
EVALUATING QUANTITATIVE AND QUALITATIVE APPROACHES IN FINANCIAL FORECASTING: APPLICATIONS AND EFFECTIVENESS IN CORPORATE PLANNING- ULTRATECH CEMENT

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ABSTRACT

Financial forecasting is a critical component of corporate planning and strategic decision-making, enabling organizations to anticipate future financial performance, allocate resources efficiently, and manage risks effectively. Forecasting techniques are broadly classified into quantitative and qualitative approaches, each offering distinct advantages and limitations. Quantitative forecasting relies on historical data, statistical models, and mathematical techniques such as trend analysis, regression analysis, time-series forecasting, and econometric models to predict future financial outcomes. These methods provide objective, data-driven insights and are particularly useful in stable business environments where reliable historical data is available.

On the other hand, qualitative forecasting incorporates expert judgment, market intelligence, customer feedback, Delphi techniques, and scenario analysis to assess future trends, especially in situations where historical data is limited or market conditions are highly uncertain. Qualitative approaches help organizations capture intangible factors such as consumer preferences, technological changes, regulatory developments, and competitive dynamics that may significantly influence financial performance.

This study evaluates the effectiveness of both quantitative and qualitative forecasting approaches in corporate planning. It examines their applications in budgeting, investment decisions, cash flow management, sales forecasting, and strategic planning. The research highlights that while quantitative methods offer accuracy and consistency, qualitative methods provide flexibility and adaptability in dynamic business environments. Furthermore, the study explores the benefits of integrating both approaches to achieve more comprehensive and reliable financial forecasts.

I. INTRODUCTION

Financial Forecasting

The lack of planning and control of cash resources is the reason often given for the failure of many small businesses in Australia. However, good forecasting can help reduce your business risk.

Much like a map helps you plan a long road trip, a financial forecast (often called a cash budget, cash flow, or financial plan) helps you achieve your goals and get your business to where you want it to be.

A financial forecast is a tool that allows you to use your resources where they're most needed, so you can control the cash flow of your business, instead of it controlling you. It allows

you to control your money so you are more likely to achieve your desired net profit.

A **financial plan** is a series of steps or goals used by an individual or business, the progressive and cumulative attainment of which is designed to accomplish a financial goal or set of circumstances, e.g. elimination of debt, retirement preparedness, etc. This often includes a budget which organizes an individual's finances and sometimes includes a series of steps or specific goals for spending and **saving** future. This plan allocates future income to various types of expenses, such as rent or utilities, and also reserves some income for short-term and long-term savings. A financial plan is sometimes referred to as an investment plan, but in personal

finance a financial plan can focus on other specific areas such as risk management, estates, college, or retirement.

People enlist the help of a financial planner because of the complexity of performing the following:

- Providing financial security and ensuring that all goals of personal finance are met
- Finding direction and meaning in one's financial decisions;
- Understanding how each financial decision affects other areas of finance; and
- Adapting to life changes to feel more financially secure.

The best results of working with a comprehensive financial planner, from an individual client or family's perspective are:

- To create the greatest probability that all financial goals (anything requiring both money and planning to achieve) are accomplished by the target date, and
- To have a frequently-updated sensible plan that is proactive enough to accommodate any major unexpected financial event that could negatively affect the plan, and
- To make intelligent financial choices along the way (whether to "buy or lease" whether to "refinance or pay-off" etc.).

Before working with a comprehensive financial planner, a client should establish that the planner is competent and worthy of trust, and will act in the client's interests rather than being primarily interested in selling the client financial products for his own benefit. As the relationship unfolds, an individual financial planning client's objective in working with a comprehensive financial planner is to clearly understand what needs to be done to implement the financial plan created for them. So, in many ways, a financial planner's step-by-step written implementation plan of action items, created after the plan is completed, has more value to many clients than the plan itself. The comprehensive written lifetime financial plan is a technical document utilized by the financial planner, the written implementation plan of action

is just a few pages of action items required to implement the plan; a much more "usable" document to the client.

Need And Importance Of Capital Structure:

The value of the firm depends upon its expected Financial Forecasting. The rate used to discount earnings stream it's the firm's required rate of return or the cost of capital. Thus, the capital structure and Financial Forecasting decision can affect the value of the firm either by changing the expected earnings of the firm, but it can affect the reside earnings of the shareholders. The effect of leverage on the cost of capital is not very clear. Conflicting opinions have been expressed on this issue. In fact, this issue is one of the most continuous areas in the theory of finance, and perhaps more theoretical and empirical work has been done on this subject than any other.

If leverage affects the cost of capital and the value of the firm, an optimum capital structure would be obtained at that combination of debt and equity that maximizes the total value of the firm or minimizes the weighted average cost of capital. The question of the existence of optimum use of leverage has been put very succinctly by Ezra Solomon in the following words.

