

CAPITAL BUDGETING KESORAM

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ABSTRACT:

Capital budgeting is a critical process for companies aiming to make informed investment decisions that align with their long-term strategic goals. This abstract provides an overview of the capital budgeting practices employed by kesoram industries limited, a prominent industrial conglomerate.

Kesoram industries limited operates in diverse sectors, including cement, tires, and rayon, necessitating a robust capital budgeting framework to allocate resources effectively. This study delves into the methodologies, tools, and criteria utilized by kesoram industries limited in evaluating and selecting capital projects.

The analysis includes an exploration of the company's risk assessment mechanisms, incorporating factors such as market volatility, regulatory changes, and technological advancements. Kesoram industries limited's approach to incorporating the time value of money, discount rate determination, and sensitivity analysis is also examined to shed light on the rigor applied in project evaluation.

Furthermore, the abstract outlines kesoram industries limited's strategies for optimizing its capital structure, considering debt and equity components in financing capital projects. The study investigates the company's efforts to strike a balance between minimizing the cost of capital and maintaining financial flexibility.

In addition, the abstract discusses the role of key performance indicators (kpis) and metrics used by kesoram industries limited to monitor the post-implementation performance of capital projects. This includes an examination of financial metrics, project timelines, and deviations from initial projections, highlighting the company's commitment to continuous improvement and adaptive management.

The findings from this comprehensive analysis contribute to the understanding of how kesoram industries limited navigates the complexities of capital budgeting in a multi-sector environment. The insights derived from this study may be valuable for industry practitioners, academics, and policymakers seeking to enhance their knowledge of effective capital allocation strategies in diverse business contexts.

INTRODUCTION

Capital budgeing:

an efficient allocation of capital is the most important finance function in modern times. It involves decisions to commit firm's funds to long-term assets. Such decisions are tend to determine the value of company/firm by influencing its growth, profitability & risk.

Investment decisions are generally known as capital budgeting or capital expenditure decisions. It is clever decisions to invest current in long term assets expecting long-term benefits firm's investment decisions would generally include expansion, acquisition, modernization and replacement of long-term assets.

Such decisions can be investment decisions, financing decisions or operating decisions. Investment decisions deal with investment of organization's resources in long tern (fixed) assets and / or short term (current) assets. Decisions pertaining to investment in short term assets fall under "working capital management". Decisions pertaining to investment in long term assets are classified as "capital budgeting" decisions.

Capital budgeting decisions are related to allocation of investible funds to different long-term assets. They have long-term implications and affect the future growth and profitability of the firm.

In evaluating such investment proposals, it is important to carefully consider the expected benefits of investment against the expenses associated with it.

Organizations are frequently faced with capital budgeting decisions. Any decision that requires the use of resources is a capital budgeting decisions. Capital budgeting is more or less a continuous process in any growing concern.

NEED FOR THE STUDY

- the project study is undertaken to analyze and understand the capital budgeting process in cement manufacturing sector, which gives mean exposure to practical implication of theory knowledge.
- ✓ To know about the company's operation of using various capital budgeting techniques.
- to know how the company gets funds from various resources.

METHODOLOGY

to achieve aforesaid objective the following methodology has been adopted. The information for this report has been collected through the primary and secondary sources.

Primary sources

it is also called as first handed information; the data is collected through the observation in the organization and interview with officials. By asking question with the accounts and other persons in the financial department. A part from these some information is collected through the seminars, which were held by kesoram

Secondary sources

the secondary data have been collected through the various books, magazines, brouchers & websites

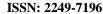
LIMITATION OF THE STUDY:

- Lack of time is another limiting factor, ie., the schedule period of 8 weeks are not sufficient to make the study independently regarding capital budgeting in kesoram.
- The busy schedule of the officials in the kesoram is another limiting factor. Due to the busy schedule officials restricted me to collect the complete information about organization.
- Non-availability of confidential financial data.
- The study is conducted in a short period, which was not detailed in all aspects.
- All the techniques of capital budgeting are not used in kesoram. Therefore it was possible to explain only few methods of capital budgeting.

REVIEW OF LITERATURE

Klammer, thomas p. (1972) surveyed a sample of 369 firms from the 1969 compustat listing of manufacturing firms that appeared in significant industry groups and made at least \$1 million of capital expenditures in each of the five years 1963-1967. Respondents were asked to identify the capital budgeting techniques in use in 1959, 1964, and 1970. The results indicated an increased use of techniques that incorporated the present value (klammer, 1984)

Fremgen james (1973) surveyed a random sample of 250 business firms that were in the 1969 edition of dun and bradsheet's reference book of corporate management. Questionnaire were sent to companies engaged in manufacturing, retailing, mining, transportation, land development, entertainment, public utilities and conglomerates to study the capital budgeting models used, stages of the capital budgeting process, and the methods used to adjust for risk. He found that firms considered the internal rate of return model to be the most important model for decision-making. He also found that the majority of firms increased their profitability requirements to





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adjust for risk and considered defining a project and determining the cash flow projections as the most important and most difficult stage of the capital budgeting process.

