A

Seminar report

On

Ratio Analysis

Submitted in partial fulfillment of the requirement for the award of degree
Of MBA

SUBMITTED TO:

www.studymafia.org

SUBMITTED BY:

www.studymafia.org

Acknowledgement

I would like to thank respected Mr…….. and Mr. ……..for giving me such a wonderful opportunity to expand my knowledge for my own branch and giving me guidelines to present a seminar report. It helped me a lot to realize of what we study for.

Secondly, I would like to thank my parents who patiently helped me as i went through my work and helped to modify and eliminate some of the irrelevant or un-necessary stuffs.

Thirdly, I would like to thank my friends who helped me to make my work more organized and well-stacked till the end.

Next, I would thank Microsoft for developing such a wonderful tool like MS Word. It helped my work a lot to remain error-free.

Last but clearly not the least, I would thank The Almighty for giving me strength to complete my report on time.

Preface

I have made this report file on the topic **Ratio Analysis**; I have tried my best to elucidate all the relevant detail to the topic to be included in the report. While in the beginning I have tried to give a general view about this topic.

My efforts and wholehearted co-corporation of each and everyone has ended on a successful note. I express my sincere gratitude to ……..who assisting me throughout the preparation of this topic. I thank him for providing me the reinforcement, confidence and most importantly the track for the topic whenever I needed it.

CONTENTS

LIST OF TABLES

Introduction

1. Introduction

Ratio analysis is a powerful tool of financial analysis. A ratio is defined as "the indicated quotient of two mathematical expressions" and "the relationship between two or more things". In financial analysis, a ratio is used as a benchmark for evaluation the financial position and performance of a firm. The absolute accounting figures reported in the financial statements do not provide a meaningful understanding of the performance and financial position of a firm. An accounting figure conveys meaning when it is related to some other relevant information. For example, an Rs.5 core net profit may look impressive, but the firm's performance can be said to be good or bad only when the net profit figure is related to the firm's Investment.

The relationship between two accounting figures expressed mathematically, is known as a financial ratio (or simply as a ratio). Ratios help to summarize large quantities of financial data and to make *qualitative judgment* about the firm's financial performance. For example, consider current ratio. It is calculated by dividing current assets by current liabilities; the ratio indicates a relationship- a quantified relationship between current assets and current liabilities. This relationship is an index or yardstick, which permits a quantitative judgment to be formed about the firm's liquidity and vice versa. The point to note is that a ratio reflecting a quantitative relationship helps to form a qualitative judgment. Such is the nature of all financial ratios.

Standards of comparison:

The ration analysis involves comparison for a useful interpretation of the financial statements. A single ratio in itself does not indicate favorable or unfavorable condition. It should be compared with some standard. Standards of comparison may consist of:

- **Past ratios**, i.e. ratios calculated form the past financial statements of the same firm;
- **Competitors' ratios**, i.e., of some selected firms, especially the most progressive and successful competitor, at the same pint in time;
- **Industry ratios**, i.e. ratios of the industry to which the firm belongs; and
- **Protected ratios,** i.e., developed using the protected or *proforma*, financial statements of the same firm.

In this project calculating the past financial statements of the same firm does ratio analysis.

1.1 Theoretical background:

1.1.1 Use and significance of ratio analysis:-

The ratio is one of the most powerful tools of financial analysis.

It is used as a device to analyze and interpret the financial health of enterprise. Ratio analysis stands for the process of determining and presenting the relationship of items and groups of items in the financial statements. It is an important technique of the financial analysis. It is the way by which financial stability and health of the concern can be judged. Thus ratios have wide applications and are of immense use today. The following are the main points of importance of ratio analysis:

a) Managerial uses of ratio analysis:-

1. Helps in decision making:-

Financial statements are prepared primarily for decision-making. Ratio analysis helps in making decision from the information provided in these financial Statements.

2. Helps in financial forecasting and planning:-

Ratio analysis is of much help in financial forecasting and planning. Planning is looking ahead and the ratios calculated for a number of years a work as a guide for the future. Thus, ratio analysis helps in forecasting and planning.

3. Helps in communicating:-

The financial strength and weakness of a firm are communicated in a more easy and understandable manner by the use of ratios. Thus, ratios help in communication and enhance the value of the financial statements.

4. Helps in co-ordination:-

Ratios even help in co-ordination, which is of at most importance in effective business management. Better communication of efficiency and weakness of an enterprise result in better co-ordination in the enterprise

5. Helps in control:-

Ratio analysis even helps in making effective control of business.The weaknesses are otherwise, if any, come to the knowledge of the managerial, which helps, in effective control of the business.

b) Utility to shareholders/investors:-

An investor in the company will like to assess the financial position of the concern where he is going to invest. His first interest will be the security of his investment and then a return in form of dividend or interest. Ratio analysis will be useful to the investor in making up his mind whether present financial position of the concern warrants further investment or not.

C) Utility to creditors: -

The creditors or suppliers extent short-term credit to the concern. They are invested to know whether financial position of the concern warrants their payments at a specified time or not.

d) Utility to employees:-

The employees are also interested in the financial position of the concern especially profitability. Their wage increases and amount of fringe benefits are related to the volume of profits earned by the concern.

e) Utility to government:-

Government is interested to know overall strength of the industry. Various financial statement published by industrial units are used to calculate ratios for determining short term, long-term and overall financial position of the concerns.

f) Tax audit requirements:-

Sec44AB was inserted in the income tax act by financial act; 1984.Caluse 32 of the income tax act requires that the following accounting ratios should be given:

1. Gross profit/turnover.
2. Net profit/turnover.
3. Stock in trade/turnover.
4. Material consumed/finished goods produced.

Further, it is advisable to compare the accounting ratios for the year under consideration with the accounting ratios for earlier two years so that the auditor can make necessary enquiries, if there is any major variation in the accounting ratios.

1.1.2 Limitations:

Ratio analysis is very important in revealing the financial position and soundness of the business. But, inspite of its advantages, it has some limitations which restrict its use. These limitations should be kept in mind while making use of ratio analysis for interpreting the financial the financial statements. The following are the main limitations of ratio analysis:

1. False results:-

Ratios are based upon the financial statement. In case financial statement are in correct or the data of on which ratios are based is in correct, ratios calculated will all so false and defective. The accounting system it self suffers from many inherent weaknesses the ratios based upon it cannot be said to be always reliable.

2. Limited comparability:-

The ratio of the one firm cannot always be compare with the performance of other firm, if uniform accounting policies are not adopted by them. The difference in the methods of calculation of stock or the methods used to record the deprecation on assets will not provide identical data, so they cannot be compared.

3. Absence of standard universally accepted terminology:-

Different meanings are given to a particular term, egg. Some firms take profit before interest and tax; others may take profit after interest and tax. A bank overdraft is taken as current liability but some firms may take it as non-current liability. The ratios can be comparable only when all the firms adapt uniform terminology.

4. Price level changes affect ratios:

The comparability of ratios suffers, if the prices of the commodities in two different years are not the same. Change in price effect the cost of production, sale and also the value of assets. It means that the ratio will be meaningful for comparison, if the prices do not change.

5. Ignoring qualitative factors:-

Ratio analysis is the quantitative measurement of the performance of the business. It ignores qualitative aspect of the firm, how so ever important it may be. It shoes that ratio is only a one sided approach to measure the efficiency of the business.

6. Personal bias:-

Ratios are only means of financial analysis and an end in it self. The ratio has to be interpreted and different people may interpret the same ratio in different ways.

7. Window dressing:-

Financial statements can easily be window dressed to present a better picture of its financial and profitability position to outsiders. Hence, one has to be very carefully in making a decision from ratios calculated from such financial statements.

8. Absolute figures distortive:-

Ratios devoid of absolute figures may prove distortive, as ratio analysis is primarily a quantitative analysis and not a qualitative analysis.

1.1.3 Classification of ratios:

Several ratios, calculated from the accounting data can be grouped into various classes according to financial activity or function to be evaluated. Mangement is interested in evaluating every aspect of the firm's performance. They have to protect the interests of all parties and see that the firm grows profitably.In view of thee reqirement of the various users of ratios, ratios are classified into following four important categories:

- **Liquidity ratios** - short-term financial strength
- **Leverage ratios** - long-term financial strength
- **Profitability ratios** - long term earning power
- **Activity ratios** - term of investment utilization

Liquidity ratios measure the firm's ability to meet current obligations;
Leverage ratios show the proportions of debt and equity in financing the firm's assets;
Activity ratios reflect the firm's efficiency in utilizing its assets; and
Profitability ratios measure overall performance and effectiveness of the firm

LIQUIDITY RATIOS:

It is extremely essential for a firm to be able to meet the obligations as they become due**. Liquidity ratios** measure the ability of the firm to meet its current obligations (liabilities). The liquidity ratios reflect the short-term financial strength and solvency of a firm. In fact, analysis of liquidity needs the preparation of cash budgets and cash and funds flow statements; but liquidity ratios, by establishing a relationship between cash and other current assets to current obligations, provide a quick measure of liquidity. A firm should ensure that it does not suffer from lack of liquidity, and also that it does not have excess liquidity. The failure of a company to meet its obligations due to lack of sufficient liquidity, will result in a poor credit worthiness, loss of credit worthiness, loss of creditors' confidence, or even in legal tangles resulting in the closure of the company. A very high degree of liquidity is also bad; idle assets earn nothing. The firm's funds will be unnecessarily tied up in current assets. Therefore, it is necessary to strike a proper balance between high liquidity and lack of liquidity.

The most common ratios which indicate the extent of liquidity are lack of it, are:

(i) Current ratio

(ii) Quick ratio.

(iii)Cash ratio and

(iv)Networking capital ratio.

1. Current Ratio:

Current ratio is calculated by dividing current assets by current liabilities.

$$\text{Current Ratio} = \frac{\text{Current assets}}{\text{Current Liabilities}}$$

Current assets include cash and other assets that can be converted into cash within in a year, such as marketable securities, debtors and inventories. Prepaid expenses are also included in the current assets as they represent the payments that will not be made by the firm in the future. All obligations maturing within a year are included in the current liabilities. Current liabilities include creditors, bills payable, accrued expenses, short-term bank loan, income tax, liability and long-term debt maturing in the current year.

The current ratio is a measure of firm's **short-term solvency.** It indicates the availability of current assets in rupees for every one rupee of current liability. A ratio of greater than one means that the firm has more current assets than current claims against them Current liabilities.

2. Quick Ratio:

Quick ratio also called **Acid-test ratio**, establishes a relationship between quick, or liquid, assets and current liabilities. An asset is a liquid if it can be converted into cash immediately or reasonably soon without a loss of value. Cash is the most liquid asset. Other assets that are considered to be relatively liquid and included in quick assets are debtors and bills receivables and marketable securities (temporary quoted investments). Inventories are considered to be less liquid. Inventories normally require some time for realizing into cash; their value also has a tendency to fluctuate. The quick ratio is found out by dividing quick assets by current liabilities.

(Quick Assets=Current Assets=Inventories)

$$\text{Quick Ratio} = \frac{\text{Quick Assets}}{\text{Current Liabilities}}$$

3. Cash Ratio:

Since cash is the most liquid asset, it may be examined cash ratio and its equivalent to current liabilities. Trade investment or marketable securities are equivalent of cash; therefore, they may be included in the computation of cash ratio:

$$\text{Cash Ratio} = \frac{\text{Cash + Marketable Securities}}{\text{Current Liabilities}}$$

4. Interval Measure

Yet another, ratio, which assesses a firm's ability to meet its regular cash expenses, is the interval measure. Interval measure relates liquid assets to average daily operating cash outflows. The daily operating expenses will be equal to cost of goods sold plus selling, administrative and general expenses less depreciation (and other non cash expenditures divided by number of days in a year (say 360).

$$\text{Interval measure} = \frac{\text{Current assets - inventory}}{}$$

Average daily operating expenses

5. Net Working Capital Ratio

The difference between current assets and current liabilities excluding short – term bank borrowings in called net working capital (NWC) or net current assets (NCA). NWC is sometimes used as a measure of firm's liquidity. It is considered that between two firm's the one having larger NWC as the greater ability to meet its current obligations. This is not necessarily so; the measure of liquidity is a relationship, rather than the difference between current assets and current liabilities. NWC, however, measures the firm's potential reservoir of funds. It can be related to net assets (or capital employed):

$$\text{NWC ratio} = \frac{\text{Net working capital (NWC)}}{\text{(Net assets (or) Capital Employed)}}$$

6. LEVERAGE RATIO:

The short-term creditors, like bankers and suppliers of raw materials, are more concerned with the firm's current debt-paying ability. On other hand, ling-term creditors like debenture holders, financial institutions etc are more concerned with the firm's long-term financial strength. In fact a firm should

have a strong short as well as long-term financial strength. In fact a firm should have a strong short-as well as long-term financial position. To judge the long-term financial position of the firm, **financial leverage**, or **capital structure ratios** are calculated. These ratios indicate mix of funds provided by owners and lenders. As a general rule there should be an appropriate mix of debt and owners equity in financing the firm's assets.

