Imapct Of Working Capital Management On Profitability Of The Select Commercial Vehicle Manufacturers In India

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Abstract

India's economic and social growth Segments are agriculture, industry and service. Transparent economic and social policies of the govt. made the country achieve rapid progress in economic and social spheres. Though all the segments are participating the nation's economic development the automobile industry in particular took its chief role in sharing 7.5 percent in the total GDP rate. The raise in standard of living, growth in young population, consumer demand, high domestic savings and cheap credit availability keep the industry growing in leaps and bounds in last decade. It is forecasted that the automobile industry will become world leader by the year 2020.This is because of the major part taken by the commercial vehicle industry in automobile segment. This can be vouched by the fact that the segment contributes more than 50 percent of the total share of 7.5 percent of automobile industry. Hence it is important to investigate the managerial efficiency of funds in commercial vehicle manufacturing firms. The managerial efficiency of funds indicates the well being of working capital of the firm. The

Working capital management is one of primary factor that made impact on the profitability of firm. Keeping this conjecture in mind, the researcher is interested to undertake this study to analyze the cash management, inventory cycle, liquidity and Return on Assets (ROA) to identify the impact on profitability of the firm. The Ratio analysis and Motaal's comprehensive rank test are important statistical tools were used by the researcher to analyze ten years spanning from the year 2009-10 to 2018- 2019 of annual reports.

Key Words: Cash Management, Efficiency, Forecasted, Spanning, Transparent.

1.1. Introduction

India's one of the top mounting economy in the world. It is proposed with a remarkable growth rate of seven percent plus in recent years. The factors reasoned for this growth are demographic dividend, high disposable income, growing industrial sectors, ease of doing business policies made the country to achieve the rapid progress. Even the other economical segments contribute to the nation's growth, the automobile industry is the parental contributor for the progress of the Indian economy with the share of 7.5 percent in the total GDP of the nation. It is vouched by the more players enter the automobile market and pumped in a massive Foreign Direct Investment of 20.85 billion US dollars in the last 18 years, this possible only because of commercial vehicle segment leading the show and made the country to become the global manufacturing hub. The turnover of commercial vehicle segment registered 717 thousand units in the end of fiscal year of 2020. Exports from this sector recorded a growth rate of 16.55 percent in the fiscal 2019. All the above facts prove that the commercial vehicle segment has grown over years. To track the status of the optimum utilization of capital and return on the investment decides the profitability of the industry and to its all stakeholders. The working capital always has its own impact in the profitability of the firms. Thus this study took its silhouette.

Working capital ensures the silky running of the business operation in all the times. The firms should maintain sufficient working capital. Surplus and insufficient working capital must be avoided because in both the circumstances there are innate dangers in disrupting business operations.

Profitability ensure the place in market and earns its customers' and investors' confidence. Profitability analysis involves how much the returns earned on its assets and capital employed.

Profit maximization is the foremost objectives of the firm which enhances the shareholder's wealth ultimately. This can be done only is the firm sustained its earnings and business operation efficiently in a point of time.

The following financial variables were considered by the researcher to study and analyse the working capital impact on the profitability of select commercial vehicle manufacturing firms in India.

They were: Current Ratio, Quick Ratio, Working Capital Turnover Ratio, and Working Capital to Current Assets, Inventory to Current Assets, Quick Assets to Current Assets, Debtors Turnover Ratio, Inventory Turnover Ratio and Return on Total Assets.

1.2 Aim of the Study

i. To analyze the working capital position of select commercial vehicle manufactures in India.
ii. To evaluate the impact of working capital management on profitability of select commercial vehicle manufactures in India.

1.3. Review of Literature

The review of the literature is the lead the researcher to the path through which the current study is being carried on. Through the process of review, the researcher acquainted with knowledge of methods and procedures. The review lends a hand to the researcher to analyse the data rationally with the aim of the study in mind. The researcher reviewed the following literature for the present study.

