

A comparative study on performance evaluation of selected 2/3 wheeler vehicles companies (with special reference to cash management)

Shailendrasinh J. Vaghela¹

Dr. Manish B. Raval²

Abstract

Cash, being a medium of exchange, is one of the important components of working capital. In the present research paper, an attempt has been made to evaluate the cash management performance of three leading public sector companies of the 2/3 Wheeler Vehicles segment in the Indian automobile industry, namely Bajaj Auto Ltd., Hero Motocorp Ltd., and TVS Motor Company Ltd. Cash flow based ratios are employed to evaluate the average cash management performance of the selected companies. After applying the tools and techniques, the researchers have found that, Hero Motocorp Ltd. is at the top of the list when it comes to average performance based on cash management, followed by Bajaj Auto Ltd. and TVS Motor Company Ltd. Researchers have observed a mix trend in the cash management performance of all the sample companies during the period of the research. TVS Motor Company Ltd. is not at its best, but though not the worst in the performance.

Key words: Cash, Working Capital, Cash Return on Assets, Cash Turnover, Cash Flow Margin

Introduction

In the last few decades, the Automobile Industry of India has been recording tremendous growth and has emerged as a major contributor to India's GDP. This dynamic Industry currently accounts for almost 7 percent of India's GDP and employing about almost 19 million people. Also contribution of Indian Automotive Industry to Global Auto Industry Development is increasing significantly. In India, since the de-licensing of the sector in 1991 and the subsequent opening up of 100 percent FDI through automatic route, Indian Automobile Sector has come a long way. Today almost every global auto major has set up facilities in the country.

In India, automotive is one of the largest industries showing impressive growth over the years and has been significantly making increasing contribution to overall industrial

¹(Research Scholar) Faculty Member, Lt. M.J.Kundaliya English Medium Mahila Commerce and B.B.A. College, Rajkot

²Assistant Professor, Lt. M.J.Kundaliya English Medium Mahila Commerce and B.B.A. College, Rajkot

development in the country. This move is further enhanced by Government's support towards setting up centers for development and innovation. In order to further accelerate and sustain advancements in the auto sector, the department has undertaken several policy measures and incentives. The most important being the announcement of Auto policy of 2002, which aimed to establish a globally competitive automotive industry in India and double its contribution to the economy. Another milestone in this field had been the launch of the National Automotive Testing and R&D Infrastructure Project (NATRIP) which aimed to create core global competencies in automotive sector. Besides, the announcement of Automotive Mission Plan for the period 2006-2016 is a major step taken to make India a global automotive hub.

As a result, India is emerging as strong automotive Research and Development (R&D) hub with foreign players like Hyundai, Suzuki, and General Motors setting up their base in India. Tata Nano's successful entry in the market steamed up the opportunities of growth available in alternative segments like electric cars, vehicles run on natural gas etc. All such initiative indicates that the Indian Automotive Industry has been emerging as a sunrise sector of the economy. It is not only meeting the growing domestic demands, but also gradually increasing its penetration in the international market.

Cash, the most liquid asset, is of vital importance to the daily operations of business firms. While the proportion of corporate assets held in the form of Cash is very small, its efficient management is crucial to the solvency of the business. In a very important sense, cash is the focal point of fund flows in a business and is generally referred to as the "lifeblood of business enterprise".

Cash is an idle resource with an opportunity cost. The liquidity provided by holding cash is at the expense of profits that could accrue from alternative investment opportunities. Hence, the firm should plan and control cash carefully.

Cash management refers to the collection, concentration, and disbursements of cash. With regards to cash, the management's goal is to manage the cash balance of an enterprise in such a way as to reduce the risk of insolvency. Due to lack of cash, if at any time a company fails to meet its obligation, it directly affects its creditworthiness. Improper management of cash may lead to insolvency and bankruptcy as well. Obviously, the prospect of such a dire consequence should compel companies to manage their cash with care. Moreover, efficient

cash management means more than just preventing bankruptcy. Efficient cash management improves the profitability and reduces the risk to which the firm is exposed.

To conclude, Cash is a medium of exchange and therefore it is the most important component of working capital. The present study focuses on performance evaluation through cash management by using various indicator of measuring average cash management.

Review of literature

Doshi S.H., Senthil R., and Patidar P., (2005) attempted to identify the reasons behind different cash practices adopted by the top three Indian information technology companies.