Leverage ratios may be calculated from the balance sheet items to determine the proportion of debt in total financing. Many variations of these ratios exist; but all these ratios indicate the same thing the extent to which the firms has relied on debt in financing assets. Leverage ratios are also computed form the profit and loss items by determining the extent to which operating profits are sufficient to cover the fixed charges.

7. DEBT RATIO:

Several debt ratios may be used to analyse the long term solvency of the firm The firm may be interested in knowing the proportion of the interest bearing debt (also called as funded debt) in the capital structure. It may, therefore, compute **debt ratio** by dividing total debt by capital employed or net assets. Capital employed will include total debt and net worth

$$\text{Debt ratio} = \frac{\text{Total debt (TD)}}{\text{Total debt (TD)} + \text{Net worth (NW)}}$$

$$\text{Debt Ratio} = \frac{\text{Total debt (TD)}}{\text{Capital employed (CE)}}$$

Debt-Equity Ratio:

The relationship describing the lenders contribution for each rupee of the owners' contribution is called debt-equity (DE) ratio is directly computed by dividing total debt by net worth:

$$\text{Debt - equity ratio} = \frac{\text{Total debt (TD)}}{\text{Net worth (NW)}}$$

8. Capital Employed to Net worth Ratio

It is another way of expressing the basic relationship between debt and equity. One may want to know: How much funds are being contributed together by lenders and owners for each rupee of owners' contribution ? Calculating the ratio of capital employed or net assets to net worth can find this out:

$$\text{Capital employed to net worth Ratio} = \frac{\text{Capital employed (CE)}}{\text{Net worth (NW)}}$$

COVERAGE RATIO:

Interest Coverage Ratio:

Debt ratios described above are static in nature, and fail to indicate the firm's ability to meet interest (and other fixed charges) obligations. The **interest coverage ratio** or the **times interest-earned** is used to test the firm's debt-

servicing capacity. the interest coverage ratio is computed by dividing earnings before interest and taxes(EBIT)by interest charges:

$$\text{Interest coverage ratio} = \frac{\text{EBIT}}{\text{Interest}}$$

ACTIVITY RATIOS:

Funds of creditors and owners are interested in various assets to generate sales and profits. The better the management of assets, the larger the amount of sales. Activity ratios are employed to evaluate the efficiency with which the firm manages and utilizes its assets. These ratios are also called turnover ratios because they indicate the speed with which assets are being converted or turned over into sales. Activity ratios, thus, involves a relationship between sales and assets. A proper balance between sales and assets generally

reflects that assets are managed well. Several activity ratios are calculated to judge the effectiveness of asset utilization.

10. Inventory Turnover Ratio:

Inventory turnover indicates the efficiency of the firm in producing and selling its product. It is calculated by dividing the cost of goods sold by the average inventory:

$$\text{Inventory turnover Ratio} = \frac{\text{Cost of goods sold}}{\text{Average inventory}}$$

(OR)

$$\frac{\text{Net sales}}{\text{Inventory}}$$

The average inventory is the average of opening and closing balances of inventory. The cost of goods sold may not be available so we can compute inventory turnover as sales divided by inventory In a manufacturing company inventory of finished goods is used to calculate inventory turnover. This inventory turnover ratio indicates whether investment in inventory is efficiently utilized or not. It, therefore, explains whether investment in inventory in within proper limits or not. It is calculated by dividing the cost of goods sales by the average inventory.

The inventory turnover shows how rapidly the inventory in turning into receivable through sales.

A high inventory turnover is indicative of good inventory management.

A low inventory turnover implies excessive inventory levels than warranted by production and sales activities or a slow moving or obsolete inventory.

Inventory Conversion Period:

It may also be of interest to see the average time taken for clearing the stock. This can be possible by calculating the inventory conversion period. This period is calculated by dividing the no. of days by inventory turnover ratio:

$$\text{Inventory turnover ratio} = \frac{\text{No. of days in the year}}{\text{Inventory turnover ratio}}$$

11. Debtors (Accounts Receivable) Turnover Ratio:

A firm sells goods for cash and credit. Credit is used as a marketing tool by number of companies. When the firm extends credits to its customers, debtors (accounts receivable) are created in the firm's accounts. Debtors are convertible into cash over a short period and, therefore, are included in current assets. The liquidity position of the firm depends on the quality of debtors to a great extent. Financial analyst applies these ratios to judge the quality or liquidity of debtors (a) Debtors Turnover Ratio (b) Debtors Collection Period Debtors' turnover is found out by dividing credit sales by average debtors:

$$\text{Debtors turnover} = \frac{\text{Credit sales}}{\text{Debtors}}$$

Debtors' turnover indicates the number of times debtors' turnover each year generally, the higher the value of debtors' turnover, the more efficient is the management of credit.

To outside analyst, information about credit sales and opening and closing balances of debtors may not be available. Therefore, debtors' turnover can be calculated by dividing Total sales by the year-end balances of debtors:

Sales

$$\text{Debtors turnover} = \frac{\quad}{\text{Debtors}}$$

Average Collection Period:

Average Collection Period is used in determining the collectibles of debtors and the efficiency of collection efforts. In ascertaining the firms comparative strength and advantage relative to its credit policy and performance

The average number of days for which the debtors remain outstanding is called the Average Collection Period. The Average Collection Period measures the quality of the debtors since it is indicated the speed of their collection.

$$\text{Average Collection Period} = \frac{360}{\text{Debtors Turnover Ratio}}$$

[or]

$$= \frac{\text{Debtors}}{\text{Sales}} \times 360$$

13. Net Assets Turnover Ratio:

Net assets turnover can be computed simply by dividing sales by net sales (NA)

$$\text{Net Assets Turnover} = \frac{\text{Sales}}{\text{Net assets}}$$

It may be recalled that net assets (NA) include net fixed assets (NFA) and net current assets (NCA), that is, current assets (CA) minus current liabilities (CL). Since net assets equal capital employed, net assets turnover may also be called capital employed, net assets turnover may also be called **capital employed turnover.**

Total Assets Turnover:

Some analysts like to compute the **total assets turnover** in addition to or instead of the net assets turnover. This ratio shows the firms ability in generating sales from all financial resources committed to total assets.

Thus:

$$\boxed{\text{Total Assets Turnover} = \frac{\text{Sales}}{\text{Total assets}}}$$

Total Assets (TA) include net fixed Asses (NFA) and current assets (CA) (TA=NFA+CA)

15. Current Assets Turnover

A firm may also like to relate current assets (or net working gap) to sales. It may thus complete networking capital turnover by dividing sales by net working capital.

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

16. Fixed Assets Turnover:

The firm to know its efficiency of utilizing fixed assets separately. This ratio measures sales in rupee of investment in fixed assets. A high ratio indicates a high degree of utilization in assets and low ratio reflects the inefficient use of assets

$$\text{Fixed Assets Turnover} = \frac{\text{Sales}}{\text{Fixed Assets}}$$

17. Working Capital Turnover Ratio:

Working Capital of a concern is directly related to sales. The current assets like debtors, bills receivable, cash, and stock etc. change with the increase or decrease in sales. The Working Capital is taken as:

Working Capital = Current Assets – Current Liabilities

This Ratio indicates the velocity of the utilization of net working capital. This Ratio indicates the number of times the working capital is turned over in the course of a year. This Ratio measures the efficiency with which the working capital is being used by a firm. A higher ratio indicates the efficient utilization of working capital and the low ratio indicates inefficient utilization of working capital.

$$\text{Working capital turnover} = \frac{\text{Sales}}{\text{Net working capital}}$$

PROFITABILITY RATIOS

A company should earn profits to survive and grow over a long period of time. Profits are essential, but it world be wrong to assume that every action initiated by management of a company should be aimed at maximizing profits, irrespective of concerns for customers, employees, suppliers or social consequences. It is unfortunate that the word profit is looked upon as a term of abuse since some firms always want to maximize profits ate the cost of employees, customers and society. Except such infrequent cases, it is a fact that sufficient profits must be able to obtain funds from investors for expansion and growth and to contribute towards the social overheads for welfare of the society.

Profit is the difference between revenues and expenses over a period of time (usually one year). 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 also interested in the profitability of the firm. Creditors want to get interest and repayment of principal regularly. Owners want to get a required rate of return on their investment. This is possible only when the company earns enough profits.

Generally, two major types of profitability ratios are calculated:

- Profitability in relation to sales.
- Profitability in relation to investment.

16. Net Profit Margin

Net profit is obtained when operating expenses; interest and taxes are subtracted form the gross profit margin ratio is measured by dividing profit after tax by sales:

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

Net profit ratio establishes a relationship between net profit and sales and indicates and management's in manufacturing, administrating and selling the products. This ratio is the overall measure of the firm's ability to turn each rupee sales into net profit. If the net margin is inadequate the firm will fail to achieve satisfactory return on shareholders' funds. This ratio also indicates the firm's capacity to withstand adverse economic conditions.A firm with high net margin ratio would be advantageous position to survive in the face of falling prices, selling prices, cost of production .

17. Net Margin Based on NOPAT

The profit after tax (PAT) figure excludes interest on borrowing. Interest is tax deducts able, and therefore, a firm that pays more interest pays less tax. Tax saved on account of payment of interest is called interest tax shield. Thus the conventional measure of net profit margin-PAT to sales ratio- is affected by firm's financial policy. It can mislead if we compare two firms with different debt ratios. For a true comparison of the operating performance of firms, we must ignore the effect of financial leverage, viz., the measure of profits should ignore interest and its tax effect. Thus net profit margin (for evaluating operating performance) may be computed in the following way:

$$\text{Net profit margin} = \frac{\text{EBIT (1-T)}}{\text{Sales}} = \frac{\text{NOPAT}}{\text{Sales}}$$

18. Operating Expense Ratio:

The operating expense ratio explains the changes in the profit margin (EBIT to sales) ratio. This ratio is computed by dividing operating expenses *viz.*, cost of goods sold plus selling expense and general and administrative expenses (excluding interest) by sales.

$$\text{Operating expenses ratio} = \frac{\text{Operating expenses}}{\text{Sales}}$$

19. Return on Investment (ROI)

The term investment may refer to total assets or net assets. The funds employed in net assets in known as capital employed. Net assets equal net fixed assets plus current assets minus current liabilities excluding bank loans. Alternatively, capital employed is equal to net worth plus total debt.

