

A FINANCIAL RATIO ANALYSIS OF KRISHAK BHARATI CO-OPERATIVE LIMITED

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ABSTRACT

The Financial Statements are generally prepared for the measurement of financial position of a particular company for a particular period of time. The financial statements i.e. (i) Profit and loss account and (ii) Balancesheet provide useful information regarding financial situation of company. The information has its own value, but if some one wants to have better judgment of the concern, he has to analyse them. This paper provides the guidelines about analysis of profitability ratio of Krishak Bharati Co-operative Ltd. located at Kawas-Hazira in Surat District.

INTRODUCTION

HISTORY OF KRIBHCO

Co-operative activity was started in 1904 in India. It has passed a century at its existence. Co-operative sector played a remarkable role to uplift the lifestyle of lower class people and to form exploitation free society and to keep down the economic imbalance profiteering and bureaucracy of the private sector and on the other hand public enterprises have failed at all. Whereas co-operative activity is getting solid, powerful and modern according to democratic formation.

Co-operative activities have progressed in the field like economical banking field, agriculture, milk production, irrigation, traders unions, oil seeds, home, sugar factories, fertilizer factories, co-operative activities have progressed well in Gujarat. People of South Gujarat have taken more benefit of it rather than the people of Saurashtra and North Gujarat. Therefore the wealth of the farmers in this area is also increased. There are some big and successful co-operative enterprises in Gujarat. KRIBHCO fertilizer factory near Surat is one of them.

Krishak Bharati Co-operative Limited is the national co-operative organization which produces large quantity of fertilizers, associated with the co-operative field. KRIBHCO produces and distributes some agricultural products like fertilizers (urea, ammonia) bio-Culture and improved seeds to the big states of India, with the help of co-operative organizations.

“**KRIBHCO**” is a leading unit working with co-operative field by which we can know how is the production management, personnel management, and financial management of this organization.

KRIBHCO has got brilliant success because of its efficiency of management in co-operative field; this success is the best example to inspire other organizations. Today in this competitive era, while private sectors are giving importance to the maximum benefit by profiteering, it is necessary to study this organization which covers many field.

Name	Krishak Bharti Co-Operative Ltd,
Joint Sector	Government, IFFCO and NCDC
Foundation stone laid by Smt. Indira Gandhi	5 th February, 1982
Trial Production of Urea	26 th November, 1985
Start of Commercial Production	1 st March 1986
Year of Business	27 Years
Legal Status	Multi state co-operative society
Number of Employees	2635
Manufacturing and Marketing	Urea, Ammonia and Bio-fertilizer
Urea-Ammonia Plant Location	Distance from Surat, Hazira, Gujarat

LITERATURE REVIEW

Ahmed Arif Karim Almazari had written an article in Journal of Accounting and Finance, Oct-Nov 2009 on the subject “Analyzing Profitability Ratios of the Jourdanian Phosphate Mines Company:.. He discusses about different types of profitability ratios and how to interpret them. Types of analysis like cross-selection analysis and time-series analysis are also explained. The main objectives of the study were-

- Emphasizing the importance of using financial ratios as the indicators of a firm’s performance and financial situation.
- To analyze the time series behaviour of the profitability ratio of the Joururdanian Phosphate Mines Company especially how these ratios behave during different business cycles?

- Identifying the obstacles and difficulties facing this company as regards to its profitability ratios.
- Recommending solutions which can be a source of help to the financial department of the Jordan Phosphate Mines Company.

Conclusions and recommendations are also given how the company increases its profit.

A M.Phil. Dissertation entitled “Financial Analysis’ – case study of sugar factory in Valsad and Navsari District was conducted by Jayesh R. Patel in March 2002. The Primary purpose of the present study is to evaluate analyses and appraise the financial performance of the three sugar factories selected for the study, the present work is a modest attempt in this direction. Analysis of financial statements has been done by adopting various tools of analysis such as financial ratio and funds flows statements etc. An endeavour has been made by means of a number of examples from actual financial statements to accustom the analysis to seize upon salient features and to turn a critical eye upon points of weakness. The period of the study was from 1989-90 to 1998-99.

