

CHAPTER – 4

CONCEPTUAL FRAMEWORK OF FINANCIAL PERFORMANCE

4.1 FINANCE

Finance is considered as the life blood of businesses, providing businesses the opportunities to grow, providing employment and also support government through the remittance of income taxes. The strategic use of finance, such as loans and investments, is the key to success of every business. Financial trends also define the state of the economy on a global level helping the central banks to plan appropriate monetary policies.

4.2 FINANCIAL MANAGEMENT

"Planning is an inextricable dimension of financial management, the term financial management connotes that funds flows are directed according to some plan." By **James Van Horne**⁶⁸

"Financial management is that activity of management which is concerned with the planning, procuring and controlling of the firm's financial resources." By Deepika & Maya Rani

"Financial Management is the Operational Activity of a business that is responsible for obtaining and effectively utilizing the funds necessary for efficient operation." By Joseph Massie

4.3 SCOPE AND FUNCTIONS OF FINANCIAL MANAGEMENT

The scope of financial management consists of three groups. The primary scope being related to finance and cash, second scope being in the rising of fund and their administration, finally the third focusing on the activities of rising funds, these are part and parcel of total management, Isra Salomon felt that in view of funds utilization third group has wider scope.

“It can be said that all activities done by a finance officer are under the purview of financial management. But the activities of these officers change from firm to firm, it become difficult to say the scope of finance. Financial management plays two main roles, one – participating in funds utilization and controlling productivity, two – Identifying the requirements of funds and selecting the sources for those funds. Liquidity, profitability and management are the functions of financial management.

The fundamental purpose of financial accounting is to provide useful financial information to users of the company that facilitates in decision making.

The income statement reflects the results of the business while balance sheet accounts for the position of business. Together they are compared with each other to see how efficiently a company is using its assets to generate profits. “Most investors and creditors use financial ratios to analyze the companies. There are innumerable ratios that can be combined for analysis purposes.”

These ratios become meaningful only when it is compared to the industry benchmark or the acceptable rule of thumb. Otherwise the ratios cannot be of much use to judge whether or not a company is fiscally sound.

Thus, financial analysis is a crucial part of overall economic analysis carried out by various business organizations in around the world. It depicts the financial health of the given company and helps the companies to channelize their financial resources and also helps in managing the funds of the company in an efficient manner. Financial analysis guides the companies in the future course of action and the direction in which any particular company should move on.

4.4 FINANCIAL PERFORMANCE

Performance can be defined as, “The accomplishment of a given task measured against preset known standards of accuracy, completeness, cost, and speed. In a contract, performance is deemed to be the fulfilment of an obligation, in a manner that releases the performer from all liabilities under the contract”⁶⁹.

“Financial performance is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. This term is also used as a general measure

of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation.”

“Financial Performance is a scientific evaluation of profitability and financial strength of any Business Concern”.

Financial Statements are indication of the two significant factors:

- i) Profitability
- ii) Financial Soundness

Analysis of financial statements, therefore, refers to the close examination and investigation of the information contained in the income statement and the Balance Sheet so as to afford full diagnosis of the profitability and financial health of the business.

Financial performance analysis helps the entity to identify its internal strengths and use the same to tackle the business opportunities from the environment and also it helps to identify the internal weakness of the entity and thereby helps it to manage the external threats.

The important line items of the financial statements are described below. These items are the crux of the analysis. In other words they are the components of the various tools used for the analysis.

1. Shareholders fund

Shareholders are the owners of the company. They have provided the equity funds for the company and they are the risk bearers of the entity. Shareholders Fund or own funds comprises of share capital and reserves & surpluses. Reserves are retained earnings or accumulated profit of the company from past years. This is also referred to as net worth of the company. Net worth increases in case of profit making company.

2. Reserves and surplus

It is part of own funds of the company. Reserves can be of two types

(1) Capital Reserves and

(2) Revenue reserves.

There are restrictions on use of capital reserves. They are normally created out of capital profits like share premium, profit on sale of fixed assets etc. They are not utilized for distributing dividend.

Revenue reserves are also called as free reserves. The profit earned after subtracting all expenses is known as divisible profit, which is partly distributed amongst shareholders in the form of dividend, and residual is retained by the enterprise for unforeseen expenses or development expansion plans for future. These are also called as retained earnings, which are getting accumulated every year as, and when the need occurs, the company can utilize these.

