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JOURNAL AND OTHER ARTICLES

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–23

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TURNOVER ANALYSIS: A CASE STUDY OF AUTOMOBILE INDUSTRY IN INDIA

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ABSTRACT

The main objective of this paper is to test whether there is any significant difference from one automobile firm to another automobile firm regarding the various turnover ratios and offer a suitable suggestions to strengthen performance of automobile industry in India. The data obtained from the annual reports of the automobile firms from the year 2002-03 to 2011-12. The paired samples statistics applied to derive the required results. The study found that there was no significant difference from inventory ratio of TVS Motor Company to the inventory ratio of Tata Motors and also came to know that there was no significant difference from realizing of cash from debtors from the Maruthi Suzuki to the Tata Motors Company. This study also identified from Mahindra & Mahindra to Maruthi Suzuki and from TVS Motor to Mahindra & Mahindra. And also total assets turnover ratio was not remarked significant difference from Ashok Layland to Maruthi Suzuki.

KEYWORDS

Inventory Turnover Ratio, Debtors Turnover Ratio, Fixed Assets, Turnover Ratio and Total Assets Turnover.

INTRODUCTION

Planning, Organizing and control of issues of inventory is called as the inventory management. Inventory consists of raw material, work-in-process and finished goods. The basic inputs are the raw materials, semi manufactured products are the work-in-process and completely manufactured products equivalent to the finished goods. The basic motives of holding inventories are transaction motive, precautionary motive and speculative motive. Transaction motive implies the smooth production and sales operation. The precautionary motive refers to the safeguard against the risk of unforeseen changes in demand and supply forces. The speculative motive indicates to take benefit of price fluctuations. The main objective of inventory management is to maintain the optimum level of inventory. The management of inventory helps in forecasting quantity of inventory is required, enables to offer the right product at the right time which leads to customer satisfaction, increases the employees efficiency by impart a knowledge on them with the help of inventory management software and other tools. It also useful to place an optimum order through this estimating, controlling and management of inventory reduces the costs and increases the productivity and sales resulting in greater profitability. The techniques of inventory management is VED Analysis (Very Essential and Dormant), E.O.Q (Economic Order Quantity), ABC Analysis (Always Better Control), JIT (Just in Time) and FSN (Fast moving, Slow moving and Non moving). In addition to the above ratios the following inventory control techniques were available, i.e., Activity – Based costing (ABC) is the process of costing system which focuses on activities performed to produce the product. In activity based costing classifies various inventory items into three different categories basing on the relationship with the different stages or parts of the production process. The most important items are classified as class A, intermediate classified as class B and remaining items classified as C. It measures the cost and performance of activities, resources and cost of objects which help to generate accurate information for management reporting and decision making. The economic order quantity helps in how much to order and when to place an order. The quantity for which order is placed when the stock reaches to the re-order level. It is called as economic order quantity when it is the quantity which is considered as the most economical to order. At which the total of ordering costs and carrying costs minimum, it is considered as an economic order quantity. At EOQ the ordering costs are equal to carrying costs the main objective of economic order quantity is to decide the “Order Size” which is considered most economical to order. The EOQ provides the information regarding how much inventory must be ordered at a specific point of time. The economic order quantity refers to determine the order size that will minimize the total of an order and carrying costs for an item of inventory. The re-order level is the level of inventory at which the new order for an item must be placed to acquire new supply. The lead time, usage rate of an item influence the reorder level. Safety stock is the minimum level of inventory which must be maintained by a firm to protect the firm from stock outs due to unexpected demand and lead time for the item. JIT is a modern approach and a firm keeps only enough inventories on hand to meet immediate production requirements. It reduces inventory carrying costs by acquiring that raw material that is to be used just in time to be placed in to production. Inventory management involves trade-off between risk and return. The risk means if the level of inventory is too low, there is a possibility of interrupted production process and various functions don't operate independently. As the size of inventory rises, the costs of storage, carrying costs and other costs also increase, but the risk of running out of inventory decreases. The financial manager must evaluate inventory in terms of money value and the number of physical units.

HISTORY OF AUTOMOBILE IN THE WORLD

The automobile industry began in 1890's and finally came of age with Henry Ford in 1914 for bulk production of cars. Initially it was dominated by the US automobile markets up to the second world war, because of it produced about 75 percent of world's auto production. In 1980 the US was overtaken by Japan and became world's leader again in 1994 and held this rank until 2009, when China took the top spot with 13.8 million units with 19.3 million units manufactured in 2012. The china occupied the first place, followed by the USA and Japan. Initially Indian auto industry concentrated on servicing, dealership, financing and maintenance of vehicles later only after a decade from independence manufacturing started in India. It contributes 22 percent of the country's manufacturing gross domestic product and it is one of the biggest job creators and world's third largest exporter of two wheelers.

The industry started grow from the year 1970 and the Government of India started the Delhi Auto Expo in 1986 to promote the auto industry. After the new industrial resolution policy 1991, foreign investors were invited in 12 large automotive companies, Maruti Udyog Ltd., General Motors India, Ford India Ltd., Eicher Motors, Bajaj Auto, Daewoo Motors India, Hero Motors, Hindustan Motors, Hyundai Motors India Ltd., Royal Enfield Motors, Telco, TVS Motors, Tata Motors, DCD Designs, Swaraj Mazda Ltd. The first automobile was launched in India in the year 1897 in Bombay. The industry is expected to grow to US \$40 billion by 2015, and it contribute 10 percent of the nations GDP by 2016 and expected to top in the world in car segment with approximately 611 million vehicles on the nations road by 2050.

