Inventory Management Practices in Spinning Mills in South India

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ABSTRACT

Inventory management is a system concerned with integration of information, transportation, acquisition, inspection, material handling, warehousing, packaging and control of supplies and ensuring security of inventory. Inventory management aims at discovering and maintaining optimal levels of investment in all types of inventories and maximizing the flow of goods, information and other related resources like people and energy from the point of origin to the point of final consumption. The main objective of this paper is to examine the inventory management practices in spinning mills.

Keywords: Inventory Management, work-in-progress, Acquisition, Investment, etc.

INTRODUCTION:

Inventory accounts for a substantial portion of the capital employed in any organisation. It constitutes stocks of resources held for future production activity or sale. Inventory holdings are often considered as the graveyard of business, as surplus stocks have been a principal cause of business failure. This kind of attitude in the outlook of business towards inventory may be attributed to the increasing size, wide variety and complexity of business enterprises, urgency of modern requirements to cope up with the business world and high idle cost of machines and men. At the same time, “the efficient management and control of inventory not only solves the acute problem of liquidity but also enhances annual profits and causes substantial reduction in the working capital of a firm”. The increasing importance of inventories as a core ingredient in gross working capital obviously calls for maximum efficiency in managing them for the overall efficient management of working capital.

Meaning of Inventory:

The term ‘inventory’ in its broader sense is referred to as any idle resources, provided that such resource has economic value. As per accounting terminology, inventory means “the aggregate of those items of tangible property which – a) are held for sale in the ordinary course of business, b) are in the process of production for such sale, and c) are to be currently consumed in the production of goods or service to be available for sale”. From the definition it is clear that inventories consist of the following types.

i. Raw-materials and bought in components are the stocks of material held prior to their utilization in the production process.

ii. Work-in-progress includes products which are only part way through a manufacturing process. Raw materials, labour, subcontracting and other manufacturing costs all together constitute work-in-progress.

iii. Finished goods are the products which the company sells to its customers.

iv. Spares are the items required to keep plant and machinery in working condition.
In a typical manufacturing concern, in addition to the above, there are other inventories which include supplies, these are the material used in running the plant or employed in producing products. These include miscellaneous consumable stores such as cotton waste, jute twine, oil and greases and other general office supplies, printed forms, journals, ledgers, electric supplies and tools like needles, spanners.

**MOTIVES FOR HOLDING INVENTORY:**
The companies hold inventories keeping in view three general motives.

a. **The transaction Motive:**  
According to this motive, inventories are to be maintained basically for the operational convenience so as to have uninterrupted production-run and sales operations.

b. **The Precautionary Motive**  
Precautionary motive emphasizes that inventories are to be held in order to safeguard from unexpected changes in demand and supply forces and other factors.

c. **The speculative motive**  
This motive implies that inventories are to be held in stock to take advantage of price fluctuations.

**OBJECTIVES OF INVENTORY MANAGEMENT:**
Inventories occupy a predominant position in the total current assets structure which calls for the maximum efficiency in their management for achieving efficient management of working capital. In order to minimize cash requirements which is a component of gross working capital, inventory should be turned over as quickly as possible, avoiding stock-outs that might result in closing down the production line or lead to a loss of sales. The management should try to achieve the financial objective of turning inventory as quickly as possible, and should also aim at ensuring sufficient inventories to satisfy production and sales demands. So inventory management involves accomplishment of two primary objectives.

a) To minimize the possibility of disruption in the production schedule of a firm for want of raw materials, stores and spares and

b) to keep down capital investment in inventories.

**REVIEW OF LITERATURE:**
Singh Pradeep (2008) attempts to evaluate the effect of the size of inventory and the impact on working capital through inventory ratios, working capital ratios, trends, computation of inventory and working capital and liquidity ranking. At the end of the study the researcher observed that the size of the inventory directly affects working capital and its management. Size of the inventory and working capital of Indian Farmers Fertilizer Cooperative Ltd (IFFCO) is properly managed and controlled compared to National Fertilizer Ltd (NFL).

Shrotriya Vikas (2008) discusses some aspects of effective inventory management. Organizations maintain inventories to achieve effectiveness in business operations. Though the quantum of inventories depends on the nature of business, these engage sizable portion of the organization’s total current assets. These two reasons compel the organization to manage inventories effectively and efficiently.

Sieke Margarita Protopappa and Seifert Ralf W. (2010) discuss at length the benefits of equally considering both operational and financial aspects in decision making for the physical and financial supply chain. They develop a mathematical model that determines the optimal purchasing under working capital restrictions and payment delays. They analyze the trade-off between the most commonly used financial and operational measurements, such as service level, return on investment, profit margin and inventory level. Their results demonstrate the significance of payment delays. Increases/decreases in the upstream/downstream payment delays favor the system’s operations by decreasing operational costs. Besides increases in the working capital employed in the system decrease the total operational cost, increase the total financial cost and lower the return on working capital investment.