Both the reserves increase share holders net worth and make the company financially sound.

3. Borrowed funds⁷⁰

Liability side of the balance sheet has two major components,

1) Own fund, and

2) Borrowed fund

Own funds are the shareholders funds. The other component, one of the important sources of fund is the borrowed funds. Such funds are those the entity has borrowed

from outsiders for a charge against its assets. It includes secured loans and unsecured loans and other liabilities. There are no financial charges on own fund but on borrowed fund, company has to make payment of interest.

4. Current liabilities

Current liabilities are the short term obligations of an enterprise which are payable within a financial year. The major components of current liabilities are

- Bills payable
- Bank overdraft
- Short term loans and advances
- Creditors
- Outstanding expenses.

An abnormal amount of current liability can create short term liquidity crisis for the company. When the entity is unable to pay of its creditors on time, it also affects the credibility of the company.

5. Capital employed

Capital employed is a total of sources of funds to the business enterprises. In other words, capital employed is the sum of share capital, reserves and surpluses and the borrowed funds. It represents the total assets employed by an entity to earn profit.

6. Fixed asset

The right hand side of the balance sheet represents use of fund and left hand side shows source of funds. The fixed assets are one of the important component against which the funds are utilized. It constitutes items like building, plant and machinery, furniture etc. These assets are used in the generation of revenue, and usually more than a year, i.e. long term. This is why depreciation is deducted from the total value of the asset and charged against the same revenue of the same period. Fixed assets are therefore the resources owned by the company and used in earning revenue.

7. Current assets

Current assets are the operational assets of the business. It represents those assets which the company expects to be realized in its ordinary course of operational cycle.

It includes liquid assets like

- Cash in hand
- Inventory
- Debtors
- Bills/trade receivables
- Short term loans and advances.
- Prepaid expenses

These assets are used to meet the short term obligations of the entity. Hence they can be used as a yard stick to measure the short term financial strength of the company.

8. Quick assets

Quick assets are assets that can be converted to cash quickly. They are more liquid than the current assets. Typically, they include cash, accounts receivable, marketable securities, and sometimes (not usually) inventory. “Quick assets are the highly liquid assets held by a company, including marketable securities and accounts receivable.” Companies use quick assets to calculate certain financial ratios that are used in decision making, including quick ratio. Quick assets also give a glimpse of the immediate liquidity position of the entity.

9. Working capital

In general there are two concepts of working capital:

- Gross working capital
- Net working capital

“Gross working capital is simply the total of the current assets the company own. It represents the investment of the entity in its current assets. This is a theoretical concept. It is not widely used in the analysis of working capital. Net working capital is the difference between the current assets and current liabilities of an entity. A positive net working capital indicates that the company has enough assets to pay off the liabilities and a negative net working capital indicates that the company is facing a liquidity crunch. Net working capital is widely accepted and used in analyzing the financial performance.”

10. Revenue from operations

“Revenue is the gross inflow of economic benefits during arising in the course of the ordinary activities of an entity in a particular period.” Such inflows result in increases

in equity, other than increases relating to contributions from equity participants. Revenue includes only the gross inflows of economic benefits received and receivable by the entity on its own account. According to Ind AS Transition Facilitation Group, “Amounts collected on behalf of third parties such as sales taxes, goods and services taxes and value added taxes are not economic benefits which flow to the entity and do not result in increases in equity.” This is because such receipts are not available for the use in the business.

11. Profit after tax

The ultimate aim of any business enterprise is to earn maximum profit. A firm should earn profit to survive and grow over a long period of time. A business enterprise can be able to discharge its obligations to the segments of the society only through earning of profits. Profit is considered as the measure of overall efficiency of a business. Profitability is the ability of a firm to earn maximum profit from best utilization of its resources. “The net amount earned by a business after all taxation related expenses have been deducted. The profit after tax is often a better assessment of what a business is really earning and hence can use in its operations than its total revenues.”

4.5 TOOL OF FINANCIAL PERFORMANCE ANALYSIS

Financial performance analysis is the process of identifying the financial strengths and weaknesses of the firm by properly establishing the relationship between the items of balance sheet and profit and loss account. It also helps in short-term and long term forecasting.

