WORKING CAPITAL TRENDS OF SELECTED TWO AND THREE WHEELER COMPANIES IN INDIA

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ABSTRACT

Indian automobile industry comprises of commercial vehicles, utility vehicles, passenger vehicles and two and three wheelers of which the two and three wheeler segment constitutes approx 80% of the total automobile industry with the production of 17 million vehicles in 2023-24. Most intriguing feature of two and three wheeler manufacturers is that they work on negative working capital. Their current liabilities are more than their current assets and still they are flourishing at the rate of 12.9% in 2024. This paper attempts to scrutinize the intricacies of working capital management in two and three wheeler industry by assessing and comparing annual reports of three giants of two and three wheeler manufacturer in India. It is imperative to understand till when the positives of a negative working capital will continue to work for the two and three wheeler industry.

Keywords: Two and Three Wheeler Companies, Working Capital Trends and Working Capital Management.

I. INTRODUCTION

Developing economies are confronted with the problem of inefficient utilization of resources available to them. Capital is the limited productive resource in such economies and proper utilization of these resources promotes the rate of growth, cuts down the cost of production and above all improves the efficiency of the productive system. The total capital of a country comprises fixed capital and working capital. Fixed capital investment generates production capacity whereas working capital makes the utilization of that capacity possible. Thus, the study of working capital occupies an important place in financial management.

II. STATEMENT OF THE PROBLEM

The working capital management is the most critical problem in financial management. Most of the time financial executives are devoted towards managing the current assets and current liabilities which are the main constituents of working capital. Importance of the working capital management stems from two reasons viz., (i) substantial portion of total investment is invested in current assets and (ii) the level of current assets and current liabilities will change quickly with the variation in sales. Hence, this study makes an attempt to analyze the direction of change over a period of time is of crucial importance. It is, therefore, very essential for an analyst to make a study about the trend and direction of working capital. Not only that, analysis of working capital trends provide a base to judge whether the practice and prevailing policy of the management with regard to working capital is good enough or an improvement is to be made in managing the working capital funds. Hence, in this study, an attempt is made about the trend of the components of the working capital movements to provide a deep and broad base while examining the working capital management of the selected enterprise.

III. OBJECTIVES OF THE STUDY

The following are the specific objectives of the study:

1. To examine the working capital trends and analysis of selected two and three wheeler companies in India.
2. To present summary of the study and to make suitable suggestion for improvement in the competitive business world.

IV. RESEARCH METHODOLOGY

In research, the methodology needs to be cautiously designed to capitulate results that are as objective as realistic. An able-bodied comprehensible modus operandi empowers the new-fangled research investigator re-examine the study milieu. Good methodology follows the standards of the established conventions. For the present study, a number of indispensable inimitabilities of the research methodology skirmishing the application magnitude and research rationalization of each one are defined here in this chapter.

4.1 Research design

It is not possible in practice for an individual research worker to approach all the bits and pieces in the universe. Researchers select only a small amount of bits pieces from the universe for the purpose of the study on the basis of stratified sampling. The sample so selected constitutes the sample design for the purpose. A research design is a definite plan for obtaining a sample from a given population. Research design means a sketch or a drawing of a research project's structure. It comprises a series of prior pronouncements that, taken together, provide a roadmap for carrying out a research project. The research design of the present study is outlined hereunder.

4.2 Selection of sample

Keeping in view the scope of the study, it is decided to include all the companies under automobile industry working before or from the year 2014-15 to 2023-24. But, owing to several constraints such as non-availability of financial statements or non-working of a company in a particular year etc., the researcher is compelled to restrict the number of sample companies to six. Therefore, this study is expost facto based on survey method making a survey of nine companies in two and three wheeler sector in India.

The Two and Three Wheeler Sector is purposively selected for the present study, considering its importance as the backbone of economic growth in any country. The database of CMIE has made compilation for nine two and three wheeler companies of which only six companies have financial data for a continuous period of 10 years namely from 2014-15 to 2023-24. Owing to several constraints such as non-availability of

financial statements or non-working of a company in a particular year, etc. for the purpose of the present study only six large two and three wheeler companies have been selected. The criterion adopted for the selection of companies in the present study is the size of their total assets of fifty crore rupees and above, as it is the only characteristics for which information is available at the population level.