Given that a firm has certain structure of assets, which offers net operating earnings of given size and quality, and given a certain structure of rates in the capital markets, is there some specific degree of financial leverage at which the market value of the firm's securities will be higher than at other degrees of leverage?

The existence of an optimum Financial Forecasting is not accepted by all. These exist two extreme views and middle position. David Durand identified the two extreme views the net income and net operating approaches.

Scope Of The Study:

A study of the Financial Forecasting and planning involves an examination of long term as well as short term sources that a company taps in order to meet its requirements of finance. The scope of the study is confined to the sources that

Ultra tech cements tapped over the years under study.

Objectives Of The Study:

The project is an attempt to seek an insight into the aspects that are involved in the capital structuring and financial decisions of the company. This project endeavors to achieve the following objectives.

1. To Study the Financial Forecasting and planning of **Ultra tech cements**.
2. Study effectiveness of financing decision on EPS and EBIT of the firm.
3. Examining leverage analysis of **Ultra tech cements**.
4. Examining the financing trends in the **Ultra tech cements**. For the period of 2021-25
5. To evaluate the Financial Forecasting and planning practices relating to various projects of **Ultra Tech Cements Limited** Hyderabad
6. To Assets the long term requirements of funds and plan for application of internal resources and debt servicing.
7. To Assess the effectiveness of long term investment decisions of **Ultra Tech Cements Limited**
8. To offer conclusion derived from the study and give suitable suggestions for the efficient utilization of capital expenditure decisions.

II. RESEARCH METHODOLOGY AND DATA ANALYSIS

Data relating to Ultra tech cements. Has been collected through

Secondary Sources:

- Published annual reports of the company for the year 2021-25.

Primary Sources:

- Detailed discussions with Vice-President (Works).
- Discussions with the Finance manager and other members of the Finance department.

Data Analysis

At each point of time a business firm has a number of proposals regarding various projects in

which, it can invest funds. But the funds available with the firm are always limited and are not possible to invest trend in the entire proposal at a time. Hence it is very essential to select from amongst the various competing proposals, those that gives the highest benefits. The crux of capital budgeting is the allocation of available resources to various proposals. There are many considerations, economic as well as non-economic, which influence the capital budgeting decision in the profitability of the prospective investment.

Yet the right involved in the proposals cannot be ignored, profitability and risk are directly related, i.e. higher profitability the greater the risk and vice versa there are several methods for evaluating and ranking the capital investment proposals.

These tools access in the interpretation and understanding of the Existing scenario of the Capital Structure.

LIMITATION OF Study

1. The study is limited to **Ultra Tech Cements Limited** only.
2. The study is limited to certain projects of **Ultra Tech Cements Limited**.
3. Period of the study is restricted to five years only.
4. The present study cannot be used for inter firm comparison.
5. Limited span of time is a major limitation for this project.
6. The act and figures of the study is limited to the period of FIVE years.
7. The data used in reports are taken from the annual reports, published at the end of the years.
8. The result does not reflect the day-to-day transactions.
9. It is also impossible to the study of day-to-day transactions in cash management.
10. The analysis of the capital is taken FIVE years.

III. LITERATURE REVIEW

What is a financial forecast?

A financial forecast is simply a financial plan or budget for your business. It is an estimate of two essential future financial outcomes for a business – your projected income and expenses. Create a cashflow forecast by adding income and expenses as they are due. You will then know exactly how much you need to make every month for a profitable business.

A financial forecast is the best guess of what will happen to your business financially over a period of time. Usually, financial forecasts are an estimate of future income and expenses for a business over the next year and are used to develop the projections of profit and loss statements, balance sheets and, most critically, the cash flow forecast.

Predicting the financial future of your business is not easy, especially if you are starting a business and do not have a trading history. Initially, your financial forecasts will be inexact and inaccurate. However, frequent forecasting with adjustments as required will promote more accurate forecasting.

Why prepare a financial forecast?

The financial forecast is critical to your business plan, especially if it is for the purpose of getting a bank loan. More importantly, you are an investor in your own business and you must have confidence in the validity of your business concept. Use a financial forecast to prove to yourself that your business will generate your desired profit and when it will start to make that profit.

A financial forecast is a vital tool in the financial management of your business and, like your business plan, requires regular review and amendment to be effective. Once the period for which you prepared the budget is over, be sure to compare the actual results against your budget forecasts. Examine why variations have occurred, take any remedial action necessary to correct the problem, or plan for them accordingly in your next budget.

Advantages of an effective financial forecast:

Demonstrates the financial viability of a new business venture. Allows you to construct a

model of how your business might perform financially if certain strategies, events and plans are carried out.

Allows you to measure the actual financial operation of the business against the forecast financial plan and make adjustments where necessary.