Lal C. Jagetia has given an article in the journal “Management Accountant” March, 1996 on the subject, “Ratio Analysis in Evaluation of Financial Health of a Company:.. The main objective of this article was that the ratio analysis is often under-rated but extremely helpful in providing valuable insight into a company’s financial picture. He observed that the ratios normally pinpoint business strengths and weakness in two ways-Ratios provide an easy way to compare today’s performance with the past. Ratios depict the areas in which a particular business is competitively advantageous or disadvantageous through comparing ratios to those of other business of the same size within the same industry. He concluded that the ratio analysis should not be viewed as an end but should be viewed as a starting point. Ratios by themselves do not answer the questions. One must look at other sources of data in order to make a judgment about the future of the company

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RESEARCH METHODOLOGY

According to J.W.B. est, “Research is considered to be formal, systematic, intensive process of carrying on the scientific method of analysis. It involves a more systematic structure of

investigation usually resulting in some sort of formal record of procedures and report of result or conclusions.”

RESEARCH STATEMENT

The research statement studied is entitled, “A financial ratio Analysis of Krishak Bharati Co-Operative Ltd. The present study focuses on the analysis of the performance of kribhco co ltd. Profitability and t- test.

OBJECTIVES OF THE STUDY

These objectives are classified in a following manner:

- To analysis the profitability performance of the company
- To assess the growth potential of the industry
- To study the organizational structure and the present position of the KRIBHCO LIMITED.

NATURE OF DATA AND SOURCES OF DATA

Collection of the data is essential part of research. The nature of data which is collected and used for this research is secondary in nature. The relevant and required data has been collected from journals, dailies, annual reports, magazines, literature and websites of selected companies and through various search engines.

SAMPLE SELECTION

Kribhco Co.Ltd operating in India from 2000-01 to 2008-09 was selected for the study.

TOOLS AND METHODS OF DATA ANALYSIS

The present study involves calculation of profitability ratios to evaluate the financial performance of kribhco Ltd. in India from 2000-01 to 2008-09. Statistical measures like percentage, mean, ratio analysis and t test are used in this study. Being a mathematical method it is not flexible - the addition of even one more observation makes it necessary to do all the computations again.

RATIO ANALYSIS

INTRODUCTION

Of all the tools of financial analysis available with analyst, the most important and the most widely used tool is Ratio analysis. Simply stated Ratio analysis is an analysis of financial statements done with the help of Ratios. A Ratio expresses the relationship that exists between two numbers taken from the financial statements. Ratio analysis is among the best tools available

to analyze the financial performance of a company as it allows intercompany and intra company comparison. Ratio also provides a bird's eye view of the financial condition of the company. The following ratios have been computed for the present study.

PROFITABILITY RATIO

Profitability is an indication of the efficiency with which the operations of the business are carried out. The profitability of a firm can be measured by its profitability Ratio. The amount and rate of profits earned depend upon the quantum of investment committed, so the profitability Ratio can be calculated on the basis of either sales or investment. Owners are interested to know the profitability as it indicates the return which they can get on their investments. The profitability Ratio in relation to sales are – (1) Gross profit ratio, (2) Net profit ratio, (3) Expenses or operating ratio, while profitability Ratio related to investments are – (1) Return on assets ratio, (2) Return on shareholders' equity or investment ratio.

The profitability in relation to sales can be used to assess the ability of the firm's management to control the various expenses involved in generating sales.

[1] GROSS PROFIT RATIO

This ratio expresses the relationship between gross profit and net sales.

$$\text{Gross Profit Ratio} = \frac{\text{Gross Profit}}{\text{Net Sales}} \times 100$$

This ratio shows profit relative to sales after the deduction of production cost and indicates the relation between production cost and selling price.