The analysis and interpretation of financial statement is used to determine the strengths and weaknesses of the company. The following tools are used for analyzing the financial position of the company:

- Ratio Analysis
- Comparative balance sheet
- Common size balance sheet
- Trend analysis

Ratio Analysis

Fundamental analysis is based on the concepts, analytical tools and various other techniques developed by the experts. It helps in comparing the relative strengths and weaknesses of companies.

Financial Ratio Analysis is a tool that was developed to perform quantitative analysis on numbers found on financial statements. However, they vary across different industries and sectors and comparisons between completely different types of companies are often not valid. In addition, it is important to analyze trends in company ratios instead of solely emphasizing a single period's figures. A ratio is a relative magnitude of two elements. There are many standard ratios used in evaluating the overall financial condition of a corporation or other organization.

“Ratio is any strategic or tactical advantage, and as a verb, means to exploit such an advantage, just as the use of a physical lever gives one an advantage in the physical sense. Ratio is a very popular business term .In the world of finance, Ratio is the use of borrowed money to make an investment and the return on an investment.”³

Financial ratios fall into several categories. For the purpose of this analysis, the commonly used ratios are grouped into four categories: activity, liquidity, solvency and profitability. Also, for the sake of consistency, the data in the financial statements created for the prior instalments of the Financial Statement Analysis series will be used to illustrate the ratios.

Liquidity Ratios

Liquidity ratios are some of the most widely used ratios, perhaps next to profitability ratios. They are especially important to creditors. These ratios measure a firm's ability to meet its short-term obligations.

The level of liquidity needed varies from industry to industry. Certain industries are more cash-intensive than others. For example, grocery stores will need more cash to buy inventory constantly than software firms, so the liquidity ratios of companies in these two industries are not comparable to each other. It is also important to note a company's trend in liquidity ratios over time.

Current ratio

The current ratio measures a company's current assets against its current liabilities. The current ratio is a measure of the short term liquidity of the company, ie, it shows if the company can pay off its short-term liabilities in an emergency by liquidating its current assets. Current assets are found at the bottom of the balance sheet and include line items such as cash and cash equivalents, accounts receivable and inventory, among others. Current ratio is calculated by the following formula

$$\frac{\text{current assets}}{\text{current liabilities}}$$

A low current ratio indicates that a firm may have difficulty in paying their current liabilities in the short run and deserves further investigation. A current ratio under 1.00, for example, means that even if the company liquidates all of its current assets, it would still be unable to cover its current liabilities. A high ratio indicates a high level of liquidity and less chance of a cash squeeze. A high current ratio may also indicate that the company is carrying too much inventory, allowing accounts receivables to balloon with tax payment collection standards or simply holding too much in cash.

Quick ratio

The quick ratio is a liquidity ratio that is more stringent than the current ratio. This ratio compares the cash, short-term marketable securities and accounts receivable to current liabilities. The rationale behind the quick ratio is that certain items, such as prepaid expenses, have already been paid out for future and therefore, cannot be quickly and easily converted back to cash for liquidity purposes. Quick ratio is calculated by using the formula:

$$\frac{\text{Quick assets}}{\text{Current liabilities}}$$

Inventory is also excluded from the calculation of quick assets. During times of stress, high inventories across all companies in the industry may make selling inventory difficult. In addition, if company stockpiles are overly specialized or nearly obsolete, they may be worth significantly less to a potential buyer.

Cash to current assets

The ratio represents the proportion of cash held by the company against the current assets. It is calculated as follows:

$$\frac{\text{Cash}}{\text{Current Assets}}$$

Ideally the share of cash in current assets should be less.

Current assets to total assets

It indicates the extent of total funds invested for the purpose of short term liquidity and throws light on the importance of current assets of a firm. It is calculated as

$$\frac{\text{Current assets}}{\text{Total Assets}}$$

It should be worthwhile to observe that how much of that portion of total assets is occupied by the current assets, as current assets are essentially involved in forming working capital and also take an active part in increasing liquidity.

Liquid asset to current asset ratio

The ratio describes the relationship between liquid asset and the current asset of the entity. It looks into the share of liquid assets in the current assets of the entity and thereby reflects an overall idea of the impact of stock in the liquidity position of the company. The formula used is

$$\frac{\text{Liquid Assets}}{\text{Current Assets}}$$

Working capital analysis

Debtors' turnover ratio

“Receivables turnover ratio can be calculated by dividing the net value of credit sales during a given period by the average accounts receivable during the same period. Average accounts receivable can be calculated by adding the value of accounts receivable at the beginning of the desired period to their value at the end of the period and dividing the sum by two.”

