Journal of Advances and Scholarly Researches in Allied Education
Vol. 13, Issue No. 1, April-2017, ISSN 2230-7540

Working Capital Management of Auto Component Industry

Dimple*

Abstract – The Indian auto-components industry has experienced healthy growth over the last few years. Some of the factors attributable to this include: a buoyant end-user market, improved consumer sentiment and return of adequate liquidity in the financial system. The revival of the auto industry was initially driven by the fiscal stimulus programme of the government. Secondary data has been used for achieving the objectives of the study.

----------X----------

INTRODUCTION

The auto-components industry accounts for almost seven per cent of India's Gross Domestic Product (GDP) and employs as many as 19 million people, both directly and indirectly. A stable government framework, increased purchasing power, large domestic market, and ever-increasing development in infrastructure have made India a favorable destination for investment.

Market Size

The Indian auto-components industry can be broadly classified into the organized and unorganized sectors. The organized sector caters to the Original Equipment Manufacturers (OEMs) and consists of high-value precision instruments while the unorganized sector comprises low-valued products and caters mostly to the aftermarket category.

Revenues of the Indian auto-components industry grew by 11 per cent over the past year to Rs 2.34 lakh crore (US$ 34.7 billion) in FY 14-15. This growth was primarily driven by healthy recovery for major Original Equipment Manufacturers (OEMs) in the medium and heavy commercial vehicles (M&HCV) and Passenger Vehicle (PV) segment.

According to the Automotive Component Manufacturers Association of India (ACMA), the Indian auto-components industry is expected to register a turnover of US$ 66 billion by FY 15–16 with the likelihood to touch US$ 115 billion by FY 20–21. In addition, industry exports are projected to reach US$ 12 billion by FY 15–16 and add up to US$ 30 billion by FY20–21.

PROFILE OF SELECTED COMPANIES

- **SPARK MINDA**

For over **five decades**, **SPARK MINDA, Ashok Minda Group (erstwhile MINDA Group)** has been a major presence in **India's automobile industry**. These fifty years have been interspersed by a number of technological innovations that have gone on to become industry standards. Today the Group has emerged as one of the leading manufacturer of automotive components with a turnover of **INR 3200 Cr. / USD 533 Mn for 2014 - 15** and employs more than **14,000 people** in India and Overseas.

- **Jamna Auto Industries Limited**

Jamna Auto Industries Limited is India's largest, and amongst world's third largest, manufacturer of tapered leaf springs and parabolic springs for automobiles. The Company was first to introduce parabolic springs in India. This was promoted by Mr Bhupinder Singh Jauhar. He started the Tapered Leaf Spring business in 1954 in a small shop in Yamuna Nagar which was converted in the company form in the year 1965. Mr Jauhar is currently the non executive Chairman of the board of directors of the company and is Chief Mentor of the Group.

- **Rico**

Rico is a world-class engineering company supplying a wide range of high precision fully machined aluminum and ferrous components and assemblies to automotive OEMs across the globe.

- Rico's consolidated group total turnover is over US$ 245 Million

- Rico's integrated services include design, development, tooling, casting, machining and assembly across ferrous and aluminum products.

Setco Automotive

Setco Automotive, the largest clutch supplier to the medium and heavy commercial vehicle (MHCV) segment, is not only eyeing a foray into the light commercial vehicles (LCV) and farm equipment space within the next six months, but also exploring options to set up an assembly plant in Russia.

- **JMT Auto Limited**

JMT Auto Limited is one of the largest Auto component manufacturers in the Eastern region and has significant expertise in the auto sector with proven capabilities in Heat treatment & gear manufacturing besides a variety of components for Oil and Gas industry. Established in 1987, the company has the competitive edge based on latest CNC Technology, our core competence being high precision Gears and Shafts. We have Eight state- of- the- art facilities in India which include fully automated machining lines, design & engineering capability.

WORKING CAPITAL MANAGEMENT

The management of current assets, current liabilities and inter-relationship between them is termed as working capital management. "Working capital management is concerned with problems that arise in attempting to manage the current assets, the current liabilities and the inter-relationship that exist between them."