[2] NET PROFIT RATIO

This ratio known as profit margin or return on sales ratio. It measures the relationship between net profit and net sales of a firm. Net profit ratio indicates what portion of sales is left to the proprietors after meeting all expenses.

$$\text{Gross Profit Ratio} = \frac{\text{Net Profit}}{\text{Net Sales}} \times 100$$

The ratio indicates the management's efficiency in manufacturing, administration, and selling of products. If the net profit is low, the firm will fail to achieve satisfactory return on owner's equity. This ratio indicates the firm's capacity to withstand against adverse economic conditions. A firm with high net profit margin can make better use of favorable conditions.

[3] OPERATING OR EXPENSES RATIO

This ratio is complementary of net profit ratio. In case, the net profit ratio is 20%, it means that the operating ratio is 80%. This ratio is the test of the operational efficiency with which the business is being carried on. There are different concepts of operating expenses such as – (i) total expenses including cost of goods sold, selling, general and administrative expenses etc. (ii) cost of goods sold and (iii) specific operating expenses.

$$\text{Operating Ratio} = \frac{\text{Cost of Goods Sold}_s}{\text{Net Sales}} \times 100$$

This ratio is very important for analyzing the profitability of concern. A high operating ratio is not good since it would leave a small amount of operating income to meet interest, dividends etc. for getting a proper idea of behavior of operating expenses, the ratio has to be compared with different companies. The variations in operating ratio may occur due to different factors which are as follows:

[4] EARNING PER SHARE (EPS) RATIO

The Profitability of equity shareholders' investment can be measured in other ways also. One such measure is to calculate earning per share. It is calculated by dividing net profit after taxes and preference divided by total number of shareholders.

$$\text{Earning per share \{EPS\} Ratio} = \frac{\text{Net Profit After Taxes}_s}{\text{No. of Equity Shares}}$$

EPS simply shows the profitability of the firm on per share basis. It does not reflect how much is paid as dividend and how much is retained in the business. As profitability ratio the EPS can be used to draw inferences on the basis of –

[5] RETURN ON CAPITAL EMPLOYED

This ratio explains the relationship between total profits earned by the business and total investments made or total assets employed. This ratio thus measures the overall efficiency of the business operations.

$$\text{Return on Capital Employed} = \frac{\text{Net Profit s}}{\text{Capital Employed}} \times 100$$

This ratio is a clear index of the earning capacity of the business and shows the optimum utilization of the assets or resources employed, i.e. return on capital employed including long-term borrowings.

IMPORTANCE OF THE STUDY

The study is helpful to different types of users like:

MANAGEMENT: This study helps to assess its past performance and to plan about its future programmes. It also helps to know up to what extent the funds were efficiently utilized or misappropriated.

CREDITORS: This study is very useful to the creditors to judge liquidity position and financial soundness of the company.

SHAREHOLDERS: The shareholders can know the prospects of the business and to what extent their interest will be affected by the result of the business operation, the profitability and financial condition and as to the future earnings and the return on their capital.

SCOPE OF THE STUDY

The study covers analysis of financial statements of KRIBHCO Limited for the period 2001-2002 to 2008-2009. The present analysis is carried up to financial year 2008-09. It can be extended to future period also. With the help of statistical analysis, the forecasting of subsequent years can also be made for particular item such as sales, inventory, profit, etc. The statistical analysis can also be applied to every ratio and by there upon more comprehensive results can be obtained. The statistical analysis can also be applied to other similar companies as well as the industry as a whole in order to know the prevailing situation in the whole industry.

LIMITATIONS OF THE STUDY

- It is based on historical data.
- It considers only monetary aspect. In absence of human resources accounting the same has been excluded from the review.
- Financial statements are primarily based on cost concept. Hence, It can not give the current position.
- In the absence of availability of information of another company in the fertilizer, the comparison between two companies can not be made. The various ratios of the company

are compared with ideal or of the previous year's ratio. The data used is primarily on the basis of annual reports only.

