

A Study on Capital Budgeting at Bharathi Cement Ltd

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ABSTRACT

The investment decision of a firm are generally known as the capital budgeting, or capital budgeting decisions may be defined as the firm's decisions to invest its current funds most efficiently in the long term assets anticipation of an expected flow of benefits over a series of years. The long term assets are those that affect the firm's operations beyond the one year period. The firm's investment decisions would generally include expansion, acquisition, modernization and replacement of the long term assets. Sale of a division or business is also as an investment decision.

Decisions like the change in the methods of sales distribution, or an advertisements campaign or a research and development programmes have long term implications for the firm's expenditure and benefits, and therefore they should also be evaluated as investment decisions. It is important to note that investment is the long assets invariably requires large funds to be tied up in the current assets such as inventories and receivables. As such, investment in fixed and current assets is one single activity.

KEYWORDS: Payback, Rate of return, Net present value, Internal rate of return, profitability index

INTRODUCTION

Capital budgeting decisions refer to assets which are in operation and yield a return over a period of time, usually exceeding one year. It is a long term investment decision involving huge capital expenditures.

The main characteristic of a capital expenditure is that the expenditure is incurred at one point of time whereas benefits of the expenditure are realized at different points of time in future.

Capital Budgeting process involves planning, availability and controlling, allocation and expenditure of long term investment funds.

The following are some of the examples of capital expenditure:

Cost of acquisition of permanent assets such as land and building plant and machinery, goodwill etc.

Cost of addition, expansion, improvement or alteration in the fixed assets.

Cost of replacement of permanent assets.

Research & Development projects costs, etc.

Need of the study:

To make financial analysis of various long term proposals regarding capital investment so as to choose the best out of many alternatives proposals.

How to cite this paper: A D Mamatha | Dr. P. Basaiah "A Study on Capital Budgeting at Bharathi Cement Ltd" Published in International Journal of Trend in Scientific Research and Development (ijtsrd), ISSN: 2456-6470, Volume-4 | Issue-6, October 2020, pp.592-595, URL: www.ijtsrd.com/papers/ijtsrd33161.pdf



IJTSRD33161

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Capital budgeting is important because it creates accountability and measurability. The ability to set long term goals is essential to the growth and prosperity of any business.

Scope of the study:

The study on capital budgeting covers different techniques followed by Bharathi Cement Ltd 2014-15 to 2018-19.

Objectives of the study:

- To analyze the various capital budgeting techniques which are practicing by Bharathi Cement Ltd.
- To calculate the net profit value at Bharathi Cement Ltd.
- To study the profitability index at Bharathi Cement Ltd.

Research methodology:

The study is based on secondary data.

Secondary data:

The data is collected from the company annual reports and company website.

WEBSITE: www.bharathicement.com

Limitations of the study;

- The study is limited to Bharathi Cement, Yerraguntla.
- The study is based on 5 years of data from 2014-15 to 2018-19.

Measurements:**PAYBACK PERIOD:****Table-1:**

YEAR	INCOME (PAT) (RS)	DEPRECIATION (RS)	CASH IN FLOW (RS)	CUMULATIVE CASH IN FLOWS (RS)
2014-15	336.2	663.2	1000	1000
2015-16	664.8	663.2	1328	2328
2016-17	1978.8	663.2	2642	4970
2017-18	1978.8	663.2	2642	7612
2018-19	1978.8	663.2	2642	10254

Pay-back period = initial year +

Initial outlay = 4145 lakhs

Payback period = $3 + 825/2642$

= $3 + 0.312$

= 3.312 (3 years and 3)

Interpretation:

The cumulative cash inflows for the year 2014-15 is 1000, 2015-16 is 2328, 2016-17 is 4970, 2017-18 is 7612, 2018-19 is 10254. The project investment can be recovered within 3.312 years during the year 2017-1. The project investment is recovered.

AVERAGE RATE OF RETURN**Table-2:**

YEAR	INCOME	DEPRECIATION	CASH IN FLOWS
2014-15	336.2	663.2	1000
2015-16	664.8	663.2	1328
2016-17	1978.8	663.2	2642
2017-18	1978.8	663.2	2642
2018-19	1978.8	663.2	2642

$$\text{ARR} = \frac{\text{Average Annual Profits after Tax}}{\text{Average investments}} \times 100$$

$$\text{Average Annual Profits} = \frac{\text{Average investment}}{\text{No of years Total Investment}}$$

$$\text{Average Investment} = \frac{\text{Total investment}}{2}$$

$$\begin{aligned} \text{Average profit} &= 6938/5 \\ &= 1387.6 \end{aligned}$$

$$\begin{aligned} \text{Average investment} &= 4145/2 \\ &= 245.55 \end{aligned}$$

$$\begin{aligned} \text{ARR} &= 1387.6/2072.5 \times 100 \\ &= 0.6696 \times 100 \\ &= 66.96\% \end{aligned}$$

Interpretation:

The cash inflows for the year 2014-15 is 1000, 2015-16 is 1328, 2016-17 is 2642, 2017-18 is 2642, 2018-19 is 2642. Accounting rate of return 66.95%. So the project can be accepted the firm rate of returns can be increased.