Classification of Working Capital

The Important classifications are as given below:

- **Conceptual classification –** There are two concept of working capital *viz.,* quantitative and qualitative. The quantitative concept takes into account as the current assets while the qualitative concept takes into account the excess of current assets over current liabilities. Deficit of working capital exists where the amount of current liabilities exceeds the amount of current assets. The above can be summarized as follows:

(i) Gross Working Capital = Total Current Assets

(ii) Net Working Capital = Excess of Current Assets over Current Liabilities

(iii) Working Capital Deficit = Excess of Current Liabilities over Current Assets.

- **Classification on the basis of financial reports –** The information of working capital can be collected from Balance Sheet or Profit and Loss Account; as such the working capital may be classified as follows:

(i) **Cash Working Capital** – This is calculated from the information contained in profit and loss account. This concept of working capital has assumed a great significance in recent years as it shows the adequacy of cash flow in business. It is based on 'Operating Cycle Concept's which is explained later in this chapter.

(ii) **Balance Sheet Working Capital** – The data for Balance Sheet Working Capital is collected from the balance sheet. On this basis the Working Capital can also be divided in three more types, *viz.,* gross Working Capital, net Working Capital and Working Capital deficit.

- **Classification on the Basis of Variability –** Gross Working Capital can be divided in two categories *viz.,* (i) permanent or fixed working capital, and (ii) Temporary, Seasonal or variable working capital. Such type of classification is very important for hedging decisions.

(i) **Temporary Working Capital** – Temporary Working Capital is also called as fluctuating or seasonal working capital. This represents additional investment needed during prosperity and favourable seasons. It increases with the growth of the business. "Temporary working capital is the additional assets required to meet the variations in sales above the permanent level."

This can be calculated as follows:

Temporary Working Capital = Total Current Assets – permanent Current Assets

(ii) **Permanent Working Capital –** It is a part of total current assets which is not changed due to variation in sales. There is always a minimum level of cash, inventories, and accounts receivables which is always maintained in the business even if sales are reduced to a minimum. Amount of such investment is called as permanent working capital.

REVIEW OF LITERATURE

Welter, in his study (1970), stated that working capital originated because of the global delay between the moment expenditure for purchase of raw material was made and the moment when payment was received for the sale of finished product. Delay centres are located throughout the production and marketing

functions. The study requires specifying the delay centres and working capital tied up in each delay centre with the help of information regarding average delay and added value.

Warren and Shelton (1971) applied financial simulation to simulate future financial statements of a firm, based on a set of simultaneous equations. Financial simulation approach makes it possible to incorporate both the uncertainty of the future and the many interrelationships between current assets, current liabilities and other balance sheet accounts. Warren and Shelton presented a model in which twenty simultaneous equations were used to forecast future balance sheet of the firm including forecasted current assets and forecasted current liabilities.

Misra (1975) studied the problems of working capital with special reference to six selected public sector undertakings in India over the period 1960-61 to 1967-68. Analysis of financial ratios and responses to a questionnaire revealed somewhat the same results as those of NCAER study with respect to composition and utilization of working capital. In all the selected enterprises, inventory constituted the more important element of working capital. The study further revealed the overstocking of inventory in regard to its each component, very low receivables turnover and more cash than warranted by operational requirements and thus total mismanagement of working capital in public sector undertakings.

R.N. Agarwal (1982) estimated total inventory investment equation for individual firms in automobile manufacturing industry, which was divided into two sectors– car-sector and non car-sector. His study was based on the data for 1959-60 through 1978-79. Official Directory of Mumbai Stock Exchange had been the basic source of data. Analysis of two sector revealed that sales and stocksales ratio were important explanatory variables. Cost of capital and trend were important in only car sector while fixed investment and flows of external funds were significant in non car sector. Existing stock of inventories was statistically significant in both the sector but contrary to expectations, it possessed negative coefficient. Several other variables as dividends, capacity utilization and liquidity ratio were found to be of no importance in explaining inventory investment behaviour.