The conventional approach of calculating return of investment (ROI) is to divide PAT by investments. Investment represents pool of funds supplied by shareholders and lenders, while PAT represent residue income of shareholders; therefore, it is conceptually unsound to use PAT in the calculation of ROI. Also, as discussed earlier, PAT is affected by capital structure. It is, therefore, more appropriate to use one of the following measures of ROI for comparing the operating efficiency of firms:

$$ROI = ROTA = \frac{BIT\ (1\text{-}T)}{Total\ assets} = \frac{EBIT\ (1\text{-}T)}{TA}$$

$$ROI = RONA = \frac{EBIT\ (1\text{-}T)}{Net\ assets} = \frac{EBIT\ (1\text{-}T)}{NA}$$

Since taxes are not controllable by management, and since firm's opportunities for availing tax incentives differ, it may be more prudent to use before tax to measure ROI. Many companies use EBITDA (Earnings before Depreciation, Interest, Tax and Amortization) instead of EBIT to calculate ROI. Thus the ratio is:

$$ROI = \frac{EBIT}{}$$

Total Assets (TA)

20. Return on Equity (ROE)

Common or ordinary shareholders are entitled to the residual profits. The rate of dividend is not fixed; the earnings may be distributed to shareholders or retained in the business. Nevertheless, the net profits after taxes represent their return. A return on shareholders equity is calculated to see the profitability of owners' investment. The shareholders equity or net worth will include paid-up share capital, share premium, and reserves and surplus less accumulated losses. Net worth also be found by subtracting total liabilities from total assets. The return on equity is net profit after taxes divided by shareholders equity, which is given by net worth:

$$ROE = \frac{\text{Profit after taxes}}{\text{Net worth (Equity)}} = \frac{PAT}{NW}$$

ROE indicates how well the firm has used the resources of owners. In fact, this ratio is one of the most important relationships in financial analysis. The earning of a satisfactory return is the most desirable objective of business. The ratio of net profit to owners' equity reflects the extent to which this objective has been accomplished. This ratio is, thus, of great interest to the present as well as the prospective Shareholders and also of great concern to management, which has the responsibility of maximizing the owners' welfare.

The return on owners' equity of the company should be compared with the ratios of other similar companies and the industry average. This will reveal the relative performance and strength of the company in attracting future investments.

21. Earnings per Share (EPS)

The profitability of the shareholders investments can also be measured in many other ways. One such measure is to calculate the earnings per share. The earnings per share (EPS) are calculated by dividing the profit after taxes by the total number of ordinary shares outstanding.

$$EPS = \frac{\text{Profit after tax}}{\text{Number of share outstanding}}$$

22. Dividends per Share (DPS or DIV)

The net profits after taxes belong to shareholders. But the income, which they will receive, is the amount of earnings distributed as cash dividends. Therefore, a large number of present and potential investors may be interested in DPS, rather than EPS. DPS is the earnings distributed to ordinary shareholders dividend by the number of ordinary shares outstanding.

$$DPS = \frac{\text{Earnings paid to shareholders (dividends)}}{\text{Number of ordinary shares outstanding}}$$

23. Dividend – Payout Ratio

The Dividend – payout Ratio or simply payout ratio is DPS (or total equity dividends) divided by the EPS (or profit after tax):

$$\text{Dividend Payout Ratio} = \frac{\text{Equity dividends}}{}$$

Profit after tax

$$= \frac{\text{Dividends per share}}{\text{Earnings per share}} = \frac{\text{DPS}}{\text{EPS}}$$

1.2 RESEARCH METHODOLOGY

1.2.1Need for the study:

The problems, which are common to most of the public sectors under taking, are materials scarcity. Capacity utilization and mainly working capital requirements and Eswar rubber Pvt.Ltd. are no exception. Thus the importance of the study reveals as to how efficiently the working cap[ital has been used so far in the organization.

1.2.2 SCOPE OF THE STUDY*:*

The scope of the study is limited to collecting financial data published in the annual reports of the company every year. The analysis is done to suggest the possible solutions. The study is carried out for 5years(2003-07).

1.2.3 Objectives of the study:

- To examine the financial performance of the **Vijai Electricals Ltd**. for the period of 2003 to 2007.
- To analyses interpret and to suggest the operational efficiency of the **Vijai Electricals Ltd.** by comparing the balance sheet& profit & loss A\c

- To critically analyses the financial performance of the **Vijai Electricals Ltd.** With Help of the ratios.

1.2.4 Data sources:

The study is based on secondary data. However the primary data is also collected to fill the gap in the information..

- Primary data will be through regular interaction with the officials of **Vijai Electricals Ltd.**.
- Secondary data collected from annual reports and also existing manuals and like company records balance sheet and necessary records.

1.2.5 LIMITATIONS:

- The study is based on only secondary data.
- The period of study was 2003-07 financial years only.

Profile

2. PROFILE

VIJAI ELECTRICALS LIMITED

HYDERABAD, INDIA

COMPANY PROFILE

The company was promoted by Shri D J Ramesh, a first generation entrepreneur and its present Chairman & Managing Director, in the year 1973 for the manufacture of Distribution and Power Transformers. Shri D J Ramesh holds a Master degree in Electrical Engineering specialising in Transformer design. His professional approach to organisational issues, remarkable business acumen coupled with ability to forecast business scenario ahead, the strong determination to pursue the excellence have all been his chief characteristics of his personality that were instrumental in bringing the organisation to a stature of a global player.

Catering to the needs of Electricity Boards and Private Enterprises within the country, the company very soon became one of the leading manufacturers of Transformers in the country. Its world class design supplemented by State-of-the-art technology, established and managed professionally with robust quality systems and modern manufacturing and testing facilities, stand testimony to the repute of the company.

THE WORKS

Of the Seven most modern manufacturing plants of the Company, one is situated at Balanagar in Hyderabad, Andhra Pradesh, the first Plant of Vijai Electricals, which has the requisite outfit to cater not only to manufacture

Distribution Transformers of various ratings but also to undertake servicing. Currently this unit is being used to undertake servicing jobs.

The Plant 2 at Rudraram, Medak District, Andhra Pradesh has a huge set of wide ranging facilities across the various disciplines with capacity to meet the ever growing needs of the customers in terms of their exacting design specification and stringent quality requirements. While the major portions of operations centre round the Distribution and Power Transformers of various ratings upto 10 MVA, the plant has also the facility to manufacture Cast Resin Dry Type Transformers, a product being produced only by a few renowned manufacturers in the country.

The Plant 3 built exclusively for the manufacture of single and three phase Energy Efficient Amorphous Metal Distribution Transformers of Conventional and Completely Self Protected (CSP) types, stands out as a distinguishable manufacturing Plant with the most modern equipment, hi-tech facilities and practices. The plant engaged in world class manufacturing practices is the only one of its kind in the country and the world outside USA.

The Plant 4 is a captive Conductor Plant catering to the needs of all the Units of the Company for all types of coated and covered copper and aluminum conductors. Continuously Transposed Conductors (CTC) manufacturing facility is yet another adjunct to the Plant and has the capacity to cater to the needs of the giant users in the country.

The other Units are backward integration projects catering to supply of material to the company and also a Packing wood unit of export quality and standards.

PRODUCTS

The product range of VEL covers the entire gamut of Transformers, some of the major ones being:

- Amorphous Metal Distribution Transformers upto 1000 KVA, Single phase and Three phase.
- Single Phase Oil Filled Transformers upto 3333 KVA, 36 kV Class.
- Three Phase Oil Filled Transformers upto 10000 KVA, 66 kV Class.
- Single Phase Dry Type Cast Resin Transformers upto 1667 KVA, 36 kV Class.
- Three Phase Dry Type Cast Resin Transformers upto 8000 KVA, 36 kV *Class.
- Completely Self-Protected Transformers upto 500 KVA.
- Double Paper Covered, Multiple Paper Covered, Super Enameled, Fiber Glass Covered Copper and Aluminum Conductors.
- Continuously Transposed Conductors (CTC)
- Monobloc Pump Sets.
- Auto Transformers.
- CLR & CQR Breakers

TECHNICAL KNOW HOW

The company has the most modern technical know how absorbed from world leaders and some of it indigenously developed over a period of 3 decades since the inception of the company. Following is the summary of technical know how absorbed from leading companies:

Single Phase Wound Core Distribution Transformers	-	M/s. Westinghouse Corporation, USA
CLR Breakers.	-	M/s. Westinghouse Corporation, USA
Amorphous Metal Core Distribution Transformers	-	M/s. Daihen Corporation, Japan

GROUP COMPANIES

SAMRAKSHANA ELECTRICALS LIMITED

Manufactures CSP Circuit Breakers for use in Distribution Transformers and meets the requirements of the Company, domestic needs and exports to USA. It also manufactures Insulated Copper and Aluminum conductors, Distribution Transformers and High Efficiency Single Phase Monobloc Pump Sets for the Agriculture Sector of the country.

GROWTH

In its manifold stages of growth, the early breakthrough was made when the company bagged a massive order for the supply of Distribution

Transformers from Andhra Pradesh State Electricity Board. Following this, newer approaches to achieve higher standards of Product Quality, enhanced Productivity were adopted in quick succession with bright prospects for higher growth and progress. Most modern additional facilities were added for design and manufacture, supported by well-established systems and Hi-tech practices in all the functions across the entire organisation, and the performance reached newer heights.

The Company embarked on a new venture to manufacture Single Phase Wound Core Transformers and today the company has admirably credited itself with being the sole manufacturer in the country, carving out a niche for itself in the design and manufacture of Single Phase Wound Core Transformers in the world.

At this juncture, the company witnessed a climate of highly motivated and empowered work force willing to give further impetus to the growth and this triggered off a major expansion, culminating in the establishment of the exclusive Amorphous Metal Transformers Plant comprising of most modern integrated manufacturing facilities.

The subsequent phase witnessed the beginning of an era of export with the company executing the first-ever export order which rapidly enhanced culminating in a newer height with a whopping export turnover of US $ 29 million during the year 1996-97. Efforts to augment this share in the world market are topmost in the agenda of the Company's Business Plan.

HUMAN RESOURCE

Today the organisation draws its strength from the highly motivated workforce which consists of qualified, trained and experienced Managers,

Engineers, Supervisors and Workmen, ever willing to meet the exacting and changing demands of the enlightened customers, and wholly committed to working towards the company's vision of leadership in the Transformer Industry.

While the Workmen and Supervisors undergo the induction training, the Graduate Engineers undergo a vigorous one-year training programme to gain skill, knowledge and competence, in order that they can measure upto the challenging tasks and assume higher responsibilities.

For achieving Managerial excellence, individuals identified for taking up vital Managerial position undergo long-term training in the reputed Premier Management Institutes of the country.

Employees at various levels and from diverse functions are exposed to various Technical and Behavioral training programmes based on the identified needs for self-development and for the enhancement of organisational effectiveness.

QUALITY

The Company has well-established Quality systems to ensure quality at all stages and in all functions in a climate of Total Quality Work Culture, where participation by everyone reigns supreme. Quality is a watchword across the

entire organisation and has proved to be a corner stone for the Company's sustained growth and success.

The three major Plants of the Company have their independent ISO 9001 – 2000 certification and have been successfully passing through the certification of Surveillance and renewal audits since the year 1994. Achieving Customer Satisfaction is the quality policy of the company and to this end the company has been adopting progressive measures visualising quality as a key strategy to stay competitive in the business.

LANDMARKS

Shining Examples of Exceptional Entrepreneurial Spirit

The name Vijai Electricals Ltd. has been associated with a large number of significant accomplishments:

1973	Establishment of the Organization
1983	Introduction of CSP Transformers in the country

1987	Technical Collaboration with M/s Westinghouse Corporation, USA for Single Phase Wound Core Transformers
1988	Commencement of Cast Resin Transformers Production.
1989	Commencement of Exports. Technical Collaboration with M/s Daihen Corporation, Japan for manufacture of AMDT's.
1994	Recognition by Government of India as "Export House". Manufacture of Earthquake Resistant Transformers for the first time in India. ISO 9001 Certification
1995	Secured an export order worth US $ 9.12 Million from Philippines, the largest ever-single export order of Transformer in the country.
1996	Commencement of Production for Amorphous Metal Distribution Transformers in the exclusive AMDT Plant
1997	Recognition by Government of India as "Trading House"
1998	Successful Type testing of 1000 KVA Amorphous Metal Distribution Transformers.
1999	Secured 'World Bank' order worth about US $ 12 Million.
2000	Obtained US patent for 'Continuous Annealing Furnace' in Amorphous Metal Transformer Plant
2001	Exported a consignment of Rs 1.1 Million to Germany Successful Type Testing for vendor registration in Japan
2002	Exports cross US $ 100 million Entry into turnkey electrification & substation projects.

