CHAPTER 1
INTRODUCTION OF THE STUDY

This chapter introduces the capital budgeting decision and its significance. Later it throws light on the need, scope and objectives of this study. The organization of study and its limitations are discussed at the end of the chapter.

1.1 Finance Functions

Finance may be defined as the management of money in such a way that it is available at the time it is required. Every organization, big or small, needs finance to carry out its day-to-day operations and attain its defined goals. In fact, finance affects not only the survival and growth but also virtually the whole existence of almost any business organization-financial or non-financial, private or public, large or small, profit seeking or non-profit organization. Being indispensable, finance is rightly known as the ‘lifeblood and nerve center’ of any organization. It is indeed this importance of finance that has led to the emergence of the concept of corporation finance, popularly known as financial management. Financial management deals with financial planning, acquisition of funds, use and allocation of funds, and financial control of the scarce financial resources by any organization.

Accordingly, financial management is the managerial activity, which is concerned with the planning and control of firm’s financial resources (Pandey, 1995). The finance function in the Indian corporate sector has undergone a massive change over time. Traditionally, the finance function had a limited scope of procurement or raising of funds by corporate enterprise to meet its financing needs with little emphasis on allocation of funds. The finance managers were only concerned with episodic financing that is raising funds at the times of expansion, diversification, mergers, consolidations, reorganizations etc., and completely ignored the aspect of efficient allocation and utilization of funds.

However, the accelerating pace of industrialization, technological inventions and innovations, intense competition, government intervention, population growth etc. all led to the need for an effective utilization of firm’s financial resources to gain a niche in the era of cut throat competition. The emphasis thus shifted from episodic financing to financial management and from raising of funds to efficient and effective utilization of funds. The modern approach views financial management in broader
sense and provides a conceptual and analytical framework for financial decision-making. The finance function thus covers both acquisition as well as allocation of funds, in modern times.

According to Deolanker (1996) and Van Horne (1994), financial management in the modern sense comprises of three major decisions as functions of finance namely, Investment decision, Financing decision and Dividend policy decision. A combination of these three maximizes the value of firm to its shareholders. However, Pandey (1995) added a fourth decision, i.e. Liquidity decision. Thus the finance function, today, revolves primarily around four major and core decisions of

- Financing (Capital Structure Decision): This refers to the decision of when, where from and how to acquire funds to meet the firm’s investment needs, i.e. to determine the appropriate proportion of debt equity mix.
- Investment (Capital Budgeting Decision): This refers to the decision of allocation of capital or commitment of funds to long term assets that would yield benefits in terms of cash flows in future.
- Dividend (Profit Allocation Decision): This deals with deciding the proportion of profits to be distributed (dividend- payout) and the proportion to be retained (retention ratio) in the business.
- Liquidity (Working Capital Decision): This deals with current asset management so as to strike a trade-off between profitability and liquidity.

Out of these four prime decisions, the investment decision, i.e. the efficient utilization and management of funds so as to maximize shareholders’ wealth, is now treated as the central issue of financial policy under the modern concept of finance function.

1.2 Capital Budgeting Decision

According to Pandey (1995), the investment decision of a firm, popularly known as the capital budgeting or capital expenditure decision, may be defined as the firm’s decision to invest its current funds most efficiently in long term assets in anticipation of expected flow of benefits over a series of years. It is the process of making investment decisions in capital expenditure, defined as that expenditure which is incurred at one point of time whereas the benefits of it are realized at different points of time in future. It involves sacrifice of a certain amount of present resources in exchange for a future return and an arbitrage over time that involves risk. To quote Jain and Kumar (1998), “A typical investment or capital budgeting involves certain
sacrifice of resources now in exchange for an uncertain but hopefully large inflow of resources in the near or distant future.” Capital expenditure may take several forms like cost of acquisition, addition, expansion, improvement in the fixed assets as land and building, plant and machinery, goodwill etc., cost of replacement of permanent assets, research and development, and diversification into new business areas.

