A STUDY ON INVENTORY MANAGEMENT OF SELECTED CEMENT COMPANY

GUNDA MALLESHAM
Roll No: 17WE1E0096
Unity PG College

Dr. M S Saritha
Principal
Unity PG College
principalupg@gmail.com

Abstract

Inventory management plays a crucial role in manufacturing organizations. The efficiency of inventory management for the selected cement company UltraTech had been analyzed by using liquidity ratios like inventory turnover ratio, current ratio and quick ratio. It is found from the results of this study that UltraTech financial performance is excellent. This study had been conducted for academic purpose to under the inventory management from a real time organization.

Keywords: *Inventory management, stock control, optimal stock, inventory case, warehousing.*

Introduction

Inventory includes an organizations raw materials, work in process, supplies used in operations and finished goods. From the viewpoint of systems approach inventory system requires the collection and processing the huge data for decision making. From the perspective of financial management inventory management can be stated as idle resource of any kind that has potential economic value and considered locked up capital (Saxena, 2009). The primary purpose of inventory is to serve as a buffer between supply and demand processes. Therefore, understanding the demand process is critical to both building an appropriate supply process and managing inventory (Waller et al, 2008). The inventory management is part of operations management and at the broad level it belongs to supply chain management in organizations (Stevenson, 2007).

Objectives of the study

1. To described about importance of inventory management.
2. To know the inventory practices in selected company.
3. To know the association between inventory management and working capital.

Review of Literature

Jansson and Mattsson (2008) had opined that MRP and kanban are perceived to result in better general performance compared to reorder point and fixed order interval methods. This is interesting as MRP is more dependent on the quality of the planning information and the ERP support than the other methods. Devine et al (2010) had explained inventory management practice in health care sector and mentioned that International Forum represents an effort to get a snap shot of inventory management practices around the world, and to understand the range of different products provided for patients. The inventory management is about maintaining optimal stock for providing products at the right time based on customers' orders. In inventory management the adoption of best practices and in relevant investments in technology and equipment peculiar to warehousing (Gallmann and Belvedere, 2011).

Elmagraby and Kerkinocal (2003) has given three factors for dynamic pricing based on inventory management. Three factors contributed to this phenomenon: (1) the increased

availability of demand data, (2) the ease of changing prices due to new technologies, and (3) the availability of decision-support tools for analyzing demand data and for dynamic pricing. The ability to collect detailed information about customers' purchasing behavior allows online sellers not only to better understand the demand, but also to customize the purchasing experience for each individual buyer. In particular, the seller can customize the online store (the Web pages), which could result in a unique shopping environment with a different assortment of products and prices for each customer. Cachon and Fisher (2000) had explained about inventory management from the perspective of shared information in the supply chain management process.

Demeter and Matyusz (2011) had observed significant relationship between lean management (LM) practices and inventory turnover. Lean companies keep fewer inventories of any type. In addition, LM practices were mostly applied in environments described in lean theory. Concerning contingency factors, the different types of inventories are sensitive to different contingency factors. Rajeev (2008) had found several major problems in the context of inventory management (IM) in machine tool enterprises including the use of rule-of-thumb for IM, a low importance given to forecasting, random ordering of materials, low levels of training and development, and low computer use as well as a low importance given to purchasing and variable lead-time.

Research Methodology

Secondary data had been used for this research study. The ratios of the selected company UltraTech had been collected from moneycontrol.com. The study period is five years from 2015 to 2019. The three selected ratios considered for this research work are inventory turnover ratio, current ratio and quick ratio. The trend of inventory turnover ratio and current ratio had been analyzed by using graphs. The relationship between the three selected ration under the category of liquidity ratios are tested by using correlation analysis. The statistical tests had been conducted by using SPSS software version 20.0.

