PROFITABILITY ANALYSIS OF KESORAM INDUSTRIES LTD.

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Abstract

The present paper analysis the overall profitability of Kesoram Industries Ltd. based on the performances of profitability ratios like gross profit margin, operating profit margin, net profit margin, return of total assets, return on net worth & return on capital employed. Profitability is a measure of efficiency and control it indicates the efficiency or effectiveness with which the operations of the business are carried on. Profitability is the profit earning capacity which is a crucial factor contributing for the survival of the firms. Every firm aims to dig up maximum profits out of the invested capital pool. The success of the company usually depends on its returns earned. To evaluate the profitability of the company, relevant ratios were used and statistical tools like mean, standard deviation, correlation, t test were applied to test the significant relationship between the relevant variables.

Keywords: *profitability, gross profit margin, operating profit margin, net profit margin, return of total assets, return on net worth & return on capital employed, correlation, t test.*

Introduction

The primary objective of the business undertaking is to earn profits. Profit earning is considered essential for the survival of the business. A business needs profits not only for its existence but also for expansion and diversification. The investors want an adequate return on their investments. A business enterprise can discharge its obligations to the various segments of the society only through earning of profits. Profits are, thus, a useful measure of overall efficiency of a business. Finance is lifeblood of every business and Profit is the soul of the business, without profit the business becomes lifeless. Profit has now become a measurement test to measure financial efficiency of the business firm. Generally profit is the net surplus of revenue over the expenditure. Profit is the ultimate output of a company and it will have no future, if it fails to make sufficient profits. Therefore the financial manager should continuously evaluate the efficiency of the company in terms of profit. The profitability ratios are calculated to measure the operating efficiency of the company. Besides management of the company, creditors and owners are interested in the profitability of the firm. Creditors want to get interest and repayment of principal regularly. Owners want to get reasonable return on their investment. This is possible only when the company earns enough profits.

Review of literature

A brief review of the literature in this field has been attempted in the following paragraphs.

Mohammed Rafiqul Islam (2000) studied the profitability of Fertilizer Industry in Bangladesh from 1985-86 to 1994-95. The findings of the study indicated that none of the selected units were consistent and all the units were plagued with declining profits. The study concluded with suggestions for improvement of the profitability of fertilizer industry in Bangladesh.

Sudarsana Reddy (2003) studied the Financial Performance of Paper industry in AP. The main objectives set for the study are to evaluate the financing methods and practices to analyze the investment pattern and utilization of fixed assets, working capital condition, to review the profitability performance and to suggest measures to improve the profitability. The main findings of the study are that A.P. paper industry needs the introduction of additional funds along with restructuring of finances and modernization of technology for better operating performance.

T. Venkatesan and DR. S. K. Nagarajan (2012) in their study examined profitability analysis of selected steel companies in India during the period from 2005-06 to 2010-11. It is cleared from that profitability more or less depends upon the better utilization of resources, cutoff expenses and quality of management function in the products, customer services and to manpower and goodwill and market share. It is worthwhile to increase production capacity and use advance technology to cut down cost of production and wage cost in order to increase profitability, not only against the investment, but also for investor‟s return point of view.

Haslem (1968) used operating profit ratios to measure the effect of management, size, location and time on profitability and found that all variables significantly related to profitability.

Lazaridis and Tryfonidis (2006) investigated the relationship of corporate profitability and working capital management for firms listed at Athens Stock Exchange. They reported that there is statistically significant relationship between profitability measured by gross operating profit and the Cash Conversion Cycle. Furthermore, Managers can create profit by correctly handling the individual components of working capital to an optimal level.

Sanjay J.Bhayani (2006) studied the impact of assets utilization on profitability of Indian Industry. He has selected 641 Indian firms from 24 Indian Industries for the study. The study revealed that the fixed assets turnover and profitability has a positive relationship.

