



## REVIEW OF RESEARCH

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### INVENTORY CONTROL FUNCTION IS AN IMPORTANT TOOL OF SELECTED CO-OPERATIVE SPINNING MILLS IN KOLHAPUR DISTRICT

**Mrs. S. S. Kadam**

Assistant Professor, D. R. K. College of Commerce, Kolhapur.

#### ABSTRACT

*In any organization the inventory of materials plays vital role in working capital management. Inventories are stock of the product a company is manufacturing for sale and components that make a product. Inventory includes stock of raw materials, work in progress, finished goods and stores and spares. These inventories are very important in spinning mills. Inventories are an integral part of working capital and it requires a considerable investment. So, it is necessary to have control the investment in inventories. Inventory control is to obtain the maximum inventory turnover with sufficient stock to meet all requirements. Inventory turnover ratio indicates the efficiency of a firm's inventory management. This ratio gives the rate at which stock are converted into sales and then into cash. Inventory control is useful for the eliminates over stocking and understocking of inventories and maintain the optimum inventory as well as the constant supply of goods to customers to maintain sufficient stock of finished goods. Hence, inventory control is necessary to maintain inventories at optimum level. Therefore to reduce the investment in inventory and to increase the profitability as well as liquidity it is very important. Hence, co-operative spinning mill to give more attention on proper inventory control and maintain optimum level of inventory and to increase the yarn production is very significant so, inventory control is a very important. This paper will discuss the inventory turnover ratio and total inventory to current assets ratio. These techniques are useful to control the investment in inventory.*



**KEY WORDS:** *Inventory control, Investment, Profitability, Liquidity, Optimum, Production, Significant.*

#### INTRODUCTION :

Inventory represents the major portion of the total current assets of most of the business enterprises. So, it is very important to manage inventory efficiently. The term inventory refers to the stockpile of the product of firm is offering for sale and the components that make up the products. Inventory is an essential part of an organization. Every manufacturing organization is may be big or small has to maintain some inventory. Inventories are held in stock for variety of reasons. Raw material are held to achieve economy and its purchases in bulk quantity and to provide against seasonal fluctuations in supply, work-in-progress is held to avoid interruptions in production, finished goods are held to provide off shelf deliveries. Inventories constitute the most significant part of current assets for a large majority of companies in India. So, success or failure of a business depends upon its inventory management performance. Hence,

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proper management and control of inventory not only solves the problems of liquidity but also increase profitability.

Textile Industry contributes 4% GDP, 9% excise collection, 18% of employment in industrial sector and 16% share in the country's export. The spinning industry contributes around 25% share in the world trade of cotton yarn and it is the largest exporter of yarn in the international market. India contributes for 12% of the world's production of textile fibers and yarn. Indian textile industry is second largest after China, in terms of spindleage and has share 23% of the world's spindle capacity and 6% of global rotor capacity. So, it is important to increase cotton yarn production and to contribute increasing world share of cotton yarn it is a very essential. Thus, for making successful business, inventory control is important. Any business organization, through maintaining proper inventory control and management, can achieve the cost and profit benefit.

In the words of C.S.V. Murthy, "Inventory control is a system which ensures the provision of the required quantity of inventories of the right quality and at the right time with a reasonable amount of capital investment. So, the aim of the inventory control is the maximum inventory turnover with sufficient stock to meet all requirements".

### REVIEW OF LITERATURE:

**Agarwal B. D. (1995)**, the researcher has observed that in textile mills, the maintenance of records relating to receipts, issues and balance of various items in the stores and use of operation research techniques for reducing material cost is a tedious job. Therefore, computer may assist the management in maintaining different stock levels and it is useful to advance knowledge of the requirement for purchase of each items and its current stock position. It is automatically helps to control the investment in inventories. Computerized store management keeps not only the proper records of receipts and issue of items but also information with regards to daily stock position, value of stock, reorder quantity, reorder level, ABC analysis, inventory turnover ratio, maximum and minimum stock levels etc.. refers to certain key issues regarding the **Gopal K. (1989)**, highlighted the objectives of study are to be maintain the adequate level of inventory in organization. In his opinion the importance of inventory management is to ensure adequate stock of raw materials stores and finished goods. He also feels that lower inventory of raw materials could result in production stoppage. Therefore, emphasizes on the adoption of inventory control techniques like maximum and minimum levels, economic order quantity, fixing the re-order levels and ABC analysis.

**Ashokkumar N. and Monohar V (2010)**, they focused on the every enterprise has to reconcile the conflicting objectives of liquidity and profitability in the inventory management to obtain a higher return on investment and to maximize the value of the company in the market. In order to minimize costs and also to ensure that the capital is not unnecessarily locked up, inventories must be efficiently managed. Hence, inventory control aspect is very important.