The method for calculating receivables turnover ratio can be represented with the following formula:

$$\frac{\text{Net credit sales}}{\text{Average debtors}}$$

Working capital turnover ratio

Working capital turnover is a ratio which measures how efficiently a company is using its working capital to support a given level of sales. Also referred to as net sales to working capital, it shows the relationship between the funds used to finance a company's operations and the revenues a company generates as a result.

$$\frac{\text{Sales}}{\text{Working Capital}}$$

“A high turnover ratio shows that management is being very efficient in using a company’s short-term assets and liabilities for supporting sales, i.e., it is generating a higher dollar amount of sales for every dollar of the working capital used. In contrast, a low ratio may indicate that a business is investing in too many accounts receivable and inventory to support its sales – which could lead to an excessive amount of bad debts or obsolete inventory.

To gauge just how efficient a company is at using its working capital; analysts also compare working capital ratios to those of other companies in the same industry, and look at how the ratio has been changing over time. However, such comparisons are meaningless when working capital turns negative, because the working capital turnover ratio then also turns negative.”

Sales to Current assets

The sales to current assets ratio is a financial calculation that can help you determine how efficiently a company is making use of its current assets to generate revenue. Current assets in this case would include the combined total of cash, marketable securities, receivables, inventory, and any prepaid expenses.

$$\frac{\text{Sales}}{\text{Current assets}}$$

The sales to current asset ratio will give you the most meaningful measure of liquidity when it’s used to analyze businesses that hold a significant amount of inventory. Because this ratio value can vary widely, the comparison of net sales amounts with current assets is best used to

spot trends over a number of accounting periods for the same company, or to compare multiple companies within the same industry.

In general terms, when the value of the sales to current asset ratio is high, a company is supporting its business income with very few assets.

Credit Strength Ratio

Credit strength ratio indicates reliance on the equity for payment of debt. It is one of the measures of the solvency of a firm. Generally, as a rule of thumb, the ratio should not exceed 60 percent; higher percentages mean significant pressure on future cash flows.

$$\frac{\text{current liabilities}}{\text{Networth}} \times 100$$

Solvency Ratios

Solvency ratios measure a company's ability to meet its longer-term obligations. Analysis of solvency ratios provides insight on a company's capital structure as well as the level of financial leverage a firm is using.

Some solvency ratios allow investors to see whether a firm has adequate cash flows to consistently pay interest payments and other fixed charges. If a company does not have enough cash flows, the firm is most likely overburdened with debt and bondholders may force the company into default.

Fixed Assets Ratio

Fixed Assets ratio is a type of solvency ratio (long-term solvency) which is found by dividing total fixed assets (net) of a company with its long-term funds. It shows the amount of fixed assets being financed by each unit of long-term funds.

It helps to determine the capacity of a company to discharge its obligations towards long-term lenders indicating its financial strength and ensuring its long-term survival.

$$\frac{\text{Net Fixed Assets}}{\text{Long Term Funds}}$$

Net fixed assets: (Total of fixed assets – Total depreciation till date) + Trade Investments including shares in subsidiaries.

Long-term funds: Share capital + Reserves + Long-term loans.

Debt-to-assets ratio

The debt-to-assets ratio is the most basic solvency ratio, measuring the percentage of a company's total assets that is financed by debt. The ratio is calculated by dividing total liabilities by total assets. A high number means the firm is using a larger amount of financial leverage, which increases its financial risk in the form of fixed interest payments.

Degree of financial leverage

Degree of Financial Leverage (DFL) is a ratio that measures the sensitivity of a company's earnings per share (EPS) to fluctuations in its operating income, as a result of changes in its capital structure. Degree of Financial Leverage (DFL) measures the percentage change in EPS for a unit change in earnings before interest and taxes (EBIT), and can be mathematically represented as follows:

$$\frac{EBIT}{EBIT - Interest}$$

The higher the DFL, the more volatile earnings per share (EPS) will be. Since interest is a fixed expense, leverage magnifies returns and EPS, which is good when operating income is rising, but can be a problem during tough economic times when operating income is under pressure.

Profitability Ratios

Profitability ratios are arguably the most widely used ratios in investment analysis. These ratios include the ubiquitous "margin" ratios, such as gross, operating and net profit margins. These ratios measure the firm's ability to earn an adequate return. When analyzing a company's margins, it is always prudent to compare them against those of the industry and its close competitors.

