INVENTORY MANAGEMENT OF COMMERCIAL VEHICLE INDUSTRY IN INDIA

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Introduction

Inventory constitutes a major component of working capital. To a large extent, the success or failure of a business depends upon its inventory management performances. Proper management and control of inventory not only solve the problem of liquidity but also increase profitability. Inventory establishes a link between production and sales. Every business undertaking needs inventory in adequate quantity for efficient processing and in-transit handling. Since, inventory itself is an idle asset and involves holding cost; it is always desirable that investment in this asset should be kept at the minimum possible level. Inventory should be available in proper quantity at all times, neither more nor less than what is required. Inadequate inventory adversely affects smooth running of business, whereas excess of it involves extra cost, thus reducing profits. The primary objective of inventory management is to avoid too much and too little of it so that uninterrupted production and sales with minimum holding costs and better customer's services may be possible.

The term 'inventory' refers to the stockpile of the products a firm is offering for sale and various components that make up these products. As per accounting terminology, inventory means "the aggregate of these items of tangible property which i) are held for sale in the ordinary course of business, ii) are in the process of production for such sale, and iii) are to be available for sale". Thus, inventory includes the stock of raw materials, goods-in-process, finished goods and stores and spares. James H. Greene states that inventory comprises "the movable articles of the business which are eventually expected to go into the flow of trade". In commercial Vehicle Industry, which is the subject matter of the present study, inventory involves raw materials, work-in progress, spares and stores, finished goods, goods in transit and other inventory.

To evaluate the practices and performances in inventory management in the Commercial Vehicle Industry in India, the present paper attempt has been made to analyse size, composition, circulation and growth of the inventory in the selected companies during the period under study.

Review of literature

Niranjan Mandal and Dutta Smriti Mahavidyalaya, (2010) in their study makes an attempt to provide an insight into the conceptual side of working capital and to assess the impact of working capital management on liquidity, profitability and non-insurable risk of ONGC, a leading public sector enterprise in India over a 9 year period (i.e. from 1998-99 to 2006-07). It also makes an endeavor to observe

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and test the liquidity and profitability position of the enterprise and to study the correlation between liquidity and profitability as well as between profitability and risk. They may be concluded that working capital management is very much useful to ensure better productive capacity, good profitability and sound liquidity of an enterprise, specifically the PSE in India, for managerial decision making regarding the creation of sufficient surplus for its growth and survival stability in the present competitive and complex environment.

Koti Reddy and Raghav Baheti (2010) in their study seeks to examine current policies and practices of working capital management at Saregama India Limited and tries to identify the strengths and weaknesses of the company; the opportunities it has and the threats it faces. It contains a detailed analysis of the various factors affecting the working capital requirements of the company and the impact they have on its profitability. The study concludes by suggesting solutions to address the concern areas that have been identified. The company is recommended to focus on digital sales, incentivize cash sales, follow a forecasting model that captures the tastes and preferences of consumers and strictly implement its credit policy.

Jasmine Kaur (2010) his study is concerned with the problems that arise in attempting to manage the Current Assets, Current Liabilities and the interrelation that exists between them. This is a two-dimensional study which examined the policy and practices of cash management, evaluate the principles, procedures and techniques of Investment Management, Receivable and Payable Management dealt with analyzing the trend of working capital management and also to suggested an audit program to facilitate proper working capital management in Indian Tyre Industry. He revealed that there is a standoff between liquidity and profitability and the selected corporate has been achieving a trade off between risk and return. Efficient management of working Capital and its components have a direct effect on the profitability levels of tyre industry.

Ranjith Appuhami (2008) the purpose of his research is to investigate the impact of firms' capital expenditure on their working capital management. The study used Shulman and Cox's (1985) Net Liquidity Balance and Working Capital Requirement as a proxy for working capital measurement and developed multiple regression models. The empirical research found that firms' 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, which is consistent with findings of previous similar researches. The findings enhance the knowledge base of working capital management and will help companies manage working capital efficiently in growing situations associated with capital expenditure.

Pradeep Singh (2008) in his study made an attempt to examine the inventory and working capital management of Indian Farmers Fertilizer Cooperative Limited (IFFCO) and National Fertilizer Limited (NFL). He concluded that the overall position of the working capital of IFFCO and NFL is satisfactory. But there is a need for improvement in inventory in case of IFFCO. However inventory was not properly utilized and maintained by IFFCO during study period. The management of NFL must try to properly utilize the inventory and try to maintain the inventory as per the requirements, so that liquidity will not interrupt.