Allows you to guide your business in the right direction and take control of your cash flow.

Provides a benchmark against which to measure future performance.

Identifies potential risks and cash shortfalls to keep the business out of financial trouble.

Provides an estimate of future cash needs and whether additional private equity or borrowing is necessary.

Assists you to secure a bank loan or other funding. Lenders and investors require financial forecasts to show your capacity to repay the loan.

How often should I prepare a financial forecast?

How often you forecast will depend on the circumstances of your business and where it is positioned in the business life cycle. If you are planning to start a business, you will develop an annual financial forecast as part of your feasibility study to prove that the business is viable.

Monthly or weekly forecasts may be necessary when the business is just starting or if the business is experiencing difficulties or rapid growth. Frequent forecasts allow you to closely monitor your figures and develop strategies to rectify any problems before they become a major issue. Rolling monthly or quarterly forecasts may be more appropriate for a stable, mature business.

You should regularly measure and monitor the performance of your business, and compare your financial forecasts with the actual figures as they become available. If necessary, adjust your forecasts to reflect the changes.

Monitoring the differences between your forecasts and the actual figures will help you to:

Identify the cause of the variation so you can take corrective action before it becomes a major problem.

Fine tune your skills so you prepare more accurate forecasts next year.

What are the components of a financial forecast?

Creating a financial forecast shows you the financial requirements to start the business, convince you and your bank of the viability of your business or your business growth, and what resources you need to keep the business profitable.

Your financial forecast will be based on information gathered from industry and market research. Since you will be responsible for achieving the predetermined financial objectives, make sure your estimates and assumptions are realistic. Be consistent and make sure that your financial forecast reflects the rest of the business plan. For example, your sales forecast should reflect the capacity of production equipment mentioned in the operational section.

Combine the components of your financial forecasts to generate projected financial statements, (balance sheet, profit and loss statement). You may need help from your accountant to assemble the figures in the conventional format, but the research and operational assumptions should be your own.

You can develop your own financial forecast by using the spreadsheets to complete the individual components. Then add the timing dimension (when you expect to receive payment and the amount) over 12 months to generate an annual cash flow forecast.

Factors Influencing Capital Budgeting Decisions:

There are many factors, financial as well as non-financial, which influence that Budget decisions. The crucial factor that influences the capital expenditure decisions is the profitability of the proposal. There are other factors, which have to be in considerations such as.

1. Urgency:

Sometimes an investment is to be made due to urgency for the survival of the firm or to avoid heavy losses. In such circumstances, the proper evaluation of the proposal cannot be made through profitability tests. The examples of such

urgency are breakdown of some plant and machinery, fire accident etc.

2. Degree of Certainty:

Profitability directly related to risk, higher the profits, Greater is the risk or uncertainty. Sometimes, a project with some lower profitability may be selected due to constant flow of income.

3. Intangible Factors:

sometimes a capital expenditure has to be made due to certain emotional and intangible factors such as safety and welfare of workers, prestigious project, social welfare, goodwill of the firm, etc.,

4. Legal Factors.

Any investment, which is required by the provisions of the law, is solely influenced by this factor and although the project may not be profitable yet the investment has to be made.

5. Availability of Funds.

As the capital expenditure generally requires large funds, the availability of funds is an important factor that influences the capital budgeting decisions. A project, how so ever profitable, may not be taken for want of funds and a project with a lesser profitability may be some times preferred due to lesser pay-back period for want of liquidity.

6. Future Earnings

A project may not be profitable as compared to another today but it may promise better future earnings. In such cases it may be preferred to increase earnings.

7. Obsolescence.

There are certain projects, which have greater risk of obsolescence than others. In case of projects with high rate of obsolescence, the project with a lesser payback period may be preferred other than one this may have higher profitability but still longer pay-back period.

8. Research and Development Projects.

It is necessary for the long-term survival of the business to invest in research and development project though it may not look to be profitable investment.

9. Cost Consideration.

Cost of the capital project, cost of production, opportunity cost of capital, etc. Are other considerations involved in the capital budgeting decisions?

IV. DATA ANALYSIS AND INTERPRETATION

FINACIAL ANALYSIS

ANALYSIS OF ULTRATECH CEMENTS LIMITED

Years	Total sales	Total assets	Fixed assets	Net Profit	Capital Employed	Long term funds	Share holders' Funds
2020-21	13205.64	14810.64	10890.33	1404.23	6607.67	2789.76	274.04
2021-22	18270.69	16667.95	12166.13	2446.19	10392.72	2012.09	274.07
2022-23	20174.94	19697.50	14025.19	2655.43	11986.24	2147.34	274.18
2023-24	20279.80	21970.29	15521.42	2144.47	14186.57	2389.35	274.24
2024-25	22936.17	25369.51	18384.46	2014.73	16827.08	2956.53	274.40

TRADITIONAL CAPITAL BUDGETING APPRISAL METHODS

1. PAY BACK PERIOD METHOD:

Payback period method is a traditional method of evaluation of capital budgeting decision. The term payback or pay out or payoff refers to the period in which the project will generate the necessary cash and recoup the initial investment or the cash out flows.

