

An Study on Profitability Analysis of Alagendran Auto Units & Spinning Mills, Madurai

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ABSTRACT

This study analyses the profitability of AB Clothing Co., a leading menswear manufacturer and wholesaler based in Bangalore, India. Secondary data from the company's annual reports covering five financial years (2020–21 to 2024–25) were examined using ratio analysis, trend analysis, chi-square testing, and break-even analysis. The findings reveal a consistent upward trend in net profit, gross profit, and return on shareholders' funds over the study period. Sales grew from ₹2,511.52 lakhs in 2020–21 to ₹4,073.67 lakhs in 2024–25, while net profit rose from ₹224.97 lakhs to ₹730.80 lakhs. The study concludes that AB Clothing Co. has demonstrated strong and improving financial performance, though certain areas such as cash management and asset utilization require focused attention.

1. INTRODUCTION

Profitability analysis is central to the financial management of any business enterprise. It enables stakeholders to assess operational efficiency, identify areas of improvement, and guide strategic decision-making. Profitability is defined as the ability of a business to generate revenue that exceeds its expenses, and it is measured through a range of financial ratios including gross profit margin, net profit margin, return on assets (ROA), and return on equity (ROE).

The garment and textile sector is one of India's largest industries, contributing significantly to GDP, employment, and export earnings. Firms within this sector face unique challenges including raw material price volatility, labour cost pressures, and evolving consumer demand. AB Clothing Co. is an ISO 9001:2015 certified menswear manufacturer and wholesaler established in Bangalore in 2008. The company manufactures a full range of menswear — including shirts, jeans, chinos, track pants, shorts, hoodies, and T-shirts — under four premium brands. It supplies products pan-India and exports to the United States, Sri Lanka, and Dubai.

1.1 Statement of the Problem

Financial performance in the clothing sector is influenced by cost structures, revenue patterns, and profit margins. An analysis of all financial aspects of AB Clothing Co. provides a clear picture of its financial health and can guide policy implications for future development. This study examines the relationship between various dimensions of profitability for the firm over a five-year period.

1.2 Objectives of the Study

Primary Objective: To conduct a profitability analysis of AB Clothing Co., Bangalore.

Secondary Objectives:

- To analyse the income and expenditure pattern and its impact on total profits.
- To assess the financial position through ratio analysis.
- To examine trend values using comparative balance sheet data.
- To provide recommendations for improvement and future financial planning.
- To compare past and present financial performance of the company.

1.3 Scope and Limitations

The study focuses exclusively on AB Clothing Co. and relies on five years of secondary data (2020–21 to 2024–25) drawn from the company's annual reports. The findings are limited to the analysis period and do not account for inflation adjustments or macroeconomic variables beyond the firm's control.

2. REVIEW OF LITERATURE

Rakesh and Kulkarni (2019) conducted a profitability evaluation of five selected textile companies over eleven years using ratio analysis and descriptive statistics. The study concluded that the firms maintained sound financial performance across current ratio, quick ratio, and sales turnover metrics, forming the methodological baseline for the present study.

Charumathi (2020) examined determinants of profitability among life insurance firms in India using regression analysis. The study found a direct relationship between profitability, firm size, and liquidity, while leverage and equity capital exhibited a negative relationship with profitability.

Venkataramana (2021) assessed the financial performance of selected Indian textile companies using liquidity and profitability ratios, correlation, and regression analysis. The findings affirmed that financial ratios are reliable indicators of profitability trends and that liquidity management has a measurable impact on overall financial outcomes.

Eljelly (2022) highlighted that the cash conversion cycle is a more robust measure of liquidity than the current ratio in determining profitability at the industry level. The study underscored the need for firms to actively manage working capital to sustain profitability, particularly during periods of economic uncertainty.

3. RESEARCH METHODOLOGY

3.1 Research Design

The study adopts an analytical research design. It examines financial data systematically to assess relationships between profitability variables and to identify performance trends over the study period.

