

CAPITAL BUDGETING METHODS AND THEIR IMPACT ON FINANCIAL PERFORMANCE

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ABSTRACT

Capital budgeting is a critical financial management process used by organizations to evaluate long-term investment opportunities and allocate resources effectively. The choice of capital budgeting methods significantly impacts financial performance, profitability, and shareholder value. This paper examines the most commonly used capital budgeting methods, including Net Present Value (NPV), Internal Rate of Return (IRR), Payback Period, and Profitability Index (PI), and analyzes their influence on decision-making and organizational outcomes. The study highlights the importance of selecting appropriate methods aligned with organizational strategy and risk appetite to optimize financial performance.

Keywords: Capital Budgeting, Financial Performance, Net Present Value (NPV), Internal Rate Of Return (IRR), Payback Period, Profitability Index (PI), Investment Appraisal, Risk Assessment, Long-Term Investment, Corporate Finance.

INTRODUCTION

Capital budgeting is the process by which firms evaluate potential investments in long-term assets to maximize value and enhance financial performance (Michael,1999). Investment decisions are critical because they involve significant capital outlays, affect cash flows over extended periods, and carry substantial risk. Effective capital budgeting ensures that organizations allocate resources to projects that yield the highest returns relative to risk (Brigham, 1982).

Various methods exist for evaluating investment opportunities, each with advantages, limitations, and implications for financial performance. This paper explores the impact of these methods on organizational decision-making and long-term profitability.

Common Capital Budgeting Methods

Net Present Value (NPV)

NPV calculates the present value of expected cash flows minus the initial investment. Projects with a positive NPV increase shareholder wealth, making NPV one of the most reliable methods for investment appraisal (Ross, 2015).

Internal Rate of Return (IRR)

IRR is the discount rate at which the NPV of a project becomes zero. While widely used, IRR can be misleading for non-conventional cash flows or mutually exclusive projects.

Payback Period

The payback period measures the time required to recover the initial investment. Although simple, it ignores the time value of money and cash flows beyond the payback period (Gitman, 2015).

Profitability Index (PI)

PI is the ratio of the present value of future cash flows to the initial investment. A PI greater than one indicates a desirable project. PI is particularly useful when capital is rationed.

Impact of Capital Budgeting Methods on Financial Performance

Profitability and Shareholder Value

Accurate application of NPV and IRR ensures that firms invest in projects that maximize profitability and enhance shareholder wealth (Ross, 2015; (Van Horne & Wachowicz, 2009).

Risk Assessment and Decision Quality

Capital budgeting methods help identify risks associated with cash flows, market conditions, and project uncertainties, enabling managers to make informed decisions.

CONCLUSION

Capital budgeting is fundamental for enhancing financial performance and achieving strategic objectives. Methods like NPV, IRR, Payback Period, and PI each provide unique insights into project viability. While NPV and IRR are more sophisticated and value-maximizing, simpler methods like Payback Period remain popular for preliminary screening. Organizations that effectively apply these methods can optimize investments, increase profitability, and create sustainable shareholder value .

REFERENCES

- Brigham, E. F. (1982). *Financial management: Theory and practice*. Atlantic Publishers & Distri.
- Ehrhardt, M. C. (2011). *Financial management: theory and practice*. USA.
- Gitman, L. J., Juchau, R., & Flanagan, J. (2015). *Principles of managerial finance*. Pearson Higher Education AU.
- Higgins, R. C., Koski, J. L., & Mitton, T. (2009). *Analysis for financial management*.
- Michael, T. B. (1999). *Principles of corporate finance*.
- Mishra, S., & Nguyen, H. (2023). *Business Finance*. Deakin University.
- Pandey, K. (2017). *Financial management*. Lulu. com.
Pearson.
- Ross, S. (2015). *Ebook: Fundamentals of Corporate Finance*. McGraw Hill.
- Shim, J. K., Siegel, J. G., & Shim, A. I. (2011). *Budgeting basics and beyond*. John Wiley & Sons.
- Van Horne, J. C., & Wachowicz, J. M. (2009). *Fundamentals of financial management 13th ed.*

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