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A Comparative Study On Performance Evaluation Of Selected Auto Ancilliaries Companies (With Reference To Cash Management)

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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 four leading public sector companies of the Auto Ancilliaries Companies segment in the Indian automobile industry, namely Bosch Ltd., Exide Industries Ltd., Amara Raja Batteries Ltd. and JBM Auto 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, EIL is at the top of the list when it comes to average performance based on cash management, followed by BL, though researchers have observed a mix trend in the performance of the BL. Researchers have seen a fluctuating trend in performance of ARBL. It is not showing stability in its overall cash management performance. When it comes to JAL, it is having the worst scenario showing much poor performance in its average cash management.

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

Introduction

In the last few decades, the Automotive 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 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 Bosch Ltd., Exide Industries Ltd., Amara Raja Batteries Ltd. and JBM Auto Ltd.

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 of Auto Ancilliaries Companies segment, researcher has selected top four companies based on turnover, namely, Bosch Ltd. (BL), Exide Industries Ltd. (JAL), Amara Raja Batteries Ltd. (ARBL) and JBM Auto Ltd. (EIL).

Data collection and period of the study

The study has been carried out for a period five year. i.e. from 2010-11 to 2014-15. 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

The study is based on secondary data taken from the published annual reports of the company.

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

The cash management performance of the sample companies are examined with the help of the ratios as per table -1.

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.

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.

Table – 1

Table showing Performance Drivers

Cash Management Performance of selected Companies

Table – 2

Table Showing Cash Management Performance Ratios of Selected Companies*

Year	Bosch Ltd.			Exide Industries Ltd.			Amara Raja Batteries Ltd.			JBM Auto Ltd.		
	CTR	CRA	CFMR	CTR	CRA	CFMR	CTR	CRA	CFMR	CTR	CRA	CFMR
2010-11	17.99	0.12	0.06	55.25	-0.16	-0.08	44.25	-0.08	-0.05	10.39	0.18	0.13
2011-12	28.43	0.23	0.10	23.86	0.04	0.02	45.16	0.13	0.06	10.87	0.21	0.13
2012-13	27.72	0.21	0.08	19.09	-0.37	-0.13	73.23	0.12	0.05	19.30	0.23	0.13
2013-14	14.04	0.14	0.06	15.33	-1.30	-0.20	8.75	-0.11	-0.07	35.33	0.17	0.09
2014-15	26.54	0.22	0.10	33.73	10.59	-0.15	5.74	0.07	0.04	26.87	0.21	0.10
Mean	22.94	0.18	0.08	29.45	1.76	-0.11	35.43	0.03	0.01	20.55	0.20	0.12
S.D.	6.51	0.05	0.02	15.98	4.96	0.08	28.26	0.11	0.06	10.69	0.02	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 BL and JAL shows fluctuating trend during the study period. If we have a look at the CTR of JAL, it is continuously decreasing till 2013-14 and suddenly rises almost to more than double in 2014-15. In case of ARBL, CTR is continuously increasing till the mid-study period, but it drops in last two years of the study period. And in case of EIL, CTR shows an uptrend till the end of the study period accept in the last year, which shows a decrease. Overall there has been a mix trend in maintaining CTR by the sample companies. As compared to JAL and ARBL, BL and EIL are using their cash more efficiently to transform it into sales.

Cash Return on Assets

For BL, 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, JAL is best at generating cash from its assets, but it is not the real scene. It is just because of the last year, in which it is generating more cash on its assets; otherwise there has been a negative CRA for the company during three financial years. In case of ARBL, it is also not efficient enough in generating cash from its assets. In 2010-11 and 2013-14, there has been a negative CRA. Also its average CRA is much lower to 0.03. EIL is best in generating cash from its assets, as it is having highest average CTR. Also its S.D. is much lower compared to other sample companies. It is also showing a continuous growth in the first three years. Though there has been a decline in 2013-14, it again grows in 2014-15.