3.2 Period of Study

The study covers five financial years from 2020–21 to 2024–25.

3.3 Data Collection

The study relies entirely on secondary data collected from the published annual reports of AB Clothing Co., comprising profit and loss accounts and balance sheets. Supplementary data were drawn from textbooks, journals, and company websites.

3.4 Tools for Analysis

The following analytical tools were employed:

- Ratio Analysis — to evaluate profitability, liquidity, and efficiency.
- Trend Analysis — to identify directional changes in sales, gross profit, and net profit over the study period.
- Chi-Square Analysis — to test the statistical relationship between profit before tax and net profit.
- Break-Even Analysis — to determine the sales level at which the firm neither earns profit nor incurs loss.

4. DATA ANALYSIS AND INTERPRETATION

Financial ratios were computed from the annual profit and loss accounts and balance sheets of AB Clothing Co. for the period 2020–21 to 2024–25. Key profitability, liquidity, and efficiency ratios are presented and interpreted below.

4.1 Net Profit Ratio

The net profit ratio measures the percentage of net income generated from total sales and reflects overall operational efficiency.

Year	Net Profit (Rs. Lakhs)	Sales (Rs. Lakhs)	Ratio (%)
2020-21	224.97	2,511.52	8.96
2021-22	289.11	2,978.53	9.71
2022-23	294.61	2,898.07	10.16
2023-24	432.62	2,953.64	14.65
2024-25	730.80	4,073.67	17.94

The net profit ratio rose consistently from 8.96% in 2020–21 to 17.94% in 2024–25, reflecting sustained improvement in profitability and effective cost management.

4.2 Current Ratio

The current ratio measures the firm’s ability to meet short-term obligations. The standard benchmark is 2:1.

Year	Current Assets (Rs.)	Current Liabilities (Rs.)	Ratio
2020-21	975.21	264.17	3.69
2021-22	1,518.90	251.65	6.03
2022-23	1,224.88	216.97	5.64
2023-24	1,249.68	263.20	4.75
2024-25	1,655.71	308.87	5.36

The current ratio peaked at 6.03 in 2021–22, indicating strong short-term liquidity. Although it declined in subsequent years, it remained well above the standard benchmark, reflecting a favorable liquidity position throughout the study period.

4.3 Gross Profit Ratio

The gross profit ratio indicates the relationship between gross profit and net sales. A higher ratio is preferable as it signifies better control over production costs.

Year	Gross Profit (PBDIT)	Net Sales	Ratio (%)
2020-21	445.32	2,511.52	17.73
2021-22	544.44	2,978.53	18.28
2022-23	510.99	2,898.07	17.63
2023-24	702.35	2,953.64	23.78
2024-25	1,068.53	4,073.67	26.23

The gross profit ratio improved significantly from 17.73% in 2020–21 to 26.23% in 2024–25, indicating growing operational efficiency and better management of direct production costs.

4.4 Return on Shareholders’ Funds

This ratio measures profitability from the shareholders’ perspective, expressing net profit after interest and tax as a percentage of shareholders’ funds.

Year	Net Profit (Rs.)	Shareholders’ Funds (Rs.)	Ratio (%)
2020-21	224.97	1,336.72	16.83
2021-22	289.11	1,511.20	19.13

2022-23	294.61	1,504.88	19.58
2023-24	432.62	1,906.54	22.69
2024-25	730.80	2,632.18	27.76

The return on shareholders’ funds increased steadily from 16.83% to 27.76%, demonstrating that the company is generating higher returns for its investors year on year.

4.5 Return on Assets (ROA)

ROA measures how effectively the company generates profits from its total asset base.

