

[Kaur\* *et al.*, 5(12): December, 2016] IC<sup>TM</sup> Value: 3.00

# **T**IJESRT

## INTERNATIONAL JOURNAL OF ENGINEERING SCIENCES & RESEARCH TECHNOLOGY

## RATIO ANALYSIS OF FINANCIAL INFORMATION Inderjot Kaur\*, Amritpal Singh Randhawa

\*Assistant Professor, Desh Bhagat Foundation Group of Institutions Assistant Professor, Desh Bhagat Foundation Group of Institutions

**DOI**: 10.5281/zenodo.199659

## ABSTRACT

E services are impartment of various products and services through electronic means. The modernized era has earmarked the dire need for all the business sections to innovate their operations at greater pace but no cost. Introduction of online banking was the huge step towards the development of their systems but previously it was accepted al a very less rate due to hindrances such as security issues, and hardware interface unfriendly with the user. In this paper, the extensive use of mobile banking using apps, paperless transactions, more secure and easy to operate scenarios and hence the evolution of E-services are discussed during the past course of time. The statistical interpretation of various percentage implementations of e-services are discussed in this paper.

KEYWORDS: Electronic Services, Mobile Apps, e-commerce,

## **INTRODUCTION**

Competition is increasing by leaps and bounds. Hence it has become really tough to take the investment decisions. In our report, Critical examination of financial information of two companies (Canadian Eco-Tours Incorporated and Green Adventures in Canada) has been done.

The financial data has been broken into simple elements so that they can be understood to take critical decisions of investment that can be much profitable. Investment decisions calculate the risk and rewards from various possible alternatives. It is well known fact that most risky alternative delivers higher profit and vice-versa.

The aim of this case study is to interpret the financial statements of both companies. Critical analysis has been done on basis of calculation of important ratios and preparation of comparative statement so that sound decisions could be taken. Financial decision of investing \$20,000/- will be purely based on the results of

- Liquidity Analysis
- Solvency Analysis
- Performance Evaluation
- Profitability
- Operating Efficiency of Business

To take the best possible decision, we must clearly know the liquidity and solvency position of the business. For this purpose, the relevant ratios are calculated in the study. Operational performance and profitability of the concerns also hold very much importance while investing huge amount in business. Hence the analysis was must to be done which was possible through operating and profitability ratios.

## **RATIO ANALYSIS**

From the available financial data, the possible and useful ratios have been calculated year wise. The purpose of ratios has also been mentioned along with.

## **Canadian Eco-Tours Incorporated (CETI)**

 Current Ratio:- It is the relationship between current analysis assets and current liabilities of the business. It is computed to access short term financial position of the company, so that short term obligations can be met.

http://www.ijesrt.com



[Kaur\* *et al.*, 5(12): December, 2016] IC<sup>TM</sup> Value: 3.00 ISSN: 2277-9655 Impact Factor: 4.116 CODEN: IJESS7

Year 2015	Year 2016
1.14 : 1	1.04 : 1

## Objective

The objective of this ratio is to assess the ability of an enterprise to meet its short term liabilities promptly. Low ratio indicates that the company is not able to meet its current liabilities whereas high ratio indicates inefficient use of funds or funds lying idle. Although there is no hard and fast rule but still Current ratio of 2:1 is consider satisfactory

#### Comments

The current ratio of this company has declined to 1.04 in 2016 from 1.14 in 2015 which is not a good sign. It clearly shows that the short term financial position is not so sound.

- 2) Quick Ratio:- Liquid assets put against the current liabilities shows the liquid ratio or Quick ratio.
  - Calculations

Quick Ratio = Liquid / Quick Assets Current Liabilities

Liquid Assets = Current Assets - Stock - Prepaid Expenses = 242,500 - 51,400 = 166,100So Quick Ratio = 166,100 = 0.83:1199,600

Objective

Quick Ratio is considered to be a better measure of shoprt term financial position as compared to current ratio. This ratio eliminates the non-liquid part of current assets and hence it will help the investor to take the decisions precisely. Ideally value of QR is 1 : 1. Higher value of ratio indicates under-stocking and Low ratio value indicates Over-stocking.