HERO MOTO CORP

Hero cycles were founded in Ludhiana in the year 1956 and it became the largest bicycle manufacturer in India by 1975. It introduced motorcycles in 1980 with a slogan of "Fill it, shut it and forget it". In the year 2012-13 the company captured 46 percent market share in two wheeler category with a revenue of 241.66 Rupees (US \$3.9 billion). In August 2011, the company was renamed Hero Moto Corp with a new corporate identity. It made a rich contribution in the fields of sport and education as sense of corporate social responsibility.

TVS MOTORS

Launch a seven new bikes in a single day and third largest two wheeler manufacturer in India was established by T.V. Sundaram Iyengar, collaborated with Layton Dewande Holdings, United Kingdom in 1962 and received the Deming prize for Total Quality Management, as a first company in the world. The TVS Apache, TVS Victor, TVS Scooty, TVS Centra and TVS Fiero are the popular brand of bikes in the Indian Market. It started SST (Srinivasan Services Trust) in 1996 meant for the economic development, education, infrastructure, environment and healthcare of villagers and helps to make villages self reliant.

ASHOK LEYLAND

Leader in the Indian bus market, prominent manufactures, suppliers and exporters of wide collection of diesel generator sets started in the year 1948 in Madras (Chennai). It is the second largest manufacturer of commercial vehicles in India, 4th Largest manufacturer of buses in the world and 16th largest manufacturers of trucks globally and it received National Energy Conservation Awards (2012). LCV Cargo Carrier of the year award for Dorset (2012), Excellence in Technology Award for the Optare Versa EV", and improve a quality of life of their employees through the medication, blood donation camps, broadly it focus on livelihood enhancement, health, education and environment.

TATA MOTORS

World's 17th largest motor vehicle manufacturing company, the world first corporate sustainability label by C11 and best publicity traded companies in Asia – Pacific, founded by Jahangir Ratanji Dadabhai Tata in 1945 as a leading Indian multinational automotive manufacturing company in Mumbai, Maharashtra. It accredited with sustainable plus marque (Gold category), Star Performer award by EEPC (Indian Engineering Export Promotion Council).

MAHINDRA AND MAHINDRA

Enjoys a strong corporate brand image, customer centricity started on 2nd October 1945 consists of segments of automotive, farm equipment, infrastructure, information technology, hospitality and financial services. It adopted the supply chain management to reducing carbon foot prints and focused on education, health, sports and culture.

MARUTI SUZUKI

It is not only one of the oldest but also as one of the biggest game players in the automotive industry. It was backs to 1981 and known as Maruti Udyog Limited (MUL) and 18.28 percent of its shares were under the ownership of the Indian Government, and its headquarters located in New Delhi. It started production in the year 1983 by producing of iconic Maruti 800 considered as the people's car of India. It consists of Maruti Omni, Maruti Alto 800, Maruti Suzuki Eeco, Maruti Alto k10, Maruti Suzuki Wagon R. It bagged the best business standard company of the year 2010-11 and best value for money car of the year at auto car India Awards 2013, sustainability award by the CII, IITC. As a part of its corporate social responsibility initiatives Maruti Suzuki has taken significant steps in the area of road safety, skill development, community development and employee engagement programs through to being pioneers in the Indian automobile industry.

REVIEW OF LITERATURE

Niresh (2012) disclosed that, there was a negative relationship between Cash Conversion Cycle and performance measures and the current assets to total assets ratio shows a weak positive relationship with the performance measures of return on assets and return on equity. The researchers mentioned that manufacturing firms adopted conservative working capital management policy in Sri Lanka. **Darabi & Toomari, (2012)** examined that there was a significant positive relationship between cash conversion cycle and the competitiveness of the company; which means that a decrease in the cash conversion cycle results in a reduction in competitiveness due to decrease in number of days of accounting receivables, decrease of inventories days and increasing in number of days of accounts payables. **Afza & Nazir, (2011)** used utilization index, performance index and total efficiency index to measure efficiency of working capital management. They also tested the speed of achieving the target level of efficiency by an individual firm by using industry norms as the target level of efficiency. **Charitou et al, (2010)** was also revealed there were significant relationship between the cash conversion cycle and days in inventory, days sales outstanding and creditor payment period with the firm's profitability. **Bellouma (2009)** concluded that a negative relationship identified between gross operating profitability and the days of sales outstanding, the days of payable outstanding, the days of inventory outstanding and the cash conversion cycle. **Mian Sajid Nazir & Talat Afza (2009)**. Their result indicated that there is a negative relationship between the profitability measures of firms and degree of aggressiveness of working capital investment and financing policies, but they found investors giving more value to those firms that are more aggressive in managing their current liabilities. **Ganesan (2007)** found that the working capital management efficiency was negatively related to the liquidity and profitability. He suggested that the manager can improve working capital efficiency by reducing days of working capital. In addition, he said that the management of days sales outstanding showed no significant effect on the return on assets and profit margin because of the heavy fixed asset requirements in telecommunication industry. It also had poor management of accounts payable and accounts receivable. **N.K. Agrawal (1983)** concluded that although the working capital per rupee of sales showed a declining trend over the years, but still a sufficient scope for reduction in investment appeared in almost all the segments of working capital. **Misra (1975)** showed that the overstocking of inventory in regard to it's each component, more cash as operational requirements and very low receivables turnover. The result indicated that there is mismanagement of working capital in public sector in India. **Swamy & V.G. Rao (1974)** concluded that inventory and fixed investment were found to be sensitive to variations in the availability of external funds. **Borty (1973)** highlighted the utility of Operating Cycle concept in the determination of future cash requirements on the basis of estimated sales and costs of internal staff of the firm.

OBJECTIVES OF THE STUDY

The study carried with the following objectives:

1. To test whether there is any significant difference from one automobile firm to another automobile firm regarding inventory turnover ratio, debtors turnover ratio, fixed assets turnover ratio and total assets turnover ratio.
2. To offer a suitable suggestions to strengthen the financial performance of automobile industry in India.