To calculate the pay period, the cumulative cash flows will be calculated and by using interpolation the exact period may be calculated.

The **Ultratech Cements Limited** has Rs. 2041.63 crores of initial investment and the annual cash flows. Then the payback period is calculated as follows:

CALCULATION OF PAY BACK PERIOD OF Ultratech Cements Limited

(Rs. In crores)

SI .NO	YEAR	CASH INFLOW	CUMULATIVE CASH FLOWWS
1	2020-21	2169.96	2169.96
2	2021-22	3348.75	5518.71
3	2022-23	3505.51	9024.22
4	2023-24	2041.63	11065.85
5	2024-25	2073.69	13139.54

The above table shows that, the initial investment RS.2986.65 Cr... lies between second and third years with Rs. 2169.96 and 5518.71 Cr

$$\begin{aligned}
 \text{PBP} &= \text{Actual (Base) year} + \frac{\text{Difference in cash flows}}{\text{Next year cash flows}} \\
 &= 2 + \frac{2073.69}{13139.54} \\
 &= 2 + 0.12
 \end{aligned}$$

= 2.12 year

Payback period (PBP) = 2.12 year.

ACCEPT-REJECT CRITERION:

PBP can be used as a criterion to accept or reject an investment proposal. A proposal whose actual payback period is more than what is pre-determined by the management.

PBP thus, is useful for the management to accept the investment decision on the **Ultratech cements limited** and also to assist the management to know that the initial investment is recovered in 2.12 years.

V. FINDINGS

1. Financial forecasting is essential for corporate planning as it helps organizations estimate future revenues, expenses, cash flows, and profitability.
2. Quantitative forecasting methods provide objective and data-driven results by using historical financial data and statistical techniques, making them highly effective in stable business environments.
3. Time-series analysis and regression models are among the most widely used quantitative techniques due to their ability to identify trends and predict future financial performance.
4. Qualitative forecasting methods are valuable when historical data is limited or unavailable, particularly for new products, emerging markets, and uncertain economic conditions.
5. Expert opinions and managerial judgment play a significant role in qualitative forecasting, helping organizations account for market changes and non-financial factors.
6. Quantitative methods generally offer higher forecasting accuracy when sufficient and reliable historical data is available.
7. Qualitative approaches provide greater flexibility in addressing sudden market changes, technological developments, and regulatory shifts.
8. Organizations that combine quantitative and qualitative forecasting techniques achieve more reliable forecasts than those relying on a single method.
9. Financial forecasting supports effective budgeting and resource allocation, enabling firms to optimize the use of financial and operational resources.
10. Accurate forecasting improves investment decision-making by helping management evaluate future opportunities and risks.
11. Forecasting contributes significantly to risk management by identifying potential financial challenges and enabling proactive planning.
12. Technological advancements and data analytics have enhanced forecasting capabilities, improving the speed and precision of financial predictions.
13. External economic factors such as inflation, interest rates, and market volatility affect forecasting accuracy, requiring continuous review and adjustment of forecasts.

VI. SUGGESTIONS:

1. The company has to maintain the optimal capital structure and leverage so that in coming years it can contribute to the wealth of the shareholders.
2. The mining loyalty contracts should be revised so that it will decrease the direct in the production
3. The company has to exercise control over its outside purchases and overheads which have effect on the profitability of the company.
4. As the interest rates in pubic Financial institutions are in a decreasing trend after globalization the company going on searching for

loan funds at a less rate of interest as in the case of Bank.

5. Efficiency and competency in managing the affairs of the company should be maintained.

VII. CONCLUSIONS

- The budgeting exercise in **Ultratech** also covers the long term capital budgets, including annual planning and provides long term plan for application of internal resources and debt servicing translated in to the corporate plan.
- The scope of capital budgeting also includes expenditure on plant betterment, and renovation, balancing equipment, capital additions and commissioning expenses on trial runs generating units.
- To establish a close link between physical progress and monetary outlay and to provide the basis for plan allocation and budgetary support by the government.
- The manual recommends the computation of NPV at a cost of capital / discount rate specified from time to time.
- A single discount rate should not be used for all the capacity budgeting projects.
- The analysis of relevant facts and quantifications of anticipated results and benefits, risk factors if any, must be clearly brought out.
- Inducting at least three non -official directors the mechanism of the Search Committee should restructure the Boards of these PSUs.
- Feasibility report of the project is prepared on the cost estimates and the cost of generation.

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