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Original Research Paper Management

Impact of Inventory Management on Financial Performance-A Comparative Study

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ABSTRACT *In this fast moving environment, inventory management plays an important role to excise sufficient control on the finances of the organization. For any businesses, customers are considered most important and to have a smooth flow of sales, inventory has to be maintained properly. Inventory involves in the whole process cycle of the organization as it starts with the shop floor to the top level management commitment. The purpose of this paper is to study the impact of inventory management on the financial performance of the chosen organization. Secondary data is used for a period from April 2009 to March 2015. Collected data was analyzed using ratio analysis and forecasting for 2014-15 was used using Least Square Method. Overall findings of the study reveal that both the companies had minimal impact of inventory management on current assets.*

KEYWORDS : Inventory management, financial performance, Ratios

Introduction

Inventories are the current assets which are expected to be converted within a year in the form of cash or accounts receivables. Thus, it is a significant part of the assets for the business firms. Actually, inventories are the goods that are stocked and have a resale value in order to gain some profit. It shows the largest costs for the Trading firms, wholesalers and retailers. Normally, it consists of 20-30% of the investment of the total Investment of the firm. Thus, it should be managed in order to avail the inventories at right time in right Quantity. Inventory refers to the stock of the resources which are held to sales and/or future production. It can be also viewed as an idle resource which has an economic value. So, better management of the inventories would Release capital productively. Inventory control implies the coordination of materials controlling, utilization and Purchasing. It has also the purpose of getting the right inventory at the right place in the right time with right Quantity because it is directly connected with the production. This implies that the profitability of the firm is directly or indirectly affected by the inventory management. Inventory Control techniques such as ABC analysis divides an inventory into three categories

- "A items" with very tight control and accurate records,
- "B items" with less tightly controlled and good records,
- "C items" with the simplest controls possible and minimal records.

The ABC analysis provides a mechanism for identifying items that will have a significant impact on overall inventory cost, while also providing a mechanism for identifying different categories of stock that will require different management and controls. Classification of ABC in Ashok Leyland includes A – JIT, B – MRP, C –LCL(low cost logistics).

Review of literature

Dimitrios P. Koumanakos (2008) studied the effect of inventory management on firm's performance in Greece, food textiles and chemicals were used in the study. The hypothesis that lean inventory management leads to an improvement in a firm's financial performance was tested. The findings in the study suggested that the higher the level of inventories preserved by a firm, the lower the rate of return.

Ogbo, Ann I., Onekan malfeyinwa Victoria (2014) studied the impact of effective inventory control management on organizational performance. The study observed that flexibility in inventory control management is an important approach for achieving organizational performance. It was found that organizations benefits from inventory control management by way of easy storage and retrieval of material, improved sales effectiveness and reduced operational cost. It also revealed that there is a relationship between operational feasibility, utility of inventory control management in the customer related issues of the organization and cost effectiveness technique are implemented to enhance the return on investment in the organization. Effective inventory control management is recognized as one of the areas management of any organization should acquire capability. It is recommended that organizations should adopt the inventory keeping method that best suit their operations.

According to Vipulesh Shardeo (2015) studied the impact of inventory management on the financial performance of the firm. He observed that it is very important to control various costs to sustain in the market. And the most importantly customer is to be considered as the most important part of any business. In such fast moving and rapid environment, inventory management plays an important role to make a control over the financial statement of the organization. Apart of costs, customer satisfaction is also the most important factors for the businesses. Inventory management also improves the level of customer satisfaction because customer wants product at least time as possible. So, a manufacturing firm must install the optimal inventory control techniques or improve their asset turnover as much as possible. Also, by different analysis it is concluded that inventory turnover ratio is correlated with the net profit of the companies. He also recommended installing some appropriate inventory control technique to increase the inventory turnover ratio, asset turnover ratio, return on assets. After that the profitability will surely improved.

Nsikan Efiok John, John Joseph Etim, And Tommy Uduak Ime, (2015) studied inventory management practices and operational performance of flour milling firms in lagos, nigeria. The study observed that exception of the large manufacturing companies, most of the medium-sized flour milling firms adopts different inventory management strategies from the scientific models. Their inventory management strategies and policies were rather based on factors such as changing level of customer demand, prevailing industry practices, forecast estimates and guesses, and available production capacity. And they also said that the companies having scientific inventory management reported efficiency in capacity utilization, increased service level, and reduced lead time and others with unscientific strategies had minimal utilization of material resources. There is need for manufacturing firms to implement scientific inventory management models to adequately handle material shortages, product stock outs, and component pile up with consequent penalties.

Kwadwo Boateng Prempeh (2015) studied the impact of efficient inventory management on profitability in evidence from selected manufacturing firms in ghana. The study observed that efficient management of raw material inventory is a major factor to be considered by Ghanaian manufacturers in enhancing or boosting their profitability. The suggestions that was given from the study is that can be achieved by encouraging large scale mechanized production of the major raw materials in Ghana and training and re-training of staff from time to time to update their knowledge and skills in modern manufacturing techniques.

Research methodology

The process used to collect information and data for the purpose of making business decisions. The methodology may include publication research, interviews, surveys and other research techniques, and other research Techniques and could include both present and historical information

Type of Study

Analytical type of study has been carried on where the research has done with the help of annual reports. In analytical research the researchers has used facts or information that is already available and analyze these to make a critical evaluation of the material.

Objectives of the Study

- To study the impact of inventory management on financial performance of Ashok Leyland in comparison with Tata Motors
- To study the liquidity, profitability and efficiency position of Ashok Leyland and Tata motors

Method & Source of Data Collection

The data collected for the research is secondary data. Secondary data are those which have already been collected by someone else and available for the study. The source of data is the annual report of Ashok Leyland and Tata motors.

