

Introduction (Financial Management)

Lesson 11

KEY CONCEPTS

- Nature, Scope & Objectives of Financial Management ■ Shareholder Value ■ Public Finance ■ Personal Finance
- Corporate Finance ■ Profit Maximization vs. Wealth Maximization

Learning Objectives

To understand:

- Nature, Scope and Objectives of Financial Management
- Risk and Return and its impact on the value of the firm
- Objectives of the firm- Profit Maximisation vs. Wealth Maximisation
- Emerging Role of the Finance Managers
- Challenges for Finance Managers
- Investment Decision Analysis

Lesson Outline

- Introduction
- Nature, Scope and Objectives of Financial Management
- Risk-Return and Value of the Firm
- Objective of the Firm : Profit Maximisation vs. Wealth Maximisation
- Emerging role of Finance Managers
- Lesson Round-Up
- Glossary
- Test Yourself
- List of Further Readings

FINANCIAL FRAMEWORK

1. Elements of Investment Decisions
2. Elements of Financing Decisions
3. Elements of Dividend Decisions
4. Costing and Risk
5. Profit Maximisation Vs. Shareholder Wealth Maximisation
6. Relationship of Finance to Economics and Accounting

INTRODUCTION

Suppose a person is planning to commence business and no matter what the nature of the proposed business be and how it is organised, he needs to address the following pertinent questions:

- i) What capital investments he needs to make? That is, what kinds of real estate, machineries, R&D programmes, IT infrastructure, and so on should he invest in?
- ii) How will he procure capital to pay for the proposed capital investments? That is, what will be the fusion of equity and debt in the proposed capital structure or financial plan?
- iii) How will he deal with the day-to-day financial activities such as collection of receivables and paying to the suppliers of raw materials and other key services?

Now as already mentioned, the above mentioned vital questions are witnessed by every entrepreneur, companies, organisations etc. in starting and managing the business. In this regard, the extensive knowledge of financial management can assist substantially in forming robust financial decisions.

Financial management emerged as a distinct field of study at the turn of the 20th century. Its evolution may be divided into three broad phases (though the demarcating lines between these phases are somewhat arbitrary)- the traditional phase, the transitional phase, and the modern phase.

The traditional phase lasted for nearly four decades. The following were its important features:

- a) The focus of financial management was mainly on certain episodic events like formation, issuance of capital, major expansion, merger, reorganisation, and liquidation in the life cycle of the firm.
- b) The approach was mainly descriptive and institutional. The instruments of financing the institutions and procedures used in capital markets, and the legal facets of the financial events formed the core of financial management.
- c) The outsider's point of view was dominant. Financial management was viewed mainly from the point of view of the investment bankers, lenders, and other outside interests.

A typical work of the traditional phase is the *The Financial Policy of Corporations* by Arthur S. Dewing. This book discusses at length the forms of securities, procedures used in issuing these securities, bankruptcy, reorganisations, mergers, consolidations, and combinations.

The treatment of these topics is essentially descriptive, institutional, and legalistic.

The *transitional phase* began around the early 1940s and continued through the early 1950s. Though the nature of financial management during this phase was similar to that of the traditional phase, higher emphasis was placed on day-to-day problems faced by financial managers in the areas of funds analysis, planning, and control. The focus shifted to working capital management. A representative work of this phase is *Essays on Business Finance* by Wilford J. Eitman *et al.*

The *modern phase* began in the mid 1950s and has witnessed an accelerated pace of development with the infusion of ideas from economic theory and application of quantitative methods of analysis. The distinctive features of the modern phase are-

- a) The central concern of financial management is considered to be a rational matching of funds to their uses so as to maximise the wealth of current shareholders.
- b) The approach of financial management has become more analytical and quantitative.

Since the beginning of the modern phase many significant and seminal developments have occurred in the domain of capital budgeting, asset pricing theory, capital structure theory, efficient market theory, option pricing theory, agency theory, valuation models, dividend policy, working capital management, financial modelling, and behavioural finance. Many more exciting developments are in the offing making finance an attractive and challenging field.

MEANING OF FINANCE

Finance is the backbone of any business. It helps in defining the feasible area of operation for any type of business activities and therefore is the foundation for any strategic planning. It may also be defined as an art or a science of managing money. Finance function is the procurement of funds and their effective utilization in business concerns.

In other words, finance is considered to be the foundation of basic activities of any business. Particularly in production and marketing activities, finance functions in the same way as oil functions in the operation of machines or blood functions in the human body. In the absence of finance, nobody can imagine either of setting up a business or its operations and development. The term finance is derived from the Latin word 'finis' which means end/finish. Finance can also be interpreted in many ways such as fund, money, investment, capital, amount etc. Finance act as a medium for business which involves the acquisition and usage of funds in various departments such as production department, purchase department, research and development etc.

Finance also refers to the science that describes the management, creation and study of money, banking, credit, investments, assets and liabilities. Finance consists of financial systems, which include public, private and government bodies and the study of finance and financial instruments, which can relate to countless assets and liabilities.

Webster's Ninth New Collegiate Dictionary defines finance as the 'Science on study of the management of funds' and the management of fund as the system that includes the circulation of money, the granting of credit, the making of investments, and the provision of banking facilities.

Finance is a term for matters regarding the management, creation, and study of money and investments. It involves the use of credit and debt, securities, and investment to finance current projects using future income flows. Because of this temporal aspect, finance is closely linked to the time value of money, interest rates, and other related topics.

Finance can be broadly divided into three categories:

- Public finance
- Corporate finance
- Personal finance

A brief description of the above mentioned broad categories of finance is provided below-

- i) **Public finance:** Central government, State government and Local government—all use finances which are obtained from various sources and which are used according to predetermined policies and

procedures. Governments have the right to collect finances or revenues through taxation and other means and have authorities to use such finances within the constitutional limits.

However, the objectives of Governmental activities are not to earn profit like private institutions, the objectives are to achieve social and economic upliftment. Government raises and uses finances for attaining the objective of maximum social advantage. That is why 'public finance' has been made a separate branch of study, wherein government financial matters are studied thoroughly and formally.

- ii) **Corporate finance:** Corporate finance is the subfield of finance that deals with how corporations address funding sources, capital structuring, accounting, and investment decisions.

Corporate finance is often concerned with maximizing shareholder value through long- and short-term financial planning and the implementation of various strategies. Corporate finance activities range from capital investment to tax considerations. Corporate finance is concerned with how businesses fund their operations in order to maximize profits and minimize costs. It deals with the day-to-day operations of a business' cash flows as well as with long-term financing goals (e.g., issuing bonds) and in addition to capital investments, corporate finance is concerned with monitoring cash flows, accounting, preparing financial statements, and taxation.

- iii) **Personal finance:** Personal finance is a term that covers managing your money as well as saving and investing. It encompasses budgeting, banking, insurance, mortgages, investments, and retirement, tax, and estate planning. The term often refers to the entire industry that provides financial services to individuals and households and advises them about financial and investment opportunities.

Individual goals and desires—and a plan to fulfil those needs within your financial constraints—also impact how you approach the above items. To make the most of your income and savings, it's essential to become financially savvy—it will help you distinguish between good and bad advice and make intelligent financial decisions.

DEFINITION OF FINANCIAL MANAGEMENT

Financial management is an integral part of overall management. The term financial management has been defined by different experts as under :

“It is concerned with the efficient use of an important economic resource namely, capital funds”. – **Solomon**

Financial management “as an application of general managerial principles to the area of financial decision-making. – **Howard and Upton**

Financial management “is an area of financial decision-making, harmonizing individual motives and enterprise goals”. – **Weston and Brigham**

Financial management “is the operational activity of a business that is responsible for obtaining and effectively utilizing the funds necessary for efficient operations. – **Joseph and Massie**

“Financial management is the activity concerned with planning, raising, controlling and administering of funds used in the business.” – **Guthman and Dougal**

“Financial management is that area of business management devoted to a judicious use of capital and a careful selection of the source of capital in order to enable a spending unit to move in the direction of reaching the goals.” – **J.F. Brandley**

“Finance is the art and science of managing money”. – **Khan and Jain**

S.C. Kuchal – “Financial Management deals with procurement of funds and their effective utilization in the business”.

According to the **Wheeler**, “Business finance is that business activity which concerns with the acquisition and conversation of capital funds in meeting financial needs and overall objectives of a business enterprise”.

E.W Walker- “Business finance is to planning, coordinating, controlling and implementing of financial activities of business institution.”

Henry Hoagland- “Business Finance is concerned with the financing and investment decisions made by the management of companies in pursuit of corporate goals.”

Professor Gloss and Baker- “Business finance is concerned with the sources of funds available to enterprises of all sizes and the proper use of money or credit obtained from such sources.”

Parhter and Wert- “Business finance deals primarily with raising, administering and disbursing funds by privately owned business units operating in non-financial fields of industry”.

According to the Encyclopedia of Social Sciences, “Corporation finance deals with the financial problems of corporate enterprises. These problems include the financial aspects of the promotion of new enterprises and their administration during early development, the accounting problems connected with the distinction between capital and income, the administrative questions created by growth and expansion, and finally, the financial adjustments required for the bolstering up or rehabilitation of a corporation which has come into financial difficulties”.

Thus, financial management is broadly concerned with raising of funds, creating value to the assets of the business enterprise by efficient allocation of funds. It is the study of integration of the flow of funds in the most optimal manner to maximize the returns of a firm by taking proper decisions in utilizing the funds. In other words, raising of funds should involve minimum cost and to bring maximum returns.

NATURE, SCOPE AND OBJECTIVES OF FINANCIAL MANAGEMENT

In modern times, we cannot imagine a world without the use of money. In fact, money is the life-blood of business because all our economic activities are carried out through the use of money. For carrying on business, we need resources which are pooled in terms of money. It is used for obtaining physical and material resources for carrying out productive activities and business operations which affect sales and pay compensation to suppliers of resources, physical as well as monetary. Hence financial management is considered as an organic function of a business and has rightly become an important one.

Finance is an essential and indispensable part of any organization. It is difficult for organizations, whether profit-making or otherwise, to sustain themselves for long without proper finances. Not just that, the efficient management of these financial resources is essential to be sustainable and viable in the long-run.

A group of experts defines Financial Management as simply the task of providing funds needed by the business or enterprise on terms that are most favourable in the light of its objectives. The approach, thus, is concerned almost exclusively with the procurement of funds and could be widened to include instruments, institutions and practices through which funds are raised. It also covers the legal and accounting relationship between a company and its sources of funds. Financial Management is certainly broader than procurement of funds.

Financial management is strategic planning, organising, directing, and controlling of financial undertakings in an organisation. It also encompasses applying management principles to the financial assets of an organisation, while also playing a significant part in fiscal management.

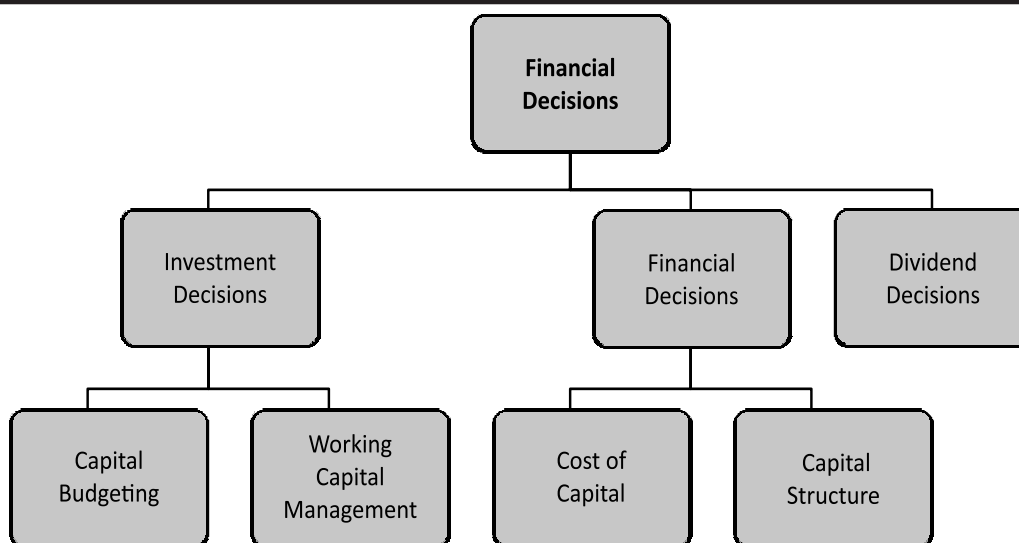
Financial management refers to the effective and efficient planning, organizing, directing and controlling the financial activities and processes of an organization. This includes but is not limited to fund procurement, allocation of financial resources, utilization of funds, etc.

It is to be noted that financial management is pervasive and is applicable to all forms of organisations, i.e.,

business organisations, philanthropic organisations, educational organisations, religious organisations and so on and so forth. In nutshell, wherever finance is involved, financial management is crucial for effective planning, procurement and utilisation of funds.

Thus, financial management is related not only to 'fund-raising' but encompasses wider perspective of managing the finances for the company efficiently. In the developed state of a capital market, raising funds is not a problem; the real problem is to put the capital resources to efficient use through effective financial planning, financial organisation and financial control and to deal with tasks like ensuring the availability of funds, allocating them for different uses, managing them, investing funds, controlling costs, forecasting financial requirements, doing profit planning and estimating rate of return on investment and assessing working capital etc.

TYPES OF FINANCIAL DECISIONS



INVESTMENT DECISIONS

Investment decision is the most important decision for value creation. Investment ordinarily means utilisation of money for profits or returns. This could be done by creating physical assets with the money and carrying on business or purchasing shares or debentures of a company.

Investments necessarily involve uncertainty, and are therefore quite risky. Within a firm, a finance manager decides that in which activity resources of the firm needs to be channelized.

For example, a marketing manager may like to have a new show room, a production manager a new lathe machine and a personnel manager may propose for higher wages or salaries for labour or staff, with the objective of enhancing productivity. . Top management may like to foray into new areas of business or territories (national / international) or proposed to launch a new product with the aim of increasing profits or capturing a lion share in the industry will trigger the need for investments and in view of this, investment decisions becomes significant. .

It is to be noted that in financial management, investment decisions relates to capital budgeting. In other words, investment decisions are concerned with the question whether adding to capital assets today will increase the revenues of tomorrow to cover costs. Thus investment decisions are commitment of money resources at different time in expectation of economic returns in future dates.

Categories of Investment Decisions

The most common categories of investment decisions are as under-

1. *Inventory Management* : Holding of stocks of materials is unavoidable for smooth running of a business. The expenditure on stocks comes in the category of investments.
2. *Strategic Investment*: In this case, the firm makes investment decisions in order to strengthen its market power. The return on such investment will not be immediate.
3. *Investment on Modernisation*: In this case, the firm decides to adopt a new and better technology in place of the old one for the sake of cost reduction. It is also known as capital deepening process.
4. *Investment in New Business*: In this case, the firm decides to start a new business or diversify into new lines of production for which a new set of machines are to be purchased.
5. *Replacement Investment* : In this category, the firm takes decisions about the replacement of worn out and obsolete assets by new ones.
6. *Expansion Investment* : In this case, the firm decides to expand the productive capacity for existing products and thus grows further in a uni-direction. This type of investment is also called capital widening.

Thus, investment decisions encompass wide and complex matters involving the following areas:

- capital budgeting
- cost of capital
- measuring risk
- management of liquidity and current assets
- expansion and contraction involving business failure and re-organisations
- buy or hire or lease an asset.