Agarwal (1983) also studied working capital management on the basis of sample of 34 large manufacturing and trading public limited companies in ten industries in private sector for the period 1966-67 to 1976-77. Applying the same techniques of ratio analysis, responses to questionnaire and interview, the study concluded the although the working capital per rupee of sales showed a declining trend over the years but still there appeared a sufficient scope for reduction in investment in almost all the segments of working capital.

Kamta Prasad Singh, Anil Kumar Sinha and Subas Chandra Singh (1986) examined various aspects of working capital management in fertilizer industry in India during the period 1978-79 to 1982-93. Sample included public sector unit, Fertilizer Corporation of India Ltd. (FCI) and its daughter units namely Hindustan Fertilizers Corporation Ltd., the National Fertilizer Ltd., Rashtriya Chemicals and Fertilizers Ltd. and Fertilizer (Projects and Development) India Ltd. and comparing their working capital management results with Gujarat State Fertilizer Company Limited in joint sector.

N.C. Gupta study (1987) examined the determinants of total inventory investment in aluminum and non-ferrous semi firms in private sector. The data had been taken from Stock Exchange, Official Directory and Mumbai for 9 years 1966-67 to 1974-75. variables considered were current sales change, one lagged sales change, inventory stock at the beginning, gross fixed investment during the year, flow of net debt (external finance) and profits net of dividends and taxes but gross of depreciation provision (retained earnings or internal finance).

RESEARCH METHODOLOGY

There were many Auto components companies in India. The annual reports of these companies have been collected from financial statement data of companies given in Annual reports. The analysis, findings, conclusions and suggestions have been presented in the form of this study.

OBJECTIVES OF THE STUDY

The present study has been undertaken to achieve the following objectives given below:

- To analyze and evaluate working capital management of selected units.
- To evaluate the inventory, receivable and cash management performance.
- To suggest on the basis of conclusions, innovation in the management of working capital in Auto component Industry in India.
- To analyze the impact of Auto component industry on the national economy.

HYPOTHESES OF THE STUDY

The study has been pursued to test the following hypotheses with reference to Auto components Industry in India:

- That proper management of working capital improves both 'Liquidity and Profitability' position of a business firm.
- That the scope for improvement in the management of working capital is greater in inventory as well as receivables management than in cash management.

Sources of Data

In the present study, top five Auto components companies have been selected out of more than 50 Auto components companies in India.

These companies are:

(i) SparkMinda

(ii) JMT Auto Limited

(iii) Jamna Auto Industries Limited

(iv) Rico

(v) Setco Automotive

The data relating to management of working capital of Auto Components industry and its selected units has been collected from the published annual reports of the companies for the year 2011-12to 2014-2015. Only Ratio analysis technique is used.

ANALYSIS AND INTERPRETATION

Financial statements contain absolute figures of assets, liabilities, revenues, expanses, and profit and loss of an enterprise. They are analyzed to present them and understandable to their users. Various tools or devices employed for analyzing the financial statement. Here we used RATIO ANALYSIS tools to analyze working capital Management of Auto Component Industry. To measure the short term liquidity of a firm the following ratios can be calculated

a) CURRENT RATIO:

Current ratio may be defined as the relationship between current assets and current liabilities.

$$\text{Current ratio} = \frac{\text{Current Assets}}{\text{Current liabilities}}$$

Table 1

Current Ratio of Selected Auto Components Companies

YEAR	Minda	Jamna	Rico	Setco	Jmt
2011-12	1.11	0.77	0.73	1.01	0.92
2012-13	1.06	0.75	0.56	0.95	1.007
2013-14	0.99	0.86	0.48	0.91	0.78
2014-15	1.13	0.78	1.15	1.10	1.27
Company Average	1.07	0.79	0.73	0.99	0.99

Interpretation:

The current ratio of all the Auto Component companies shows fluctuating trend throughout the study period. The minimum Current Ratio in Minda is 0.99 (2013-2014), Jamna is 0.75 (2012-13), Rico is 0.48 (2013-14), Setco is 0.91(2013-2014) and in Jmt is 0.78(2013-14).