Tanwar S. K. and Shah C. K. (2012) have made an in-depth study of the inventory management of selected companies in India. In order to project a clear picture of the profitability of the industry as a whole, the analysis of profitability of individual firm would be helpful. In conclusion the author is of the opinion that the profitability analysis today is of paramount significance in the context of overall performance of the business concern. In the analytical frame work 127 constructed for this purpose, the analyst should have both microscopic and macroscopic views of profitability.
STATEMENT OF THE PROBLEM:

Indian spinning industry is one of the oldest and largest segment of the country’s industrial sector and occupies the pride of place in Indian industry. The Indian cotton textile industry provides employment to nearly one million. Besides it provides indirect employment to several million engaged in cotton cultivation and associated functions like ginning and pressing, seed cotton marketing apparel production, internal and external trade in raw cotton, yarn and fabrics, cotton seed oil industry etc. Further, it also serves few industries like those engaged in production of fertilizers, pesticides and other agro-chemicals, dyes and other textile finishing chemicals. It is also a major source of foreign exchequer and has gained a unique status in the international market.

The handlooms and power looms constituting the decentralized sector, on one hand, and private mills, Government managed National Textile Corporation (NTC) mills and the co-operative mills comprising the organized sector, on the other, are the two structural components of Indian cotton textile industry. Keeping in view its contribution to the national economy, the Government has taken the initiative and formulated certain package of measures and policies to boost its growth. Despite several measures taken by the Government, the industry has been suffering from multifarious problems like shortage of raw materials, high production cost, insufficient working capital, mounting sickness, lack of scope for expansion and modernization, declining exports and high levels of taxation.

The profit margin in the textile industry is very low when compared to that of other major industries. The very low level of profit margins and the large inter year variation in the costs of spinning mills, and new challenges to the already strained and inadequate working capital. Inadequate working capital forces the units to default in payment to creditors on schedule, not to purchase in time and purchase in inconvenient lots at a high cost, low inventory turnover, idle machine capacity because of interruptions and like. The aforesaid facts reveal that the Cotton Textile Industry in general and the Spinning mills in particular are under serious financial strain, particularly in the matter of working capital. Efficient management of meager working capital can improve the financial performance. Hence, the present study aim at an in depth study of working capital management practices in the select Spinning mills in South India.

RESEARCH OBJECTIVES:

1. To study the size of inventory in select spinning mills;
2. To examine the adequacy of inventory in select spinning mills;

SCOPE AND COVERAGE:

The total spinning mills working in south India are 481. The listed mills from the sector at 10 percent sample has been drawn for the present study. Following are the 10 select Spinning Mills in South India.

1. Aditya Spinners, Srikalahasti, Andhra Pradesh
2. Kallam Spinning Mills, Guntur, Andhra Pradesh
3. Suryaamba Spinning Mills, Secunderabad, Telangana
4. Suryalata Spinning Mills, Secunderabad, Telangana
5. Suryavanshi Spinning Mills, Secunderabad, Telangana
6. Amarjothi Spinning Mills, Tiruppur, Tamilnadu
7. Gem Spinners India, Chennai, Tamilnadu
8. Kandagiri Spinning Mills, Salem, Tamilnadu
9. Sambandam Spinning Mills, Salem, Tamilnadu
10. Pasari Spinning Mills, Karnataka

DATA BASE:

The data have been collected from both primary and secondary sources. The primary data have been drawn from the sample units with the help of a pre-tested schedule administered to the management of the spinning mills to elicit first hand information.

Secondary data include published reports viz, Reserve Bank of India Bulletins, Bombay; Financial performance of companies, Industrial Credit and Investment Corporation of India, Bombay; Reports of Andhra Pradesh Industrial Development Corporation, Hyderabad; Hand-book of Statistics on Cotton Textile Industry, The Indian Cotton Mills Federation, Bombay; Reports of The South India Textile Research Association, (SITRA) Coimbatore.

In addition, the other major sources of data are: Institute for Financial Management and Research (IFMR), Madras and Institute of Public Enterprises (IPE), Hyderabad. Further, various publications, journals in the
sphere of industry and finance were extensively used. Published financial statements and annual reports of the sample spinning mills were collected to analyse the data. In addition to these, several structured and unstructured interviews have also been conducted with experts on the subject and persons who are connected directly or indirectly with the functioning of spinning mills in South India.

MEASURING THE LEVEL OF INVESTMENT IN INVENTORY:

Virtually all manufacturing firms must carry some stocks of raw-materials for efficient processing, in-transit handling and uninterrupted production process. The management has to decide the level of investment in inventory without affecting its production and sales functions with possible minimum costs. An investigation into the level of investment in inventory, its distribution of investment among the constituents of inventory and adequacy are taken up.

SIZE OF INVENTORY:

The size of inventories in the selected mills during the period 2008-09 to 2017-18. The size of inventory increased from 13.07 crores in 2008-09 to 27.23 crores registering double increase during the period under study. During the period 2010-11 the size of investment in inventory showed a remarkable increase in an average. This may be due to boom period prevailing during the years mentioned. It is conspicuous to note that the mean value of inventory is higher (55.91 per cent) in Kallam, whereas Pasari recorded a minimum (0.75 per cent).

