

A Comparative Study of Financial Performance of Selected Manufacturing Industries of Pune District

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Abstract- This study evaluates the financial performance of selected manufacturing companies in Pune District using financial statement analysis. The manufacturing sector plays a crucial role in economic development by contributing to industrial growth, employment generation, and overall economic productivity. With increasing competition and the need for efficient financial management, assessing the financial performance of manufacturing firms has become essential for informed decision-making by managers, investors, and policymakers. The study adopts a descriptive and analytical research design and relies on secondary data collected from company annual reports, financial databases, and published financial statements. Various financial analysis techniques such as ratio analysis, comparative financial statement analysis, and statistical testing are used to assess the financial health of the selected firms. Descriptive statistics reveal that the companies maintain an average total income of 110552.18 and average sales of 107824.07, while the mean profit after tax of 5516.92 indicates moderate profitability among the firms. Ratio analysis shows an average profit margin of 6.81%, a dividend payout ratio of 26.47%, and a strategic growth rate of 73.61%, suggesting stable profitability and growth potential. The debt–equity ratio of 0.96 indicates a relatively balanced capital structure with moderate reliance on debt financing. Hypothesis testing results confirm that key financial indicators such as profit after tax, total income, sales, debt–equity ratio, and profit margin significantly influence financial performance, as all p-values are below the 0.05 significance level. Overall, the findings highlight the importance of profitability, revenue generation, and capital structure in determining the financial stability and operational efficiency of manufacturing firms in Pune District.

Keywords- Financial Performance Analysis; Manufacturing Firms; Financial Ratios; Capital Structure; Profitability Analysis; Pune District

I. INTRODUCTION

The manufacturing sector is a key driver of economic growth in developing countries like India, contributing significantly to employment generation, industrial productivity, and Gross Domestic Product (GDP). It supports various allied industries and strengthens the overall economic structure [1]. Government initiatives such as the Make in India program aim to expand the manufacturing base, attract investment, and improve global competitiveness through technological advancement and efficient production systems. Consequently, manufacturing firms increasingly focus on improving operational efficiency and financial performance to remain competitive in both domestic and international markets [2].

Financial performance reflects a company's ability to utilize its resources effectively to generate profits and maintain financial stability. Financial statement analysis, which involves evaluating balance sheets, income statements, and cash flow statements, helps assess an organization's financial health and operational efficiency. Techniques such as ratio analysis, trend analysis, and comparative financial analysis provide insights into profitability, liquidity, solvency, and efficiency [3].

Pune District, a major industrial hub in Maharashtra, hosts numerous manufacturing companies across sectors such as automobiles and engineering. Due to growing competition, comparative financial performance analysis of these firms is essential to identify strengths, weaknesses, and overall financial stability, thereby supporting informed decision-making for managers, investors, and policymakers [4].

II. LITERATURE REVIEW

The literature review examines previous research related to financial performance analysis and financial statement evaluation. It helps researchers understand theoretical concepts, methodologies, and findings from earlier studies, enabling the identification of research trends and gaps. In financial management research, various studies have assessed the financial stability and operational efficiency of companies using analytical tools such as ratio analysis, comparative financial statements, and trend analysis. Financial performance analysis evaluates a company's financial health through indicators like profitability, liquidity,

solvency, and efficiency ratios derived from financial statements. Techniques such as ratio analysis, comparative analysis, and common-size analysis help simplify financial data and improve the accuracy of performance evaluation. Empirical studies on manufacturing firms indicate that financial performance varies across companies due to differences in management strategies, capital structures, and market conditions. These studies highlight the importance of effective financial management in ensuring competitiveness and long-term sustainability in the manufacturing sector.

