

INVENTORY MANAGEMENT OF SELECTED PAINT COMPANIES OF INDIA

Kanisha Ayer*

ABSTRACT

Inventories are stock of products of a company. Inventory constitute the most important part of current assets. The various forms of inventory are raw materials, work-in-progress and finished goods. If a firm maintain high level of inventory than funds of company are tying up and if firm maintain low level of inventory than it disturbs the production and sales, so management of inventory is very important for success of business. The main objective of inventory management is to maintain sufficient level of inventory and to minimize carrying cost and time. In present study an attempt is made to examine inventory management in selected paint companies of India for the period of five years 2016-17 to 2020-21. For data analysis and interpretation various techniques like trend analysis, ratio analysis, charts, graphs, ANOVA test are used by the researcher.

KEYWORDS: *Inventory, Inventory Management, Inventory Turnover Ratio, Inventory Control.*

Introduction

Inventory management is a process of managing optimum level of inventory. The optimum level of inventory means level between maximum and minimum inventory. For smooth production and sales, it is necessary to maintain adequate level of inventories. The three motives for holding inventories are transactions motive, precautionary motive and speculative motive. The transactions motive points out the need to maintain inventories to facilitate smooth production and sales. Precautionary motive involves holding of inventories to protect against risk of changes in demand and supply of product. Speculative motive gives importance to take advantage of fluctuations in prices. Before making investment in inventories a company has to analyze how much profit earn from it. So, firm has to make effective inventory policy to maximize firm's value. For managing inventory an effective inventory control system is necessary. There are various types of inventory control system like ABC analysis, VED analysis, Just in Time and outsourcing. According to size and type of inventory company has to select the inventory control system. Nowadays most of companies are using computerized inventory control system because it helps to track easily large items of inventories. It is an automatic system of counting inventories, recording withdrawals and revising the balance. The present study focused on inventory management in paint companies of India. Paint Company is a manufacturing company having high level of three types of inventories i.e. raw materials, work-in progress and finished goods. The Indian paint market is divided into two parts organized market and unorganized market. There are 12 companies in organized market and 2000 companies in unorganized market. So, it is necessary to know inventory management system in paint companies.

Review of Literature

Sohani and Pagore (2014) considered that effective inventory management in supply chain is key factor of success. A company would ideally want to have enough inventories to satisfy the demand of its customers. The investment in inventories for a small business takes a big percentage of the total

* Research scholar, P.G. Department of Business Studies, Sardar Patel University, Vallabh Vidyanagar, Gujarat, India.

budget. The results of the study showed that the flow of material was not effectively and efficiently working because of that company facing problems like shortage of material and improper dispatch of material. This is because company was not following any inventory management system.

Shafi (2014) opined that success and failure of business depends on inventory management performance. Mismanagement of inventory and absence of control system have resulted in disgraceful performance for some of the industries in developing countries. The results of the study showed that each country's textile industry was trying to solve the problem of deciding effective inventory level.

Nazar (2018) attempted study of inventory management in steel industry for four years. The researcher had used primary data and secondary data for the study. Researcher had used various techniques like ABC analysis, VED analysis, economic ordering quantity, safety stock, reorder level, inventory turnover ratio for analysis of data. The results of the study showed that inventory turnover ratio had declining trend. The study proved that there was significant relationship between return on assets and inventory days.

Objectives of the Study

The following are the objectives of the study:

- To examine size of inventories of selected paint companies of India.
- To study inventory management of selected paint companies of India.
- To study inventory turnover ratio of selected paint companies of India.

Research Methodology

The researcher has used convenient sampling method and selected four paint companies of India namely Asian Paints Ltd, Berger Paints Ltd, Kansai Nerolac Paints Ltd and Shalimar Paints Ltd for the period of five years 2016-17 to 2020-21. The data used in this study are secondary data collected from annual reports of the companies. The researcher has used various techniques like trend analysis, ratio analysis, percentage, charts, graphs, and ANOVA test for analysis of data.

Hypothesis of the Study

- H₀:** There is no significant relationship between inventories and current assets of selected paint companies of India.
- H₁:** There is significant relationship between inventories and current assets of selected paint companies of India.
- H₀:** There is no significant difference between inventory turnover ratios of selected paint companies of India.
- H₁:** There is significant difference between inventory turnover ratios of selected paint companies of India.

Data Analysis and Interpretation

Table 1: Size of Inventory of Selected Paint Companies of India

(Rs. in crore)

Company/Year	2016-17	2017-18	2018-19	2019-20	2020-21
Asian	2197.09	2178.43	2585.10	2827.17	3124.61
Berger	894.30	939.36	1149.13	1167	1499
Narolac	691.31	805.76	1052.77	930.14	1090.20
Shalimar	925.53	740.06	713.57	866.15	888.07

Source: Annual reports.

From the above table we can see that size of inventories of Asian Paint was highest during the period of study. The size of inventories of Berger paint was increasing during the period of the study. Narolac paint had lowest inventory Rs. 691.31 during the period of the study.