Factors Determining Investment Decisions

The three key factors that influence investment decisions are as under:

- (i) Estimation of capital outlays and the future earnings of the proposed project focusing on the task of value engineering and market forecasting.
- (ii) Availability of capital and considerations of cost of capital focusing attention on financial analysis.
- (iii) A set of standards by which to select a project for implementation and maximising returns therefrom focusing attention on logic and arithmetic.

As mentioned that investment decisions mainly focus on capital expenditure decisions, in view of this, it is imperative to have a discussion on the mentioned topic.

Capital budgeting – Capital Budgeting refers to the planning process which is used for decision making of the long term investment that whether the projects are fruitful for the business and will provide the required returns in the future years or not and it is important because capital expenditure requires huge amount of funds so before doing such expenditure in capital, the companies need to assure themselves that the spending will bring profits in the business.

Capital Budgeting is a decision-making process where a company plans and determines any long term Capex whose returns in terms of cash flows are expected to be received beyond a year. Investment decisions may include any of the below:

- i) Expansion
- ii) Acquisition
- iii) Replacement
- iv) New Product
- v) R&D (Research & Development)
- vi) Major Advertisement Campaign
- vii) Welfare investment

The capital budgeting decision making remains in understanding whether the projects and investment areas are worth the funding of cash through the capitalization structure of the company debt, equity, retained earnings – or not. The characteristics of capital budgeting are as under:

- a) It involves high risk
- b) Large profits are estimated
- c) Long time period between the initial investments and estimated returns

(For more details on capital budgeting, please refer to Lesson 13- Capital Budgeting)

Investment decisions have, thus, become the most important area in the decision making process of a company. Such decisions are essentially made after evaluating the different proposals with reference to growth and profitability projections of the company. The choice helps achieve the long term objectives of the company i.e., survival and growth, preserving market share of its products and retaining leadership in its production activity.

Investment Decision Analysis

The investment decision process:

- Generate cash flow forecasts for the projects,
- Determine the appropriate opportunity cost of capital,
- Use the cash flows and the cost of capital to compute the relevant investment criteria.

Issues:

- Why use cash flows and not accounting earnings? - can we “spend” earnings?
- Which cash flows do we use?
 - total vs. incremental cash flows,
 - how to treat sunk costs
- Which investment criterion do we use, and why?
 - Net Present Value (NPV),
 - Payback / Discounted payback period
 - Average Accounting Return
 - Internal Rate of Return (IRR)
 - Profitability Index
- Mutually exclusive vs. independent projects.

- Sensitivity analysis.
 - How sensitive are the criterion to changes in key assumptions.

Earnings vs. Cash Flows

- You cannot spend earnings! Need cash to build a plant, not earnings.
- Earnings can be manipulated by creative accounting.

Classic Example: The movie Forrest Gump (Paramount Pictures, 1994)

Winston Groom, the author of the book on which the movie is based, was promised 2% of the net income on the movie. The movie grossed over \$650 million worldwide. However, Groom got nothing! Paramount reported a \$62 million loss on the movie, because of a 32% commission the studio charged the movie to cover costs on future films that might fail!!

Now the question is whether Paramount didn't made a cash profit on the movie?

The answer is earnings can be what you want them to be, while cash flows are what you receive in your bank account, and are hence much more real and transparent.

Things to check from Cash Flow from Investing Activities

1. **Source of investments made during the year:** Cash flow from Investing activity is generally a negative cash flow component of the cash flow statement. One should observe whether the investments made by the company are coming on the back of sufficient cash flow from operations or retained earnings, or whether the company has borrowed money or raised additional capital to raise the money needed for the investments made. In any case, what is important is that the return on investment is greater than the cost of capital. Going a step further would be to understand how that return is then distributed amongst various stakeholders, a component of cash flow from financing activities.
2. **Qualitative nature of the investments made by the company:** Imagine a non-finance company employing capital raised from external sources for making non-current investments in debt or equity securities rather than investing that capital in buying core business growth assets such as plant and machinery etc. It raises a couple of questions regarding the attractiveness of the industry in which the company operates, the growth and expansion strategy of the company, the possibility of expansion, company's ability to expand and the appropriate timing for the same etc.

The inter-period and intra-firm pattern of investments made by companies in an industry read with management discussion and analysis not only draws a picture about the company's future plans but also indicates the prospects of profitability in the industry and direction of development of business at an industry level considering all players in that industry.

In case of capital-intensive industries wherein huge capex is needed for expansion and maintenance, one must observe that a persistently large negative cash flow from investing activity component over many years could indicate that the company is undertaking expansion in the business and must further analyse the nature of such an expansion. This can be observed in case of other businesses as well wherein there is surge in cash outflow from investment activity.

3. **Does business have high capital expenditure requirements?:** In the book "Investment Checklist" by Michael Shearn, he gives a detail account of how one can approach this question. He emphasises that "if the capital requirements are high, then the cash flows of the business need to be continually reinvested in the business just to maintain existing assets. High capital expenditures reduce cash flow, which is what the value of a business is based on". One can observe this by looking at the ratio of capital expenditure to sales. One must also observe the capital requirements in terms of maintenance

capital expenditure and growth capital expenditure and determining how long the assets last before they need to be replaced, as highlighted in the book.

4. **Capitalisation of Operating Expenses:** Capitalisation of operating expenses not only shows higher earnings but also a higher cash flow from operations. These capitalised expenses are shown under cash flow from investing activities. In the book “Financial Shenanigans” by Howard M Schilt, he gave the example of WorldComm, where some senior executives classified billions of dollars (a whopping 58.588 billion dollars) of normal operating costs as capital equipment purchases, thereby inflating profits and cash flow from operations.

He also recommends that one must keep an eye on growing fixed asset accounts or “soft” asset accounts (eg. Other assets), which may show signs of aggressive capitalisation. Another recommendation by him was to keep a check if some companies are classifying inventory purchases under investing activity.

5. **Inorganic Expansion of Business:** Cash flow from investing activities includes cash payments made to and received from inorganic expansion and development of business in the form of merger and acquisitions, takeovers etc. It is pertinent to observe the efficiency of such inorganic acquisitions and synergies resulting from such deals. Inorganic acquisition of a business which is unrelated to the core business of the acquiring company should be further investigated and evaluated for value to shareholders and other relevant stakeholders. One can also look at the pattern of acquisitions and mergers by the company and how effective they have been in the past.

One classic example of such an inorganic expansion was the acquisition of Sterling Drugs, a pharmaceutical company by Kodak, an imaging and photography company in 1987. The acquisition was a massive failure and eventually resulted in a big loss of value to the shareholders, ending up with sale of Sterling Drugs to the Sanofi Group and partly to SmithKline Beecham in 1993 and 1994.

6. **Churn in Business and Sale of Business Units or Assets:** While the cash flow from investing activities is an indicator of how new cash or existing cash is employed to generate future profitability, it also includes the cash flow from sale of assets, sale of business units etc. One should note the strategic direction of the company as well as the implication of such divestitures on the value of the shareholders. Under the Companies Act, 2013, there are specific provisions regarding sale of assets and business units to related parties especially directors of the company. One must pay attention on whether the transactions have taken place at a fair price and that all necessary compliances are in place.
7. **In-house expenditure and research and development:** In terms of the accounting standards, Investing Activities refers to “acquisition and disposal of long-term assets and other assets not included in cash equivalents”. It must be noted that only those expenditures that result in recognition of an asset in the balance sheet are eligible for classification as investing activities. Therefore, expenditures such as advertising and promotional activities or research and development, especially in-house development expenditure, typical in case of pharma or technological companies warrant special attention.

Understanding Cash Flow from Investing Activities

In many cases, a firm may have a negative overall cash flow for a given quarter. If the company cannot generate positive cash flow from its business operations, a negative overall cash flow is not necessarily a bad thing.

An item on the cash flow statement belongs in the investing activities section if it is the result of any gains (or losses) from investments in financial markets and operating subsidiaries.

An investing activity also refers to cash spent on investments in capital assets such as property, plant, and equipment, which is collectively referred to as capital expenditure, or CAPEX. Below is a more comprehensive list of cash flows that can stem from a firm’s investing activities:

<i>Inflows from Investing Activities</i>	<i>Outflows from Investing Activities</i>
Proceeds from disposal of property, plant, and equipment	Payments for acquisition of property, plant, and equipment
Cash receipts from the disposal of debt instruments of other entities	Payments for purchase of debt instruments of other entities
Receipts from sale-of-equity instruments of other entities	Payments for purchase of equity instruments of other entities
	Sales/maturities of investments
	Purchasing and selling long-term assets and other investments

The following items are not covered under the cash flow from investing activities:

- Interest payments or dividends
- Debt, equity, or other forms of financing
- Depreciation of capital assets (even though the purchase of these assets is part of investing)
- All income and expenses related to normal business operations

FINANCING DECISIONS

Determining the best capital structure or financing decision is the next step in financial management for executing the investment decision once taken. A look at the balance-sheet of a company shows its sources of long-term finance i.e., how much funds it has procured from equity shareholders, preference shareholders, debentureholders, term loans from banks / financial institutions etc.

Financing decisions are concerned with the determination of how much funds to procure from the various avenues available i.e., the financing mix or capital structure. Let us quickly have a look on some definitions of capital structure in order to develop a basic understanding on the term.

“Capital structure is essentially concerned with how the firm decides to divide its cash flows into two broad components, a fixed component that is earmarked to meet the obligations toward debt capital and a residual component that belongs to equity shareholders”-P. Chandra.

Capital structure refers to the amount of debt and/or equity employed by a firm to fund its operations and finance its assets. A firm’s capital structure is typically expressed as a debt-to-equity or debt-to-capital ratio.

From a technical perspective, the capital structure is the careful balance between equity and debt that a business uses to finance its assets, day-to-day operations, and future growth. Capital Structure is the mix between owner’s funds and borrowed funds.

- Funds = Owner’s funds + Borrowed funds
- Owner’s funds (Equity) = Equity share capital + Preference share capital + Reserves and Surplus + Retained Earnings
- Borrowed funds = Loans + Debentures + Public Deposits

In short, Capital Structure is the mixture of long-term sources of funds. Capital Structure is optimal when the proportion of debt and equity maximizes the value of the equity share of the company.

In lesson 15, we would study in detail how the change in capital structure can impact the valuation of a firm.

In business organisations, financing decision today, has become fully integrated with top-management policy formulation via capital budgeting, long-range planning, evaluation of alternate uses of funds, and establishment of measurable standards of performance in financial terms.

Financial decision making is concerned more and more with the questions as to how cost of funds be measured, proposals for capital using projects be evaluated, or how far the financing policy influences cost of capital or should corporate funds be committed to or withheld from certain purposes and how the expected returns on projects be measured.

(Note: In lesson 14, the technique of cost of capital has been elaborated).

Optimal use of funds is one of the biggest concern of financing decisions and top managements in corporate sector are more concerned with planning the sources and uses of funds and measuring performance. New measurement techniques, utilising computers, have facilitated efficient capital allocation through financing decisions. Both Investment decision and financial decisions are jointly made as an effective way of financial management in corporate units. No doubt, the purview of these decisions is separate, but they affect each other. Financial decisions, as discussed earlier, encompass determination of the proportion of equity capital to debt to achieve an optimal capital structure, and to balance the fixed and working capital requirements in the financial structure of the company. This important area of financing decision making, aims at maximising returns on investment and minimising the risk. The risk and return analysis is a common tool for investment and financing decisions for designing an optimal capital structure of a corporate unit. It may be mentioned that debt adds to the riskiness of the capital structure of a firm. This part of financial management is the analysis of company through earnings before interest and taxes, variable costs, contribution. It is called a study of operating leverages. Further, the earnings per share to be given to shareholders is analysed through the technique of financial leverage. When study of both these aspects is made it is known as combined leverage. The leverage concepts have been discussed in detail in lesson 15.

Factors affecting Financing Decision

While taking financing decisions the finance manager keeps in mind the following factors:

1. **Cost:** The cost of raising finance from various sources is different and finance managers always prefer the source with minimum cost.
2. **Risk:** More risk is associated with borrowed fund as compared to owner's fund securities. Finance manager compares the risk with the cost involved and prefers securities with moderate risk factor.
3. **Cash Flow Position:** The cash flow position of the company also helps in selecting the securities. With smooth and steady cash flow companies can easily afford borrowed fund securities but when companies have shortage of cash flow, then they must go for owner's fund securities only.
4. **Control Considerations:** If existing shareholders want to retain the complete control of business then they prefer borrowed fund securities to raise further fund. On the other hand if they do not mind to lose the control then they may go for owner's fund securities.
5. **Floatation Cost:** It refers to cost involved in issue of securities such as broker's commission, underwriters fees, expenses on prospectus, etc. Firm prefers securities which involve least floatation cost.

Understanding Cash Flow from Financing Activities

The financing activity in the cash flow statement focuses on how a firm raises capital and pays it back to investors through capital markets. These activities also include paying cash dividends, adding or changing

loans, or issuing and selling more stock. This section of the statement of cash flows measures the flow of cash between a firm and its owners and creditors.

A positive number indicates that cash has come into the company, which boosts its asset levels. A negative figure indicates when the company has paid out capital, such as retiring or paying off long-term debt or making a dividend payment to shareholders.

Examples of common cash flow items stemming from a firm's financing activities are:

- Receiving cash from issuing stock or spending cash to repurchase shares
- Receiving cash from issuing debt or paying down debt
- Paying cash dividends to shareholders
- Proceeds received from employees exercising stock options
- Receiving cash from issuing hybrid securities, such as convertible debt

DIVIDEND DECISIONS

The dividend decision is another major area of financial management. The financial manager must decide whether the firm should distribute all profits or retain them or distribute a portion and retain the balance. Theoretically, this decision should depend on whether the company or its shareholders are in the position to better utilise the funds, and to earn a higher rate of return on funds. However, in practice, both dividends and retention of profits are important financial signals to the market, which continuously tries to assess the future profitability and risk of a company. A number of other factors like the market price of shares, the trend of earning, the tax position of the shareholders, cash flow position, requirement of funds for future growth, and restrictions under the Companies Act etc. also play an important role in the determination of dividend policy of business enterprise. The finance manager has to take a decision regarding optimum dividend payout ratio, he also has to take decisions relating to bonus issue and interim dividend.

It can be said that investment, financing and dividend decision are inter-related to each other. Financial Management is concerned with all three investment, financing and dividend decisions in relation to objectives of the company. Investment ordinarily means profitable utilization of funds. Investment decisions are concerned with the question whether adding to capital assets today will increase the net worth of the firm. Financing is next step in financial management for executing the investment decision once taken. Financial decision making is concerned with the question as to how funds requirements should be met keeping in view their cost, and how far the financing policy influences cost of capital. The dividend decision is another major area of financial management. It helps the financial manager in deciding whether the firm should distribute all profits or retain them or distribute a portion and retain the balance. Management needs to ensure that enough funding is available at the right time to meet the needs of the business. Hence, making of financial policy in taking three important decision of business viz. Financing, Investing and Dividend are always helpful to the management to take key corporate decision like expansion, diversification etc.

The following are the some major factors which influence the dividend policy of the firm.

1. Legal requirements

There is no legal compulsion on the part of a company to distribute dividend. However, there certain conditions imposed by law regarding the way dividend is distributed. Basically there are three rules relating to dividend payments. They are the net profit rule, the capital impairment rule and insolvency rule.

2. Firm's liquidity position

Dividend payout is also affected by firm's liquidity position. In spite of sufficient retained earnings, the firm may not be able to pay cash dividend if the earnings are not held in cash.