Present status of the Indian Automobile Industry

Indian automobile industry is nearly six decades old. The Indian Automobile industry is the seventh largest in the world with an annual production of over 2.6 million units in 2009. In 2009, India emerged as Asia's fourth largest exporter of automobiles, behind Japan, South Korea and Thailand. The industry encompasses commercial vehicles, multi-utility vehicles, passenger cars, two wheelers, three wheelers, tractors and auto components. Out of 262 total number of companies, 220 Auto ancillaries, 7 commercial vehicle companies, 5 motor cycles / moped companies, 8 passenger car manufacturers 12 scooter and three wheeler companies and 10 tractor manufacturing companies. It employs 4, 50,000 people directly and 100, 00,000 people indirectly and is now inhabited by global majors in keen contention.

India manufactures about 38,00,000 two wheelers, 5,70,000 passenger cars, 1,25,000 Multi Utility Vehicle, 1,70,000 Commercial Vehicles and 2,60,000 tractors annually. Today, the Indian automobile industry is ranked first in the world in the production of three wheelers, second in the production of two wheelers, fourth in the production of commercial vehicles and ninth in passenger vehicles.

Selection of Sample companies

There are 46 companies operating in the Indian Automobile Industry. The companies under automobile industry are classified into five sectors namely; Commercial vehicles, Motor cycles / mopeds, Passenger cars, Scooters and three-wheelers and Tractors. Out of five sectors in the Indian Automobile Industry, commercial vehicle sector has been selected for the purpose of the study. In order to select the sample companies from the commercial vehicle sector for the study, only those companies which were established before liberalization period (1990) only selected. Thus, the number of companies selected under the study is restricted to five out of seven companies viz., Ashok Leyland Ltd. (ALL), Tata Motors Ltd. (TML), Force Motors Ltd. (FML), Eicher Motors Ltd.(EML) and SML Isuzu Ltd.(SML). All the 27 manufacturing units of five companies are selected for the study based on census method.

Other two commercial vehicle companies namely, Asian Motor Works Ltd. and Tata Marcopolo Motors Ltd. were incorporated in the year 2002 and 2006 respectively, thus they have also been excluded for the study.

Objectives of the study

The present study attempts to achieve the following objectives.

- 1. To study the size of inventory of the selected units in Indian commercial vehicle Industry.
- 2. To examine the composition of inventory in these units.
- 3. To know the circulation of inventory in these units.
- 4. To study the growth of inventory in these units.

Hypotheses of the study

The following hypotheses are helpful to achieve the above objectives.

- 1. There is no correlation between inventory and sales of Ashok Leyland Ltd.
- 2. There is no correlation between inventory and sales of Tata Motors Ltd.
- 3. There is no correlation between inventory and sales of Force Motors Ltd.
- 4. There is no correlation between inventory and sales of Eicher Motors Ltd.

5. There is no correlation between inventory and sales of SML Isuzu Ltd.

Period of the Study

The period of the study selected only ten years from 2000-01 to 2009-10. **Methodology**

The study is analytical in nature. The data used for the study is secondary data. The required data for the commercial vehicle companies were collected from the compilation made by the Centre for Monitoring Indian Economy (CMIE) for the period 2000-01 to 2009-10. Prowess database of CMIE is the most reliable and empowered corporate database. It contains a highly normalized database built on a sound understanding of disclosures on were over 7000 companies in India. Some of the data collected from journals, websites, books etc. Editing, classification and tabulation of the financial data, which will be collected from the above-mentioned sources, will be done as per the requirements of the study.

Financial and Statistical Tools

For assessing the size, composition, circulation and growth of the inventory position, Mean, Standard deviation and Co-efficient of variation is used. To find out the relationship between sales and inventory linear regression analysis, Karl persons co-efficient of correlation is used. To test the results of regression and correlation co-efficient t test is applied.

Limitations of the Study

The data used in this study have been taken only from secondary sources and as such it findings depends entirely on the accuracy of such data.

Findings of the study Size of Inventory

The basic objective of inventory management is, to optimise the size of inventory in a firm, so that, smooth performance of production and sales functions may be possible at the minimum cost. The holding of surplus and slow moving inventories extra costs, wherein, the inventory-carrying cost alone is estimated to be between 10 and 20 percent in India while the interest payable on money borrowed from banks for obtaining inventories is around 18 per cent. To what extent the selected units have been successful in optimising their inventory holdings during the period is evaluated in this paper.