	Successful completion of Arc Proof Test on 30 kVA Single-Phase Transformers as per JIS (Japanese Standards) for the first time in India.
2003	ISO 9001 – 2000 series Certification. Commissioning of exclusive and complete Corrugation Line.
2004	Records highest ever turnover of Rs.294 crores in the FY 2003-04. Technical Collaboration with Daihen Corp. Japan for Large Power Transformers up to 500 MVA, 500 KV Class. Commissioning of Porcelain Plant. Commissioning of Radiator Plant. Commissioning of Robotic Welding.
2005	Commissioning of Plasma Arc Cutting facilities. Accreditation to all Testing laboratories viz., Transformer Testing Laboratories Units- 02 & 03, Conductor Testing Laboratory – Unit-04 and Transformer Oil Testing laboratory in Unit -2, from National Accreditation Board for Testing and Calibration Laboratories (NABL).
2006	Incorporation of Brazilian Subsidiary of Vijai Electricals Ltd. India.
2007	Incorporation of the Mexican wing of Vijai Electricals Ltd. India. Successful SC testing of the first 50 MVA Transformers produced by the EHV wing in the first attempt.

THE AWARDS

The Company was quick not only to sense the emerging trends in technology world over, but alongside played consistently a significant role in experimenting, innovating and pioneering newer concepts. Energy Saving and Cost Effectiveness became the twin principles of the Company's mission and bearing evidence to this committed effort, Vijai Electricals introduced Energy-Efficient, Cost-Effective Amorphous Metal Transformers, the first-ever produced in the country.

The Organisation is on a perpetual campaign advocating the use of Amorphous Metal Transformers, tirelessly driving home the message of the imperative and the urgent need for saving of Energy to meet the ever-growing demands of Power in the country.

The successful journey performed with dynamism, vision and indefatigable energy in the path of excellence over a period of two and a half decades, has opened up new horizons for a prosperous and victorious entry into the new millennium. Crowning all these efforts, the Company has received several Awards, Trophies and Shields in recognition of its performance and leading roles in the domains of Domestic and Export markets and to quote a significant few,

In Recognition of Outstanding Excellence:

- Udyog Patra Award from Vice President of India in the year 1982.
- Udyog Ratna Award from the then Union Minister of Energy, Govt. of India in the year 1987.

- Certificate of Merit from EEPC for outstanding Export for the years 1992, 1993 and 1994.
- All India Award for Export Excellence by EEPC for the years 1994-95, 1995-96 and 1996-97.
- Rolling Trophies for Export by Confederation of Indian Industries (CII), continually for four years beginning from 1994 to 1997.
- Recognized as 'Export House' in 1993-94 by the Govt. of India.
- Recognised as 'Trading House' in 1997-98 by the Government of India
- EEPC Regional Award for the outstanding Export Performance during the year 1999-2000 (Under the Category Electric Power Machinery, Switchgear and Control Gear).
- National Citizen's Award for the year 1998 received by our Chairman for outstanding contribution in the field of Industry.
- Udyog Jyoti Award from the then Minister of Labor & Employment, Govt. of India. in the year 2000.
- Award for the Best Export Effort in the State (Surana Udyog Silver Rolling Trophy) during 2001-02 from the FAPCII.
- ITID (Institute of Trade and Industrial Development) Quality Excellence Award 2002 awarded in recognition of Quality Product (Amorphous Metal Transformers) by ITID, New Delhi.
- 4th Best Exporter Award for the year 2001-2002 from Container Corporation of India, Ministry of Railways, Govt. of India.
- Bharat Ratna Dr. M.Visvesvaraya Industrial Award 2003 for Best Import Substitution Effort from All India Manufacturers Organization, A.P.
- EEPC Regional Award for the outstanding Export Performance during the year 2000-2001.
- EEPC Regional Award for the outstanding Export Performance (Continuous excellence) during the year 2001-2002.

- EEPC Regional Award for the outstanding Export Performance (New / Difficult Market) during the year 2002-2003.
- EEPC Regional Award for the outstanding Export Performance during the year 2005-2006.

CUSTOMER SERVICE

The Organisation has an exclusive Customer Service Wing manned by a complement of highly skilled Engineers and Technicians to provide prompt and efficient service to the customers.

Periodic analysis of the feedback is made and appropriate corrective and preventive measures are taken to ensure not only quality but also reliability, downtime reduction and life cycle extension. The staff remains in constant touch with the customers and assures Total Customer Service through interaction, prompt service and effective feedback system.

CUSTOMERS

The Company enjoys the proud privilege of being a well known supplier to all State Electricity Boards in the country and Electricity Generating companies and number of Private Industries. With its accent on export, it has customers in a number of countries across the world and the company has plans to foray into Europe and North America for a higher Global Market share.
The customers from within the country include the following

DOMESTIC

All State Electricity Boards in India, in particular the APTRANSCO, KEB, GRIDCO, MSEB, etc.

Other Electric Utilities and Industrial Houses include:

- M/s A-Z Consultants.
- Ahmedabad Electricity Company Ltd.
- Assam State Electricity Board.
- Bombay Suburban Electric Supply Limited, Mumbai
- Bombay Electric Supply and Transport Undertaking, Mumbai
- Bihar State Electricity Board
- Delhi Vidyut Board
- Department of Atomic Energy, Mumbai
- Gridco, Bhubaneshwar
- Govt. of Jammu and Kashmir
- Gujarat Electricity Board
- Haryana State Electricity Board
- Himachal Pradesh State Electricity Board
- Indian Railways
- Hubli Electricity Supply Company Limited.
- Kalpataru Power Transmission Limited.
- Kerala State Electricity Board
- Larsen & Toubro Ltd.
- Madhya Pradesh Electricity Board
- Maharashtra DISCOM
- New Delhi Municipal Council
- Nuclear Power Corporation

- RajasthanDISCOM
  a) AVVNL b) JVVNL
- Siemens Ltd.
- Tamil Nadu Electricity Board.
- Uttar Pradesh State Electricity Board.
- Power Grid Corporation of India Ltd.
- National Thermal Power Corporation.

EXPORT

Ever since Vijai Electricals entered the export market in 1989, it has established a significant presence in several export markets like Philippines, Bangladesh and UAE. The company has also covered other countries like Brazil, Ghana and Nepal. Some of the countries have placed repeat orders with the company due to performance of the product. It emerged as the largest exporter of Transformers in the country during 1996-97 when its export turnover reached Rs 94.93 Crores.

During 2001-02 it also entered into the European market with an initial consignment of Rs 1.1 million exported to Germany.

The customers from abroad include the following

- Rural Electrification Board, Bangladesh
- Fasons Metal Industries, Bangladesh
- General Electric Manufacturing Company, Bangladesh
- Sena Kalyan Sangstha, Bangladesh
- National Electrification Administration, Philippines
- Dubai Electricity and Water Authority, Dubai
- Electricity Authority, Cyprus
- Electricity Corporation of Ghana, Ghana
- Electro Paulo Electricidado, Saopaulo, Brazil
- Ho Chi Minh City Power Corporation, Vietnam

- Ministry of Electricity and Water, Oman
- Nepal Electricity Authority, Nepal
- Water and Electricity Department, Al Ain, UAE
- WESCOSA, Saudi Arabia
- Zimbabwe Electricity Supply Authority, Zimbabwe.
- M&C, Germany
- Schneider Corporation – U.K.

HIGHLIGHTS OF THE FINANCIAL YEAR 2003-04:

- Recorded highest ever gross turnover of Rs.293 crores.
- Secured single largest order ever in the distribution transformer segment in our country from Gujarat Electricity Board (GEB) towards supply of Amorphous Metal Distribution Transformer (AMDTs) valuing Rs.170 crores.
- Executed prestigious order valuing Rs.18 crores from Iraq, with unique product specifications, in a record time of 45 days.
- Entered into strategic partnering agreement with M/s Schneider Electric Corporation, U.K. for supply of transformers.
- Implemented Baan ERP System for effective resource planning. Went live on 30.9.2004.
- Entered into one more technical collaboration agreement with M/s Daihen Coropartion, Japan for transfer of technology.
- Turnkey Projects division expanded.

HIGHLIGHTS OF THE FINANCIAL YEAR 2004-05:

- Recorded highest ever net sales of Rs.471.68 crores during the eleven months period in a year since inception.

- Supplied 15 Nos 30 KVA transformers to JAPAN, a country known for Quality, Precision and Reliability for the products. General phenomenon is that if we are able to supply our product to Japan and Europe, it establishes that our product is acceptable in any part of the world.
- Increased the average production plant capacity from Rs.25 crores per month to Rs.50 crores per month by adding line balancing equipments in respect of Transformer Division and also with the help of BaaN production scheduler.
- Installed and commissioned two ROBOT Welding machines of FANUC, Japan make in Fabrication bay. It is first of its kind in transformer industry. This will facilitate higher productivity, quality, precision and reduction in man power.
- Strengthened backward integration facilities viz., a) Developed bushings for all Single and Three phase distribution transformers except export Power Transformers. b) Indigenously developed substitution for imported Tap switch for Schneider Jobs. c) Developed press boards for all types of transformers including introduction of Press board shearing line up to 3mm. d) Epoxy dotted paper for all ratings of transformers types in the winding section. e) Widened the fabrication capacity by introducing fabrication of Fin Type Radiators for the transformer ratings up to 10 MVA etc.
- Secured single largest order worth Rs.102.82 crores from Reliance Energy Ltd during current financial year and second largest in the transformer industry in India. First being GEB order worth Rs.170 crores secured by us only.
- Entering in a big way for supply of distribution transformers to Wind Energy Sector. M/s.Enercon has already placed order on us and expecting more orders from M/s. Enercon and M/s.Suzlon etc.

- Identified potential export market in the countries such as Ethiopia, Tanzania, Nigeria, Kenya, Zambia, Uganda etc.,
- Successfully completed one year of Baan ERP system. The company is being benefited with better production planning in terms of product mix which yields high returns and effective utilisation of machinery minimising the imbalances in capacities of machinery resulting in high output as much as Rs.600 crores per annum.
- Technical know absorption under progress from M/s. Daihen Corporation, Japan towards transfer of technology in respect of Power Transformers Design and Manufacturing.

HIGHLIGHTS OF THE FINANCIAL YEAR 2006-07:

- Project division is the first in the country to have all the ERP functionalities.
- VIJAI goes ahead in Foundation of its own exclusive Corrugation Tank Line.
- Successfully conducted Arc Proof Test for the first time in India.
- Sets up a new plant in Uttaranchal for the manufacture of Single Phase Distribution Transformers.
- Enters into Technical Collaboration with Daihen Corporation, Japan for manufacture of EHV Power Transformers up to 500 MVA, 500 KV class. This State-of-the-art manufacturing facility is located at Rudraram, near Hyderabad.

- Revenue is a whopping INR 1327 crores (US $ 330 Million) in the current financial year of 2006-07.
- Set up exclusive manufacturing facilities of Copper foils and Kraft paper.
- Fabrication facility houses hitech processes such as Plasma arc cutting and Robotic welding.
- Deploys ERP to optimise the available resources and reduce the response time to the customers.
- Exploring possibilities to venture into Wind and Hydel power projects.
- Plans for setting up Massive Service Centre across different parts of India.
- Introduces the new "Delta Core Transformers".
- Plans for setting up an exclusive manufacturing plant in Mexico for energy efficient Amorphous Metal Core Distribution Transformers.

FUTURE PLANS

The Company has embarked upon major expansion and diversification projects including Power Transformers, Medium Distribution Transformers, Bio-Mass Power Plant, and other backward integration projects to widen its customer base and capture new growth possibilities and reduce manufacturing costs and has also plans to launch newer versions of Transformers which should prove not only economical in terms of cost and energy but as all-time superior product to provide. Total Satisfaction to the end users, be they Electricity Boards, Power Generating Companies or Private Enterprises.

Export would continue to be a thrust area but with the greater accent on expanding the world market especially foraying into Europe and US.

The Company, which has an entry into Distribution System Improvement Projects, would continue to look for greener pastures to progressively capture

similar contracts of Projects, domestic as well as foreign, in the immediate future.

Review of Literature

3. Review of literature

Financial statements have two major uses in financial analysis .first, they are used to present a historical recover of the firm's financial development. Second, they are used for a course of action for the firm.

A performance financial statement is prepared for a future period. It is the financial manager's estimate of the firm's future performance.

The operation and performance of a business depends on many individuals are collective decisions that are continually made by its management team. Every one of these decisions ultimately causes a financial impact, for better or works on the condition and the periodic results of the business. In essence, the process of managing involves a series of economic choices that activates moments of financial resources connected with the business.