Investment decision is important because it determines the value of a firm by influencing its growth, profitability and risk. It is considered to be one of the most important decisions because it has long-term implications for a firm. The financial manager before going in for any kind of investment engages himself with rational matching of present value of benefits with present costs so as to increase Net Present Value of a project, which in turn will increase the market value of shares of a firm and ultimately maximizes shareholders’ wealth.

In short, capital budgeting is the process of deciding what investment decision should be taken and which project is beneficial for a period of time keeping in mind the objective of maximization of shareholders’ wealth. These decisions involve commitment of huge funds that too for a longer period which also changes the risk complexion of business. This decision, if undertaken judiciously, helps in providing the benefits of maximization of wealth not only for the concerned organization and industry but also for the economy as a whole. On the other hand, if this decision is not given its due importance, it will ultimately lead to the decline and demise of even a growing prosperous organization.

1.3 Significance of Capital Budgeting

Capital budgeting decision is considered to be the most important and crucial decision among the four decisions mentioned above because it, to a great extent, influences the survival, growth and value of a business enterprise. In the words of Porwal (1976), “Capital budgeting is one of the important vehicles to achieve objectives of a business concern”. Van Horne (1994) argues that capital budgeting decision is the most important of the three decisions when it comes to the creation of value.

The importance of capital budgeting can be well comprehended from the fact that an unsound investment decision may prove to be fatal to the very existence of the concern. The importance and need of capital budgeting arises due to the following reasons:
• Affects firm’s growth in long run: A firm’s decision to invest in long-term assets has a decisive influence on the rate and direction of growth. Wrong, unprofitable investments may prove disastrous for the future survival, growth and value of a firm.

• Large investments: Capital budgeting decisions involve large investment of scarce funds. Since funds are scarce, so it becomes necessary to make proper planning regarding capital expenditure.

• Long-term commitment of funds: Capital budgeting not only involves large investments but also involves long-term and permanent commitment of funds. This long-term commitment of funds may also change the risk complexion of a business (Mayer, 1981)

• Long-term effect on profitability: Capital budgeting has long-term effect on profitability. Not only present earnings of the company are affected but also its future earnings. The effects of capital budgeting will extend into the future and will have to be endured for a longer period than the consequences of current operating expenditures (Van Horne, 1994). Thus, long term profitability of the company depends on the investment decisions.

• Complexity of decision: Investment decisions are among the firm’s most difficult decisions, which are complex in nature. This is due to difficulty in estimating the future cash flows from an investment especially in uncertain business conditions.

• Irreversible nature: Capital budgeting decisions are irreversible in nature (Bhattacharya, 1997 and Jain and Kumar, 1998). This is because it is very difficult to find a market for the second hand capital assets. The only alternative will be to scrap the capital assets so purchased or sell them at a substantial loss in the event of the decision being proved wrong.

• National importance: Investment decision is also concerned with the national importance because it determines employment, economic activities and growth of an economy.

1.4 Capital Budgeting Process

Capital budgeting is a very complicated process as it involves steps relating to the investment of current funds for benefits in future. The process may differ from one concern to another but, overall, the process involves following steps:
1. Identification of investment proposal: Capital budgeting process starts with identification of investment proposals. It is very important to select the best investment proposal. The departmental head analyses various proposals in the light of the corporate strategies and submits the suitable proposals to the Capital Expenditure Planning Committee of the business enterprise.

2. Screening of proposals: After identifying proposals, the Capital Expenditure Planning Committee screens various proposals, which are received from different departments. The committee views and checks these proposals and compares it with the company strategies.

3. Evaluation of various proposals: The next step in this process is to evaluate the profitability of various proposals. To evaluate the profitability, various methods can be used, e.g. Payback period method, Accounting Rate of Return method, Net Present Value method and Internal Rate of Return method etc.