Table 1 portrays the size of inventories in the selected companies, during the period of study. This table reveals that the size of inventory in the industry has gradually increased from Rs.1880.99 crores in 2000-01 to Rs.4927.56 crores in 2009-10, i.e., more than double, except during the years 2001-02 and 2008-09 when the investment in inventory has slightly come down. Among the firms, the increase in inventory has been observed most in SML i.e., more than three times. The inventory size of ALL has shot up from Rs. 517.67 crores in 2000-01 to Rs. 1638.24 crores in 2009-10 with slight falls in 2002-03, TML from Rs. 1105.1 crores to Rs. 2935.59 crores, and FML from Rs. 183.4 crores to Rs.193.73 crores during the period of study. The size of inventory of EML has decreased from Rs. 30.56 crores in 2000-01 to Rs. 22.03 crores in 2009-10. On the whole, it is evident that the size of the inventory among the firms in the industry has been on the increase at a slightly faster rate except EML.

Table 2 shows the values of mean and co-efficient of variation (C.V.) and 't' values of the size of inventory. It reveals that the inventory has constituted a high proportion of total investment in the industry. The mean value of inventory to current assets ratio for the overall industry is 31.28 per cent, with it has been 51.97 per cent in FML, 36.71 per cent in ALL, 32.81 per cent in SML, 28.60 per cent in TML and 27.26 per cent in EML. FML has relatively a high mean value among the firms and its 't' value indicates that the mean value of this firm varies significantly at 1 per cent level from industry mean value. In the case of FML, ALL and SML, the mean value of inventory to CA ratio is more than the industry means value.

The percentage of inventory to total current assets of commercial vehicle industry showed declining trend from 39.11% in 2000-01 to 29.59% in 2009-10. Similarly, TML, EML and FML's inventory to total current assets ratios were also registered declining trend. This indicates that the lower shares of working capital funds were tied up in inventories and TML, EML and FML had managed well their inventory during the period of study.

Composition of Inventory

In commercial vehicle industry, the major components of inventory include raw materials, work-in progress, finished goods, stores and spares, goods in transit and other inventory. Table 3 which contains the statistical values (mean and C.V.) of proportionate shares of these components to total inventory, shows that raw materials, work-in progress and finished goods constitute about 90 per cent of the total inventory in the industry. Stores and spares rank at the fourth place with regard to its share in total inventory in all the units; finished goods rank at the first place regarding its share in total inventory in ALL, TML and SML whereas raw material ranks at the first place in FML and EML.

It is evident from the table 3 that industry average for finished goods proportion works out to 43.90 per cent; as against this, ALL has this share to the tune of 45.47 per cent, TML 45.67 per cent and SML 42.77 per cent in the total inventory.

This table further shows that mean values of the raw materials proportion to total inventory have been higher in EML as well as FML than the industry. The Coefficient of Variation has been more in TML, (i.e., 0.26), than the industry coefficient of variation. Work-in-progress also occupies an important place in the inventory in the industry, with 12.56 per cent mean value. This share has relatively been less in EML, where the trend has been fluctuating in this ratio, and the proportion of work-in progress has increased slightly in the firms during the period. The C.V. has been relatively high in EML and ALL. Goods-in-transit have constituted a significant proportion of total inventory in TML and SML. Moreover, the proportion of goods-in-transit has been nil in ALL, FML and EML.

Other materials have not constituted a significant proportion of total inventory in this industry. Among the firms in the industry, the mean values of 'other inventory' proportionate to aggregate inventory, swings between 0.29 and 4.07, with relatively high variations.

Circulation of Inventory

Circulation of Inventory directly affects the profitability of a firm. Other things remaining the same, the faster the circulation, the larger the profits. Each turnover adds to the volume of profits. A high inventory turnover means that the

firm has conducted more business with less amount of inventory. In order to judge the velocity with which inventory and its components have circulated in the selected companies during the period of study, the following ratios have been computed:

- 1. Holding period of aggregate inventory
- 2. Holding period of raw materials
- 3. Holding period of work-in progress
- 4. Holding period of finished goods

The statistical values (mean, C.V. and 't' value) relating to these ratios, in relation to the firms have been given in Table 4. The average inventory holding period for the industry as a whole comes to 1.31 months. Among the companies in the industry, FML (2.44 months) has the highest inventory holding period. TML has the minimum holding period for inventory. And both these Mean values significantly vary at 1 per cent level from the industry mean. The Co-efficient of Variation values indicates that all the companies in the industry have experienced less variation, than that of the industry. The Co-efficient of Variation values which oscillate between 0.25 and 0.76 also confirm that, the variations in this ratio during the period have been relatively high.