The maximum Current Ratio in Minda is 1.13 (2014-15), Jamna is 0.86 (2013-14), Rico is 1.15 (2014-15), and Setco is 1.10 (2014-15) and in Jmt is 1.27(2014-15).

(b) QUICK RATIO:

Quick ratio is a test of liquidity than the current ratio. The term liquidity refers to the ability of a firm to pay its short-term obligations as & when they become due. Quick ratio may be defined as the relationship between quick or liquid assets and current liabilities. An asset is said to be liquid if it is converted into cash within a short period without loss of value.

$$\text{Quick ratio} = \frac{\text{Quick Assets}}{\text{Current liabilities}}$$

Table 2

Quick Ratio of Selected Auto Components Companies

YEAR	Minda	Jamna	Rico	Setco	Jmt
2011-12	0.88	0.44	0.52	0.73	0.34
2012-13	0.86	0.40	0.41	0.62	0.27
2013-14	0.77	0.42	0.37	0.58	0.40
2014-15	0.85	0.47	0.98	0.72	0.55
Company Average	0.84	0.43	0.57	0.66	0.39

Interpretation:

The Quick ratio of all the Auto Component companies shows fluctuating trend throughout the study period. The minimum Quick Ratio in Minda is 0.77 (2013-2014), Jamna is 0.40 (2012-13), Rico is 0.37 (2013-14), Setco is 0.58(2013-2014) and in Jmt is 0.27(2012-13). The maximum Quick Ratio in Minda is 0.88 (2011-12), Jamna is 0.47(2014-15), Rico is 0.98 (2014-15), and Setco is 0.73 (2011-12) and in Jmt is 0.55(2014-15).

(c) ABSOLUTE LIQUID RATIO:

Although receivable, debtors and bills receivable are generally more liquid than inventories, yet there may be doubts regarding their realization into cash immediately or in time. Hence, absolute liquid ratio should also be calculated together with current ratio and quick ratio so as to exclude even receivables from the current assets and find out the absolute liquid assets. Absolute liquid assets include cash in hand etc.

$$\text{Absolute liquid ratio} = \frac{\text{Absolute liquid Assets}}{\text{Current liabilities}}$$

Table 3

Absolute Liquid Ratio of Selected Auto components Companies

YEAR	Minda	Jamna	Rico	Setco	Jmt
2011-12	0.15	0.03	0.005	0.04	0.029
2012-13	0.11	0.03	0.01	0.09	0.01
2013-14	0.04	0.04	0.001	0.02	0.07
2014-15	0.06	0.02	0.002	0.03	0.006
Company Average	0.09	0.03	0.004	0.04	0.028

Interpretation:

The Absolute Liquid ratio of all the Auto Component companies shows fluctuating trend throughout the study period. The minimum Absolute Liquid Ratio in Minda is 0.04(201 3-2014), Jamna is 0.02 (2014-15), Rico is 0.001 (2013-14), Setco is 0.02(2013-2014) and in Jmt is 0.006(2014-15). The maximum Absolute Liquid Ratio in Minda is 0.15 (2011-12), Jamna is 0.04(2013-14), Rico is 0.01 (2012-13), and Setco is 0.09 (2012-13) and in Jmt is 0.07(2013-14).

d.) Inventory turnover ratio:

This ratio indicates the relationship between the cost of goods sold during the year and average stock kept during the year.

$$\text{Inventory turnover ratio} = \frac{\text{Cost of goods sold}}{\text{Inventory}}$$

Table 4

Inventory turnover ratio of Selected Auto Components Companies

YEAR	Minda	Jamna	Rico	Setco	Jmt
2011-12	10.6	6.26	6.92	4.59	1.54
2012-13	12.37	5.18	8.15	3.36	1.36
2013-14	10.20	6.46	8.70	3.03	1.22
2014-15	10.30	8.33	9.56	3.73	2.04