Year	Net Profit (Rs.)	Total Assets (Rs.)	Ratio
2020-21	224.97	1,666.20	0.13
2021-22	289.11	2,145.56	0.13
2022-23	294.61	1,970.23	0.15
2023-24	432.62	2,222.23	0.19
2024-25	730.80	3,050.03	0.24

ROA improved progressively from 0.13 in 2020–21 to 0.24 in 2024–25, reflecting increasing efficiency in asset utilization and profit generation.

4.6 Debtors Turnover Ratio

This ratio measures the efficiency of debt collection, expressed as the number of times debtors are converted into cash during the year.

Year	Total Sales (Rs.)	Accounts Receivable (Rs.)	Ratio (Times)
2020-21	2,511.52	324.19	7.75
2021-22	2,978.53	468.30	6.36
2022-23	2,898.07	351.27	8.25
2023-24	2,953.64	260.81	11.32
2024-25	4,073.67	392.63	10.37

The debtors turnover ratio showed an improving trend overall, peaking at 11.32 times in 2023–24 before a marginal decline to 10.37 in 2024–25. This indicates effective credit management and timely debt collection.

4.7 Trend Analysis

Trend analysis was performed using 2020–21 as the base year (index = 100). The analysis tracks the growth trajectory of sales, gross profit (PBDIT), and profit after tax over the study period.

Year	Sales (Rs.)	Sales Trend%	Gross Profit	GP Trend%	PAT (Rs.)	PAT Trend%
2020-21	2,511.52	100.00	445.32	100.00	224.97	100.00
2021-22	2,978.53	118.59	544.44	122.26	289.11	128.51
2022-23	2,898.07	115.39	510.99	114.75	294.61	130.95
2023-24	2,953.64	117.60	702.35	157.72	432.62	192.29
2024-25	4,073.67	162.19	1,068.53	239.95	730.80	324.82

All three indicators exhibit robust growth over the study period. Sales grew by 62.19%, gross profit by 139.95%, and profit after tax by an exceptional 224.82% compared to the base year. This trend confirms the company’s strong and accelerating profitability.

4.8 Chi-Square Analysis

A chi-square test was applied to assess the statistical relationship between profit before tax (PBT) and net profit (PAT).

H₀: There is no significant difference between profit before tax and net profit.

H₁: There is a significant difference between profit before tax and net profit.

PBT (Rs.)	Net Profit (Rs.)	O – E	(O – E) ²	(O – E) ² / E
309.86	224.97	84.89	7,206.31	32.03
412.75	289.11	123.64	15,286.85	52.87
376.67	294.61	82.06	6,733.84	22.86
584.82	432.62	152.20	23,164.84	53.54
979.49	730.80	248.69	61,846.72	84.63

Calculated $\chi^2 = 245.93$ | Table value at $df = 4, \alpha = 0.05$: 9.488

Since the calculated value (245.93) exceeds the tabulated value (9.488), H₁ is rejected. This indicates no statistically significant difference between profit before tax and net profit, suggesting consistent and predictable tax treatment throughout the study period.

4.9 Break-Even Analysis

Break-even analysis identifies the level of sales at which total revenue equals total costs, resulting in zero profit or loss.

Year	Fixed Cost (Rs.)	Total Contribution (Rs.)	Total Sales (Rs.)	Break-Even Sales (Rs.)
2020-21	2,127.61	2,572.93	2,511.52	2,076.82
2021-22	2,521.74	3,066.18	2,978.53	2,449.65
2022-23	2,607.24	3,118.23	2,898.07	2,423.15
2023-24	2,088.38	2,790.73	2,953.64	2,210.29
2024-25	3,173.00	4,241.53	4,073.67	3,047.43

Throughout the study period, actual sales exceeded break-even levels in each year, confirming the company’s sustained profitability. The year 2020–21 recorded the lowest break-even threshold (Rs. 2,076.82 lakhs), providing the widest margin of safety.