DATA ANALYSIS

GROSS PROFIT RATIO

Year	Gross profit (Rs. In lacs)	Growth rate per year (In %)	Net Sales (Rs. In lacs)	Growth rate per year	Ratio (In %)
2000-2001	36,198	-	96,239	-	37.61
2001-2002	36,800	1.66	98,159	2.00	37.49
2002-2003	21,181	-42.44	88,606	-9.73	23.90
2003-2004	45,938	116.88	120,096	35.54	38.25
2004-2005	40,993	-10.76	114,007	-5.07	35.96
2005-2006	45,561	11.14	150,808	32.28	30.21
2006-2007	48,629	6.73	185,556	23.04	26.21
2007-2008	62,798	29.14	223,041	20.20	28.16
2008-2009	49,786	-20.72	255,913	14.74	19.45
Average	43,098		148,047		30.80
Correlation	0.79				
t	4.54				

This ratio indicates the relationship between the sales and gross profit higher gross profit indicates good condition of the company. When the ratio of various year was compared with average gross profit, it is found that the gross profit in the year 2000-01, 2001-02, 2002-03 & 2004-05 was lower and was higher in the year 2003-04, & 2005-06 to 2008-09.

Gross Profit (t = 4.54)

The hypothesis to be tested is that, H₀: "There is no linear relationship between gross profit and net sales" (i.e. H₀ = $\rho = 0$) against the alternative hypothesis H₁ = " $\rho > 0$ " is accepted because the calculated value of t (=4.54) is greater than table value of t (= 2.37) at 5% level of

significance for 7 degree of freedom. This indicates that there is linear relationship between gross profit and net sales. Hence, we can say that gross profit and net sales are correlated.

Correlation ($r = 0.79$)

The correlation between net sales and total assets is positive. So, it is indicates that there is linear relationship between gross profit and net sales.

NET PROFIT RATIO

Year	Net profit (Rs. In lacs)	Growth rate per year (In %)	Net Sales (Rs. In lacs)	Growth rate per year (In %)	Ratio (In %)
2000-2001	13,810	-	96,239	-	14.35
2001-2002	18,733	35.65	98,159	2.00	19.08
2002-2003	3,402	-81.84	88,606	-9.73	3.84
2003-2004	15,270	348.85	120,096	35.54	12.71
2004-2005	14,059	-7.93	114,007	-5.07	12.33
2005-2006	19,245	36.89	150,808	32.28	12.76
2006-2007	19,324	0.41	185,556	23.04	10.41
2007-2008	20,920	8.26	223,041	20.20	9.38
2008-2009	25,014	19.57	255,913	14.74	9.77
Average	16,642		148,047		11.63
Correlation	0.77				
t	3.19				

This ratio indicates the relationship between sales and net profit. when average sales is compared for the period covered it was revealed that it was lower in the year 2000-01 to 2004-05 where as the year 2005-06 to 2008-09 the sales was higher than average sales.

Net Profit: ($t = 3.19$)

The hypothesis to be tested is that, H₀: “There is no linear relationship between net profit and net sales” (i.e. H₀ = $\rho = 0$) against the alternative hypothesis H₁ = “ $\rho > 0$ ” is accepted because the calculated value of t (=3.19) is greater than table value of t (= 2.37) at 5% level of significance for 7 degree of freedom. This indicates that there is linear relationship between net profit and net sales. Hence; we can say that the net profit and net sales are correlated.

Correlation (r = 0.77)

The correlation between net profit and net sales is positive. So, it is indicates that there is linear relationship between net profit and net sales.

