INTERNATIONAL JOURNAL OF RESEARCH IN **COMPUTER APPLICATION & MANAGEMENT**



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OBJECTIVES

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PERFORMANCE OF PROFITABILITY MANAGEMENT IN AMARA RAJA BATTERIES LIMITED", TIRUPATI - AN EVALUATION

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ABSTRACT

An attempt has been made to study the "Performance of Profitability Management in Amara Raja Batteries Limited", Tirupati. An analysis of profitability performance, assessment of gross profit margin, net profit margin, return on equity and return on investment in ARBL through the application of ratio analysis and statistical tests has been undertaken. The time period considered for evaluating the study is six years i.e. from 2004 to 2009. It is found that the gross profit ratio declined due to the fact that the gross profit margin ratio had not increased to the levels of sales revenue. Despite declined ratio, gross profit margin was comfortable as it was more than 25 per cent over the study period. The profitability performance was thin in beginning two years and in later years the net profit performance was improved. The management of ARBL has made sincere efforts in cutting down the operating cost so as to improve the profit performance. The profitability in terms of owner's equity was well reflected in the later part of the study period. This provides keen interest to the prospective shareholders also. It may be said that the management of the ARBL took greater responsibility in the maximisation of share holders' equity. The overall return on capital employed ratio of the company shows the increasing trend. It indicates a good sign of making capital budgeting decisions and encouraging management to obtain assets that would provide a satisfactory return on investment and to dispose of assets that are not providing an acceptable return to Amara Raja Batteries Limited.

KEYWORDS

Gross profit margin, net profit margin, return on equity and return on investment ratio in Amara Raja Batteries Limited.

INTRODUCTION

rofit is the primary motivating force for any economic activity. Business enterprise is essentially being an economic organization, it has to maximize the welfare or the interest of its stakeholders. To this end, the business undertaking has to earn profit from its operations. In other words, its receipts from operations should be more than the expenses over a period of time usually an accounting year. Infact, profits are useful intermediate beacon towards which a firm's capital should be directed (Bradley). In this connection, McAlpine rightly remarked that profit cannot be ignored since it is both a measure of the success of business and the means of its survival and growth (McAlpine). Profit is the report card of the past and the incentive gold star for the future. It acts as a yardstick to measure the effectiveness and efficiency of business efforts. Profit is the positive and fruitful difference between revenues and expenses of a business enterprise over a period of time (Jain).

OBJECTIVES

The present research paper aims at endeavouring the following objectives:

- to analyse the profitability performance from the sales point of view; and
- to assess the profitability performance from the investment point of view.

TOOLS OF ANALYSIS

The data drawn from the annual reports of ARBL have been carefully analysed, tabulated and interpreted by using well established financial tools. The analysis of data is carried out through profitability ratios such as gross profit margin, net profit margin, return on equity and return on investment ratio. Statistical tools like mean, standard deviation, coefficient of variation and coefficient of correlation are also applied. Graphs and diagrams are presented to illuminate the facts and figures.

SCOPE AND COVERAGE

The present study is confined to Amara Raja Batteries Limited. The Amara Raja Batteries Limited, Tirupati in Andhra Pradesh, India has been selected because of the proximity to the investigator. This study is restricted to assess the performance of profitability management in ARBL with the help of the ratio analysis. The time period considered for evaluating the study is six years i.e. from 2004 to 2009.

THE IMPORTANCE OF PROFIT

Modern business has various responsibilities all of which can be met only when the firm makes profit. Over the long term, a loss making firm will go out of existence. Profit planning is a systematic and formalized approach of determining the effect of management's plans upon the company's profitability (Srivastava). A well organized profit planning programme will help towards maintaining a level of profit which will ensure the concentration of the business and fulfillment of other responsibilities. Certainly, profit growth coupled with high level of profit and the ability to maintain reasonable profit will help towards (Townsend).

- Ensuring that shareholders receive an adequate dividend;
- Preserving the assets worth of the business;
- Generating a sufficient cash flow out of profits to provide capital for expansion; and
- Providing funds for the search for, and development of new and improved products to replace existing products before they go into decline.

"In the short-run, even without any management action the concern may get good financial results due to some favourable conditions. But in the long-run management actions have a strong and continuous impact on financial results" (Wilson). Every business undertaking should be interested in long-run prosperity

which can be achieved through planning and control. Planning for profits is an important management responsibility but it is not given much importance as it warrants (Thomas).