Luther (2007) conducted the liquidity, profitability and risk analysis of Madras Cement Ltd. He suggested in his study that firm should take into consideration the short term liquidity also along with long-term investment decisions as if the liquidity remains continuously, it can affect the profitability and in long run it can endanger the solvency of the firm especially during the time of financial distress.
Dr. S.K. khartik titto Varghese, (2011) they found the profitability more or less depends upon the better utilization of resources and to manpower. It is worthwhile to increase production capacity and use advance technology to cut down cost of production and wage cost in order to increase profitability, not only against the investment, but also for investor‟s return points of view.

Objectives of the study

1. To analyse the profile of Kesoram Industries Ltd.
2. To evaluate the profit margins in relation to sales.
3. To examine the profitability in relation to investment.

Methodology

Source of Data

The study is based on secondary data. The data were collected from the annual reports of the Kesoram Industries Ltd., magazines and journals relating to finance have also been used as sources of data. The present study is descriptive and analytical in nature.

Statistical Tools

To analyse profitability of Kesoram Industries Ltd., the important statistical techniques such as arithmetic mean, standard deviation, compound annual growth rate (CAGR), correlation and t test have been used for the study.

Period of Study

The study covers a period of five years from 2009-10 to 2013-2014.

Sampling

The sample for the present study was drawn from the list of companies coming under the cement industry listed on the Bombay Stock Exchange. For the present study, Kesoram Industries Ltd. which is located in India has been chosen for analysis of the profitability position of the company.

Key variables

The variable that have been adopted for the present study are Gross Profit, Net Profit, Operating Ratio, Profit After Tax, Net Sales, Total Assets, Earnings Per Share, Return on Net worth and Return On Capital Employed.

Hypotheses

The following hypotheses were framed to conduct the analysis and evaluate the profitability results of Kesoram Industries Ltd.

H01: There is no significant relationship between gross profit margin and net sales.
H02: There is no significant relationship between operating profit margin and net sales.
H03: There is no significant relationship between net profit margin and net sales.
H04: There is no significant relationship between net profit margin and total assets.
H05: There is no significant relationship between net profit margin and net worth.
H06: There is no significant relationship between ROCE and net sales.

Limitations of the study

1. The present study is based on only secondary data.
2. Analysis is restricted to only Kesoram Industries Ltd. which is a private company based in India.
3. Study is limited to only five years period i.,e., from 2009-10 to 2013-14.
4.

Profile of Kesoram Industries Ltd.

Kesoram was founded in 1919 under the name of Kesoram Cotton Mills Ltd. From its humble beginnings as a cotton textile mill in Culcutta, Kesoram expanded into the production of rayon. Its first rayon plant was built in 1959, with a production capacity of 4,635 metric tons of rayon yarn per year. The spirit of entrepreneurship did not end there. Kesoram soon entered the tyres and cement industries. A change of name was needed to reflect the company's increasing portfolio of business. So in 1986, it changed its name to Kesoram Industries Limited. Since then, Kesoram's operations have grown form strength to strength. Its reputation is recognised today by its listings on four global stock exchanges – National Stock Exchange of India, Bombay Stock Exchange, Calcutta Stock Exchange Association, and the Societe de la Bourse de Luxembourg. The company is engaged in the manufacture of cement, tyres, tubes, rayon, paper, heavy chemicals and

The first plant for manufacturing of rayon yarn was established at Tribeni, District Hoogly, West Bengal and the same was commissioned in December, 1959 and the second plant was commissioned in the year 1962. This unit has 6,500 metric tons per annum capacityas on 31-3-2008.

The plant for manufacturing of transparent paper was also set up at the same location at Tribeni, District Hoogly, West Bengal, in June, 1961. It has the annual capacity to manufacture 3,600 metric tones per annum of transparent paper.