OPERATING RATIO

Year	Cost of goods sold (Rs. In lacs)	Growth rate per year (In %)	Net Sales (Rs. In lacs)	Growth rate per year (In %)	Ratio (In %)
2000-2001	91,094	-	96,239	-	91.68
2001-2002	93,413	2.55	98,159	-1.21	95.16
2002-2003	97,655	4.54	88,606	-9.73	110.21
2003-2004	108,469	11.07	120,096	35.54	90.32
2004-2005	106,378	-1.93	114,007	-5.07	93.31
2005-2006	146,381	37.60	150,808	32.28	97.06
2006-2007	185,304	26.59	185,556	23.04	99.86
2007-2008	219,672	18.55	223,041	20.20	98.49
2008-2009	266,162	21.16	255,913	14.74	104.00
Average	146,059		148,394		97.79
Correlation	0.99				
t	18.71				

This ratio establishes the relationship between sales and cost of goods sold. When operating ratio is higher then the condition of the company is not sound. Average cost of goods sold and operating expenses was Rs. 146059 lacs, the cost of goods sold and operating expenses was

lower than average in the year 2000-01 to 2004-05 whereas higher in the year 2005-06 to 2008-09. The highest was Rs. 255913 lacs in the year 2008-09 and the lowest in the year 2002-03 amount to Rs. 88606 lacs. The average sales was Rs. 148394 lacs in the year 2000-01 to 2004-05 the sales was lower than average and higher from the year 2005-06 to 2008-09.

Operating Ratio: (t=18.71)

The hypothesis to be tested is that Ho: “There is no linear relationship between cost of goods sold and net sales” (i.e. Ho: $\rho = 0$) against the alternative hypothesis H1: $\rho > 0$ is accepted because the calculated value of t(=18.71) is greater than the table value of t(=2.37) for 7 d.f. This indicates that, there is linear relationship between cost of goods sold and net sales. Hence we can say that cost of goods sold and net sales are correlated.

Correlation (r=0.99)

The correlation between cost of goods sold and net sales is highly positive. So it's indicates that, there is linear relationship between cost of goods sold and net sales.

EARNINGS PER SHARE RATIO

Year	Profit after tax (Rs. In lacs)	Growth rate per year In (%)	No. Of equity shares	Growth rate per year (In %)	Ratio (In Rs.)
2000-2001	13,810	-	48,907	-	282,373
2001-2002	18,733	35.65	49,034	0.26	382,041
2002-2003	3,402	-81.84	49,326	0.60	68,970
2003-2004	15,270	348.85	49,217	-0.22	310,259
2004-2005	14,059	-7.93	39,399	-19.95	356,836
2005-2006	19,245	36.89	39,506	0.27	487,141
2006-2007	19,324	0.41	39,650	0.36	487,364
2007-2008	20,920	8.26	39,648	-0.01	527,643
2008-2009	25,014	19.57	39,116	-1.34	639,483
Average	16,642		43,756		393,567.78
Correlation	-0.61				
t	2.05				

This ratio indicates the earning of the company per share. The highest PAT was in the year 2008-09 which amounts to Rs 25014 lacs and the lowest was in 2002-03 amounting to Rs. 3402 lacs. The average PAT was Rs.16642 lacs. When the PAT of various year was compared with average then it is found that it was lower in the year 2000-01, 2002-03, 2003-04& 2004-05, where as it was higher in 2001-02 and from 2005-06 to 2008-09. The numbers of equity share go on changing from year to year i.e. the highest number of equity share was in the year 2002-03 and lowest number of equity share were in 2008-09.

Earning Per Share [EPS] Ratio: (t = 2.05)

The hypothesis to be tested is that, H0: “There is no linear relationship between profit after tax and number of equity shares” (i.e. $H_0 = \rho = 0$) against the alternative hypothesis $H_1 = \rho > 0$ is rejected because the calculated value of t (= 2.05) is less than table value of t (= 2.37) at 5% level of significance for 7 degree of freedom. This indicates that there is no linear relationship between profit after tax and number of equity shares. Hence, we can say that profit after tax and numbers of equity shares are uncorrelated.