MODERN METHODS**NET PRESENT VALUE:****Table-3:**

YEAR	CASH INFLOWS	DCF (15%)	PRESENT VALUE
2014-15	1000	0.870	870.00
2015-16	1328	0.756	1003.9
2016-17	2642	0.658	1738.4
2017-18	2642	0.572	1511.2
2018-19	2642	0.497	1313.2
		TOTAL	6436.5

Net Present value = present value of cash inflows - Present value of cash outflows

NPV = 6436.5 - 4145.0

= 2291.5

Interpretation:

The present value of cash inflows 15% discount factor for the year 2014-15 is 870.0, 2015-16 is 1003.9, 2016-17 is 1738.4, 2017-18 is 1511.2, 2018-19 is 1313.2. The net present value is positive i.e. RS 2,291,50,000. So that project can be accepted.

INTERNAL RATE OF RETURN:

Table-4: Internal rate of return at 32%:

YEAR	Cash Inflows	DCF(32%)	Present Value
2014-15	1000	0.758	758
2015-16	1328	0.574	762.272
2016-17	2642	0.435	1149.27
2017-18	2642	0.329	869.218
2018-19	2642	0.250	660.5
		TOTAL	4199.26

Table-5: Internal rate of return at 35%:

YEAR	Cash Inflows	DCF(35%)	Present Value
2014-15	1000	0.740	740
2015-16	1328	0.548	727.744
2016-17	2642	0.406	1072.652
2017-18	2642	0.301	795.242
2018-19	2642	0.223	589.166
		TOTAL	3924

$$IRR = L + \frac{P1-C}{P1-P2} \times D$$

WHERE

P1=Present value of lower rate

P2=Present value of higher rate

C=Cash outflows

D=Difference rate

L=Lower discount factor

$$\begin{aligned}
 IRR &= 32 + x(35-32) \\
 &= 32 + (54.26/275.26) \times 3 \\
 &= 32 + 0.19(3) \\
 &= 32 + 0.57 \\
 &= 32.57\%
 \end{aligned}$$

Interpretation:

The net present value cash inflow at 32% discount factor for the year 2014-15 is 758, 2015-16 is 762.272, 2016-17 is 1149.27, 2017-18 is 869.218, 2018-19 is 660.5. The net present value of cash inflow at 35% discount factor for the year 2014-15 is 740, 2015-16 is 727.744, 2016-17 is 1072.652, 2017-18 is 795.242, 2018-19 is 589.166. The internal rate of return is 32.57%. So the project can be accepted. The internal rate of return is more than the external value it means returns are more than the expenditure. It shows good financial position of the firm

PROFITABILITY INDEX:

Table-6:

YEAR	CASH INFLOWS	DCF (15%)	PRESENT VALUE
2014-15	1000	0.870	870.00
2015-16	1328	0.756	1003.9
2016-17	2642	0.658	1738.4
2017-18	2642	0.572	1511.2
2018-19	2642	0.497	1313.2
		TOTAL	6436.5

$$PI = 1.55$$

PROFITABILITY INDEX

Interpretation:

The present value of cash inflows at 15% discount factor for the year 2014-15 is 870.00, 2015-16 is 1003.9, 2016-17 is 1734.4, 2017-18 is 1511.2, and 2018-19 is 1313.2. The Profitability Index is greater than 1 ($PI > 1$). So the project can be accepted, it indicates the firm position it always more than value. It is a barometer for measuring financial position of the firm.

Findings:

- The initial investment of the project is 4145 lakhs, the payback period of the project is 3 years. So the investor get there returns within expected time it leads to increase the cash inflows of the firm.
- Accounting Rate of Return of the project is 66.96%. The project can be accepted. The firm rate of the return is increasing.
- The net present value of the project at 15% discount rate factor is positive i.e. Rs.2291.5 lakhs. The project can be accepted.
- The Internal Rate of Return of the project is 32.57%. So the project can be accepted. The internal rate of return is more than the external value it means returns are more than the expenditure. It shows good financial position of the firm.
- The Profitability Index is greater than 1 ($PI > 1$) i.e. 1.55. So the project can be accepted, it indicates the firm position it always more than value.

Suggestions:

It can be suggested that the Bharathi cement ltd has sufficient reserves and surplus, in such a view it can go for diversification of its operations.

It can be suggested that the firm is in profitable condition so the risk is minimum to take the investment decision of the company.

It can be suggested that financial position of the company is good so it can be similar type of projects to increase the profits.

Conclusion:

Capital budgeting is a continuous process in any growing concern. Some of the decisions may directly affect the profit of the firms. However, in all cases, the decisions have a long-term impact on the performance of the organization.

From the study, it is identified that the investors are getting back their investment within the expected period. NPV and IRR are positive and profitability index is greater than one. So the project is accepted. The investors may invest their amount in this project, and also allocate the funds based on the requirement. Further it can go for diversification of its operations.

