users & insignificant tool of financial analysis.

- **Common size balance sheet-** A statement in which balance sheet items are expressed as the percentage of its total.
- **Common size income statements-** in common size income statement various item of income statements are shown as percentage of sales.

TRENDS ANALYSIS

The financial statement may be analyzed by computing trends of several years. The methods of calculating trend percentage involve the calculation of percentage relationship that each item bears to the same item in the base year. It is very important from the point of view of forecasting or budgeting. It discloses the change in the financial and operating data between specific periods. However, no. of precautions should be taken, while using trends ratios as a tool.

Limitations of financial analysis: financial statement analysis is an important method of determination of financial capabilities and weakness of any firm, but their analysis is based on the information given in the financial statements. Some of the limitations are as follows

- It is study of interim reports only.
- Comparison of financial statements of one firm with another is not possible.
- Validity of financial analysis is reduced when there are price changes.
- Conclusion drawn from one-year financial statements is worthless.
- Profit and loss account is prepared on the basis of old conventions due to which correct information of net profit is not provided.

UNIT III

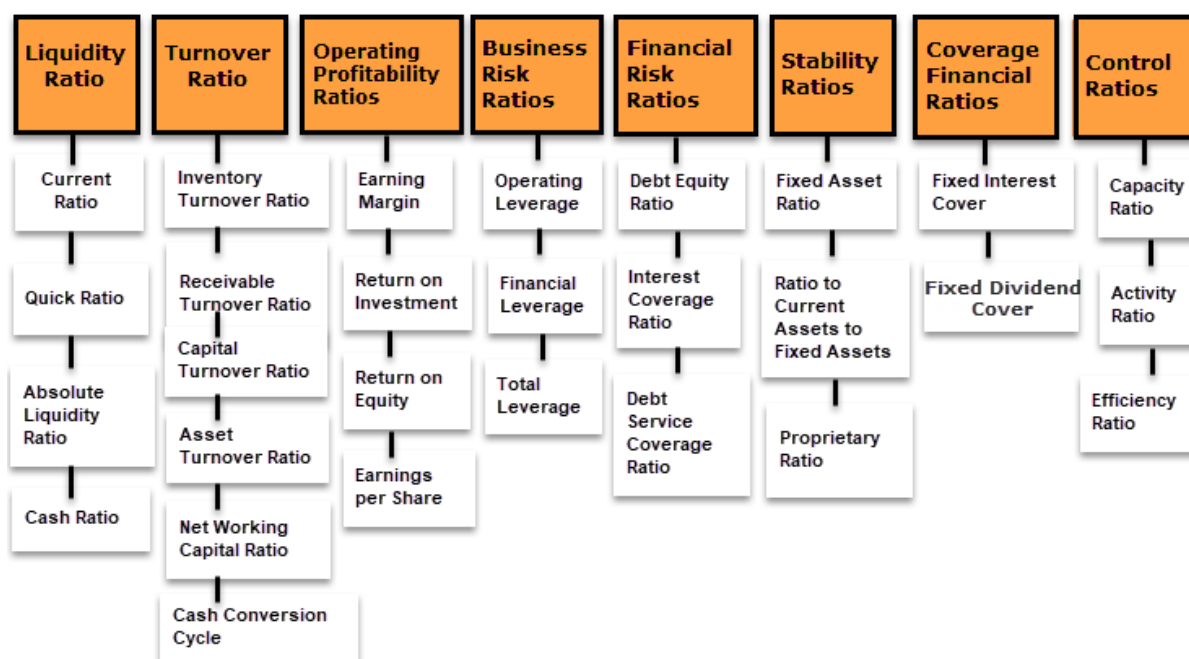
RATIO ANALYSIS

MEANING OF RATIO: generally, ratio means establishment of logical relationship between two or more variable. Thus, ratio is a numeric relation between two or more items of financial statement.