Comments

From the liquidity point of view, the position of CETI in 2016 is satisfactory.

Solvency Ratios

Debt Equity Ratio:- This ratio judges the long-term financial position of the firm. It indicates the relation between Internal Equities and External Equities

Calculation

$$29,000 + 228,600 = 0.68:1$$
  
125,000 + 249,000

Objective

The Ratio indicates the amount of capital supplied to the business by the investors and cushion available on liquidation. It also indicates the extent to which the firm depends upon outsiders for its existence.

Comments

Generally, Lower this ratio, the better it is. As per a generalized rule of 2 : 1, debt should be twice the equity, but in this case it is just above and hence it is quiet a risky scenario.

Total Assets to Debt Ratio:- The two components of this ratio are total assets and long term debt. It measures the extent to which the debt is covered by assets.

Calculation

Long Term Debt = Long term loan + long term notes = 228,600 + 29,000 = 257,600 (Here due to non availability of information 374,500 is assumed as long term loan

Assets to debt ratio = 603,100 = 2.34 : 1 257,600



[Kaur\* et al., 5(12): December, 2016]

ISSN: 2277-9655 Impact Factor: 4.116 CODEN: IJESS7

IC<sup>TM</sup> Value: 3.00 Comments

Higher ratio represents higher security to the leaders of long term loan. The acceptable value to ratio is 2 : 1. In this case it is satisfactory.

**Turnover Ratios** 

Fixed assets Turnover Ratio:- It establishes relation between fixed assets and net sales indicating how efficiently they are used in achieving sales

Calculation = 1,180,000 = 2.99:1(2016) Fixed assets for 2015 = Total assets - Current assets = 520,700 - 189,300 - 12,000= 319,400Hereby, Fixed asset turnover ratio = 1240,000 = 3.88:1319,400

Objective

Higher ratio is better indicator of working of business as it refers to efficient utilization of fixed assets. If it is very low, it means idle capacity.

Comments

In 2016, the ratio is almost 3 times so the investment in fixed assets is judicious In 2015 the ratio is higher as compared to 2016. This means the position is declining.

**Profitability Ratios** 

Gross Profit Ratio :- Adequate GP is required to cover the operating expenses, fixed charges, dividends and reserves

Calculation GP Ratio = Gross Profit  $\times 100$ Net Sales Gross Profit (2016) = Net Sales - COGS = 1,180,000 - 649,000 = 531,000 Gross Profit (2015) = Net Sales - COGS = 1,240,000 - 694,700 = 545,600 GP Ratio (2016) **531,000**  $\times$  **100** = **45% 1,180,000** 

#### Objective

This ratio shows the average margins on goods sold. It should be adequate so that fixed charges can be covered.

Comments

The GP Ratio shows the increase of 1% as per available data which is a good.

Operating Ratio:- It is Calculated by using cost of goods sold and operating expenses. It uses the cost that matches with sales.

Calculations

OR2015 = **694,400+260,400×100 = 77% 1,240,000** 

Objective

It is test of operating efficiency of the business. It is important to calculate because it reveals the profit margin available to investor

Comments

The operating position of this company is satisfactory.

http://www.ijesrt.com



[Kaur\* et al., 5(12): December, 2016]

#### IC<sup>TM</sup> Value: 3.00

Net Profit Ratio:- It is indicator of the overall position of the efficiency of business. Profit before tax and profit after tax, any of them can be taken.

**ISSN: 2277-9655** 

**CODEN: IJESS7** 

**Impact Factor: 4.116** 

Calculation

Net Profit Ratio = Net Profit  $\times$  100 Net Sales

Objective

It helps in determining the operational efficiency of business

Comment

As it can be seen, the ratio of 2016 has increased as compared to 2015 which is good for business.