4.3 Source of data

The data used for the present study is secondary data. The major source of data analyzed and interpreted in this study related to all those data which was collected from "PROWESS" database, which is the most reliable on the empowered corporate database of Centre for Monitoring Indian Economy (CMIE). The database provides financial statements, ratio analysis, fund flows, product profiles, returns and risk on the stock market. The Reserve bank of India Bulletin, Business newspapers, Annual survey of industry, CMIE publications, Libraries of various research institutions through internet etc. have also been used as a data source.

4.4 Data analysis

In the course of analysis in this study, use of various accounting and statistical techniques have been made. Accounting technique includes ratio analysis, while among statistical techniques the arithmetic mean (X), Co-Efficient of Variation (CV), Standard Deviation (SD), Trend Indices, Compound Annual Growth Rates (CAGR) and Chi-Square Test have been applied through EXCEL and SPSS statistical software.

V. LIMITATIONS OF THE STUDY

There are some limitations are as follows, the most important among them are:

1. The study is based on secondary data obtained from the published annual reports and as such its finding depends entirely on the accuracy of such data.
2. Statistical test used in the study to interpret the analyzed data to generalize the findings of the study for the entire population has got their own limitations and result in the analysis is subject to some constraints as are applicable to statistical tools.
3. The financial statement does not keep pace with the changing price level.

VI. REVIEW OF LITERATURE

The chapter is an attempt to evaluate the research on various components of working capital management of Selected Two and Three Wheeler Companies in India that are either directly or indirectly linked with the present study.

Sana Maswadeh (2015)[1] studied the relationship between the approaches used to manage working capital and the amount of profit that may be generated as a result of such approaches. This study's objective is to evaluate the relationship between the three distinct strategies for managing working capital—aggressive, moderate, and conservative—and profitability. Specifically, the research will focus on the aggressive strategy. The research relied on the financial statements that had been issued by pharmaceutical and industrial firms in Jordan during the course of the previous five years, especially between the years 2009 and 2013. According to the results of the research, effective management of working capital should include making compromises between the level of risk and the amount of profit generated. Because of the firms that have a modest level of working capital as a management approach, this enables them to produce consistent profits over the course of a longer period of time, and as a consequence. Working capital is defined as cash and other liquid assets that are immediately available for use in a business.

Syed Noorul Shajar and Saleem Akhtar Farooqi (2016)[2] is the discipline of management that is unavoidable in all walks of economic life, whether in a home or in a business, in the public domain or in the private domain, profit oriented or not. The effective administration of a company's working capital is the single most important component in guaranteeing the company's continued existence together with its liquidity, solvency, and profitability. The Automotive Industry is responsible for 22% of the Gross Domestic Product (GDP) that is generated by Manufacturing in the nation (GDP). For the purpose of this research paper, three Indian automobile companies are taken into consideration. These are the giants companies in the Indian automobile industry, and each one plays an important part in the expansion of the Indian economy. For the purpose of conducting the analysis of the results, ROCE is used as a dependent proxy variable for profitability. While CR, DTR, and ITR are employed as independent proxy variables for the purpose of proving that working capital management has an effect on the profitability of businesses. The success of the economy is directly correlated to the profitability and productivity of each and every sector in the country, and this is something that can be accomplished in large part via the use of effective procedures for managing working capital.

Sheela Christina (2017)[3] pointed out that in order to confront an analytical research design, employs an approach that gathers secondary data. The researcher ensured that the data was genuine and reliable before commencing the study by gathering it from the five years before to the current one specifically for this reason. The researcher used a variety of statistical methodologies, such as trend analysis and correlation, in addition to the following financial tools: ratio analysis, comparative balance sheet analysis, and DuPont analysis. According to the metrics that assess profitability, the quantity of earnings, the utilization of fixed assets, and the amount of working capital all dropped during the most recent fiscal year. As a consequence of this, the company could decide to implement the necessary changes in order to boost both sales and profits. The findings of the study indicated that the financial performance does not warrant further concern.

Nufazil Altaf, et al.(2018)[4] examined the association between working capital management (WCM) and firm profitability for a sample of 437 non-financial Indian enterprises. The primary purpose of this piece of research is to evaluate the liquidity and solvency positions of a number of representatives and assess the nature of the relationship that exists between the industry as a whole and the respective companies through the utilization of various ratios. The findings of the study provide more evidence that WCM has an inverted U-shaped association with the profitability of firms. The purpose of managing a company's working capital is to guarantee that the company will be able to carry on with its business as usual and that it will have the resources to pay off any short-term debt that comes due. In this research, an effort was made to evaluate the liquidity and solvency levels of six different automobile companies situated in India. In order for the firm to improve its liquidity, it is essential for the company to increase the quantity of working capital that it has available to it.