METHODOLOGY OF THE STUDY

The data collected from the secondary sources through the annual reports of various automobile firms from the 2002-03 to 2011-12. The paired samples statistics applied to derive the required results. The only six firms were selected for this study. These are Hero Motor Corporation, TVS Motors, Ashok Leyland, Tata Motors, Mahindra & Mahindra and Maruti Suzuki.

INPUT TABLE 1: INVENTORY TURN OVER RATIO OF DIFFERENT FIRMS OF AUTO-MOBILE INDUSTRY FROM THE YEAR 2002-03 TO 2011-12

Year	Hero MotoCorp	TVS Motor	Ashok Leyland	Tata Motors	Mahindra & Mahindra	Maruti Suzuki
2002-03	25.51	12.73	6.85	10.20	8.39	15.52
2003-04	31.30	13.22	6.92	14.91	10.14	21.94
2004-05	36.57	12.69	7.59	14.06	8.92	16.90
2005-06	38.74	11.06	5.99	12.63	9.48	14.15
2006-07	36.25	11.86	6.93	13.26	11.75	21.27
2007-08	42.82	9.61	7.90	14.44	12.49	22.93
2008-09	47.53	13.31	5.36	13.47	14.56	30.46
2009-10	42.80	17.12	5.11	13.50	17.91	30.47
2010-11	43.88	13.27	5.86	13.86	15.64	33.33
2011-12	40.84	13.19	6.63	13.37	14.99	22.80

Source: Compiled from the Annual Reports

Input Table-1 : This table narrates the inventory turnover ratio of different firms of Automobile Industry. The higher ratio (47.53) represented from the year 2008-09 and lowest ratio (25.51) witnessed during 2002-03 regarding Hero Motor Corporation, Highest (17.12) and lowest (9.61) with reference to TVS Motor, lowest (5.11) and highest (7.90) regarding Ashok Layland, Highest (14.91) and lowest (10.20) from Tata Motors, highest (33.33) and lowest (15.52) from Maruthi Suzuki.

OUT PUT TABLE 1: PAIRED SAMPLES STATISTICS OF VARIOUS FIRMS OF AUTO MOBILE INDUSTRY

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Hero Motor Corp	38.6240	10	6.51822	2.06124
	Tvs Motor(Inventory Turnover Ratio)	12.8060	10	1.93149	.61079
Pair 2	Ashok Leyland	6.5140	10	.91580	.28960
	Tata Motors	13.3700	10	1.28531	.40645
Pair 3	Mahindra & Mahindra	12.4270	10	3.24001	1.02458
	Maruti Suzuki	22.9770	10	6.61480	2.09178
Pair 4	Mahindra & Mahindra	12.4270	10	3.24001	1.02458
	Hero Motor Corp	38.6240	10	6.51822	2.06124
Pair 5	Hero Motor Corp	38.6240	10	6.51822	2.06124
	Maruti Suzuki	22.9770	10	6.61480	2.09178
Pair 6	Tvs Motor(Inventory Turnover Ratio)	12.8060	10	1.93149	.61079
	Tata Motors	13.3700	10	1.28531	.40645
Pair 7	Mahindra & Mahindra	12.4270	10	3.24001	1.02458
	Ashok Leyland	6.5140	10	.91580	.28960
Pair 8	Maruti Suzuki	22.9770	10	6.61480	2.09178
	Hero Motor Corp	38.6240	10	6.51822	2.06124

Source: SPSS

Output Table-1 : The above table furnishes the information regarding paired samples statistics of different firms of automobile industry. The higher value of mean implies the higher inventory turnover ratio, the lower value of mean implies the lower inventory turnover ratio. The Hero Motor Corp turnover ratio was higher than TVS Motor, Tata Motors exceeds Ashok Layland, Maruthi Suzuki exceeds the Mahindra & Mahindra, Hero Motor Corp exceeds the Mahindra & Mahindra as well as Maruthi Suzuki, and Mahindra & Mahindra exceeds Ashok Layland. Finally it can be concluded that the higher inventory ratio was holding by the Hero Motor Corporation, followed by the Maruthi Suzuki and least ratio represented from Ashok Layland.

OUT PUT TABLE 2: PAIRED SAMPLES TEST OF VARIOUS FIRMS OF AUTO MOBILE INDUSTRY

OUTPUT TABLE 2: PAIRED SAMPLES TEST OF VARIOUS FIRMS OF AUTO MOBILE INDUSTRY

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Hero Motor Corp - Tvs Motor(Inventory Turnover Ratio)	2.58180E1	6.58873	2.08354	21.10471	30.53129	12.391	9	.000
Pair 2	Ashok Leyland - Tata Motors	-6.85600	1.46811	.46426	-7.90622	-5.80578	-14.768	9	.000
Pair 3	Mahindra & Mahindra - Maruti Suzuki	-1.05500E1	4.03679	1.27654	-13.43774	-7.66226	-8.264	9	.000
Pair 4	Mahindra & Mahindra - Hero Motor Corp	-2.61970E1	4.60789	1.45714	-29.49329	-22.90071	-17.978	9	.000
Pair 5	Hero Motor Corp - Maruti Suzuki	1.56470E1	5.06481	1.60163	12.02385	19.27015	9.769	9	.000
Pair 6	Tvs Motor(Inventory Turnover Ratio) - Tata Motors	-.56400	2.33850	.73950	-2.23686	1.10886	-.763	9	.465
Pair 7	Mahindra & Mahindra - Ashok Leyland	5.91300	3.87831	1.22643	3.13862	8.68738	4.821	9	.001
Pair 8	Maruti Suzuki - Hero Motor Corp	-1.56470E1	5.06481	1.60163	-19.27015	-12.02385	-9.769	9	.000

Source: SPSS

Output Table-2 : This table shows the paired samples test of different firms of Automobile Industry regarding turnover ratio.