It has been observed from the table 4 that the average holding period for raw material for the industry is 1.10 months. Among the firms in the industry, it ranged between 0.79 months to 3.24 months. The holding period of raw material of FML is higher than that of any other companies in the industry. The high C.V. values of EML confirm that, variations in holding period of aggregate inventory during the period have been relatively high. The holding period for raw material in ALL, TML and FML vary significantly at 1 per cent level, similarly for EML and SML it varies at 5 per cent level of significance, from that of the industry Mean value.

It is further observed from the table that the average holding period for workin progress in the industry is 1.52 months; among the firms in the industry, it ranged between 0.12 months to 1.52 months. The mean values of all the companies vary significantly at 5 per cent level, from the industry mean. The high Co-efficient of Variation values of EML confirms that, variations in this ratio during the period have been relatively high.

Growth Trends in Inventory and Sales

The sales of a concern directly affect its profit and the holding of inventory involves cost. Every increase in the inventory is expected to be accompanied by an adequate increase in sales so that the increased cost of inventory may be recovered from the increased profits. In the commercial vehicle industry, there is an emphasise to meet the production requirements without any interruption, by means of holding enough level of inventory. For the purpose of comparing the growth in sales with the growth in inventory during the period under review, progressive base year growth rate and average growth rate have been computed.

Table 5 reveals that the average growth rate of sales has been more than the growth rate of inventory in the industry. This trend is a healthy sign and indicates that the industry, TML and FML has moved in the positive direction though the rate is slow. TML and FML's average growth rate in sales has been more than the growth rate of inventory which indicates that very good administration of inventory management in these two companies. ALL and EML, SML's average growth rate in inventory has been more than the growth rate of sales which indicates that the steps to be taken to improve the growth rate of sales.

To have a look at the real growth that has taken place in inventory and sales during the period under study, the average growth rates of inventory and sales at constant prices have been shown in Table 6.

It is evident from the above table that the average growth rate of sales has been more than the growth rate of inventory in all the companies selected for the study; whereas in the case of sales, it is positive in all the companies except in EML. The maximum average growth has been achieved by FML (i.e) 70.70 per cent), while the growth is just marginal in the other companies. Hence, it is also said that, as all the firms are already on the right track, results achieved so far are also satisfactory.

Relationship between Inventory and Sales - Regression Analysis

The achievement of the maximum possible profit is the goal of any enterprise. This object can be achieved by accelerating sales to the extent possible. In order to have uninterrupted flow of production and sales, inventories are to be made available, whenever needed. Thus, the volume of sales and size of inventory holdings are related to each other. For the purpose of having in depth insight into the extent of relationship between inventory and sales, the values of co-efficient of correlation (r), co-efficient of determination (R²), 't' value (to test the significance of correlation) and linear regression equations have been computed in table 7.

The value of correlation co-efficient between sales and inventories is 0.98 in the industry. The 't' values indicate that the relationship between inventory (dependent variable) and sales (independent variable) have been significant at 1per cent level in all units in the industry except FML. Among the firms in the commercial vehicle industry all the units have significant relationship between inventory and sales. The FML has to improve its inventory level as per the operating requirements, because of the fact that there is moderate correlation registered inventory and Sales. The correlation is stronger in TML and EML than in any other firms in the industry. It reflects on the effectiveness of management in controlling the inventory in relation to sales.

In the above table, linear regression equation has been used for the purpose of future projections. The values of parameter 'b' indicate the sensitivity with which inventory in a concern changes for a unit of increase / decrease in sales. Among the firms, the sales elasticity of inventory varies from 0.07 units to 0.21 units. TML is less sensitive than other firms in the industry for the change in inventory as a result of change in sales. It is also inferred from the table that one unit increase in sales volume shows 0.07 units increase in inventory levels in TML. Moreover, SML is more sensitive than other firms in the industry for change in inventory as a result of change in sales. It is also inferred from the table that one unit increase in sales volume shows 0.21units in inventory levels in SML. The value of parameter 'b' further brings out that, the commercial vehicle industry can easily overcome the problem of overstocking by increasing the level of operating activity, because its growth in inventory is much less than the growth in sales.