Rekha, Sitlani, and Melwani (2019)[5] argued that the financial performance of listed 2/3 wheeler manufacturing enterprises in India, as well as the effect of internal financial factors on financial performance, are the foundation of the current research. The study used a causal research approach, which entails examining cause-and-effect connections. The main goal of the current research was to determine how internal financial factors affected the financial performance of 2/3 wheeler manufacturing vehicle enterprises. Multiple regression analysis was used to do this. Return on Assets has been used to gauge financial success. The findings showed that some internal financial factors, which have different effects on financial performance, have an influence on financial performance. The companies' operating efficiency and capacity to create profits were both enhanced by the hired assets. Financial performance was adversely affected by leverage and the intensity of R&D. Performance was significantly impacted by the assets that were backed by borrowing, and spending on R&D did not generate large sales income for the companies.

Nabaghan Mallick and Abhipsa Priyadarshini (2020)[6] stated that the fraction of a company's total assets used for ongoing operations is known as working capital. It specifies how much cash is required for ongoing business operations and to settle short-term obligations, ensuring that the company's liquidity status is not compromised. Effective working capital management is a prerequisite for developing strategies and methods for handling and managing working capital. An attempt has been undertaken to conduct an extensive research in order to better understand working capital management in the vehicle industry (four wheelers) in India. Conclusion: Negative working capital will continue to be advantageous to the four-wheeler sector. This research aims to assess the working capital management of the organization. According to the research, this illustrates that having negative working capital is not necessarily a bad thing. Instead, it is an indication of good management. Businesses should decrease expenses and implement good working capital management in order to improve. In order to enhance the nation's economic growth via greater production and the creation of programs to raise car product consumption, the enterprises should examine their existing management techniques.

Xavier Susairaj, Salaijayamani and Premkumar (2021)[7] focused on the consequences of the COVID-19 pandemic on the Indian car industry, as well as sales made during the epidemic and the market share held by the various automotive sectors. The paper recommends that the automotive sector take specific actions to increase sales, such as cutting prices or offering extra offers while the pandemic is in progress. The car industry, which contributes significantly to India's Gross Domestic Product (GDP), is the sector that has the most shares on the Indian market. After the pandemic situation in India, there was a huge decrease in the sales of automobiles, as shown by the numbers presented above. Despite the fact that they lack the financial means to purchase the automobiles. In addition to having an effect on the automobile market and its share, this pandemic also had an effect on people's day-to-day life. Automobile manufacturers might take measures to promote sales during the pandemic by cutting costs or giving special promotions. These are two options available to them. It's possible that this will help increase sales of the automobile while the outbreak is going on. In the midst of this pandemic, here are some simple strategies for increasing the cost of automobiles.

Rahman (2023)[8] investigated the effectiveness of working capital management (WCM) through the application of the index method. The investigation concentrates on the assessment of the efficiency with which companies manage their working capital and the influence this efficiency has on their overall financial performance. The index method, a quantitative approach, is employed to evaluate and assess the efficacy of working capital management in a variety of industries. The study emphasizes the role of efficient WCM in reducing the costs associated with holding surplus inventory, optimizing payment cycles, and reducing receivables collection periods. The results indicate that the financial performance of companies with superior WCM practices is generally stronger, as evidenced by higher profit margins and improved liquidity ratios. To guarantee optimal cash flow management and enhanced financial results, the study suggests that companies implement the index method or comparable instruments to conduct routine assessments of their WCM processes. This research provides managers with valuable insights that can be applied to improve the operational efficiency and profitability of their company by implementing more effective WCM practices.

Aversa (2024)[9] investigated the development of the two-wheeler industries in these three countries, each of which has its own distinct industrial history and market dynamics. The study underscores Italy's early dominant position in engineering and design, particularly through iconic brands like Vespa, which revolutionized scooter manufacturing and popularized two-wheelers in Europe. The two-wheeler industry in India is being discussed in the context of accelerated urbanization, affordability, and a focus on meeting the needs of a vast domestic market. India has emerged as a substantial player in the global two-wheeler market as a consequence of its expanding investment in electric vehicles (EVs) and its large-scale production capabilities, despite the fact that Italy and Japan initially dominated technological innovation. This is an

observation made by the study. The paper concludes by analysing the future trends in the global two-wheeler industry, which include the increasing emphasis on sustainable manufacturing practices and electrification. According to Aversa, the global two-wheeler market will continue to be influenced by Italy, Japan, and India, with each country contributing unique assets to its growth.