RATIO ANALYSIS: Ratio analysis is a techniques of analysis and interpretation of financial statements. It is a process of establishing various ratios and their interpretation, to help top management in decision making. Ratio is not an end in itself but it is a means of understand strength and weakness of the firm properly.

CLASSIFICATION OF RATIOS : Various accounting ratios are broadly classified as under –

- Short term financial position ratios or liquidity ratios.
- Activity or turnover ratio.
- Profitability ratios.
- Long term financial positions or solvency ratios.



1. Liquidity Ratios

This type of ratio helps in measuring the ability of a company to take care of its short-term debt obligations. A higher liquidity ratio represents that the company is highly rich in cash. The types of liquidity ratios are: –

Current Ratio: The current ratio is the ratio between the current assets and current liabilities of a company. The current ratio is used to indicate the liquidity of an organization in being able to meet its debt obligations in the upcoming twelve months. A higher current ratio will indicate that the organization is highly capable of repaying its short-term debt obligations.

Current Ratio = Current Assets / Current Liabilities

Quick Ratio: The quick ratio is used to ascertain information pertaining to the capability of a company in paying off its current liabilities on an immediate basis.

The formula used for the calculation of a quick ratio is

Quick Ratio = (Cash and Cash Equivalents + Marketable Securities + Accounts Receivables) / Current Liability

2. Profitability Ratios

This type of ratio helps in measuring the ability of a company in earning sufficient profits.

The types of profitability ratios are: –

Gross Profit Ratios: Gross profit ratios are calculated in order to represent the operating profits of an organization after making necessary adjustments pertaining to the COGS or cost of goods sold.

The formula used for the calculation of gross profit ratio is-

Gross Profit Ratio = (Gross Profit / Net Sales) * 100

Net Profit Ratio: Net profit ratios are calculated in order to determine the overall profitability of an organization after reducing both cash and non-cash expenditures.

The formula used for the calculation of net profit ratio is-

Net Profit Ratio = (Net Profit / Net Sales) * 100

Operating Profit Ratio: Operating profit ratio is used to determine the soundness of an organization and its financial ability to repay all the short term and long term debt obligations.

The formula used for the calculation of operating profit ratio is-

Operating Profit Ratio = (Earnings Before Interest and Taxes / Net Sales) * 100

Return on Capital Employed (ROCE): Return on capital employed is used to determine the profitability of an organization with respect to the capital that is invested in the business.

The formula used for the calculation of ROCE is:

ROCE = Earnings Before Interest and Taxes / Capital Employed

3. Solvency Ratios

Solvency ratios can be defined as a type of ratio that is used to evaluate whether a company is solvent and well capable of paying off its debt obligations or not.

The types of solvency ratios are: –

Debt Equity Ratio: The debt-equity ratio can be defined as a ratio between total debt and shareholders fund. The debt-equity ratio is used to calculate the leverage of an organization.

An ideal debt-equity ratio for an organization is 2:1.

The formula for debt-equity ratio is-

Debt Equity Ratio = Total Debts / Shareholders Fund

Interest Coverage Ratio: The interest coverage ratio is used to determine the solvency of an organization in the nearing time as well as how many times the profits earned by that very organization were capable of absorbing its interest-related expenses.

The formula used for the calculation of interest coverage ratio is-

Interest Coverage Ratio = Earnings Before Interest and Taxes / Interest Expense

4. Turnover Ratios

Turnover ratios are used to determine how efficiently the financial assets and liabilities of an organization have been used for the purpose of generating revenues.

The types of turnover ratios are: –

Fixed Assets Turnover Ratios: Fixed assets turnover ratio is used to determine the efficiency of an organization in utilizing its fixed assets for the purpose of generating revenues.

The formula used for the determination of fixed assets turnover ratio is-

Fixed Assets Turnover Ratio = Net Sales / Average Fixed Assets

Inventory Turnover Ratio: Inventory turnover ratio is used to determine the speed of a company in converting its inventories into sales.

