



A Study on Capital Budgeting at Larsen and Toubro Pvt Ltd

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Abstract:

Capital budgeting then consists in planning the deployment of available capital for maximizing the long-term profitability (return on investment) of a firm. It refers to the process by which a firm determines where it should apply its comparatively limited financial resources. Capital budgeting may be defined as the decision-making process by which a firm evaluates the purchase of major fixed assets, including buildings, machinery, and equipment. It deals exclusively with major investment proposals which are essentially long-term projects and is concerned with the allocation of the firm's scarce financial resources among the available market opportunities. The capital projects would be evaluated using the Internal rate of Return, Net Present Value, Profitability Index method, and average rate of Returns. Sample projects are undertaken for the study and the decision of acceptance or rejection is shown. The study focuses on the capital budgeting practices of L&T Ltd, evaluating the long-term fund requirements, and assessing the effectiveness of their investment decisions. The research methodology involves analysing various proposals and evaluating their profitability and risk to select the most beneficial ones. However, the study has certain limitations, including its limited scope to specific L&T projects and a fixed period of 45 days for data collection.

Keywords: Decision Making, Financial Analysis, Capital, Budgeting.

Introduction:

Capital budgeting is the process of considering alternative capital projects and selecting those alternatives that provide the most profitable return on available funds within the framework of company goals and objectives

Capital Budgeting decisions pertaining to fixed /long-term assets which by definition refer to assets which are in operation, and yield a return, over a period of time, usually exceeding one year. They, therefore involve a series of outlays of cash resources in return for anticipated flow of future benefits.

L&T's capital budgeting process begins with the identification of potential long-term

investment opportunities that align with the company's strategic objectives. The project proponents or business units prepare detailed project proposals, outlining project scope, estimated costs, expected benefits, risks, and financial projections. These proposals then undergo an initial screening by the finance team and top management to assess their feasibility and alignment with company goals. The finance team collaborates with relevant departments to estimate the capital costs and operating expenses associated with each approved project. Subsequently, a comprehensive financial analysis is conducted using metrics such as Net Present Value (NPV), Internal Rate of Return (IRR),

Payback Period, and Profitability Index to compare and rank the projects based on their financial attractiveness.

Capital budgeting involves making long-term investment decisions that require the estimation of future cash inflows and outflows. However, due to uncertainties, these estimates can be subject to risk. Various methods are suggested to account for risk in capital budgeting, including adjusting discount rates, using certainty equivalent adjustments, sensitivity analysis, probability techniques, standard deviation, coefficient of variation, and decision tree analysis.

The capital budgeting process involves identifying investment proposals, screening and evaluating them, fixing priorities, obtaining final approval, implementing the projects, and conducting post-completion audits to evaluate performance.

Capital budgeting decisions can be categorized into two main types: increasing revenues (expansion, new product lines) and reducing costs (asset replacement). They can further be classified as accept-reject decisions for independent projects, mutually exclusive project decisions, or capital rationing decisions where limited funds are available for multiple profitable projects.

Overall, capital budgeting aims to maximize profitability and return on investment while considering the uncertainties and risks associated with future cash flows.

Problem Statement:

The statement of the problem in capital budgeting typically revolves around challenges and issues faced by organizations in making effective long-term investment decisions. a statement of the problem could include:

1. Risk assessment and management
2. Inadequate decision-making tools

3. Environmental and social considerations

Literature Review:

- Capital budgeting: a systematic review of the literature
- The Evolution of the application of capital budgeting techniques in enterprises.
- Considerations of sustainability in capital budgeting decision-making.
- Exploring Sustainability Considerations in Capital Budgeting Decisions

Objectives of the Study:

1. To study the capital budgeting techniques.
2. To evaluate the capital budgeting practices relating to various projects
3. To Assess the effectiveness of long-term investment decisions
4. To offer a conclusion derived from the study and give suitable suggestions for the efficient utilization of the capital.

Research Questions:

1. What capital budgeting techniques are used by Larsen & Toubro Limited for project evaluation in Hyderabad?
2. How does L&T evaluate long-term infrastructure investments such as metro rail, roads, and construction projects?
3. What are the major factors influencing capital budgeting decisions at L&T Hyderabad?
4. How does risk analysis impact capital budgeting decisions at L&T?
5. What is the role of Net Present Value (NPV) in L&T's capital investment decisions?
6. How does Internal Rate of Return (IRR) influence project selection at L&T?

Research Methodology:

The research methodology adopted for this study is primarily based on secondary data collection. The data was gathered from various sources such as company releases, websites, newspapers or publications, and internet-based information. The study aims to assess the financial feasibility and potential profitability of an investment using several tools and techniques.