Some of the decisions made by management one will be the major, such as investment in a new facility, raising large amounts of debts or adding a new line of products or services. Most other decisions are part of the day to day process in which every functional area of the business is managed. The combine of effect of all decisions can be observed periodically when the performance of the business is judged through various financial statements and special analysis.

These changes have profoundly affected all our lives and it is important for corporate managers, share holders, tenders, customers and suppliers to investment and the performance of the corporations on which then relay. All who depend on a corporation for products, services, or a job must be med about their company's ability to meet their demands time and in this changing world. The growth and development of the corporate enterprises is reflected in their financial statement.

LIQUIDITY AND PROFITABILITY:

Liquidity and profitability are two important demanders in determining the soundness of an enterprise.

Liquidity means ability of a firm to meet its current obligations when they become due for payment. It has two aspects – quantitative and qualitative. Qualitative aspect implies the quantum of current assets a firm possesses irrespective of making any difference b/w various types of current assets such as inventories, cash and so on. Qualitative aspect reforms the quality of current in terms of their realization in to cash considering time dimension involved in maturing different components of current assets.

Profitability is the capacity of earning profits and due most important measure of performance of affirms. It is generally assumed that there is negative relationship b/w liquidity and profitability i.e. higher liquidity results in lower profitability and vice-versa.

The objectives of the study:

- To study the growth and development of the company.
- To study the behavior of liquidity and profitability of the companies.
- To analyze the factors determining the liquidity and profitability.
- To comparative study of selected companies on the basis of selected ratios.

Statement of the problem:

Development of industries depends on several factors such as financial personnel, technology, and quality of the product and marketing art of these. Financial aspects assume a significant role in determining the growth of industries. All of the company's operations virtually affect its need for cash. Most of these data covering operations areas are however outside the direct responsibility of the financial executives. Values top management appreciates the value of good financial executives to know the profitability and liquidity of the concern. The firm whose present operations are inherently difficult should try to makes its financial analysis to enable its management to stay on top of its working position. In this context the researcher is interested in undertaking an analysis of the financial performance of companies to examine and to understand how management of fiancé plays a crucial role of the financial performance analysis of selected companies in India has been undertaken.

Data Analysis

5. Data analysis

LIQUIDITY RATIOS:

Current Ratio:

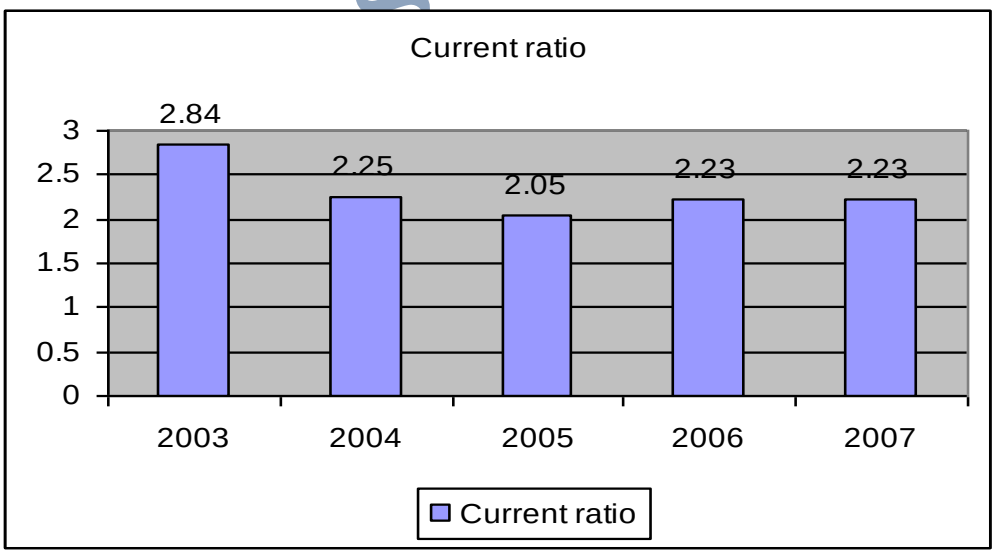
Current ratio is calculated by dividing current assets by current liabilities.

$$\text{Current Ratio} = \frac{\text{Current assets}}{\text{Current Liabilities}}$$

TABLE 4-1

Year	Current Assets	Current Liabilities	Current Ratio
2003	8133.07	2864.19	2.84
2004	14479.12	6435.97	2.25
2005	25459.61	12433.14	2.05
2006	55132.02	24722.77	2.23
2007	83467.24	37469.92	2.23

(Source: Annual Reports)



INFERANCE: In above table shown the current ratio of five years (2003-2007). The Current Ratio of Vijai Electricals Ltd. Varied from 2.84 to 2.23 with an average of 2.32 during the study period. The solvency position of Vijai Electricals Ltd. In terms of current ratio was above the standard norm volume of 2:1 for the entire period. The current Ratio in the year 2002-03 was 2.84. This came down to 2.23 in the last 2 years This shows utilization of idle funds in the company

QuickRatio:

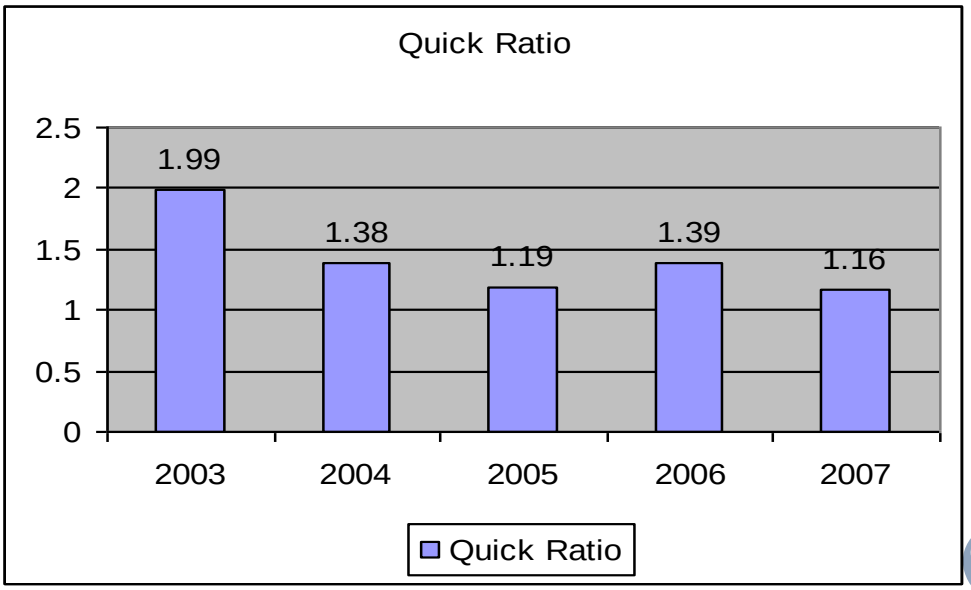
(Quick Assets=Current Assets-Inventories)

$$\text{Quick Ratio} = \frac{\text{Quick Assets}}{\text{Current Liabilities}}$$

TABLE 4-2

Year	**Quick Assets**	**Current Liabilities**	**Quick Ratio**
2003	5690.11	2864.19	1.99
2004	8902.79	6435.97	1.38
2005	14755.46	12433.14	1.19
2006	34365.82	24722.77	1.39
2007	43449.05	37469.92	1.16

(Source:AnnualReports)



INFERANCE: The Ideal Ratio is 1:1 except in the first year the firm's has a good capacity to pay of current obligations immediately and is a test of liquidity. The high Quick Ratio indicates that the firm has the ability to meet its current liabilities. The above table shows the Quick Ratio of five years (2003-2007). The Quick Ratio of Vijai Electricals Ltd.varied from 1.99 to 1.16 with an average of 1.42. It was above the standard norm of 1:1 for the entire period. It confirms that the liquidity position of this Vijai Electricals Ltd. in terms of quick ratio was more than the standard.

Cash ratio:

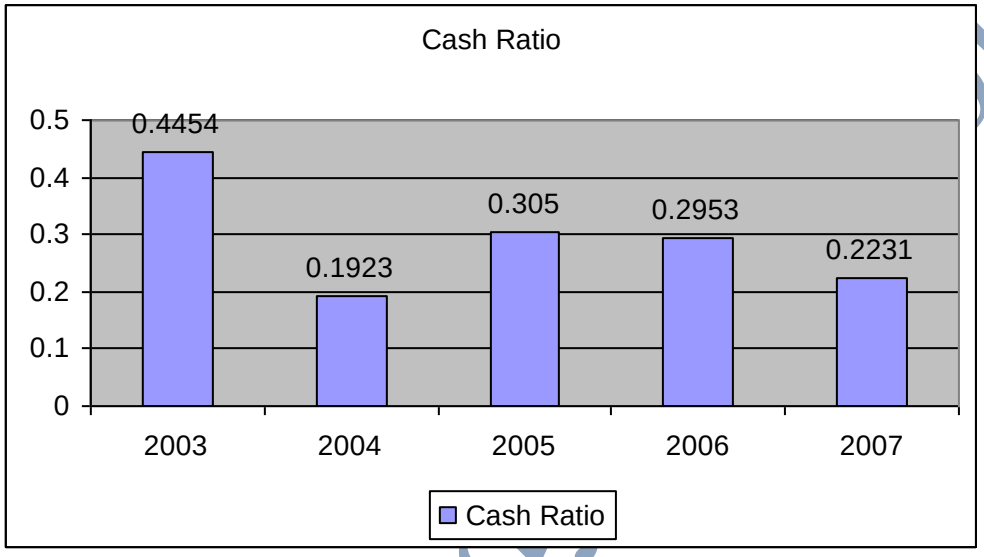
$$\text{Cash Ratio} = \frac{\text{Cash + Marketable Securities}}{\text{Current Liabilities}}$$

TABLE 4-3

Year	Cash & Bank	Current	Cash Ratio

	Balances	Liabilities	
2003	1275.66	2864.19	0.4454
2004	1237.83	6435.97	0.1923
2005	3791.87	12433.14	0.3050
2006	7301.83	24722.77	0.2953
2007	8360.79	37469.92	0.2231

(Source: Annual Reports)



INFERENCE: This Cash Ratio indicates that the capacity of the company to realize current liabilities with its liquidity position. In the above Table the Cash Position Ratio of Five Years (2003-2007). The Cash Ratio of Vijai Electricals Ltd.has has undergone many fluctuations. It started with high ratio at first by 0.45 in the year 2003; it was decreased to 0.19 by next year it was slightly increased in next year i.e.2005 to 0.30.again fallen down to 0.295 in the year 2006 and decreased to 0.22 in the year 2007.