Results of the Hypotheses

The following results were obtained from the above study:

- 1. There is correlation between inventory and sales of Ashok Leyland Ltd.
- 2. There is correlation between inventory and sales of Tata Motors Ltd.
- 3. There is correlation between inventory and sales of Force Motors Ltd.
- 4. There is correlation between inventory and sales of Eicher Motors Ltd.

5. There is correlation between inventory and sales of SML Isuzu Ltd. It has been observed from that all the units in the commercial vehicle industry have significant relationship between inventory and sales.

Conclusion

While managing the inventory position of the company we have to concentrate the four aspects of inventory management viz., size, composition, circulation and growth of inventory. In this, overall analysis of inventory of all units in the Indian commercial vehicle industry is very good in their management of inventory. Among the firms in the commercial vehicle industry TML occupies the first place in the management of inventory. It is evidently proved through strong correlation between inventory and sales. FML's average growth rate of sales has been more than the growth rate of inventory which indicates that very good administration of inventory, but the moderate correlation registered between sales and inventory. It indicated that FML has to improve its inventory level as per the operating requirements. Inventory is the largest asset among current assets in manufacturing concerns. Thus, proper management of inventory is important to maintain and improve the health of an organisation. Efficient management of inventories will improve the profitability of the organisation.

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Appendix

Table 1
Size of Inventory

(Rs. in Crores)

Year	ALL	TML	FML	EML	SML	Industry
2000-01	517.67	1105.10	183.40	30.56	44.26	1880.99
2001-02	595.34	987.51	132.29	29.33	46.52	1791.26
2002-03	410.46	1159.29	148.15	36.05	59.83	1818.06
2003-04	506.94	1147.44	152.26	126.25	60.35	1993.24
2004-05	568.08	1601.36	185.06	161.25	88.55	2604.3
2005-06	902.56	2012.24	213.84	161.23	91.14	3386.6
2006-07	1070.32	2500.95	203.92	168.91	87.33	4222.07
2007-08	1223.91	2421.83	240.67	210.38	123.50	4376.81
2008-09	1330.02	2229.81	196.03	19.37	149.29	3927.18
2009-10	1638.24	2935.59	193.73	22.03	160.00	4927.56

Source: computed from annual reports of the respective companies

Table 2
Statistical Values of Ratios Relating to Inventory Size

Statistical values of Ratios Relating to inventory Size							
Year	ALL	TML	FML	EML	SML	Industry	
Inventory	Inventory to current assets ratio						
Mean	36.71	28.60	51.97	27.26	32.81	31.28	
C.V.	0.15	0.26	0.14	0.41	0.25	0.16	
t	2.10***	-3.30*	11.39*	-1.09	0.59		
Inventory	Inventory to total assets ratio						
Mean	31.78	19.68	60.74	25.03	85.19	23.68	
C.V.	0.23	0.33	0.24	0.47	0.53	0.27	
t	3.36*	-10.63*	8.37*	0.60	4.56*		

Source: Computed from Annual reports of the respective companies

Table 3
Statistical values of Composition of Inventory (in Percentage)

Statistical values of Composition of Inventory (in 1 electriage)							
Particulars	ALL	TML	FML	EML	SML	Industry	
Raw Material							
Mean	35.96	30.65	49.02	49.47	40.97	34.44	
C.V	0.10	0.26	0.13	0.15	0.12	0.16	
Work-in-progress							
Mean	13.27	12.65	15.45	7.01	7.46	12.56	

C.V	0.32	0.16	0.09	0.34	0.22	0.16	
Finished goods							
Mean	45.47	45.67	24.97	36.81	42.77	43.90	
C.V	0.14	0.18	0.24	0.24	0.11	0.13	
Stores and Spares							
Mean	3.26	7.05	6.49	2.77	0.54	5.56	
C.V	0.22	0.35	0.27	0.17	0.28	0.29	
Goods-in-transit							
Mean	-	3.01	-	-	7.97	1.98	
C.V	-	0.69	-	-	0.52	0.57	
Other Inventory							
Mean	2.05	0.97	4.07	3.95	0.29	1.56	
C.V	0.32	0.41	0.44	1.56	0.25	0.39	