Ranawat et al. (2024)[10] examined the strategies employed by a variety of financial institutions to mitigate risks and navigate uncertainties in a rapidly evolving automotive market. The authors emphasize the unique challenges that the auto finance sector faces, such as fluctuating interest rates, regulatory changes, market volatility, and changing consumer preferences. This is particularly evident in the increasing demand for sustainable financing options and Electric Vehicles (EVs). In addition, the research underscores the importance of companies implementing diversified risk strategies to ensure compliance with evolving regulatory environments and to mitigate exposure to economic uncertainties and market fluctuations. The authors examine the operational risks and the strategies employed by companies in the auto finance industry to address customer defaults, fraud and liquidity issues, in addition to financial risks. In order to maintain financial stability and enhance profitability, they emphasize the importance of effective risk management strategies, particularly in a competitive market. The research offers important insights into the methods by which companies can effectively manage risks and guarantee sustained development by adapting to the dynamic landscape of the Indian automobile sector.

VII. ANALYSIS AND INTERPRETATION - WORKING CAPITAL TRENDS

The direction of change over a period of time is of crucial importance in financial analysis. Working capital is an important field of financial management so it is necessary for an analyst to make a study about the trend and direction of working capital. While examining the working capital management of an industry a study should also be made about the trend of the various components of the working capital movements to provide a vast base. This analysis will provide a base to judge whether the practice and prevailing policy of the management with regard to working capital is good enough or an improvement is required for managing the working capital funds. Further, any one trend by itself is not very important and, therefore, comparison of related trends should also be made by an analyst. For example, an increasing trend in the working capital coupled with a decreasing trend in sales would usually reflect an unfavourable situation. An upward trend of current assets, (like inventories, accounts receivables, cash and bank balances and other current assets) as against a downward trend of current liabilities would usually be viewed favourably.

7.1 Working Capital Trends of Atul Auto Limited

The value of net working capital of Atul Auto Limited for the period of study from 2014-15 to 2023-24 has been shown in Table 1. The net working capital of above mentioned firm has clearly marked a fluctuating trend throughout the period. In the year 2014-15 the net working capital was Rs.35.48 crores which fluctuated to Rs.42.24 crores in 2023-24, marking an increase of 119.05 per cent in the indices. The mean value of net working capital of Atul Auto Limited during the study period was Rs.51.36 crores. The compound annual growth rate was 1.76 per cent. The co-efficient of variation was 38.66 per cent which shows more fluctuation in the net working capital of Atul Auto Limited during study period.

The indices of working capital of Atul Auto Limited registered a fluctuating trend throughout the period of study from 2014-15 to 2023-24 as shown in Table 1. The indices of working capital fluctuated from 100.00 in the year 2014-15 to 119.05 in the year 2023-24. This was due to a substantial fluctuation in the working capital of Atul Auto Limited. The actual and trend value of working capital of Atul Auto Limited was calculated by using the regression equation and the details of chi-square values during the study period. The Linear least square regression equation of Y on X is $Y_c = 51.36 + (-60) X$. The trend values of working capital fluctuated during the study period from 2014-15 to 2023-24. The difference between actual values and trend

values of working capital were significant in all year. This happened due to fluctuate in the current assets especially in the sundry debtors.

H_0 = *There is no significant relationship between actual values and trend values of net working capital among different years of Atul Auto Limited*

H_1 = *There is significant relationship between actual values and trend values of net working capital among different years of Atul Auto Limited*

The comparison of actual value of net working capital of Atul Auto Limited has been shown in Table 1, which represents that the trend values differed materially from the actual net working capital. The original values of production were lower than the trend values in 2014-15, 2015-16, 2021-22, 2022-23 and 2023-24. It may be indicated that in the remaining year, the original values of net working capital were higher than the trend values. To test the significant relationship between the actual values and trend values of working capital of the company, the chi-square test was applied. Since the calculated value of chi-square test (68.44) was more than the table value (16.919) at 5 per cent level of significance and hence the null hypothesis is rejected. Hence it is evident that, there is significant relationship between actual values and trend values of net working capital among different years of Atul Auto Limited.

7.2 Working Capital Trends of Bajaj Auto Limited

The value of net working capital of Bajaj Auto Limited for the period of study from 2014-15 to 2023-14 has been shown in Table 2. The actual net working capital of Bajaj Auto Limited has marked a fluctuating trend throughout the study period. In the year 2014-15 the net working capital was Rs.19.44 crores which decreased to Rs.16.31 crores in 2023-24, marking an decrease of 83.92 indices. The mean value of sales during the study period was Rs.34.35. The SD and CV value were 17.07 and 49.68 per cent which point toward more fluctuation in the net working capital of Bajaj Auto Limited during the study period. The CAGR values were registered at -1.74 per cent.