CONCEPT OF PROFITABILITY

Profitability implies profit-making ability of a business enterprise. The term profitability is a combination of two words profit and ability. To obtain profit, from accounting point of view, total expenses are deducted from the total revenues for a given period. The word ability means the earning power or operating performance of the concern on its investment. Therefore, profitability may be defined as the ability of a given investment to earn a return from its use (Harward and Upton). Profits are the soul of the business without which it is lifeless. Lord Keynes remarked. "Profit is the engine that drives the business enterprise" (Kulshrestha). Profit is indeed a magic eye that mirrors all aspects of an enterprise operations including quality of output (Kulshrestha). To the management and the owners, actual or potential perhaps the single most important statistic is the figure of net profit. In this measure lie the results of past decisions, the indicium of management's performance, the basis for valuing the owner's equity in the firm (Curran).

MEASUREMENT OF PROFITABILITY

Profitability is analysed through the computation of profit ratios. Profitability ratios are calculated to measure the operating efficiency and financial performance. It can be measured based on different components of income statement and balance sheet. Van Horne opines that the profitability ratios are of two types (Van Horne): those showing profitability in relation to sales and those showing profitability in relation to investment. The profitability in relation to sales is evaluated through gross profit margin and net profit margin. The profitability in relation to investment is measured by the return on shareholders' equity and the return on investment.

GROSS PROFIT MARGIN

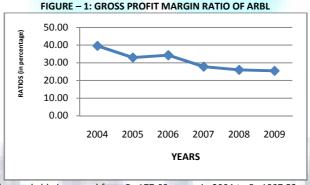
The gross profit margin reflects the efficiency with which management produces each unit of product. This ratio indicates the average spread between the cost of goods sold and the sales revenue. When we subtract the gross profit margin from 100 percent, we obtain the ratio of cost of goods sold to sales. A high gross profit margin ratio is a sign of good management. A low gross profit margin may reflect higher cost of goods sold due to the firm's inability to purchase raw materials at favourable terms, inefficient utilization of plant and machinery, or over investment in plant and machinery, resulting in higher cost of production or due to fall in prices in the market. GROSS PROFIT MARGIN = GROSS PROFIT / SALES X 100.

The gross profit margin ratio of the Amara Raja Batteries Limited is provided in the Table - 1 and Figure - 1.

Year Gross Profit (Rs. in crores) Sales (Rs. in crores) Ratio (in %) 2004 70.25 177.60 39.56 2005 78.29 237.79 32.92 2006 135.97 396.96 34.25 2007 167.14 602.49 27.74 2008 285.32 1100.68 25.92 2009 339.69 1337.52 25.40 Mean 179.44 642.17 30.97 **Standard Deviation** 476.40 110.53 5.57 C.V. (%) 61.60 74.19 18.00 Co-efficient of Correlation between debt and equity (r) = 0.998

TABLE - 1: GROSS PROFIT MARGIN RATIO OF ARBL

Source: Compiled from Annual Reports of Amara Raja Batteries Limited



It is observed that the quantum of sales had remarkably increased from Rs.177.60 crores in 2004 to Rs.1337.52 crores in 2009. The other variable gross profit had strikingly moved from Rs.70.25 crores in 2004 to Rs.339.69 crores in 2009. It may be noticed that both these variables have tended to arise over the study period. The gross profit margin ratio had declined from 39.56 per cent in 2004 to 25.40 per cent in 2009. The ratio declined due to the fact that the gross profit margin ratio had not increased to the levels of sales revenue. Despite declined ratio, gross profit margin was comfortable as it was more than 25 per cent over the study period. The mean, standard deviation and co-efficient of variation (C.V) of gross profit margin ratio in ARBL are 30.97, 5.57 and 18 per cent respectively. The coefficient of correlation between gross profit and sales in ARBL was 0.998 and thereby indicating that there was highly positive relation between gross profit and sales. It may be concluded that the profitability performance in terms of gross profit margin was satisfactory in ARBL.

