

## **Original Research Paper**

**Commerce** 

### WORKING CAPITAL MANAGEMENT IN AMARA RAJA BATTERIES LIMITED, CHITTOOR DISTRICT, ANDHRA PRADESH

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ABSTRACT

The battery is one of the most important man made inventions all throughout history. Today, it is generally used as a portable source of power. Batteries are classified by chemistry and the most common are lead, lithium and nickel based. The battery industry in India that comprises automobile, sealed maintenance free (SMF), tubular and lead acid batteries, has been registering an annual growth rate of 25 per cent year on year. Amara Raja Batteries Limited is a multi-national company which manufactures and sells lead-acid storage batteries for industrial and automotive applications in India. It is one of the biggest company of Amara Raja Group of companies located at Chittoor district, Andhra Pradesh. It was incorporated in February 1985 as a private limited company and later converted into public limited company in the year 1990. The company is the largest supplier of stand-by power systems to various customer groups, such as telecom, railways, power control, solar, UPS, automobile, replacement markets, and private label customers. The company is also having prestigious automotive clients including Ford, General Motors, Daimler Chrysler, Ashok Leyland, TELCO and Mahindra & Mahindra. Working capital is often referred to as life blood of an organization. It is the money required for carrying on day today activities of an organization. An effective working capital management system helps businesses not only to cover their financial obligations but also boosts their earnings. Hence, an attempt is made to study the working capital management in Amara Raja Batteries Limited. The present study covered aspects such as current assets, liquid assets, current liabilities and various ratios relating to working capital for the period 2012-13 and 2016-17 i.e. 5 years.

# **KEYWORDS**: Current assets, Current liabilities, Inventory, Working capital.

- 1.Introduction: The battery is one of the most important man made inventions all throughout history. Today, it is generally used as a portable source of power. But in the past, batteries were our only source of electricity. Without its conception, modern comforts such as computers, vehicles and communication devices may not have been possible. Batteries are classified by chemistry and the most common are lead, lithium and nickel based. The battery industry in India that comprises automobile, sealed maintenance free (SMF), tubular and lead acid batteries, has been registering an annual growth rate of 25 per cent year on year. Demand for Indian batteries from importers worldwide has increased. The main sectors in which demand for batteries are solar, telecom, automation and power conditioning. The present article mainly focuses on the working capital management in Amara Raja Batteries Limited. Amara Raja Batteries Limited is a multi-national company which manufactures and sells lead-acid storage batteries for industrial and automotive applications in India.
- 2. Profile: Amara Raja Batteries Limited is located at Karakambadi, Tirupati, Chittor District, Andhra Pradesh. It is one of the biggest company of Amara Raja Group of companies others being Amara Raja Electronics Limited, Amara Raja Power Systems Limited, Amara Raja Infra Private Limited, Amara Raja Industrial Services Private Limited, Mangal Industries Limited, Galla Foods and Silver Lining Storage Solutions Limited. Amara Raja Batteries Limited was incorporated in February 1985 as a private limited company. The company was converted into public in the year 1990. In May 1992, they designed and implemented the most advanced battery manufacturing facility in India. In December 1997, they signed a joint venture agreement with the Johnson Controls Incorporation, USA for the import of technology for the manufacture of automotive batteries.

In the year 2000, the company launched Amaron automotive batteries. In the year 2002, they launched Quanta UPS, Amaron Hiway and Harvest batteries. In the year 2004, they launched Amaron PRO, GO, and FRESH automotive batteries... In May 2007, the company has launched a new retail store format 'Power zone' to cater the growing need for better technology and better service at affordable price in the rural markets. They are offering a platter of products of global quality at local prices, right from automotive batteries, tractor batteries and home UPS, from the House of Amara Raja. In May 2008, the company entered the two wheeler battery segment with the launch of Amaron Pro Bike Rider 2-wheeler