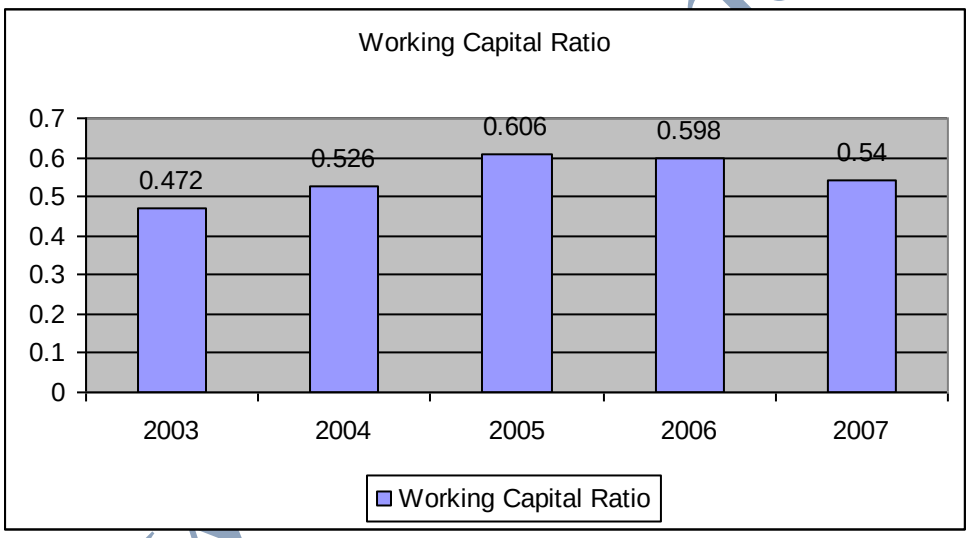
Net working capital Ratio:

$$\text{NWC ratio} = \frac{\text{Net working capital (NWC)}}{\text{(Net assets (or) Capital Employed)}}$$

TABLE 4-4

Year	Networking capital	Netassets (FA+WC)	Ratio
2003	5268.89	11163.25	0.472
2004	8061.16	15334.28	0.526
2005	13026.47	21483.56	0.606
2006	30409.23	50836.50	0.598
2007	45997.32	84789.70	0.54

(Source: Annual Reports)



INFERENCE: Net working capital has increase from 0.47 in 2003 to 0.606 in 2005 and decreased to 0.54in 2007. so this clearly shows that the firm has sufficient amount of working capital

LEVERAGE RATIOS:

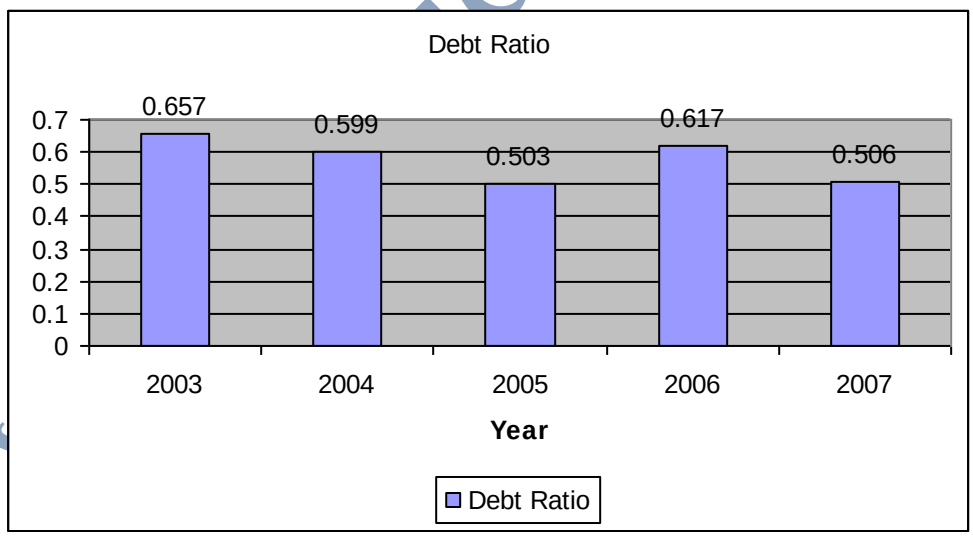
DEBT RATIO:

$$\text{Debt ratio} = \frac{\text{Total debt (TD)}}{\text{Total debt (TD) + Net worth (NW)}}$$

TABLE 4-5

year	Total debt (a)	Networth (b)	Capital employed(a+b)	ratio
2003	6925.53	3580.79	10506.32	0.657
2004	8660.89	5798.87	14459.76	0.599
2005	10334.22	10221.72	20555.94	0.503
2006	30743.59	19048.73	49792.32	0.617
2007	43395.31	42340.98	85736.29	0.506

(Source: Annual Reports)



INFERENCE: The Ratios indicates that the company was taken more debt in the first two years and they reduced their debt taken for further years. Table shows the Debt Ratio of five years (2003-2007).The Debt Ratio of Vijai Electricals Ltd. is started with 0.66 in the year 2003 and it was slightly

decreased to 0.599 in the next year and decreased during the year 2005 to 0.50 and reached 0.506 in 2007.

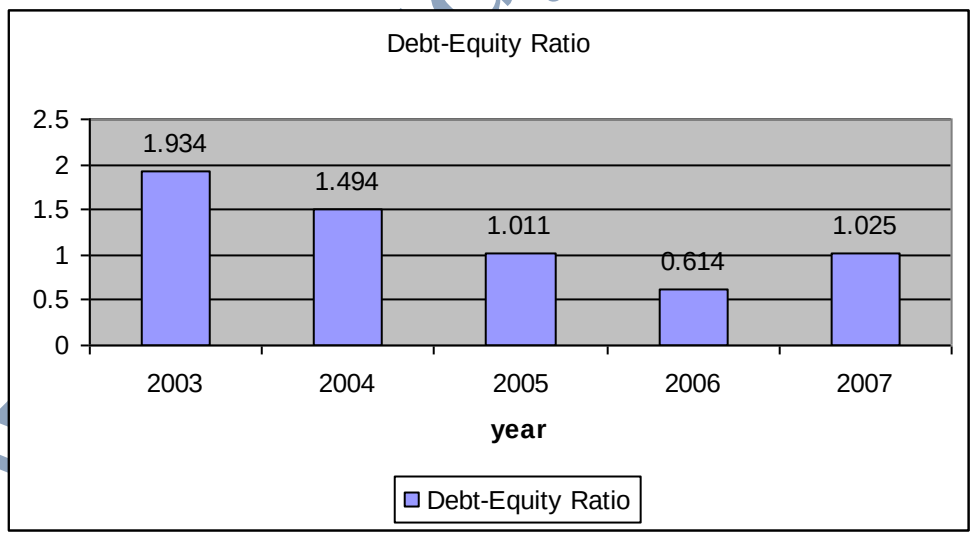
Debt – equity ratio:

$$\text{Debt – equity ratio} = \frac{\text{Total debt (TD)}}{\text{Net worth (NW)}}$$

TABLE 4-6

Year	Total debt	Networth	ratio
2003	6925.53	3580.79	1.934
2004	8660.89	5798.87	1.494
2005	10334.22	10221.72	1.011
2006	30743.59	19048.73	0.614
2007	43395.31	42340.98	1.025

(Source: Annual Reports)



INFERENCE: The standard norm for the ratio is 2:1. The actual debt-equity ratio in the above table shows, the first two years less than the stand ratio after the ratio has decreased from 1.934 in 2003 to 1.494 in 2004. After that the ratio starts declining trend from 1.011 in 2005 to 0.614 in 2006. and again raises to 1.025 in 2007 This indicates from the study that the firm tries to reduce the debt

and reducing financial risk of the firm when both ratios of the years 2003 and 2007 are compared.

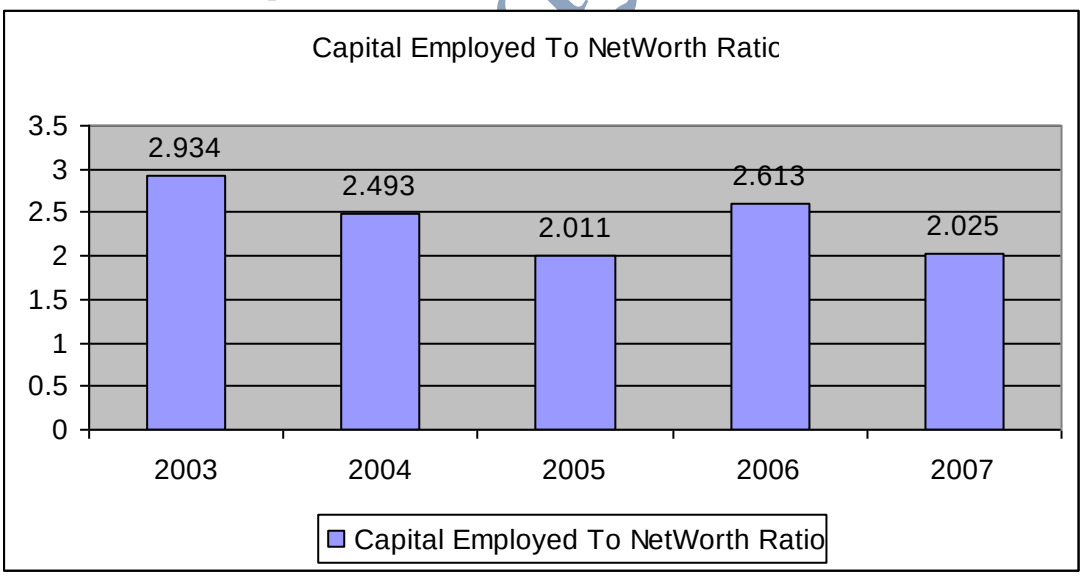
Capital Equity Ratio:

$$\text{Capital Employed To Net Worth Ratio} = \frac{\text{Capital Employed}}{\text{Net Worth}}$$

TABLE 4-7

Year	CapitalEmployed	Net worth	Ratio
2003	10506.32	3580.79	2.934
2004	14459.76	5798.87	2.493
2005	20555.94	10221.72	2.011
2006	49792.32	19048.73	2.613
2006	85736.29	42340.98	2.025

(source: Annual Reports)



INFERENCE: The above table shows the Capital Equity Ratio of five years(2003-2007) . The Capital Equity Ratio of Vijai Electricals Ltd. Shows fluctuation in the period of study. The ratio goes down from 2.93 in 2003 to

2.011 in the year 2006 an again raises to 2.013 in 2006 and reaches to 2.025 in 2007.

COVERAGE RATIOS:

Interest Coverage Ratio:

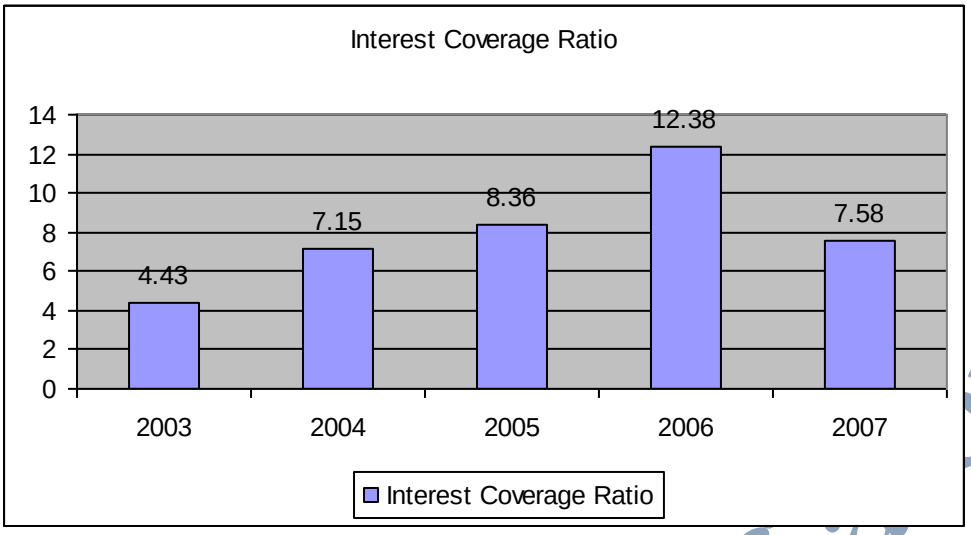
$$\text{Interest Coverage Ratio:} \quad \frac{\text{EBIT}}{\text{Interest}}$$

TABLE 4-8

Year	EBIT	interest	ratio
2003	3914.25	883.36	4.43
2004	5282.30	738.68	7.15
2005	9533.82	1139.76	8.36
2006	16453.77	1329.30	12.38

2007	26083.30	3439.73	7.58

(Source: Annual Reports)



INFERENCE: Interest coverage ratio 7 to 8 percent is considered an ideal. .The interest coverage ratio is highly increased during the study period from 4.43 in 2003 to 12.38 in 2006 and gone down to 7.58 in 2007.But these figures is indicates very high.

