

A Study on Assessing the Effect of Inventory Management on Financial Performance at Palm Era Foods Private Limited, Thoothukkudi

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ABSTRACT

This study examines the effect of inventory management on the financial performance of Palm Era Foods Private Limited, Thoothukkudi. It highlights issues such as overstocking, stockouts, and demand forecasting challenges affecting efficiency. The research uses financial data from 2020–2025 and applies ratio and comparative analysis techniques. Findings show that effective inventory management improves liquidity, profitability, and working capital utilization. The study concludes that proper inventory control and forecasting are essential for sustainable growth and financial stability.

Keywords: Inventory Management, Financial Performance, Liquidity, Profitability

INTRODUCTION OF THE STUDY

Inventory Management

Inventory management can be defined as an organized process through which the inventory of a company is planned, controlled, monitored and optimized to have the correct amount of goods during the correct time and at the correct cost. It is the handling of raw materials, work-in-progress and finished products such that it facilitates efficient production and sales processes without creating overstock and shortages. Inventory management mainly aims at sustaining the perfect supply-demand balance, as well as reducing carrying, ordering, and storage expenses. Inventory management is effective in helping organizations cut wastages, eliminate stock-outs, enhance cash flow, and generally increase the overall efficiency of operation, making it a part of enhancing financial performance.

Objectives of inventory management

1. To Ensure Continuous Production and Sales

Maintaining continuous production and unhindered sales is one of the overall goals of inventory management. There is enough supply of raw materials thus avoiding delays in production processes. On the same note, it is important to have adequate finished goods to facilitate punctual delivery of goods to the customer. With appropriate inventory planning, there will be no stock-out that would result in loss of customers and goodwill.

2. To Maintain Optimum Inventory Levels

The target of inventory management is to maintain the best balance between the overstock and understock. Over stocks raise the cost of storage and insurances and the possibility of obsolescence. Conversely, the understocking can interfere with the operations and diminish the sales. Companies can have a balance by deciding the right level of reorder and safety stock.

3. To Minimize Inventory Costs

The other notable goal is to minimize different inventory expenses. These are the ordering costs, carrying costs, storage costs and handling costs. Good inventory management approaches contribute towards curbing unwarranted buying and wastage. Reduction of inventory costs directly enhances profit margins of the company.

4. To Improve Liquidity and Cash Flow

Inventory management is important in ensuring that the organization maintains liquidity. Stocking up is also wasteful of working capital. Companies will be able to turn stock into cash faster by making sure that their inventory turns quicker. Better cash flow will enable it to fulfill short-term financial commitments without any problem.

5. To Prevent Losses Due to Damage, Obsolescence, and Theft

Proper inventory management assists in the reduction of losses that occur due to spoilage, deterioration, obsolescence, and pilferage. Inventory records are checked and verified regularly and by stock. Adoption of correct measures to store and handle goods is a measure to guard against damages. This goal is even more urgent in the business related to perishable products. Such losses can be prevented which protects the profits of the company and also minimizes unnecessary expenses. Therefore, inventory management provides asset protection and risks mitigation.

6. To Facilitate Efficient Production Planning

Inventory management facilitates good production planning and scheduling. However, through inventory analysis and demand forecasts, companies are able to schedule procurement and production activities to be efficient. This minimizes emergency buying and last minute modifications of production. There is adequate coordination between purchasing, productions and sales departments. Effective planning reduces the delays as well as resource wastage. Thus, the inventory management improves the coordination of operations.

7. To Enhance Profitability and Financial Performance

The end goal of inventory control is to enhance profit and the financial performance. Efficient inventory turnover decreases the holding costs and maximizes sales revenue. The balanced inventory level will guarantee customer satisfaction and business repeat. Inventory management helps in enhanced ROI. It also increases the essential financial ratios like inventory turnover and gross margin. Inventory management, therefore, is an important aspect in realizing long-term business success.

