

Financial Implications of Inventory Management Techniques in Garments Business

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Abstract

Inventory management is an important factor influencing the financial performance, working capital efficiency and profitability of garment businesses. The garment industry operates in a highly competitive and rapidly changing environment where seasonal demand, changing fashion trends, fluctuating raw material prices and export-market uncertainty can significantly affect inventory levels. The present study examines the financial implications of inventory management practices at Skyline Apparels, Tirupur. The study is based on secondary data collected from the financial statements of the company for five financial years from 2020–21 to 2024–25. Various financial and inventory management techniques, including Inventory Turnover Ratio, Days Inventory Outstanding, Gross Margin Return on Inventory Investment, Inventory Growth Rate, Inventory to Working Capital Ratio, Stock to Current Assets Ratio, Gross Profit Ratio, Net Profit Ratio and Operating Ratio, are used for analysis.

Keywords: Inventory Management, Profitability, Working Capital, Financial Performance, Inventory Turnover, Garment Industry, Sales, Stock Control, Cost Control, Skyline Apparels.

1. INTRODUCTION

The garment industry involves managing raw materials, work-in-progress, and finished goods through different production stages. Inventory management helps maintain the right level of stock to meet production and customer needs without blocking excess funds. It is especially important because fashion trends, seasonal demand, and raw material prices change frequently. Poor inventory control can cause overstocking, shortages, wastage, high storage costs, and blocked working capital, affecting profitability and liquidity. Techniques such as Economic Order Quantity (EOQ), Just-in-Time (JIT), ABC analysis, and demand forecasting can improve inventory control. Thus, effective inventory management plays an important role in cost reduction, working capital efficiency, and overall financial performance.

1.2 STATEMENT OF THE PROBLEM

Garment export companies face challenges such as changing fashion trends, rising raw material costs, production delays, and quality issues. Poor inventory management can lead to excess stock, storage costs, slow-moving goods, and blocked working capital. Low inventory may also cause production delays and loss of sales. These problems can affect the company's liquidity and profitability. Therefore, proper inventory management is important for garment businesses. This study examines the inventory management of Skyline Apparels and its effect on the company's financial performance.

1.3 OBJECTIVES OF THE STUDY

- To suggest suitable inventory management strategies.
- To evaluate the impact of fluctuating raw material prices.
- To examine the relationship between inventory turnover and profit.
- To compare financial performance over the study period in relation to inventory management.
- To evaluate how inventory management affects cash flow and operational efficiency.

1.4 SCOPE OF THE STUDY

This study examines the inventory management practices of Skyline Apparels, Tirupur, and their impact on financial performance. It covers financial data from 2020-21 to 2024-25. The study uses Inventory Turnover Ratio, Current Ratio, Quick Ratio, Gross Profit Ratio, and Operating Profit Ratio. It aims to evaluate inventory management and provide useful suggestions to improve inventory control, profitability, working capital, and liquidity.

1.5 RESEARCH METHODOLOGY

The Study of research analysis the financial implications of inventory management techniques in a garment business it involves a quantitative approach using certain financial metrics and data collection from the company's records.

SOURCE OF DATA COLLECTION

Secondary data: The principal sources of information are the financial statements and annual reports of Skyline Apparels covering five financial years from 2020–21 to 2024–25.

TOOL USED

- Inventory Turnover Ratio
- Current Ratio
- Quick Ratio
- Gross Profit Ratio
- Operating Profit Ratio.

1.6 LIMITATIONS OF THE STUDY

The literature reviewed indicates that inventory management has a significant relationship with profitability, liquidity, working capital and operational efficiency. However, much of the existing literature focuses on general garment, apparel or manufacturing businesses rather than the specific financial conditions of Skyline Apparels. The present study therefore concentrates on the company-specific financial data available for the selected five-year period.

2.REVIEW OF LITERATURE

Singh, R. and Verma, A. (2021) studied the case of inventory cost control in the textile industry along with financial effects. Inefficiency in the controls made overstocked inventory increase. Costs related to storage and warehousing surged all of a sudden. The financing cost also increased because of huge working capital. Net profits were drained by inefficiency. Efficient monitoring helped in reducing extra costs. The management helped inventory increase the turnover. Inventory management helped improve the financial position. Cost controls directly boosted the profits. The study proves inventory cost management to be an important financial issue.