4. Fixing priorities: It is very important to fix the priorities because on the basis of priorities decisions are taken and proposals are selected. Unprofitable or uneconomic proposals are rejected. It is very essential to rank the various proposals and to establish priorities of these proposals.

5. Final approval and preparation of capital expenditure budget: After evaluation of proposals and fixing priorities, the other criterion of final approval is its contribution in the capital expenditure budget. It is very necessary to take correct decision or accept the final proposal so that the company can get profits in future.

6. Implementing proposal: After preparation of a capital expenditure budget and incorporation of a particular proposal in the budget, the next step involves implementation of the project. When the project is implemented, it is very essential to assign responsibilities for completing the project so as to avoid unnecessary delays and cost overruns.

7. Performance review: The last stage in the process of capital budgeting is the evaluation of the performance of the project. Evaluation is made through the comparison of actual expenditure with the budgeted one. If any variations exist, then steps may be taken to remove these in future.

1.5 Capital Budgeting Techniques

Capital budgeting is a very essential and indispensable tool of management. The task of the finance manager in the modern times is to make an efficient allocation of resources by choosing investment proposals with satisfactory cash flows and rates
of return. Therefore, a financial manager must be able to decide whether an investment is worth undertaking and should be able to choose intelligently between two or more alternatives. To do this, a sound procedure to evaluate, compare, and select projects is needed. This procedure is called capital budgeting.

Any business enterprise has limited amount of financial resources of funds that may be drawn either from equity capital or debt. All firms have limited borrowing resources that should be allocated among the best competing investment alternatives, depending on its credit worthiness and security of available assets. Even the best known firm in an industry or a community can increase its borrowing up to a certain limit. Once this point is reached, the firm will either be denied more credit or be charged a higher interest rate, making borrowing a less desirable way to raise capital. Moreover, there is a limit on the volume of credit that the banking system can create in the economy. Commercial banks and other lending institutions have limited deposits from which they can lend money to individuals, corporations, and governments. Besides the reserve requirements fixed in by the Central Bank limits the credit creating capacity of banks.

Some argue that a company can issue a good amount of common stock to the general public to raise capital. However, increasing the number of shares of company stock will serve only to distribute the same amount of equity among a greater number of shareholders. This would lead to dilution of control of the existing shareholders whose company ownership or share will proportionally decrease with increase in the number of shareholders.

Capital is a limited resource whether it is in the form of debt or equity (short-term or long-term, common stock) or retained earnings. The scarcity of capital or resources coupled with the importance of the investment decision in maximizing the long term value of the firm requires focus on sound investment appraisal. This forms the basis of emergence of techniques of capital budgeting.

These techniques help the management in deciding whether or not a particular project is economically viable and adds to the value or wealth of the firm. In the case of more than one project, these aid the management in identifying the projects that will contribute most to the profits, and consequently to the value (or wealth) of the firm resulting in shareholders’ wealth maximization. For evaluating these investments or projects, various capital budgeting techniques or methods have been developed to select the best investment avenue or project where an organization
should commit its scarce funds and resources to gain maximum returns. Different companies prefer different capital budgeting techniques. While some companies still prefer old non-discounted less sophisticated techniques like payback period method, Accounting Rate of Return etc., others have moved towards the application of more sophisticated Discounted Cash Flow (DCF) techniques like Net Present Value (NPV) and Internal Rate of Return (IRR).

1.6 Need and Scope of the Study

It is worth mentioning that no major study has been conducted in India in the area of capital budgeting, especially a comprehensive one, incorporating a detailed analysis of various aspects of capital budgeting. Whatever studies have been conducted so far these concentrated either on financial goals or on capital budgeting techniques or on all areas of corporate finance. The emphasis has been largely on usage of discounted, non discounted capital budgeting methods and some risk techniques. The following aspects however remain neglected.