Gachira, (2014) explore the impact of working capital management on the profitability of the 39 non-financial firms for listed on the Zimbabwe stock exchange. The

outcome shows that there is a positive relationship among cash conversion cycle, inventory turnover, and debtors' days on the profitability and there is negative relationship between debt to assets ratio, current ratio and creditors days on the profitability.

Inna (2016) in his study investigation that Negative or insufficient working capital has many drawback. Due to negative working capital firm unable to pay his short-term liability in time, the production process slow down due to lack of raw material, deficiency of adequate working capital, fixed assets cannot be utilized completely and some time management cannot obtain gain of business opportunities.

Thulasivelu & Suresh (2017) a study on working capital performance study is very much necessary to the present globalized economic environment. Suitable trend analyses of financial performance make possible the firms to increase their earning capacity and transform the retained earning process by modifying various revenue ratios.

Snekha (2018) the analysis has revealed the fluctuations and has both positive and negative aspects during five years. The performance of the company seem to be in augment every year as the rise in sales however the efficient management of adapting to changes is needed to run towards success.

Amanjeet Kau (2018) the reason of the current study is to examine the issues like how large is the investment in working capital and its various components, how the quality of current assets has evolved over time, and whether working capital and its various components have been utilized efficiently by the selected four wheeler sector in India during the period under study. This investigation is aimed at judging the working capital management of the company.

1.4. Research Methodology

Research Design: For this study the researcher used descriptive research design. Descriptive as well as analytical research describes the attribute or performance of the subject under study.

Data collection: The data considered for this study is secondary in nature. The data are sourced and collected from published Annual Report of select commercial vehicle

manufacturers in India for last ten years. Furthermore the researcher used for framing theoretical as well as analytical framework from various books and published material, newspapers, Journals and websites and Author personal views taken in to account. For analysis Current Ratio, Quick Ratio, Working Capital Turnover Ratio, Working Capital to Current Assets, Inventory to Current Assets, Quick Assets to Current Assets, Debtors Turnover Ratio, Inventory Turnover Ratio and Return on Assets are examined.

Period of Study: The present study covers the period of ten years spanning from the year 2009-10 to 2018- 2019.

Data Presentation: For data representation tabular format has been used to show the working capital position of the select commercial vehicle manufacturers.

Sample Frame: The following commercial vehicle manufacturing firms are selected based on the financial variables from financial statement, size, and Inventory turnover. They are

1. Ashok Leyland Limited (ALL)
2. Mahindra & Mahindra Limited (MML) and
3. Tata Motors Limited (TML)

Tools and Techniques of Data Analysis: The following financial and statistical tool, techniques were used to analyse the financial statement of select commercial vehicle manufacturing firms in India. They are: mean, standard deviation, coefficient of variance, annual growth rate, regression analysis various necessary ratio analyses and Motaal's comprehensive rank test

1.5. Hypothesis of the Study: Profitability i.e., ROA with the other independent variables like CR, DTR, ITR. For this purpose a set of testable hypothesis, null hypothesis (H0) versus the alternative Hypothesis (H1) are framed and proved by using different statistical tools.

- Ho: There is no significant impact of Current Ratio, Debtors Turnover Ratio and Inventory Turnover Ratio on ROA.
- H1: There is significant impact of Current Ratio, Debtors Turnover Ratio and Inventory Turnover Ratio on ROA.

Ashok Leyland (ALL)

As per the below table 1 the working capital ratio shows as -0.05 negative position in ALL, this shows the current asset

position is substantially low compared to current liability. It indicates the cash flow in the management is very poor and it will alarm to financial anguish. Quick ratio (0.06) is low, hence the firm has insufficient liquid asset to pay off their dues. Even the firm shows negative working capital (-278.10) the inventory management was up to the mark (1926.01).This inferred that ALL has utilized its inventory and converted the same into finished goods. The annual growth rate of working capital turnover, current ratio, and quick ratio is recorded negative. As a result ALL failed to utilizing working capital efficiently that hit the returns and declines the profit earning capacity.