3. Repayment need

A firm uses several forms of debt financing to meet its investment needs. These debt must be repaid at the maturity. If the firm has to retain its profits for the purpose of repaying debt, the dividend payment capacity reduces.

4. Expected rate of return

If a firm has relatively higher expected rate of return on the new investment, the firm prefers to retain the earnings for reinvestment rather than distributing cash dividend.

5. Stability of earning

If a firm has relatively stable earnings, it is more likely to pay relatively larger dividend than a firm with relatively fluctuating earnings.

Dividend Decision Matrix

Factors	FCFE > Dividends	FCFE < Dividends
ROE > Cost of Equity	i) Good Projects ii) Cash flow surplus iii) No Change	i) Good Projects Decrease ii) Dividends Invest in Projects
ROE < Cost of Equity	i) Poor Projects ii) Cash flow surplus iii) Increase Dividends iv) Reduce Investment	i) Poor Projects ii) Cash flow Deficit iii) Decrease Dividends iv) Reduce Investment

Stable Dividend Policy: A Policy of Dividend Smoothing

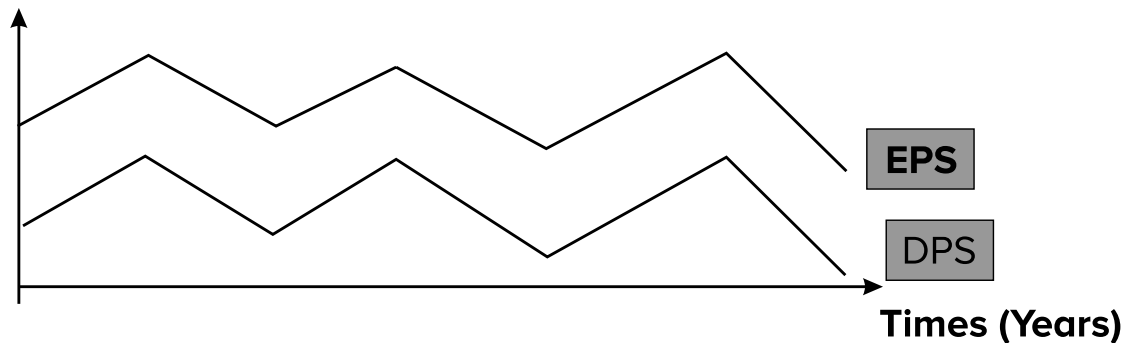
Lintner (1956) had observed that managers tend to value stable dividend policies and corporations tend to smooth dividends relative to earnings. That is, dividends are increased gradually and rarely cut, resulting in a much lower variability of dividends as compared to the variability in earnings.

Most Companies adopt a basic policy of maintaining its internal reserves to ensure stable income far into the future, while at the same time seek to distribute a sufficient amount of earnings to shareholders in accordance with business results. With a decrease in EPS, DPS has decreased and with increase in earnings the dividend per share has increased. However increase in dividends is lagging behind increase in earnings in order to 'smoothen' or 'stabilize' dividend payments over the time.

Firm may adopt any of the following stable dividend policies:

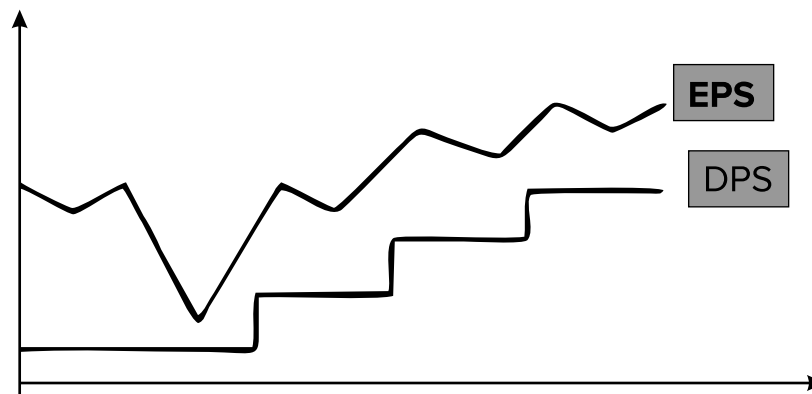
- Stable dividend payout ratio
- Stable dividends per share
- A regular plus extra dividend policy

- (i) **Stable Dividend Payout Ratio:** As per this policy the percentage of dividends paid out of earnings remains constant.



Example: if a company adopts a 30% payout ratio and if EPS is Rs 100, then shareholder having 10 shares will receive Rs.300 as dividend under this policy.

- ii) **Stable Dividends Per Share:** According to this policy, the firm pays a certain fixed amount of dividend per share every year. Annual dividend per share is increased only when the company reaches a new level of earnings and expects to maintain it.



- iii) **A Regular Plus Extra Dividend Policy:** According to this policy a certain fixed percentage or a minimum amount of dividend is paid every year, which is referred to as regular dividend. The firm pays 'additional' or 'extra' dividend if earnings are higher than normal in any year.

Rationale for stable dividend policy:

Most firms adopt a stable dividend policy. If a firm's earnings are temporarily depressed or if it needs a substantial amount of funds for investment, then it might well maintain its regular dividend using borrowed funds to meet its needs, until things returned to normal. The logic or rationale for stable dividend policy is:

- i) Stockholders like stable dividends – many of them depend on dividend income, and if dividends were cut, this might cause serious hardship to them. A stable dividend policy is desirable for many investors such as retired persons, who take dividends as a source to meet their current living expenses.
- ii) A stable dividend policy would reduce investor uncertainty, and reductions in uncertainty are generally associated with lower capital costs and higher stock prices, other things being equal.
- iii) Institutional investors generally prefer to invest in companies having stable dividend records.
- iv) Adoption of stable dividends is advantageous for a company interested in raising funds from external

sources as shareholders willingly invest in companies having stable dividends as they have more confidence in such companies.

The disadvantage is that such a policy might decrease corporate flexibility. Once a company has adapted a stable dividend policy, any change in such a policy may have adverse effects on the company image and may result in creating serious doubts in the minds of investors about financial standing of the company, which might prove to be very dangerous for the company at a later stage.

DECISION CRITERIA

Decision criteria depends upon the objective to be achieved through the instrumentality of decision making process. The main objectives which a business organisation pursues are maximisation of return and minimisation of costs.

A fair decision criterion should distinguish between acceptable and unacceptable proposals and solve the problem of selection of the best alternatives from amongst the various alternatives available in a given situation to achieve the above objectives. A fair decision criterion should follow the following two fundamental principles i.e. (1) the **“Bigger and Better”** principle; (2) **“A Bird in Hand is Better than Two in the Bush”** principle. The first principle suggests that bigger benefits are preferable to smaller ones; whereas the second one suggests that early benefits are preferable to later benefits.

Decision criteria in financial management can be studied under two separate heads viz. The criteria for investment decisions; and the criteria for the financing decisions.

Criteria for investment decisions are mainly concerned with planning and control of capital expenditure through budgeting process following the tools of analysis viz. pay back period, accounting rate of return, discounted cash flow methods e.g., net present value method, etc. We shall discuss these methods for evaluating investment decisions in detail in the study relating to capital budgeting in Lesson 13. However, the essence and the inherent spirit in these techniques is based on logic which helps in the decision making process.

Both the above principles are based on the assumption “other things being equal” which is a rare reality. But in practice the decision process very much adheres to these principles particularly in the areas of capital budgeting decisions and determining the cost of capital in project financing proposals.

As a matter of fact, these techniques have been founded on the following decision criteria:

1. **Urgency:** The use of ‘urgency’ is treated as criterion for selection of investment projects in many corporate units/ business enterprises/government set up. Urgency is assessed on the following basis:
 - (a) it provides sufficient justification for undertaking a project;
 - (b) it provides immediate contribution for attainment of objectives of the project; and
 - (c) it maximises profits.

Although urgency as criterion lacks objectivity, being non-quantifiable, yet it definitely provides an ordinal ranking scale for selection of projects on preferential pre-exemption basis.

2. **Pay back:** Time is of essence while selecting this criterion for investment decisions. The decision is taken on the basis of quickness in pay off of the investments. Pay back simply measures the time required for cash flows from the project to return the initial investment to the firm’s account. Projects, on the basis of this criterion, having quicker pay backs are preferred. For example, imagine a company invests £200,000 in new manufacturing equipment which results in a positive cash flow of £50,000 per year.

Payback Period = £200,000 / £50,000. In this case, the payback period would be 4 years because 200,000 divided by 50,000 is 4.

Another example of payback period.

1. The ABC company is planning to purchase a machine known as machine X. Machine X would cost \$25,000 and would have a useful life of 10 years with zero salvage value. The expected annual cash inflow of the machine is \$10,000. Compute payback period of machine X and conclude whether or not the machine would be purchased if the maximum desired payback period of ABC company is 3 years.

Solution

Since the annual cash inflow is even in this project, we can simply divide the initial investment by the annual cash inflow to compute the payback period. It is shown below:

$$\begin{aligned} \text{Payback period} &= \$25,000 / \$10,000 \\ &= 2.5 \text{ years.} \end{aligned}$$

According to payback period analysis, the purchase of machine X is desirable because its payback period is 2.5 years which is shorter than the maximum payback period of the company.

2. Due to increased demand, the management of XYZ Beverage Company is considering to purchase a new equipment to increase the production and revenues. The useful life of the equipment is 10 years and the company's maximum desired payback period is 4 years. The inflow and outflow of cash associated with the new equipment is given below:

Initial cost of equipment: \$37,500

Annual cash inflows:

Cost of ingredients: \$45,000

Salaries expenses: \$13,500

Maintenance expenses: \$1,500

Should XYZ Beverage Company purchase the new equipment? Use payback method for deriving answer.

Step 1:

In order to compute the payback period of the equipment, we need to work out the net annual cash inflow by deducting the total of cash outflow from the total of cash inflow associated with the equipment.

Computation of net annual cash inflow:

$$\$75,000 - (\$45,000 + \$13,500 + \$1,500) = \$15,000$$

Step 2:

Now, the amount of investment required to purchase the equipment would be divided by the amount of net annual cash inflow (computed in step 1) to find the payback period of the equipment.

$$\begin{aligned} &= \$37,500 / \$15,000 \\ &= 2.5 \text{ years} \end{aligned}$$

According to payback method, the equipment should be purchased because the payback period of the equipment is 2.5 years which is shorter than the maximum desired payback period of 4 years.

3. The management of ABC company wants to reduce its labor cost by installing a new machine. Two types of machines are available in the market – machine X and machine Y. Machine X would cost \$18,000 where as machine Y would cost \$15,000. Both the machines can reduce annual labor cost by \$3,000. Which is the best machine to purchase according to payback method?

Solution:

Payback period of machine X: $\$18,000/\$3,000 = 6$ years

Payback period of machine y: $\$15,000/\$3,000 = 5$ years

According to payback method, machine Y is more desirable than machine X because it has a shorter payback period than machine X.

Pay back decision criterion does not follow the principles laid down above viz. “the bigger and better” and “bird in hand”. It ignores the first principle completely as it does not take into account the cash flows after investment has been recovered. It also does not satisfy entirely the second principle as it assigns zero value to the receipts, subsequent to recovery of the amount.

3. **Rate of return:** It provides another decision criterion based on accounting records or projected statements to measure profitability as annual percentage of capital employed. Rate of return is arrived at following two different methods for treating income in the analysis which give different results. In the first case, average income generated from investment is taken after deduction of depreciation charge. In second case, the original cost is taken as denominator rather than average investment. This gives the simple yearly rate of return. This is based on “bigger and better” principle. This criterion can be applied either against average investment in the year selected for study or simply against initial cost.

In other words, a Rate of Return (ROR) is the gain or loss of an investment over a certain period of time. In other words, the rate of return is the gain (or loss) compared to the cost of an initial investment, typically expressed in the form of a percentage. When the ROR is positive, it is considered a gain, and when the ROR is negative, it reflects a loss on the investment.

The standard formula for calculating ROR is as follows:

$$\text{Rate of Return} = \frac{\text{Ending Value of Investment} - \text{Beginning Value of Investment}}{\text{Beginning Value of Investment}} * 100$$

Example:

1. Amit is a retail investor and decides to purchase 10 shares of Company A at a per-unit price of \$20. Adam holds onto shares of Company A for two years. In that time frame, Company A paid yearly dividends of \$1 per share. After holding them for two years, Adam decides to sell all 10 shares of Company A at an ex-dividend price of \$25. Adam would like to determine the rate of return during the two years he owned the shares.

Solution:

To determine the rate of return, first, calculate the amount of dividends he received over the two-year period:

10 shares x (\$1 annual dividend x 2) = \$20 in dividends from 10 shares

Next, calculate how much he sold the shares for:

10 shares x \$25 = \$250 (Gain from selling 10 shares)

Lastly, determine how much it cost Adam to purchase 10 shares of Company A:

10 shares x \$20 = \$200 (Cost of purchasing 10 shares)

Plug all the numbers into the rate of return formula:

$$= ((\$250 + \$20 - \$200) / \$200) \times 100 = 35\%$$

Therefore, Adam realized a 35% return on his shares over the two-year period.

Further, it is also essential to comprehend the concept of Annualized Rate of Return also. The annualized ROR, also known as the Compound Annual Growth Rate (CAGR), is the return of an investment over each year.

The formula for annualized ROR is as follows:

$$\text{Annualized Rate of Return} = \left(\frac{\text{Ending Value}}{\text{Beginning Value}} \right)^{1/n} - 1$$

Similar to the simple rate of return, any gains made during the holding period of this investment should be included in the formula.

Example: Let's assume that an individual placed their money into two different investment products:

1. A \$100,000 investment into a high-interest savings account with a variable interest rate. With no additional contributions, six years later, the account balance amounts to \$115,900.
2. An investment property in Miami that was bought for \$350,000 in 2015. Five years later, the property is now worth \$410,000.

With two completely different investments, which one provides the best return? We can use the annualized rate of return formula to calculate the rate of return for both investments on an annual basis.

Using the formula given above, we substitute the figures:

$$1) \text{ ARR} = (115,900 / 100,000)^{(1/6)} - 1$$

$$\text{ARR} = 0.02489 \approx 2.50\%$$

$$2) \text{ ARR} = (410,000 / 350,000)^{(1/5)} - 1$$

$$\text{ARR} = 0.03215 \approx 3.21\%$$

By using the annualized rate of return formula, we are now able to compare the returns for both investments over the same time frame. Therefore, we can conclude that the investment property in Miami provides the best return at an annualized rate of **3.21%**.

4. **Undiscounted benefit-cost ratio:** It is the ratio between the aggregate benefits and the cost of project. Benefits are taken at face value. The ratio may be "gross" or "net". It is "gross" when calculated with benefits without deducting depreciation. In the net version, depreciation is deducted from benefits

before computing the results. Both ratios give identical ranking. Net ratio equals the gross ratio minus 1. This relationship makes it simple to calculate gross ratio and then to arrive at net ratio.

This criterion is compatible with the “bigger and better” principle. But it does not follow the second principle of “bird in hand” as early receipts are given identical weights to later receipts in the project’s life.

5. **Discounted benefit-cost ratio:** This ratio is more reliable as it is based on present value of future benefits and costs. It may also be gross or net like the one discussed earlier. It takes into account all incomes whenever received and to this extent complies with “bigger and better” principle. Early receipts are given more weight than late receipts on account of introduction of discount factor.

This ratio satisfies the requirements of both the principles and is a good criterion for decision making.

Example of Benefit Cost Ratio:

Cash flow projections for a project are provided below. The relevant discount rate is 10%.