NET PROFIT MARGIN

Net profit is obtained when operating expenses, interest and taxes are subtracted from the gross profit. Net profit margin ratio establishes a relationship between net profit and sales and indicates management's efficiency in manufacturing, administering and selling the products. This ratio is the overall measure of the firm's ability to turn each rupee sales into net profit. This ratio also indicates the firm's capacity to withstand adverse economic conditions. A firm with a high net margin ratio would be in an advantageous position to survive in the face of falling selling prices, rising costs of production or declining demand for the product. Net profit margin ratio is calculated by using the following formula:

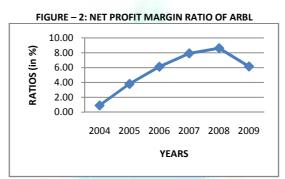
NET PROFIT MARGIN = PROFIT AFTER TAX / SALES X 100.

The net profit margin ratio of the Amara Raja Batteries Limited is shown in the Table - 2 and Figure - 2.

TABLE - 2: NET PROFIT MARGIN RATIO OF ARBI

TABLE 2: NETT NOTH WARGIN NATIO OF ARBE								
Year	Net Profit (Rs. in crores)	Sales (Rs. in crores)	Ratio (in %)					
2004	1.64	177.60	0.92					
2005	9.06	237.79	3.81					
2006	24.33	396.96	6.13					
2007	47.71	602.49	7.92					
2008	94.88	1100.68	8.62					
2009	82.45	1337.52	6.16					
Mean	43.35	642.17	5.59					
Standard Deviation	38.68	476.40	2.83					
C.V. (%)	89.24	74.19	50.67					
Co-efficient of Correlation between debt and equity (r) = 0.96								

Source: Compiled from Annual Reports of Amara Raja Batteries Limited



It is obvious that profit after tax had depicted arise over the study period. In other words the net profit margin had jumped from Rs.1.64 crores in 2004 to Rs.82.45 crores in 2009. Subsequently the ratio had gone up from 0.92 per cent in 2004 to 6.16 per cent in 2009 with mild fluctuations. Barring first two years the ratio was more than the standard norm of 6 times. It means that the profitability performance was thin in beginning two years and in later years the net profit performance was improved. The mean, standard deviation and co-efficient of variation (C.V) of net profit margin ratio in ARBL are 5.59, 2.83 and 50.67 percent respectively. The coefficient of correlation between net profit and sales in ARBL was 0.96 and thereby indicating that there was highly positive relation between net profit and sales. It may be concluded that the management of ARBL has made sincere efforts in cutting down the operating cost so as to improve the profit performance.

RETURN ON EQUITY RATIO (ROE)

A return on shareholder's equity is calculated to see the profitability of owner's investment. Return on equity ratio indicates how well the firm has used the resources of owners. This ratio is one of the most important relationships in financial analysis. The earning of satisfactory return is the most desirable objective of a business. The ratio of net profit to owner's equity reflects the extent to which this objective has been accomplished. This ratio is of great interest to the present as well as prospective shareholders and also of great concern to management which has the responsibility of maximizing the owner's welfare. Return on equity ratio is calculated by using the following formula: RETURN ON EQUITY = PROFIT AFTER TAXES / NETWORTH X 100.

The return on equity ratio of the Amara Raja Batteries Limited is presented in the Table - 3 and Figure - 3.

TABLE - 3: RETURN ON EQUITY RATIO OF ARBL

Year	Net Profit	(Rs. in crores)	Net Worth	(Rs. in crores)	Ratio (in %)	
2004	1.64		174.59		0.94	
2005	9.06		180.69		5.01	
2006	24.33		201.29		12.09	
2007	47.71		243.67		19.58	
2008	94.88		333.10		28.48	
2009	82.45		405.59		20.33	
Mean	43.35		256.49		14.41	
Standard Deviation	38.68		93.56		10.34	
C.V. (%)	89.24		36.48		71.80	
Co-efficient of Correlation between debt and equity (r) = 0.93						

Source: Compiled from Annual Reports of Amara Raja Batteries Limited



It is obvious that equity and profit after tax have reported to increase over the study period. Equity had increased from the Rs. 174.59 crores in 2004 to Rs. 405.59 crores in 2009. Return on equity ratio had also depicted arise over the study period. It had spurted from near 0.94 per cent in 2004 to 20.33 per cent in 2009. It is clear that in the first three years of the study the ratio did not reach the standard norm of 12 per cent. Thereafter, the ratio had out weighed the standard norm. The mean, standard deviation and co-efficient of variation (C.V) of return on equity ratio in ARBL are 14.41, 10.34 and 71.80 percent respectively. The co-efficient of correlation between net profit and net worth in ARBL was 0.93 and thereby indicating that there was highly positive relation

between net profit and net worth. It may be concluded that the profitability in terms of owner's investment was not satisfactory upto 2006. The profitability in terms of owner's equity was well reflected in the later part of the study period. This provides keen interest to the prospective shareholders also. It may be said that the management of the ARBL took greater responsibility in the maximisation of share holders' equity.

