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# **RELATION BETWEEN FREQUENCY AND SIZE OF CAPITAL EXPENDITURES**

MOHD. KHALID

RESEARCH SCHOLAR OF SRI SATYA SAI UNIVERSITY

MADHYA PRADESH (INDIA)

## **ABSTRACT**

*The pattern and pace of long-term investment is crucial in the development of every economy. The rate of capital accumulation or business fixed investment is one of the key determinants of economy's long term growth rate and is indispensable for overall economic development.*

*The role of Indian corporate sector has always been instrumental in this regard. Moreover, the same has become even more significant after the liberalization, privatization and globalization measures post Industrial Policy 1991 in Indian economy. Investment as such contributes towards current demand, current employment and future output. It therefore becomes interesting to study investment at aggregate, industry and firm level. The investment pattern can also indicate impact of monetary and fiscal policy on the corporate sector.*

**KEYWORDS:** *Investment, Indian Economy, Capital*

## **INTRODUCTION**

“Investment spending is devoted to increasing or maintaining the stock of capital. The stock of capital consists of factories, machines, offices and other durable man-made products used in the process of production. The capital stock also consists of residential housing as well as inventories” Over the last decade and a half,

Indian economy has witnessed a widespread change in its orientation towards the role of state and private enterprises in contributing towards economic growth. One of the primary objectives of liberalisation through Industrial Policy 1991 was to ensure that a market-oriented economy would infuse capital expenditures by corporate India to

connect to the global economy and push the country's growth rate.

This study confines itself to the consideration of business fixed investment (corporate capital expenditures). The primary aim of this study is to analyse the importance of various sources of finance in corporate capital expenditures in India. Every organization is required to commit a part of total funds permanently or for a long-term towards the accomplishment of its objectives.

This includes setting up of infrastructure, review and up-gradation of infrastructure, entering new markets, launching new products, selecting from lease rentals or purchases and make or buy decisions. It represents a sizeable outlay of funds for the company.

Capital expenditure decision making involves the scrutiny, review, analysis, implementation and follow-up of such long-term investments to achieve the goal of shareholders' wealth maximization. In the words of Gitman , "Capital budgeting is the process of evaluating and selecting long-term investments consistent with the firm's goal of owners' wealth maximization."

Capital expenditure decisions are made with different motives in mind by different firms. The growth plans of an existing firm require the acquisition of more fixed assets whereas a newly incorporated firm needs to build resources to implement its plans. Further, when a budding firm is progressing towards its goals, it requires replacing or renewing the obsolete or worn-out assets.

Costs and benefits of repairs and replacements have to be compared. Renewal, an alternative to replacement, may involve rebuilding, overhauling or retrofitting an existing fixed asset to improve its efficiency. Some other capital expenditure decisions require long-term commitment of funds in expectation of a future return.

The proposal of capital expenditure decision-making can be initiated at any level in the organization. The broad objective of all such decisions revolves around shareholders' wealth maximization. In an attempt to make an optimal choice, due consideration has to be given to the quantum of investment involved. An appropriate solution to the issue may originate after a thorough study of market, firm's resources and competitor's policy.

However, the proposals have to be formally reviewed by the requisite authority in the light of firm's objectives and growth plans to evaluate their economic validity. First, a preliminary screening of all the capital expenditure proposals is done in light of the broad objectives. The outlay required and importance of decision depends on the level of capital expenditure budget.

### **OBJECTIVES OF THE STUDY**

The present study primarily aims to study the financing of capital expenditures in Indian corporate sector. Within this primary objective, the specific objectives of study are:

- a) To identify the trends about the frequency and size of capital expenditures.
- b) To study the significance of various sources of funds for financing long-term investment decisions.
- c) To analyze the importance of cash flows in firm's investment decisions and the nature of its relationship with corporate investment.
- d) To examine the relationship between financing and capital expenditure decisions.

### **HYPOTHESES OF THE STUDY**

The hypotheses of the study have been drafted in accordance with the specific objectives. The broad hypotheses of the study are as follows:

- a) Routine investments are more frequent than growth related investments.
- b) Borrowed funds are the most frequently used for financing capital expenditures.
- c) Investment decisions of firms are sensitive to cash-flows and there is a U shaped relationship between investment and cash flows.
- d) Investment decisions are dependent upon financing sources.

The above mentioned hypotheses have been revisited and elaborated in the chapter on research methodology.

### **RESEARCH METHODOLOGY**

#### **Data Source**

The study is based on firm level data which in turn has been obtained from secondary sources for the purpose of analysis. The relevant data was available in audited financial statements of the sample companies. This has been sourced primarily from a firm-level micro database;

PROWESS administered by the Centre for Monitoring Indian Economy (CMIE). In India, CMIE has the largest database on the Indian economy and companies.

Prowess is a database of large and medium Indian firms. It contains detailed information on over 23,000 firms comprising all companies traded on India's major stock exchanges and several others including the central public sector enterprises. Minor gaps have been filled with information from published annual reports and company websites.

The study focuses on Indian corporate sector. It aims to examine and accomplish the objectives stated above over a fourteen year period from 2010-11 to 2014-15. The period after liberalization has seen changes in the asset structure of all companies irrespective of industries. The requirement of consistent data for balanced panel was reasonably met from 1994-95 onwards. The study covers a fourteen year period till 2008-09. Besides, a study spread over more than a decade can be expected to give reliable and representative results.