Tata Motors Limited (TML)

The component wise analysis of Table.1 observed that the TML's working capital shows the negative trend. Normally the negative working capital is one of the major barriers of cash inflow for the business operation. In case of TML the annual growth rate of inventories is high and it is recorded as 244.89 it proves that the firm depending on its customers, generating cash quickly instead of waiting for the payment from its debtors. The co efficient of variation in current assets and quick asset shows 2.82 less .It indicates that the TML maintains its current and quick assets consistently over the period of study. Even the working capital is negative in TML but at the same time the working capital turnover is recorded as 158.64 positively. This means that the frequency of usage of working capital to its cost of goods sold on cash has been growing little over the period of study.

1.6. `Data Analysis and Interpretation

Table 1. Working Capital Position of Selected Commercial Vehicle Manufacturers in India

Ashok Leyland Limited (ALL)										
Variables	CA	CL	WC	Inventories	CR	QR	WCTR	WC /CA	INV / CA	QA/ CA
MEAN	5262.20	5540.29	-278.10	1926.01	0.97	0.60	-9.42	-0.05	0.38	0.62
S.D.	1636.32	1944.79	640.50	502.19	0.16	0.13	38.67	0.15	0.11	0.11
C.V (%)	31.10	35.10	-230.31	26.07	16.71	22.05	-410.67	-305.51	27.93	17.28
AGR (%)	100.57	196.85	-153.77	63.88	-32.43	-24.14	-815.60	-126.81	-18.30	12.27
Mahindra & Mahindra Limited (MML)										
Variables	CA	CL	WC	Inventories	CR	QR	WCTR	WC/ CA	INV /CA	QA / CA
MEAN	10861.30	9153.77	1707.53	2488.93	1.17	0.89	19.35	0.13	0.24	0.76
S.D.	4115.46	2891.14	1352.61	701.28	0.12	0.13	26.70	0.10	0.04	0.04
C.V(%)	37.89	31.58	79.21	28.18	10.12	14.48	138.01	72.57	18.77	5.89
AGR (%)	199.07	175.71	343.08	222.96	8.47	6.35	-35.45	48.15	7.99	-1.96
Tata Motors Limited (TML)										
Variables	CA	CL	WC	Inventories	CR	QR	WCTR	WC/ CA	INV / CA	QA/ CA
MEAN	90613.78	97865.36	-7251.58	27000.32	0.91	0.64	77.49	-0.12	0.30	0.70
S.D.	33226.36	31195.43	9054.52	10556.14	0.12	0.08	176.28	0.15	0.02	0.02
C.V(%)	36.67	31.88	-124.86	39.10	12.74	13.17	227.48	-130.19	6.70	2.82
AGR (%)	190.22	142.47	26.15	244.89	19.70	11.53	158.64	-56.53	18.83	-6.83

Source: Computed

From the below table 2 of Motaal's comprehensive test of liquidity indicates that the MML holding the rank 1.This exhibits that the MML having most liquid position among the three firms taken under study. TML has ranked 2nd and the last firm was ALL ranked 3rd showing the adverse liquidity position.

Table 2. Motaals Comprehensive Test of Working Capital Position of Selected Commercial Vehicle Manufacturers in India

Motaals Comprehensive Test of Working Capital								
Companies	CR	Rank	QR	Rank	WCTR	Rank	WC / CA	Rank
ALL	0.97	2	0.60	3	-9.42	3	-0.05	2
MML	1.17	1	0.89	1	19.35	2	0.13	1
TML	0.91	3	0.64	2	77.49	1	-0.12	3
Companies	INV/ CA	Rank	QA/ CA	Rank	Total	Ultimate Rank		
ALL	0.38	1	0.62	3	14	3		
MML	0.24	3	0.76	1	9	1		
TML	0.30	2	0.70	2	13	2		

Source: Computed

Table 3: Impact of Working Capital Management on Profitability Selected Commercial Vehicle Manufacturers in India

Ashok Leyland Limited (ALL)			
Model	**Regression co-efficient**	**Standard error**	**t**
(Constant)	0.021	0.077	0.278
CR	0.005	0.064	0.081**
DTR	0.003	0.002	1.356**
ITR	-0.001	0.005	-0.216**
R	R Square	Adjusted R Square	F Value
0.595	0.354	0.031	9.86*
Mahindra & Mahindra Limited (MML)			
Model	**Regression co-efficient**	**Standard error**	**t**
(Constant)	0.163	0.141	1.161
CR	-0.04	0.068	-0.886*
DTR	0.004	0.005	0.839**