Ali, K. & Showkat, N. (2022) assessed inventory efficiency across manufacturing sectors. Garments ranked among the major manufacturing groups studied. Inefficient inventory practices enhanced holding and stockout costs. Optimized inventory reduced financial losses and thus improved profitability. Operating profit was increased by proper utilization of available resources. Waste and obsolescence declined steadily with better control. Production flow gradually became smoother and more predictable. Working capital utilization was stronger through effective stock management. Inventory efficiency served as a major profit driver. Strategic inventory planning helped improve their financial performance. Efficient systems contributed to long-run operational sustainability.

3. DATA ANALYSIS

INVENTORY TURNOVER RATIO

Inventory Turnover Ratio measures the number of times inventory is sold and replaced during a year. Skyline Apparels recorded an inventory turnover of 2.36 times in 2020–21, which increased to 3.31 times in 2021–22. However, it declined sharply to 1.07 times in 2022–23 and 0.73 times in 2023–24. It improved slightly to 1.11 times in 2024–25. The decline indicates slow-moving inventory and possible overstocking during the middle years of the study period.

DAYS INVENTORY OUTSTANDING

Days Inventory Outstanding increased from 155 days in 2020–21 to 110 days in 2021–22, indicating faster movement of stock. However, it increased considerably to 341 days in 2022–23 and reached 500 days in 2023–24. It subsequently reduced to 332 days in 2024–25. The high DIO indicates that inventory remained in the business for a longer period and that inventory management remained weak despite the recent improvement.

GROSS MARGIN RETURN ON INVENTORY INVESTMENT

GMROI was 1.46 in 2020–21, indicating relatively efficient generation of gross profit from inventory investment. It declined to 0.51 in 2021–22, increased slightly to 0.63 in 2022–23 and then declined further to 0.38 and 0.35 in 2023–24 and 2024–25 respectively. The overall decline indicates weakening profitability from inventory investment.

INVENTORY TO WORKING CAPITAL

Inventory accounted for 61.71% of working capital in 2020–21. The ratio increased to 66.74% in 2021–22, 74.60% in 2022–23 and 87.02% in 2023–24. It reduced slightly to 85.77% in 2024–25. The high proportion indicates that a substantial amount of working capital was tied up in inventory, potentially reducing the company's short-term financial flexibility.

INTERPRETATION

The overall analysis indicates that Skyline Apparels experienced considerable fluctuations in inventory efficiency during the study period. The best inventory movement was recorded in 2021–22, when inventory turnover reached 3.31 times and DIO reduced to 110 days. Subsequently, inventory movement weakened considerably.

FINDINGS:

- Inventory management performance fluctuated considerably during the five-year period, with inconsistent inventory levels and control.
- Inventory efficiency weakened significantly, as the Inventory Turnover Ratio declined to 0.73 times and Days Inventory Outstanding increased to 500 days in 2023–24.
- GMROI declined from 1.46 to 0.35, indicating reduced profitability from inventory investment during the study period.
- A large portion of working capital was invested in inventory, reaching 87.02% in 2023–24, while sales and gross profitability showed considerable fluctuations.
- Overall, inventory performance remained weak during the middle years, although the improvement in net profitability in 2024–25 indicates some recovery in the latest year.

SUGGESTION:

The company should improve demand forecasting and inventory planning to match purchases with actual production and customer needs. Techniques such as EOQ and ABC analysis can help control order quantities and focus on important inventory. Digital inventory management and ERP systems should be used to provide real-time stock information. Slow-moving and obsolete stock should be identified regularly and cleared or used properly. Production planning should be improved to reduce delays, idle time and excess inventory. Better coordination among merchandising, production and logistics departments can improve order fulfilment, reduce communication gaps and support efficient inventory management.

CONCLUSION:

The study concludes that inventory management plays an important role in the financial performance of garment businesses. The analysis of Skyline Apparels over the period 2020–21 to 2024–25 shows that inventory efficiency has fluctuated significantly. Although inventory turnover improved considerably in 2021–22, the subsequent decline and increase in Days Inventory Outstanding indicate the presence of slow-moving inventory and inefficient stock utilization. The continuous decline in GMROI indicates that inventory investment generated lower gross-margin returns in the later years. The high proportion of working capital invested in inventory also indicates pressure on liquidity and financial

flexibility. However, the improvement in inventory turnover, reduction in DIO and increase in net profitability in 2024–25 indicate signs of recovery.

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