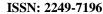
Petty j william, scott david p., and bird monroe m. (1975) examined responses from 109 controllers of 1971 fortune 500 (by sells dollars) firms concerning the techniques their companies used to evaluate new and existing product lines. They found that internal rate of return was the method preferred for evaluating all projects. Moreover, they found that present value techniques were used more frequently to evaluate new product lines than existing product lines.

Gitman lawrence g. And john r. Forrester jr. (1977) analysed the responses from 110 firms who replied to their survey of the 600 companies that forbes reported as having the greatest stock price growth over the 1971-1979 periods. The survey containing questions related to capital budgeting techniques, the division of responsibility for capital budgeting decisions, the most important and most difficult stages of capital budgeting, the cut-off rate and the methods used to assess risk. They found that the dcf techniques were the most popular methods for evaluating projects, especially the irr. However, many firms still used the pbp method as a backup or secondary approach. The majority of the companies that responded to the survey indicated that the finance department was responsible for analysing capital budgeting projects. Respondents also indicated that project definition and cash flow estimation was the most difficult and most critical stage of the capital budgeting process. The majority of the firms had a cost of capital or cut-off rate between 10 and 15%, and they most often adjusted for risk by increasing the minimum acceptable rate of return on capital projects.

Kim suk h. And farragher edward (1981) surveyed the 1979 fortune 100 cfo about their 1975 and 1979 usage of techniques for evaluating capital budgeting projects. They found that in both years, the majority of the firms relied on a dcf method (either the irr or the npv) as the primary method and the payback as the secondary method.

Marc ross (1986) in an in-depth study of the capital budgeting projects of 12 large manufacturing firms, he found that although techniques that incorporated discounted cash flow were used to some extent, firms relied rather heavily on the simplistic payback model, especially for smaller projects. In addition, when discounted cash flow techniques were used, they were often simplified. For example, some firms' simplifying assumptions include the use of the same economic life for all projects even though the actual lives might be different. Further, firms often did not adjust their analysis for risk. Surveys results also indicate that project approval at many firms (in eight out of twelve firms studied) follow different criteria depending on the locus of the decision.

Wong, farragher and leung (1987) surveyed a sample of large corporations in hong kong, malaysia and singapore in 1985. They found that pbp was the most popular primary technique for evaluating and ranking projects in malaysia. In hong kong, they found pbp and arr to be equally the most popular. They concluded that, in contrast to us companies where dcf techniques are significantly more popular than non-dcf techniques as primary evaluation measures, companies in hong kong, malaysia and singapore prefer to use several methods as primary measures in evaluating and ranking proposed investment projects. It is also observed that companies in hong kong, malaysia and singapore do not undertake much risk analysis, neither attempting to assess risk nor adjust evaluation criteria





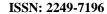
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to reflect risk. The most popular risk assessment techniques were sensitivity analysis and scenario analysis (high-medium-low forecasts).

Stanley (1990) has studied capital budgeting techniques used by small business firms in the 1990s. According to eugene brigham, in his book 'fundamentals of financial management' in the chapter "capital budgeting in the small business firms", capital budgeting may be more important to the smaller firm than its larger counterparts because of the lack of diversification in a smaller firm. He says that a mistake in one project may not be offset by successes in others. His intention of the study is to ascertain where small firms stand today in regard to capital budgeting techniques as opposed to prior decades. He selected 850 small firms out of which he received 232 usable responses to the study. As per his findings, a number of patterns relating to capital budgeting by smaller firms are worthy to note. The firms continue to be dependent on the payback method as the primary method of analysis. This is not necessarily evidence of a lack of sophistication, as much as it is a reflection of the financial pressures put on the small business owner by financial institutions. The question to be answered is not always how profitable the project is, but how quickly a loan can be paid back. Small business owners have increased sophistication as over 27% use discounted cash flow as the primary method of analysis. Stanley opines that their conclusions may, at times, be somewhat misleading due to an inappropriate discount rate. Small firms take risk very seriously which is reflected by a higher required rate of return for risky projects.