The indices of working capital of Bajaj Auto Limited registered a fluctuating trend throughout the period of study from 2014-15 to 2023-24 as shown in Table 2. The indices of working capital fluctuated from 100.00 in the year 2014-15 to 83.92 in the year 2023-24. This was due to a substantial fluctuating in the working capital of Bajaj Auto Limited.   The actual and trend values of working capital of Bajaj Auto Limited were calculated by using the regression equation and the details of chi-square values during the study period. The Linear least square regression equation of Y on X is Yc = 34.35 + (-1.85) X. The trend values of working capital fluctuating during the entire study period from 2014-15 to 2023-24. The difference between actual values and trend values of working capital were significant in throughout the year, but the differences were positive in all the years.

H_0 = *There is no significant relationship between actual values and trend values of net working capital among different years of Bajaj Auto Limited*

H_1 = *There is significant relationship between actual values and trend values of net working capital among different years of Bajaj Auto Limited*

The comparison of actual value of net working capital of Bajaj Auto Limited has been shown in Table 2 which represents that the trend values differed materially from the actual net working capital. The original values of net working capital were lower than the trend values in 2014-15, 2017-18, 2022-23 and 2023-24. It may be indicated that in the remaining year, the original values of net working capital were higher than the trend values. To test the significant relationship between the actual values and trend values of working capital of the company, the chi-square test was applied. Since the calculated value of chi-square test (65.09) was more than the table value (16.919) at 5 per cent level of significance and hence the null hypothesis was rejected and

accepted alternative hypothesis. Hence it is evident that, there is significant relationship between actual values and trend values of working capital of Bajaj Auto Limited.

7.3 Working Capital Trends of Kinetic Engineering Limited

The value of net working capital of Kinetic Engineering Limited for the period of study from 2014-15 to 2023-24 has been shown in Table 3. The net working capital of above mentioned firm has clearly marked a fluctuating as well as increasing trend throughout the period. In the year 2014-15 the net working capital was Rs.11.03 crores which fluctuated and increased to Rs.21.27 crores in 2023-24, marking an increase of 192.84 per cent in the indices. The mean value of net working capital of Kinetic Engineering Limited during the study period was Rs.11.26 crores. The compound annual growth rate was 6.79 per cent. The co-efficient of variation of actual value of net working capital was 54.12 per cent which shows more fluctuation in the net working capital of Kinetic Engineering Limited during study period.

The indices of working capital of Kinetic Engineering Limited recorded a fluctuating as well as increasing trend throughout the period of study from 2014-15 to 2023-24 as shown in Table 3. The indices of working capital increased from 100.00 in the year 2014-15 and further to 192.84 in the year 2023-24. This was due to a generous increase in the working capital of Kinetic Engineering Limited. The actual and trend values of working capital of Kinetic Engineering Limited were calculated by using the regression equation and the details of chi-square values during the study period. The Linear least square regression equation of Y on X is Yc = 11.26 + 0.80 X. The trend values of working capital increased during the study period. The difference between actual values and trend values of working capital were significant in any year, but the differences were positive in all the years.

H_0 = *There is no significant relationship between actual values and trend values of net working capital among different years of Kinetic Engineering Limited*

H_1 = *There is significant relationship between actual values and trend values of net working capital among different years of Kinetic Engineering Limited*

The comparison of actual value of net working capital of Kinetic Engineering Limited has been shown in Table 3, which represents that the trend values differed materially from the actual net working capital. The original values of net working capital were lower than the trend values in 2018-19, 2019-20, 2020-21 and 2021-22. It may be indicated that in the remaining year, the original values of net working capital were higher than the trend values. To test the significant relationship between the actual values and trend values of working capital of the company, the chi-square test was applied. Since the calculated value of chi-square test (23.40) was more than the table value (16.919) at 5 per cent level of significance and hence the null hypothesis was rejected and accepted alternative hypothesis. Hence it is evident that, there is significant relationship between actual values and trend values of working capital of Kinetic Engineering Limited.