The formula used for calculating inventory turnover ratio is-

Inventory Turnover Ratio = Cost of Goods Sold / Average Inventories

Receivable Turnover Ratio: Receivable turnover ratio is used to determine the efficiency of an organization in collecting or realizing its account receivables.

The formula used for calculating the receivable turnover ratio is-

Receivables Turnover Ratio = Net Credit Sales / Average Receivables

5. Earnings Ratios

Earnings ratio is used for the purpose of determining the returns that an organization generates for its investors.

The types of earnings ratios are: –

Profit Earnings Ratio: P/E ratio indicates the profit earning capacity of the company.

The formula used for the calculation of profit earnings ratio is:

Profit Earnings Ratio = Market Price per Share / Earnings per Share

Earnings per Share (EPS): EPS signifies the earnings of an equity holder based on each share.

The formula used for EPS is:

EPS = (Net Income – Preferred Dividends) / (Weighted Average of Outstanding Shares)

<i>Parties Interested</i>	<i>Application of Ratios</i>	<i>To Test</i>
I. Creditors (Short - term) Investors Money Lenders	<ol style="list-style-type: none"> 1. Current Ratio 2. Liquid Ratio 3. Absolute Liquid Ratio 4. Proprietary Ratio 5. Assets to Proprietorship Ratio 6. Debt-Equity Ratio 7. Capital Gearing Ratio 	Liquidity and Solvency
II. Shareholders Creditors (Long Term) Government Purchasers of Enterprise Employees	<ol style="list-style-type: none"> 1. Gross Profit Ratio 2. Net Profit Ratio 3. Operating Ratio 4. Return on Capital Employed 5. Dividend Ratio 6. Earning per Share 7. Dividend per Share 	Profitability
III. Shareholders and Outsiders	<ol style="list-style-type: none"> 1. Capital Gearing Ratio 2. Equity Capital Ratio 3. Long Term Loans to Net Worth 	Capital Structure
IV. Management	All types of ratios	Management Efficiency

UNIT IV

CASH FLOW ANALYSIS

(As Per Accounting Standard-3)

INTRODUCTION:

Cash flow analysis is another important technique of financial analysis. It involves preparation of Cash Flow Statement for identifying sources and applications of cash; Cash flow statement may be prepared on the basis of actual or estimated data. In the latter case, it is termed as 'Projected Cash Flow Statement', which is synonymous with the term 'Cash Budget'. In the following pages we shall explain in detail in preparation of cash flow statement, utility and limitations of cash flow analysis etc.

Use and significance of cash flow statement –

- Helpful in the evaluation of present cash position of the firm
- Helpful to the management
- Knowledge about liability redemption capacity
- Knowledge about important facts
- Helpful in formulation of policies
- Helpful in the evaluation of financial policies and present cash position
- Useful to outsiders
- Find variation and performance

Limitations of cash flow statement

- Difficult to define cash
- Liquidity cannot be assessed
- No clear picture
- Scope becomes narrow
- Not equivalent to income statement

CASH FLOW STATEMENT

(Indirect Method)

		Rs.	Rs.
A.	Cash flows operating activities		
	Closing Balance of profit & loss account		
Less:	Opening balance of profit & loss account		
	Profit after appropriation		
Add:	Items of appropriation:		
	1) Interim dividend		
	2) Final dividend/proposed dividend (current year)		
	3) Transfer to general reserve		
	4) Transfer to other reserve		
	5) Provision for taxation		
	6) Issue of bonus share		
Add:	Non-cash items :		
	1) Depreciation		
	2) Goodwill written off		
	3) Preliminary expenses written off		
	4) Discount on issue of shares/debenture written off		
	5) Other fictitious assets written off		
	6) Provision for contingencies		
Add:	Non-operating expenses/losses		
	1) Loss on sale of fixed assets		
	2) Premium on redemption of Pref. share and debenture		
	3) Interest paid		
	4) Foreign exchange loss		
	5) Loss on sale of investment		
Less:	Non-operating income :		
	1) Profit on sale of fixed assets		
	2) Discount on redemption of preference shares/debentures		
	3) Interest received		
	4) Dividend received		
	5) Profit on sale of investment		
Add:	Decrease in current assets (except cash and bank)		
	Increase in current liabilities (except bank overdraft)		
Less:	Increase in current assets (except cash and bank)		
	Decrease in current liabilities (except bank overdraft)		
Less:	Payment of income-tax		
	Cash from operating activities	→	
B.	Cash flows from investing activities		