Jog and srivastava (1991) provide direct empirical evidence on the capital budgeting process based upon a survey of large canadian corporations. They explored many issues viz., the use of capital budgeting techniques, cash flow forecasting methods, risk analysis techniques and methods used to estimate the cost of capital and the cost of equity. His findings are most firms used multiple capital budgeting methods to assess capital investments; dcf methods were employed by more than 75% of our respondents to evaluate projects such as expansion-existing operations, expansion-new operations, foreign operations and leasing. It appears that the propensity to use dcf techniques increases with the complexity of the decision of the dcf methods, irr was used more frequently than npv in most cases, of the two rules of thumb, he observed little use of arr. Payback is used much more frequently in conjunction with dcf methods. According to them, the use of dcf methods has become a norm in canadian firms and that multiple evaluation criteria are being commonly used. Management's subjective estimates are used as often to generate a cash flow forecast as quantitative methods. Sensitivity analysis is the most popular technique among quantitative methods used in cash flow estimation, possibly reflecting the popularity of pc-based spreadsheet programs. The estimation of cost of capital also seems to be based more often on judgment than on any formal models. A significant number of firms use non-standard discount rates, i.e., rates other than the wacc and those using it seem to rely on judgmental or non-standard methods of estimation for their cost of equity, the standard methods being either the capm or the dividend growth model. Compared to previous studies, he found the usage rate for dcf methods is higher. However, the use of subjective, judgmental and nonstandard techniques in the estimation of cash flows, risk analysis and the estimation of the appropriate cost of capital continues to be high.





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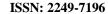
Bierman (1993) finds that 73 of 74 fortune 100 firms use discounted cash flow (dcf) analysis, with internal rate of return (irr) being preferred over net present value(npv). The payback period method also remains a very popular method in practice, though not as a primary technique. 93 per cent of the respondents use company-wide wacc for discounting free cash flows and 72 per cent use the discount rate applicable to project based on its risk characteristics.

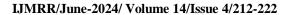
Bierman harold (1993) surveyed fortune 500 industrial companies regarding the capital budgeting methods used by these firms in 1993. He found that every responding firm used some type of dcf method. The payback period was used by 84 percent of his surveyed companies. However, no company used it as the primary method, and most companies gave the greatest weight to a dcf method. 99 percent of the fortune 500 companies used irr, while 85 percent used npv. Thus, most firms actually used both methods. 93 percent of companies calculated a weighted average cost of capital as part of their capital budgeting process. A few companies apparently used the same wacc for all projects, but 73 per cent adjusted the corporate wacc to account for project risk, and 23 per cent made adjustments to reflect divisional risk.

Drury, braund and tayles' (1993) survey of 300 manufacturing companies with annual sales exceeding £20 million indicates that payback (86%) and irr (80%) are the most widely used project appraisal methodologies. The most widely used project risk analysis technique is sensitivity analysis. Forty-nine per cent of the respondents do not use statistical analysis for risk analysis and 95 per cent of the respondents never use either capm or monte carlo simulation due to lack of understanding.

Petry and sprow's (1993) study of 151 firms listed in the 1990 business week 1,000 firms indicates that about 60 per cent of the firms use the traditional payback period either as a primary or as a secondary method for capital budgeting decisions. Ninety per cent of the firms use npv and irr either as a primary or as a secondary capital budgeting decision methodology. Most of the financial managers indicated that either they had not heard of the problems of irr (multiple rates of return, npv and irr conflict) or such problems rarely occurred.

DATA ANALYSIS AND INTERPRETATION







RECOVERY OF PROJECTS (Stage-I):

Following calculations are under consider

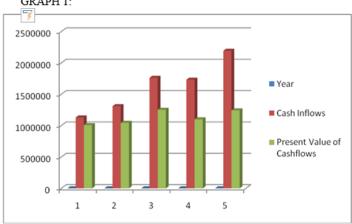
Under Discounted Pay Back Period:

 $Stage-I~\underline{(3}~x~20000~)Outlay~~:~~5,48,92,00,000$

NET PRESENT VALUE:

Year	Cash Inflows	Dis. @12%	Present Value of Cashflows
1	Rs. 1.129.384.000	0,892	Rs. 1.007.410.528
2	Rs. 1.310.895.000	0,797	Rs. 1.043.986.315
3	Rs. 1.761.879.000	0,711	Rs. 1.252.695.969
4	Rs. 1.732.086.000	0,635	Rs. 1.109.874.610
5	Rs. 2.193.061.000	0,567	Rs. 1.243.465.587
	Present Value of Cash Flows		Rs. 5.647.433.010
	Less: Cash Outlay		Rs. 5.489.200.000
Net Present Value			Rs. 158.233.010





Interpretation:

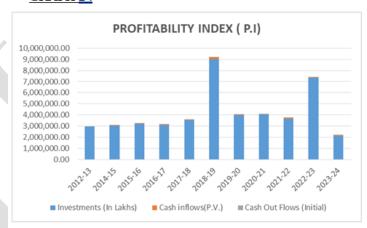
The net present value is the difference between the "present value of cash inflows" and "present value of cash outflows.