batteries. It is the largest manufacturer of Standby Valve Regulated Lead Acid batteries in the Indian Ocean Rim comprising the area ranging from Africa and the Middle East to South East Asia. It is in the business of Industrial Battery, Automobile Battery and Power System. The company offers its batteries under the Amaron, Power Zone, Power Stack, Amaron Volt, and Quanta brands. It also provides installation, commissioning, and maintenance services; and exports its products to various countries. The company is the largest supplier of stand-by power systems to various customer groups, such as telecom, railways, power control, solar, UPS, automobile, replacement markets, and private label customers. The company is also having prestigious Automotive clients including Ford, General Motors, Daimler Chrysler, Ashok Leyland, TELCO, and Mahindra & Mahindra. The total workforce of the Amara Raja Batteries Limited is 10000

**3. Need for the study:** Working capital is often referred to as "life blood" of an organization. It is also called as circulating capital. It is defined as the money required for carrying on day today activities of an organization. It is the functional area of the finance that covers all the current accounts of the firm. It is an amount of fund which is necessary to cover the cost of operating the enterprise. Whether it is manufacturing or non-manufacturing one without adequate working capital, there can be no progress in the industry. Working capital management refers to a company's managerial accounting strategy designed to monitor and utilize the two components of working capital, current assets and current liabilities, to ensure the most financially efficient operation of the company. The primary purpose of working capital management is to make sure that the company always maintains sufficient cash flow to meet its short-term operating costs and short-term debt obligations.

It commonly involves monitoring cash flow, assets and liabilities through ratio analysis. Efficient working capital management helps company's smooth financial operation and improves the company's earnings and profitability. A hallmark of good business management is the ability to utilize working capital management to maintain a solid balance between growth, profitability and liquidity. An effective working capital management system helps businesses not only to cover their financial obligations but also boosts their earnings. Hence, an attempt is made to study the working capital management in Amara Raja Batteries Limited.

4. Objectives: The objectives of the present study are as follows.

- To study the status and structure of current assets and current liabilities and
- To analyze the working capital management in Amara Raja Batteries Limited.
- Data Collection and Statistical techniques: The study is primarily based on the secondary data which includes books, magazines, annual reports, records, websites etc. The data has been analyzed with the help percentages and financial and statistical tools like ratio analysis, averages.
- 6. Period of Study: The study covered a period of 5 years from 2012-13 to 2016-17.
- Scope: The present study covers only the important aspects such as current assets, liquid assets, current liabilities and various ratios relating to working capital for the above said period.
- 8. Descriptive Study: The description of the study is given in the following pages.
- **8.1. Current Assets and Current Liabilities of Amara Raja Batteries Limited:** Current assets are those which are easily converted into cash. It is evident from table 1 that of all the

Table 1: Current Assets during 2012-13 and 2016-17

(Rs.Crores)

Particulars	2012-13	2013-14	2014-15	2015-16	2016-17
Trade receivables	380.68	452.79	554.10	592.15	570.49
	(30.29)	(34.87)	(43.64)	(42.05)	(32.44)
Inventories	292.86	335.01	418.13	601.64	816.95
	(23.30)	(25.80)	(32.93)	(42.73)	(46.45)
Cash and bank	410.79	294.57	222.18	150.25	170.92
balances	(32.68)	(22.69)	(17.50)	(10.67)	(9.72)
Short term loans/	165.68	211.93	67.64	55.04	63.68
advances	(13.18)	(16.31)	(5.33)	(3.91)	(3.62)
Other current assets	6.85	4.32	7.58	9.06	8.80
	(0.55)	(0.33)	(0.60)	(0.64)	(0.50)
Investments					127.78
					(7.27)
Total	1256.86	1298.62	1269.63	1408.14	1758.62
	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)

Source: Annual Reports of Amara Raja Batteries.

Note : Figures in parentheses indicate the percentage to total.

