



WORKING CAPITAL MANAGEMENT IN AUTOMOBILE INDUSTRY – A CASE STUDY OF HERO MOTOCORP PRIVATE LIMITED

By

Dr. Krishnamohan Vaddadi¹

Professor, Department of Commerce and Management Studies (DCMS) and Registrar,
Andhra University, Visakhapatnam, Andhra Pradesh. Pin: 530003.

Mrs P. Uma Rajitha²

Assistant Professor, Kakinada Institute of Engineering and Technology (KIET), Korangi,
Andhra Pradesh.
PIN: 533461.

ABSTRACT

Working capital meets the short-term financial requirements of a firm. The efficient handling of cash and current assets determines the survival of a firm and it should maintain adequate working capital for its smooth functioning. Both, inadequate working and surplus working capital will harm the profitability and general health of a firm equally.

This paper is to examine the working capital management in Hero MotoCorp Pvt. Ltd. Hero cycles were founded in Ludhiana in the year 1956 and it became the largest bicycle manufacturer in India by 1975. The company was renamed Hero MotoCorp Pvt. Ltd. with a new corporate identity. It made a rich contribution to the fields of sports and education as a sense of corporate social responsibility.

In this paper, the structure and composition of working capital in the enterprise for a period of ten years is analysed to report the working capital position and net profit. The Pearson correlation was calculated and SPSS tool was used for testing of hypotheses formulated.

Keywords: *Current Assets, Net profit, Pearson Correlation, Statistical Package for Social Sciences (SPSS) and Working Capital.*

I. INTRODUCTION

Working capital meets the short-term financial requirements of a firm. The efficient handling of cash and current assets determines the survival of a firm. The firm should maintain adequate working capital for its smooth functioning. Both, inadequate working and surplus working capital will harm the profitability and general financial health of a firm. In this paper, an attempt is made to examine the working capital management in Hero MotoCorp Pvt. Ltd. The origin of the company can be traced with Hero Cycles that was founded in Ludhiana in the year 1956 and it became the largest bicycle manufacturer in India by 1975. In the year 1980 it has introduced



motorcycles with a slogan of “fill-it, shut-it and forget-it”. The company was renamed Hero MotoCorp Private Limited in the year 2011 with a new corporate identity. In the year 2012-13, the company captured 46 percent market share in two-wheeler categories with revenue of Rs.241.66 (the US \$ 3.9 billion). It made a rich contribution to the fields of sports and education as a sense of corporate social responsibility.

II. REVIEW OF LITERATURE

Nufazil Altaf, Farooq Ahmad Shah, (2018) study found that "How does working capital management affect the profitability of Indian companies?" The purpose of this paper is to examine the relationship between working capital management (WCM) and firm profitability for a sample of 437 non-financial Indian companies. The study is based on secondary financial data obtained from *Capitaline* database, pertaining to a period of ten years. This study employs two-step generalized methods of moments (GMM) techniques to arrive at results. The results of the study confirm the inverted U-shape relationship between WCM and firm profitability. In addition, the authors also found that the firms should complete their Cash Conversion Cycle (CCC) on an average by 63 days.

Dr Navena Nesa Kumari Dr M. Victor Louis Anthuvan (2017) investigated “The Impact of The Working Capital Management on The Profitability of The Leading Listed Automobile Companies in India” (2006- 2012). The purpose of the research is to analyze whether working capital management can affect the company profitability of Automobile sector in India for that study takes into consideration the top S&P CNX 500 manufacturing firms within the geographical area of India. This study has been framed to show how efficient working capital management impacts the corporate profitability of 10 leading listed Automobile sector in Chennai.

Muhammad Mehta Azeem and Akin Marsap (2015) examined the various factors determining the working capital in Pakistani non-financial firms by taking into account different economic and financial variables relating to the business over a period of six years [2004-2009]. Descriptive analysis, ANOVA, correlation and regression analysis was applied on the panel data to see the relationship of different variables with working capital management. In this study, it is found that operating cycle return on assets, leverage, size and level of economic activity is negatively related to working capital requirements of a firm whereas operating cash flows and sales growth are positively related to working capital to requirements.

Hina Agha (2014) reviewed the impact of working capital management on profitability. The main purpose of this study is to empirically test the impact of working capital management on profitability. Keeping in mind this objective, he studied the Glaxo-Smith-Kline pharmaceutical company registered in Karachi stock exchange for the period of 1996-2011. The interpretation of results is that by increasing the debtor’s turnover, inventory turnover and by decreasing creditor’s turnover ratios, the company can increase its profitability but there is no significant effect of increasing or decreasing the current ratio on profitability. Therefore the results of the research indicate that through proper working capital management, the company can increase its profitability.