RETURN ON INVESTMENT RATIO

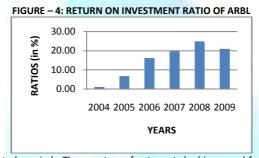
The term investment may refer to total assets or net assets. The fund employed in net assets is known as capital employed. Investment represent pool of a funds supplied by shareholders and lenders. Net assets equal net fixed assets plus current assets minus current liabilities excluding bank loans. Alternatively, capital employed is equal to net worth plus total debt. The conventional approach of calculating return on investment (ROI) is to divide profit after tax by investment. Where ROTA and RONA are respectively return on total assets and return on net assets. RONA is equivalent of return on capital employed. Return on investment ratio is calculated by using the following formula: RETURN ON INVESTMENT = EBIT / NET ASSETS x 100

The return on investment ratio of the Amara Raja Batteries Limited is presented in the Table - 4 and Figure - 4.

EBIT (Rs. in crores) Net Assets (Rs. in crores) Year Ratio (in %) 2004 2.08 189.48 1.10 13.75 204.00 2005 6.74 2006 38.79 239.14 16.22 2007 76.15 384.36 19.81 2008 161.54 649.35 24.88 2009 145.23 691.46 21.00 392.97 14.96 Mean 72.92 **Standard Deviation** 67.49 226.13 9.16 C.V. (%) 92.55 57.55 61.25 Co-efficient of Correlation between debt and equity (r) = 0.98

TABLE - 4: RETURN ON INVESTMENT RATIO OF ARBL

Source: Compiled from Annual Reports of Amara Raja Batteries Limited



Net assets and EBIT tended to increase over the study period. The quantum of net assets had increased from Rs.189.48 crores in 2004 to Rs.691.46 crores in 2009. The ratio had varied between 1.10 per cent in 2004 and 24.88 per cent in 2008. The ratio was higher than the standard norm of 12 per cent in four out of six years of the study period. Return on investment ratio was more attractive during the last four years of the study to the prospective investors which is a welcoming feature. The mean, standard deviation and co-efficient of variation (C.V) of return on investment ratio in ARBL are 14.96, 9.16 and 61.25 percent respectively. The co-efficient of correlation between EBIT and net assets in ARBL was 0.98 and thereby indicating that there was highly positive relation between EBIT and net assets. It may be concluded that the overall return on capital employed ratio of the company shows the increasing trend from 2004 to 2008. It indicates a good sign of making capital budgeting decisions and encouraging management to obtain assets that would provide a satisfactory return on investment and to dispose of assets that are not providing an acceptable return.

CONCLUSION

It is observed that the gross profit ratio had declined due to the fact that the gross profit margin ratio had not increased to the levels of sales revenue. Despite declined ratio, gross profit margin was comfortable as it was more than 25 per cent over the study period. The profitability performance was thin in beginning two years and in later years the net profit performance was improved. The management of ARBL has made sincere efforts in cutting down the operating cost so as to improve the profit performance. The profitability in terms of owner's equity was well reflected in the later part of the study period. This provides keen interest to the prospective shareholders also. It may be said that the management of the ARBL took greater responsibility in the maximisation of share holders' equity. The overall return on capital employed ratio of the company shows the increasing trend. It indicates a good sign of making capital budgeting decisions and encouraging management to obtain assets that would provide a satisfactory return on investment and to dispose of assets that are not providing an acceptable return. Hence, it is suggested that the profit performance can still be improved by taking effective operating financial measures by the management of ARBL. The overall profit performance further can be improved through the modern capital budgeting techniques, effective credit and collection policies, new inventory management techniques, the best cash management practices and effective cost control techniques.

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