Source: Computed from Annual reports of the respective companies

Table 4
Statistical Values of Ratios Relating to Movements of Inventory

		Statistical values of Hartos Hearing to Fiber South Values							
Particulars	ALL	TML	FML	EML	SML	Industry			
Holding period	of aggreg	ate invento	ry						
Mean	1.81	1.04	2.44	0.83	1.74	1.31			
C.V.	0.25	0.26	0.67	0.62	0.64	0.76			
t	4.58*	-3.41*	8.62*	-8.53*	3.64*				
Holding period	Holding period of Raw Material								
Mean	1.62	0.79	3.24	1.09	1.49	1.10			
C.V.	0.33	0.12	0.35	0.50	0.27	0.19			
t	4.61*	-6.07*	7.14*	-0.01**	3.17**				
Holding period	of work-i	n-progress							
Mean	0.45	0.26	0.69	0.12	0.25	1.52			
C.V.	0.28	0.22	0.21	0.51	0.44	0.23			
t	-13.37*	-13.47*	-10.40*	-11.73*	-9.97*				
Holding period of Finished goods									
Mean	1.51	0.93	1.22	0.65	1.25	1.04			
C.V.	0.28	0.40	0.35	0.85	0.23	0.31			
t	4.64*	-3.31*	1.81	-1.78	1.70				

Source: Computed from Annual reports of the respective companies

Table 5
Progressive Base year Percentage Growth of inventory and sales from 2000-01 to 2009-10

Particulars	ALL	TML	FML	EML	SML	Industry
2000-01						
Inventory	-	_	-	-	-	-
Sales	-	-	_	_	-	-
2001-02						

Inventory	15.00	-10.64	-27.87	-4.02	5.11	-4.77
Sales	0.54	9.83	0.72	22.27	26.65	8.12
2002-03						
Inventory	-31.05	17.40	11.99	22.91	28.61	1.50
Sales	18.47	21.32	34.60	30.56	24.70	21.98
2003-04						
Inventory	23.51	-1.02	2.77	250.21	0.87	9.64
Sales	24.78	45.85	34.89	117.88	28.74	43.64
2004-05						
Inventory	12.06	39.56	21.54	27.72	46.73	30.66
Sales	23.46	32.52	-9.35	45.37	23.44	29.51
2005-06						
Inventory	58.88	25.66	15.55	-0.01	2.92	30.04
Sales	25.48	18.75	9.06	-17.39	3.85	16.34
2006-07						
Inventory	18.59	24.29	-4.64	4.76	-4.18	24.67
Sales	37.35	33.96	4.53	19.30	-1.70	32.44
2007-08						
Inventory	14.35	-3.16	18.02	24.55	41.42	3.67
Sales	8.40	4.97	-7.24	12.51	10.87	1.86
2008-09						
Inventory	8.67	-7.93	-18.55	-90.79	20.88	-10.27
Sales	-23.15	-10.42	-17.12	-68.58	-18.68	-14.24
2009-10						
Inventory	23.17	31.65	-1.17	13.73	7.17	25.47
Sales	2.15	3.92	2.74	-4.57	3.25	3.40
Avg. Inventory	15.91	12.87	1.96	27.67	16.61	12.29
Avg. Sales	13.05	17.86	5.87	17.48	11.24	15.89

Source: Computed from Annual reports of the respective companies

Table 6
Average Growth Rates in Inventory and sales (at constant prices)
from 2000-01 to 2009-10

Name of the Company	Inventory	Net Sales
ALL	13.64	13.76
TML	11.44	20.51
FML	0.54	70.70
EML	-3.58	-0.57

SML	15.33	13.23
Industry	11.25	17.95

Source: Computed from Annual reports of the respective companies

Table 7
Linear Regression Results (for Inventory to Sales Ratio)

Name of the company	Linear Regression Equation $Y = a + bX$	r	\mathbb{R}^2	t- value
ALL	Y = 40.73 + 0.17X	0.88	0.78	5.37*
TML	Y = 506.95 + 0.07X	0.98	0.97	16.85*
FML	Y = 104.00 + 0.10X	0.54	0.29	1.81
EML	Y = -22.02 + 0.10X	0.98	0.96	14.41*
SML	Y = -14.17 + 0.21X	0.81	0.65	3.88*
Industry	Y = 595.83 + 0.09X	0.98	0.96	14.74*

^{*} indicates significant at 1% level.

Here, Y = Inventory; X = Sales

Source: Computed from annual reports of the respective units.