STATEMENT OF THE PROBLEM

In the current competitive business atmosphere, poor management of inventory creates a number of challenges for the organization, including Palm Era Foods Private Limited. Some of the challenges include overstocking, stockouts, slow-moving inventory, and inaccurate demand forecasting. Overstocking inventory results in increased holding costs, spoilage, and tied up working capital, while stockouts result in production stoppages and delayed delivery of orders. Poor management of inventory directly affects the financial performance of the organization by decreasing profitability, affecting liquidity, and decreasing return on investment. It also affects customer satisfaction due to delayed or non-availability of products, ultimately damaging the market reputation of the company.

SIGNIFICANCE OF THE STUDY

This research highlights the importance of inventory management in ensuring efficient use of resources within an organization. It explains how proper inventory control helps maintain optimal stock levels and reduces holding costs. The study examines the impact of inventory on liquidity and the ability to meet short-term obligations. It also explores the relationship between inventory management, working capital, and financial performance. Overall, the research supports better decision-making to improve cost efficiency, financial stability, and sustainable growth.

OBJECTIVES OF THE STUDY

Primary objective

- To study on effectiveness of inventory management in Palm Era Foods Private Limited, Thoothukkudi

Secondary objectives

- To evaluate inventory efficiency in the company
- To assess the impact of inventory levels on company liquidity
- To analyze the profitability associated with inventory management
- To understand the relationship between inventory growth and operational performance
- To identify the influence of working capital and debt on inventory management

SCOPE OF THE STUDY

The study focuses on evaluating the effectiveness of inventory management and its impact on the financial performance of Palm Era Foods Private Limited, Thoothukkudi. It examines key variables such as inventory efficiency, turnover ratio, liquidity, profitability, working capital, and debt management. The research is limited to the firm's operations in Thoothukkudi and involves employees from inventory and finance departments. It aims to identify the strengths and weaknesses in existing inventory management practices. The study also seeks to analyze the relationship between inventory control and financial stability while providing suggestions for improvement.

LIMITATION OF THE STUDY

- The study is confined to Palm Era Foods Private Limited, Thoothukkudi, so findings cannot be generalized to other organizations.
- The analysis depends on company-provided financial and inventory data, which may contain errors or omissions.
- Only selected variables like inventory efficiency, liquidity, profitability, working capital, and debt are considered.
- The study covers a short time period, limiting insights into long-term trends and seasonal variations.
- Data collected from selected employees and questionnaires may include personal bias and may not fully represent overall practices.

REVIEW OF LITERATURE

(**Ngbomowa et al., 2023**) This research work assessed the relationship between inventory management variables (inventory turnover and inventory conversion period) and financial performance in 10 listed industrial goods companies in Nigeria, using an ex-post facto design with secondary data from 2018-2020. The aim was to determine the impact of inventory management on net profit margin and return on assets, and results revealed a positive relationship between both inventory turnover and conversion period and financial performance. The scope was limited to industrial goods industries, and the study recommended that optimal levels of inventory should be closely monitored and maintained to ensure continued profitability.

(**Matara, 2024**) examined the practices of inventory management and their effects on the financial performance of plastic manufacturing firms in Nairobi County through a quantitative research approach and purposive sampling of firms engaged in 2024. The main aim was to assess the relationship between lean principles, EOQ, and JIT practices and profitability and cost-effectiveness within the local manufacturing context. The findings indicated a positive relationship between EOQ and JIT practices and profitability, although there were difficulties in the application of lean principles, but financial gains were realized through effective inventory management. The study suggested improved

demand forecasting, technology, and cooperation with suppliers to enhance practices. Effective inventory management systems improve cost-effectiveness and financial performance despite the difficulties in implementation.