Several studies have examined factors influencing the financial performance of manufacturing firms. Kwak (2019) [5] found that adjusted inventory turnover is a more reliable indicator of financial sustainability in manufacturing companies. Grozdić et al. (2020) [6] highlighted the importance of capital investment in improving firm performance. Kim et al. (2021) [7] showed that asset turnover and sales growth positively influence financial performance, while leverage negatively affects profitability. Farhan et al. (2021) [8] emphasized the impact of working-capital policies on profitability in Indian manufacturing firms, while Agarwal et al. (2021) [9] reported declining ROA across different firm sizes and a negative relationship between debt–equity ratio and ROA. Liew et al. (2022) [10] and Yousaf and Dey (2022) [11] identified ROA as a strong indicator of firm performance, while Sharma et al. (2022) [12] confirmed the growing importance of financial ratio analysis in manufacturing research.

The literature review shows that financial statement analysis and ratio analysis are widely used methods for evaluating corporate financial performance across different sectors and regions. Many studies have applied various financial indicators and comparative techniques to assess profitability, liquidity, and efficiency. However, most existing research focuses on national-level companies or individual firms rather than comparing multiple companies within a specific regional context. Limited studies examine the comparative financial performance of manufacturing companies in Pune District. Therefore, this study aims to fill this gap by analyzing and comparing selected manufacturing companies in Pune District using financial statement analysis to better understand their financial strengths and weaknesses. In continuation with the identified research gap, the study aims to analyze and compare the financial performance of selected manufacturing companies in Pune District using financial statement and ratio analysis. It seeks to examine the liquidity, profitability, solvency, and efficiency of these firms to understand their financial strengths, weaknesses, and overall performance patterns. The study also intends to provide insights into the financial position and investment trends of the selected companies, thereby supporting better financial evaluation and strategic decision-making.

To evaluate the financial performance of the selected manufacturing companies, the following hypotheses are formulated:

H01: There is no significant difference in the financial performance of the selected manufacturing companies in Pune District based on financial statement analysis.

H11: There is a significant difference in the financial performance of the selected manufacturing companies in Pune District based on financial statement analysis.

H02: Profitability indicators such as profit margin and profit after tax do not significantly influence the financial performance of the selected manufacturing companies.

H12: Profitability indicators such as profit margin and profit after tax significantly influence the financial performance of the selected manufacturing companies.

H03: Liquidity and solvency indicators such as debt–equity ratio and borrowings do not significantly affect the financial performance of the selected manufacturing companies.

H13: Liquidity and solvency indicators such as debt–equity ratio and borrowings significantly affect the financial performance of the selected manufacturing companies.

H04: There is no significant relationship between revenue indicators (total income and sales) and the overall financial performance of the selected manufacturing companies.

H14: There is a significant relationship between revenue indicators (total income and sales) and the overall financial performance of the selected manufacturing companies.

III. RESEARCH METHODOLOGY

The present study adopts a descriptive and analytical research design to evaluate the financial performance of selected manufacturing companies in Pune District. The research focuses on analyzing financial information obtained from company financial statements and comparing the performance of different firms

using financial ratios and other financial analysis techniques. The study primarily relies on secondary data collected from reliable sources such as annual reports of the selected companies, company websites, financial databases, and published financial statements. Additional information has also been gathered from journals, research articles, and government reports related to the manufacturing sector.

For the purpose of the study, selected manufacturing companies operating in Pune District have been chosen based on the availability of financial data, industry relevance, and their operational presence in the region. These companies represent important manufacturing sectors such as automobile, engineering, and industrial production. The financial performance of these companies is analyzed over a specific study period to understand performance trends and assess financial stability.

To evaluate the financial performance of the selected companies, various analytical tools and techniques are used, including ratio analysis, comparative financial statement analysis, and trend analysis. Key financial ratios such as profitability ratios (ROA, ROE, Net Profit Ratio), liquidity ratios (Current Ratio, Quick Ratio), solvency ratios (Debt–Equity Ratio), and efficiency ratios (Asset Turnover Ratio) are applied to assess financial health and operational efficiency. The scope of the study is limited to selected manufacturing firms in Pune District and is based on secondary financial data available in published reports, which means that the findings depend on the accuracy and completeness of the disclosed financial information.