Current assets, trade receivables formed more than 30 per cent during 2012-13 and 2016-17 recording the highest of 43.64 per cent during 2014-15 and lowest of 30.29 per cent during 2012-13. The percentage of inventories to total gradually increased from 23.30 per cent to 46.45 per cent during the study period. However, the proportion of cash and bank balances and short term loans and advances decreased from 32.68 per cent to 9.72 per cent and 13.18 per cent to 3.62 per cent respectively during the aforesaid period. Other current assets include interest accrued, prepaid expenses, advances to employees, export incentives etc. The contribution of other current assets to total current assets was below one per cent. With regard to investments the company made short term investments only during 2016-17.

Table 2: Current Liabilities during 2012-13 and 2016-17

(Rs.Crores)

				(1	13.010163)
Particulars	2012-13	2013-14	2014-15	2015-16	2016-17
Trade payables	136.28	127.78	266.03	349.29	418.44
	(23.65)	(20.17)	(58.16)	(54.76)	(55.09)
Other current	180.72	215.67	149.07	233.88	287.53
liabilities	(31.37)	(34.03)	(32.59)	(36.67)	(37.85)
Short term	249.32	281.87	42.33	54.63	53.66
provisions	(43.27)	(44.48)	(9.25)	(8.57)	(7.06)
Short term	9.86	8.38	0.00	0.00	0.00
borrowings	(1.71)	(1.32)	(0.00)	(0.00)	(0.00)
Total	576.18	633.70	457.43	637.80	759.62
	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)

Source: Annual Reports of Amara Raja Batteries.

Note: Figures in parentheses indicate the percentage to total. It can be inferred from table 2 that the percentage of trade payables increased from 23.65 per cent during 2012-13 to 55.09 per cent during 2016-17 with relative ups and downs. Here other current liabilities include unclaimed dividend, outstanding liabilities, excise duty, service tax, sales tax payable, TDC/TCS payable, advances from customers etc. There was a constant growth of other current liabilities from 31.37 per cent to 37.85 per cent during the study period except the year 2014-15. The proportion of short term provisions during the first 2 years was made more than 40 per cent where as in the rest of the period, it was below 10 per cent. The company borrowed short term borrowings only for the first two years which was below 2 per cent.

**8.2. Working Capital Ratios:** To study and evaluate the working capital management in Amara Raja Batteries, working capital ratios such as current ratio, quick ratio, inventory to current assets ratio, working capital turnover ratio are computed.

**8.2.1. Current Ratio:** To judge the short term financial strength of an enterprise, the current ratio is computed. Current ratio indicates the firm's ability to pay its current liabilities. It is the ratio between current assets and current liabilities. The standard norm for such ratio is 2:1.

Table 3: Current Ratio during 2012-13 and 2016-17

(Rs.Crores)

Year	Current Assets	Current Liabilities	Current Ratio
2012-13	1256.86	576.18	2.18
2013-14	1298.62	633.70	2.05
2014-15	1269.63	457.43	2.78
2015-16	1408.14	637.80	2.21
2016-17	1758.62	759.62	2.32

Source: Annual Reports of Amara Raja Batteries.

It can be observed from table 3 that the firm maintained standard norms for current ratio during the entire study period. It fluctuated between 2.78 and 2.05 with an average ratio of 2.31. It can be concluded that the overall position of current assets and current liabilities is good as the company is maintaining current assets to meet the current obligations.

**8.2.2. Quick Ratio:** It is the ratio between quick assets and current liabilities. The standard norm for such ratio is 1:1 and it is taken as a tool for the assessment of liquidity position of a firm. Table 4 reveals that the firm maintained standard norm for quick ratio during 2012-13 and 2016-17. It varied between 1.24 and 1.86 with an average ratio of 1.51. Hence, it can be inferred that the liquidity position of the firm is satisfactory.