7.4 Working Capital Trends of Maharashtra Scooters Limited

The value of net working capital of Maharashtra Scooters Limited for the period of study from 2014-15 to 2023-14 has been shown in Table 4. The actual net working capital of Maharashtra Scooters Limited has marked a fluctuating trend throughout the study period. In the year 2014-15 the net working capital was Rs.28.31 crores which decreased to Rs.10.06 crores in 2023-24, marking a decrease of 35.54 indices. The mean value of sales during the study period was Rs.27.76. The SD and CV value were 26.11 and 94.04 per cent which point toward more fluctuation in the net working capital of Maharashtra Scooters Limited during the study period. The CAGR values were registered at -9.83 per cent.

The indices of working capital of Maharashtra Scooters Limited registered a increasing trend throughout the period of study from 2014-15 to 2023-24 as shown in Table 4. The indices of working capital

fluctuated from 100.00 in the year 2014-15 to 35.54 in the year 2023-24. This happened due to a substantial fluctuation in the working capital of Maharashtra Scooters Limited. The actual and trend values of working capital position in Maharashtra Scooters Limited were calculated by using the regression equation and the details of chi-square values during the study period. The Linear least square regression equation of Y on X is Yc = 27.26 + 0.24 X. The trend values of working capital increased during the study period. The difference between actual values and trend values of working capital were significant in all the years. This happened due to variation in the current assets especially in the inventory and sundry debtors.

H₀ = There is no significant relationship between actual values and trend values of net working capital among different years of Maharashtra Scooters Limited

H₁ = There is significant relationship between actual values and trend values of net working capital among different years of Maharashtra Scooters Limited

The comparison of actual value of net working capital of Maharashtra Scooters Limited has been shown in Table 4, which represents that the trend values differed materially from the actual net working capital. The original values of net working capital were lower than the trend values in 2015-16, 2016-17, 2017-18, 2018-19, 2021-22, 2022-23 and 2023-24. It may be indicated that in the remaining year, the original values of net working capital were higher than the trend values. To test the significant relationship between the actual values and trend values of working capital of the company, the chi-square test was applied. Since the calculated value of chi-square test (219.26) was more than the table value (16.919) at 5 per cent level of significance and hence the null hypothesis was rejected and accepted alternative hypothesis. Hence it is evident that, there is a significant relationship between actual values and trend values of working capital of Maharashtra Scooters Limited.

7.5 Working Capital Trends of Majestic Auto Limited

The value of net working capital of Majestic Auto Limited for the period of study from 2014-15 to 2023-14 has been shown in Table 5. The actual net working capital of above firm has marked a highly fluctuating trend throughout the study period. In the year 2014-15 the net working capital was Rs.61.51 crores which fluctuated to Rs.52.18 crores in 2023-24, marking a fluctuation of 84.83 indices. The mean value of sales during the study period was Rs.40.11. The SD and CV value were 21.76 and 54.26 per cent which point toward more fluctuation in the net working capital of Maharashtra Scooters Limited during the study period. The CAGR values were registered at -1.63 per cent.

The indices of working capital of Majestic Auto Limited recorded a fluctuating trend throughout the period of study from 2003-04 to 2012-13 as shown in Table 5. The indices of working capital decreased to 5.19 in the year 2012-13 and further to 254.97 in the year 2006-07. This was due to substantial decrease in the working capital of Sakthi Sugars Limited. The actual and trend value of working capital of Majestic Auto Limited was calculated by using the regression equation and the details of chi-square values during the study period. The Linear least square regression equation of Y on X is Yc = 40.11 + (-0.08) X. The trend values of working capital fluctuating during entire period of the study. The difference between actual values and trend values of working capital were significant in all the years, but the differences were positive in all the year. This happened due to disparity of current assets especially in the other current assets.

H₀ = There is no significant relationship between actual values and trend values of net working capital among different years of Majestic Auto Limited

H₁ = There is no significant relationship between actual values and trend values of net working capital among different years of Majestic Auto Limited

The comparison of actual value of net working capital of Majestic Auto Limited has been shown in Table 5, which represents that the trend values differed materially from the actual net working capital. The

original values of net working capital were lower than the trend values in 2016-17, 2017-18, 2018-19, 2019-20 and 2021-22. It may be indicated that in the remaining year, the original values of net working capital were higher than the trend values. To test the significant relationship between the actual values and trend values of working capital of the company, the chi-square test was applied. Since the calculated value of chi-square test (105.98) was more than the table value (16.919) at 5 per cent level of significance and hence the null hypothesis was rejected. Hence it is evident that, there is significant relationship between actual values and trend values of working capital of Majestic Auto Limited.