Earnings Per share :- It measures the earning of equity shareholders after meeting all the obligations. Net profit after tax and preference dividend is used.

EPS(2016) = **200,925** = **\$2 per share 100,000** 

Objective

It helps in evaluating the prevailing market price of shares in light of profit earning capacity. More the earnings better will be the performance

Comments

The EPS is very minimum which can be improved by increasing the performance of the business.

Dividend per share:- It represents dividend distributed per equity share

Calculation DPS(2016) = **50,000 = \$0.5 per share 100,000** 

Objective

The objective of this ratio is to measure the dividend distributed among share holders. Higher the DPS, Better it is for the image of the company. Higher DPS will result in higher investment in future.

Comments

The DPS of this company is shockingly very low. This means they retain their earnings on higher rate.

Price Earning Ratio:- It establishes the relation between market price of share and earning per share. It indicates how many times is the market price to its earning.

Calculation

PER=Market Price per share = 12 = 6:1Earning per share 2

## Objective

This ratio will help us to judge the market price of share. It indicates how much the public is ready to pay for future earning prospects of company. It is also used for knowing the position of over or under valuation of shares. Comments

Generally higher ratio is preferred because it ensures the faith of investors in the stability in the earnings of company.

## Green Adventures in Canada Limited (GAIN)

1) Current Ratio:- Calculations



[Kaur\* et al., 5(12): December, 2016]

## ICTM Value: 3.00

**ISSN: 2277-9655 Impact Factor: 4.116 CODEN: IJESS7** 

Current Ratio = Current Assets = Current receivables + Current Assets **Current Liabilities** 

Current Liabilities

Year 2015	Year 2016
1.41 : 1	1.64 : 1

Comments

The current ratio of this company has improved to 1.64 in 2016 from 1.41 in 2015. This is good sign of improvement.

Solvency Ratios

1) Debt Equity Ratio:- Calculation

$$= 38,000 + 185,500 = 0.478 : 1$$
  
150,000 + 317,600

Comments

Generally, Lower this ratio, the better it is. As per a generalized rule of 2 : 1, debt should be twice the equity, but in this case it is not satisfactory

2) Total Assets to Debt Ratio:- Calculation

= 185,500 + 38,000 = 223,500(Here due to non availability of information 185,500 is assumed as long term loan Assets to debt ratio = 653,100 = 2.92 : 1 223,500

#### Comments

Higher ratio represents higher security to the leaders of long term loan. The acceptable value to ratio is 2 : 1. In this case it is satisfactory. This means business heavily does not depends on outside loans for its existence **Turnover Ratios** 

1) Fixed assets Turnover Ratio:- Calculation

= 1,360,000 = 3.31 times (2016) 410,600

1,150,000 = 3 times (2015) 382,200

Comments

In 2016, the ratio is almost 3.31 times so the investment in fixed assets is judicious. In 2016 the ratio is higher as compared to 2015. This means the position is improving.

## **Profitability Ratios**

1) Gross Profit Ratio :- Calculation GP Ratio = Gross Profit  $\times 100$ Net Sales Gross Profit (2016) = Net Sales - COGS = 1,360,000 - 788,800 = 571,200Gross Profit (2015) = Net Sales - COGS = 1,150,000 - 621,000 = 529,000GP Ratio (2016) 571,200 × 100 = 42% 1,360,000

GP Ratio (2015) 529,000 × 100 = 46% 1,150,000

Comments

The GP Ratio shows the decrease of 2% as per available data which is a not good.

