



A FINANCIAL INSIGHT INTO CAPITAL BUDGETING PRACTICES AT SHIVA TEXYARN LTD

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ABSTRACT

This research provides a comprehensive financial analysis of the capital budgeting practices at Shiva Texyarn Ltd., Coimbatore, using key evaluation techniques such as Payback Period (PBP), Accounting Rate of Return (ARR), and Net Present Value (NPV). The study aims to assess the effectiveness and viability of the company's investment decisions over a five-year period (2020–2024). Results indicate variability in project profitability, with certain years demonstrating high returns and efficient capital use, while others reflect suboptimal outcomes and potential financial risks. The findings highlight the importance of adopting appropriate capital budgeting tools and maintaining consistent evaluation practices for sustainable financial performance. This study serves as a practical reference for improving investment decision-making in mid-sized manufacturing firms.

KEYWORDS: Capital Budgeting, Payback Period, Accounting Rate of Return, Net Present Value, Financial Analysis, Investment Decision, Shiva Texyarn Ltd.

INTRODUCTION

In every organization, budgeting plays a crucial role in effective financial planning and management. It provides a structured approach to forecasting future revenues and expenses, ensuring that resources are allocated effectively to meet organizational goals. Among the various types of budgets, the sales budget is especially important, as it predicts future sales and directly influences production, marketing, and financial strategies. Properly designed budgets can identify potential cost-saving opportunities, reduce waste, and improve overall profitability. This paper explores the importance of budgeting in business operations, highlighting how budgetary planning can promote growth, efficiency, and financial stability.

REVIEW OF LITERATURE

Gitman and Zutter (2012) highlight that capital budgeting decisions are crucial as they shape a firm's long-term financial strategy and directly impact profitability. They stress the significance of NPV and IRR for sound investment decisions.

Pandey (2015) emphasizes that effective capital budgeting is essential for resource optimization in manufacturing industries. Tools like Payback Period and ARR are frequently used for their simplicity and decision-making support.

Ross et al. (2011) argue that Net Present Value (NPV) remains the most reliable evaluation method, as it accounts for both the time value of money and risk-adjusted returns in investment decisions.

Brealey, Myers, and Allen (2014) assert that capital budgeting bridges the gap between strategic corporate planning and value creation, making it a critical component of financial management.

Chandra (2014) observes that Indian firms tend to favor traditional techniques such as Payback Period due to ease of use, though modern tools like NPV and IRR offer more precision and strategic alignment.

Khan and Jain (2018) conclude that using a mix of capital budgeting techniques leads to more balanced decisions, enhancing both profitability forecasting and risk management.

OBJECTIVE OF THE STUDY

The primary objective of this study is to evaluate the effectiveness and financial viability of investment decisions undertaken by Shiva Texyarn Ltd., Coimbatore through capital budgeting techniques. The study aims to analyze proposed or existing projects using the following methods:

1. To determine the time required for the company to recover its initial investment, assessing the liquidity and risk associated with capital expenditures through Payback Period (PBP)
2. To evaluate the profitability of investment projects based on accounting information, measuring the expected return on investment from an accounting perspective by Accounting Rate of Return (ARR).



- To assess the present value of future cash flows generated by the project, taking into account the time value of money, and thereby determine whether the investment adds value to the company by Net Present Value (NPV).

METHODOLOGY

Study is descriptive in nature. Secondary data is collected from the annual reports of the company from the year 2020-2024.

Numerous financial analysis techniques exist to assess the economic worth of an investment. Capital Budgeting refers to the method by which investors evaluate the potential value of an investment project. The three predominant methods for project selection include the Payback Period (PB), Accounting Rate of Return (ARR), and Net Present Value (NPV).