IV. RESULTS AND DISCUSSION

Table 1: Key Financial Indicators of Selected Manufacturing Firms

Variable	Mean	Median	Std. Deviation
Total Income	110552.18	30430.42	316310.57
Sales	107824.07	29094.91	311762.59
Profit After Tax	5516.92	1487.61	14179.22
Total Capital	4445.36	815.27	12635.71
Reserves & Funds	31981.79	8029.41	91293.86
Borrowings	28604.19	5693.24	70835.28

These variables represent the financial position and operational scale of manufacturing companies, which directly relate to the objective of evaluating financial performance.

Table 1 presents the descriptive statistics of key financial indicators of the selected manufacturing firms. The results show that the mean total income of the companies is 110552.18, with a median value of 30430.42, indicating that some firms have significantly higher income levels than others. Similarly, the mean sales value is 107824.07, while the median is 29094.91, suggesting variations in sales performance among the firms. The average profit after tax is 5516.92, reflecting moderate profitability within the sample companies. The mean total capital of 4445.36 and reserves and funds of 31981.79 indicate substantial financial resources available for business operations and expansion. Borrowings show a mean value of 28604.19, suggesting that several firms rely on external financing. The relatively high standard deviation values across most variables indicate considerable variation in financial performance among the selected manufacturing companies.

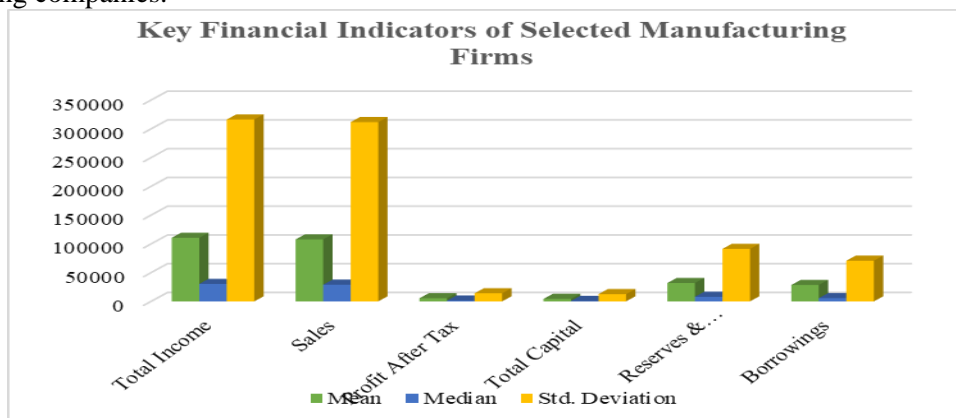


Fig. 1: Graphical representation of Financial Indicators of Selected Manufacturing Firms

Table 2: Key Financial Performance Ratios

Financial Ratio	Mean	Median	Std. Deviation
Profit Margin	6.81%	5.62%	7.14
Dividend Payout Ratio	26.47%	22.31%	35.92
Strategic Growth Rate	73.61%	77.69%	35.91
Debt-Equity Ratio	0.96	0.67	1.99
Unsecured Borrowings to Shareholder Funds	26.86%	17.54%	34.73

These ratios are derived from pooled financial data and represent the profitability, growth potential, and financial leverage of the selected manufacturing companies.

Table 2 presents the key financial performance ratios used to evaluate profitability, growth, and financial stability of the selected firms. The mean profit margin of 6.81% with a median of 5.62% indicates moderate profitability levels across companies. The dividend payout ratio shows a mean value of 26.47%, suggesting that a portion of earnings is distributed to shareholders while the remaining profits are retained for reinvestment. The strategic growth rate, with a mean of 73.61% and a median of 77.69%, reflects the growth potential and reinvestment capacity of the companies. The debt–equity ratio of 0.96 indicates that firms maintain a balanced capital structure with moderate reliance on debt financing. Additionally, the ratio of unsecured borrowings to shareholder funds (26.86%) suggests that some companies depend on unsecured sources of financing. Overall, the ratio analysis highlights variations in profitability, leverage, and growth potential among the selected manufacturing firms.