(Kumar & Santhosh, 2024) performed an extensive literature review on the effects of inventory management practices on business financial performance, with a broad industrial range, to demonstrate the influence of contemporary inventory management practices such as JIT, automated tracking, and forecasting on cost savings and profitability. The study revealed that there is a significant body of evidence to support the view that optimal inventory management practices can help minimize stockouts, reduce costs, and enhance profit margins. The study recommended the use of technology in inventory management and balanced demand forecasting to achieve long-term financial benefits. The study conclusion highlighted that optimal inventory management practices can help enhance financial performance.

(Issah et al., 2025) examined the effects of inventory management practices on the efficiency of the supply chain and, by extension, financial performance. The study used a quantitative research approach with secondary data. The study used purposive sampling of companies that have adopted contemporary inventory practices. The study aimed to determine the effects of inventory practices such as Just-in-Time, EOQ, and technology readiness on supply chain performance, which has a direct bearing on financial performance. The study found that better inventory practices increase efficiency and lower costs, which has a direct implication on financial sustainability. The study recommended the adoption of technology to improve the processing of inventory and the responsiveness of the supply chain.

RESEARCH GAP

Existing research on inventory management mainly focuses on areas like turnover, stock control, and their impact on profitability and efficiency. However, limited studies examine the combined effect of inventory on multiple financial aspects such as liquidity, profitability, and operational performance. There is also a lack of multi-year analysis addressing both short-term and long-term financial impacts. Key factors like debt-equity ratio, inventory growth trends, and comprehensive financial ratios are often overlooked. This study aims to fill the gap by providing an integrated analysis of inventory management and financial performance over time. exhausted by the past studies.

RESEARCH METHODOLOGY

Research is a systematic pursuit of knowledge involving critical investigation, observation, and experimentation to understand a topic.

The research work is carried out at Palm Era Foods Private Limited, Thoothukkudi, which is involved in food processing and trading activities. The scope of the research work is limited to the inventory management practices of the company and their impact on financial performance. Through the analysis of this organization, the research work intends to explore the strengths, weaknesses, and areas for improvement in inventory management practices and their financial implications.

RESEARCH DESIGN

The research work uses an analytical research design, which helps in the systematic analysis of inventory management practices and their impact on financial performance. It helps the researcher to analyze the financial ratios and performance measures to understand the financial efficiency of inventory management practices.

SOURCES OF DATA

The study relies solely on the secondary data. The necessary data was obtained from the annual financial statements of Palm Era Foods Private Limited for a period of five years (2021-2025). The data was obtained from the balance sheets, profit and loss statements, and other official financial statements of the company. The secondary data facilitates the analysis of the financial position, profitability, liquidity, and inventory of the company over the specified period. The adoption of the secondary data facilitates the study in terms of reliability, cost-effectiveness, and time efficiency.

RESEARCH APPROACH

The research approach selected by the researcher is quantitative data.

RESEARCH INSTRUMENT

The research instrument used by the researcher is annual reports of the company Palm Era Foods Private Limited, Thoothukkudi.

SAMPLE UNIT & SAMPLING TECHNIQUE

Sampling unit of this study is Palm Era Foods Private Limited, Thoothukkudi.

The population of the study is the financial statements of Palm Era Foods Private Limited for the years 2021 to 2025. The data was selected through convenience sampling, where the researcher made use of the convenient financial statements that were relevant to the study. The financial year is one sampling unit. The study will make use of the complete and accurate financial data that represents the inventory management of the company.

SAMPLE SIZE

The sample consists of five years of financial statements (2021–2025). The analysis includes balance sheets and income statements for the selected period. Studying five consecutive years helps in identifying short-term variations and long-term trends in inventory management and financial performance.