Data analysis and interpretation

Gross Profit Margin (GPR):- Gross Profit Margin indicates the relationship between gross profit and net sales. It measures the efficiency of the company's operations. Higher the ratio, the better it is. A low ration indicates unfavourable trend in the form of reduction in selling prices not accompanied by proportionate decrease in cost of goods sold or increase in cost of production. The gross profit margin can be calculated as:

Gross Profit Margin = (Gross Profit/Net Sales) x 100

Tabel 1: Gross Profit Ratio of Kesoram Industires Ltd. (Rs. In crores)

Year	Gross Profit	Net Sales	GPR (in %)
2009-10	1,655.38	4,750.62	34.85
2010-11	1,607.10	5,397.88	29.77
2011-12	1,451.38	5,918.20	24.52
2012-13	1,872.91	5,710.82	32.80
2013-14	1,747.79	5,080.91	34.40
Average	1,666.91	5,371.69	31.27
S.D	157.43	470.28	4.26
Variance	19,828.19	176,929.84	14.53
C.V in %	9.44	8.75	13.63
Kurtosis	0.17	-1.40	0.86
Skewness	-0.10	-0.25	-1.24
CAGR	1.37%	1.69%	-0.32%

Source: Compiled from the annual reports of Kesoram Industries Ltd.

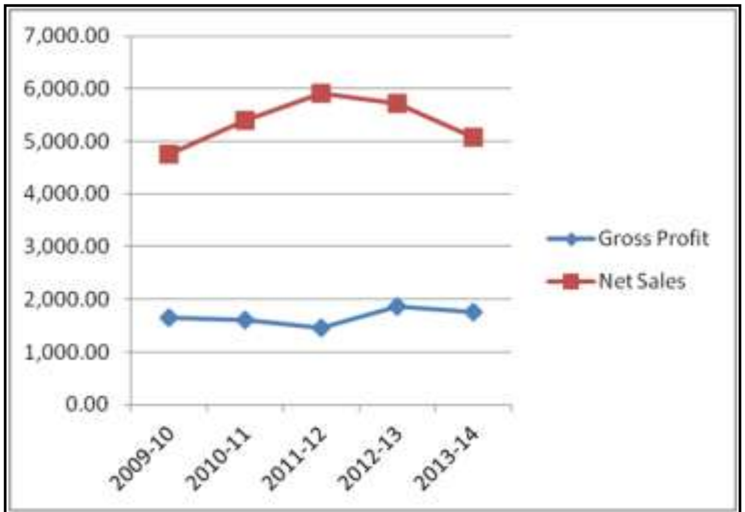

Figure 1: Relationship between gross profit and net sales

The Table No. 1 presents the results of the gross profit ratio and based on which discussions are made. The table 1 highlights that the highest GPR was observed for the year 2009-10 (34.85%) and lowest GPR was observed for the year 2011-12 (24.52%). The average GPR of Kesoram Industries Ltd. was (31.27%) and a standard deviation of 4.26 was noticed. The highest ratio indicates an increase in the selling price of the goods sold without any corresponding increase in the cost of the goods sold. It can be inferred from the table 1 that the GPR fluctuated over a period of study. It can be understood that the company experienced poor performance from its operations. The figure 1 indicates the trends of gross profit and net sales of Kesoram Industries Ltd. It is noticed from the figure 1 that even there was almost ten percent decrease in sales volume in 2013-14, the gross profit ratio was increased by 2.40% which might happen due to effective control on the prime cost and increase in price of the goods sold.

Operating Profit Margin (OPR):- Operating profit margin is a measurement of what proportion of a company's revenue is left over after paying for variable costs of production such as wages, raw materials, etc. It indicates what portion of profit is left to cover non-operating expenses such as interests, reserves and dividends etc. The higher this ratio, the better is the operational efficiency of the company and vice versa. This ratio can be calculated as:

$$\text{Operating Profit Margin} = (\text{Operating Profit}/\text{Net Sales}) \times 100$$