Table 2: Trend Analysis of Inventories of Selected Paint Companies of India

Company/Year	2016-17	2017-18	2018-19	2019-20	2020-21
Asian	100	101	117.66	128.67	142.19
Berger	100	105.04	128.49	130.64	167.67
Narolac	100	116.56	152.29	134.55	157.70
Shalimar	100	80	77	93.62	96

Trend analysis shows changes in percentage during the period of study. In the above table 2016-17 was taken as base year. The trend analysis of Asian paint, Berger paint and Shalimar paint showed increasing trend during the period of study. Narolac paint had fluctuating trend during the period of study.

Table 3: Inventory to Current Assets Ratio of Selected Paint Companies of India

Company/Year	2016-17	2017-18	2018-19	2019-20	2020-21
Asian	0.40	0.40	0.43	0.49	0.31
Berger	0.48	0.45	0.50	0.53	0.49
Narolac	0.29	0.32	0.49	0.42	0.38
Shalimar	0.32	0.31	0.25	0.45	0.46

Source: Annual reports.

Inventory to current assets ratio shows portion of current assets tied up in inventories. The lower ratio is better for company. The ratio of Shalimar paint was 0.25 lowest in the year 2018-19. The ratio of Berger paint was 0.53 highest in the year 2019-20.

ANOVA Test

Source of Variation	SS	df	MS	F	P- value	F crit
Between groups	0.050055	3	0.016685	3.337	0.04	3.23887152
Within groups	0.08	16	0.005			
Total	0.130055	19				

In the above table the results of ANOVA test showed p-value $0.04 < 0.05$ so null hypothesis is rejected it means that there is no significant relationship between inventory and current assets of paint companies.

Table 4: Inventory Turnover Ratio of Selected Paint Companies of India

Company/Year	2016-17	2017-18	2018-19	2019-20	2020-21
Asian	3.57	3.47	3.89	3.50	3.32
Berger	2.98	3.14	3.23	2.91	2.47
Narolac	3.58	3.70	3.50	3.16	2.82
Shalimar	2.47	2.54	2.97	2.89	2.49

Source: Annual reports.

Inventory turnover ratio shows how fast firm sells its inventory. Higher inventory ratio means strong sales and lower ratio means weak sales or low demand of product. The inventory turnover ratio of Asian paint was 3.32, Berger paint was 2.47. Narolac paint was 2.82 and Shalimar paint was 2.49 in the year 2020-21.

ANOVA Test

Source of variation	SS	df	MS	F	P- value	F crit
Between groups	2.34652	3	0.7821733	9.87218	0.00	3.23887152
Within groups	1.26768	16	0.07923			
Total	3.6142	19				

In the above table the results of ANOVA test showed p-value $0 < 0.05$ so null hypothesis is rejected it means that there is no significant difference between inventory turnover ratios of selected paint companies.

Findings and Suggestions

- The size of inventories of Asian paints was Rs. 3124.61 highest as compare to other three companies in the year 2020-21 so company should use effective inventory management system, so investment in inventories can be reduced.
- In trend analysis 2016-17 was taken as base year. The trend analysis of Shalimar paints was lowest as compare to other three companies
- The inventory to current assets ratio of Asian paints was 0.31 in the year 2020-21 it means investment in inventory was 31% of current assets, so it was satisfactory. Berger paints and Shalimar paints investment in inventory was 49% and 46% in the year 2020-21, so both companies should try to reduce their investment in inventories because funds of company blocked in inventory.

- The inventory turnover ratio of all companies was fluctuating during the period of study. The company should use better marketing strategies and increase their sales. A company should give more attention on top selling items.

Conclusion

Inventory is a raw material, work-in- progress, finished goods, components, spare parts of the company. Inventory is an important component of current assets. Inventory management helps company to manage their inventory efficiently and lower the risk of blockage of funds.

References

1. Khan A.A. (1990), Working Capital Analysis, Print Well Publishers, Jaipur.
2. Kulkarni P.V (1990), Financial Management, Himalaya Publishing House, New Delhi.
3. Maheshwari S.N. (2010), Management Accounting and Financial Control, S. Chand and Sons, New Delhi.
4. Khera B.D. (1997), Inventory Control, National Productivity Council, New Delhi.
5. Nazar S. (2018), A Study on Inventory Management System- Case Study, Journal of Advance Research in Dynamical and Control Systems, vol.10, issue-10.
6. Shafi M. (2014), Management of Inventories in Textile Industry: A Cross Country Research Review, Singaporean Journal of Business Economics and Management Studies, vol.2, issue-7.
7. Sohani N. and Pagore A. (2014), Study and Analysis of Inventory Management Practices in Small Scale Industry, Journal of Emerging Technologies and Innovative Research, vol.1.
8. <https://www.asianpaints.com>
9. <https://www.bergerpaints.com>
10. <https://www.nerolac.com>
11. <https://www.shalimarpaints.co>

