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Econometrics Assignment

FINANCIAL RATIOS ANALYSIS

Executive Summary

Amara Raja, Excide, High Energy Batteries are the leading companies in automotive battery and all three maintain good ratio . We will see which company maintains the ratio better than other companies.

Introduction

Amara Raja Group, is an Indian multinational conglomerate company. The group has a presence in the automotive battery business, packaged foods and beverages, electronics products manufacturing, infrastructure sector, power system production and fabrication of sheet metal products and fasteners. The Amara Raja Group is known for its automotive battery brand Amaron, the second largest selling automotive battery brand in India after Exide Industries. Amara Raja Group employs a workforce of more than 15216 employees. Amara Raja Batteries was named on Asia's 'Best Under A Billion' 2010 list of companies compiled by *Forbes* magazine.

Company Profile

Company Name	Amara Raja Batteries Limited
Founder Name	Ramachandra Naidu

Owner	Amara Raja Group
Date of Establishment	10 April 1985
Establishment Place	Tirupati, Andhra Pradesh
Revenue	INR 1.06 lakh crores (In 2020)
CEO	S. Vijayanand
Registered Address	Renigunta-Cuddapah Road, Karakambadi, Tirupati, Andhra Pradesh, India
Corporate Identity Number(CIN)	L31402AP1985PLC005305
Telephone No.	+91 22 2265000
Fax	+91 22 2285600
Company Status	Active
Website	www.amararajabatteries.com

Industry Profile

The Indian Automotive Battery industry is valued at INR 2400 billion with the industrial battery market estimated at INR 1200 billion. Automotive batteries are an interesting piece of technology, they are used to drive most electrical devices an automobile could possess but they can also be used in the industrial segment. Industrial leaders like Exide, Amara raja are also present in the industrial segment which uses batteries in power lifts, telecom equipment, railways etc.
With advancement in hybrid technology, this becomes the norm as they will become a part of the powertrain when it comes to hybrid and electric applications.

Another interesting feature in the Indian automotive battery scene is its OEM share is only 30% and 70% comes from the replacement market. Here unorganized players have 50% market share. The Indian automotive battery market holds a lot of promise – with new entrants like Minda partnering with Panasonic etc.
The government's efforts to boost automotive battery manufacturing in India will drive the segment's growth. On November 11, 2020, the Indian government announced incentives worth INR 3 trillion (approximately USD 40 billion) to encourage companies in ten sectors to boost local manufacturing and increase exports. The incentive scheme worth INR 180 billion (about USD 2.4 billion) will be directed toward advanced cell chemistry, aimed at bringing at least 50 GW of lithium-ion batteries to be manufactured in India.

With increasing population and easy financing facilities, the automobile sector is expected to grow significantly during the study period. Electric vehicle (EV) sales are expected to support the segment.

Financial Analysis

Financial Ratio	High Energy Batteries (India) Limited	Exide Industries ltd	Amara Raja Batteries Limited
Liquidity Analysis			
Current Ratio	1.74	1.82	1.85
Quick Ratio	0.80	0.80	0.67
Cash Ratio	0.12	0.34	0.05
Efficiency Analysis			
Inventory Turnover	2.47	5.19	1.33
Days Inventory Outstanding	147.96	70.36	274.402
Receivables Turnover	4.18	8.70	10.91
Average Collection Period	87.34	41.95	33.139
Operating Cycle	235.30	112.31	307.89
Payables Turnover	8.18	5.32	8.1587
Average Payable Period	44.61	69	44.74
Cash Conversion Cycle	190.69	43.74	262.26
Solvency Analysis			
Debt-to-Total-Assets Ratio	0.43	0.24	0.29
Proprietary Ratio	0.57	0.16	0.71
Debit-to-Equity Ratio	0.77	0.04	0.40
Times-Interest-Earned	6.54	1.22	49.20
Profitability Analysis			
Operating Margin	0.31	0.11	0.00
Net Margin	0.23	0.37	0.06
Return on Assets	0.18	0.35	0.08
Return on Operating Assets	1.81	1.32	0.11
Return on Equity (ROE)	0.32	0.44	0.11
Return on Cap Employed	0.95	0.09	0.10
Market Value Analysis			
Dividend Pay-out Ratio (in %)	15.00	0.00000448458	14.99
Dividend Yield (in %)	0.99	1.27	0.83
Price-Earnings Multiple	15.11	16.55	17.98
Price-Book Multiple	4.87	1.26	2.02

Liquidity Analysis:

A liquidity ratio is a type of financial ratio used to determine a company's ability to pay its short-term debt obligations. The metric helps determine if a company can use its current, or liquid, assets to cover its current liabilities.From the liquidity perspective, Excide company is most comfortable in honoring its short-term commitments whereas Amar Raja may face difficulty in honoring its short term commitments.

Solvency Analysis:

Solvency ratio helps to determine whether the company can meet its financial obligations in the long term and this metric is very useful to lenders, potential investors, suppliers, and any other entity.