Tabel 2: Operating Profit Ratio of Kesoram Industires Ltd. (Rs. In crores)			
Year	Operating Profit	Net Sales	OPR (in %)
2009-10	663.59	4,750.62	13.97
2010-11	199.77	5,397.88	3.70
2011-12	-45.83	5,918.20	-0.77
2012-13	312.06	5,710.82	5.46
2013-14	286.09	5,080.91	5.63
Average	283.14	5,371.69	5.60
S.D	255.32	470.28	5.35
Variance	52,151.82	176,929.84	22.86
C.V in %	90.18	8.75	95.49
Kurtosis	1.62	-1.40	2.06
Skewness	0.47	-0.25	0.88
CAGR	-18.97%	1.69%	-20.32%

Source: Compiled from the annual reports of Kesoram Industries Ltd.

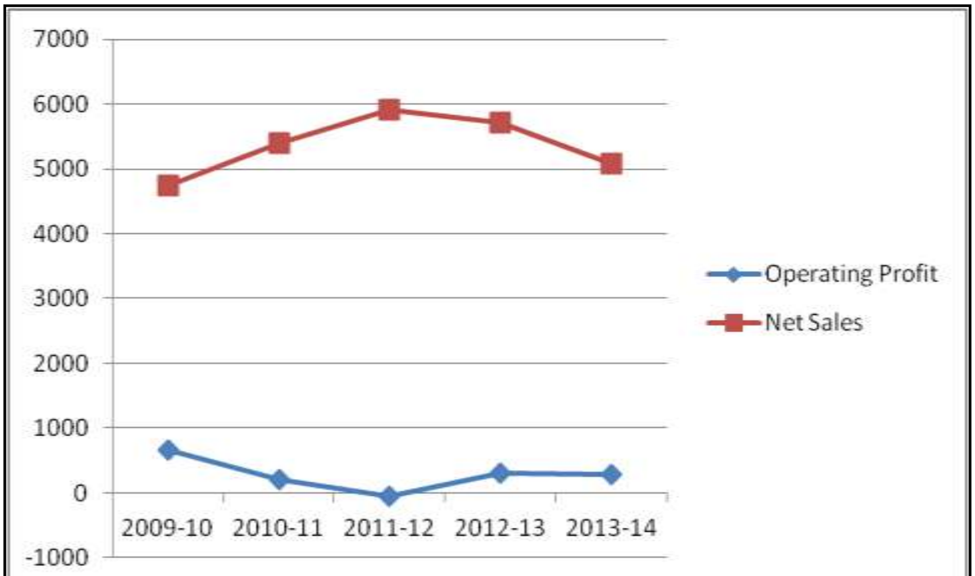

Figure 2: Relationship between operating profit and net sales

The table 2 exhibits the operating profit margin of Kesoram Industries Ltd. The operating profit ratio showed a fluctuating trend during the stud period. The highest OPR (13.97%) was observed in the year 2009-10 and the negative OPR (-0.77%)was noticed in the year 2011-12. The average operating profit was 5.60% during the study period. The figure 2 evidences that, in the initial two years of the study period, the net sales increased and it was showed that there was negative operating profit during the year 2011-12 in spite of increase in net sales in 2011-12 which indicates that the kesoram Industries Ltd. might not have controlled the operating expenses effectively or else there might be increase in operating expenses. In 2012-13 and 2013-14, the OPR of the company increased even there was decline in the volume of net sales. The variance indicates the degree of stability in the operating profits. The CAGR of the company is not satisfied as it is reflected as -20.32%.

