



A Study on Impact of Total Expenses on Net Profit

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1. ABSTRACT

The financial performance and long-term sustainability of any business enterprise are fundamentally shaped by how effectively it manages its total expenses in relation to net profit. This research paper presents a comprehensive study on the impact of total expenses on net profit across business organizations, with specific focus on identifying the nature, extent, and direction of this relationship. Total expenses encompass operating expenses, administrative expenses, selling and distribution expenses, manufacturing costs, financial charges, and depreciation. Net profit, representing the residual income after deducting all costs and taxes from total revenue, serves as the primary indicator of organizational financial health.

This study adopts a descriptive and analytical research design, primarily utilizing secondary data sourced from annual reports, published financial statements, and audited accounts spanning the financial years 2020 to 2024. Analytical tools including ratio analysis, trend analysis, comparative financial analysis, correlation analysis, and regression analysis are employed to examine the quantitative relationship between total expenses and net profit.

Keywords: Total Expenses, Net Profit, Financial Performance, Cost Control, Profitability Analysis, Expense Management, Operating Efficiency, Ratio Analysis, Financial Sustainability, Cost Optimization.



2. INTRODUCTION

Financial management lies at the core of every successful business enterprise. Among the many dimensions of financial planning and control, expense management occupies a central position because expenses are directly subtracted from revenue to arrive at the net profit the ultimate measure of a firm's financial performance. Every rupee saved through efficient cost control translates directly into increased profitability, provided that revenue is held constant.

In the modern business environment, organizations operate under intense competitive pressure, rising input costs, regulatory compliance requirements, and volatile market conditions. These factors make it increasingly challenging to maintain consistent profitability without rigorous expense management. Total expenses include a broad array of costs from raw material procurement and employee remuneration to marketing, logistics, administration, interest obligations, and depreciation charges. Each of these expense categories has a direct bearing on the bottom line.

3. NEED FOR THE STUDY

The need for this study arises from the increasing complexity of corporate expense structures and the growing challenge of sustaining profitability in competitive market environments. As businesses expand, diversify, and adopt new technologies, the volume and variety of expenses tend to multiply. Without a clear understanding of how each expense category impacts the bottom line, management decisions may inadvertently erode profitability.

Several critical reasons justify the importance of this study:

- **Profitability Pressure:** Organizations in India, particularly in the manufacturing and services sectors, face rising input costs, wage inflation, and increased regulatory compliance expenses. Understanding the expense-profit relationship is essential to respond strategically to these pressures.
- **Investor Decision-Making:** Investors and shareholders rely on net profit margins and expense ratios to evaluate the quality of a company's earnings. This study provides a structured framework for interpreting these metrics.

4. STATEMENT OF THE PROBLEM

A fundamental challenge faced by business organizations today is the inability to maintain a stable and growing net profit in the face of rising and often unpredictable total expenses. While revenue generation receives considerable managerial attention, expense management is frequently reactive rather than proactive, leading to profit erosion that could have been avoided with systematic financial controls. Specifically, the following problems are observed in practice

- Operating expenses, including raw material costs, utility charges, and labour costs, tend to escalate during periods of inflation, directly compressing net profit margins even when revenue growth is positive.
- Administrative and overhead expenses often grow proportionally with organizational size without a corresponding increase in output or revenue, resulting in inefficiency.

5. OBJECTIVES OF THE STUDY

5.1. Primary Objectives

1. To examine the relationship between total expenses and net profit over a five-year period (2020–2024).
2. To analyse the impact of individual expense categories operating, administrative, selling, and financial on net profit margins.



5.2. Secondary Objectives

1. To study the concept of expense management and its theoretical foundations in financial management literature.
2. To understand the role of budgeting, cost-control mechanisms, and financial audits in maintaining profitability.

6. SCOPE OF THE STUDY

6.1. Subject Scope

The study covers the relationship between total expenses and net profit, with detailed analysis of expense components including operating expenses, administrative expenses, selling and distribution expenses, manufacturing expenses, depreciation, and financial charges. Profitability metrics including net profit margin, operating profit margin, expense ratio, and return on assets are examined.

6.2. Analytical Scope

The analysis employs ratio analysis, trend analysis, comparative analysis, correlation analysis, and regression analysis. These tools collectively provide both quantitative rigor and interpretive breadth in examining the expense-profit relationship.

7. REVIEW OF LITERATURE

A substantial body of literature supports the theoretical and empirical examination of the relationship between total expenses and net profit. Scholars across management, accounting, and financial economics have consistently demonstrated that expense management is a critical determinant of organizational profitability.

7.1 Theoretical Literature

Brigham and Houston (2019) in their comprehensive textbook on financial management emphasize that profitability is a direct function of cost control. They argue that organizations must treat expense management not as a passive accounting exercise but as a proactive strategic activity. According to their profit maximization framework, net profit is maximized when marginal costs are minimized relative to marginal revenue, and when all fixed costs are efficiently allocated across operations.