ANALYTICAL TOOLS

The following analytical tools and financial ratios are employed in the study to determine the impact of inventory management on financial performance:

Ratio Analysis

Ratio analysis is used to evaluate liquidity, profitability, efficiency, and financial stability. The following ratios are included in the study:

- Inventory Turnover Ratio
- Days Inventory Outstanding
- Inventory-to-Sales Ratio
- Gross Margin Return on Inventory Investment (GMROII)
- Inventory Growth Rate
- Trend Percentage of Inventories
- Current Ratio
- Quick Ratio
- Gross Profit Ratio
- Net Profit Ratio
- Operating Profit Margin
- Working Capital Turnover Ratio
- Debt-to-Equity Ratio

Comparative Balance Sheet

A comparative balance sheet is a financial document that displays the assets, liabilities, and shareholders' equity of a business for two or more consecutive accounting periods simultaneously. It assists in determining the variations in the financial position of a business over a period of time by indicating the absolute rise or fall in each item. The significance of a comparative balance sheet is based on its capacity to indicate the patterns of growth, financial stability, and composition of assets and liabilities. It helps the management of a business in making observations and judgments about its performance and the effects of financial decisions.

Common Size Balance Sheet

A balance sheet where each item is shown as a percentage of total assets is called a common size balance sheet. It is a financial statement where each item is shown as a percentage of total assets. This approach helps in comparing companies of different sizes or comparing the same company over different periods. The significance of the common size balance sheet is that it assists in making an analysis of the relative importance of assets, liabilities, and equity in the overall financial structure.

ANALYSIS AND INTERPRETATIONS

WORKING CAPITAL TURNOVER RATIO

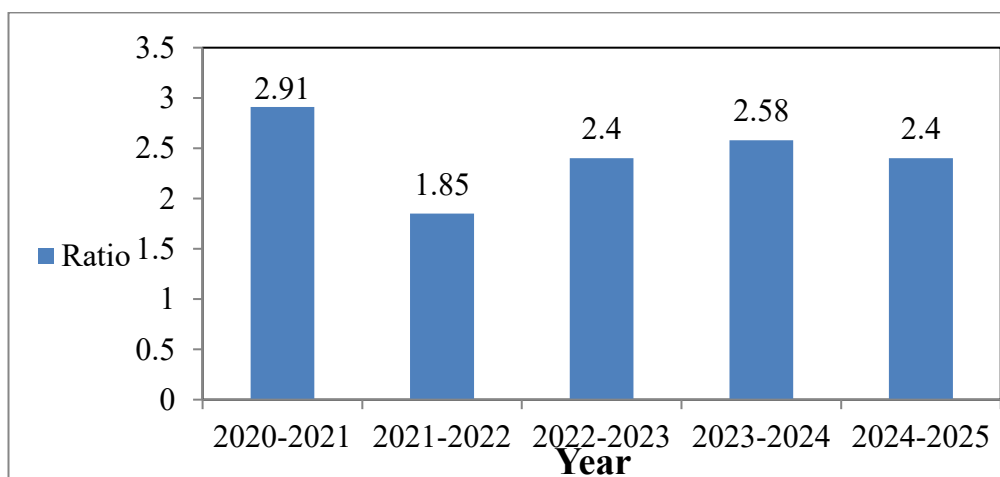
Working capital ratio measures the effective utilization of working capital. It also measures the smooth running of business or otherwise.

$$\text{Working Capital Turnover Ratio} = \frac{\text{Net sales}}{\text{Net working capital}} \times 100$$

Working Capital Turnover Ratio			
Year	Sales	Net Working Capital	Ratio
2020-21	242.29	83.16	2.91
2021-22	215.53	116.23	1.85
2022-23	337.07	140.68	2.40
2023-24	445.65	172.77	2.58
2024-25	536.05	223.75	2.40

Interpretation: The above table shows that the working capital turnover ratio is 2.91 in the year of 2020-21. It has decreased to 1.85 in the year of 2021-22. It has increased to 2.40 and 2.58 in the year of 2022-23 and 2023-24. It has decreased to 2.40 in the year of 2024-25 respectively.

WORKING CAPITAL TURNOVER RATION



DEBT-TO-EQUITY RATIO

The debt-to-equity ratio is a financial metric that compares a company's total debt to its shareholders' equity, indicating the proportion of financing that comes from creditors versus owners. It reflects the company's financial leverage and is used to assess its financial stability and risk. A higher ratio suggests greater reliance on debt for funding operations.