Net Profit Margin (NPR):- Net profit margin is the percentage of revenue remaining after all operating expenses, interest, taxes and preferred stock dividends (but not common stock dividends) have been deducted from a company's total revenue. A higher ratio indicates better position of the company. This ratio is calculated as:

Net Profit Margin = (Earnings After Tax/Net Sales) x 100

Tabel 3: Net Profit Ratio of Kesoram Industires Ltd. (Rs. In crores)

Year	Net Profit	Net Sales	NPR (in %)
2009-10	237.34	4,750.62	5.00
2010-11	-210.21	5,397.88	-3.89
2011-12	-379.74	5,918.20	-6.42
2012-13	-329.23	5,710.82	-5.77
2013-14	-515.55	5,080.91	-10.15
Average	-239.48	5,371.69	-4.25
S.D	288.17	470.28	5.64
Variance	66,431.32	176,929.84	25.48
C.V in %	-120.33	8.75	-132.92
Kurtosis	2.51	-1.40	2.52
Skewness	1.46	-0.25	1.32
CAGR	-	1.69%	-

Source: Compiled from the annual reports of Kesoram Industries Ltd.

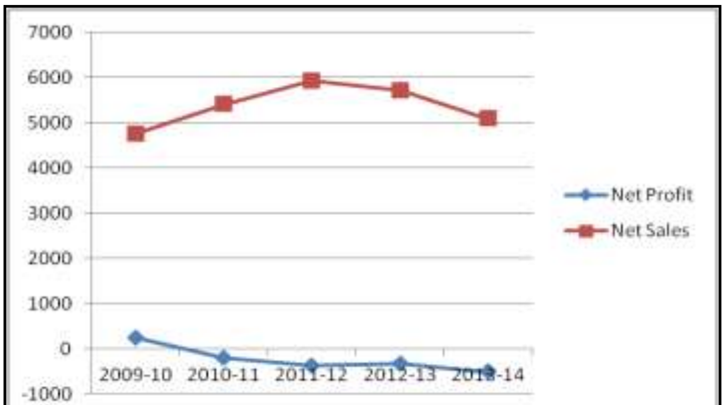

Figure 3: Relationship between net profit and net sales

The table 3 evidences the negative trends of net operating profit rate during the entire study period except in 2009-10. The highest NPR was observed in the year 2009-10 (5.00%) and lowest NPR(-10.15%) was noticed as negative net profit margin in the year 2013-14. The co-efficient of variance was -132.92% which indicates the ineffective performance of the company. During the study period. The figure 3 represents the net profit ratios of Kesoram Industries Ltd. whose profits are declining year by year by during the study period where the net sales revealed an increasing trend in the initial years of the study. This trend was due to higher payments of interest and depreciation according to the financial statements of the Kesoram Industries Ltd.

Return On Total Assets (ROTA):- Return on total assets which is also called as return on investment is a ratio that measures a company's earnings before interest and taxes (EBIT) against its total net assets. The ratio is considered an indicator of how effectively a company is using its assets to generate earnings. The higher the return on total assets ratio, the better it is for the firm and vice versa. This ratio can be calculated through the below equation.

Return On Total Assets = (Net Profit /Total Assets) x 100

Tabel 4: Return on Total Asstes of Kesoram Industires Ltd. (Rs. In crores)

Year	Profit After Tax	Total Assets	ROTA (in %)
2009-10	237.34	4,663.03	5.09
2010-11	-210.21	5,296.63	-3.97
2011-12	-379.74	5,017.65	-7.57
2012-13	-329.23	4,985.43	-6.60
2013-14	-515.55	4,514.67	-11.42
Average	-239.48	4,895.48	-4.89
S.D	288.17	309.43	6.19
Variance	66,431.32	76,597.42	30.64
C.V in %	-120.33	6.32	-126.45
Kurtosis	2.51	-1.16	2.06
Skewness	1.46	-0.01	1.22
CAGR	-	-0.81%	-

Source: Compiled from the annual reports of Kesoram Industries Ltd.