The debt ratio is the ratio which shows what extent of the assets are funded by outside funds. A debt ratio of 0.4 or lower is preferred and a debt ratio of 0.6 or higher will make it difficult to borrow money. Both Excide and Amar Raja have debt ratio less than 0.4

The proprietary ratio indicates the proportion of the total assets funded by shareholders. A high proprietary ratio of 0.75 or higher is preferred which shows that the business is in a strong position. Amar Raja i has a higher proprietary ratio and a pretty comfortable position than the other two companies.

The debt equity ratio(risk ratio) is the proportion of outside funds to the owner's funds. A debt equity ratio of less than 1 is preferred and a ratio higher than 2 is considered risky. All three company have ratio less than 1 which shows that they maintain their risk ratio

The times interest earned is the amount of operating profit a company earns for a rupee of interest paid. A higher times interest earned ratio of more than 2.5 is favorable because it means that the company presents less of a risk to investors and creditors in terms of solvency. Amar Raja has a very high interest earned compared to the other two companies.

Efficiency Analysis:

Exide Industries Ltd. has the highest Inventory Turnover Ratio which means it has a light inventory therefore the company spends less money on storage, write-downs and obsolete inventory.

The days inventory outstanding ratios calculate the average number of days it takes to move a product. Exide Industries Ltd. has the lowest DIO which shows how fast they can turn the inventory into cash. A smaller DIO shows the efficiency of the company both in terms of sales performance and inventory management.
The receivables turnover ratio is the number of times the company completes the cycle of selling on credit and collecting payment from clients. It shows the efficiency with which a company is able to collect on its receivables. Amara Raja Batteries Ltd. has the highest receivable turnover ratio as their customers pay their invoices in time and the company collects its debts efficiently.

The average collection period ratio is the average number of days it takes for the company to collect dues from clients. Amara Raja Batteries Ltd. has a low average collection period which means they have a higher efficiency as they are indulged in consumer vehicles while High Energy Batteries (India) Ltd. have a very high average collection period because they sell heavy vehicles in bulk for a longer credit period.

The operating cycle is the time taken by the company to complete the process of producing/ purchasing inventories, selling them and recovering cash from customers. A lower operating cycle is preferred. Exide Industries ltd has a very low operating cycle which shows how efficient they are in completing the process of producing/ purchasing inventories, selling them and recovering cash from customers.
The payables turnover ratio is the number of a times a year the company complete the cycle of buying on credit and making payment to suppliers. A higher ratio shows that the company is buying on credit and making payments quickly. Exide Industries ltd has a very high payables turnover ratio compared to the other peer companies.

Profitability Analysis:

Operating Margin is the profit earned from core activities of the company for every rupee of sales. In essence, how profitable is the main business of the company. High Energy Batteries possesses the highest operating margin followed by Exide Industries with less than half that of the former. While Amara Raja Batteries is just surviving on a bare minimum operating margin. Comparatively, net margin is the profit earned from the overall activities of the company for every rupee of sales. Exide Industries leads in terms of net margin followed by High Energy Batteries. This implies that Exide Industries generates more profit from other sources which is in contrast

to High Energy Batteries. Net margin multiplied exponentially as compared to operating margin for Amara Raja Batteries.

Return on Assets is the ratio of net profit to total assets. Measures what the company receives for its investment in assets. A higher ROA is preferred which shows that the company earns more money with smaller investments. Exide Industries leads with a higher return on assets with a marked difference on High Energy Batteries and Amara Raja Batteries. Return on Operating Assets is the ratio of net profit to operating assets. Return on Operating Assets shows the trend similar to profitability measures based on sales . High Energy Batteries generates most of its profit from operating assets as compared to overall performance while Exide Industries is the opposite.

The return on equity is the net profit that the company has earned for every rupee belonging to the company. A higher ROE signals that a company efficiently uses its shareholder's equity to generate income. Low ROE means that the company earns relatively little compared to its shareholder's equity. Exide Industries among the rest is most efficient in utilizing shareholder’s funds. High Energy Batteries is slightly lesser than Exide, while Amara Batteries is least. The return on capital equity is the operating profit that the company has earned for every rupee of long term capital. A rising ROCE suggests that a company is increasing its profit generation without needing as much capital. High Energy Batteries outperforms its competitors with a substantial high ROCE. Exide Industries and Amara Batteries tie with a value 89% lesser than High Energy Batteries.

Market Value Analysis:

The dividend payout ratio is similar for Amara Raja Batteries and High Energy Batteries around 15% of their total earnings. On the other hand, Exide Industries paid a near zero dividend to its shareholders. Dividend Yields are low for all the three companies with an average of 1.03% return for shareholders. Price Earnings Multiple have minimal variations among the three while Price Book Multiple is high for High Energy Batteries making its shares are expensive as compared to Amara Raja Batteries and Exide Industries.

Conclusion:

Amara Raja Batteries is attractive to bankers and lenders due to its solvency. Inefficient management adversely affects its operations, hence resulting in major losses. Running on losses and retaining old stock might result in loss of customer trust in terms of assured quality and supplying products on time. Additionally, shareholders would see this lack in efficiency as a threat to their potential returns. Although the company has low profitability, the market value of its stocks is in par with its peers