Margins will vary among industries. Companies operating in industries where products are mostly "commodities" (products easily replicated by other firms) will typically have low margins. Industries that offer unique products with high barriers to entry generally have high margins. In addition, companies may hold key competitive advantages leading to increased margins.

Net profit margin

Net profit margin compares a company's net income to its net revenue. This ratio is calculated by dividing net income, or a company's bottom line, by net revenue. It measures a firm's ability to translate sales into earnings for shareholders. Once again, investors should look for companies with strong and consistent net profit margins.

$$\frac{\text{Net Profit}}{\text{Sales}} \times 100$$

In our example, the net profit margin of 8.3% suggests that for every \$1 of revenue generated by the firm, \$0.083 is created for the shareholders.

Return on asset and Return on Equity

Two other profitability ratios are also widely used—return on assets (ROA) and return on equity (ROE).

Return on assets is calculated as net income divided by total assets. It is a measure of how efficiently a firm utilizes its assets. A high ratio means that the company is able to efficiently generate earnings using its assets. As a variation, some analysts like to calculate return on assets from pre tax and pre-interest earnings using Earnings before Interest and Tax divided by total assets.

While return on assets measures net income, which is return to equity holders, against total assets, which can be financed by debt and equity, return on equity measures net income less preferred dividends against total stockholder's equity. This ratio measures the level of income attributed to shareholders against the investment that shareholders put into the firm. It takes into account the amount of debt, or financial leverage, a firm uses. Financial leverage magnifies the impact of earnings on Return on equity in both good and bad years. If there are large discrepancies between the return on assets and return on equity, the firm may be incorporating a large amount of debt. In that case, it is prudent to closely examine the liquidity and solvency ratios.

Return on investment (ROI)

When a firm invests money in a business, it naturally expects adequate return on its investment. ROI measures the overall profitability. It establishes the relationship between profit / return and investment. It is also called accounting rate of return.

$$ROI = \frac{\text{Profit before interest and tax}}{\text{Capital employed}} \times 100$$

Return on Net worth

“Return on Net worth is a ratio developed from the perspective of the investor and not the company. By looking at this, the investor sees if entire net profit was passed on to him, how much return he would be getting. It explains the efficiency of the shareholders’ capital to generate profit.”

$$\frac{\text{Net Income}}{\text{Shareholders equity}}$$

“A high return on net worth percentage is indicative of the prudent use of shareholders’ money while a low percentage indicates less efficient deployment of equity resources.

Return on net worth is considered as a vote of the efficiency of a company’s management with an increasing percentage indicating higher efficiency in generating profit on every dollar invested.”⁷¹

Capital Structure Ratios

Debt-to-equity ratio

“The debt-to-equity ratio measures the amount of debt capital a firm uses compared to the amount of equity capital it uses. A ratio of 1.00 x indicates that the firm uses the same amount of debt as equity and means that creditors have claim to all assets, leaving nothing for shareholders in the event of a theoretical liquidation.

For our example, total debt used in the numerator includes short- and long-term interest-bearing debt. This ratio can also be calculated using only long-term debt in the numerator.

Proprietary ratio

The proprietary ratio (also known as the equity ratio) is the proportion of shareholders' equity total assets, and as such provides a rough estimate of the amount of capitalization currently used to support a business. If the ratio is high, this indicates that a company has a sufficient amount of equity to support the functions of the business, and probably has room in its financial structure to take on additional debt, if necessary. Conversely, a low ratio indicates that a business may be making use of too much debt or trade payables, rather than equity, to support operations (which may place the company at risk of bankruptcy).

Thus, the equity ratio is a general indicator of financial stability. It should be used in conjunction with the net profit ratio and an examination of the statement of cash flows to gain a better overview of the financial circumstances of a business. These additional measures reveal the ability of a business to earn a profit and generate cash flows, respectively. To calculate the proprietary ratio, divide total shareholders' equity by total assets. The results will be more representative of the company's true situation if you exclude goodwill and intangible assets. from the denominator.

