

Capital Budgeting Techniques in Bhel

¹A.Lohitha, A.Latha

¹Research scholar, ²associate professor

^{1, 2} Malla Reddy Engineering College (A), Maisammaguda, Dhulapally, Secunderabad.

Abstract:

The study is based on the capital budgeting of BHEL-Hyderabad, which includes the total capital investment in the different projects and in different categories. Here we analyze the capital expenditure is an outlay of cash for a project that is expected to produce a cash inflow over a period of time exceeding one year. Examples of projects include investments in property, plant, and equipment, research and development projects, large advertising campaigns, or any other project that requires a capital expenditure and generates a future cash flow. The process of the capital investments in the procedure, which is a commercial enterprise, determines and evaluates ability expenses or investments, which might be big in nature. Often times, a potential challenge's lifetime cash inflows and outflows are assessed with the intention to decide whether the capability returns generated meet a enough goal benchmark, additionally known as "funding appraisal." These expenditures and investments encompass initiatives, which includes building a new plant, or making an investment in a protracted-time period assignment. The long-term investment of the system involves making plans, availability and controlling, allocation and expenditure of long-time period funding budget.

Keywords:

Capital budgeting, investments, sales, profit, depreciation

1. INTRODUCTION

The predominant traits of a capital expenditure are that the expenditure is incurred at one factor of time while advantages of the expenditure are realized at one of kind points of time in future. Capital budgeting manner entails making plans, availability and controlling, allocation and expenditure of lengthy-time period investment finances.

The following are some of the examples of capital expenditure:

- The price of acquisition of permanent property consisting of land and building plant and equipment, goodwill etc.
- The fee of addition, growth, improvement or alteration in the constant belongings.

- The value of replacement of permanent assets.
- Research & Development Projects charges, and so forth.

DEFINITION:

"Capital Budgeting is a long-term planning to making financing proposed capitals outlays".

In other words of Lynch, "Capital Budgeting is concerned with planning and development of available capital for the purpose of the concern".

2. OBJECTIVES

The primary objectives of this study are

1. The objective of this paper is to evaluate the investment decisions in the company either to be taken or not.
2. To analyse the projects with the use of capital budgeting techniques of the selected pharma industries.

3. RESEARCH METHODOLOGY

The present study has been conducted to know the capital budgeting techniques which are used in the pharma industries to make appropriate decisions of the investments before investing into the projects these techniques helps for evaluation of the projects.

REVIEW OF LITERATURE:

The effective research on Capital budgeting is the system of allocating capital inside a company. This is completed to determine the long-time period investments that relaxed the continuity and Profitability of the business enterprise.

While making capital budgeting investment decision the following factors or aspects should be considered.

- The amount of investment
- Minimum rate of return on investment
- Return expected from the investments.
- Ranking of the investment proposals and
- Based on profitability the ranking is evaluated I.e., expected rate of return on investment.

The cause of this observes is to explore literature on capital budgeting in big Corporations in capital-extensive industries. Subsequently, analysis of techniques, which might be extensively incorporated in multinationals, how they may be used and what, must likely be taken into the account within the future, is carried out. After this introductory part, the basics techniques, as well as practical Aspects of capital budgeting are presented and discussed in ore element. Next, Capital budgeting in forest industry is supplied. The very last section introduces a Heuristic version that seeks to seize the relevant troubles in the industry.

R.K. Bhattacharya. D. Roy - “Development Of A New Design Variant Of LP Turbine Of two hundred/ 210mw LMW Russian Design For Uprating” “Project may be very prestigious for both Indian Railways and BHEL in view of the novelty and revolutionary manner of catering to the motel load and the locomotive load thru the Diesel-Electric Locomotive”.

Bierman (1993) finds that 73 of 74 Fortune 100 firms utilize reduced income (DCF) examination, with the interior rate of return (IRR) being favored over net present value(NPV).

93 percent of the respondents utilize all inclusive WACC for reducing free money streams and 72 for each penny utilize the rebate rate pertinent to extend in view of its hazard characteristics.11 Bierman Harold (1993) overviewed Fortune 500.