Dimple & Ritu Jain (2013) analysed the impact of working capital management on liquidity, profitability and element of risk on the Infosys and TCS Company. To achieve these objectives, data has been collected from secondary sources and for getting results various kind of statistical tools are used like ratio, average, Spearman's coefficient of correlation etc. The results reveal that there is a positive correlation between liquidity, profitability and risk. The study shows that there is a positive relationship between risk & profitability and liquidity & profitability of TCS but Infosys shows a negative relationship between liquidity & profitability. So, Infosys should make some vigilant planning to reduce their current ratio and improve their return on investment. This study will help the managers to make vigilant planning to manage the working capital.

Diogo Filipe Nascimento Gomes (2013) explained the relationship between working capital management (WCM) and the firm's profitability in Portugal. The study uses a database, combining firm-level financial data with a matched employer-employee data, for the period from 2004 to 2009, obtaining a sample of 106,961 observations corresponding to 41,536 firms. The relationship between WCM and profitability is analyzed using panel data methodology, applying Fixed Effects model with robust standard errors. Results show that there is a concave relationship between WCM and profitability, indicating that firms have an optimal working capital level where firms should stand to maximize profitability. For CEO's characteristics these are positively related to profitability, showing that male, Portuguese, older and with higher educational level CEOs have more profitable firms. The age, size, industry and location of firms affect the optimal WCM level that maximizes profitability. For firms, with the WCM level below the optimal point, in order to increase profitability, should increase the investment in WCM, once there is a positive relation between the two variables for low levels of working capital.

No study pertaining to working capital management in automobile industry in general and study of relationship between working capital and profitability in particular was reported. As such, the present paper is an attempt to bridge the gap, with the following specific objectives and hypotheses.

III. OBJECTIVES OF THE STUDY

- i. To examine working capital position of the Hero MotoCorp Private Limited
- ii. To analyze the relationship between working capital and the profitability of the Hero MotoCorp Private Limited during the period of study.
- iii. To offer suggestions for effective working capital management based on the analysis of bottlenecks, if any.



IV. HYPOTHESIS OF THE STUDY

The hypothesis formulated for the study is tested for Hero MotoCorp Pvt. Ltd, to test the relation between working capital and profitability:

Null Hypothesis (H₀):

There is no relationship between working capital and the profitability of the Hero MotoCorp Private Limited

Alternative Hypothesis (H_a):

There is a relationship between working capital and the profitability of the Hero MotoCorp Private Limited.

V. METHODOLOGY OF THE STUDY

The design of the present study is descriptive and analytical in nature and desk-research method has been used. It has covered the period of 10 years duration between 2009 and 2018. The secondary data was collected from the published annual reports, including financial statement data by industry given in balance sheet, profit and loss account and key financial statement of the companies for the year 2008-09 to 2017-18 which will be directly obtained from the registered offices and other employees of the respective companies. As it has been stated above the research data is collected from more of secondary source and secondary data was collected with the content analysis method. The purpose of this content is to present the research question and hypothesis, the underlying principles of research methodology and the choice of the appropriate research method for the paper.

Table-1: Statement of the Working Capital and Net Profit of the Hero Moto Corp Pvt. Ltd (INR. In Cr)

YEARS	HERO		
	MotoCorp Pvt. Ltd.		
	WC	NP	WC to NP
2008-09	484	968	1: 2.0
2009-10	228	1282	1: 5.6
2010-11	243	2232	1: 9.2
2011-12	487	1928	1: 3.9
2012-13	906	2378	1: 2.6
2013-14	1131	2106	1: 1.9
2014-15	2117	2349	1: 1.1
2015-16	1999	3112	1: 1.6
2016-17	3360	3546	1: 1.1
2017-18	4505	3722	1: 0.8

Source: Annual Reports of the Company during the study period



Table 2: Test of Relationship between Working Capital and Profitability of the Hero MotoCorp Private Limited

	WC of Hero MotoCorp Pvt. Ltd.	NP of Hero MotoCorp Pvt. Ltd.
WC of Hero MotoCorp		
Pearson Correlation	1	.870
Sig. (2-tailed)		.001
N	10	10
NP of HERO MotoCorp		
Pearson Correlation	.870	1
Sig. (2-tailed)	.001	
N	10	10

* Correlation is significant at the 0.01 level (2-tailed).

Note: SPSS package is used to test the hypothesis stated

A Pearson product-moment correlation coefficient was computed to assess the relationship between the Working Capital of Hero MotoCorp Pvt. Ltd. and Profitability of the Hero MotoCorp Pvt. Ltd. There was a strong positive correlation between the two variables, $r = .870$, $n = 10$, $p = 0.001$.

Result:

There was an insignificant correlation between working capital of Hero MotoCorp Pvt. Ltd. and the Profitability of the Hero MotoCorp Pvt. Ltd. Increases in working capital of Hero MotoCorp Pvt. Ltd. would correlate with increases in the Profitability of the Hero MotoCorp Pvt. Ltd. Hence, the alternative hypothesis that “there is a relationship between working capital of Hero MotoCorp Pvt. Ltd. and the profitability of the Hero MotoCorp Pvt. Ltd.” is deemed to be accepted.