Table 4: Quick Ratio during 2012-13 and 2016-17

(Rs.Crores)

Year	Quick Assets	Current Liabilities	Current Ratio
2012-13	964.00	576.18	1.67
2013-14	963.61	633.70	1.52
2014-15	851.50	457.43	1.86
2015-16	806.50	637.80	1.26
2016-17	941.67	759.62	1.24

Source: Annual Reports of Amara Raja Batteries.

#### 8.2.3. Inventory to Current Assets Ratio:

This ratio expresses the relationship between inventory to current assets. It highlights how much amount is in the form of stock in current assets. The higher is the value of this ratio, the poorer shall be the efficiency of current assets.

Table 5: Inventory to Current Assets Ratio during 2012-13 and 2016-17 (Rs.Crores)

Year	Inventory		Inventory to current assets Ratio
2012-13	292.86	1256.86	0.23
2013-14	335.01	1298.62	0.26
2014-15	418.13	1269.63	0.33
2015-16	601.64	1408.14	0.43
2016-17	816.95	1758.62	0.47

Source: Annual Reports of Amara Raja Batteries.

It can be seen from table 5 that there was continuous growth of inventory to current assets ratio during the aforesaid study period. It increased from 0.23 to 0.47 during the said period with an average ratio of **0.34.** Though the firm is maintaining the efficiency of current assets by reaching the standard norms, but in the years to come there is a need to maintain economic order quantity to have good liquidity position.

**8.2.4. Working Capital Turnover Ratio:** This ratio indicates the velocity of the utilization of net working capital. It shows firm's efficiency in generating sales revenue using the total working capital available in the business. A higher ratio indicates efficient utilization of working capital.

Table 6: Working Capital Turnover Ratio during 2012-13 and 2016-17

(Rs.Crores)

Year	Net Sales	Net Working	Working Capital Turnover
		Capital	Ratio
2012-13	2958.92	680.68	4.35
2013-14	3436.66	664.92	5.17
2014-15	4211.33	812.20	5.19
2015-16	4617.76	770.34	5.99
2016-17	5317.15	999.00	5.32

Source: Annual Reports of Amara Raja Batteries.

It is evident from table 6 that working capital turnover ratio varied between 4.35 and 5.99 during the study period. The average working capital turnover ratio is 5.20. It means the firm is maintaining sufficient working capital. It also indicates that the firm has taken all necessary steps to accelerate the sales volume in proportion to the increased investment in working capital. At the same time it can also be inferred that it has more than enough liquid funds to meet short term obligations.

- **9. Findings and Suggestions:** Based on the above analysis, the following findings and suggestions are made.
- The firm is successfully maintaining standard norms for both current ratio and quick ratio.
- Though it reached standard norms for quick ratio, it would be better if it maintains more cash and bank balance in the years to come to meet day to day expenses without any difficulty.
- As far as the inventory is concerned, the firm witnessed continuous growth during the study period. Hence it has to take steps to minimize the investment in inventory which may lead to inefficient capital in future.
- If possible it has to reduce inventory level by adopting scientific inventory management techniques.
- With regard to the average of inventory to current assets ratio, the firm reached standard norms. Excess of standard norms may lead to improper allocation of financial resources.
- The firm is having sufficient working capital turnover ratio that confirms the excellent performance of working capital.

#### **References:**

- I.M.Pandey, Financial Management, 8th Edition, Vikas Publishing, New Delhi.
- M.Y.Khan & P.K.Jain, Financial Management, 4th Edition, Tata McGrawhill Publishing Co Ltd, New Delhi.
- 3. K.Rajeswara Rao & Prasad, Accounting and Finance, Jai Bharat Publishers, Guntur.
- 4. James c. Vann Horne, Financial Management, 9th Edition, Prentice- Hall of India

- Private Limited, New Delhi.
- Shashi K.Gupta, R.K.Sharma, Anuj Gupta, Management Accounting, Kalyani Publishers, Hyderabad, 2018.
- Annual Reports of Amara Raja Batteries.