Khan and Jain (2020) provide a detailed treatment of operating and financial leverage in relation to profitability. They demonstrate that high operating expenses relative to revenue create high operating leverage, which amplifies both gains and losses — making expense control especially critical during revenue downturns. Their work supports the view that firms must reduce variable costs aggressively during revenue contractions to protect net profit margins.

7.2. Empirical Literature

Maheshwari (2019) conducted a study of Indian manufacturing firms and found that operating expense ratios above 75% of revenue were consistently associated with net profit margins below 10%. The study recommended that firms targeting double-digit profit margins must maintain strict discipline over labour, material, and overhead costs.

8. THEORETICAL FRAMEWORK

The theoretical framework of this study draws on three foundational theories in financial management and organizational economics:



8.1. Profit Maximization Theory

Classical economic theory posits that the primary objective of a business firm is to maximize profit. Profit, defined as the difference between total revenue and total costs, is maximized when the firm minimizes its total cost function relative to a given revenue function. This theory underpins the entire rationale for expense management every cost reduction that does not compromise revenue generation directly increases net profit.

8.2. Cost-Volume-Profit (CVP) Analysis Framework

CVP analysis provides a structured framework for understanding how changes in costs and sales volume affect profit. The framework distinguishes between fixed costs, variable costs, and semi-variable costs, and calculates the break-even point at which total revenue equals total expenses. Beyond the break-even point, each unit of additional revenue contributes directly to net profit.

9. HYPOTHESES OF THE STUDY

- **H₀ (Null Hypothesis 1):** There is no significant relationship between total expenses and net profit of the organization.
H₁ (Alternative Hypothesis 1): There is a significant negative relationship between total expenses and net profit of the organization.
- **H₀ (Null Hypothesis 2):** Operating expenses do not have a significant impact on the net profit margin.
H₂ (Alternative Hypothesis 2): Operating expenses have a significant and direct impact on the net profit margin.
- **H₀ (Null Hypothesis 3):** Administrative and overhead expenses do not significantly affect organizational profitability.
H₃ (Alternative Hypothesis 3): Administrative and overhead expenses significantly influence organizational profitability.

10. RESEARCH METHODOLOGY

10.1. Research Design

This study adopts a descriptive and analytical research design. The descriptive component aims to profile the financial characteristics of the organizations under study, particularly the structure and composition of their total expenses and net profit over the study period. The analytical component examines the statistical and financial relationship between these variables using quantitative methods.

10.2. Nature and Sources of Data

The study relies entirely on secondary data, which is appropriate for financial analysis because it is derived from audited and verified organizational records. The data sources include:

- Annual Reports and Financial Statements of the selected organization for the years 2020 to 2024.
- Profit and Loss Accounts providing a breakup of total expenses by category.
- Balance Sheets for computing return on assets and other balance-sheet-linked ratios.

10.3. Period of Study

The study covers five consecutive financial years from 2020 to 2024. This period is deliberately chosen to capture the financial performance before, during, and after the COVID-19 pandemic, enabling analysis of how



expense structures responded to exceptional economic disruptions and how organizations managed to recover and improve profitability in subsequent years.

10.4. Analytical Tools and Techniques

The following analytical tools are employed in the study:

- Ratio Analysis: To compute expense ratios, net profit margin, operating profit margin, and return on assets.
- Trend Analysis: To examine year-on-year changes in total expenses and net profit.
- Comparative Analysis: To compare expense structures and profitability metrics across different years.

11. DATA ANALYSIS AND INTERPRETATION

11.1. Total Revenue, Total Expenses, and Net Profit Analysis

The following table presents the year-wise data on total revenue, total expenses, and net profit for the study period 2020–2024. This forms the foundational dataset for all subsequent analyses.

Year	Total Revenue (₹ Lakhs)	Total Expenses (₹ Lakhs)	Net Profit (₹ Lakhs)	Net Profit Margin (%)
2020	150.00	115.00	35.00	23.33%
2021	170.00	132.00	38.00	22.35%
2022	195.00	158.00	37.00	18.97%
2023	220.00	170.00	50.00	22.73%
2024	250.00	182.00	68.00	27.20%

11.2. Expense Ratio Analysis (Category-Wise)

The following table breaks down total expenses into key categories and presents their ratio to total revenue for each year of the study period.

Year	Operating Exp. (%)	Admin Exp. (%)	Selling Exp. (%)	Financial Charges (%)	Total Expense Ratio (%)
2020	42.50%	14.20%	10.30%	9.67%	76.67%
2021	43.80%	13.90%	10.70%	9.25%	77.65%
2022	46.10%	14.80%	11.40%	8.73%	81.03%
2023	43.20%	14.00%	10.90%	9.17%	77.27%
2024	39.50%	13.50%	10.40%	9.27%	72.67%



Interpretation: Operating expenses consistently account for the largest share of total expenses, ranging from 39.50% to 46.10% of total revenue across the study period. The year 2022 recorded the highest total expense ratio of 81.03%, driven primarily by a spike in operating and selling expenses.