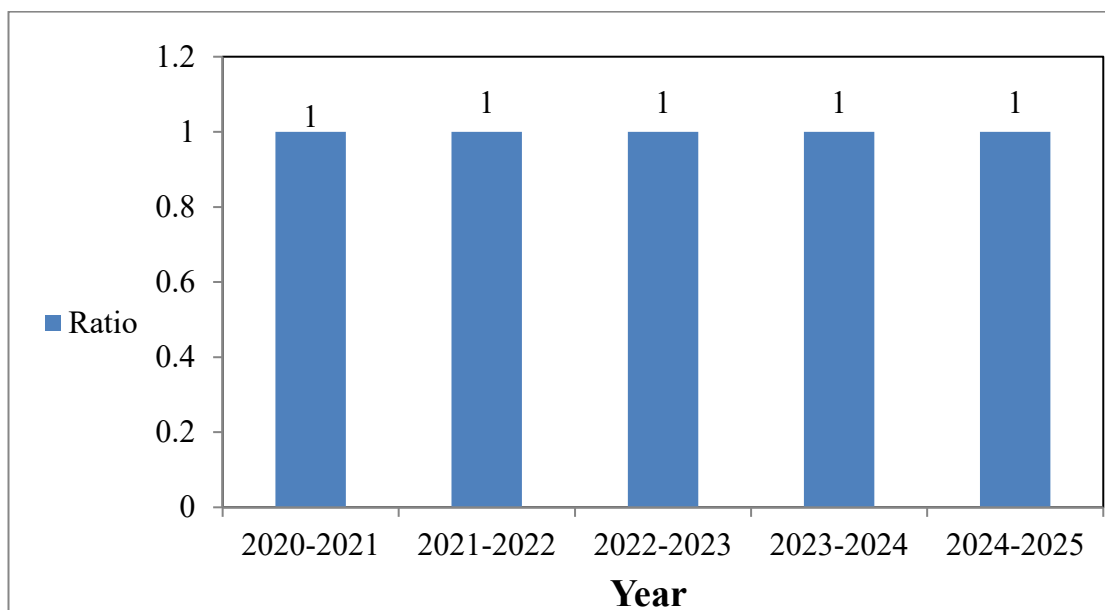
$$\text{Debt-to-Equity Ratio} = \frac{\text{Total liabilities}}{\text{Total equity}}$$

Debt-to-Equity Ratio			
Year	Total liabilities	Total Equity	Ratio
2020-21	228.62	228.62	1
2021-22	237.13	237.13	1
2022-23	259.96	259.96	1
2023-24	302.35	302.35	1
2024-25	345.31	345.31	1

Interpretation:

The above table shows that the debt-to-equity ratio is 1 in the years of 2020-21. It is stable in the remaining years i.e., 2021-22, 2022-23, 2023-24 and 2024-25.

DEBT-TO-EQUITY RATION



SUGGESTIONS

- Improve inventory turnover by adopting effective stock management and maintaining optimal inventory levels.
- Reduce days inventory outstanding through better demand forecasting and faster stock movement.

- Minimize holding costs and optimize pricing to enhance return on investment.
- Align inventory levels with actual demand to control excessive inventory growth.
- Maintain proper liquidity by managing current and quick ratios without over-investing in inventory.

CONCLUSION

Inventory management plays a vital role in determining an organization's financial performance by improving liquidity, profitability, and efficient use of working capital. Proper control of inventory turnover, holding period, and demand matching helps reduce costs and operational inefficiencies. Inventory decisions directly influence cost structure, cash flow, and return on investment, thereby affecting overall financial stability. Maintaining an optimal balance between inventory and financial resources is essential for sustainable growth. Continuous monitoring, improved forecasting, and strong inventory policies are key to achieving long-term organizational success.

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