Time	t=0	t=1	t=2	t=3
Costs	-\$5000	-\$10,000	-\$10,000	-\$15,000
Benefits	-	-	\$50,000	\$75,000
Net Cash Flow	-\$5000	-\$10,000	\$40,000	\$60,000

What is the benefit-cost ratio of the project?

Solution:

Time	Discounted Costs	Discounted Benefits
t=0	-\$5000	0
t=1	-\$10,000 $(1+10\%)^{-1} = \$9,090.91$	0
t=2	-\$10,000 $(1 + 10\%)^{-2} = \$8,264.46$	$\$50,000 / (1 + 10\%)^2 = \$41,322.21$
t=3	$-\$15,000 / (1 + 10\%)^3 = \$11,269.72$	$\$75,000 / (1 + 10\%)^3 = \$56,348.61$
Total		\$97,670.92

6. **Present value method:** This concept is useful as a decision criterion because it reveals the fact that the value of money is constantly declining, as a rupee received today is more in value than the rupee at the end of a year. Besides, if the rupee is invested today it will fetch a return on investment and accumulate to Re. $1(1+i)^n$ at the end of ‘n’ period. Hence a rupee received at the end of ‘n’ period is worth $1/(1+i)^n$ now. Investment decisions require comparison of present value with the cost of assets, and if the present value exceeds the cost, the investment is rendered acceptable. The practical application of concept of time value of money would be discussed in lesson 12.

Another off-shoot of this criterion is net present value method which is closely related to cost-benefit ratio. It takes into account all income and its timing with appropriate weights. Here difference of present value of benefits and costs is considered as against the ratio in cost-benefit analysis. This criterion

is useful for acceptance of projects showing positive net present value at the company's cost of capital rate. It can be used for choosing between mutually exclusive projects by considering whether incremental investment yields a positive net present value.

Example

Company A Ltd wanted to know their net present value of cash flow if they invest 100000 today. And their initial investment in the project is 80000 for the 3 years of time, and they are expecting the rate of return is 10 % yearly. From the above available information, calculate the NPV.

Solution:

$$\begin{aligned} \text{NPV} &= \text{Cash flow} / (1 + i)^t - \text{initial investment} \\ &= 100000 / (1 - 10\%)^3 - 80000 \end{aligned}$$

NPV = 57174.21

So in this example, NPV is positive, so we can accept the project.

- 7. Internal rate of return:** It is a widely used criterion for investment decisions. It takes interest factor into account. It is known as marginal efficiency of capital or rate of return over cost. It stipulates rate of discount which will equate the present value of the net benefits with the cost of the project. This method satisfies both these principles and would be elaborated with practical examples in Chapter 12.

Example:

Let us say a company has an option to replace its machinery.

The cost and return are as follows:

Initial investment = Rs.5,00,000

Incremental increase per year = Rs.2,00,000

Replacement value = Rs.45,270

Life of asset = 3 years

If we assume IRR to be 13%, the computation will be as follows.

Solution:

Year	Cash flows	Discounted cash flows	Computation
0	-5,00,000	-500000	(5,00,000 * 1)
1	2,00,000	176991	2,00,000 * (1/1.13) ¹
2	2,00,000	156229	2,00,000 * (1/1.13) ²
3	2,00,000	138610	2,00,000 * (1/1.13) ³
4	45,270	27765	45,270 * (1/1.13) ⁴

The total of the column Discounted Cash Flows approximately sums up to zero making the NPV equal to Zero. Hence, this discounted rate is the best rate. As can be seen from the above, using the rate of 13%, the cash flows, both positive and negative become minimum.

Hence, it is the best rate of return on investment. The cost of capital of the company is 10%. Since the IRR is higher than the cost of capital, the project can be selected.

If the company has another opportunity to invest the money in a project that gives a 12% return, the company will still go in for the machinery replacement since it gives the highest IRR.

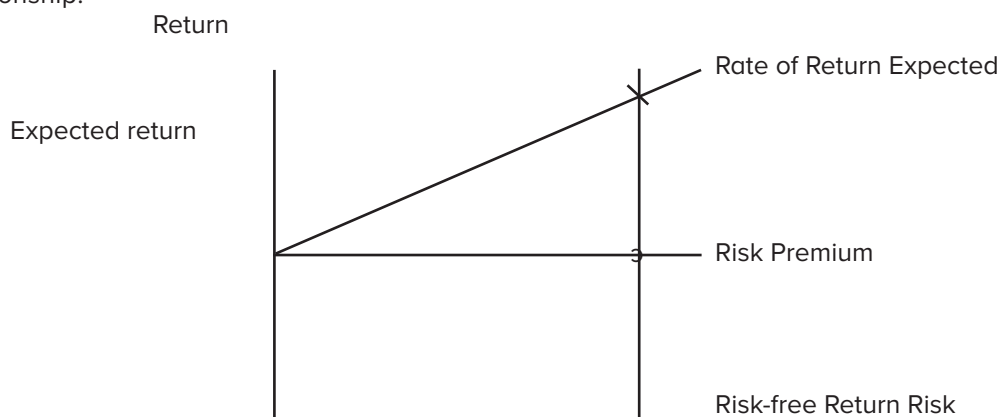
Capital Structure

The capital structure of a corporate unit contains two important parameters viz., the owners' capital known as equity and the debt which represents interest of debenture holders in the assets of the company. The factors responsible for inclusion of debt in the capital structure of a company are tax-savings, easier to sell, lower cost of floatation and services, lower cost of capital, the advantage of leverage, no dilution of equity and probable loss of control, logical to consolidate and fund short-term indebtedness by a bond issue, advantageous in the inflationary trends of rising interest rates and improvement in financial ratios.

There is no alternative for a company to equity financing to meet its requirement for funds. Debt can be raised by a company only on an adequate equity base which serves as a cushion for debt financing. The study of effect of leverage is the main focus point to determine the best mix of debt and equity sources of funds. It is, therefore, desired to consider this criterion for financing decision making in relation to leverage and cost of capital.

VALUE OF FIRM-RISK AND RETURN

Financial decisions incur different degree of risk. An investor's decision to invest in risk free government bonds has less risk as interest rate is known and the risk of default is very less. On the other hand, an investor would incur more risk if he decides to invest in shares, as the return is not certain. However, the investor can expect a lower return from government bond and higher from shares. Risk and expected return move in tandem; the greater the risk the greater would be the expected return. The following figure shows the risk-return relationship.



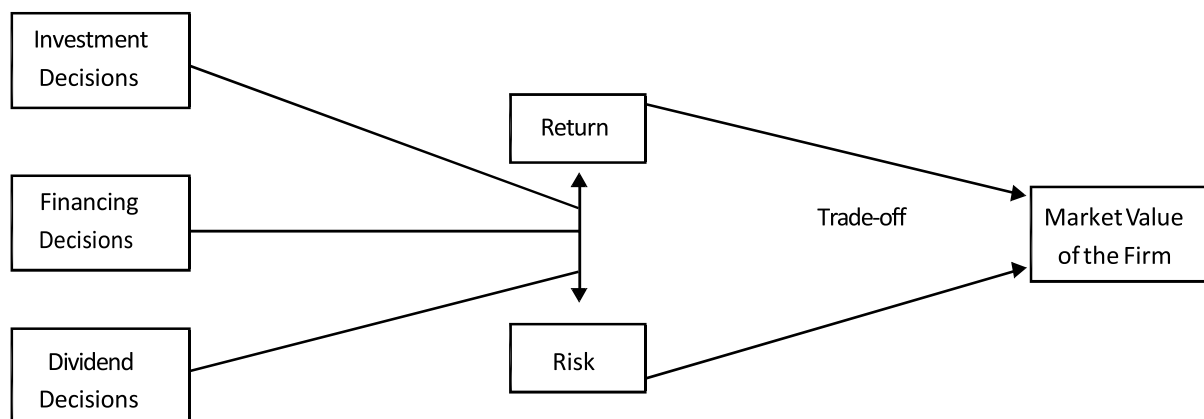
The Risk-return relationship

As discussed earlier, a finance manager has to take various types of decision- investment decisions, financing decisions and dividend decisions. A finance manager takes these decisions in the light of the objective of wealth maximisation as reflected in the market price of the shares. The finance manager should also know as to what

are the factors which may affect the market price of the shares. The various decisions will be taken in the light of these factors, otherwise any attempt to achieve the objective of maximisation of market price of the shares may not be achieved.

A finance manager cannot avoid the risk altogether nor he takes a decision by considering the return aspect only. Usually, as the return from an investment increases, the risk associated with it also increases. In an attempt to increase the return, the finance manager will have to undertake greater degree of risk also. Therefore, a finance manager is often required to trade-off between the risk and return. At the time of taking any decision, the finance manager tries to achieve the proper balance between the consideration of risk and return associated with various financial management decisions to maximise the market value of the firm. A particular combination of risk and return where both are optimized may be known as Risk-return trade off and at this level of risk-return, the market price of the shares will be maximised.

The figure below demonstrates the relationship between market value of the firm, return and risk, on the one hand and financial management decision on the other.



LIQUIDITY

Liquidity is an important concept in financial management and is defined as ability of the business to meet its short-term obligations. It shows the quickness with which a business/company can convert its assets into cash to pay what it owes in the near future. According to Ezra Soloman, it measures a company's ability to meet expected as well as unexpected requirements of cash to expand its assets, reduce its liabilities and cover up any operating losses. Liquidity, as a decision criterion, is widely used in financial management. It is used for managing liquid resources or current assets or near cash assets so as to enhance the effectiveness with which they are utilised with a view to minimising costs. It also focuses attention on the availability of funds. Enhancement of liquidity enables a corporate body to have more funds from the market.

While using liquidity as a decision criterion, the management makes use of ratios. They give a bird's eye view of the current liquidity position or shortages thereof. A company will like to have liquid resources for transaction purposes, as a precautionary measure and for speculative opportunities. The management's attitude towards these i.e., transaction motive, precautionary motive and speculative motive (taking advantage of lower prices of raw materials etc., in the market) is an important determinant of a company's liquidity position.

Liquidity is assessed through the use of ratio analysis. Liquidity ratios provide an insight into the present cash solvency of a firm and its ability to remain solvent in the event of calamities.

Current Ratio which is the ratio of current assets to current liabilities, is widely used by corporate units to judge the ability to discharge short-term liabilities covering the period upto one year. The interpretation of the current ratio is that 'higher the ratio, greater is the ability of the firm to pay off its bills'.

Nevertheless, it is a crude ratio and does not take into account the difference amongst different categories of assets. For example, inventory may not be turned into cash as quickly as Account Receivables. The main difficulty that arises in treating inventory as a quick item is that unless one has ensured about the quality, condition and marketability of the inventory it may be impossible to turn it into cash immediately at the estimated value. Therefore, to assess quick liquidity position, inventory is excluded while calculating Quick Ratio. The ingredients of current assets while computing the Quick Ratio are cash, marketable securities and receivables. Besides cash, the other two items are near cash and at very short notice can easily be converted into cash. Therefore, for taking financial decisions particularly for assessing cash position of the company and its ability to discharge current obligations, Quick Ratio is frequently relied upon. Nevertheless, the main shortcoming of the Quick Ratio is that it ignores inventories and concentrates on cash, marketable securities and receivables in relation to current obligations although inventory is also a basic input in current ratio without which company's decision process cannot be complete.

Liquidity ratio enables a company to assess its Net Working Capital. Working Capital is denoted by the combination of current assets or current liabilities of a company, and for calculation of net working capital we deduct current liabilities from current assets. Having done so we are left with the ready money in our hands to meet day to day needs of the business. If we still want to know as to how much is available with the company per rupee of sales then Net Working Capital is divided by sales.

Tailor-made measurement can be devised for calculating liquidity ratio in different situations. For example, the principle of liquidity can be extended to study liquidity of receivables (or inventories) separately to enable the executives to take decisions about the collection period of bills.

Liquidity of receivables is assessed through Average Collection Period (ACP). ACP tells us the average number of days receivables are outstanding i.e., the average time a bill takes to convert into cash. The inverse to this ratio is Receivables Turnover Ratio (RTR). Either of the two ratios can be used as both depict the slowness of recovery, but the readings are different. For financial decisions and to use liquidity as criterion the average collection period ratio, and receivables turnover ratio is used to help in taking corrective steps for maintaining the optimum liquid position for the company at any given time to avoid risk of losing goodwill and chances of bankruptcy. The ratio, in short, reveals the following results:

- (1) Too low an average collection period may suggest excessively restricted credit policy of a company.
- (2) Too high an average collection period (ACP) may indicate too liberal a credit policy. A large number of receivables may remain due and outstanding, resulting in less profits and more chances of bad debts.

Average collection period and receivables turnover ratio should be compared to the average age of accounts payable or accounts payable turnover ratio. Though adequate liquidity could be maintained by accelerating collections and deferring payments, yet this has its own limitations and drawbacks. It affects the credit standing of the company in business and banking circles.

In the same spirit, decisions are made to maintain a proper inventory level in the company. For the purpose, it becomes essential to assess the liquidity of inventory. Inventory Turnover Ratio i.e., cost of goods sold divided by average annual inventory, shows the rapidity with which inventory is turned into receivables through sales. The higher the ratio, the more efficient is the inventory management system of the company.

To conclude, liquidity, as a decision criterion is an important tool in financial management. Financial decisions are affected by liquidity analysis of a company in the following areas:

1. Management of cash and marketable securities;
2. Credit policy of a firm and procedures for realisation;
3. Management and control of inventories;

4. Administration of fixed assets;
5. Taking decisions for efficient use of current assets at minimum cost; and
6. Decisions to keep the company's position on sound basis to avoid eventualities.

The above analysis of liquidity suggests evaluation of current assets of a company. On liabilities side also, liquidity position is analysed and managed through assessment of long and medium term debts of the company, and the arrangements for their repayments. This is done purely from the precautionary point of view so that the company could be saved from the risk of bankruptcy for non-payment of its debt to the lenders.

PROFITABILITY

Profitability as a decision criterion is another important tool in financial management for taking decisions from different angles after evaluating the performance of the company in different spheres. For example, if it becomes essential for the company to examine profit per unit of sale then it is done by estimating profitability per rupee of sales. It is used as a measure of comparison and standard of performance. Similarly, there could be other ratios.

Because different users look at the profitability of a company from different angles, they use different ratios. Short-term creditors, long-term lenders, equity shareholders, investors, etc. all are interested in profitable operations of a concern. They use the ratios which best suit their requirements. Profitability can be related to sales or to total capital employed or to net worth of the company. But then different figures for profits are taken into account.

Profitability to sales ratio, reflects the company's ability to generate profits per unit of sales. If sales lack sufficient margin of profit, it is difficult for the business enterprise to cover its fixed cost, including fixed charges on debt, and to earn profit for shareholders. From investors point of view profits are compared by the investors as percentage to the capital employed in the business enterprise. Absence of adequate profitability ratio on sales reflects the company's inability to utilise assets effectively. This is analysed through the asset turnover ratio.

One of the important profitability ratios is profits on equity – profit figure after interest, before dividend and taxes, drawn from the profit and loss account is related to the equity of the shareholders as shown in balance sheet. This is an indicator of profits earned on funds invested by the owners. It is an indicator of actual returns received by them. This ratio may assume two forms:

$$(1) \frac{\text{Earning available to common shareholders}}{\text{Total Equity}}$$

$$(2) \frac{\text{Net income after tax}}{\text{Total Equity}}$$

[The ratio at (2) is used where the company has no preference shareholders].