Null Hypothesis (H_0) : There is no significant difference from inventory ratio of Hero Motor Corporation to inventory ratio of Hero Motor Corporation to inventory ratio of TVS Motor.

Alternative Hypothesis (H_a) : There is a significant difference from inventory ratio of Hero Motor Corporation to inventory ratio of TVS Motor.

Analysis : The calculated value of t was 12.391 at df was 9 significant value was 0.000, hence it affirmed that the proposed null hypothesis was rejected and alternative hypothesis was accepted and decided that there was a significant difference from inventory ratio of Hero Motor Corporation to inventory ratio of TVS Motor.

Null Hypothesis (H_{02}) : There is no significant difference from inventory ratio of Ashok Layland to inventory ratio of Tata Motors.

Alternative Hypothesis (H_{a2}) : There is a significant difference from inventory ratio of Ashok Layland to inventory ratio of Tata Motors.

Analysis : The value of mean was -6.856 and value of t was -14.768 at df was 9, significant value was 0.000, hence it can be concluded that proposed null hypothesis was rejected and alternative hypothesis was accepted and confirmed that there was a significant difference between inventory ratio of Ashok Layland to Tata Motors.

Null Hypothesis (H_{03}) : There is no significant difference from inventory ratio of Mahindra & Mahindra to inventory ratio of Maruthi Suzuki.

Alternative Hypothesis (H_{a3}) : There is a significant difference from inventory ratio of Mahindra & Mahindra to inventory ratio of Maruthi Suzuki.

Analysis : The value of mean was -1.055 at t value was -8.264 at df was 9 significant value was 0.000, hence it was witnessed that proposed null hypothesis was not accepted and inferred that there was a significant difference between inventory ratio of Mahindra & Mahindra and inventory ratio of Maruthi Suzuki.

Null Hypothesis (H_{04}) : There is no significant difference between inventory ratio of Mahindra & Mahindra to Hero Motor Corporation.

Alternative Hypothesis (H_{a4}) : There is a significant difference between inventory ratio of Mahindra & Mahindra to Hero Motor Corporation.

Analysis : The value of t was -17.978 at df was 9, P value was 0.000, hence it was observed that proposed null hypothesis was rejected and alternative hypothesis was accepted and confirmed that there was a significant difference from the inventory ratio of Mahindra & Mahindra to the inventory ratio of Hero Motor Corporation.

Null Hypothesis (H_{05}) : There is no significant difference between inventory turnover ratio of Hero Motor Corporation to inventory turnover ratio of Maruthi Suzuki.

Alternative Hypothesis (H_{a5}) : There is a significant difference between inventory turnover ratio of Hero Motor Corporation to inventory turnover ratio of Maruthi Suzuki.

Analysis: The value of mean was 1.564 and value of t was 9.769 at df was 9, P value was 0.000, hence it confirmed that the proposed null hypothesis was rejected and alternative hypothesis was accepted and concluded that there was a significant difference from the inventory ratio of Hero Motor Corporation to inventory ratio of Maruthi Suzuki.

Null Hypothesis (H_{06}) : There is no significant difference from inventory ratio of TVS Motor to the inventory turnover ratio of Tata Motors.

Alternative Hypothesis (H_{a6}) : There is a significant difference from inventory ratio of TVS Motor to the inventory ratio of Tata Motors.

Analysis : The value of mean was -0.564 and with t value was -0.763 at df was 9, P value was 0.465, hence it can be concluded that the proposed null hypothesis was accepted and came to know that there was no significant difference from inventory ratio of TVS Motor Company to the inventory ratio of Tata Motors Company.

Null Hypothesis (H_{07}) : There is no significant difference from the inventory ratio of Mahindra & Mahindra to the inventory ratio of Ashok Layland.

Alternative Hypothesis (H_{a7}) : There is a significant difference from the inventory ratio of Mahindra & Mahindra to the inventory ratio of Ashok Layland.

Analysis : The value of mean was 5.91 and t value was 4.821 at df was 9, P value was 0.001, and confirmed that the proposed null hypothesis was rejected and alternative hypothesis was accepted and came to know that there was a significant difference from the inventory ratio of Mahindra & Mahindra to the inventory ratio of Ashok Layland.

Null Hypothesis (H_{08}) : There is no significant difference from the inventory ratio of Maruthi Suzuki to the inventory ratio of Hero Motor Corporation.

Alternative Hypothesis (H_{a8}) : There is a significant difference from inventory ratio of Maruthi Suzuki to the inventory ratio of Hero Motor Corporation.

Analysis : The value of mean was -1.564 and t value was -9.769 at df was 9 with a significant value was 0.000, hence it was confirmed that the proposed null hypothesis was rejected and alternative hypothesis was accepted and concluded that there was a significant difference from the inventory ratio of Maruthi Suzuki to the inventory ratio of Hero Motor Corporation.