7.6 Working Capital Trends of Scooters India Limited

The value of net working capital of Scooters India Limited for the period of study from 2014-15 to 2023-24 has been shown in Table 6. The net working capital of above mentioned firm has clearly marked a fluctuating trend throughout the period. In the year 2014-15 the net working capital was Rs.91.82 crores which fluctuated and decreased to Rs.65.85 crores in 2023-24, marking a decrease of 71.72 per cent in the indices. The mean value of net working capital of Scooters India Limited during the study period was Rs.79.66 crores. The compound annual growth rate was -3.27 per cent. The actual value of co-efficient of variation was 36.05 per cent which shows more fluctuation in the net working capital of Scooters India Limited during study period.

The indices of working capital of Scooters India Limited registered a fluctuating trend throughout the period of study from 2014-15 to 2023-24 as shown in Table 6. The indices of working capital fluctuated from 100.00 in the year 2014-15 to 71.72 in the year 2023-24. This was due to a substantial fluctuation in the working capital of Scooters India Limited. The actual and trend values of working capital of Scooters India Limited were calculated by using the regression equation and the details of chi-square values during the study period. The Linear least square regression equation of Y on X is $Yc = 79.66 + (-7.10) X$. The trend values of working capital fluctuated during the study period from 2014-15 to 2023-24. The relationship between actual values and trend values of working capital were significant in all the selected years of study, but the differences were positive in all the years.

H_0 = *There is no significant relationship between actual values and trend values of net working capital among different years of Scooters India Limited*

H_1 = *There is significant relationship between actual values and trend values of net working capital among different years of Scooters India Limited*

The comparison of actual value of net working capital of Scooters India Limited has been shown in Table 6, which represents that the trend values differed materially from the actual net working capital. The original values of net working capital were lower than the trend values in 2014-15, 2018-19, 2019-20, 2020-21 and 2021-22. It may be indicated that in the remaining year, the original values of net working capital were higher than the trend values. To test the significant relationship between the actual values and trend values of working capital of the company, the chi-square test was applied. Since the calculated value of chi-square test (42.39) was more than the table value (16.919) at 5 per cent level of significance and hence the null hypothesis was rejected and accepted alternative hypothesis. Hence it is evident that, there is significant relationship between actual values and trend values of working capital of Scooters India Limited.

VIII. RECOMMENDATIONS

Keeping in view the above observations relating to the study, the following measures are suggested which would go a long way to improve management of working capital in the two and three wheeler sector in India.

1. The problem of surplus investments in inventory and receivables in the selected units can largely be tackled through improved co-ordination in the functioning of some strategic departments such as

purchase, production, marketing and finance. For co-ordination, strengthening up of management information system in the units is essential.

2. The organizations need to adopt weekly reporting system in respect of inventory and receivables.

3. Moreover, the responsibility for arranging funds to meet the working capital requirements should not be thrust upon the finance managers only, rather it should be made a collective responsibility of all the departmental managers.

4. There is an urgent need to bring about a change in the attitude of the management towards the working capital.

5. During the course of the investigation, it has been found that the managements normally consider the liquidity aspects of the working capital management to be important and do not play much attention to the profitability of funds employed in it.

6. That is why the main problem of the working capital in the two and three wheeler sector in India is over investments in various current assets. To overcome this difficulty, the managements should regard both the facts of working capital as equally important and realize that only proper balancing of liquidity and profitability would ensure efficient working capital management.

7. With a view to lowering investments in receivables, the selected units should administer their receivables on certain well established principles of receivables management.

8. Allocation of authority pertaining to credit and collection to some specific departments, selection of proper credit terms and laying down of sound collection policies and procedures would go a long way to improve collections.

9. Cash management in the selected units can be streamlined by proper planning and control of cash.

10. The firms must increasingly adopt objective methods rather than intuitive methods of cash forecasting. Moreover, cash inflows and outflows must be assiduously regularized.

IX. CONCLUSION

As the management of working capital involves frequent decision-making, it is proposed that every organization should set up a separate 'cell' to keep an eye on the environmental conditions and economic trends. So the selected units under study have been able to create such a section in the organization. The cost of fuel is an impediment for the user of automobiles. Altering of fuel ratio will go a long way in encouraging the demand of vehicles. Not only is the cost of fuel is high but also quality is low and this is not only detrimental for the engine of car but also for the environmental health. The high prices of fuel prevent the people from buying new vehicles despite the availability of attractive financial schemes. Under these circumstances scrapping of old vehicles in favour of new ones will become difficult. It suggested that Indian cost of fuel is important and at the same this fuel quality needs to be improved in terms of gumming tendency and dust contamination.