ITR	-0.003	0.004	-0.862*
R	R Square	Adjusted R Square	F Value
0.749	0.561	0.342	12.56*
Tata Motors Limited (TML)			
Model	**Regression co-efficient**	**Standard error**	**t**
(Constant)	0.133	0.141	1.161
CR	-0.004	0.068	-0.886*
DTR	0.077	0.005	0.839
ITR	-0.021	0.004	-0.862*
R	R Square	Adjusted R Square	F Value
0.678	0.46	0.19	17.05

Source: Computed ** significant at 1 percent level * significant at 5 percent level

The above table 3 shows that there is positive relationship between current ratio and ROA of ALL at one percent level of significant and negative relationship of MML and TML at five percent level of significant. The P value of current ratio is less than significance level 0.05. So, we are rejecting the null hypothesis and accepting the alternative hypothesis. The above table shows that there is positive relationship between debtor's turnover ratio and ROA of ALL and MML. The coefficient value of DTR is positive and P value is less than significance level 0.05. So, we are rejecting the null hypothesis and accepting the alternative hypothesis. The above table shows that there is negative relationship between inventory turnover ratio and ROA. The P value is lower than significance level 0.05. So, we are rejecting null hypothesis and accepting alternative hypothesis. Thus, there is negative relationship between inventory turnover ratio and ROA of all the selected firms.

Findings

- In case of ALL, MML& TML the Inventory management is good. Mostly they cover the cash flow from their sles, instead waiting for their debtors.
- The growth rate current ratio of MML and TML is only up to the mark which is not meeting the ideal ratio of

2:1, which in long run will affect the working capital position of the company. Thus companies should make sure that the current assets and current liabilities grow at standard ratio of 2:1.

- There is positive relationship between debtor's turnover ratio and ROA of ALL and MML.
- The MML having most liquid position among the three firms taken under study. It is because of the operational efficiency of the firm and that leads to the profitability of the firm.
- There is positive relationship between current ratio and ROA of ALL. Whereas in MML and TML there is a negative relationship between current ratio and ROA.
- None of the firms mentioned above, were able to maintain ideal rule of thumb of current ratio and quick ratio, for studied period.
- The above study shows the firms strive to uphold the percentage of inventory in current assets is as low as possible, which make sure good liquidity for the business.
- As per Motaals Comprehensive test, the liquidity position of MML is best and followed by TML and lastly ALL.

Suggestions

- All the firms were strictly following the cash basis operations to improve their liquidity position.
- The growth in working capital has to manage sensibly by the firms by targeting days cover for inventories except in MML.
- All the firms should ensure that the current assets and current liabilities grow at standard ratio of 2:1. Especially ALL has to track the proper utilization of inventories.
- The firms must able to affirm their own terms when it comes to decide the time for payables or receivable.
- To maintain the positive working capital rate, the firm has to prefer the low interest rate borrowings. Because it directly attributes the success rate of profitability.

Conclusion

From the above analysis we can depict the following conclusion

A firm used to procure funds and employ the same in its business endeavor for the prosperous of business. But, sometimes the financial plans go awry, due to the overburdened with current liabilities, which is not good situation for long run business and for the period of recession especially. The selected commercial vehicle firms for the study of impact of working capital on the profitability of the firm analyzed the liquidity, turnover of the inventories and ROA checks the degree of the cash flow and profitability of the firm. The positive working capital and liquid resources (cash in hand and at bank) to current assets ratio shows the more complimentary liquidity condition of a firm and vice-versa. The study made it possible to establish a relation between working capital management and firm's profitability. Firm size is also linked with working capital. If firm size amplifies, the need of working capital will be more. The study brings the necessity of resourceful working capital management. Researchers are in consensus that profitability of the firm is more ensured with better working capital management.

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