Interpretation:

The Inventory Turnover Ratio of all the Auto Component companies shows fluctuating trend throughout the study period. The minimum Average age of inventory in Minda is 30days (2012-13), Jamna is 44 days (2014-15),Rico is 39 days (2014-15) , Setco is 79 days (2011-12) and in Jmt is 178 days(2014-15).

e.) Debtors turnover ratio:

This ratio indicates the relationship between credit sales & average debtors:

$$\text{Debtors tunover ratio} = \frac{\text{Net Credit Sales}}{\text{Debtors}}$$

Table 5

Debtor's turnover ratio of Selected Auto components Companies

YEAR	Minda	Jamna	Rico	Setco	Jmt
2011-12	6.04	9.03	6.52	4.05	8.43
2012-13	6.12	8.74	7.78	4.02	8.29
2013-14	5.96	6.82	9.20	4.34	4.16
2014-15	6.60	13.79	5.86	5.21	9.49

Interpretation

The Debtors Turnover Ratio of all the Auto Component companies shows fluctuating trend throughout the study period. The minimum Average collection period in Minda is 55days (2014-15), Jamna is 27 days (2014-15) ,Rico is 40 days (2013-14) , Setco is 70days (2014-15) and in Jmt is 38 days(2014-15).

FINDINGS

After the careful study of the financial results following are the findings about the working capital Management of Auto component Industry: -

- The business needs to maintain some cash to pay its current liabilities in time.
- Similarly, to maintain supply of goods to meet the demand in the market, the stock of finished goods has to be kept.
- Working capital is needed for the purchase of raw material and for the payment of various day to day expenses.
- The profit depends largely on sales but sales do not result in cash immediately. To increase the sales goods are to be sold on credit, the collection of which takes place after time terms. Thus, there exist a gap between the sales of goods and realization of cash.
- For the efficient operation of the business, working capital is required along with the fixed capital.
- Present study of Auto component Industry depicts that the Industry is delivering strong operating and financial performance. The Industry is slowly move towards large profit so we hope near future company earn more profit.

RECOMMENDATIONS

After interpretation and analysis, I am giving certain suggestions which I hope may be helpful for the Industry.

1. Each Company must increase cash generate sources for fight with regular liquidity challenges.
2. The most important thing is that they have to maintain balance in internal & external source of capital. Company must improve external source of capital for extension in profit of shareholders.
3. A lot of Operating Expenses reduce profit of company. So attention must be taken to reduce such Operating expenses to earn more profit and establish powerful image in Indian market.
4. Overall study recommends that each company properly utilize their internal sources and must reduce operating expenses.

REFERENCE BOOKS

J. M. Warren and J. P. Shelton (1976). "A Simultaneous Equation Approach to Financial Planning", Journal of Finance, Volume 26, pp. 1123-1142

Kamta Prasad Singh, Anil Kumar Sinha and Subas Chandra Singh (1986). Management of Working Capital in India, Janaki Prakashan, New Delhi.

N.C. Gupta (1987). Productivity, Investment and Import Substitution in Indian Industries (A Case Study of Non- Ferrous Metals), Anmol Publications, New Delhi.

N.K. Agrawal (1983). Management of Working Capital, Sterling Publication Pvt. Ltd., New Delhi, 1983.

Paul Welter (1970). "How to Calculate Savings Possible Through Reduction of Working Capital", Financial Economist, pp. 50-58.

R.N. Agarwal (1982). Analysis of Profits, "Investment and Financing Behaviour of Indian Automobile Manufacturing Industry", Ph.D. Thesis, Delhi University.

Ram Kumar Misra (1975). Problems of Working Capital (With Special Reference to Selected Public Understandings I India), Somaiya Publications Private Limited, Mumbai.

Reports, Journals, Bulletins and Periodicals:

- Annual Reports of the various selected Auto Component Industry Units
- Management Accountants, India
- The Journal of Industries and Trade
- The Indian Accounting Journal
- Journal of Accounting & Finance Accounting Review.

Corresponding Author

Dimple*