Petty J William, Scott David P., and Bird Monroe M. (1975) inspected reactions from 109 controllers of 1971 Fortune 500 (by offers dollars) firms concerning the methods their organizations used to assess new and existing product offerings.

R.K. Bhattacharya. D. Roy – “Design automation of 500 mw condenser the usage of expertise based engineering—an MOU venture”

“Rapid Prototyping method for making the blades and the usage of conventional technique for making crown and lower ring, savings in time and cost have been finished”.

P. Jagannathan, D. Roy – “Engineering, design improvement and production of gas gas bundle of v94.2 fuel turbine” “Designed & developed a higher capability, modern Mill — BHEL 280 Mill which is appropriate for 500 MW and 660 MW”.

HYPOTHESIS FORMULATION:

Having identified the objectives of this study, the following hypotheses have been formulated and tested during the period of study:

H₀ There is no significance difference between fixed investments and the selected internal factors (sales, profits, depreciation) is not significant. Study superintend.

DATA ANALYSIS:

1. Fixed investment Analysis Statement: During the study period, the purpose of investments of this company is for capacity expansion/up-gradation and R&D. We observe that out of 5 years, investments have been financed by internal sources for 5 years. Besides the internal sources, this company have also raised funds from external sources to finance their additional fixed investments during 2013-2017

2. Trends in Fixed Investment: In order to discover the fixed investment trend of this company, the rate of increase in fixed assets during the year has been computed. In the process of classification, these rates are classified into two categories by taking normal business practices into consideration and the findings of empirical analysis.

A. Regular/routine Investments:

Company invests less than 10 per cent of investments as regular/routine investments for maintenance and replacements and

B. Growth / expansion oriented Investments:

Company invests more than 10 percent consider as growth and expansion.As we can see form the table 1, the annual rate of growth in fixed statements and their classification. In the year2013-17 the investments represents routine investments category for normal maintenance and replacements whereas the rest of the years reliable to growth and expansion. The amount of incremental investments increased its height in 2017 with Rs9321.45crs. The highest rate of growth is found in The same year with 11.596 per cent. Overall trend of fixed investments during the study period is found to be increasing with an annual average investment

Year	Fixed Assets Beginning	Assets Increase During The Year	Percentage Of Increase	Classification
2013	7531.64	828.4804	9.0909	R
2014	7,709.91	848.0901	9.4549	R
2015	8,890.4	977.944	10.654	G
2016	8999.56	989.9516	11.4532	G
2017	9321.45	1025.3595	11.596	G

As we can see from the table 1, the annual rate of growth in fixed statements and their classification. In the year 2013-17 the investments represents routine investments category for normal maintenance and replacements whereas the rest of the years reliable to growth and expansion. The amount of incremental investments increased its height in 2017 with Rs9321.45crs. The highest rate of growth is found in the same year with 11.596 per cent. Overall trend of fixed investments during the study period is found to be increasing with an annual average investment.

Accountable Factors for Fixed Investment: The purpose of Investments differs one to another firm. For example, the purpose of expansion is to meet the growing demand for products; the purpose of modernisation helps to reduce the cost through new production processes; and diversification helps to additions to existing product line. All these forms help to increase the sales, in turn to increase profits of the company's overall. In this study, we have tried to correlate each internal factors such as sales, profit and depreciation charges with fixed investments.

a. Fixed Investments and sales: Trends of fixed investments and the sales show the same trend but the per cent of changes are vary during the study period. The coefficient of correlation

Between sales and fixed investments is found to be 0.765 (see table 3) which is statistically Significant at 5 per cent level of significance, suggesting that the relationship between the variables is moderate. Capital budgeting decisions may increase the sales through increased production, and promotion programmes provides the demand for the product goes up in the market. This has been proved by this company as it occupies the good position in the market. From the analysis, the fixed investments and sales have the close and direct relationship between each other.