INPUT TABLE 2: DEBTORS TURN OVER RATIO OF DIFFERENT FIRMS OF AUTO-MOBILE INDUSTRY FROM THE YEAR 2002-03 TO 2011-12

Year	Hero MotoCorp	TVS Motor	Ashok Leyland	Tata Motors	Mahindra & Mahindra	Maruti Suzuki
2002-03	42.32	38.99	5.47	10.23	6.38	9.79
2003-04	63.02	54.18	7.49	16.69	10.75	13.89
2004-05	111.41	66.53	9.88	24.12	14.46	17.14
2005-06	70.26	69.76	12.14	26.31	14.16	19.45
2006-07	40.11	45.46	15.54	35.60	14.82	21.12
2007-08	32.70	32.31	17.74	30.08	13.26	25.76
2008-09	55.10	27.25	9.25	19.11	12.77	26.33
2009-10	122.63	21.71	7.51	17.92	16.09	33.92
2010-11	162.08	25.17	10.34	19.20	17.97	42.93
2011-12	117.09	28.24	11.02	20.42	19.05	38.84

Source: Compiled from the Annual Reports

Input Table-2 : This table reflects the information of debtors turnover ratio of various firms of automobile industry. The highest ratio (162.08) witnessed during the year 2010-11 followed by the 2009-10 and least ratio (32.70) was identified during the year 2007-08 regarding Hero Motor Corporation. Regarding TVS Motor highest ratio (69.76) during the year 2005-06 followed by the 2004-05 and the least ratio was identified during 2009-10 (21.71). The highest ratio (35.60), lowest ratio (10.23) regarding Tata Motors, highest ratio (19.05) and least ratio (6.38) witnessed from the Mahindra & Mahindra and highest ratio (42.93) and least ratio (9.79) represented from the Maruthi Suzuki.

OUT PUT TABLE 3: PAIRED SAMPLES STATISTICS OF VARIOUS FIRMS OF AUTO MOBILE INDUSTRY

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Hero Motor Corp	81.6720	10	43.64023	13.80025
	Tvs Motor(Inventory Turnover Ratio)	40.9600	10	17.40573	5.50418
Pair 2	Ashok Leyland	10.6380	10	3.73961	1.18257
	Tata Motors	21.9680	10	7.26766	2.29824
Pair 3	Mahindra & Mahindra	13.9710	10	3.60894	1.14125
	Maruti Suzuki	24.9170	10	10.83865	3.42748
Pair 4	Ashok Leyland	10.6380	10	3.73961	1.18257
	Hero Motor Corp	81.6720	10	43.64023	13.80025
Pair 5	Mahindra & Mahindra	13.9710	10	3.60894	1.14125
	Tvs Motor(Inventory Turnover Ratio)	40.9600	10	17.40573	5.50418
Pair 6	Maruti Suzuki	24.9170	10	10.83865	3.42748
	Ashok Leyland	10.6380	10	3.73961	1.18257
Pair 7	Maruti Suzuki	24.9170	10	10.83865	3.42748
	Tata Motors	21.9680	10	7.26766	2.29824

Source: SPSS

Output Table-3 : This table reflects the paired samples statistics of various firms of automobile industry regarding debtors turnover ratio. The more number of days required to recover the cash from debtors of the Hero Motor Corporation than the TVS Motor as well as Ashok Layland. Ashok layland realized cash earlier than the Tata Motors, Mahindra & Mahindra than Maruthi Suzuki, Ashok Layland than Hero Motor Corporation, Mahindra & Mahindra than TVS Motor, Ashok Layland than Maruthi Suzuki, Tata Motors than Maruthi Suzuki. Finally it can be concluded the least number of days required to recover the cash from debtors regarding Ashok Layland followed by TVS Motor, Tata Motors, Maruthi Suzuki and Hero Motor Corporation.

OUT PUT TABLE 4: PAIRED SAMPLES TEST OF VARIOUS FIRMS OF AUTO MOBILE INDUSTRY

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Hero Motor Corp - Tvs Motor(Inventory Turnover Ratio)	4.07120E1	50.72469	16.04055	4.42575	76.99825	2.538	9	.032
Pair 2	Ashok Leyland - Tata Motors	-1.13300E1	4.14061	1.30937	-14.29201	-8.36799	-8.653	9	.000
Pair 3	Mahindra & Mahindra - Maruti Suzuki	-1.09460E1	7.96432	2.51854	-16.64333	-5.24867	-4.346	9	.002
Pair 4	Ashok Leyland - Hero Motor Corp	-7.10340E1	44.87969	14.19221	-103.13900	-38.92900	-5.005	9	.001
Pair 5	Mahindra & Mahindra - Tvs Motor(Inventory Turnover Ratio)	-2.69890E1	18.70063	5.91366	-40.36663	-13.61137	-4.564	9	.001
Pair 6	Maruti Suzuki - Ashok Leyland	1.42790E1	10.78888	3.41174	6.56110	21.99690	4.185	9	.002
Pair 7	Maruti Suzuki - Tata Motors	2.94900	12.71796	4.02177	-6.14888	12.04688	.733	9	.482

Source: SPSS

Output Table-4 : This table reveals that paired samples test of various firms of automobile industry regarding debtors turnover ratio. This table reflects that there was significant difference from one firm to another firm regarding the debtors turnover ratio except the firms Maruthi Suzuki and Tata Motors regarding these firms there was no significant difference between each other with reference to the debtors turnover ratio.