Data Analysis

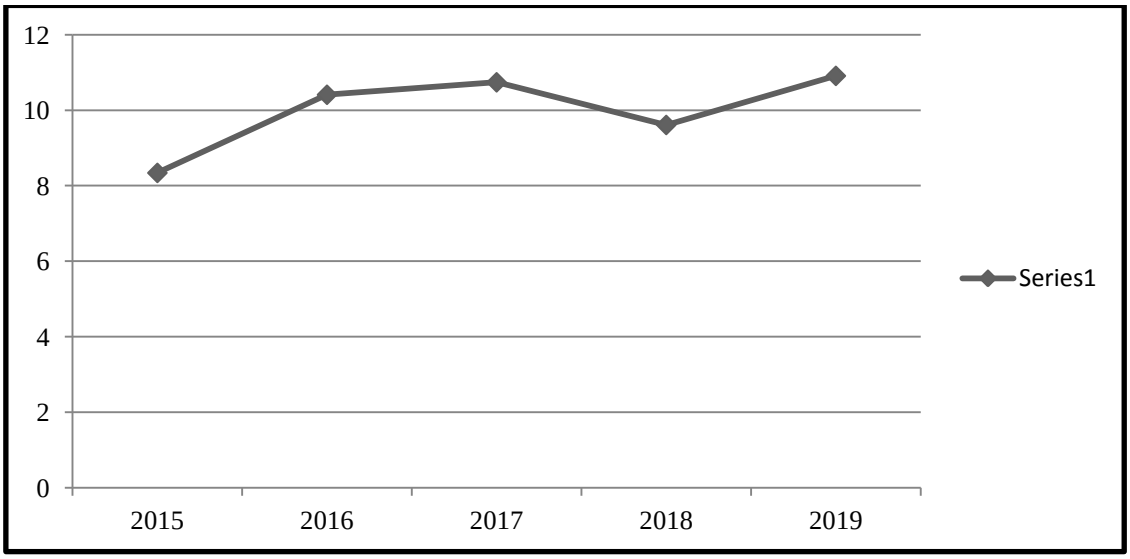
The data for the selected five of UltraTech Company had been compiled in Table 1. The highest inventory ratio is observed in the year 2017. The current ratio with its value as 1.55 is also high in the study period in 2017. From the table 1 it is also observed that in the year 2017 the quick ratio is also high with its value as 1.27. The inventory turnover ratio is low in the year 2015 with its value as 8.34. The current ratio is low in the year 2016 with its value 0.86 and in the year 2015 the quick ratio is low with its value 0.59. The trend of inventory turnover cab be seen in Figure 1. The trend of current ration can be found in Figure 2. It is observed there is fluctuation in inventory turnover ratio during the study period.

Table 1: Inventory and Current Ratio of UltraTech Cement

Ratios	2015	2016	2017	2018	2019
Inventory Turnover Ratio	8.34	10.41	10.74	9.61	10.91
Current Ratio	0.90	0.86	1.55	0.96	0.97
Quick Ratio	0.59	0.66	1.27	0.68	0.69