Less:	Sale of fixed assets / investment		
Add:	Purchases of fixed assets/investment		
	Interest received		
	Dividend received Non-operating surplus		
C.	Cash flows from investment activities	→	
	Cash flows from financing activities:		
Add:	Issue of shares/debentures		
Less:	Long term borrowing		
	Redemption of preference shares/debentures		
	Repayment of long term loan		
	Interest paid		
	Divided paid		
	Cash from financing activities		
	Repayment of bank overdraft		
	Drawings by proprietors / partners		
	<i>Cash flows from financing activities</i>	→	
	Net increase in cash and cash equivalents (A+B+C)		
Add:	Opening balance of cash & cash equivalents	→	
	Closing balance of cash & cash equivalents	→	

Note: Cash & cash equivalents = Cash + Bank + Short term investments

How Cash Flow Statements Work

Every company that sells and offers its stock to the public must file financial reports and statements with the Securities and Exchange Commission (SEC).¹ The three main financial statements are the balance sheet and income statement. The cash flow statement is an important document that helps open a wind interested parties insight into all the transactions that go through a company.

There are two different branches of accounting—accrual and cash. Most public companies use accrual accounting, which means the income statement is not the same as the company's cash position. The cash flow statement, though, is focused on cash accounting.

Profitable companies can fail to adequately manage cash flow, which is why the cash flow statement is a critical tool for companies, analysts, and investors. The cash flow statement is broken down into three different business activities: operations, investing, and financing.

Let's consider a company that sells a product and extends credit for the sale to its customer. Even though It recognizes that sale as revenue, the company may not receive cash until a later date. The company earns a profit on the income statement and pays income taxes on it, but the business may bring in more or less cash than the sales or income figures.

Investors and analysts should use good judgment when evaluating changes to working capital, as some companies may try to boost up their cash flow before reporting periods.

Cash Flows From Operations

This is the first section of the cash flow statement covers cash flows from operating activities (CFO) and includes transactions from all operational business activities. The cash flows from operations section begins with net income, then reconciles all noncash items to

cash items involving operational activities. So, in other words, it is the company's net income, but in a cash version.

This section reports cash flows and outflows that stem directly from a company's main business activities. These activities may include buying and selling inventory and supplies, along with paying its employees their salaries. Any other forms of in and outflows such as investments, debts, and dividends are not included.

Companies are able to generate sufficient positive cash flow for operational growth. If there is not enough generated, they may need to secure financing for external growth in order to expand.

For example, accounts receivable is a noncash account. If accounts receivable go up during a period, it means sales are up, but no cash was received at the time of sale. The cash flow statement deducts receivables from net income because it is not cash. The cash flows from the operations section can also include accounts payable, depreciation, amortization, and numerous prepaid items booked as revenue or expenses, but with no associated cash flow.

Cash Flows From Investing

This is the second section of the cash flow statement looks at cash flows from investing (CFI) and is the result of investment gains and losses. This section also includes cash spent on property, plant, and equipment. This section is where analysts look to find changes in capital expenditures (capex).

When capex increases, it generally means there is a reduction in cash flow. But that's not always a bad thing, as it may indicate that a company is making investment into its future operations. Companies with high capex tend to be those that are growing.

While positive cash flows within this section can be considered good, investors would prefer companies that generate cash flow from business operations—not through investing and financing activities. Companies can generate cash flow within this section by selling equipment or property.