- There is a need to focus separately on the different sources of risk and risk factors and their adjustments. Similarly, a study of discount rate/cost of capital practices along with cost of equity capital and calculation of required rate of return needs to form a part of these studies.
- A detailed study of different stages of capital budgeting have been ignored by the Indian researchers.
- Non financial considerations and other factors considered while accepting projects and relative importance of these while selecting projects have been largely ignored in Indian research studies.
- There is also a need to study the usage of advanced capital budgeting techniques like Modified Internal Rate of Return (MIRR), Earnings Multiple Approach, NPV adjusted with Real Options Analysis, Economic Value Added (EVA)/MVA and sophisticated risk techniques like Simulation Analysis, DCF Break Even Analysis, Hillier Model, Decision Tree Analysis, Probability Theory, calculated bail-out factor by the Corporate sector in India.
- Indian studies have also ignored the important issues of possible conflict with NPV and IRR, variability in discount rates and cash flow forecasting techniques.
• Studies in India have examined the impact of nature of industry and the size of companies on selection of capital budgeting techniques, but have ignored the impact of other variables like size of capital budget, CEO education, age of the company, type of investment on choice of capital budgeting techniques.

• Also, research in this area needs special attention particularly when a number of changes have taken place in the economic and business environment, both in domestic as well as in global markets since the last few years, which have had a considerable impact on the investment scenario that has become very risky. This may as well influence the investment appraisal techniques especially risk techniques employed by companies for evaluating their investment proposals.

After the government relaxed the entry and exit rules for foreign companies in India and embarked on full fledged globalization, the economy initially grew at a steady pace. There took place a spurt in foreign investment through Foreign Institutional Investors (FIIs) and the rupee strengthened against the dollar. Unprecedented changes took place in various financial sectors like banking, insurance etc., and a number of global mergers took place with MNCs entering in each and every sphere of business. A boom occurred in foreign trade with increasing exports, and foreign reserves resulting in mounting Indian stock markets. All this resulted in increased liquidity in the economy and escalating inflation, such that the government had to increase deposit rates to curb this. Further other financial changes took place like Securities and Exchange Board of India (SEBI) regulation mandating the adherence of clause 49 (on corporate governance) by all listed companies, from 1 April 2006.

The economy was growing at a steady pace until there was a sudden slowdown of Indian markets after mid 2007. The recession (originating due to the US financial crisis) had a strong impact on the world economy towards the second-half of 2008. Consequently the year 2008 was very turbulent and unstable for Indian corporate sector under the adverse impact of gloomy and miserable foreign markets. According to the United Nations Council on Trade and Development (UNCTAD) [investment brief (1 November 2009), in the year 2008 global foreign direct investment worldwide flows came down by more than 20 per cent. In India, total net
capital flows fell from US$17.3 billion in April-June 2007 to US$13.2 billion in April-June 2008 (source: UNCTAD Investment Briefs, Investment Issues Analysis Branch of UNCTAD, 2009).

Initially it was a promising year with the economy growing at well above 8 percent and the Sensex touching nearly 21,000 points. However, the mounting global crude prices and the global subprime crisis took its toll. As a consequence, the Indian stock markets crashed down to 10,000 mark (or even less) as the FIIs pulled out billions of dollars, making it one of the worst performers in the Asian equity scene. The dollar became stronger resulting in expensive imports and reducing foreign exchange reserves. To salvage the Indian economy, multi-billion dollar stimulus packages were announced and an aggressive rate-cut campaign was initiated by the Reserve Bank of India. However, amid the efforts of Indian Government to revive the economy, Rs 8000 crore financial fraud by the IT giant Satyam added fuel to the fire.

Thus, the Indian business environment had become highly turbulent with companies being prone to numerous risks like exchange rate risk, interest rate risk, inflation risk etc. Only the globally competitive and professionally managed companies could be expected to thrive in such an unstable environment. For achieving this, the companies are focusing even more on effective financial management practices and are greatly concerned about core financial issues like capital structure, cost of capital, working capital management and, most important of all investment appraisal or capital budgeting decisions with risk incorporation.