5. FINDINGS

The following key findings emerge from the analysis:

5.1 Ratio Analysis

1. Net Profit Ratio: Increased consistently from 8.96% (2020–21) to 17.94% (2024–25), reflecting continuous improvement in profitability.
2. Current Ratio: Remained significantly above the 2:1 benchmark throughout the period, peaking at 6.03 in 2021–22. This indicates strong short-term liquidity.

3. Reserve to Equity Ratio: Rose from 35.18 to 75.49, reflecting the company's growing reinvestment of profits and strengthening financial base.
4. Cash Position Ratio: Fluctuated between 0.10 and 0.68, with no consistent trend. Cash management requires attention as the ratio dipped in 2023–24.
5. Gross Profit Ratio: Improved from 17.73% to 26.23%, signalling better cost control and enhanced operational efficiency.
6. Return on Investment: Increased from 0.31 to 0.36, indicating better utilization of invested capital.
7. Total Assets Turnover Ratio: Showed a declining trend from 1.51 to 1.33, suggesting that asset growth outpaced sales growth and asset utilization efficiency needs improvement.
8. Return on Assets: Improved from 0.13 to 0.24, indicating increasing effectiveness in generating profit from assets.
9. Debtors Turnover Ratio: Peaked at 11.32 times in 2023–24, demonstrating effective receivables management. A slight decline to 10.37 in 2024–25 warrants monitoring.
10. Return on Shareholders' Funds: Rose steadily from 16.83% to 27.76%, reflecting the company's increasing ability to reward its investors.
11. Operating Ratio: Fluctuated between 0.67 and 0.84. The decline to 0.72 in 2024–25 indicates improved cost efficiency in operations.

5.2 Trend Analysis

Sales grew by 62.19%, gross profit by 139.95%, and profit after tax by 224.82% over the five-year period (base year: 2020–21). These figures confirm a strong and accelerating growth trajectory for the company.

5.3 Chi-Square Analysis

The calculated chi-square value (245.93) exceeds the critical value (9.488) at the 5% significance level with 4 degrees of freedom. H_0 is rejected, establishing that there is no statistically significant difference between profit before tax and net profit over the study period.

5.4 Break-Even Analysis

Actual sales exceeded break-even sales in all five years of the study, confirming continuous profitability. The lowest break-even threshold occurred in 2020–21 (Rs. 2,076.82 lakhs), while 2024–25 recorded the highest at Rs. 3,047.43 lakhs, consistent with the firm's expanding scale of operations.

6. SUGGESTIONS AND CONCLUSION

6.1 Suggestions

- Production capacity should be increased to generate higher revenue and achieve economies of scale.
- The current ratio, though favorable, should be managed closer to the 2:1 benchmark by reducing excess current liabilities, which will improve liquidity efficiency.
- The company should strengthen its reserve policy. Maintaining higher reserves will provide a buffer against future contingencies and support business expansion.
- Administrative and overhead expenses should be reviewed and optimised without compromising employee quality. Attracting and retaining skilled professionals will enhance long-term productivity.
- The declining total assets turnover ratio indicates that asset deployment needs to be optimised. Strategic realignment of assets in line with sales targets is recommended.

6.2 Conclusion

This study has assessed the profitability and financial performance of AB Clothing Co., Bangalore over five financial years (2020–21 to 2024–25). The analysis demonstrates a clear and consistent improvement in the company's financial position. Net profit grew from Rs. 224.97 lakhs to Rs. 730.80 lakhs, representing a 224.82% increase relative to the

base year. Gross profit margins, return on assets, and return on shareholders' funds all improved substantially over the study period.

The company's liquidity position remains strong, with current ratios well above the standard benchmark throughout the period. Break-even analysis confirms that actual sales exceeded break-even thresholds in all five years, underscoring the firm's financial viability.

However, the study also identifies areas requiring attention: cash management, asset turnover efficiency, and cost optimisation. With focused management of these areas, AB Clothing Co. is well-positioned to sustain and enhance its profitability in the coming years. This analysis provides both a diagnostic view of past performance and a strategic foundation for future financial planning.

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