Cash Flows From Financing

Cash flows from financing (CFF) is the last section of the cash flow statement. The section provides an overview of cash used in business financing. It measures cash flow between a company and its owners and its creditors, and its source is normally from debt or equity. These figures are generally reported annually on a company's 10-K report to shareholders.

Analysts use the cash flows from financing section to determine how much money the company has paid out via dividends or share buybacks. It is also useful to help determine how a company raises cash for operational growth.

Cash obtained or paid back from capital fundraising efforts, such as equity or debt, is listed here, as are loans taken out or paid back.

When the cash flow from financing is a positive number, it means there is more money coming into the company than flowing out. When the number is negative, it may mean the company is paying off debt, or is making dividend payments and/or stock buybacks.

UNIT V BUDGETARY CONTROL

Budgetary control is the process by which budgets are prepared for the future period and are compared with the actual performance for finding out variances, if any. The comparison of budgeted figures with actual figures will help the management to find out variances and take corrective actions without any delay.

Objectives of Budgetary Control

The main objectives of budgetary control are given below:

- Defining the objectives of the enterprise.
- Providing plans for achieving the objectives so defined.
- Coordinating the activities of various departments.
- Operating various departments and cost centres economically and efficiently.
- Increasing the profitability by eliminating waste.
- Centralizing the control system.
- Correcting variances from set standards.
- Fixing the responsibility of various individuals in the enterprise.

CASH BUDGET

A cash budget is a budget or plan of expected cash receipts and disbursements during the period. These cash inflows and outflows include revenues collected, expenses paid, and loans receipts and payments. In other words, a cash budget is an estimated projection of the company's cash position in the future.

FLEXIBLE BUDGET

A flexible budget is a budget or financial plan of estimated cost and revenue for different levels of output. The variation happens due to the change in the volume or level of activity.

SALES BUDGET

A sales budget estimates the sales in units as well as the estimated earnings from these sales. Budgeting is important for any business. Without a budget companies can't track process or improve performance. The first step in creating a master company while budget is to create a sales budget.

PRODUCTION BUDGET

A production budget is a financial plan that lists the number of units to be manufactured during a period. In other words, this is a report that estimates the number of units that a plant will produce from period to period.

CAPITAL EXPENDITURE BUDGET

Company's manager has to plan for the expenditure and benefits an entity would derive from investing in an underlying project.

These investment decisions are typically pertaining to the long-term assets that are expected to produce benefits over more than one year. All such evaluation forms part of the capital budgeting process.

In this article, you will learn what is capital budgeting, capital budgeting process and techniques of capital budgeting.

What is a Capital Budgeting?

Capital budgeting is the process of making investment decisions in long term assets. It is the process of deciding whether or not to invest in a particular project as all the investment possibilities may not be rewarding.

Thus, the manager has to choose a project that gives a rate of return more than the cost financing such a project. That is why he has to value a project in terms of cost and benefit.

Following are the categories of projects that can be examined using capital budgeting process:

- The decision to buy new machinery
- Expansion of business in other geographical areas
- Replacement of an obsolete equipment
- New product or market development etc

Thus, capital budgeting is the most important responsibility undertaken by a financial manager. This is because it involves the purchase of long-term assets and such decisions may determine the future success of the firm.

These decisions help in maximizing shareholder's value.

Principles applicable to capital budgeting process also apply to other corporate decisions like working capital management.

Process of Capital Budgeting

Following are the steps of capital budgeting process:

Idea Generation

The most important step of the capital budgeting process is generating good investment ideas. These investment ideas can come from a number of sources like the senior management, any department or functional area, employees, or sources outside the company.

Analyzing Individual Proposals

A manager must gather information to forecast cash flows for each project in order to determine its expected profitability. This is because the decision to accept or reject a capital investment is based on such an investment's future expected cash flows.

Planning Capital Budget

An entity must give priority to profitable projects as per the timing of the project's cash flows, available company resources, and a company's overall strategies. The projects that look promising individually may be undesirable strategically. Thus, prioritizing and scheduling projects is important because of the financial and other resource issues.