In this changing economic scenario in India, there is a need to re-examine and re-study the corporate practices regarding capital budgeting. Thus, the present study aims to fill up this research gap by unveiling the status of capital budgeting in Indian corporate sector, and studying the capital budgeting methods particularly the techniques incorporating risk being preferred by these companies for taking investment decisions. To address these issues, it is proposed to undertake a comprehensive primary survey of companies in India to analyze the capital budgeting practices being practiced by them. The scope of this study is limited not merely to determining the corporate practices regarding capital budgeting in Indian corporate sector but also to study different variables or factors that have had an impact on the methods of capital budgeting.
1.7 Objectives of the Study

The overall objective of the study is to examine in detail the capital budgeting practices being adopted by Indian companies in the turbulent and risk prone business environment. The specific objectives of the study are:

1. To study the corporate practices regarding the capital budgeting techniques or methods used for evaluating an investment proposal.
2. To study the criticality in terms of level of difficulty, importance and riskiness of different stages of capital budgeting process, and the factors affecting capital budgeting techniques which are being applied by the companies.
3. To investigate the corporate practices concerning cost of capital and cost of equity capital.
4. To analyze the different sources of risk, their adjustments by companies, and the corporate practices regarding the capital budgeting techniques incorporating risk.
5. To identify the non financial and other factors considered by the companies and their relative importance while evaluating projects.
6. To study the impact of different variables on the selection of capital budgeting technique and risk handling techniques used by different companies.

1.8 Organization of the Study

The study has been organized into nine chapters including this chapter (Chapter I) that has attempted to introduce the issue proposed for investigation. Chapter II presents the theoretical framework of capital budgeting decision. It discusses the capital budgeting techniques, risk adjusted capital budgeting techniques, cost of capital and equity capital practices and other issues pertaining to investment decision. Chapter III presents an exhaustive review of literature which is intended to identify the research gaps in the studies conducted on capital budgeting practices adopted by the companies. Chapter IV concentrates on research methodology that deals with universe of the study, selection of the sample, descriptive statistics of the sample, techniques of data collection, and statistical techniques used for analysis. The capital budgeting techniques preferred by the Indian companies have been dealt with in Chapter V. It also analyses the effect of different variables like size of company’s capital budget, its sales revenue, nature/type of industry, CEO education, age of
company, type of investment on the usage of capital budgeting techniques. The chapter further deals with CFOs preferences and opinions regarding these techniques and the factors affecting choice of capital budgeting techniques. It also throws light on the criticality of different stages of capital budgeting process. Chapter VI discusses the consideration of risk in capital budgeting. It highlights the different sources of risk and the risk factors that affect companies. It also discusses the methods preferred by the companies for adjustment of these risk factors, and the capital budgeting techniques used by companies for risk incorporation. It also analyses the effect of different variables like size of capital budget, nature, CEO education, CEO age, age of company on risk adjusted capital budgeting techniques.

The cost of capital practices adopted by the companies has been discussed in Chapter VII. This chapter discusses the methods used for calculating cost of capital and cost of equity capital by the companies. It also deals with the calculations of required rate of return by the companies.

Chapter VIII discusses non financial considerations or qualitative factors considered by the companies that affect their capital budgeting decisions. The chapter also explores the factors (financial as well as non financial) that affect project selection.

Lastly, Chapter IX presents the summary, findings, and conclusions of the study undertaken. The agenda for future research has also been outlined in this chapter.

1.9 Limitations of the Study

- The respondents were CFOs, Director Finance etc. who are knowledgeable people, but had hectic and busy time schedules. As a consequence, they had to be persuaded repeatedly to spare their time to fill the questionnaire.
- Many of the company personnel reluctantly filled up the questionnaire, and in a few cases did not supply complete information.
- Subjectivity in the responses, especially in questions relating to personal opinions, is also feared.