ACTIVITY RATIOS:

Inventory turnover Ratio:

$$\text{Inventory turnover} = \frac{\text{Cost of goods sold}}{\text{Average inventory}}$$

(or)

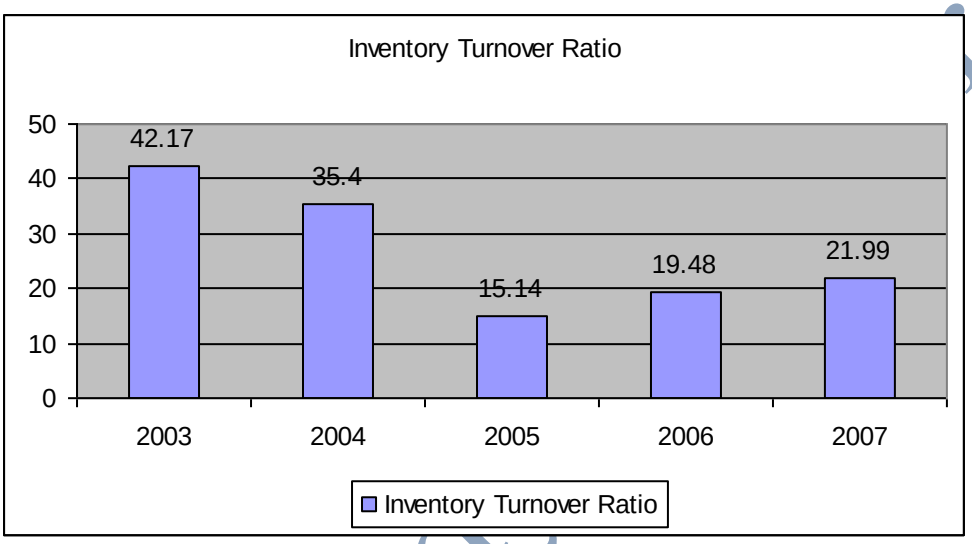
$$\frac{\text{Net sales}}{\text{Inventory}}$$

TABLE 4-9

Year	Net sales	inventory	ratio

2003	17417.14	413.04	42.17
2004	26734.80	755.18	35.40
2005	54339.16	3588.65	15.14
2006	85012.43	4363.72	19.48
2007	132147.33	6008.90	21.99

(Source: Annual Reports)



INFERENCE: The Inventory Turnover Ratio increased and decreased on the buys of sales that sales increased. The ratio increased because the year sales are increased. The ratio is decreased because the year sales are decreased. In the above Table shows the Inventory Turn over Ratio of five years (2003-2007).The inventory ratio of Vijai Electricals Ltd. was started from 42.17 in the year 2003 and it was slightly decreased to 35.4 in the next year. It was decreased to 15.14 in the year 2005, it increased slightly by next two years.

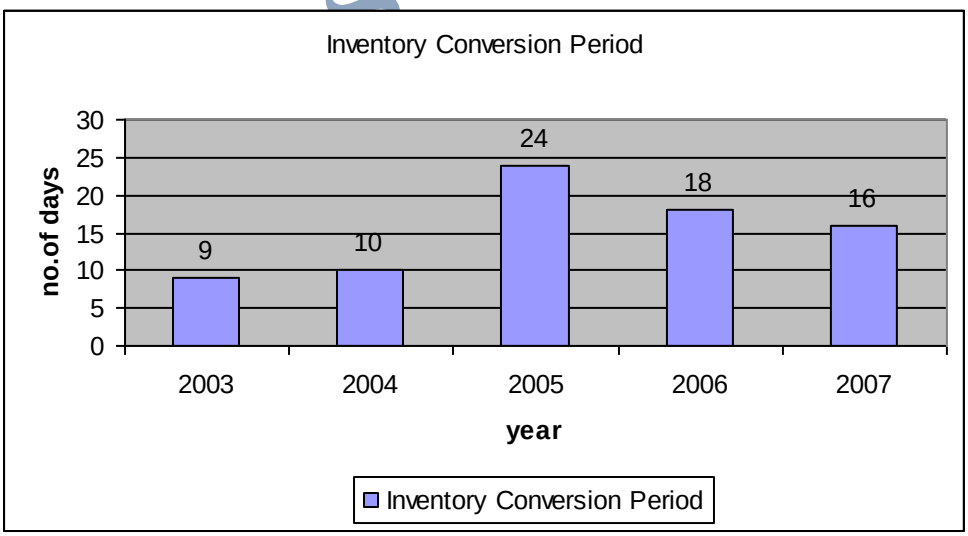
Inventory conversion period:

$$\text{Inventory conversion period} = \frac{\text{No. of days in the year}}{\text{Inventory turnover ratio}}$$

TABLE 4-10

Year	Days (360 days)	Inventory turnover ratio	Conversion days
2003	360	42.17	9
2004	360	35.40	10
2005	360	15.14	24
2006	360	19.48	18
2007	360	21.99	16

(Source: Annual Reports)



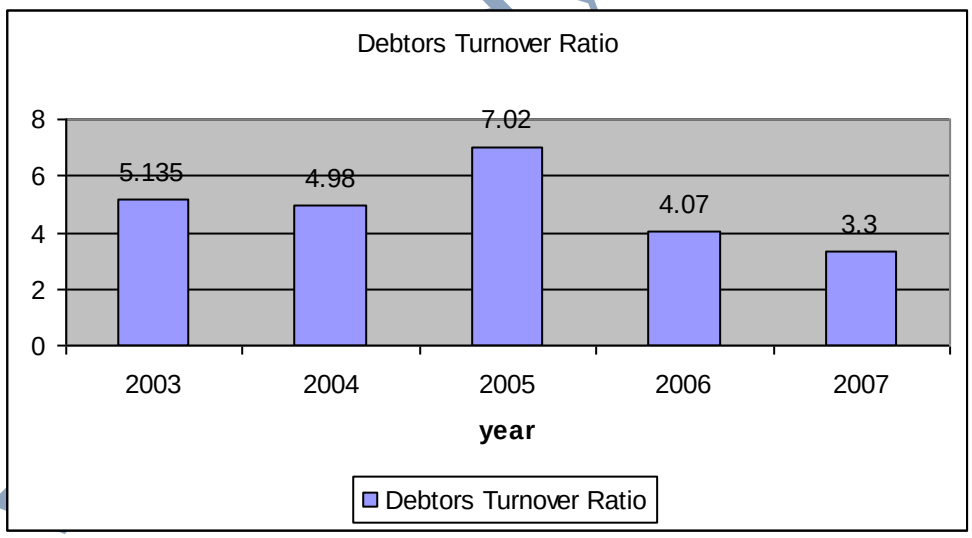
Debtor turnover Ratio:

$$\text{Debtors turnover} = \frac{\text{Credit sales}}{\text{Debtors}}$$

TABLE 4-11

Year	Sales	debtors	ratio
2003	17417.14	3391.9	5.135
2004	26734.80	5943.59	4.98
2005	54339.16	7740.24	7.02
2006	85012.43	20909.68	4.07
2007	132147.33	40018.09	3.30

(Source: Annual Reports)



INFERENCE: Debtors Turnover Ratio should be very high then only the company will be receiving its debts with in a short period. It indicates the company has taken less time to convert the credit sales into cash. In the above Table shows the Debtors turnover ratio of five years (2003-2007).

The debtors turnover ratio of Vijai Electricals Ltd. was started with 5.135 in the year 2003 and it increased to 7.02 in the year 2005, it was decreased to4.07 in next year 2006, and it was decreased to 3.3 by the end of year 2005.

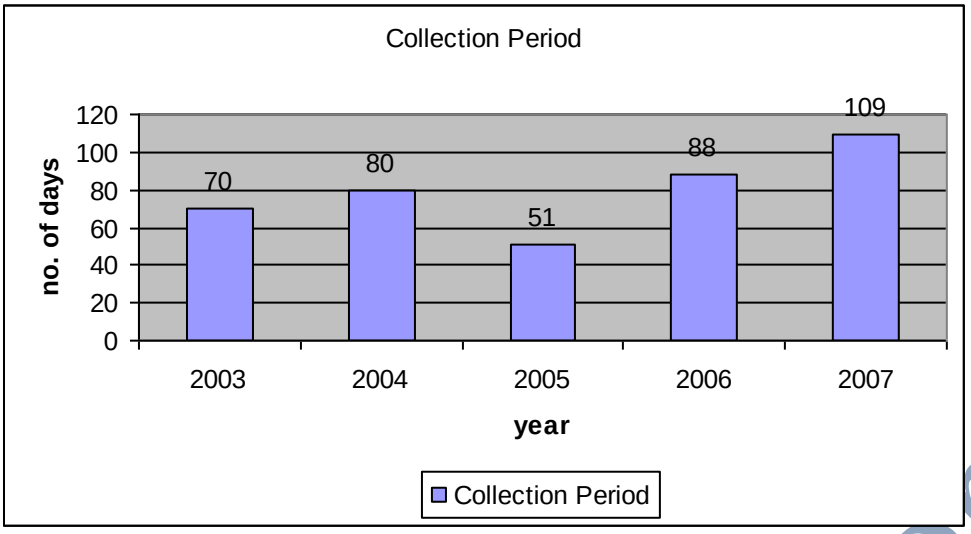
Debtors Collection of period:

$$\text{Collection of period} = \frac{360}{\text{DEBTORS TURN OVER}}$$

TABLE 4-12

Year	**days**	**Debtors turnover ratio**	**Collection period**
2003	360	5.135	70
2004	360	4.98	80
2005	360	7.02	51
2006	360	4.07	88
2007	360	3.30	109

(Source : Annual Reports)



INFERENCE:

If the Debtors Turn over Ratio increases the debtors collection period will be short. If the debtors turnover ratio decreases the debtors collection period will take long time. In the above Table shows the Debtors Collection Period (Days) of five years (2003-2007). During the year 2003 the period of days is 70 days. It rose to 80 days in 2004. It is decreased to 51 days in 2005. It again increased to 88 days in the year 2006, it raised to very high in the year 2007.

Net Assets Turnover Ratio:

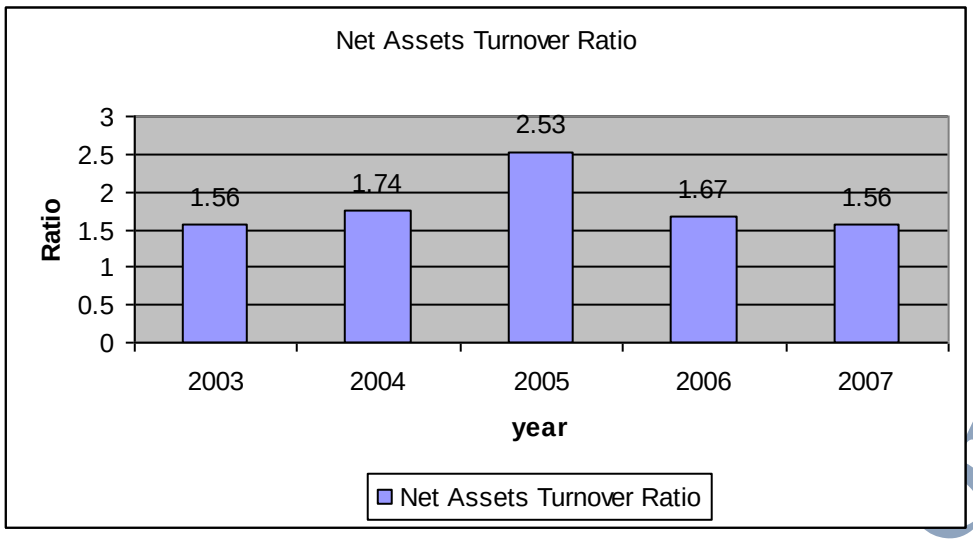
Net assets turnover can be computed simply by dividing sales by net sales

$$\text{Total Assets Turnover} = \frac{\text{Sales}}{\text{Net assets}}$$

TABLE 4-13

Year	sales	Net assets	ratio
2003	17417.14	11163.25	1.56
2004	26734.80	15334.28	1.74
2005	54339.16	21483.56	2.53
2006	85012.43	50836.50	1.67
2007	132147.33	84789.70	1.56

(Source: Annual Reports)



INFERENCE: Net assets turnover ratio was 1.56 in 2003 and 1.74 in 2004, 2.53 in 2005 and 1.67 in 2006 and 1.56 in 2007.so this company earned least turnover ratio in the year 2003 and 2007