The more restrictive version of the formula is:

$$\frac{\text{Shareholders' equity}}{\text{Total tangible assets}}$$

Total Debt to asset ratio

Total debt to assets ratio measures the relationship between the long term borrowed funds and the total assets. It describes that portion of total assets that are financed through total long term borrowed funds.

$$\frac{\text{Total long term borrowed funds}}{\text{Total assets}}$$

Fixed asset utilization index

In an enterprise, fixed asset must be employed in the same quantum of sales. Fixed asset Index assist in understanding the efficiency of a business in optimum utilization of fixed assets. “One of the most important tools employed to evaluate the effectiveness of the utilization of fixed assets is assets index.⁷² Fixed asset turnover means the number of times an asset flows through a firm’s operations into sales. The turnover of fixed assets investment is defined as the relationship between the volume of business done and the amount of capital tied-up in fixed property investments”⁷³. In order to analyse the utilization of fixed assets, the utilization index for the fixed assets has been worked out as under

$$UI_{FA} = \frac{S_t}{S_{t-1}} \times \frac{FA_{t-1}}{FA_t}$$

Where UI_{FA} – Utilization Index (Fixed Assets)
 S_t – Sales revenue at period ‘t’
 S_{t-1} – Sales revenue at (t–1) period
 FA_t – Fixed assets at period ‘t’
 FA_{t-1} – Fixed assets at (t–1) period

A value of $UI_{fa} > 1$ indicates in the matter of utilization of fixed assets of the company. The higher the value of the index, the greater is the degree of efficiency in this regard and vice-versa.

4.6 SPRINGATE MODEL

“Springate continued Altman studies and the use of audit analytics for selecting 4 appropriate financial ratios, which was included working capital to total assets, profit before interest and taxes to total assets, profit before tax to current debt, sale to total assets among the 19 ratio, which had the best ratio to identify healthy and bankrupt companies and after its tests, provided a model in 40 companies, which achieved to 92.5 percent correct predictions.

For most of the bankrupt companies models predicted bankruptcy even four years before the actual bankruptcy occurring. There are some variations in accuracy of different models. The model that shows the best results when predicting the bankruptcy is Springate.”⁷⁴

4.7 STATISTICAL TOOLS

4.7.1 Correlation

According to L. R. Connor “If two or more quantities vary in sympathy so that movements in the one tend to be accompanied by corresponding movements in the others, then they are said to be correlated”. According to W. L. King “Correlation means that between two series or groups of data, there exists some casual connection”. The term correlation indicates the relationship between two such variables. It establishes a kind of relationship, if the value of one variable change it leads to change in the value of another variable. The correlation indicates that the two variable move together.”

4.7.2 Regression Analysis

“Regression analysis is the process of constructing a mathematical model or function that can be used to predict or determine one variable by other variables. The Simple Linear Regression or bi-variate regression involve two variables in which one variable is predicted by another variable. In simple linear regression, the variable to be predicted is called the dependent variable and is designated as y. The predictor is called the independent variable, or explanatory variable, and is designated as x and in this method only a straight-line relationship between two variables is examined. The first step in determining the equation of the regression line that passes through the sample data is-to establish the equation form. In regression analysis, researchers use the slope-intercept equation of a line with deterministic models.”⁷⁵ Deterministic models are mathematical models that produce an „exact“ output for a given input. A deterministic regression model is: $y = \alpha + \beta x$ In a deterministic model, all points are assumed to be on the line and in all cases is zero. Virtually all regression analysis of business data involve sample data, not population data. As a result α and β are unattainable

and must be estimated by using the sample statistics, a and b . Hence, the equation of the regression line containing the sample y intercepts a and the sample slope b .

“Regression Equation is: $y = a + bx$ Where a = the sample intercept and b = the sample slope
A widely used measure fit for regression models is the coefficient of determination, or r^2 . The coefficient of determination is the proportion of variability of the dependent variables (y) accounted for or explained by the independent variable (x). The coefficient of determination ranges from 0 to 1. An r^2 of zero means that the predictor accounts for none of the variability of the dependent variables and that there is no regression prediction of y by x . An r^2 of 1 means perfect prediction of y by x and that 100% of the variability of y is accounted for by x . Of course, most r^2 values are between the extremes. Simple regression provides only one predictor and only one regression coefficients to test.”⁷⁶

4.8 CONCLUSION

Ratio analysis is a form of fundamental analysis that links together the three financial statements commonly produced by corporations. Ratios provide useful figures that are comparable across industries and sectors. Using financial ratios, investors can develop a feel for a company's attractiveness based on its competitive position, financial strength and profitability. Statistical tests are used to prove the authenticity of financial analysis.