INPUT TABLE 3: FIXED ASSETS TURN OVER RATIO OF DIFFERENT (FIRMS OF AUTO-MOBILE INDUSTRY FROM THE YEAR 2002-03 TO 2011-12)

Year	Hero MotoCorp	TVS Motor	Ashok Leyland	Tata Motors	Mahindra & Mahindra	Maruti Suzuki
2002-03	10.41	5.57	2.94	1.53	2.50	3.10
2003-04	11.23	4.58	3.93	2.18	3.49	4.53
2004-05	12.32	3.91	4.80	2.62	4.66	5.78
2005-06	11.41	2.35	5.40	2.55	5.44	6.59
2006-07	9.54	2.60	5.43	3.08	5.88	6.32
2007-08	5.89	1.80	2.77	2.69	3.22	2.48
2008-09	5.34	1.97	1.26	1.88	2.84	2.38
2009-10	6.29	2.29	1.25	1.95	3.85	2.82
2010-11	3.70	3.13	1.73	2.22	4.08	3.13
2011-12	4.05	3.34	1.98	2.65	4.32	2.46

Source: Compiled from the Annual Reports

Input Table-3 : This table reflects the fixed assets turnover ratio of different firms of Automobile Industry. The higher fixed assets turnover ratio (12.32) occurred during the year 2004-05 followed by 2005-06 (11.41) and 2003-04 (11.23) and the least (3.70) was happened during the year 2010-11 regarding during Hero Motor Corporation. The ratio of 5.57 happened during the year 2002-03, followed by the 2011-12 and the least (1.80) happened during the year 2007-08 with reference to the TVS Motor Company except Mahindra & Mahindra to Maruthi Suzuki and from Mahindra & Mahindra to TVS Motor.

OUT PUT TABLE -5: PAIRED SAMPLES STATISTICS OF VARIOUS FIRMS OF AUTO MOBILE INDUSTRY

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Hero Motor Corp(Fixed Assets Turnover)	8.0180	10	3.29046	1.04053
	Tvs Motor	3.1540	10	1.22076	.38604
Pair 2	Ashok Leyland	3.1490	10	1.64478	.52012
	Tata Motors	2.3350	10	.46527	.14713
Pair 3	Mahindra & Mahindra	4.0280	10	1.08685	.34369
	Maruti Suzuki	3.9590	10	1.69275	.53530
Pair 4	Maruti Suzuki	3.9590	10	1.69275	.53530
	Hero Motor Corp(Fixed Assets Turnover)	8.0180	10	3.29046	1.04053
Pair 5	Mahindra & Mahindra	4.0280	10	1.08685	.34369
	Tvs Motor	3.1540	10	1.22076	.38604
Pair 6	Tata Motors	2.3350	10	.46527	.14713
	Maruti Suzuki	3.9590	10	1.69275	.53530
Pair 7	Mahindra & Mahindra	4.0280	10	1.08685	.34369
	Hero Motor Corp(Fixed Assets Turnover)	8.0180	10	3.29046	1.04053

Source: SPSS

Output Table-5 : This table reveals that the information of paired samples statistics of various firms of automobile industry regarding fixed assets turnover ratio. The best performance had taken place by the Hero Motor than TVS Motor, Tata Motor than Ashok Layland, Maruthi Suzuki than Mahindra & Mahindra, Hero Motor than Maruthi Suzuki, Mahindra & Mahindra than TVS Motor, Maruthi Suzuki than Tata Motors, and Hero Motor Corporation than Mahindra & Mahindra. Finally it was evident that, the best utilization of fixed assets hold by the Hero Motor Corporation followed by Mahindra & Mahindra, Maruthi Suzuki and TVS Motor.

OUT PUT TABLE 6: PAIRED SAMPLES TEST OF VARIOUS FIRMS OF AUTO MOBILE INDUSTRY

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Hero Motor Corp(Fixed Assets Turnover) - Tvs Motor	4.86400	2.92408	.92468	2.77224	6.95576	5.260	9	.001
Pair 2	Ashok Leyland - Tata Motors	.81400	1.42952	.45206	-.20862	1.83662	1.801	9	.105
Pair 3	Mahindra & Mahindra - Maruti Suzuki	.06900	1.07221	.33906	-.69801	.83601	.204	9	.843
Pair 4	Maruti Suzuki - Hero Motor Corp(Fixed Assets Turnover)	-4.05900	2.24171	.70889	-5.66262	-2.45538	-5.726	9	.000
Pair 5	Mahindra & Mahindra - Tvs Motor	.87400	1.85332	.58607	-.45178	2.19978	1.491	9	.170
Pair 6	Tata Motors - Maruti Suzuki	-1.62400	1.50309	.47532	-2.69925	-.54875	-3.417	9	.008
Pair 7	Mahindra & Mahindra - Hero Motor Corp(Fixed Assets Turnover)	-3.99000	3.17169	1.00298	-6.25889	-1.72111	-3.978	9	.003

Source: SPSS

Output Table-6 : This table reveals that whether there is any significant difference of fixed assets turnover ratio from one firm to another firm of automobile industry. This table evident that there was a significant difference from one firm to another firm regarding fixed assets turn over ratio.

INPUT TABLE 4: TOTAL ASSETS TURNOVER RATIO OF DIFFERENT FIRMS OF AUTO-MOBILE INDUSTRY FROM THE YEAR 2002-03 TO 2011-12

Year	Hero MotoCorp	TVS Motor	Ashok Leyland	Tata Motors	Mahindra & Mahindra	Maruti Suzuki
2002-03	5.21	4.96	1.69	2.21	1.38	2.08
2003-04	4.58	4.09	2.31	2.68	1.98	2.42
2004-05	4.54	3.32	2.15	2.63	2.17	2.36
2005-06	4.20	2.81	2.64	2.40	2.16	2.21
2006-07	3.99	2.67	2.99	2.49	1.92	1.98
2007-08	3.52	2.16	2.70	2.06	1.64	1.94
2008-09	3.36	2.14	1.54	1.02	1.42	2.06
2009-10	4.80	2.33	1.65	1.14	1.74	2.32
2010-11	4.68	3.46	2.19	1.35	1.86	2.59
2011-12	4.91	3.79	2.75	2.29	2.19	2.22