Profit margin is another measure of viewing profitability. The revenue bearing property of sales can be easily assessed from the profit margin. It is derived by dividing operating income from business by sales. This ratio indicates the efficiency of operations as well as how products are priced. Inadequacy of profit margin is an evidence of company's inability to achieve satisfactory results. Pricing decisions are made by financial executives in consultation with the marketing departments of the company. Policy decisions relating to increase or decrease in price are taken in respect of different products keeping in view the competitiveness of the market. Profit margin ratio is constantly used by business executives for this purpose. To look into the cash generating capacity of sales, gross profit margin is used by deducting the cost of goods sold from sales and dividing by sales.

The gross profit margin ratio indicates the profits relative to sales after deduction of direct production cost. It

indicates efficiency of production operations and the relationship between production costs and selling price.

The difference between the above two ratios i.e. gross profit margin and net profit margin ratios is that general and administrative expenses are excluded while computing gross margin. Thus, net profit margin ratio is calculated as under:

$$\text{Net Profit Margin (NPM)} = \frac{\text{Net Profit after Taxes}}{\text{Sales}}$$

NPM ratio is an indicator of company's ability to generate profits after paying all taxes and expenses. Decline in this ratio reflects the presence of either higher expenses relative to sales or higher tax burden on the company, affecting its profitability adversely. For assessment of profitability as a decision criterion return on investment (ROI) is a frequently used ratio.

Return on Investment: This is an important profitability ratio from the angle of shareholders and reflects on the ability of management to earn a return on resources put in by the shareholders. The beauty of the ROI ratio is that earning of the company can be viewed from different angles so as to take decisions on different causes responsible, to reduce or to enhance the profitability of the company. One way of finding out rate of return on assets employed in the company is to find the ratio of earnings before interest and taxes (EBIT) to capital employed. This ratio indicates operating income to the assets used to produce income.

Another way of computing the ratio of return is through the assets turnover ratio and margin of profit which gives the same results, as EBIT to capital employed. It may be seen from the following:

$$\frac{\text{EBIT}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Assets}} = \frac{\text{EBIT}}{\text{Assets}}$$

A high ratio indicates efficient use of assets and low ratio reflects inefficient use of assets by a company.

Another off-shoot of profitability ratio is the times interest earned ratio, which gives a clue to the interest bearing capacity of the income character of business operations. This ratio relates operating profits to fixed charges created by the company's borrowings, and provides an indication of margin of safety between financial obligations and Net income after tax. A company may earn profits but may find it difficult to make payments of excess interest charges or may face inability to meet such obligations. EBIT should be 5 to 6 times interest charges as a satisfactory guideline for this ratio. Lenders, particularly banks and financial institutions, greatly rely on this ratio particularly in profitability assessment through projections of income of the borrower in the coming years after investment of borrowed funds.

In this way, we find that profitability as decision making criterion in financial management, is crucial for business managers. Business works as a system comprised of sub-systems. Different criteria assess different aspects and assist in viewing different situations which have an aggregate impact on business activity, and therefore form the basis of financial management.

There is an inverse relationship between liquidity and profitability. While the immediate survival of a business depends on its liquidity, its long term survival and growth depend on profitability. Thus, liquidity ensures short term survival and profitability ensures long term survival. Both are, therefore important for any firm to survive. A firm should maintain a trade-off situation where the firm maintains its optimum liquidity for greater profitability and the finance executive has to strike a balance between the two conflicting objectives. Therefore we can say that Liquidity and Profitability are competing goals for the finance manager.

Examples of Return on Investment

1. Vegan Steaks had the best year ever, with sales of \$4,500,000 and operating profit of \$950,000. The balance sheet at the beginning of the year showed assets used in production with a cost of \$20,000,000 and

accumulated depreciation of \$5,000,000. The company didn't buy any assets during the year but did have depreciation expense of \$1,000,000. Calculate the ROI for the year.

Solution:

Beginning of the year book value:

$$20,000,000 - 5,000,000 = 15,000,000$$

End of year book value:

$$20,000,000 - (5,000,000 + 1,000,000) = 14,000,000$$

So, the average book value of assets is \$14,500,000.

$$\frac{950,000}{14,500,000} = .0655$$

or ROI of 6.55%.

2. Management of It'll Heal Medical Company are evaluating the performance of three divisions of the company. The Booboo Division had operating profit of \$499 and on average used assets with a book value of \$6,238. The Splint Division had operating profit of \$350 and used average assets of \$3,889. The Intensive Care Division had operating profit of \$570 and average assets of \$9,500. Which division is performing the best?

Solution:

The Splint Division is performing the best with an ROI of 9%. ROI is a good way to compare divisions of different sizes. You calculate ROI as operating profit divided by average assets.

$$\frac{499}{6,238} = .08$$

or 8% ROI for the Booboo Division.

$$\frac{350}{3,889} = .09$$

or 9% ROI for the Splint Division.

$$\frac{570}{9,500} = .06$$

or 6% ROI for the Intensive Care Division.

COSTING AND RISK

In financial management, costing relates to the system adopted for assessing cost of capital from various sources viz., equity and preference shares, debentures/bonds, long-term borrowings from financial institutions, etc. Equity capital is owner's money employed in the business whereas borrowed funds are creditors' funds carrying an interest obligation and repayment schedule. There are thus, risks involved if interest is not paid or on account of default in repayment of principal. It is ordinarily expected that every rupee obtained on loan enhances the chances of increasing the returns on owners' capital and the net worth. The rate of interest on borrowed funds is usually lower than the returns expected by the investors or risk-takers in the business. Moreover, interest paid is deductible for tax purposes. The following illustration gives an idea of the phenomenon stated above:

(Figures in Crore)

	<i>Company A</i>	<i>Company B</i>
Total Capital	₹100	₹100
Owners' capital	₹100	₹50
Borrowed capital	NIL	₹50
Rate of earnings	20%	20%
Rate of interest	–	15%
Earnings before interest and taxes	₹20	₹ 20
Interest paid	–	₹7.50
Earnings before taxes	₹ 20	₹12.50
Taxes at 50%	₹10	₹6.25
Earnings after taxes	₹10	₹6.25
Percentage of earning son owners' funds	10%	12.5%

But if the company is not able to earn sufficient returns, the returns on owners' funds are reduced and risk increases. Using borrowed funds or fixed cost funds in the capital structure of a company is called financial gearing. High financial gearing will increase the earnings per share of a company if earnings before interest and taxes are rising, as compared to the earnings per share of a company with low or no financial gearing. It may be understood that leverage and gearing are used interchangeably (the former is used in USA and the latter in U.K.).

So at times when the economy is doing well, the shareholders of a highly geared company will do better than the shareholders of a low geared company. However, if the company is not doing well, when its profits before interest and taxes are falling, the earnings per share of highly geared company will fall faster than those of the low geared company. The higher this level of financial gearing, the greater the risk. Those who take risk should appreciate that in difficult times their reward will be below average but in good times they will receive above average rewards. The lower the levels of financial gearing, the more conservative are the financial policies of the company and the less will be deviations over time to earnings per share.

Risk is associated with fixed charges in the shape of interest on debt capital. Higher the fixed charges, the greater the chance that it will not be covered by earnings and so greater the risk. Large companies financed by heavy borrowings, need to continue to produce and search for new markets for their output. Any internal disturbance or external constraint that may hamper the company's production and sales will reduce inflow of funds but fixed interest charges have to be paid. A study of the effects of capital gearing on cost of capital is quite important for financial decisions. Given that a company has to minimise the cost of capital, it should fix up a level of gearing where is costs of capital is minimum.

As against the traditional theory of capital structure suggesting that the average cost of capital does depends on the level of gearing, the alternative theory on cost of capital as propounded by Modigliani and Miller argues that the cost of capital is independent of the capital structure. The essence of the Modigliani and Miller argument

is the arbitrage process. Should the value of two firms with identical incomes and the same risk class ratios vary (which would be possible under the traditional theory) the investors would arbitrage so as to make the market value of the two firms equal. A key assumption of the model is that the investors can arbitrage between companies, and between loan and equity capital, without increasing the risk of their individual investment portfolios. The above theories would be discussed in detail in lesson 3.

Despite all the above theoretical explanations the fact remains that debt is associated with risk which enhances with increase in the leverage. There are two major reasons for this increased risk viz., (1) interest is a fixed charge and is required to be paid by the company whether or not it earns profits; and (2) a substantial decrease in liquidity or increased demands from creditors for payment if the company has higher proportion of debt capital in its capital structure. For these reasons, the risk of a company not being able to meet its obligations is greater than in the case of a company in which the proportion of borrowed sum is substantially smaller.

Distinction may be made between different types of risk to which an enterprise is exposed in the business environment.

The risk which we have discussed is financial risk that arises in relation to owners' return created by the utilization of funds in the enterprise particularly fixed cost securities i.e. debt and preference shares. Financial risk is distinguished from "business risks" which is associated with the chance of loss due to variability of return, in general, created by the enterprise and as such it is known as operating risk. Operating risk is concerned with EBIT (earning before interest and taxes) whereas financial risk is concerned with EAIT (earning after interest and taxes). If there is preference capital then the financial risk is concerned with earnings available to ordinary (equity) shareholders after dividends have been paid to preference shareholders. Financial risk encompasses the risk of possible insolvency and the variability in the earnings on equity. In case the enterprise does not employ debt or preference capital there will be no financial risk and over all risk for the firm will be low. It is only because of application of debt financing, that overall risk increases and originates into financial risk to equity holders.

Broadly risks may be classified into systematic and unsystematic risks. Systematic risk is risk within the entire system. This is the kind of risk that applies to an entire market, or market segment. All investments are affected by this risk, for example risk of a government collapse, risk of war or inflation, or risk such as that of the 2008 credit crisis.

On the other hand, unsystematic risk is also as residual risk, specific risk or diversifiable risk. It is unique to a company or a particular industry. For example strikes, lawsuits and such events that are specific to a company, and can to an extent be diversified away by other investments.

Examples of Systematic Risk (Undiversifiable Risk)

- Changes in laws / regulations
- Tax reforms
- Interest rate hikes
- Natural disasters (earthquakes, floods etc.)
- Political instability and flight of capital
- Changes in foreign policy
- Volatility in currency values
- Failure of banks (e.g. 2008 mortgage crisis)
- Economic recessions

Examples of Unsystematic (Diversifiable Risk)

- The entry of a new competitor into a market
- A company is forced to recall one of its products
- A company is found to have prepared fraudulent financial statements
- A union targets a company for an employee walkout
- A foreign government expropriates the assets of a specific company

Besides, there are other types of risk which are related to investment decisions and not cost of financial sources viz., purchasing power risk, market risk, interest rate risk, social risk, regulatory risk and other risks. A brief description of the mentioned risks are as under:

- a) *Purchasing Power Risk*: Inflation risk, also referred to as purchasing power risk, is the risk that inflation will undermine the real value of cash flows made from an investment. Inflation risk can be seen clearly with fixed-income investments.
- b) *Market Risk*: Market risk is the possibility that an individual or other entity will experience losses due to factors that affect the overall performance of investments in the financial markets.
- c) *Interest Rate Risk*: Interest rate risk is the potential for investment losses that result from a change in interest rates. If interest rates rise, for instance, the value of a bond or other fixed-income investment will decline.
- d) *Social Risk*: Social risk for a business includes actions that affect the communities around them. Examples include labor issues, human rights violations within the workforce, and corruption by company officials.
- e) *Regulatory risk*: Regulatory is the risk that a change in regulations or legislation will affect a security, company, or industry. Companies must abide by regulations set by governing bodies that oversee their industry. Therefore, any change in regulations can cause a rippling effect across an industry.
- f) *Reputation Risk*: Reputational risk is a threat or danger to the good name or standing of a business or entity. Reputational risk can occur in the following ways:
 - Directly, as the result of the actions of the company itself
 - Indirectly, due to the actions of an employee or employees
 - Tangentially, through other peripheral parties, such as joint venture partners or suppliers
- g) *Operational Risk*: This business risk can happen internally, externally or involve a combination of factors. Something could happen unexpectedly resulting into closure of business operations. Unexpected event could be a natural disaster or fire that may cause substantial damage to the business resulting into its closure of operations.
- h) *Competition Risk*: While a business may be aware that there is always some competition in their industry, it's easy to miss out on what businesses are offering that may appeal to the customers. In this case, the business risk involves a company leader becoming so comfortable with their success and the status quo that they don't look for ways to pivot or make continual improvements. Increasing competition combined with an unwillingness to change may result in a loss of customers.

OBJECTIVES OF A FIRM

Financial management of any business firm has to set goals for itself and to interpret them in relation to the objective of the firm. Broadly, there are two objectives a business firm viz.

- (a) Profit maximisation;
- (b) Shareholder Wealth maximisation.

(a) Profit Maximisation

According to Solomon, Price system directs managerial efforts towards more profitable goods or services. Prices are determined by the demand and supply conditions as well as the competitive forces, and they guide the allocation of resources for various productive activities.

In economic theory, the behavior of the firm is analysed in terms of profit maximization. The classical economic view of the firm, as put forward by Hayek (1950) and Fredman (1970), is that it should be operated in a manner that maximizes its profit. This occurs, in economic terms, when marginal revenue equals marginal cost. Profit maximization means that a firm either produces maximum output for a given amount of input, or uses minimum input for producing a given output. The underlying rationale of profit maximization is efficiency. It is assumed that profit maximisation causes the efficient allocation of resources under the competitive market condition, and profit is considered as the most appropriate measure of a firm's performance.

Thus, profit maximisation is considered as an important goal in financial decision-making in an organisation. It ensures that firm utilizes its available resources most efficiently under conditions of competitive markets.

But in recent years, under the changed corporate environment, profit maximisation is regarded as unrealistic, difficult, inappropriate and socially not much preferred goal for business organisation. It is argued that profit maximisation assumes perfect competition, and in the face of imperfect modern markets, it cannot be a legitimate objective of the firm. It is also argued that the objective of profit maximisation as a business objective developed in the 19th century when the business activity was self financing and based on assumption of private property and single entrepreneurship. The only aim of the entrepreneur then was to maximize his profit and enhance his own wealth, this objective could be easily satisfied by profit maximisation objective. The modern business environment is characterised by limited liability and a distinction between management and ownership. The various stakeholders of the firm are shareholder, lenders, customers, employees, government and society. In practice the objectives of all these stakeholders may differ and may even conflict with each other. The manager has a difficult task of reconciling and balancing these conflicting objectives. The goal of profit maximization overlooks the interest of other parties than the shareholders and is therefore criticised and considered as unrealistic, inappropriate and immoral.

Profit maximisation as corporate goal is criticised by scholars mainly on the following grounds:

- (i) It is vague conceptually.
- (ii) It ignores timing of returns.
- (iii) It ignores the risk factor.
- (iv) It may tempt to make such decisions which may in the long run prove disastrous.
- (v) Its emphasis is generally on short run projects.
- (vi) It may cause decreasing share prices.
- (vii) The profit is only one of the many objectives and variables that a firm considers.

(b) Shareholder Wealth Maximisation

According to Solomon, shareholder wealth maximization means maximizing the net present value of a course of action to shareholders. Net present value (NPV) or wealth of a course of action is the difference between the present value of its benefit and the present value of its costs.

Presently, maximisation of present value (or wealth) of a course of action is considered appropriate operationally flexible goal for financial decision-making in an organisation. The net present value or wealth can be defined more explicitly in the following way:

$$NPV = \frac{R_t}{(1 + i)^t}$$

Where,

NPV = Net Present Value

R_t = Net cash flow at time t

i = Discount

t = time value of the cash flow

The management of an organisation tries to maximise the present value not only for shareholders but for other stakeholders too, i.e., employees, customers, suppliers and community at large. This goal for the maximum present value is generally justified on the following grounds:

- (i) It is consistent with the object of maximising owners economic welfare.
- (ii) It focuses on the long run.
- (iii) It takes into account various forms of risks.
- (iv) It recognises the value of regular dividend payments.
- (v) It takes into account time value of money.
- (vi) It maintains market price of its shares.
- (vii) It seeks growth in sales and earnings.