**Madhusudhana Rao et. al. (2005)** - Highlights the volume of inventories depends on procurement lead times, the firms purchasing strategies such as taking advantage of price discounts on bulk purchases, geographical location of suppliers, scarcity of raw materials, expected rise in prices, the accuracy of demand forecast, extent of subcontracting and service level of the firm. By formulation of strategic partnership with suppliers, adopting vendor managed inventory strategy.

**Narayanaswamy R. (2011)** - Stated that the first step in proper inventory control and valuation is to determine the physical inventory that belongs to the business. So firm may count inventories either on a periodic basis or track inventories based on purchases and sales in order to determine the quantity. Ones quantity is determined, inventories are then transformed into financial amounts by assigning cost to the physical quantities.

**Vipulesh Shardeo (2015)** - Discussed the Impact of Inventory Management on the financial performance of the firm and analyzed some of the parameters which directly show the impact of inventory management to the financial statement of the firm. Also he discussed different inventory control techniques and their interrelationship with the financial statement of the firm. Inventory management also improves

the level of customer satisfaction. So, a manufacturing firm must install the optimal inventory control techniques or improve their asset turnover ratio, as much as possible. Inventory turnover ratio is correlated with the net profit of the companies.

**Ashokkumar Panigrahi (2013)** - Describes the relationship between inventory management and profitability is investigated for a sample of five top Indian cement companies. In this study to examine the Regression analysis to determine the impact of inventory conversion period over gross operating profit taking current ratio, size of the firm, financial debt ratio as control variables, current ratio and financial debt ratio are the variables which appear in the regression model as control variables.

**Ranjit Appuhami (2008)** - In his study made to investigate the impact of firm's capital expenditure on their working capital management. The study used Net Liquidity balance and working capital requirement as a proxy for working capital measurement and developed multiple regression models. The empirical research found that the firm's capital expenditure has a significant impact on working capital management. The study also found that the firms operating cash flow, which was recognized as a control variable, has a significant relationship with working capital management. The finding enhances the knowledge base of working capital and inventory control efficiently in growing situations associated with capital expenditure.

#### **OBJECTIVES OF THE STUDY:**

- 1) To study the inventory turnover ratio in selected spinning mills.
- 2) To study the total inventory to current assets in selected spinning mills.
- 3) To suggest appropriate suggestions for inventory control in the study organization.

#### **RESEARCH METHODOLOGY:**

The present study is based on secondary data which is collected from various publications, journals, magazines, reference books, internet and annual reports etc.

#### **Sample Design:**

Researcher has selected two co-operative spinning mills in Kolhapur district.

#### **SCOPE OF THE STUDY:**

**Geographical Scope:** The area of present study is restricted in Kolhapur district only. Researcher has considered two co-operative spinning mills in Kolhapur district only.

**Topical Scope:** The topical scope of present study is confined to the A Study on Inventory Control Function is an important tool of selected co-operative spinning mills in Kolhapur district.

**Analytical Scope:** The analytical scope of this study covers the fulfillment of the objectives set out for the study.

#### **INVENTORY TURNOVER RATIO:**

ITR is also known as inventory turnover ratio. It establishes a relationship between sales during the period and the amount of average inventory. Inventory turnover ratio indicates the efficiency of a firm's inventory management. This ratio is useful to show the rate at which stock is converted into sales and then into cash. A low inventory turnover ratio is an indicator of dull business and over investment in inventory. A high inventory turnover indicates efficient management of a firm. In opinion of financial analysts and as per standard norms the optimum inventory turnover ratio is 5 to 9 times. The higher rate of inventory turnover, the larger the amount of profit, the smaller the amount of working capital tied up in inventory.

**Table No. 1: The Inventory Turnover ratio in Selected Spinning Mills**

Years	In Times		
	The Ichalkaranji Co-op. Spinning Mills Ltd.	Indira Gandhi Mahila Soot Girni Ltd.	Average
2008-09	11.04	11.36	11.20
2009-10	12.37	11.83	12.10
2010-11	11.64	3.60	7.62
2011-12	7.27	1.71	4.49
2012-13	11.90	4.58	8.24
2013-14	13.14	8.19	10.67
2014-15	13.27	16.28	14.77
2015-16	13.62	29.14	21.38
<b>Average</b>	<b>11.78</b>	<b>10.84</b>	<b>11.30</b>

Source: Data collected from selected spinning mills.