PROFITABILITY INDEX (P.I):

Year	Investments (In Lakhs)	Cash inflows(P.V.)	Cash Out Flows (Initial)
2012-13	2,945,083.37	18180	20000
2014-15	3,040,293.17	24780	30000
2015-16	3,192,444.28	45070	60000
2016-17	3,071,183.11	54640	80000
2017-18	3,545,210.87	18630	30000
2018-19	9,025,874.00	161290	22000
2019-20	3,991,459.40	19210	33000
2020-21	4,038,114.20	11130	70000
2021-22	3,667,441.15	65420	40000
2022-23	7,338,000.00	19233	80000
2023-24	2,089,775.00	61323	60000
	Total:	498896	525000

GRAPH 2:



Interpretation:

- a) The profitability index of present value of cash inflows and cash out flows is fluctuation from year to year in the year 2012-13 the present value of cash inflows is 18180 were as in the year 2023-24 has been increased with 61323.
- b) The highest cash inflows has been recorded in 2017-2018 as 161290 and lowest has been recorded as 18180 in the year 2012-13.



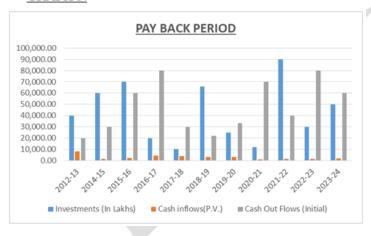
PAY BACK PERIOD:

Year	Investments (In Lakhs)	Cash inflows(P.V.)	Cash Out Flows (Initial)
2012-13	40,000.00	8000	20000
2014-15	60,000.00	1600	30000
2015-16	70,000.00	2200	60000
2016-17	20,000.00	4500	80000
2017-18	10,000.00	4000	30000
2018-19	66,000.00	3000	22000
2019-20	25,000.00	2900	33000
2020-21	12,000.00	1100	70000
2021-22	90,000.00	1600	40000
2022-23	30,000.00	1200	80000
2023-24	50,000.00	1800	60000
Total:	473,000.00	31900	525000

Pay Back Period = Initial Investments
Annual Cash inflows

40,000
= 40,000
5 Years
8000

GRAPH 3:



Interpretation:

In the pay back method the investment and the case inflows are fluctuating from year to year where as in the year 2012-13 it is 40000 and in the year 2023-24 is 50000.

Cash inflows are in the order of increasing to decreasing from 2012-13 and 2023-24.

FINDINGS, SUGGESTIONS AND CONCLUSION



FINDINGS:

- 1. Cost estimates: the feasibility of a project is initially based on cost estimates derived from similar units. However, there is a need for continuous planning to ensure realistic cost estimates, which often involve escalation due to the unavailability of the latest cost data.
- 2. Cost of generation: financing of public sector projects typically follows a debt-equity ratio of 3:1, with a prevailing interest rate set by the central government. The calculation of the cost of generation involves considerations such as plant life, depreciation, and operation & maintenance expenses.
- 3. Role of finance management in investment decisions: finance managers play a crucial role in project investigations, ensuring the accuracy of data and participating in the analysis of various alternatives to determine the most optimal solution.
- 4. Capital budgeting: the company utilizes various financial appraisal techniques such as discounted payback period, net present value (npv), profitability index (pi), and payback period to evaluate the feasibility and returns of investment projects.

SUGGESTIONS:

- 1. Continuous cost monitoring: given the dynamic nature of costs, there should be a mechanism in place for continuous monitoring and updating of cost estimates to reflect changing market conditions.
- 2. Enhanced cost engineering: developing specialized cost engineering capabilities, particularly tailored to power projects, can improve the accuracy and reliability of cost estimates.
- 3. Comprehensive feasibility studies: investing in detailed feasibility studies covering all aspects of the project, including demand projections, site selection, and cost estimates, can mitigate risks and ensure informed investment decisions.
- 4. Utilization of updated financial appraisal techniques: while traditional techniques like npv and payback period are valuable, incorporating more sophisticated methods such as real options analysis could provide deeper insights into investment decisions, especially in uncertain environments.



CONCLUSION:

The data provided highlights the meticulous financial appraisal process undertaken by kesoram for investment decisions in power projects. It underscores the critical role of finance management in ensuring the viability and profitability of investments. Continuous refinement of cost estimation methods, comprehensive feasibility studies, and utilization of updated financial appraisal techniques are essential for making informed and sustainable investment decisions in the dynamic energy sector.

REFERENCES:

Financial accounting

Cost and management accounting

Financial accounting

Accounting for management

Website:

www.google.com www.kesoram.com www.yahoofinance,com