Period of Study

The data is collected for the time period of April 2009-2010 to March 2014-2015

Tools Used For Analysis

The tools used for the analysis are

Ratio analysis, Least Square regression

Data analysis and interpretation
Ratio analysis
Current ratio

The current ratio is a liquidity ratio that measures a firm's ability to pay off its short-term liabilities with its current assets. The current ratio is an important measure of liquidity because short-term liabilities are due within the next year.

Table 2: current ratio of Ashok Leyland and Tata motors

Organization	Ratios	2011	2012	2013	2014	2015
Ashok Leyland	Current Ratio	1.05	0.88	0.81	0.77	0.93
Tata Motors	Current Ratio	0.57	0.61	0.48	0.35	0.42
Ashok Leyland	Liquid Ratio	0.47	0.43	0.45	0.51	0.65
Tata Motors	Liquid Ratio	0.37	0.41	0.26	0.15	0.18
Ashok Leyland	Operating profit ratio	10.85	9.78	7.02	1.67	7.56
Tata Motors	Operating profit ratio	9.9	7.69	3.81	-2.65	-3.4
Ashok Leyland	Net Profit Ratio	5.64	4.4	3.47	0.29	2.46
Tata Motors	Net Profit Ratio	3.84	2.28	0.67	0.97	-13.05
Ashok Leyland	Return on Net worth	15.93	13.43	9.73	0.66	6.54
Tata Motors	Return on Net worth	9.05	6.41	1.57	1.74	-31.88
Ashok Leyland	Inventory turnover ratio	5.06	5.76	6.58	8.36	9.7
Tata Motors	Inventory turnover ratio	13.79	12.8	9.9	8.24	8.37
Ashok Leyland	Asset turnover ratio	1.05	1.07	0.95	0.77	1.01
Tata Motors	Asset turnover ratio	0.86	1.01	0.85	0.68	0.72
Ashok Leyland	Inventory to current assets	0.55	0.52	0.44	0.34	0.31
Tata Motors	Inventory to current assets	0.31	0.31	0.45	0.62	0.51

From the above table it shows that both the company's current ratio is declining, when compared with its competitor, the ratio of the company is far better but according to the norms (2:1) it is less. This shows that the company is able to maintain a better current ratio than its competitors but it is not enjoying the credit worthiness. Quick ratio of the Ashok Leyland is better while compared with its competitor but it is lower than the standard norms (1:1). Operating Profit Ratio in comparison with its competitor Tata Motors is high even though it's declining and this indicates that the company is doing well and trying to recover from the recessions faced during 2012 -2014. Net profit ratio for Ashok Leyland is high and is doing well when compared to Tata Motors. Inventory turnover ratio was low for Ashok Leyland during the period 2011 to 2013, it indicates that the company was holding too much of inventory. Asset turnover ratio of Ashok Leyland was better than Tata Motors indicating that the company is able to generate sales from the assets. The Inventory to current assets ratio for Ashok Leyland is low.

Least Square Method

It is a statistical technique for estimating changes in a dependent variable which is in linear relationship with one or more independent variables . Based on fitting a straight line to the observed data this technique aims to derive a good relationship that may be used to predict future values of one variable when the value of the other is known.

Table 2: Forecasted inventory for Ashok Leyland for the year for the 2015 and 2016

Year	Inventory		Current Assets	
	2014-15	2015-16	2014-15	2015-16
Actual	1,398.53		4,693.00	
Forecasted	1,468.91	1,347.71	3,846.34	3,793.05

The estimated value of inventory for Ashok Leyland for the year 2015 is Rs 1,468.91 cr and for the year 2016 is Rs 1,347.71 cr. The forecasted value of inventory is more than the actual value it shows that the company is performing well to minimize inventory and increase profit. The estimated value of current assets for the year 2015 is Rs 3,846.34 cr and for the year 2016 is Rs 3,793.05.The forecasted value is less than the actual Value and this indicates that the company is performing well to increase its current assets.

Table 3: Forecasted inventory of Tata motors for the year 2015 and 2016

Year	Inventory		Current Assets	
	2014-15	2015-16	2014-15	2015-16
Actual	3,629.47		8,572.97	
Forecasted	4,671.80	4,913.55	7,501.30	6,464.052

The estimated value of inventory for the year 2014-15 is Rs 4,671.8 cr and for the year 2015-16 is Rs 4,913.55 cr.The forecasted value of inventory is more than the actual value it shows that the company is performing well to minimize inventory and increase profit. The estimated value of current assets for the year 2014-15 is Rs 7501.304 cr and for the year 2015-16 is Rs 6464.052 cr. Forecasting using Least Square Method reveals that there is 5% variation from actual to forecasted inventory and current assets.

Conclusion

The financial statements of a company are generally affected by inventory management. Wastage of stock & non-moving stocks and Excess inventory affects the profit & loss and working capital of a company. Excess inventory in the company occurs due to various reasons such as, SAP disabilities, BOM change, and Inventory accuracy. Inventory is the most important part of any business especially for manufacturing companies. It is the hidden costs which are to be controlled for sustaining in present competitive market. Apart from costs, customer satisfaction is also the most important factors for the businesses. Inventory management also improves the level of customer satisfaction because customer wants product at least time as possible. So, a manufacturing firm must install the optimal inventory control techniques or improve their asset turnover as much as possible. Also, by different analysis it is concluded that the company has to reduce its inventory holding period and increase liquidity, profitability and efficiency position of the company.

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