Ghosh Sudipta (2011), analysed performance evaluation through cash management of TSL and SAIL in her research paper. The empirical findings of the study revealed that TSL on the average has utilized its cash more efficiently in comparison to SAIL. TSL has better capacity to convert its sales in to cash than that of SAIL.

Sanghani D. D. (2013) analysed performance evaluation through cash management of Bajaj Auto Ltd. and Hero Motocorp Ltd. in his research paper. The findings of the study revealed that Hero Motocorp Ltd. has used the average cash more efficiently than Bajaj Auto Ltd. Also, cash return on assets of both the companies was quite similar and both the companies are almost same in case of capacity to convert its sales into cash.

Yucel, T, and Kart, P. (2010) examined the relationship of cash conversion cycle (CCI) with profitability, Liquidity cycle debt structure for a sample of 167 firms during the period 1995 to 2000.

Objectives

The main objective of the study is to make comparison of performance evaluation based on cash management by and between Bajaj Auto Ltd.(BAL), Hero Motocorp Ltd.(HMCL) and TVS Motor Company Ltd.(TMCL).

Hypotheses of the study

According to above objective, the following hypotheses have been framed, as under...

H0: - There is no significant difference in Cash Turnover Ratio between the sample companies.

H0: - There is no significant difference in Cash Return on Assets between the sample companies.

H0: - There is no significant difference in Cash Flow Margin Ratio between the sample companies.

Research Methodology

Sample

The universe of the study consists of all the companies registered under automobile sector of Bombay Stock Exchange. The universe is divided in various segmentations like cars & utility vehicles, commercial vehicles, 2/3 wheelers etc. Using cluster sampling technique, researchers has selected top three 2/3 wheeler companies based on turnover, namely, Bajaj Auto Ltd., Hero Motocorp Ltd. and TVC Motor Company Ltd.

Data collection and period of the study

The study has been carried out for a period five year. i.e. from 2008-09 to 2012-13. The study is based on secondary data that has been collected and compiled from the published annual reports of the sample companies.

Tools and techniques

As per the nature of the study following tools and techniques are used for testing the hypotheses.

- Accounting Tools:- Ratio analysis
- Statistical technique: - Mean, Standard Deviation (S.D.), ANOVA

Limitations of the Study

1. The study is based on secondary data taken from the published annual reports of the company.
2. The study is conducted on selected samples of the universe. The result may or may not apply to the other units of the same universe.

Data Analysis and Interpretation

Table – 1

Table showing Performance Drivers

Performance Drivers	Formulae	Performance Measures
Cash Turnover Ratio (CTR)	Annual Sales ÷ Average cash and cash equivalents	The ratio indicates frequency of cash getting transformed into sales.
Cash Return On Assets (CRA)	Cash Flow From Operating Activities ÷ Total Assets	The cash return on assets (including interest) indicates internal generation of cash available to creditors or investors.
Cash Flow Margin Ratio (CFMR)	Cash Flow From Operating Activities ÷ Net sales	The ratio shows the relationship between cash generated from operations and sales.

The cash management performance of the sample companies are examined with the help of the above ratios.

To examine whether or not there are significant differences in cash management performance between the sample companies, One-Way ANOVA has been applied in the study.

Cash Management Performance of selected Companies

Table – 2

Table Showing Cash Management Performance Ratios of Selected Companies*

Year	Bajaj Auto Ltd.			Hero Motocorp Ltd.			TVC Motor Company Ltd.		
	CTR	CRA	CFMR	CTR	CRA	CFMR	CTR	CRA	CFMR
2008-09	87.46	0.62	0.25	70.26	0.34	0.11	160.37	0.09	0.04
2009-10	96.60	0.69	0.26	14.82	0.73	0.17	61.00	0.17	0.08
2010-11	48.63	0.38	0.13	19.45	0.49	0.12	115.48	0.11	0.03
2011-12	17.08	0.42	0.14	315.06	0.43	0.10	734.66	0.25	0.06
2012-13	17.62	0.05	0.02	182.91	0.35	0.08	457.05	0.22	0.06
Mean	53.48	0.43	0.16	120.50	0.46	0.12	305.71	0.17	0.06
S.D.	37.58	0.25	0.10	128.11	0.16	0.03	284.65	0.07	0.02

(* Source: Compiled by the researchers, from the annual reports of the selected samples under the study)

Cash Turnover Ratio

As observed from table – 2, the Cash turnover ratio of BAL has increased in 2009-10 and has decreased in the 2010-11 and 2011-12 by more than 50%. But it has not shown any considerable change in 2012-13 as compared to 2011-12. Whereas CTR of HML and TMCL has shown a highly fluctuating trend in its CTR. CTR for both the companies suddenly rises and is highest in year 2011-12 and decreased again in 2012-13. Overall there has been a mix trend in maintaining CTR by all the sample companies. As compared to BAL and HMCL, TMCL is best in utilizing its cash more efficiently to transform it into sales. Whereas HMCL stands at second position in utilizing its cash and BAL come to last in transforming its cash into sales.