The tools employed for the assessment include the Payback Period Method, which calculates the time required for the initial investment to be recouped based on annual cash inflows. The Accounting or Average Rate of Return Method (ARR) is also utilized, offering two formulas to evaluate the profitability by comparing average annual net earnings to the initial investment or average investment.

1. Research Design:

The study uses a descriptive research design to understand the capital budgeting practices of L&T Ltd

2. Sample Size:

The secondary data for the project regarding investment and various investment analysis were collected from

1. Company websites,
2. Newspapers,
3. Magazines,

3. Sample Area:

The sample area for this study is the Finance, Project Management, and Operations departments of Larsen & Toubro Limited, Hyderabad. The study focuses on employees involved in capital budgeting decisions, project evaluation, and financial planning.

4. Data Collection:

The study uses both primary and secondary sources of data.

Primary Data:

Primary data directly from employees and management of Larsen & Toubro Limited, Hyderabad. This data is collected through:

Methods of Primary Data Collection:

1. Questionnaires
2. Personal Interviews
3. Discussions with Finance Team
4. Observation Method
5. Email/Online Surveys

Secondary Data:**Secondary Data Sources Used:**

Information about capital budgeting at L&T can be gathered from:

- Annual Reports of Larsen & Toubro Limited
- Financial Performance Reports
- Infrastructure Project Reports
- Investment Strategy Reports

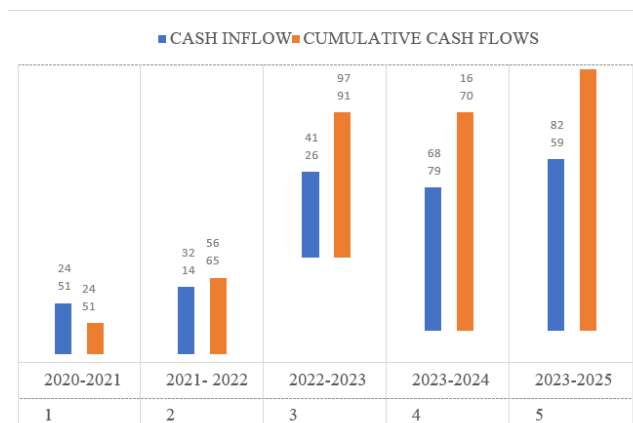
5. Sampling Technique:

The sampling technique used for this study is **Convenience Sampling**.

Convenience Sampling is a non-probability sampling method where respondents are selected based on their availability and willingness to participate in the study. In this project, employees of Larsen & Toubro Limited, Hyderabad who are involved in capital budgeting decisions were selected based on accessibility and convenience.

Data Analysis:**Table 1: Calculation of Payback Period of L&T India (Rs. in crores)**

Sr. No.	Year	Cash Inflow	Cumulative Cash Flows
1	2020-2021	2451	2451
2	2021-2022	3214	5665
3	2022-2023	4126	9791
4	2023-2024	6879	16670
5	2024-2025	8259	24929

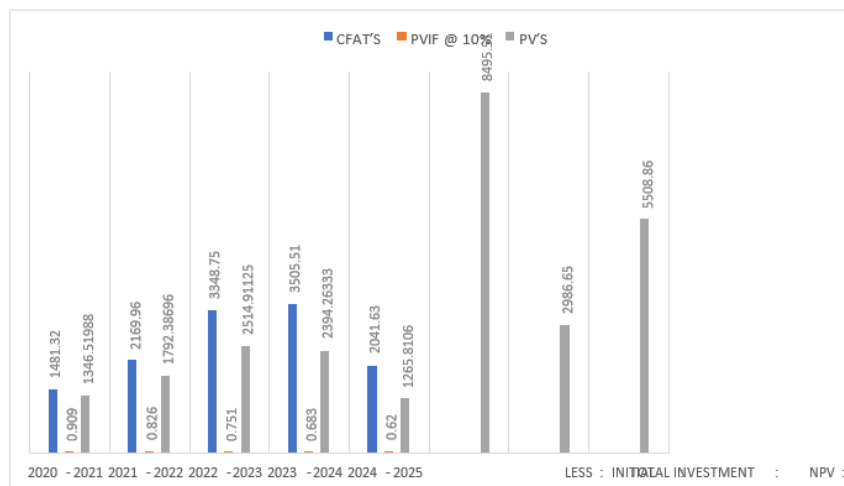
Graph 1: Calculation of Payback Period of L&T India (Rupees in crores)**Interpretation:**

From the above graph, the Year 2020-2021: The cash inflow for this year was Rs. 2451 crores, resulting in a cumulative cash flow of Rs. 2451 crores. The year 2021-2022: The cash inflow for this year was Rs. 3214 crores, which added to the previous cumulative cash flow, resulting in a new cumulative cash flow of Rs. 5665 crores. Year 2022-2023: The cash inflow for this year was Rs. 4126 crores, which added to the previous cumulative cash flow, resulting in a new cumulative cash flow of Rs. 9791 crores. The year 2023-2024: The cash inflow for this year was Rs. 6879 crores, which added to the previous cumulative cash flow, resulting in a new cumulative cash flow of Rs. 16670 crores. The year 2024-2025: The cash inflow for this year was Rs. 8259 crores, which added to the previous cumulative cash flow, resulting in a new cumulative cash flow of Rs. 24929 crores.