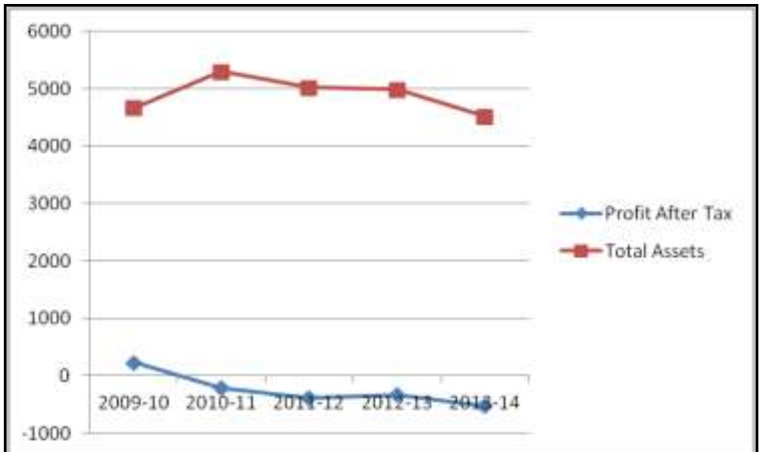

Figure 4: Relationship between operating profit and net sales

Table 4 provides the results of return on total assets. The highest value of return on total assets was (5.09%) in the year 2009-10 and least value was (-11.42%) in the year 2013-14. The average ROTA was -4.89% and coefficient of variance was -126.45%. There was decreasing trend in total assets from 2010-11 to 2013-14. However, the Profit After Tax was negative for all the year except in 2009-10 during the study period. The figure 4 indicates a fluctuating trend of TOTA of Kesoram Industries Ltd. over the study period. It was noticed that the company has suffered continuous losses during the study period. ROTA was negative for the entire study period as the net profit margin was also in negative sense.

Earnings Per Share (EPS):- The portion of a company's profit allocated to each outstanding share of common stock. Earnings per share serves as an indicator of a company's profitability. It is often considered to be one of the most important variables in determining a stock's value. EPS is calculated as the following.

Earnings Per Share = Profit After Tax minus Preference Dividend /Total Outstanding Equity Shares

Return On Net Worth (Return On Equity):- Return on net worth refers to the amount of net income earned as a percentage of shareholders equity. Return on equity measures a company's profitability by revealing how much profit a company generates with the money that shareholders have invested. ROE is expressed as a percentage and calculated as the following.

Return On Net Worth = (Net Income /Net worth) x 100

Return On Capital Employed (ROCE):- Return on capital employed is a financial ratio that measures a company's profitability and the efficiency with which its capital is employed. Capital employed is the sum of shareholders' equity and debt liabilities; it can be simplified as (Total Assets – Current Liabilities). A higher ROCE indicates more efficient use of capital. ROCE should be higher than the company's capital cost; otherwise it indicates that the company is not employing its capital effectively and is not generating shareholder value. Return on capital employed can be calculated as:

Return On Capital Employed = (Earnings Before Interest and Tax /Capital Employed) x 100

Tabel 5: EPS, RONW and ROCE of Kesoram Industires Ltd. (Rs. In crores)			
Year	EPS (Rs)	RONW(%)	ROCE (%)
2009-10	51.88	15.44	11.80
2010-11	-45.95	-16.20	0.30
2011-12	-83.02	-41.62	-5.98
2012-13	-71.98	-56.74	2.75
2013-14	-46.97	-109.50	2.04
Average	-39.21	-41.72	2.18
S.D	53.38	46.74	6.38
Variance	2,279.24	1,747.65	32.60
C.V in %	-136.14	-112.02	292.56
Kurtosis	3.35	0.45	1.79
Skewness	1.74	-0.45	0.54
CAGR	-	-	-35.52%

Source: Compiled from the annual reports of Kesoram Industries Ltd.