2) Operating Ratio:- Calculations

OR (2015) = 621,000+241,500×100= 75% 1.150.000

http://www.ijesrt.com © International Journal of Engineering Sciences & Research Technology



[Kaur* et al., 5(12): December, 2016] Impact Factor: 4.1   IC <sup>TM</sup> Value: 3.00 CODEN: IJES   OR (2016) = 788,800+312,800×100= 81% 1,360,000	
OR (2016) = <b>788,800+312,800×100= 81%</b>	<b>S7</b>
OR (2016) = <b>788,800+312,800×100= 81%</b>	
1.360.000	
Comments	
The operating ratio has improved. This means lesser profit is available to the investors in form of inter	est
and dividend. So it is not a good sign.	
3) Net Profit Ratio:- Calculation	
Net Profit Ratio = Net Profit $\times$ 100	
Net Sales	
NPR $(2015) = 211,125 \times 100 = 18\%$	
1,150,000	
NPR (2016)= <b>190,800</b> × <b>100</b> = <b>14.02%</b>	
1,360,000	
Comment	
As it can be seen, the ratio of 2016 has decreased as compared to 2015 which is not good	for
business.	
4) Earnings Per share :- Calculations	
EPS = Net Profit after Tax	
No of equity shares	
EPS(2016) = 190,800 = \$1.2  per share	
150,000 <b>110</b> ,000	
Comment	
	the

The EPS is very minimum which can be improved by increasing the performance of the business.

5) Dividend per share:- Calculation DPS(2016) = **40,000** = **\$0.26** per share 150,000

Comments

The DPS of this company is shockingly very low.

6) Price Earning Ratio:- Calculation

Comments

Generally higher ratio is preferred because it ensures the faith of investors in the stability in the earnings of company.

## **CONCLUSION AND FUTURE SCOPE**

If we want to invest in equity shares of the company, then we must go for CETI because as per the analysis, CETI has higher EPS as compared to that of GAIN. If we want to invest in debentures then we must go for GAIN because as per analysis, GAIN has lower Debt Equity Ratio than that of CETI. This is because more use of equity is safety for debenture holders.

So Ratio Analysis is best tool in the hands of management to judge the financial image of the company as it provides easy and direct inter and Intra company comparisons.

## REFRENCES

- [1] Basu, S. (1977)" Investment performance of common stocks in relation to their price-earnings ratios: A test of the efficient market hypothesis" The Journal of Finance, 32(3), 663-682.
- [2] Basu, S. (1983) "The relation between earnings yield, market value, and return for NYSE stocks: Further evidence" Journal of Financial Economics, 12(1), 129-56.
- [3] Beaver, W., & Morse, D. (1978) "What determines price-earnings ratios" Financial Analysts Journal, 34(4), 65-76.



ISSN: 2277-9655 Impact Factor: 4.116 CODEN: IJESS7

[Kaur\* et al., 5(12): December, 2016]

ICTM Value: 3.00

- [4] Bradshaw, M. (2002) "The use of target prices to justify sell-side analysts stock recommendations" *Accounting Horizons*, 16(1), 27-41.
- [5] Dechow, P., Hutton, A., & Sloan, R. (1999) "An empirical assessment of the residual income valuation model" *Journal of Accounting & Economics*, 26(1-3), 1-34.
- [6] Fairfield, P. (1994), "E/P, P/B and the present value of future dividends" *Financial Analysts Journal*, 50(4), 23-31.
- [7] Gode, D., & Mohanram, P. (2003) "Inferring the cost of capital using the Ohlson-Juettner model" *Review of Accounting Studies*, 8(4), 399-431.
- [8] Jaffe, J., Keim, D., & Westerfield, R. (1989) "Earnings yields, market values, and stock returns" *Journal* of *Finance*, 44(1), 135-48.
- [9] Kim, M., & Ritter, J. (1999) "Valuing IPOs" Journal of Financial Economics, 53(3), 409-437.
- [10] Liu, J., Nissim, D., & Thomas, J. (2002) "Equity valuation using multiples" Journal of Accounting Research, 40(1), 135-172.
- [11] Mohanram, P. (2005) "Separating winners from losers among low book-to-market stocks using financial statement analysis" *Review of Accounting Studies*, *10*(2-3), 133-170.
- [12] Ohlson J., & Gao, Z. (2006) "Earnings, earnings growth and value" Foundations and Trends in Accounting, 1(1).