b. Fixed investments and profit: As we mentioned above, increase in fixed Investment is to enhance the earning capacity of the company. It is clear from the table 3 where we can find a shift from loss into profit. There are number of fluctuations with substantially high and low levels of the fixed investments and profits during the study period. The coefficient of correlation between profits and fixed investments is found to be 0.393(see table 3) which is statistically significant at 5 per cent level of significance, indicating poor association between the variables. This is mainly due to inefficient utilisation of fixed investments. Hence the management has to improve its utilisation of fixed assets

Statement of Descriptive Statistics & Selected variables

Year	INVESTMENTS	SALES	PROFIT	DEPRICIATION
2013	663.40	25,629.99	913.42	935.64
2014	417.67	30,182.98	1,419.29	1,077.32
2015	420.17	39,108.83	3,460.78	982.92
2016	429.17	48,424.65	6,614.73	953.39
2017	461.67	47,978.89	7,039.96	800.00
TOTAL	2392.08	191,325.34	19448.18	4749.27
MEAN	478.416	38,265.07	3889.636	949.854
SD	104.8896448	10286.55337	2850.2222	100.0146

c. Fixed investments and depreciation charges: This is another important internal factor considered to be associated with fixed investments. In our study, we found that very poor relationship between the variables (0.607) and this coefficient is statistically insignificant at 5 per cent level of significance.

Normally, more the investments in fixed assets, the higher will be the depreciation charges which help the company for additional investments in fixed assets. An appropriate method of depreciation on fixed assets not only helps the company to retain the profits and or

proper tax planning. But this company's utilisation is very poor.

Simple correlation analysis

Variables between	corralation@	t value for r	table value @5%	D.F	RESULTS
INVESTMENTS & SALES	-0.59281199438	-8.16435269461	2.776	4	Ho rejected
INVESTMENTS & PROFIT	0.470353160	-2.629310289660	2.776	4	Ho rejected
INVESTMENTS & DEP	-0.23743039	-6.5393931	2.776	4	Ho Accepted

FINDINGS:

The incremental investments in fixed investments show an increasing trend during the study period with an average of Rs. **478.416 crs** and standard deviations of Rs**104.8896448**. However the investments are not uniform throughout the study period. In this study, we found that the coefficient of correlation between incremental fixed assets and sales to be positive and significant. Similarly, the coefficient of correlation between fixed investments and profit have the moderate relationship and statistically significant. However, the relationship between the fixed investments and depreciation have the poor relationship and statistically insignificant. About, the sources of funds towards the fixed investments for this company are internal sources. In order to maintain the market position with its products, every company must produce product as good as, or better than its competitors. This leads to fixed investments decisions which can be classified into two: routine and expansion. Every company has to make routine investments continuously whereas growth investments are made intermittently.

CONCLUSION:

The basic challenging task of fixed investment decisions lies in the search for lucrative opportunities and to derive the benefits in the uncertainty environment in quantitative terms. From the empirical analysis, this company's fixed investments decisions are wise and shows better fund management.

REFERENCE:

1. Bierman H J (1993), Capital Budgeting in 1992:A Survey, Financial Management, Vol.22,p.24
2. Drury C,Braund S and Tayles M (1993), A survey of Management Accounting Practices in UK Manufacturing Companies,

ACCA Research Paper 32, Chartered Association of Certified Accountants.

3. Petry Glenn H and Sprow James (1993), the Theory of Finance in 1990s, The Quarterly Review of Economics and Finance, pp 359-381
4. Truong G., Partington and Peat M. (2006), "Cost of Capital Estimation and Capital Budgeting practice in Australia,"
5. Lord Beverley R. and Boyd Jennifer R.; Capital Budgeting in New Zealand Local Authorities: An Examination of Practice, Accepted for Presentation at the Fourth Asia Pacific Interdisciplinary Research in Accounting conference, 4 to 6 July 2004, Singapore, www.smu.edu.sg/events/apira/2004/Final Papers/1176-Lord.pdf.