VI. CONCLUSION

The net profit of Hero MotoCorp Pvt. Ltd. has increased during the period of study. The net profit of the Hero MotoCorp Pvt. Ltd. was higher than the working capital of the company. The high net profit margin of a company shows the effectiveness of the company in controlling its costs. It ensures adequate return to the owners and enables a firm to withstand adverse economic conditions when selling price and demand for the company’s products is falling and the cost of production is increasing. It also indicates the efficiency of total investment and shows the amount of profit per unit of capital invested.

To attain a higher net profit margin, the company should lower its cost of production and increase its sales revenue. Rise in the cost of production, the decline in the volume of sales and falling prices lead to low net profit margin. To enhance the net profit margin, the company needs



to cut-off unnecessary expenditure and increase its sales capacity. It can also be understood as competitive business strategy of such companies which use predatory pricing strategy also known as undercutting in which a product is set at a very low price with the intention to achieve new customers or to drive competitors out of the market to capture the market share and to minimize their tax payments, as a short-term strategy. In such a scenario, the net margins may go down and its impact on working capital management can also be evidently seen as lower performance in managing its working capital efficiently.

V. 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*
3. Abdul Rahman, 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, Page 36.
7. Amaboldi (2005), "Activity-based costing in Healthcare: a UK case study", *Research in Healthcare Financial Management*, Volume 1, Issue 10, 2005, Pp. 61-75.
8. Amarjit Gill (2011), "Factors That Influence Working Capital Requirements in 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. American Institute of Certified Public Accounts: *According Research and Terminology* Bullet New York (1961).



10. An Industry-wise study of Finish and Swedish Public Companies”, Thesis Submitted to Department of Accounting Hanken School of Economics, Helsinki, 2012.
11. Archibong, S.E. (2004), Applied Research Methods for the social sciences. Lagos: Nokia Ventures.
12. Arnold Glen (2008), “Corporate financial management”, 4th edit, Pearson education limited.
13. 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, Issue 1, January-February 2013, Pp. 121-129, Published by IAEME.
14. Atkinson et al (2007), Management accounting (5th edition). New Jersey: Prentice Hall.
15. Black Champion U.Miller, Accounting in Business Decisions Theory Method and Use, Englewood Cliffs New Jersey, Prentice Hall, Inc., (1961).
16. Brigham Eugene F and Houston, Joel F. (2003) “Fundamentals of Financial Management”, 10th edition Brooks, C., 2003, ‘Introductory Econometrics for finance ‘2nd edition Cambridge, <http://www.compridge.org/9780521873062>.
17. Brigham, E.F (1985), Fundamentals of Financial Management (7th edition). New York: Dryden Publishers.
18. Buchar, Joseph and Koenisberg, Ernest, Scientific, Inventory Management, (New Delhi: Prentice Hall of India, 1966).
19. Canada”, Economics and Finance Review, Volume 1, Issue 3, May 2011, Pp. 30-40.
20. Carole Howorth and Paul Westhead (2003), “The focus of working capital management in UK small firms”, Management Accounting Research, Issue 14, March 2003, Pp. 94-111.
21. Chandra Bose, Inventory Management, Publisher PHI Learning Pvt. Ltd., 2006, ISBN 120328531, 9788120328532, 440 Pages.
22. Charles, W.T. (N.d) “How to improve collection”, Retrieved December 16, 2012.
23. Dimple &Ritu Jain(2013) "A Comparative Study of Working Capital Management of Infosys and Tata Consultancy Services Ltd" International Research Paper Volume: 2



24. Chiumintto P.M., “A Practical basis for Working Capital Management” in Doris William ed. Hand Book of Business Finance, New York: Prentice Hall, 2001.
25. D.C. Jain: the Chartered Accountant, “Concept of Value Added”, May 1987, Pp. 54.
26. Dabler Donald W. and Lee Lomer: Purchasing and Materials Management, New York: MacMillan, 2002.
27. Dale, Ernest (1917), Management: theory and practice, edition 2nd, Published New York: McGraw-Hill.
28. Dalip S.Swamy and V.G.Rao (1974), “The Flow of Funds in Indian Manufacturing”
Deloof, M. (2003), “Does Working Capital Management Affects profitability of Belgian Firms?”, Journal of Business Finance & Accounting, Volume 30, No.3& 4,2003, 0306-686X.
29. Dr Amalendu Bhunia and Islam Uddin Khan (2011), “Liquidity management efficiency of Indian Steel Companies (a Case Study)”, Far East Journal of Psychology and Business, Volume 3, No.3, June 2011, Pp. 3-13.
30. Dr Mohammad Fawzi Shubita (2013), “Working Capital Management and Profitability: A Case of Industrial Jordanian Companies “, International Journal of Business and Social Science, Volume 4, No. 8, (Special Issue – July 2013), Pp. 108-115.