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Table 1

Actual Value and Trend Value of Net Working Capital of Selected Two and Three Wheeler Companies in India

Year	Atul Auto Limited			Bajaj Auto Limited			Kinetic Engineering Limited			Maharashtra Scooters Limited			Majestic Auto Limited			Scooters India Limited		
	Working Capital (Rs. in Crores)	Indices (2014-15 = 100)	Trend Values (Yc)	Working Capital (Rs. in Crores)	Indices (2014-15 = 100)	Trend Values (Yc)	Working Capital (Rs. in Crores)	Indices (2014-15 = 100)	Trend Values (Yc)	Working Capital (Rs. in Crores)	Indices (2014-15 = 100)	Trend Values (Yc)	Working Capital (Rs. in Crores)	Indices (2014-15 = 100)	Trend Values (Yc)	Working Capital (Rs. in Crores)	Indices (2014-15 = 100)	Trends Value (Yc)
2014-15	35.48	100.00	54.04	19.44	100.00	42.69	11.03	100.00	7.65	28.31	100.00	26.68	61.51	100.00	40.48	91.82	100.00	111.63
2015-16	31.66	89.23	53.44	61.79	317.84	40.84	12.36	112.06	8.45	11.17	39.46	26.92	71.13	115.64	40.40	117.65	128.13	104.52
2016-17	61.95	174.61	52.84	51.24	263.60	38.98	10.77	97.64	9.25	26.60	93.96	27.16	07.17	11.66	40.32	121.87	132.73	97.42
2017-18	68.37	192.70	52.25	21.89	112.60	37.13	10.85	98.37	10.06	13.47	47.58	27.40	28.92	47.02	40.23	111.37	121.29	90.32
2018-19	65.42	184.39	51.65	23.44	120.56	35.28	4.46	40.44	10.86	06.67	23.56	27.64	25.22	41.00	40.15	65.87	71.74	83.21
2019-20	84.71	238.75	51.06	43.32	222.84	33.43	7.11	64.46	11.66	84.29	297.74	27.88	32.27	52.46	40.06	62.61	68.19	76.11
2020-21	64.00	180.38	50.46	53.05	272.89	31.57	2.71	24.57	12.46	64.87	229.14	28.12	13.46	21.88	39.98	49.30	53.69	69.01
2021-22	26.01	73.31	49.87	36.72	188.91	29.72	10.98	99.55	13.26	21.06	74.39	28.36	60.61	98.54	39.90	43.95	47.87	61.90
2022-23	33.72	95.04	49.27	16.31	83.92	27.87	21.04	190.75	14.06	11.12	39.28	28.60	48.59	79.00	39.81	66.33	72.24	54.80
2023-24	42.24	119.05	48.68	16.31	83.92	26.01	21.27	192.84	14.86	10.06	35.54	28.84	52.18	84.83	39.73	65.85	71.72	47.70
Mean	51.36	Computed X^2 Value = 68.44 Critical Value of X^2 = 16.919 with Degree of freedom (n-1)=9 at 5% Significant Level Result : H_O is Rejected		34.35	Computed X^2 Value = 65.09 Critical Value of X^2 = 16.919 with Degree of freedom (n-1)=9 at 5% Significant Level Result : H_O is Rejected		11.26	Computed X^2 Value = 65.09 Critical Value of X^2 = 16.919 with Degree of freedom (n-1)=9 at 5% Significant Level Result : H_O is Rejected		27.76	Computed X^2 Value = 65.09 Critical Value of X^2 = 16.919 with Degree of freedom (n-1)=9 at 5% Significant Level Result : H_O is Rejected		40.11	Computed X^2 Value = 105.98 Critical Value of X^2 = 16.919 with Degree of freedom (n-1)=9 at 5% Significant Level Result : H_O is Rejected		79.66	Computed X^2 Value = 42.39 Critical Value of X^2 = 16.919 with Degree of freedom (n-1)=9 at 5% Significant Level Result : H_O is Rejected	
SD	19.86			17.07			6.09			26.11			21.76			28.72		
CV (%)	38.66			49.68			54.12			94.04			54.26			36.05		
CAGR (%)	1.76			-1.74			6.79			-9.83			-1.63			-3.27		

Source: Computed from Annual reports of the respective companies

Chart 1

Actual Value and Trend Value of Net Working Capital of Selected Two and Three Wheeler Companies in India