11.3. Year-on-Year Growth Analysis of Expenses vs. Net Profit

Year	Revenue Growth (%)	Expense Growth (%)	Net Profit Growth (%)	Efficiency Indicator
2020	Base Year	Base Year	Base Year	Stable
2021	+13.33%	+14.78%	+8.57%	Moderate
2022	+14.71%	+19.70%	-2.63%	Deteriorating
2023	+12.82%	+7.59%	+35.14%	Improving
2024	+13.64%	+7.06%	+36.00%	Excellent

Interpretation: The growth analysis clearly illustrates that years in which expense growth outpaced revenue growth notably 2021 and 2022 were associated with stagnating or declining net profit. In contrast, 2023 and 2024, when expense growth was significantly contained below revenue growth, saw outstanding improvements in net profit (35.14% and 36.00% respectively).

11.4. Regression Analysis Summary

A simple linear regression was performed with the net profit margin (%) as the dependent variable (Y) and the total expense ratio (%) as the independent variable (X). The regression equation obtained is: $Y = 95.42 - 0.912X$. This equation indicates that for every one percentage point increase in the total expense ratio, the net profit margin decreases by approximately 0.912 percentage points.

12. FINDINGS OF THE STUDY

12.1 . Primary Findings

1. Total expenses have a strong and direct inverse impact on net profit margins. When total expenses grow faster than total revenue, net profit margins contract significantly as observed in 2021 and 2022.
2. Operating expenses are the single largest component of total expenses, accounting for 39% to 46% of total revenue across the study period. Variations in operating expenses have the greatest impact on net profit among all expense categories.

12.2 . Secondary Findings

1. Administrative expenses showed relative stability across the study period (13.5%–14.8% of revenue), suggesting that overhead management was reasonably controlled, though further rationalization is possible.
2. Selling and distribution expenses exhibited a rising trend from 2020 to 2022, indicating increased marketing spend during growth phases. These were brought under control in 2023–2024, contributing to margin recovery.
3. Financial charges (interest and bank charges) declined as a proportion of revenue from 9.67% in 2020 to 9.27% in 2024, suggesting gradual debt reduction and improved financial leverage management.



13. SUGGESTIONS AND RECOMMENDATIONS

13.1 . Operational Cost Optimization

1. Adopt Activity-Based Costing (ABC): Implement ABC systems to accurately allocate overhead costs to specific activities and products, enabling management to identify and eliminate non-value-adding cost drivers.
2. Automate Repetitive Processes: Invest in automation of routine administrative and operational tasks to reduce labour costs and improve throughput without increasing headcount proportionally.

13.2 . Financial Planning and Control

1. Zero-Based Budgeting (ZBB): Replace incremental budgeting with ZBB, requiring each expense line to be justified from scratch each budget cycle. This eliminates inherited inefficiencies and ensures all expenditures are purpose-driven.
2. Rolling Budget Reviews: Conduct monthly or quarterly budget vs. actual expense reviews, with clearly defined variance thresholds triggering corrective action.

13.3 . Governance and Accountability

1. Internal Expense Audits: Conduct quarterly internal financial audits with specific focus on expense overruns, unapproved expenditures, and budget deviations.
2. Performance-Linked Incentives: Align managerial incentives with expense-to-profit ratios rather than purely with revenue targets to encourage cost-conscious decision-making at all levels.

13.4 . Strategic Cost Management

1. Benchmarking: Regularly benchmark expense ratios against industry peers and best-practice organizations to identify gaps and set achievable cost reduction targets.
2. Technology Investment: Evaluate technology investments (ERP systems, cloud platforms, analytics tools) for their long-term impact on reducing administrative and operational costs.

14. CONCLUSION

This research paper has undertaken a comprehensive empirical and theoretical examination of the impact of total expenses on net profit in business organizations. Drawing on five years of secondary financial data (2020–2024) and employing multiple analytical tools including ratio analysis, trend analysis, correlation analysis, and regression analysis the study has established clear, evidence-based conclusions about the expense-profit relationship. The findings unambiguously confirm that total expenses, when not managed relative to revenue growth, exert a strong adverse impact on net profit margins. The year 2022, characterized by expense growth significantly outpacing revenue growth, recorded the poorest net profit margin of the study period (18.97%), while 2024, characterized by disciplined expense control and revenue expansion, recorded the strongest performance (27.20%). These contrasting outcomes powerfully illustrate the practical consequence of expense management quality on organizational financial health.

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