Table no. 1 shows the calculation of inventory turnover ratio of selected spinning mills. Turnover ratio of The Ichalkaranji Co-op. Spinning Mills Ltd., in the year 2008-09, was 11.04 times, which decreased to 7.27 times in 2011-12 and again increased to 13.62 times in the year 2015-16. Turnover ratio of Indira Gandhi Mahila Soot Girni Ltd., in the year 2008-09, was found 11.36 times and it was found decreased 1.71 times in the year 2011-12 and again it was found increased in the year 2015-16 by 29.14 times. This observations shows Ichalkaranji Co-op. Spinning Mills have the best average of 11.78 times which was greater than average of Indira Gandhi Mahila Soot Girni Ltd. The year wise analysis shows that the average inventory turnover ratio was 11.30 times of the year from 2008-09 to 2015-16. Overall inventory turnover ratio shows wide fluctuations in selected spinning mills.

**Table no. 2: Total Inventory to Current Assets of Selected Spinning Mills**  
In percentage

Years	The Ichalkaranji Co-op. Spinning Mills Ltd.	Indira Gandhi Mah. Soot Girni Ltd.	Average
2008-09	72.37	9.60	40.98
2009-10	64.99	21.16	43.07
2010-11	59.84	85.03	72.43
2011-12	59.37	74.67	67.02
2012-13	52.43	65.07	58.75
2013-14	42.88	41.11	41.99
2014-15	39.93	15.87	27.90
2015-16	42.58	10.57	26.57
<b>Average</b>	<b>54.29</b>	<b>40.38</b>	<b>47.33</b>

The amount of working capital funds invested in inventories could be known by calculating inventories to total current assets. The part of inventory in the total current assets shows how much liquidity of firm is locked up in inventory. The lower percentage of inventory to the current assets, the greater the liquidity of current assets. Thus, the low ratio is better than the high ratio.

Table no. 2 shows the total inventories as a percentage to total current assets of selected spinning mills. It is found that percentages of total inventories to current assets were fluctuated throughout the study period of spinning mills. Ichalkaranji Co-operative spinning mill have 72.37% of current assets invested as

inventory in the year 2008-09, and it reduce the ratio in the year 2014-15 39.93%, where Indira Gandhi Mahila Sahakari Sootgirmi Ltd. shows 9.60% in the year 2008-09 and it was found increased 85.03% in the year 2010-11 it means it increased 11.29% and again it found declined up to 10.57% in the year 2015-16. The overall average inventory was found 47.33%.

It is observed that as a percentage of total inventories to current assets is fluctuated in the study period. The average percentage of total inventories to current assets of Ichalkaranji Co-operative Spinning mill is 54.29% where Indira Gandhi Mahila Soot Girni have 40.38%. It showed that the investment in inventory of two selected mills was inconsistent.

#### **FINDINGS:**

- Selected spinning mill shows the inventory turnover ratio is fluctuated. On the basis of analysis it is clear that none of the mills has stable policy of inventory stocking. Indira Gandhi Mahila Soot Girani Ltd. shows the low ratio of 1.71 times in the year 2011-12, was due to the over stocking of inventory and highest inventory ratio was 29.14% in the year 2015-16. Ichalkaranji Co-operative Spinning Mills Ltd. shows the low ratio 7.27 times in the year 2011-12 and highest inventory turnover shows 13.62 times in the year 2015-16. Year wise selected spinning mills shows overall average of inventory turnover ratio was 11.30 times it means selected spinning mills converting its inventory into sales quickly.
- The overall average percentage of inventory to current assets of selected spinning mills 47.33% during the study period. Indira Gandhi Mahila Soot Girani Ltd. shows the average percentage 40.38% which was quite consistent comparatively Ichalkaranji Co-op. Spinning Mill Ltd. reported the average percentage of inventory to current assets was 54.29% which was inconsistent.

#### **SUGGESTION:**

- To take the review of demand and supply of yarn production and to study the internal and external policies of spinning mills as well as to study the government policies then prepare the purchase budget and master budget. It is beneficial to control the fluctuations in size of inventories.
- It is suggested that such an over stocking might have improved their liquidity position but the consequential declined in the inventory turnover ratio So, to give the proper control overstocking and under stocking of inventory. Government also gives the control on fluctuation the rate of cotton and yarn.
- To prepare the various planning and policies, about the purchase and sales of inventories and use just in time method and minimize the inventory holding period.
- Inventory represents second largest component of current assets in spinning mills. Highest level of average percentage of inventory to current assets indicates more liquidity locked up in inventory. So it is essential to fixing the stock levels for different categories of items by taking into account market trends and consumption pattern.

#### **CONCLUSION:**

Effective management of inventory is essential to avoid unnecessary locking up of investment in inventories. In both the selected mills inventory turnover ratio is fluctuated but it shows average inventory turnover ratio is better than standard ratio. It means the mills was converting its inventory into sales quickly. Hence, to high and too low inventory turnover ratio may not be good. So, optimum inventory turnover ratio is useful to earn a reasonable margin of profit. Inventory represents the largest component of current asset in spinning mills. Hence, it is necessary to maintain optimum level of inventories. Effective management of inventory useful to avoid the unnecessary locking up investment in inventories.

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