Correlation (r = -0.61)

The correlation between profit after tax and number. of equity shares is negative. So, it is indicates the partial negative correlation between profit after tax and number of equity shares.

RETURN ON CAPITAL EMPLOYED

Year	Ebit (Rs. In lacs)	Growth rate per year (In %)	Capital employed (Rs. in lacs)	Growth rate per year (In %)	Ratio (In %)
2000-2001	21,047	-	198,102	-	10.62
2001-2002	24,848	18.06	206,969	4.48	12.01
2002-2003	4,228	-82.98	207,192	0.11	2.04
2003-2004	22,037	421.22	209,481	1.10	10.52
2004-2005	18,861	-14.41	206,035	-1.65	9.15
2005-2006	28,250	49.78	217,369	5.50	13.00
2006-2007	23,300	-17.52	228,793	5.26	10.18
2007-2008	27,746	19.08	260,323	13.78	10.66

2008-2009	27,973	0.82	264,156	1.47	10.59
Average	22,032		222,047		9.86
Correlation	0.51				
t	1.57				

This ratio indicate what is the rate of return on capital employed. The average capital employed was Rs. 222407 lacs. From the year 2000-01 to 2005-06 the capital employed is lower than average and was higher from the year 2006-07 to 2008-09.

Return on Capital Employed: (t = 1.57)

The hypothesis to be tested is that,

H0: "There is no linear relationship between EBIT and capital employed" (i.e. $H_0 = \rho = 0$) against the alternative hypothesis $H_1 = \rho > 0$ is rejected because the calculated value of t (= 1.57) is less than table value of t (= 2.37) at 5% level of significance for 7 degree of freedom. This indicates that there is no linear relationship between EBIT and capital employed. Hence, we can say that EBIT and capital employed are uncorrelated.

Correlation (r = 0.51)

The correlation between EBIT and capital employed is positive. So, it is indicating that the EBIT and capital employed are correlated.

CONCLUSION RECOMMENDATION

Gross profit ratio from the year 2000-01 to 2008-09 lies between 19.45% to 38.25%. Gross profit of the year 2003-04 was the highest at 38.25% which displayed the good sign for the company. Where as in the year 2008-09 it was 19.45% which is not good sign for the company. Gross profit ratio is very much satisfactory. Net profit ratio from the year 2000-01 to 2008-09 lies between 3.84% to 19.08%. The average ratio was 11.63% net profit ratio was found to be below the gross profit ratio. It discloses that operating expenses are more in all the year which shows very critical situation of the Company. Earning Per Share was very satisfactory in all the years except in the year 2002-03. The EPS in the year 2008-09 was Rs. 639483, which is six times more than original value, which is good sign for the company. Return on capital employed from the year 2000-01 to 2008-09 lies between 2.04% to 13%. Except 2002-03, this ratio shows minor difference in it. The highest ratio was 13% in the year 2005-06, which shows the good sign of the company.

Conclusions should be considered as guiding factors to determine how far the goals were deviated and what should be done to improve the existing financial position. The following

recommendations are The company should increase the production vis-a-vis sales. The company should also concentrate on quality products. Looking to the total investment made, this is one of primary steps to strengthen the company. The gross profit ratio is satisfactory. However, net profit ratio is not in commensurate with gross profit ratio. Hence the post production expenses and financial charges need to be curbed. company has made the use of ownership capital. Since the rate of profit of the company is more than the rate of interest prevailing in the market on the borrowed capital, the company can obtain borrowed capital in order to take the advantage of trading on equity and ultimately increase the earning per share. The credit policy for the debtor is not favorable the company does not receive collection from the debtor at the right time. The credit policy should be made effective so that collection from debtor can be received at the earliest.

Income of the company is based on the subsidy provided by the government, The Company should try to minimize the operating expenses so as to maintain profit and it should not put much reliance on the subsidy.

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