Table 2: Calculation of Net Present Value of L&T India

YEARS	CFAT'S	PVIF @ 10%	PV'S
2020-2021	1481.32	0.909	1346.51988
2021-2022	2169.96	0.826	1792.38696
2022-2023	3348.75	0.751	2514.91125
2023-2024	3505.51	0.683	2394.26333
2024-2025	2041.63	0.620	1265.8106
TOTAL:			8495.51
LESS: Intial Investment			2986.65
NPV:			5508.86

Graph 2: Calculation of Accounting Rate of Return of L&T India (Rs. in crores)



Interpretation:

1. Years: The years listed in the table represent different periods or fiscal years for which cash flows are being analysed.
2. CFAT (Cash Flow After Taxes): This column shows the net cash flow generated after deducting taxes for each respective year.
3. PVIF @ 10% (Present Value Interest Factor): This column represents the discount factor applied to each cash flow to convert them to their present value. The discount rate used is 10%.
4. PV's (Present Values): These values represent the present value of each year's cash flow, calculated by multiplying the CFAT with the corresponding PVIF.
5. Total: This row shows the sum of all the present values from the PV's column, which amounts to 8495.51.
6. Less: Initial Investment: This is the initial investment made in the project or venture. It is deducted from the total present values to determine the Net Present Value (NPV).
7. NPV (Net Present Value): The NPV is the difference between the total present values and the initial investment. In this case, it is calculated as 5508.86.

Findings:

- The study revealed that the amount of total investment in assets has increased significantly from 19697.50cr to Rs. 21970.29cr.
- It is observed that the amount of sales has increased from 7042.82 Cr to 20279.80 Cr (2020- 2025) this increased sales helped the organization to improve its business turnover in different sectors.
- It has been found that the Payback period for the project will be 2.33 years which indicates the project will earn good yield in the future also.
- It has been found that the Average rate of return for the project is 50.1 %
- It is observed that the required rate of ARR (Accounting Rate Of Return) is 20% and the present ARR of the company is 50%
- It is revealed that the NPV and IRR show a good path for the organization to develop in future markets and also the investments for the investors.
- It is observed that the company should not use the risk-adjusted techniques.
- IRR is the maximum rate of interest, that an organization can afford to pay on capital, invested in, is accepted if IRR exceeds the

cutoff rates and rejected if it is below the cutoff rate.

Suggestions:

- The study suggests that a large sum of money is involved which influences the profitability of the firm making capital budgeting an important task.
- Long-term investment once made cannot be reversed without significance loss of invested capital. The investment becomes sunk and mistakes, rather than being readily rectified, must often be born until the firm can be withdrawn through depreciation charges or liquidation. It influences the whole conduct of the business for the years to come.
- Investment decisions are the base on which the profit will be earned and probably measured through the return on the capital. A proper mix of capital investment is quite important to ensure an adequate rate of return on investment, calling for the need for capital budgeting.

Conclusion:

In L&T India, the budgeting process encompasses both short-term and long-term capital budgets, which includes annual planning and provides a comprehensive plan for the utilization of internal resources and debt servicing as part of the corporate plan.

This capital budgeting scope covers various expenditures, such as plant betterment, renovation, balancing equipment, capital additions, and commissioning expenses for trial runs of generating units. One of the key objectives is to establish a strong correlation between physical progress and financial allocation, enabling effective plan allocation and

budgetary support from the government. The manual recommends computing Net Present Value (NPV) at a specified cost of capital or discount rate, ensuring that different projects use appropriate discount rates.

Moreover, the analysis involves a thorough examination of relevant facts and quantification of anticipated results and benefits, while also addressing any associated risk factors.

The inclusion of at least three non-official directors on the Board, through a mechanism like the Search Committee, aims to enhance the governance structure of these PSUs. For each project, a feasibility report is prepared, incorporating cost estimates and generation expenses. The scope of capital budgeting in L&T India extends to various categories, such as approved and ongoing schemes, newly approved schemes, unapproved schemes, capital budgets for plant betterments, survey and investigation, and research and development budgets

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