The companies meeting the following selection criteria have been chosen for the final sample:

- Continuity of operations
- Consistent data availability
- Common and consistent accounting year from 1st April to 31st March.

Banking, finance and trading companies have been kept outside the purview of the study. Banking companies are governed by separate set of legislations apart from difference in factors influencing their investment decisions. Additionally, finance and trading companies do not primarily require huge capital expenditures for their growth and expansion plans. Further, as the data set is spanning over a fourteen year period, it is imperative to adjust variables against inflation to deduce reliable results. However, certain companies have been dropped due to non availability of suitable Wholesale Price Index as the same is available for manufacturing industries.

The methodology comprises of varied econometric and statistical tools. Frequency and trends of capital expenditure decisions has been analyzed with the help of tabulation of data, use of frequency distribution, simple percentages, correlation, and cross tabulation. Since this is a study of investment behavior of Indian corporate sector, a cross-section comprising of 176

companies over fourteen years has been analyzed with the help of panel data models. LIMDEP (Version 7.0) software has been used for multiple regression analysis. The segregated analysis for various industry groups has been carried out on parallel lines as for aggregate sample.

### **SIGNIFICANCE OF THE STUDY**

A stricter control is required after approval and funding. Further, the actual and estimated costs and benefits have to be compared. The firm has to study its relevant cash flow patterns that include 'initial investment', 'operating cash inflows and outflows' and 'terminal cash flows' of the project.

The decision regarding acceptance or rejection is taken after evaluation of various proposals by using different capital budgeting techniques such as internal rate of return, net present value, payback period, discounted payback period, profitability index etc. The executives generally prefer to use a combination of these techniques along with personal experience to give a final approval to the project. Some supplementary tools of incorporating risks in capital expenditure proposals are sensitivity analysis, risk adjusted discount rate,

certainty equivalent coefficient and decision tree.

At times, the managers are faced with more than one feasible proposal but the funds may fall short of the requirements. Hence, the next step in capital expenditure decision making process is to ration the available funds among the feasible proposal(s) optimally.

The controlling aspect comes into picture once the project is finally selected and implemented. Pre-completion control refers to the comparison of estimated and actual benefits of the project during its various stages. Lastly, post-completion audit is carried out to evaluate the total return from the project with the targets set in the beginning to improve the future analysis of capital expenditure proposals.

### **SCOPE OF THE STUDY**

The Indian economy is one of the fastest growing economies of the world. Despite the recent economic recession faced by some of the biggest economies of the world, Indian economy has fared remarkably well at the financial front. The frequency, quantum and diversity of investment opportunities faced by present day Indian corporate sector is the primary reason for

understanding the preferred financing pattern in depth. Additionally post industrial policy 1991, the structural and macroeconomic reforms followed due to liberalization, privatization and globalization regime makes it even more interesting to study the financing patterns in an era accompanied by plethora of investment opportunities.

## CONCLUSION

The findings of this study is of great use by policy makers, the Indian corporate sector and investors in general. The present study, besides enhancing the existing empirical literature, has provided the results with a sample comprising of private and public sector enterprises from Indian corporate sector. The study will be found useful from various dimensions and its justification is derived from wider considerations, both academic and practical in terms of its relevance to the Indian corporate sector.

## REFERENCES

- Abel, A. and Blanchard, O., 2011, Investment and Sales: Some Empirical Evidence,
- NBER Working Papers, 2012, National Bureau of Economic Research Inc., June.
- Athukorala, Prema Chandra and Sen, Kunal, 2014, Saving, Investment and Growth in India, Oxford University Press, New Delhi.
- Athukorala, Prema Chandra and Sen, Kunal, 2010, Liberalization and Business Investment in India, Australian and East Anglian Universities: Research School of Pacific and Asian Studies Press.
- Bhattacharyya, Surajit, 2011, Determinants of Private Corporate Investment: Evidence from Indian Manufacturing Firms, Economic Society of South Africa, Conference, 2007
- Brealey, R.A. and Myers, 2013, S.C., Principles of Corporate Finance, Tata McGraw Hill, New Delhi.
- Brigham, Eugene F., 2010, Fundamentals of Financial Management, Sixth Edition, The Dryden Press, Fort Worth.

- Brigham, Eugene F.,2012, Financial Management: Theory and Practice, Fourth Edition, The Dryden Press, New York.
- Bruinshoofd, W. A.,2014, Corporate Investment and Financing Constraints: Connections with Cash Management , WO Research Memoranda (discontinued), Netherlands Central Bank, Research Department, May 2013
- Cava, Gianni La, Financial Constraints, the User Cost of Capital and Corporate Investment in Australia, Research Discussion Paper (2011-12), Economic Analysis, Reserve Bank of Australia, December, 2012.
- Chandra Prasanna, Financial Management, Tata McGraw-Hill, New Delhi, 2001.
- Devereux, Michael and Schiantarelli, Fabio, Investment, Financial Factors and Cash Flow: Evidence from UK Panel Data, NBER Working Papers 3116, National Bureau of Economic Research Inc.