Cash Flow Margin Ratio

From table – 2, it is clearly seen that EIL comes at the top of the list and JAL again is at the bottom of the list, when it comes to CFMR. JAL is showing a negative cash flow and that affects its CFMR. Whereas similar to its CRA, ARBL is showing a mix trend in its CFMR also. It is because of the negative cash flow in 2010-11 and 2013-14. BL is again showing a mix trend and able to perform good enough as compared to JAL and ARBL.

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

Table – 3

Table showing Statistical Result of ANOVA

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Ratio	F-value	Sig.	Status of Null-hypotheses
CTR	0.74	0.54	Accepted
CRA	0.54	0.66	Accepted
CFMR	17.04	0.00	Rejected

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.
As the null-hypotheses H0 is accepted, the researchers have not found any significant difference in CRA of the sample companies during the period of the study.

As the null-hypotheses H0 is rejected, the researchers have found significant difference in CFMR 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.

Table – 4

A Table Showing Multiple Comparison of Cash-Flow Margin Ratio

(Posthoc using Tukey's HSD)

COMPANY		Mean Difference	Std. Error	Sig.	95% Confidence Interval		Is Mean difference significant or not?
					Lower Bound	Upper Bound	
BL	JAL	0.19	0.03	0.00	0.09	0.28	Significant
	ARBL	0.07	0.03	0.17	-0.02	0.17	Not Significant
	EIL	-0.04	0.03	0.72	-0.13	0.06	Not Significant
JAL	BL	-0.19	0.03	0.00	-0.28	-0.09	Significant
	ARBL	-0.11	0.03	0.02	-0.21	-0.02	Significant
	EIL	-0.22	0.03	0.00	-0.32	-0.13	Significant
ARBL	BL	-0.07	0.03	0.17	-0.17	0.02	Not Significant
	JAL	0.11	0.03	0.02	0.02	0.21	Significant
	EIL	-0.11	0.03	0.02	-0.21	-0.01	Significant
EIL	BL	0.04	0.03	0.72	-0.06	0.13	Not Significant
	JAL	0.22	0.03	0.00	0.13	0.32	Significant
	ARBL	0.11	0.03	0.02	0.01	0.21	Significant

Findings

As observed from the above multiple comparisons, researchers have found that the CFMR of one of the sample JAL is having significant differences with CFMR of all the other three samples i.e. BL, ARBL and EIL. Also it can be seen that CFMR of ARBL is having significant difference, when compared to CFMR of EIL. It can be observed that JAL is not able to maintain its CFMR during9 the period of the study. Also, ARBL is not showing stability in maintaining its CFMR during the period of the study.

Conclusion

Considering the efficiency in average use of cash, JBM Auto Ltd. is at the top of the list followed by Bosch Ltd. Exide Industries Ltd. and Amara Raja Batteries Ltd. are lagging much behind in average use of cash as compared to Bosch Ltd. and JBM Auto Ltd. Considering the average point of view, cash return on assets of Bosch Ltd. and JBM Auto Ltd. are quite similar and way ahead than Exide Industries Ltd. and Amara

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Raja Batteries Ltd. So to conclude, Bosch Ltd. and JBM Auto Ltd., are at higher level of managerial efficiency in effective us of their assets.

Bosch Ltd. and JBM Auto Ltd. are almost same in converting their sales into cash seeing the average cash flow margin. But here also, Exide Industries Ltd. and Amara Raja Batteries Ltd. are way behind in converting their sales to cash.

Overall performance of Bosch Ltd., when eyed from the cash management viewpoint, is good enough though showing a mix trend during the study period. JBM Auto Ltd. is found to be best at its management of cash considering the average cash management performance. Amara Raja Batteries Ltd. is below the average performance as compared to Maruti Suzuki India Ltd and JBM Auto Ltd., which again, cannot be said that it is only due to its poor cash management. But other factors such as market condition and its sales may also be affecting its performance. In case of Exide Industries Ltd., it is at the bottom of the list, when it comes to performance evaluation based on its cash management in comparison to other samples of the same cluster. Further a research can be done for finding out the possible causes of such poor performance by Exide Industries Ltd. as compared to the other sample companies.

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