Monitoring and Conducting a Post Audit

It is important for a manager to follow up or track all the capital budgeting decisions. He should compare actual with projected results and give reasons as to why projections did not match with actual performance. Therefore, a systematic post-audit is essential in order to find out systematic errors in the forecasting process and hence enhance company operations.

Techniques of Capital Budgeting

Capital budgeting techniques are the methods to evaluate an investment proposal in order to help the company decide upon the desirability of such a proposal. These techniques are categorized into two heads: traditional methods and discounted cash flow methods.

Traditional Methods

Traditional methods determine the desirability of an investment project based on its useful life and expected returns. Furthermore, these methods do not take into account the concept of time value of money.

Pay Back Period Method

Payback period refers to the number of years it takes to recover the initial cost of an investment. Therefore, it is a measure of liquidity for a firm. Thus, if an entity has liquidity issues, in such a case, shorter a project's payback period, better it is for the firm.

Therefore,

Payback period = Full years until recovery + (unrecovered cost at the beginning of the last year)/Cash flow during the last year

Here, full years until recovery is nothing but the payback that occurs when cumulative net cash flow equals to zero. Cumulative net cash flow is the running total of cash flows at the end of each time period.

Average Rate of Return Method (ARR)

Under ARR method, the profitability of an investment proposal can be determined by dividing average income after taxes by average investment, which is average book value after depreciation.

Thus, ARR = Average Net Income After Taxes/Average Investment x 100

Where, Average Income After Taxes = Total Income After Taxes/Total Number of Years

Average Investment = Total Investment/2

Based on this method, a company can select those projects that have ARR higher than the minimum rate established by the company. And, it can reject the projects having ARR less than the expected rate of return.

Discounted Cash Flow Methods

As mentioned above, traditional methods do not take into the account time value of money. Rather, these methods take into consideration present and future flow of incomes. However, the DCF method accounts for the concept that a rupee earned today is worth more than a rupee earned tomorrow. This means that DCF methods take into account both profitability and time value of money.

Net Present Value Method (NPV)

NPV is the sum of the present values of all the expected incremental cash flows of a project discounted at a required rate of return less than the present value of the cost of the investment.

In other words, NPV is the difference between the present value of cash inflows of a project and the initial cost of the project. As per this technique, the projects whose NPV is positive or above zero shall be selected.

If a project's NPV is less than zero or negative, the same must be rejected. Further, if there is more than one project with positive NPV, then the project with the highest NPV shall be selected.

$$NPV = CF_1/(1+k)^1 + \dots + CF_n/(1+k)^n + CF_0$$

where CF_0 = Initial Investment Outlay (Negative Cash flow)

CF_t = after tax cash flow at time t

k = required rate of return

Internal Rate of Return (IRR)

Internal Rate of Return refers to the discount rate that makes the present value of expected after-tax cash inflows equal to the initial cost of the project.

In other words, IRR is the discount rate that makes present values of a project's estimated cash inflows equal to the present value of the project's estimated cash outflows.

If IRR is greater than the required rate of return for the project, then accept the project. And if IRR is less than the required rate of return, then reject the project.

$$PV(\text{inflows}) = PV(\text{outflows})$$

$$NPV = 0 = CF_0 + CF_1/(1 + IRR)^1 + \dots + CF_n/(1 + IRR)^n + CF_0$$

Profitability Index

Profitability Index is the present value of a project's future cash flows divided by initial cash outlay. Thus, it is closely related to NPV. NPV is the difference between the present value of future cash flows and the initial cash outlay.

Whereas, PI is the ratio of the present value of future cash flows and initial cash outlay.

$$PI = PV \text{ of future cash flows} / CF_0 = 1 + NPV / CF_0$$

Thus, if the NPV of a project is positive, PI will be greater than 1. If NPV is negative, PI will be less than 1. Therefore, based on this, if PI is greater than 1, accept the project otherwise reject.