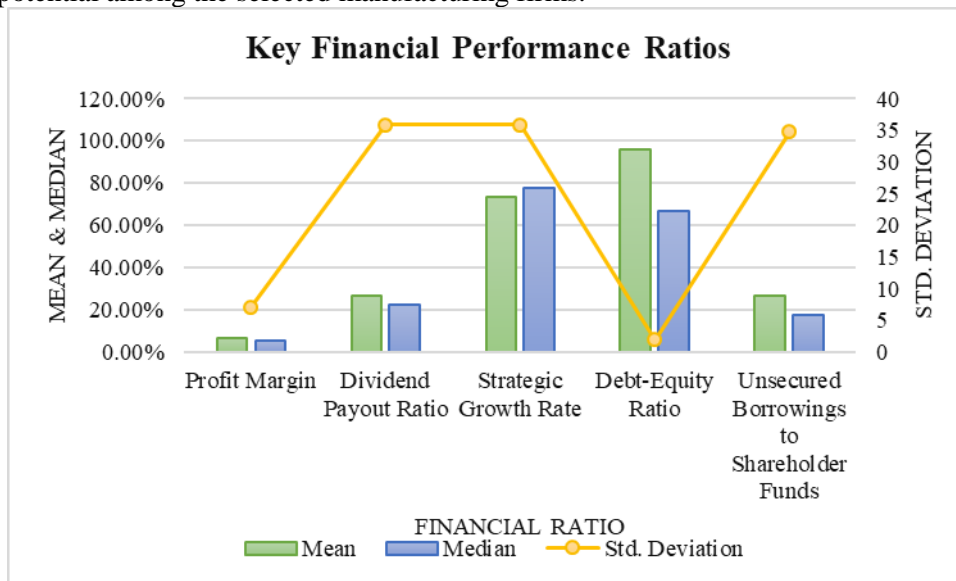


Fig. 2: graphical representation of Key Financial Performance Ratios

Table 3: Key Hypothesis Testing Results (Relevant Indicators)

Variable	t-value	Significance (p)	Interpretation
Profit After Tax	4.268	0.001	Significant
Total Income	3.834	0.002	Significant
Sales	3.795	0.001	Significant
Debt-Equity Ratio	5.509	0.002	Significant
Profit Margin	10.472	0.001	Significant

The results indicate that financial indicators such as profitability, revenue generation, and capital structure significantly influence the financial performance of the selected companies.

Table 3 shows the results of hypothesis testing using the t-test for selected financial indicators. The results indicate that all variables considered in the analysis have p-values less than 0.05, confirming statistical significance at the 5% level. Profit after tax has a t-value of 4.268 with a significance value of 0.001, indicating that profitability significantly influences financial performance. Similarly, total income (t = 3.834) and sales (t = 3.795) also show significant effects on company performance. The debt–equity ratio (t

= 5.509) demonstrates that capital structure plays an important role in determining financial stability. Furthermore, profit margin ($t = 10.472$) shows the highest level of significance among the tested variables, highlighting the importance of operational efficiency in financial performance. Overall, the hypothesis testing results confirm that profitability, revenue generation, and capital structure significantly influence the financial performance of the selected manufacturing companies.