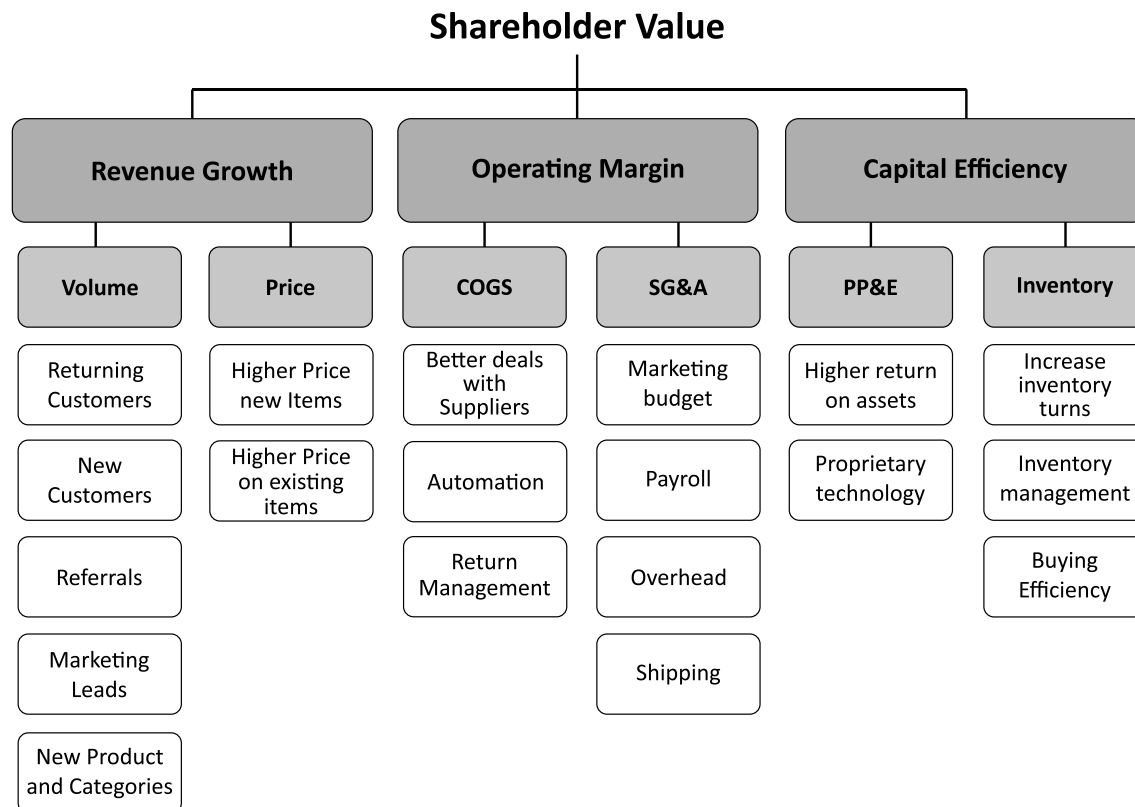
However, profit maximisation can be part of a wealth maximisation strategy. Quite often two objectives can be pursued simultaneously but the maximisation of profit should never be permitted to overshadow the objectives of wealth maximisation.

The objective of the firm provides a framework for optimal decision making in the area of business management. The term 'objective' should be used in the sense of 'decision criteria' for taking decisions involved in financial management. It means that what is relevant is not the overall objective of the business but operationally useful criterion against which the investment, financing and dividend policy decisions are to be judged. The objective of shareholder wealth maximisation is an appropriate and operationally feasible criterion to choose among the alternative financial actions.

It provides an unambiguous measure of what financial management should seek to maximise in making investment and financing decisions on behalf of shareholders. Another point to note in this context is that objective provide a 'normative' framework. In other words, it implies that the focus is on what a firm should try to achieve and on policies that it should follow if the objectives are to be achieved.

How to Create Shareholder Value

In order to maximize shareholder value, there are three main strategies for driving profitability in a company: (1) revenue growth, (2) increasing operating margin, and (3) increasing capital efficiency.



Source: Corporate Finance Institute

1. **Revenue Growth:** For any goods and services businesses, sales revenue can be improved through the strategies of sales volume increase or sales price inflation.

- i) *Increasing Sales Volume*

A company would want to retain its current customers and keep them away from competitors to maintain its market share. It should also attract new customers through referrals from existing customers, marketing and promotions, new products and services offerings, and new revenue streams.

- ii) *Raising Sales Price*

A company may increase current product prices as a one-time strategy or gradual price increases throughout several months, quarters, or years to achieve revenue growth. It can also offer new products with advanced qualities and features and price them at higher ranges. Ideally, a business can combine both higher volume and higher prices to significantly increase revenue.

2. **Operating Margin**

Besides maximizing sales, a business must identify feasible approaches to cost reductions leading to optimal operating margins. While a company should strive to reduce all its expenses, COGS (Cost of Goods Sold) and SG&A (Selling, General, and Administrative) expenses are usually the largest categories that need to be efficiently managed and minimized.

- i) *Cost of Goods Sold (COGS)*

When a company builds a good relationship with its suppliers, it can possibly negotiate with

suppliers to reduce material prices or receive discounts on large orders. It may also form a long-term agreement with the suppliers to secure its material source and pricing.

Many companies use automation in their manufacturing processes to increase efficiency in production. Automation not only reduces labor and material costs, but also improves the quality and precision of the products and, thus, largely reduces defective and return rates. Return management is the process by which activities associated with returns and reverse logistics are managed. It is an important factor in cost reduction because a good return management process helps the company manage the product flow efficiently and identify ways to reduce undesired returns by customers.

ii) *Selling, General, and Administrative (SG&A) Expenses*

SG&A is usually one of the largest expenses in a company. Therefore, being able to minimize them will help the company achieve an optimal operating margin. The company should tightly control its marketing budget when planning for next year's spending. It should also carefully manage its payroll and overhead expenses by evaluating them periodically and cutting down on unnecessary labor and other costs. Shipping cost is directly associated with product sales and returns. Therefore, good return management will help reduce the cost of goods sold as well as logistics costs.

3. Capital Efficiency

Capital efficiency is the ratio between dollar expenses incurred by a company and dollars that are spent to make a product or service, which can be referred to as ROCE (Return on Capital Employed) or the ratio between EBIT (Earnings Before Interest and Tax) over Capital Employed. Capital efficiency reflects how efficiently a company is deploying its cash in its operations.

Capital employed is the total amount of capital a company uses to generate profit, which can be simplified as total assets minus current liabilities. A higher ROCE indicates a more efficient use of capital to generate shareholder value, and it should be higher than the company's capital cost.

i) *Property, Plant, and Equipment (PP&E)*

To achieve high capital efficiency, a company would first want to achieve a high return on assets (ROA), which measures the company's net income generated by its total assets.

Over time, the company might also shift to developing proprietary technology, which is a system, application, or tool owned by a company that provides a competitive advantage to the owner. The company can then profit from utilizing this asset or licensing the technology to other companies. Proprietary technology is an optimal asset to possess because it increases capital efficiency to a great extent.

ii) *Inventory*

Inventory is often a major component of a company's total assets, and a company would always want to increase its inventory turnover, which equals net sales divided by average inventory. A higher inventory turnover ratio means that more revenues are generated given the amount of inventory. Increasing inventory turnover also reduces holding costs, consisting of storage space rent, utilities, theft, and other expenses. It can be achieved by effective inventory management, which involves constant monitoring and controlling of inventory orders, stocks, returns, or obsolete items in the warehouse.

Inventory buying efficiency can be greatly improved by using the Just-in-time (JIT) system. Costs are only incurred when the inventory goes out and new orders are being placed, which allows companies to minimize costs associated with keeping and discarding excess inventory.

Ethics of Shareholder Wealth Maximization

There is an idea that businesses focused on money are greedy and don't care about social issues or that socially responsible businesses can't increase stock values. But a company can be both profitable and socially responsible.

Consider the 2008 Great Recession and one of its main causes, the subprime mortgage crisis. These banks were more concerned about their investment portfolios instead of properly loaning money to customers, which is their charge. Those investment portfolios were filled with toxic assets, which eventually compromised the operations of many financial institutions and caused the failure of several big banks. As a result, their share prices fell right along with them. In this case, greed and a lack of social concern led to their downfall.

On the other hand, after almost failing during the Great Recession, automaker GM turned itself around, strengthened its ability to withstand future recessions, and developed "greener" vehicles. As a result, it realized an increase in its share price.

PROFIT MAXIMISATION VERSUS SHAREHOLDER WEALTH MAXIMISATION

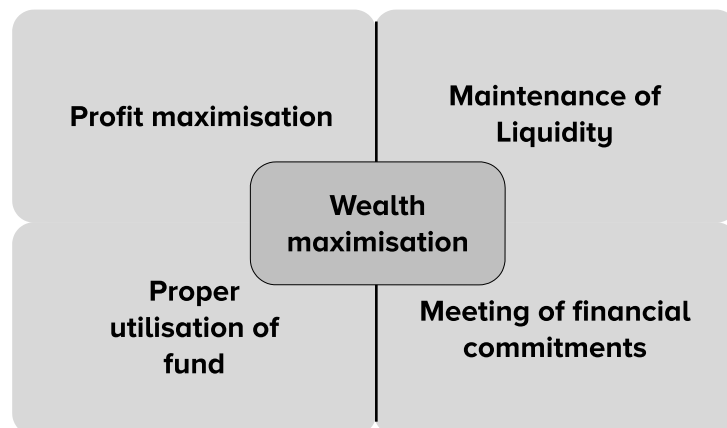
Profit maximisation is basically a single-period or, at the most, a short-term goal. It is usually interpreted to mean the maximisation of profits within a given period of time. A firm may maximise its short-term profits at the expense of its long-term profitability and still realise this goal. In contrast, shareholder wealth maximisation is a long-term goal and shareholders are interested in future as well as present profits. Wealth maximisation is generally preferred because it considers (1) wealth for the long-term, (2) risk or uncertainty, (3) the timing of returns, and (4) the shareholders' return. The following table provides a summary of the advantages and disadvantages of these two often conflicting goals.

Profit Maximisation Vs. Shareholder Wealth Maximisation

<i>Goal</i>	<i>Objective</i>	<i>Advantages</i>	<i>Disadvantages</i>
Profit maximisation	Large amount of profits	<ol style="list-style-type: none"> 1. Easy to calculate profits 2. Easy to determine the link between financial decisions and profits 	<ol style="list-style-type: none"> 1. Emphasizes the short term 2. Ignores risk or uncertainty 3. Ignores the timing of returns 4. Requires immediate resources
Shareholder wealth maximisation	Highest market value of common stock	<ol style="list-style-type: none"> 1. Emphasizes the long term 2. Recognizes risk or uncertainty 3. Recognizes the timing of returns 4. Considers return 	<ol style="list-style-type: none"> 1. Offers no clear relationship between financial decisions and stock price 2. Can lead to management anxiety and frustration

In other words, the conflict may emerge in the area of profit maximisation and wealth maximisation as an objective of financial management. Profit maximisation would be a measure of attaining profit in a firm and wealth maximisation would consider the effect of earning per share and dividend to shareholders. The objective of wealth maximisation would be fulfilled by increasing the market price of shares through decisions on future cashflow, dividends and earnings per shares but to maximise profit the financial manager may have to consider

issues like – retained earnings, non-payment of dividends, investing funds in profitable outlets. The finance manager has to try and maximise profit without in any way affecting the shareholders wealth because primary goal of financial decision making is to achieve wealth maximisation. Profit maximisation is the narrow objective of financial management because profit is a test of economic efficiency but wealth maximisation is comprehensive objective of financial management, it goes beyond the quantitative aspects as it also considers qualitative benefits in a firm. Wealth maximisation objective is therefore, superior to the profit maximisation concept.



Advantages of Profit Maximisation Hypothesis

1. Prediction:

The profit-maximization hypothesis allows us to predict quite well the behaviour of business firms in the real world. It does not matter that few firms are maximizers in reality. What matters is that they behave without too much difficulty and with reasonable accuracy. Further Arguments for the Profit-Maximization Hypothesis.

2. Proper Explanation of Business Behaviour:

The economist relies on the profit- maximization hypothesis because it is useful in explaining and predicting business behaviour.

3. Knowledge of Business Firms:

Profit motive is the most pervasive force that governs the behaviour of business firms. In the case of small firms facing strong competition from others, they are forced to act as profit maximizers. They must do everything possible to increase sales and reduce costs in order to survive in their competitive environment.

4. Simple Working: The profit-maximization hypothesis is simple, and there are well- developed mathematical tools of analyzing maximization or minimization problems.

5. More Realistic:

Profit maximization is the single best assumption available and introduction of more “realistic” assumptions complicates the analysis considerably without adding much to the predictive power of the model.

Disadvantages of Profit Maximisation

1. Ambiguity in the Concept of Profit:

It has been pointed out that in the assumption of profit maximization; the concept of profit has never been unambiguously stated. Is it rate of profit, total or net profits that a firm tends to maximize? The three concepts have entirely different implications for price theory.

2. Multiplicity of Interests in a Joint Stock Company:

It is argued that with the ushering in of corporate form of enterprise, profit maximization goal has a considerably reduced edge; other goals have come to the fore.

3. No Compulsion of Competition for a Monopolist:

As far as a monopolist goes he has no compulsions to maximize his profit. Since the monopolist ordinarily earns above-normal returns, why should he maximize? In imperfectly competitive industries where barriers to entry are effective, the firm ordinarily does not have to walk the tightrope of zero economic profits. Instead, the existence of monopoly power provides wider range of various alternatives than order conditions of perfect competition.

4. Separation of Ownership from Control:

Under the impact of managerial revolution, there has been a considerable divorce of ownership and control. In modern, gigantic corporations little attempt is made either by individuals or by the groups to maximize profits. Generally, the salaried managers cease to look for profits beyond the level which suffices to pay their salaries and keep the shareholders quiet and the owners are powerless to remedy the situation. In a public corporation set up by statute with no share but only loan capital, the divorce of ownership from control is as complete as imaginable.

In such cases, it may be asked, what replaces profits in the managers' mind. In really very large firms, the managers may only try to minimize costs and avoid losses but have no interest in increasing profits.

5. The Principle of Decreasing Power:

Keeping maximum business power is another common craze among organizers. It is seen in many cases that growth of the firm through increased number of owners is profitable. But the existing owners are unwilling to introduce any more partners.

This is because the greater the number of owners, the lesser is the power in each hand. The diminution of power on account of the introduction of new partners is called the Principle of decreasing Power. In this way, most entrepreneurs owning small firms have strong feeling to stick to a small firm and independent and exercise unrestrained power rather than to invite new owners and enlarge their profits.

6. Stress on Efficiency, not Profit:

In particular cases some other motives become more important than profit maximizing. In many industries, the manager's aim is the attainment of some non-economic ideal of efficiency such as beauty, size, durability, sharpness of product.

Managers pursue it not only for its own sake but for the good professional reputation it gives them in the trade. In large multi-branch firms, the practice is common to encourage the branches to compete both in buying and selling. Therefore, in place of profit, efficiency is given top priority.