RESULTS AND ANALYSIS

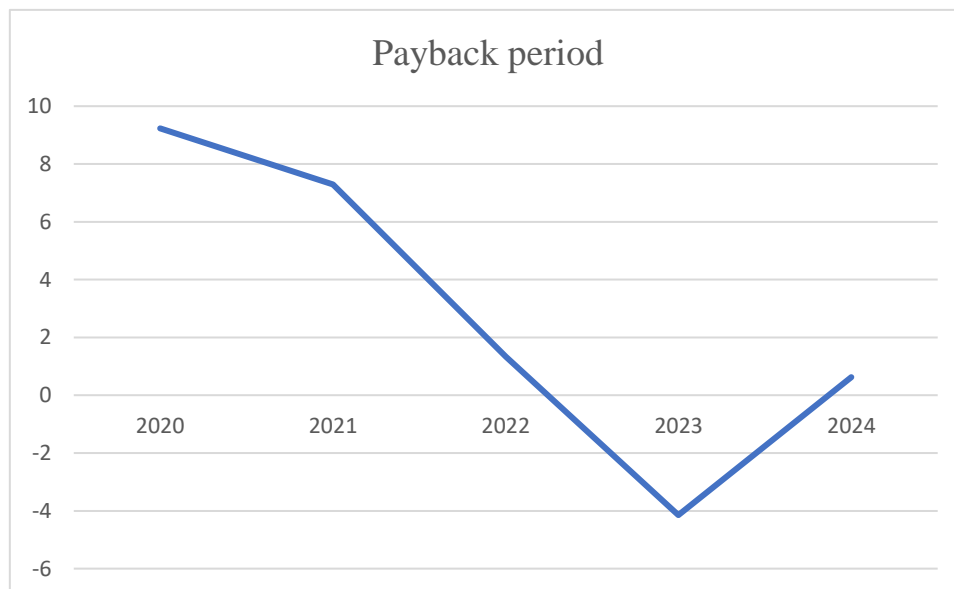
PAYBACK PERIOD (PBP)

The payback period refers to the duration required for a company to recoup its initial investment in cash. This concept can also be described as the time it takes for a project to generate cash flows that equal the initial investment, thereby reimbursing the company. The payback period is determined by dividing the total capital investment by the net annual cash flow. In cases where the net annual cash flow is anticipated to vary, the average of these cash flows may be utilized.

$$\text{Payback Period} = \frac{\text{Initial Investment}}{\text{Cash Inflow per Period}}$$

Payback Period Analysis for Shiva Texyarn Limited

Year	Initial Investment (₹ in lakhs)	Annual Cash Inflow (₹ in lakhs)	Payback period (Year)
2020	1,428.12	154.7	9.231544926
2021	1127.38	154.7	7.28752424
2022	2658.43	2,001.19	1.328424587
2023	2,754.10	-664	-4.147740964
2024	693.26	1108.4	0.625460123



Interpretation

The payback period analysis reveals that in 2022 and 2024, the company achieved very quick recovery of investments, with payback periods of 1.33 years and 0.63 years, respectively, indicating highly viable projects. In

contrast, the 2020 and 2021 investments took significantly longer to recover, with payback periods of over 7 and 9 years, reflecting lower efficiency in those periods. The project in 2023 shows a negative cash inflow, resulting in a negative payback period, indicating a potential loss or non-viable investment. Overall, capital budgeting decisions improved in recent years, suggesting better financial planning and project selection.

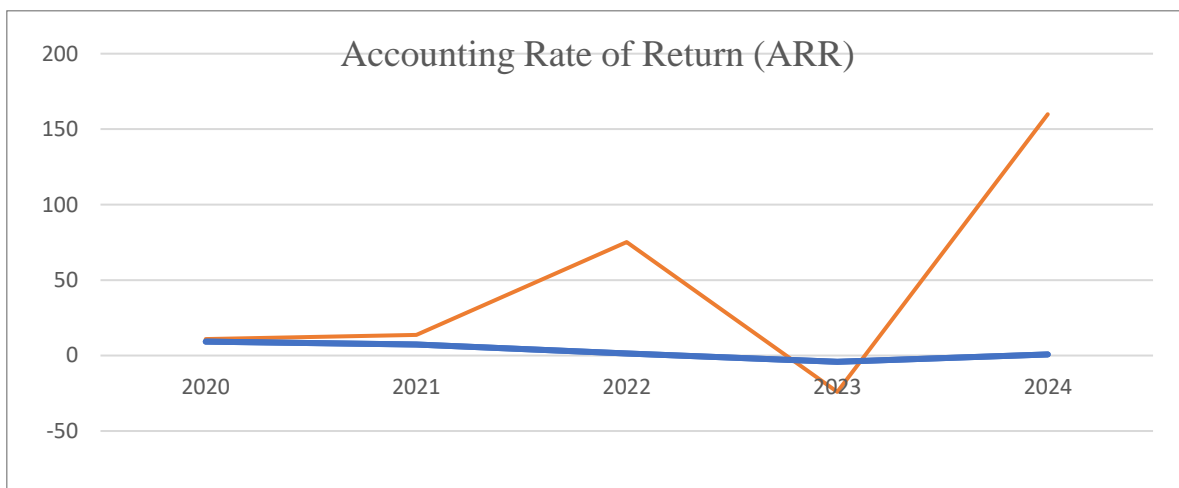
ACCOUNTING RATE OF RETURN (ARR)