Heavy amount of investment is noticed during the last three years of study period in almost the mills. It is observed that this heavy investment in inventory persists due to the conditions prevailed during those three years. During these years yarn prices ruled higher due to boom in the export of textiles. This rise in prices of yarn compensated the increase in the price of raw materials. Pasari mill showed a declining trend. In last two years of study period Pasari has not invested in inventory due to the closer of mill and low volume of production.

The amount of investment in inventory varied widely within the sample mills. It varied from 0.17 crores to 4.89 crores for Aditya, 17.09 crores to 92.87 crores for Kallam, 2.90 crores to 17.43 crores for Suryaamba, 8.40 crores to 32.94 crores for Suryalata, 2.18 crores to 69.21 crores for Suryavanshi, 21.69 crores to 71.37 crores for Amariyothi, 0.95 crores to 19.32 crores for Gem, 10.64 crores to 62.22 crores for Kandagiri, 18.81 crores to 102.94 crores for Sambandam, 0.09 crores to 2.78 crores for Pasari.

In all the sample mills Kallam and Aditya increased their investment in inventory. The C.V value of 0.34 of Suryalata mill indicates consistency in Maintaining investment in inventory where as Pasari Mill showed a high level of variation (1.50).

ADEQUACY OF INVENTORY:

The Financial Manager is concerned with aggregate inventory investment and its effect on funds flow generated by the firm. Holding the inventory facilitates smooth production and minimization of risks and cost, results in increased profits. But at the same time holding of inventory involves some costs like carrying costs and ordering costs. Inventory-carrying costs alone are estimated to be between 10 and 20 per cent in India, while the interest payable on money borrowed from banks for obtaining inventories is around 18 per cent. Generally the costs includes material cost, order costs and carrying costs which are direct and costs of funds tied up in inventory and cost of running out of stock are the indirect costs contribution to buying and holding stocks. All these necessitates maintenance of adequate inventory neither excess nor inadequate. “Inventories should be allowed to increase till the resulting savings exceed the total cost of holding the added inventory”.

However, the adequacy of inventory is difficult to assess in precise terms. Certain ratios may be applied to test the adequacy. Among them one is inventory in terms of month’s cost or value of production and turnover of inventory. Inventory turnover ratio is used to measure the rapidity with which inventories are sold within a year. It is found by dividing cost of goods sold during a year by the average inventory. “it is one method of reviewing performance and controlling inventories periodically to check the inventory turnover of each type of raw material supply and finished goods. Moreover, “inventory turnover ratio acts as an indicator of the liquidity of the inventory”. A higher turnover indicates more efficient management of inventory. This is so because the concern has managed business with proportionately less amount of inventories, which results in savings in investment.

The inventory turnover ratio in selected spinning mills. A study of the individual mills reveal that Pasari has high turnover ratio in an average with high level of variation which C.V value is 1.91, and next Suryaamba and Aditya
have high turnover ratio 18.29 and 16.99 respectively. Amarjothi recorded a lower turnover in an average. Turnover of inventory varies widely among the individual mills, it varied from 11.09 to 26.44 for Aditya, 2.79 to 4.30 for Kallam, 8.12 to 41.24 for Suryaamba, 7.40 to 19.40 for Suryalata, 4.07 to 15.14 for Suryavanshi, 1.74 to 7.38 for Amarjothi, 0.93 to 13.36 for Gem, 2.04 to 8.20 for Kandagiri, 2.01 to 8.61 for Sambandam, 0.33 to 130.11 for Pasari. During the last three years of study period the turnover ratio is low in almost all the mills. Kallam having C.V value of 0.15 showed consistency in managing this ratio, whereas Pasari having (1.91) high fluctuations in managing inventory turnover.

CONCLUSION:

Inventory accounts for a substantial portion of the capital employed in any business concern, calling for greater attention of the financial executive. Efficient management of inventory not only solves the acute problem of liquidity but also augment the annual profits, results in reduction in the investment of working capital. The term "Inventory" in the present study include an aggregate of raw materials, cotton in process, finished yarn, stores and spares. Raw materials constituted its predominance among components of inventory in almost all the sample mills. The percentage of raw materials to aggregate inventory from to mill however the investment is higher because of the nature of cotton.

Inventory control technique of ABC analysis is adopted by all the units under study. However, there are instances of a heavy surplus of stores and obsolete finished goods i.e., out-dated yarn. Generally the purchases made basing on the "SPIN PLAN", "SPIN PLAN" is made depending on the demand for the particular count of yarn in the market. With the fashions ever changing in the modern world, the manufacturer is expected to interact with the changing needs of the customer. Any lapse in doing so will leave the manufacturer behind and he is left with the obsolete finished goods. So the marketing department should act cautiously off the product. The continual presence of stores and finished yarn which became obsolete must be disposed off as early as possible. But there is an absence of any satisfactory system regarding their disposal in the select mills. In the present study, the spinning mills have a separate spares and stores department under the able incharge of chief stores officer. Most of the spares are produced indigenously and the mills are importing only some of the spare parts.

REFERENCES:


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