7. Tendency of Following One Trade Only:

It is often seen that businessmen refrain from "integration or other forms of expansion not because they have been calculated to be unprofitable but because "jack of all trades, master of none or some such proverbial wisdom is always there."

8. Conspicuous Consumption:

It should be noted that the firm is not only a producer but a consumer also. Often firms, to impress their clients and various civil servants visiting it, indulge in what may be called Conspicuous consumption. In this regard it

may be noted that this kind of consumption does not go against profit-maximization; profits are first maximized and then spent on non-essential goods. But if the firms indulge themselves, their investment policy cannot be said to be dictated by profitability.

9. Legal Restrictions on Profit-Making:

In mixed developing economies like India, there are very many enterprises—public utilities, development institutions etc. that are legally forbidden to maximize their profits.

Example – Wealth Maximisation

- Typical examples of wealth maximization can be the cases where the shareholders have benefited from investing in a particular stock over some time. Because the company's net worth has grown, this has positively impacted the share values, too and thus increasing shareholders' wealth. A very practical example can be an investment made in 1996 for a US-based company called Havells. It is observed that any investor who has invested in Havells to a tune of \$1500 in this stock in 1996 and has retained the stock till now have seen a massive gain from a mere \$1500 to \$ 4,000,000.
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Advantages of Wealth Maximisation

Some of the advantages of wealth maximisation are as under:

- It is more related to cash flows than profits. Cash flows are more certain and regular, and there is a lack of uncertainty that otherwise is associated with profit.
- Profits are more manipulative, but cash flows are not. Thus, wealth maximization is less prone to manipulation than profit maximization, which relies on profit.
- It is more long-term-focused than profit maximization, which has a short-term focus. Profit maximization is easy to attain because managers may adopt unethical ways to bring short-term profits based on long-term sustainability.
- They consider risk and uncertainty factors while considering the discounting rate, which reflects both the time and risk.

Disadvantages of Wealth Maximisation

Some of the disadvantages of wealth maximisation are as follows:

- It is more based on an idea that is prospective and not descriptive.
- The objectives laid in such a technique are not clear.
- Wealth maximization is largely dependent on the business's profitability as only after the business is profitable can it think of enhancing the wealth of the shareholders.
- It is based on the generation of cash flows and not on the accounting profit

Wealth maximization has both merits and demerits attached to it. It is a very important factor for every investor before one invests in a company. They bring about happiness by generating good returns to their shareholders, and they tend to invest more in such companies, which may be required for their expansion or growth.

Economic Value-Added (EVA) – A Criterion to Gauge Shareholder's Value

The conventional approach to measure profit will deduct cost of loan capital in arriving at profit; but there is no similar deduction for the cost of shareholders. Critics of the conventional approach point out that a business will not make a profit, in an economic sense, unless it covers the cost of all capital invested, including shareholders' funds. Earnings per share tells nothing about the cost of generating those profits. If the cost of capital (loans, bonds, equity) as say, 15 per cent, then a 14 per cent earning is actually a reduction, not a gain, in economic value. Profits also increase taxes, thereby reducing cash flow.

Return on assets is a more realistic measure of economic performance, but it ignores the cost of capital. Leading firms can obtain capital at low costs, via favourable interest rates and high stock prices, which they can then invest in their operations at decent rates of return on assets. This tempts them to expand without paying attention to the real return, economic value-added.

Economic value added (EVA) is the after tax cash flow generated by a business minus the cost of the capital it has deployed to generate that cash flow. Representing real profit versus paper profit, EVA underlines shareholder value, increasingly the main target of leading companies strategies. Shareholders are the players who provide the firm with its capital; they invest to gain a return on that capital.

The concept of EVA is well established in financial theory, but only recently has the term moved into the mainstream of corporate finance, as more and more firms adopt it as the base for business planning and performance monitoring. There is growing evidence that EVA, not earnings, determines the value of a firm. There is difference between EVA, earnings per share, return on assets, and discounted cash flow, as a measure of performance.

Discounted cash flow is very close to economic value-added, with the discount rate being the cost of capital.

There are two key components to EVA. The net operating profit after tax (NOPAT) and the capital charge, which is the cost of capital times the amount of capital. In other words, it is the total pool of profits available to provide cash return to those who provided capital to the firm. The capital charge is the product of the cost of capital times the capital tied up in the investment. In other words, the capital charge is the cash flow required to compensate investors for the riskiness of the business given the amount of capital invested. On the one hand, the cost of capital is the minimum rate of return on capital required to compensate debt and equity investors for bearing risk—a cut-off rate to create value and capital is the amount of cash invested in the business, net of depreciation (Dierks and Patel, 1997). In formula form,

$$\text{EVA} = (\text{Operating Profit}) - (\text{A Capital Charge})$$

$$\text{EVA} = \text{NOPAT} - (\text{Cost of Capital} \times \text{Capital})$$

The functions of EVA can be understood from the following perspectives-

- i) *EVA as a Performance Measure* : There is a continuous endeavor to develop a single measure that captures the overall performance, yet which is easy to calculate and is also economical. In order to achieve goal congruence, manager's compensation is often linked with the performance of the firm. Investors decide whether to invest in a firm, or to continue with the firm or to exit from it, only on the basis of overall performance of the firm. The only suitable solution to the above stated problems is 'EVA'.

ROI, ROE and ROA gives us the rate of return earned by the firm with respect to capital invested in the firm. The most important limitation of these measures are derived from limitations inherent in the measurement of accounting profit. But these limitations are also associated with EVA. The difference lies only in the fact that the cost of equity is also factored to arrive at the residual income.

EVA stresses that in order to justify investments in the long run they have to produce at least a return that

covers the cost of capital as otherwise the shareholders would be better off investing elsewhere. This approach includes that the organization tries to operate without excess capital. While the accountants are familiar with the concept of residual value, its application in economic value measurement as a means of evaluating underlying business performance is nothing short of an overhaul of traditional accounting concepts.

- ii) *EVA as a Corporate Philosophy:* EVA, when implemented at every level of managerial decision making process, encourages managers to deploy resources only on value enhancing activities and to align the interests of shareholders with managers. This involves two things- one is linking managerial compensation package with EVA and second is to inculcate the culture of evaluating every action from the viewpoint that it should generate EVA. The ultimate outcome should be enhancement in the shareholders wealth measured by the capital market.

The simplicity of EVA in communicating the very fundamental principle that only the generation of surplus over cost of capital can enhance shareholders wealth makes it a management technique superior to other planning and control techniques.

Problem: XYZ Ltd. has capital investment of ₹ 150 crores. After tax operating income is ₹ 20 crores and company has a cost of capital of 12%. Estimate the Economic Value Added of the firm.

Solution: Capital employed 150 crores NOPAT= ₹ 20 crores

WACC = 12 %

EVA = NOPAT- (WACC-CE)

= 20 – (12% x 150)

= ₹ 2 crores

NOPAT - Net Operating Profit after Tax

WACC - Weighted Average Cost of Capital

CE- Capital Employed

Example

Say you made a ₹ 20,000 capital investment in your company. Your operating profit, after taxes, is ₹ 10,000. The opportunity cost of that investment is 10%.

In this case EVA would be Net Operating Profit after taxes – Cost of Capital i.e. ₹ 10,000- 10% of ₹ 20,000 = ₹ 8,000.

The goal of EVA is to take into account the cost of capital invested in the company.

Thus, EVA represents the value added to the shareholders by generating operating profits in excess of the cost of capital employed in the business. EVA will increase if:

- i. Operating profits grow without employing additional capital i.e., through greater efficiency.
- ii. Additional capital is invested in the projects that give higher returns than the cost of procuring new capital, and
- iii. Unproductive capital is liquidated i.e., curtailing the unproductive uses of capital.

Implementing EVA in a company is more than just patting one additional row in the income statement. It is of course some kind of change process which should be given some management effort. However, if right actions are taken straight from the beginning then implementing EVA should be one of the easiest change process that a company goes through. The actions might include e.g.:

- Gaining the understanding and commitment of all the members of the management group through training and discussing and using this support prominently during the process.
- Training of the other employees, especially all the key persons.
- Adopting EVA in all levels of organization.

However, there are a few common mistakes that are often made in implementing or using EVA. Most of them are bound up with either misunderstanding and thus misusing the concept at upper levels or not training all the employees to use EVA and thus not using the full capacity of the concept. These common mistakes include defining capital costs intentionally wrongly (usually too high for some reason), using EVA only in the upper management level and investing too little in training of employees.

Advantages of the Economic Value Added (EVA)

The following Some outstanding advantages of economic value added (EVA) below are:

1. EVA may be a tool that helps to focus managers' attention on the impact of their decisions in increasing shareholders' wealth.
2. EVA may be a good guide for investors; as on the bias of EVA, they will decide whether a specific company is worth investing money in or not. They can use as a basis for the valuation of goodwill and shares. Unlike accounting profit, like EBIT, net, and EPS, EVA Economic and predicate on the thought that a business must cover both the operating costs also because the capital costs and hence it presents a far better and true picture of the corporate to the owners, creditors, employees, shareholders, and everyone other interest parties.
3. EVA may be a good controlling device during a decentralized enterprise. Management can apply EVA to seek out the EVA contribution of every decentralized unit or segment of the corporate. It helps the corporate in monitoring the matter areas and hence taking corrective action to resolve those problems.
4. EVA can improve the company's corporate governance because since a better EVA implies higher bonuses to the managers; they're going to be working hard and also honestly; which successively augurs well for the corporate.
5. EVA helps the corporate owners identify the simplest person to run the corporate effectively and efficiently.

Disadvantages of the Economic Value Added (EVA)

The following some outstanding disadvantages of economic value added (EVA) below are:

1. EVA does not take size differences into consideration. A plant or division that is larger in size will obviously have a higher EVA, in comparison to something that is smaller in size, which could distort your calculations and give you an inaccurate result.
2. EVA can be used for personal gains by the manager, which might not be particularly profitable for the firm.
3. EVA might overemphasize the immediate need to generate the results. It might put more emphasis on short-term gains than long-term ones.

Interpreting the calculated EVA

When using EVA to assess the performance of an organisation or a division, the following should be considered:

1. Is it positive? If so, that is favourable, as it means that the organisation is providing a return that is greater than that required by providers of finance. It is creating wealth.

2. What is the trend over time? Is the calculated EVA increasing or not? Even if the trend is down, the organisation has still performed favourably if the calculated EVA is positive.
3. Reasons for changes in EVA also need to be investigated. For individual projects, EVA is only really meaningful when looking at the whole lifespan of a project. In the early years of a project's life, when the net book value of the assets is higher, the finance charge may also be higher, leading to a lower value of EVA, whereas in later years the reverse is true.

MARKET VALUE ADDED (MVA) – ANOTHER CRITERION TO GAUGE WEALTH MAXIMIZATION

Market value added (MVA) is a calculation that shows the difference between the market value of a company and the capital contributed by all investors, both bondholders and shareholders. In other words, it is the sum of all capital claims held against the company plus the market value of debt and equity. It is calculated as:

$$\text{MVA} = \text{V} - \text{K}$$

where MVA is the market value added of the firm, V is the market value of the firm, including the value of the firm's equity and debt (its enterprise value), and K is the total amount of capital invested in the firm.

Example-1

Calculate the market value added using the following information:

Total number of shares issued = 20,000,000

Number of shares held as treasury stock = 1,100,000

Current share price = \$35.5

Total invested capital plus retained earnings = \$453,503,000

Cost of treasury stock = \$39,050,000

Assume that the market value of debt equals its book value.

Solution

Number of Shares Outstanding = 20,000,000 – 1,100,000 = 18,900,000

Market Capitalization = 18,900,000 × \$35.5 = \$670,950,000

Total Shareholders' Equity

= Total Invested Capital + Retained Earnings – Cost of Treasury Stock

= \$453,503,000 – \$39,050,000 = \$414,453,000

Market Value Added for Shareholders = \$670,950,000 – \$414,453,000 = \$256,497,000

Market Value Added for all Investors

= Market Value of Equity – Total Shareholders' Equity + Market Value of Debt – Book Value of Debt

= \$256,497,000 + 0 = \$256,497,000

Example -2

Company XYZ whose shareholders' equity amounts to \$750,000. The company owns 5,000 preferred shares and 100,000 common shares outstanding. The present market value for the common shares is \$12.50 per share and \$100 per share for the preferred shares.

Market Value of Common Shares = $100,000 * \$12.50 = \$1,250,000$

Market Value of Preferred Shares = $5,000 * \$100 = \$500,000$

Total Market Value of Shares = $\$1,250,000 + \$500,000 = \$1,750,000$

Using the figures obtained above:

Market Value Added = $\$1,750,000 - 750,000 = \$1,000,000$

FINANCIAL DISTRESS AND INSOLVENCY

Generally the affairs of a firm should be managed in such a way that the total risk – business as well as financial – borne by equity holders is minimised and is manageable, otherwise, the firm would obviously face difficulties. In managing business risk, the firm has to cope with the variability of the demand for its products, their prices, input prices, etc. It has also to keep a tab on fixed costs. As regards financial risk, high proportion of debt in the capital structure entails a high level of interest payments. If cash inflow is inadequate, the firm will face difficulties in payment of interest and repayment of principal. If the situation continues long enough, a time will come when the firm would face pressure from creditors. Failure of sales can also cause difficulties in carrying out production operations. The firm would find itself in a tight spot. Investors would not invest further. Creditors would recall their loans. Capital market would heavily discount its securities. Thus, the firm would find itself in a situation called distress. It may have to sell its assets to discharge its obligations to outsiders at prices below their economic values i.e. resort to distress sale. So when the sale proceeds is inadequate to meet outside liabilities, the firm is said to have failed or become bankrupt or (after due processes of law are gone through) insolvent.

Failure of a firm is technical if it is unable to meet its current obligations. The failure could be temporary and might be remediable. When liabilities exceed assets i.e. the net worth becomes negative, bankruptcy, as commonly understood, arises. Technical bankruptcy can be ascertained by comparing current assets and current liabilities i.e. working out current ratio or quick ratio. On the other hand, solvency ratios indicate long term liquidity i.e. the ability of the firm to discharge its term-liabilities. Examples of solvency ratios are Debt to Equity ratio, Debt to total Funds Ratios, and Interest coverage ratio. Trend analysis should be made for the past three to five years to pick up signals of bankruptcy, if any.

FINANCIAL MANAGEMENT IS A SCIENCE OR AN ART

Financial Management is a subject within the compass of social science as it deals with people. Its nature is nearer to applied sciences as it envisages use of classified and tested knowledge as a help in practical affairs and solving business.

Theory of financial management is based on certain systematic principles, some of which can be tested in mathematical equations like the law of physics and chemistry. Financial management contains a much larger body of rules or tendencies that hold true in general and on the average. The use of computers, operations research, statistical techniques and econometric models find wide application in financial management as tools for solving corporate financial problems like budgeting, choice of investments, acquisition or mergers etc. This takes the financial management nearer to treatment as a subject of science. Nevertheless, there remains a wide scope for application of value judgement in financial decision making. Most practical problems of finance have no hard and fast answers that can be worked out mathematically or programmed on a computer. They must be solved by value judgement, intuition and the “feel” of experience. Thus, despite its frequent acceptance as an applied science, finance remains largely an art. Because, according to George A. Christy and Peyton Foster Roden (Finance: Environment and Decisions) knowledge of facts, principles and concepts is necessary for making decisions but personal involvement of the manager through his intuitive capacities and power of judgement becomes essential. This makes financial management and managing a company's finance both an

art and a science. It requires a feel for the situation and analytical skills alongwith a thorough knowledge of the techniques and tools of financial analysis and the know-how to apply them and interpret the results.