The ARR method utilizes accounting data presented in financial statements to assess the profitability of investment proposals. It is commonly referred to as the return on investment and is sometimes known as the average rate of return. (ARR)

Accounting Rate of Return =	Profit after Tax	X 100
	Original Investment	

Accounting Rate of Return (ARR) for Shiva Texyarn Limited

Year	PAT (₹ in lakhs)	Initial Investment (₹ in lakhs)	ARR(%)
2020	154.7	1,428.12	10.83242305
2021	154.7	1127.38	13.72208129
2022	2,001.19	2658.43	75.27713726
2023	-664	2,754.10	-24.10950946
2024	1108.4	693.26	159.8822952



Interpretation

The ARR analysis indicates that 2024 yielded the highest return at 159.88%, showing exceptional profitability relative to the investment made. In 2022, the ARR was also strong at 75.28%, reflecting a highly efficient use of capital. Earlier years like 2020 and 2021 had moderate ARR values of 10.83% and 13.72%, suggesting relatively modest profitability. However, 2023 recorded a negative ARR of -24.11%, indicating a loss-making project. Overall, the data shows an improving trend in capital efficiency, except for the setback in 2023.

NET PRESENT VALUE (NPV)

It is essential to take into account the time value of money when assessing projects that involve varying costs, cash flows, and service durations. Discounted cash flow methods, including the net present value approach, factor in both the timing and magnitude of cash flows. To apply the net present value method, one must be aware of the cash inflows, cash outflows, and the company's minimum acceptable rate of return on investments. This required rate of return serves as the discount rate in the net present value computation.

Formula

Present value = Cash flows * Present value of Re. 1 @ 10% discount using present value table **Net present value** = Present value of all cash inflows – present value of initial investment. **Decision Rule:**



Accept: NPV > Zero

Reject: NPV < Zero

Net Present Value for Shiva Texyarn Limited

Year	Annual Cash Inflow (₹ in lakhs)	Present Factor @ 10%	PV of Net Cash Flows (₹ in lakhs)	PV of Initial investment (₹ in lakhs)
2020	154.7	0.909	140.6223	1298.16108
2021	154.7	0.826	127.7822	931.21588
2022	2,001.19	0.751	1502.89369	1996.48093
2023	-664	0.683	-453.512	1881.0503
2024	1108.4	0.621	688.3164	430.51446
		TOTAL =	2006.1025	6537.4226

Calculation	
Present value of all cash flows Less:	2006.10259
Present value of all Initial Investment	6537.42265
Net Present Value (2020-24)	-4531.32006

Interpretation

The NPV analysis shows that the **total present value of net cash flows** is ₹2,006.10 lakhs, while the **total present value of initial investments** is ₹6,537.42 lakhs, resulting in a **negative overall NPV**. This indicates that, cumulatively, the projects may not be financially viable at a 10% discount rate. The years **2022 and 2024** show strong positive PVs of cash inflows, suggesting profitable projects. However, **2023 has a large negative PV**, which significantly impacts the overall result. The negative NPV implies that the investments may reduce shareholder value unless performance improves or costs are reduced.

FINDINGS

- The Payback Period (PBP) in 2022 is 1 year, indicating efficient investment recovery, while the longest PBP was in 2019 at 4.97 years.
- PBP across years: 2018 – 2.17, 2019 – 4.97, 2020 – 1.46, 2021 – 0.58, 2022 – 1.00.
- The Net Present Value (NPV) from 2018 to 2022 is negative at ₹(17,08,88,234.5), indicating the project may be financially unviable.
- A negative NPV highlights that returns may not justify the investment when accounting for the time value of money.
- The Accounting Rate of Return (ARR) shows fluctuations: 2018 – 0.46, 2019 – 0.20, 2020 – 0.68, 2021 – 1.72, and 2022 – 1.00.
- The highest ARR was in 2021 (1.72), reflecting better profitability that year.

CONCLUSION

Capital budgeting is an essential procedure for assessing long-term investments such as machinery, infrastructure, and research and development, ensuring their financial feasibility and alignment with corporate growth objectives. Given the substantial costs and long-term obligations associated with these investments, thorough analysis is crucial. This research highlights the significance of effective fund distribution in improving financial performance. Analytical tools such as Net Present Value (NPV), Payback Period, and Average Rate of Return (ARR) are instrumental in evaluating project feasibility, with results indicating that well-informed capital investment choices have a direct effect on profitability, growth, and financial stability.

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