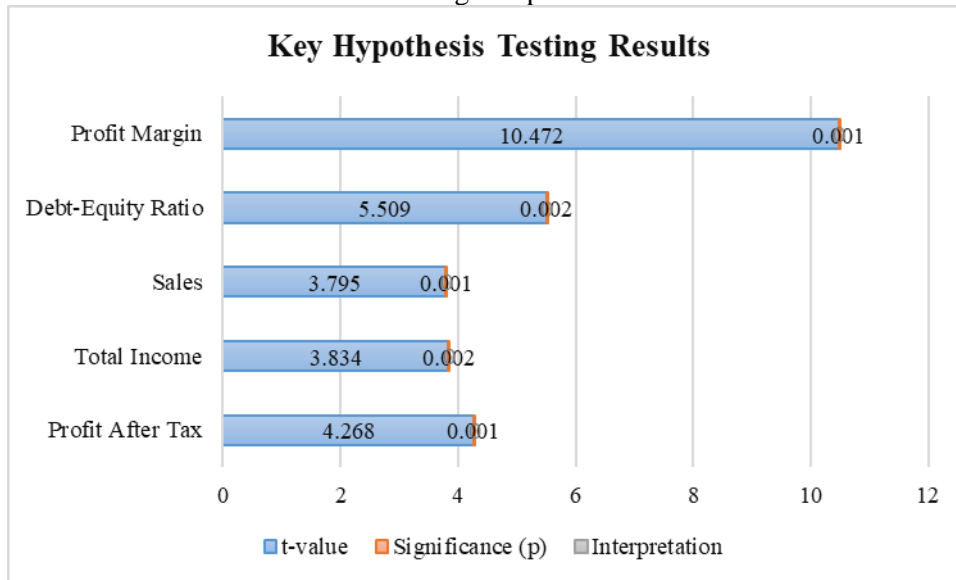


Fig. 3: Graphical representation of Hypothesis Testing Results

Hypothesis Testing Interpretation

The hypothesis testing results indicate that the selected financial indicators significantly influence the financial performance of the manufacturing companies studied. The p-values for Profit After Tax, Total Income, Sales, Debt–Equity Ratio, and Profit Margin are all less than 0.05, indicating statistical significance at the 5% level. Therefore, the null hypotheses associated with these variables are rejected, and the alternative hypotheses are accepted. This suggests that profitability, revenue generation, and capital structure have a significant impact on the financial performance of the selected manufacturing companies. The findings confirm that financial statement analysis provides meaningful insights into company performance and supports the use of financial ratios for comparative financial evaluation and decision-making in the manufacturing sector.

The overall results of the study indicate that the selected manufacturing companies in Pune District exhibit varying levels of financial performance in terms of income generation, profitability, capital structure, and financial stability. The descriptive analysis shows that the firms maintain a relatively high average total income of 110552.18 and sales of 107824.07, while the average profit after tax of 5516.92 reflects moderate profitability among the companies. Financial ratios further reveal that the firms maintain an average profit margin of 6.81%, a dividend payout ratio of 26.47%, and a strategic growth rate of 73.61%, indicating stable profitability and growth potential. The debt–equity ratio of 0.96 suggests a balanced capital structure with moderate reliance on borrowed funds. The hypothesis testing results confirm that key financial indicators such as profit after tax ($t = 4.268, p = 0.001$), total income ($t = 3.834, p = 0.002$), sales ($t = 3.795, p = 0.001$), debt–equity ratio ($t = 5.509, p = 0.002$), and profit margin ($t = 10.472, p = 0.001$) significantly influence the financial performance of the selected companies. Since all p-values are less than 0.05, the null hypotheses are rejected and the alternative hypotheses are accepted, confirming that profitability, revenue generation, and capital structure play a crucial role in determining the financial performance of manufacturing firms in Pune District.

V. CONCLUSION

The study concludes that financial statement analysis provides an effective framework for evaluating and comparing the financial performance of manufacturing companies in Pune District. The results reveal that the selected firms demonstrate moderate profitability and stable financial performance, reflected by an average profit margin of 6.81%, a dividend payout ratio of 26.47%, and a strategic growth rate of 73.61%.

Descriptive statistics indicate that companies maintain substantial income and sales levels, with mean total income of 110552.18 and sales of 107824.07, while the average profit after tax of 5516.92 highlights moderate profitability across firms. The debt–equity ratio of 0.96 suggests a balanced capital structure with controlled reliance on borrowed funds. Hypothesis testing confirms that key financial indicators profit after tax, total income, sales, debt–equity ratio, and profit margin significantly influence financial performance, as all p-values are below the 0.05 significance level. These findings highlight the importance of profitability, revenue generation, and capital structure in determining the financial stability and operational efficiency of manufacturing firms. Overall, the study contributes to understanding financial performance patterns within the Pune manufacturing sector and supports the use of ratio-based financial analysis for comparative evaluation and managerial decision-making. Future research can extend this study by including a larger sample of companies across multiple industrial regions, incorporating additional financial indicators and advanced statistical techniques, and examining the impact of digital transformation, corporate governance practices, and macroeconomic factors on manufacturing firm performance.

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