Source: Compiled from the Annual Reports

Input Table-4 : This table reflects the total assets turnover ratio of different firms of automobile industry. The higher ratio (5.21) witnessed during the year 2002-03 followed by the 2011-12 (4.91) and the least (3.36) during the year 2008-09 regarding the Hero Motor Corporation. The higher ratio (4.96) witnessed during the year 2002-03 followed by the 2011-12 (4.91) and the least (3.36) during the year 2008-09 regarding the Hero Motor Corporation. The higher ratio (4.96) witnessed during the year 2002-03 followed by the 2003-04 and the least (2.14) happened regarding the TVS Motor company. Regarding Ashok Layland the higher ratio represented from the 2006-07 followed by the 2011-12 and the least witnessed during the year 2008-09. With reference to Tata Motors the higher ratio represented from the 2003-04 followed by 2011-12, 2002-03 and the least (1.02) by 2008-09. The followed by 2004-05 and the least (1.42) during 2008-09 with reference to Mahindra & Mahindra. The higher ratio (2.59) followed by the 2.42 (2003-04) and the least value (1.94) was from 2007-08 represented from the Maruthi Suzuki. The higher ratio (5.43 – 2006-07) – Ashok Layland. 3.08-2006-07 – Tata Motors, 5.88-2006-07 – Mahindra & Mahindra, 6.59 – 2005-06 – Maruthi Suzuki and the least ratio 1.53 – 2002-03 – Tata Motors, 2.50 - 2002-03 – Mahindra & Mahindra, 2.46 – 2011-12 – Maruti Suzuki regarding the fixed assets turnover ratio.

OUT PUT TABLE 7: PAIRED SAMPLES STATISTICS OF VARIOUS FIRMS OF AUTO MOBILE INDUSTRY.

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Hero Motor Corp(Fixed Assets Turnover)	4.3790	10	.60243	.19050
	Tvs Motor	3.1730	10	.92542	.29264
Pair 2	Ashok Leyland	2.2610	10	.51054	.16145
	Tata Motors	2.0270	10	.62418	.19738
Pair 3	Mahindra & Mahindra	1.8460	10	.29774	.09415
	Maruti Suzuki	2.2180	10	.20757	.06564
Pair 4	Maruti Suzuki	2.2180	10	.20757	.06564
	Tvs Motor	3.1730	10	.92542	.29264
Pair 5	Ashok Leyland	2.2610	10	.51054	.16145
	Mahindra & Mahindra	1.8460	10	.29774	.09415
Pair 6	Ashok Leyland	2.2610	10	.51054	.16145
	Maruti Suzuki	2.2180	10	.20757	.06564
Pair 7	Hero Motor Corp(Fixed Assets Turnover)	4.3790	10	.60243	.19050
	Maruti Suzuki	2.2180	10	.20757	.06564

Source: SPSS

Output Table-7 : This table narrates the information of paired samples statistics of total assets turnover ratio of different firms of automobile industry. The Hero Motor Corporation was better than TVS Motor, Ashok Layland slightly more than Tata Motors, Maruthi Suzuki was higher than Mahindra & Mahindra, TVS Motor than Marthi Suzuki, Ashok Layland than Mahindra & Mahindra as well as the Maruthi Suzuki. Finally it was witnessed that the higher total assets turnover ratio represented from the Hero Motor Corporation followed by the TVS Motor, Ashok Layland, Maruthi Suzuki and Mahindra & Mahindra.

OUT PUT TABLE 8: PAIRED SAMPLES TEST OF VARIOUS FIRMS OF AUTO MOBILE INDUSTRY

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Hero Motor Corp(Fixed Assets Turnover) - Tvs Motor	1.20600	.58716	.18568	.78597	1.62603	6.495	9	.000
Pair 2	Ashok Leyland - Tata Motors	.23400	.50056	.15829	-.12408	.59208	1.478	9	.173
Pair 3	Mahindra & Mahindra - Maruti Suzuki	-.37200	.28122	.08893	-.57317	-.17083	-4.183	9	.002
Pair 4	Maruti Suzuki - Tvs Motor	-.95500	.88176	.27884	-1.58577	-.32423	-3.425	9	.008
Pair 5	Ashok Leyland - Mahindra & Mahindra	.41500	.39820	.12592	.13015	.69985	3.296	9	.009
Pair 6	Ashok Leyland - Maruti Suzuki	.04300	.58997	.18657	-.37904	.46504	.230	9	.823
Pair 7	Hero Motor Corp(Fixed Assets Turnover) - Maruti Suzuki	2.16100	.52248	.16522	1.78724	2.53476	13.079	9	.000

Source: SPSS

Output Table-8 : This table discloses the information whether there is any significant difference from one firm to another firm regarding the automobile industry. There was a significant difference from one automobile firm regarding total assets turnover ratio except Ashok Layland to Maruthi Suzuki and from Ashok Layland to Tata Motors.

FINDINGS OF THE STUDY

The study found the following findings.

1. The study found that the higher inventory ratio was holding by the Hero Motor Corporation, followed by the Maruthi Suzuki and the least ratio represented form Ashok Layland.
2. The Study observed that there was no significant difference from inventory ratio of TVS Motor Company to the inventory ratio of Tata Motors and the remaining pairs (Hero Motor Crop – TVS Motor, Ashok Layland – Tata Motors, Mahindra & Mahindra – Hero Motor Corp, Hero Motor Corp – Maruthi Suzuki, Mahindra & Mahindra to Ashok Layland and from Maruthi Suzuki to Hero Motor Corporation) witnessed a significant difference with each other regarding inventory turnover ratio.
3. The study also observed that the higher number of days required to recover the cash from debtors of Hero Motor Corporation followed by the TVS Motor, Maruthi Suzuki and Tata Motors.
4. The study came to knew that there was no significant difference from realizing of cash from debtors from Maruthi Suzuki to the Tata Motors Company but there was a significant difference between the other firms.
5. The study observed that the higher fixed assets turnover ratio hailed from the Hero Motor Corporation followed by the Mahindra & Mahindra, Marthi Suzuki and TVS Motor.
6. The study identified that there was no significant difference from Mahindra & Mahindra to Maruthi Suzuki and from TVS Motor to Mahindra & Mahindra regarding the fixed assets turnover ratio.
7. The study exhibited that total assets turnover ratio of Hero Motor Corporation was better than TVS Motor, Ashok Layland, Maruthi Suzuki and Mahindra & Mahindra.
8. There was no significant difference regarding Total assets turnover ratio of Ashok Layland to Tata Motors and from Ashok Layland to Maruthi Suzuki.