Cash Return on Assets

From Table-2, we can observe that for BAL there has been a mix trend in CRA. CRA is good enough in the starting of the research period, but in the end of the research period, it is showing a decreasing trend and has decreased drastically in the year 2012-13. For TMCL, though there has been a mix trend in its Cash Return on Assets, it has been efficient enough in cash generating capacity from its assets, on an average basis. On an average basis and overall, HMCL is best at generating cash from its assets, though it is showing a mix trend in its Cash Return on Assets. Overall if we see, than HMCL is best, BAL is better and TMCL is good in cash generating capacity from its assets.

Cash Flow Margin Ratio

From table – 2, we can see that on an average basis, BAL is the best performer in CFMR, whereas HMCL is better and TMCL comes to be good. If we look from the standard deviation point of view, TMCL and HMCL are almost same. Whereas BAL is showing a higher S.D. HMCL is showing a declining trend from, 2010-11, whereas BAL and TMCL are showing a mix trend.

Now, to know whether there are significant differences in the average cash management performances between the sample companies, ANOVA has been applied. The results obtained from ANOVA are shown as below:

Table – 3

Table showing Statistical Result of ANOVA

Ratio	F-value	Sig.	Status of Null-hypotheses
CTR	2.590	0.116	Accepted
CRA	4.346	0.038	Rejected
CFMR	3.778	0.053	Accepted

1. As the null-hypotheses H0 is accepted, the researchers have not found any significant difference in CTR of the sample companies during the period of the study.
2. As the null-hypotheses H0 is rejected, the researchers have found significant difference in CRA of the sample companies during the period of the study. As the significant difference is found, the researchers have further carried out multiple comparison of the same applying Posthoc using Tukey's HSD.
3. As the null-hypotheses H0 is accepted, the researchers have not found any significant difference in CFMR of the sample companies during the period of the study.

Table – 4

A Table Showing Multiple Comparison of Cash Return on Assets
(Posthoc using Tukey's HSD)

COMPANY		Mean Difference	Std. Error	Sig.	95% Confidence Interval		Is Mean difference significant or not?
					Lower Bound	Upper Bound	
BAL	HMCL	-.03600	.11112	.944	-.3325	.2605	Not Significant
	TMCL	.26400	.11112	.083	-.0325	.5605	Not Significant
HMCL	BAL	.03600	.11112	.944	-.2605	.3325	Not Significant
	TMCL	.30000	.11112	.047	.0035	.5965	Significant
TMCL	BAL	-.26400	.11112	.083	-.5605	.0325	Not Significant
	HMCL	-.30000	.11112	.047	-.5965	-.0035	Significant

Findings

As observed from the above multiple comparisons, researchers have found that the CRA of TMCL is having significant difference with CRA of HMCL. It can be observed that TMCL is not able to maintain its CRA during the period of the study as efficiently as other companies are.

Conclusion

Considering the efficiency in average use of cash, TVS Motor Company Ltd. is at the top of the list followed by Hero Motocorp Ltd. and Bajaj Auto Ltd., though it is way behind in generating cash return on its assets.

Considering the average point of view, cash return on assets of Hero Motocorp Ltd. and Bajaj Auto Ltd. are quite similar and way ahead than TVS Motor Company Ltd. So to conclude, Hero Motocorp Ltd. and Bajaj Auto Ltd., are at higher level of managerial efficiency in effective use of their assets.

All the sample companies are showing quite a mixed trend in converting their sales into cash seeing the average cash flow margin. But here also TVS Motor Company Ltd. is way behind in converting their sales to cash when compared to Bajaj Auto Ltd. and Hero Motocorp Ltd. Bajaj Auto Ltd. is leading followed by HMCL and TMCL when it comes to CFMR.

Overall performance of all the sample companies, when eyed from the cash management viewpoint, is good enough though showing a mix trend during the study period. But if we need to select the best from them, then it comes to be Hero Motocorp Ltd. followed by Bajaj Auto Ltd. and VS Motor Company Ltd. Hero Motocorp Ltd. is found to be best at its management of cash considering the average cash management performance.

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