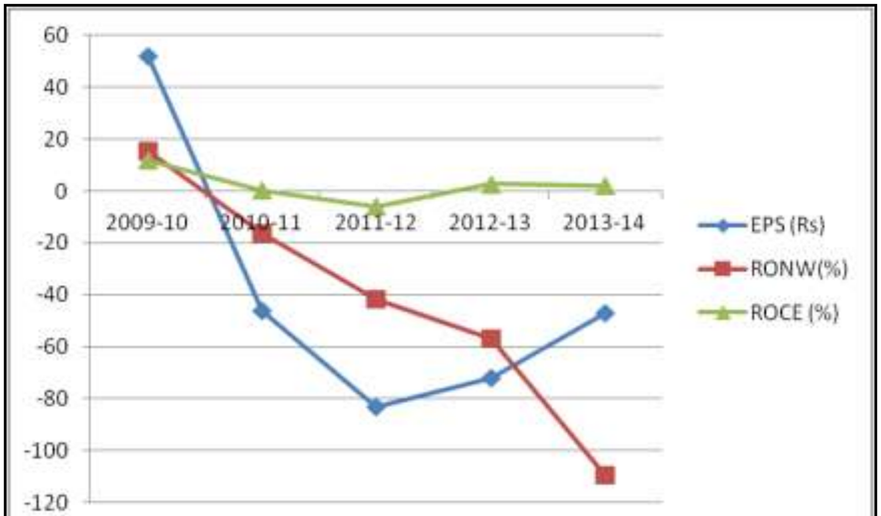

Figure 5: Trend of EPS, RONW and ROCE

The table 5 indicates the profitability ratios regarding Kesoram Industries Ltd. during the period of study. It was noticed that EPS was negative except in 2009-10 during the study period. The average value of EPS was Rs.-39.21 and Co-efficient of variation was -136.14% which indicates highest variance of EPS during the study period. The table 5 also shows that there were negative trends as to RONW and these trends were fluctuated. The RONW decreased year by year from 2009-10 to 2013-14. This trend indicates that the company's shareholders funds were not utilized in effective manner. The return on capital employed was positive except in 2011-12. The highest ROCE(11.80%) was noticed in the year

2009-10 and lowest was -5.98% and the average ROCE was 2.18%. The figure 5 represents the trends of EPS, RONW and ROCE during the study period. EPS curve shows highest negative EPS was notice in the year 2011-12 and thereafter it just improved the subsequent years whereas RONW moved in decreasing trend. The ROCE that indicates the overall profitability of the company was almost constant during the year years 2012 and 2013-14.

Hypothesis Testing

For calculating 't' value, the following equation has been employed.

$$t = r/\sqrt{((1 - r^2))} * \sqrt{(n - 2)}$$

Table 6: Correlation results			
Correlation between variables	r value	t calculated value	t tabel value
Gross Profit and Net Sales	-0.22	-0.391	4.303
Net Profit and Net Sales	-0.59	-0.472	4.303
Operating Profit and Net Sales	-0.85	-0.723	4.303
Profit After Tax and Total Assets	-0.05	-0.382	4.303
Net Worth and Net Sales	-0.42	-0.420	4.303
EPS and Net Sales	-0.89	-0.836	4.303
Source: Calculations were done using excel			

The table 6 shows the relationship between various variables. There is high negative correlation between operating profit & net sales and EPS & net sales. Medium correlation exists between net profit & net sales and net worth & net sales. There is minimum negative correlation between gross profit & net sales and profit after tax & total assets. Tabulated value of t for 2 degree of freedom at 5% level of significance is 4.303. Since the calculated value of t is less than the tabulated value in all the cases, it is not significant. Hence the null hypothesis is accepted and I concluded that there is no significant relationship between the variables of the study.

Conclusion

From the analysis made in this paper, it is concluded that the gross profit margin of Kesoram Industries Ltd. was good as its average GPR was 31.27% and gross profit was almost constant during the study period. When it comes to operating profit margin, there was fluctuations and it declined to negative figure in 2011-12. This might have happened owing to increase in operational costs whereas in case of net profit margin the company suffered with negative margins. As per the company financial results it is observed that operating profit was less than the interest expenses and depreciation summed up together due to which the net profits seemed to be negative during the study period. The same has been effected in EPS and RONW. The ROCE has fluctuated during the study period, however, its trends were positive.

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