CONCLUSION AND SUGGESTIONS

The Study observed that there was no significant difference from inventory ratio of TVS Motor Company to the inventory ratio of Tata Motors and the remaining pairs (Hero Motor Crop – TVS Motor, Ashok Layland – Tata Motors, Mahindra & Mahindra – Hero Motor Corp, Hero Motor Corp – Maruthi Suzuki, Mahindra & Mahindra to Ashok Layland and from Maruthi Suzuki to Hero Motor Corporation) witnessed a significant difference with each other regarding inventory turnover ratio. Hence it is suggested that every organization should take necessary steps to have low debtors turnover period to reduce the holding of working capital requirements.

REFERENCES

1. Abbasali Pouraghajan and Milad Emamgholipourarchi (2012), "Impact of Working Capital Management on Profitability and Market Evaluation: Evidence from Tehran Stock Exchange", *International Journal of Business and Social Science*, Volume 3, Issue 10, May 2012, pp. 311 – 318.
2. Abdul Raheman and Mohamed Nasr (2007), "Working Capital Management And Profitability – Case Of Pakistani Firms", *International Review of Business Research Papers* Vol.3 No.1. March 2007, Pp.279 – 300.
3. Abdul Raheman, Talat Afza, Abdul Qayyum and Mahmood Ahmed Bodla (2010), "Working Capital Management and Corporate Performance of Manufacturing Sector in Pakistan", *International Research Journal of Finance and Economics*, Issue 47, 2010, PP. 151-163.
4. Abuzar M.A. Eljelly, (2004), "Liquidity-Profitability Trade-off: An Empirical Investigation in an Emerging Market", *International Journal of Commerce and Management*, Vol. 14, No. 2, pp. 48-61.
5. Adesh Sharma (1994), "Investment and Financing in Pesticides Industry in India", *Indian Journal of Finance and Research*, Vol. No.2, July 1994, pp. 67-83.
6. Adina Elena Danuletiu, (2010), "Working Capital Management And Profitability: A Case Of Alba County Companies", *Annales Universitatis Apulensis Series Oeconomica*, 2010, vol. 1, issue 12, pages 36.
7. Amarjit Gill (2011), "Factors That Influence Working Capital Requirements in Canada", *Economics and Finance Review*, Volume 1, Issue 3, May 2011, pp. 30 – 40.
8. Amarjit Gill, Nahum Biger and Neil Mathur (2010), "The Relationship Between Working Capital Management And Profitability: Evidence From The United States", *Business and Economics Journal*, Volume 2010: BEJ-10, 2010, pp. 1 – 9.
9. Arunkumar O. N and T. Radharamanan (2013), "Working Capital Management and Profitability: An Empirical Analysis of Indian Manufacturing Firms", *International Journal of Management (IJM)*, Volume 4, Issue1, January- February 2013, pp. 121 - 129, Published by IAEME.
10. Carole Howorth and Paul Westhead (2003)16, "The focus of working capital management in UK small firms", *Management Accounting Research*, Issue 14, March 2003, PP. 94-111.
11. Ghosh SK and SG Maji (2004), "Working Capital Management Efficiency: A Study on the Indian Cement Industry", *Management Accountant*, Vol. 39, No. 5, May 2004, pp. 363-372.
12. Imran Omer Chhapra and Nousheen Abbas Naqvi (2010), "Relationship between Efficiency Level of Working Capital Management and Profitability of Firms in the Textile Sector of Pakistan", *Indus Journal of Management & Social Sciences*, Volume 4, No. 1, Spring 2010, PP. 30-42.
13. Kumar, Vijay & A. Venkatachalam (1995), "Working Capital and Profitability – An Empirical Analysis", *The Management Accountant*, October 1995, P-748-750.
14. Mehmet SEN and Eda ORUÇ (2009), "Relationship between Efficiency Level of Working Capital Management and Return on Total Assets in Ise", *International Journal of Business and Management*, Volume 4, No. 10, October 2009, PP. 109-114.
15. Mohammad Khodaei Valahzagharda, Ali Saeedia and Nasrollah Moradpurb (2013), "Investigating the role of different industries on the relationship between working capital management and Tobin's Q", *Management Science Letters*, Volume 3, 2013, PP. 3013-3036.
16. N.C. Gupta (1987), Productivity, "Investment and Import Substitution in Indian Industries (A Case Study of Non-Ferrous Metals)", *e book and book in English*, Anmol Publications, 1st Ed, New Delhi, 1987.
17. N.K. Agrawal (1983), "Management of Working Capital", *Sterling Publication Pvt. Ltd., Original from the university of Michigan*, New Delhi, 1983, digitized 28 oct 2006, 167 pages.
18. Nor Edi Azhar Binti Mohamad and Noriza Binti Mohd Saad (2010), "Working Capital Management: The Effect of Market Valuation and Profitability in Malaysia", *International Journal of Business and Management*, Volume 5, Issue 11, November 2010, pp. 140-147.
19. S.K. Chakra barty (1973), "Use of Operating Cycle Concept for Better Management of Working Capital", *The Economic and Political Weekly*, Volume 8, August 1973, PP. M69-M76.

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