A very interesting presentation has been made by Weston in his book “Methodology in Finance”. The finance functions are mainly three viz., planning, organisation and financial control. In each of these finance functions elements of science and art can be observed. Wherever methodology is to be applied in decision making in all these areas, the subject matter becomes a science confronted with the framework of techniques and tools. On the other hand, when the question of choice to make selection out of the alternative results arises the subject matter becomes an art requiring human skills for value judgement. For example, in planning function, there are certain goals, which may be short-term goals or long-term goals. Each falls within the area of art. Another parameter of planning is estimating funds, which may again be short-term or long-term involving techniques and skills. When involvement to techniques is there the subject matter remains science and when the skills are required to be interpreted, the subject matter becomes an art. It so happens in all aspects of planning, organisation and control.

Thus, in the entire study of financial management whether it is related to investment decision, financing decisions i.e. deciding about the sources of financing, or dividend decision, there is a mixture of science as well as art. When techniques for analytical purposes are used it is science and when choice in appreciation of the results is made it is an art. Thus, people will like to call financial management as science as well as art. But it is better if we say that the discipline of financial management has both the aspects of science as well as art; where there is theory of systematic knowledge it is science and where there is application it is art.

EMERGING ROLES OF FINANCIAL MANAGER

With the evolution of finance from being mere a descriptive study to the one that is highly developed discipline, the role of financial managers has also undergone a sea change. His areas of responsibilities now extend far beyond keeping records, reports, the firm’s cash position, paying bills and obtaining funds, and he is now concerned with and is fully involved in the decision making processes to decide investment of funds in assets, determining the best mix of financing and dividends in relation to overall valuation of the firm. The responsibilities of the financial manager are linked to the goal of ensuring liquidity, profitability or both and is also related to the management of assets and funds of any business enterprise. When the Financial Manager is involved in management of asset, he is performing the role of the decision-maker and when he is managing funds, he is performing the staff function. In the light of different responsibilities of the financial manager, he performs mainly the following duties:

- 1. Forecasting of Cash Flow:** This is necessary for the successful day to day operations of the business so that it can discharge its obligations as and when they arise. In fact, it involves matching of cash inflows against outflows and the manager must forecast the sources and timing of inflows from customers and use them to pay the liability.
- 2. Raising Funds:** The Financial Manager has to plan for mobilising funds from different sources so that the requisite amount of funds are made available to the business enterprise to meet its requirements for short term, medium term and long term.
- 3. Managing the Flow of Internal Funds:** Here the Manager has to keep a track of the surplus in various bank accounts of the organisation and ensure that they are properly utilised to meet the requirements of the business. This will ensure that liquidity position of the company is maintained intact with the minimum amount of external borrowings.
- 4. To Facilitate Cost Control:** The Financial Manager is generally the first person to recognise when the costs for the supplies or production processes are exceeding the standard costs/budgeted figures. Consequently, he can make recommendations to the top management for controlling the costs.

5. **To Facilitate Pricing of Product, Product Lines and Services:** The Financial Manager can supply important information about cost changes and cost at varying levels of production and the profit margins needed to carry on the business successfully. In fact, financial manager provides tools of analysis of information in pricing decisions and contribute to the formulation of pricing policies jointly with the marketing manager.
6. **Forecasting Profits:** The Financial manager is usually responsible for collecting the relevant data to make forecasts of profit levels in future.
7. **Measuring Required Return:** The acceptance or rejection of an investment proposal depends on whether the expected return from the proposed investment is equal to or more than the required rate of return. An investment project is accepted if the expected return is equal or more than the required rate of return. Determination of required rate of return is the responsibility of the financial manager and is a part of the financing decision.
8. **Managing Assets:** The function of asset management focuses on the decision-making role of the financial manager. Finance personnel meet with other officers of the firm and participate in making decisions affecting the current and future utilisation of the firm's resources. As an example, managers may discuss the total amount of assets needed by the firm to carry out its operations. They will determine the composition or a mix of assets that will help the firm best achieve its goals. They will identify ways to use existing assets more effectively and reduce waste and unwarranted expenses.

The decision-making role crosses liquidity and profitability lines. Converting the idle equipment into cash improves liquidity. Reducing costs improves profitability.

9. **Managing Funds:** Funds may be viewed as the liquid assets of the firm. In the management of funds, the financial manager acts as a specialised staff officer to the Chief Executive of the company. The manager is responsible for having sufficient funds for the firm to conduct its business and to pay its bills. Money must be located to finance receivables and inventories, to make arrangements for the purchase of assets, and to identify the sources of long-term financing. Cash must be available to pay dividends declared by the board of directors. The management of funds has therefore, both liquidity and profitability aspects. If the firm's funds are inadequate, the firm may default on the payment of liabilities and may have to pay higher interest. If the firm does not carefully choose its financing methods, it may pay excessive interest costs with a subsequent decline in profits.

RELATION OF FINANCE TO ECONOMICS AND ACCOUNTING

Financial management has a close relationship to economics on the one hand and accounting on the other.

Relationship to Economics: There are two significant linkages between economics and finance. The macro-economic environment defines the setting within which a firm operates and the micro-economic theory provides the conceptual underpinning for the tools of financial decision making.

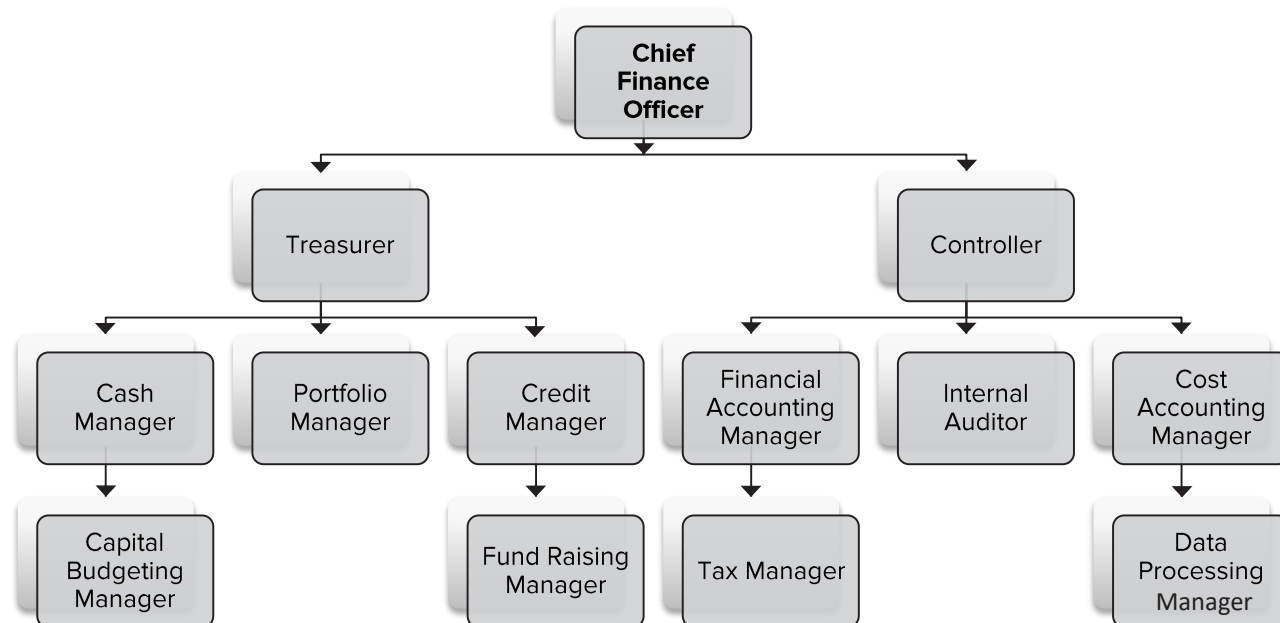
Key macro-economic factors such as the growth rate of the economy, the domestic savings rate, the role of the government in the economic affairs, the tax structure, the nature of external economic relationships, the availability of funds to the corporate sector, the rate of inflation, the real rate of interest, and the terms on which the firm can raise finances define the environment in which the firm operates. No financial manager can afford to ignore the important developments in the macro-economic sphere and the impact of the same on the firm.

While an understanding of the macro-economic developments sensitises the financial manager to the opportunities and threats in the environment, a firm grounding in micro-economic principles sharpens his analysis of decision alternatives. Finance, in essence, is applied micro-economics. For instance, the principle of marginal analysis- a key principle of micro-economics according to which a decision should be guided by comparison of incremental benefits and costs is applicable to a number of managerial decisions in finance.

Thus in a nutshell, a basic knowledge of macro-economics is essential for comprehending the environment in which the firm operates and a good grasp of micro-economic principles is helpful in sharpening the tools of financial decision making.

Relationship to Accounting: The finance and accounting functions are closely related and almost invariably fall within the realm of the chief financial officer as shown in the exhibit below-

Organisation of Finance Function



Given this affinity, it is not surprising that in popular perception finance and accounting are often considered indistinguishable or at least substantially overlapping. However, as a student of finance one must know how the two differ and how the two relate. The following discussion highlights the differences and relationship between the two.

Score Keeping vs. Value Maximising- Accounting is concerned with score keeping, whereas finance is aimed at value maximizing. The primary objective of accounting is to gauge the performance of the firm, assess its financial condition, and ascertain the base for tax payment. The principal goal of financial management is to create shareholder value by investing in positive net present value projects and minimising the cost of financing. Of course, financial decision making requires substantial inputs from accounting. As Gitman says:

“The accountant’s role is to provide consistently developed and easily interpreted data about the firm’s past, present, and future operations. The financial manager uses these data, either in raw form or after certain adjustments and analyses, as an important input to the decision making process.”

Accrual Method vs. Cash Flow Method- The accountant prepares the accounting reports based on the accrual method which recognises revenues when the sale occurs (irrespective of whether the case is realised immediately or not) and matches expenses to sales (irrespective of whether cash is paid or not). The focus of the financial manager, however, is on cash flows. He is concerned about the magnitude, timing, and risk of cash flows as these are the fundamental determinants of values.

Certainty vs. Uncertainty: Accounting deals primarily with the past. It records what has happened. Hence, it is relatively more objective and certain. Finance is concerned mainly with the future. It involves decision making under the imperfect information and uncertainty. Hence, it is characterised by a high degree of subjectivity.

LESSON ROUND-UP

- Financial Management deals with procurement of funds and their effective utilizations in the business and concerned with investment, financing and dividend decisions in relation to objectives of the company.
- Investment decisions are essentially made after evaluating the different project proposals with reference to growth and profitability projections of the company.
- Financing decisions are concerned with the determination of how much funds to procure from amongst the various avenues available i.e. the financing mix or capital structure.
- Dividend decision is to decide whether the firm should distribute all profits or retain them or distribute a portion and retain the balance.
- Profit maximization ensures that firm utilizes its available resources most efficiently under conditions of competitive markets.
- Wealth maximization means the management of an organization maximizes the present value not only for shareholders but for all including employees, customers, suppliers and community at large.
- Economic value added is the after cash flow generated by a business minus the cost of capital it has deployed to generate that cash flow.
- Liquidity means ability of the business to meet short-term obligations. It shows the quickness with which a business/company can convert its assets into cash to pay what it owes in the near future.
- Profitability ratio reflects on the ability of management to earn a return on resources put in by the shareholders evaluating the performance of the company in different spheres
- Affairs of the firm should be managed in such a way that the total risk – business as well as financial borne by equity shareholders is minimised and is manageable.

GLOSSARY

Risk Premium: A risk premium is the investment return an asset is expected to yield in excess of the risk-free rate of return. An asset's risk premium is a form of compensation for investors. It represents payment to investors for tolerating the extra risk in a given investment over that of a risk-free asset.

Net worth: Net worth is an easy one to start with. You may have heard the term in your day-to-day, from financial experts discussing a company's net worth, to magazines discussing a certain celebrity's value in dollars. In a business context, net worth simply means the difference between your total assets and total amount you owe to your creditors and other financial stakeholders.

A positive net worth indicates good financial health, whilst a negative net worth means your company is operating at a loss.

Inflation: Without getting too much into the nitty gritty of corporate finance, inflation means the sustained increase in the price of goods and services over a certain period, in relation to the value of your national currency. One inflation indicator working professionals should look out for is if their income is rising proportionately with the national rate of inflation. Furthermore, if your organisation operates on a global scale, inflation can have an impact on your price point when selling outside your country's borders.

Diversification: Diversification is a risk management strategy that mixes a wide variety of investments within a portfolio. A diversified portfolio contains a mix of distinct asset types and investment vehicles in an attempt at limiting exposure to any single asset or risk. The rationale behind this technique is that a portfolio constructed of different kinds of assets will, on average, yield higher long-term returns and lower the risk of any individual holding or security.

Enterprise Value (EV): A measure of a company's value, calculated by: market capitalisation plus debt & preferred shares minus cash and cash equivalents. It is the theoretical takeover price that a buyer would pay for a company less the cash.

Non-Financial Goals

The non-financial goals include:

- i) Environmental care;
- ii) Enhancing ethics in business and finance;
- iii) Employee welfare;
- iv) Corporate social responsibility;
- v) Good creditor relations;
- vi) Compliance with government regulations;
- vii) Addressing customers' interests.

TEST YOURSELF

(These are meant for recapitulation only. Answer to these questions are not to be submitted for evaluation)

1. The _____ relates to the decision made by the investors or the top level management with respect to the amount of funds to be deployed in the investment opportunities.
 - a. Investment decision
 - b. Financing decision
 - c. Purchasing decision
 - d. Dividend decision
2. The entry of a new competitor into a market is which form of risk?
 - a. Systematic risk
 - b. Divesifiable risk
 - c. Partial risk
 - d. Parellel risk
3. The formula to compute net profit margin is:
 - a. $\text{Profit after Tax} / \text{Net Sales} \times 100$
 - b. $\text{Profit before Tax} / \text{Net Sales} \times 100$
 - c. $\text{Profit after Tax} - \text{Net Sales} \times 100$
 - d. $\text{Profit after Tax} + \text{Net Sales} \times 100$

4. Liquidity ratio enables a company to assess its_____
 - a. Capital Expenditure
 - b. Profits
 - c. Long-term Working Capital
 - d. Net Working Capital

5. _____ are the financial decisions related to raising of finance. It involves identification of various sources of finance and the quantum of finance to be raised from long-term and short-term sources.
 - a. Dividend decisions
 - b. Sales decisions
 - c. Financing decisions
 - d. Profit decisions

ESSAY TYPE QUESTIONS

1. Contrast the salient features of the traditional and modern approaches to financial management.
2. Discuss the three broad areas of financial decision making.
3. What is the justification for the goal of maximising the wealth of shareholders?
4. What do the critics of the goal of maximising shareholders wealth say?
5. Critically evaluate the goals of maximisation of profit and maximisation of return on equity.
6. What forces are prodding companies in India to accord greater importance to the goal of shareholder wealth maximisation?
7. Discuss the risk-return trade-off in financial decisions.
8. What are the agency costs and how can they be mitigated?
9. "Financial management is in many ways an integral part of the jobs of managers." Comment.
10. Comment on the emerging role of the finance manager.

LIST OF FURTHER READINGS

1. Financial Management - Text, Problems and Cases by MY Khan and PK Jain, 8th Edition
2. Financial Management, Theory and Practice by Prasanna Chandra, 10th Edition
3. Financial Management by I.M.Pandey, 12th Edition
4. Fundamentals of Financial Management (14th Edition) by R P Rustagi, Taxmann Publications.
5. Advanced Financial Management by Kohok M.A., Everest Publishing House.
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