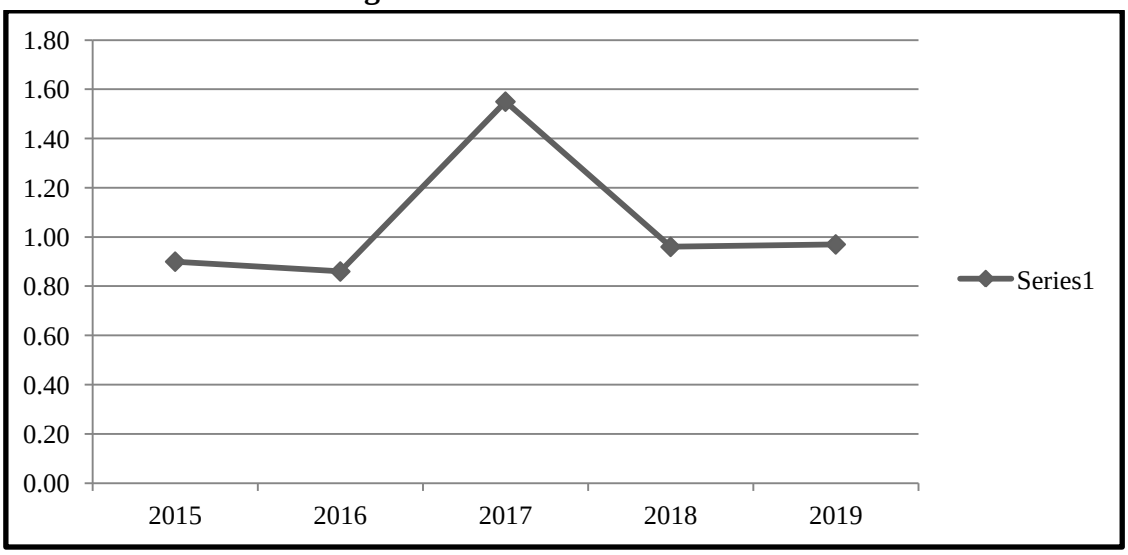
(Source: Compiled from secondary data available at https://www.moneycontrol.com/financials/ultratechcement/ratiosVI/UTC01?classic=true)

Figure 1: Trend of Inventory Ratio



(Source: Developed by the researcher)

Figure 2: Trend of Current Ratio



(Source: Developed by the researcher)

H1: There is correlation between inventory turnover ratio and current ratio in the selected cement company.

Result: From Table 2 it is noticed that p-value between inventory turnover ratio and current ratio is 0.482 and it is more than 0.05. Therefore there is no correlation between inventory turnover ratio and current ratio. Hence H1 is rejected.

Table 2: Correlations

		Inventory Turnover Ratio	Current Ratio
Inventory Turnover Ratio	Pearson Correlation	1	0.420
	Sig. (2-tailed)		0.482
	N	5	5

Current Ratio	Pearson Correlation	0.420	1
	Sig. (2-tailed)	0.482	
	N	5	5

(Source: Output from SPSS)

Table 3: Correlations

		Inventory Turnover Ratio	Quick Ratio
Inventory Turnover Ratio	Pearson Correlation	1	0.500
	Sig. (2-tailed)		0.391
	N	5	5
Quick Ratio	Pearson Correlation	0.500	1
	Sig. (2-tailed)	0.391	
	N	5	5

(Source: Output from SPSS)

H2: There is correlation between inventory turnover ratio and quick ratio in the selected cement company.

Result: H2 is rejected because the p-value between inventory turnover ratio and quick ratio is 0.391 which is more than 0.05. Hence there is no significant relationship between inventory turnover ratio and quick ratio.

Discussion and Conclusion

UltraTech is maintaining healthy financial position because its inventory ratio is always positive and it had increased during the study. Irrespective of market conditions the company is able to achieve its organizational goals. The inventory turnover ratio is high in the year 2018 when compared to 2015. The liquidity position of the company is excellent because the current ratio and quick ratio are positive and they have consistently grown in the study period. The compound annual growth rate (CAGR) of the company for turnover ratio, current ratio and quick ratio are 6.95%, 1.89% and 3.99% respectively during the study period from 2015 to 2019. It is observed that the company performance is excellent it the cement industry.

Suggestions

A firm ignoring the management of inventories will be jeopardizing its long run profitability and may fail finally. The reduction in 'excessive' inventories carries a favorable impact on a company's profitability. The effective management of logistics and implementation of latest technology like Just-in Time (JIT) helps organization to minimize inventory costs. In the era of digitalization it is better to implement process of inventory management through artificial intelligence techniques. Future researcher can analyze the relationship between inventory management and return on investments and return on assets. Inventory management plays an important role in every company as any ineffective inventory

system will result in loss of customers and sales. An effective inventory management is able to generate more sales for the company which directly affects the performance of the company. Therefore it requires a systematic inventory management which is managed by a group of employees who are experts in this area.

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