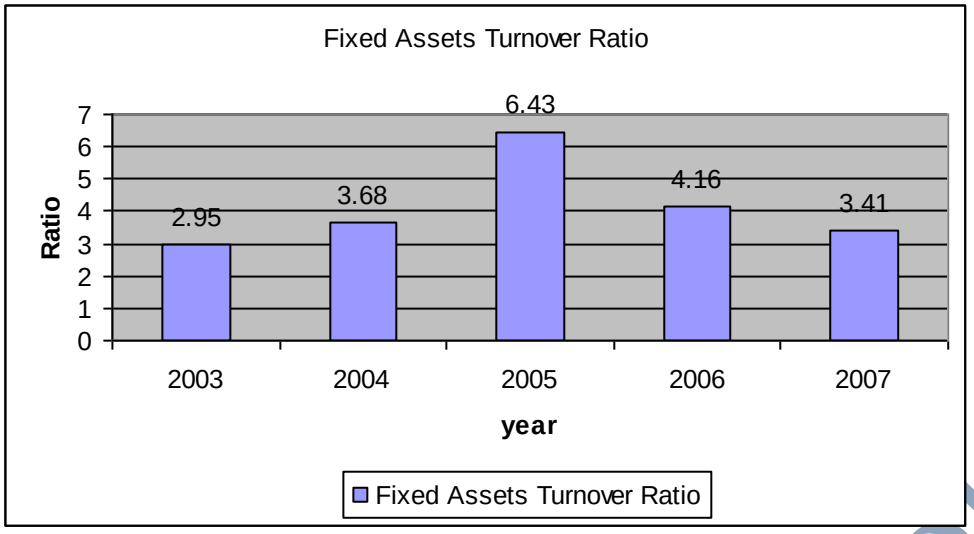
Fixed Assets Turnover Ratio:

$$\text{Fixed Assets Turnover Ratio} = \frac{\text{Sales}}{\text{Fixed Assets}}$$

TABLE 4-14

Year	**sales**	**Net fixed assets**	**ratio**
2003	17417.14	5894.36	2.95
2004	26734.80	7273.12	3.68
2005	54339.16	8457.09	6.43
2006	85012.43	20427.25	4.16
2007	132147.33	38792.38	3.41

(Source: Annual Reports)



INFERENCE: Fixed assets turnover ratio was 2.95, 3.68, 6.43, 4.16, 3.41 in respective years of 2003, 2004, 2005, 2006, and 2007 so the company achieved maximum fixed asset turnover ratio in 2005.

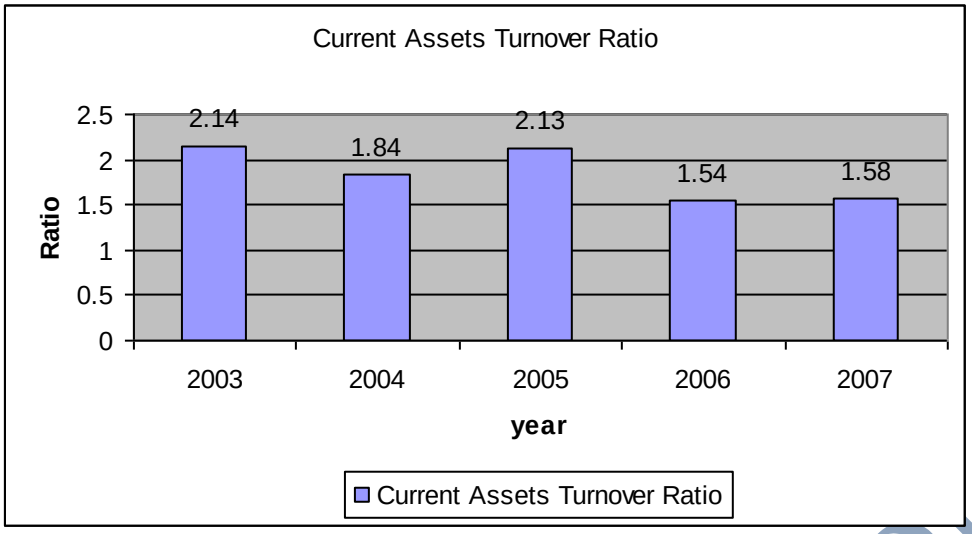
Current assets turnover Ratio:

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

•TABLE 4-15

Year	sales	Current assets	ratio
2003	17417.14	8133.07	2.14
2004	26734.80	14497.12	1.84
2005	54339.16	25459.61	2.13
2006	85012.43	55132.02	1.54
2007	132147.33	83467.24	1.58

(Source: Annual Reports)



INFERENCE: In this chart it shows the current assets turn over ratio by which company is currently rotating the assets for business purpose. It was highly purchased current assets by the end of the year 2005. The Current Assets Turnover Ratio for the five years (2003-2007). Current assets turnover ratio was 2.14, 1.84, 2.13, 1.54 and 1.58 in respective year of 2003, 2004, 2005, 2006 and 2007 so the company achieved maximum Current assets turnover ratio in 2005.

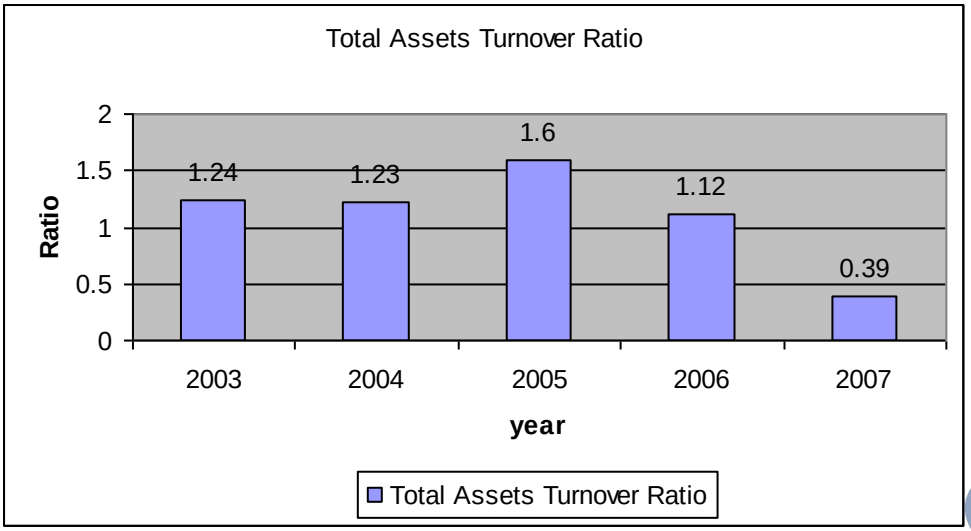
Total Assets Turnover Ratio:

$$\text{Total Assets Turnover Ratio} = \frac{\text{Sales}}{\text{Total Assets}}$$

TABLE 4-16

Year	sales	Total assets	ratio
2003	17417.14	14033.27	1.24
2004	26734.80	21775.87	1.23
2005	54339.16	33924.33	1.60
2006	85012.43	75566.90	1.12
2007	132147.33	337301.62	0.39

(Source: Annual Reports)



INFERENCE: Total Assets Turnover Ratio of the company is rotating their assets into business purpose. It shows that the company can able to rotate the total assets in the business. Above Table shows the Total Assets Turnover Ratio for the period of five years (2003-2007). Total assets turnover ratio was 1.24 in 2003 and 1.23 in 2004, 1.6 in 2005, 1.12 in 2005 and 0.39in the year 2007.so this company earned last turnover ratio in the year 2007.

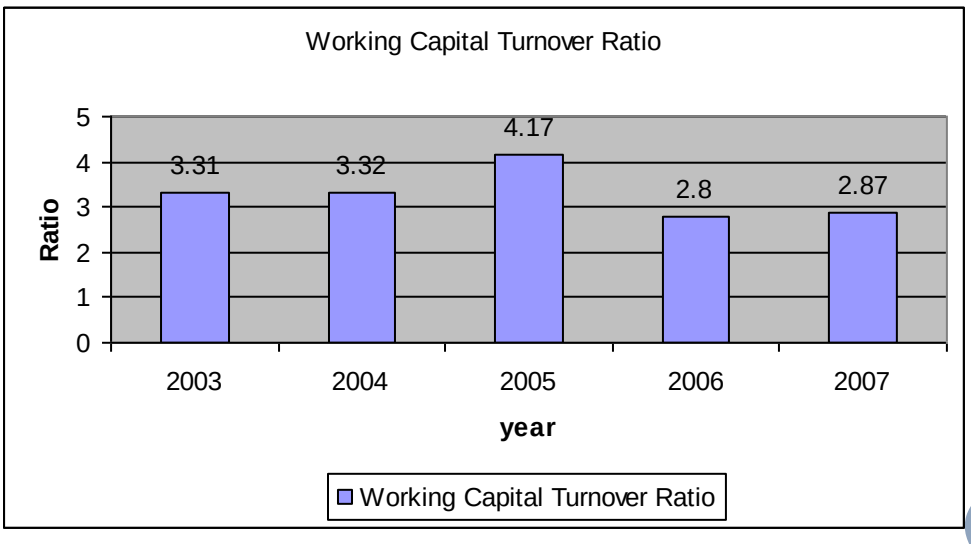
Working Capital Turnover Ratio:

$$\text{Working Capital Turnover Ratio} = \frac{\text{Sales}}{\text{Working Capital}}$$

TABLE 4-17

Year	**sales**	**Working capital**	**ratio**
2003	17417.14	5268.89	3.31
2004	26734.80	8061.16	3.32
2005	54339.16	13026.47	4.17
2006	85012.43	30409.23	2.80
2007	132147.33	45997.32	2.87

(Source: Annual Reports)



INFERENCE: In the above Table and Chart the velocity of the utilization of Net Working Capital. It has been observed that the working capital turnover ratio of Vijai Electricals Ltd. In the above Table shows the Working Capital Turnover Ratio of five years (2003-2007). In the year 2005 Vijai Electricals Ltd. holds with efficient working capital. After years ratio is declined.

PROFITABILITY RATIOS:

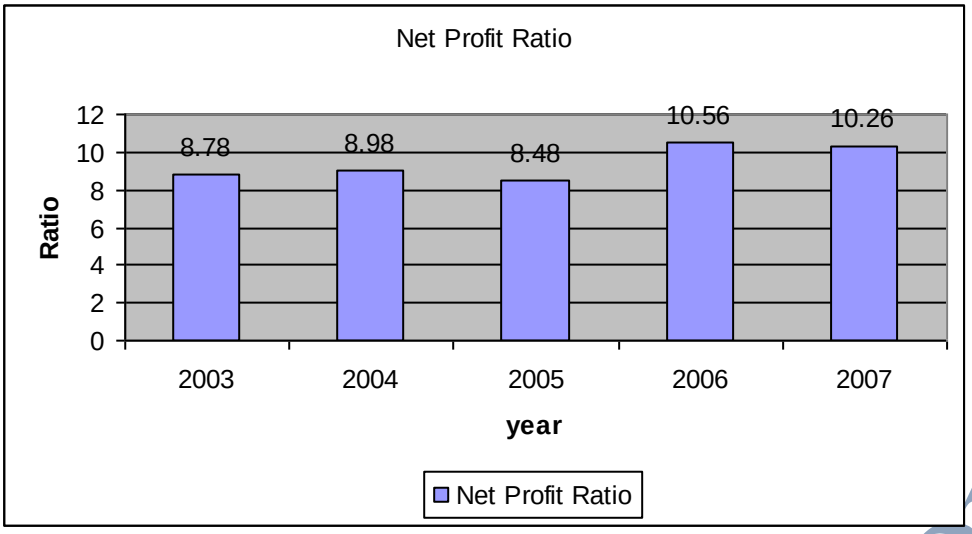
Net Profit Ratio:

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

TABLE 4-18

Year	PAT	sales	ratio
2003	1529.92	17417.14	8.78
2004	2400.90	26734.80	8.98
2005	4607.65	54339.16	8.48
2006	8977.64	85012.43	10.56
2007	13559.83	132147.33	10.26

(Source: Annual Reports)



INFERENCE: Net profit ratio was 8.78, 8.98, 8.48, 10.56, and 10.26 in respective year of 2003, 2004, 2005, 2006 and 2007 so the company achieved maximum Net profit ratio in 2006 and 2007.

Net Profit Based On No PAT:

$$\text{Net Profit Based On No PAT} = \frac{EBIT(1-t)}{Sales} = \frac{No\ PAT}{Sales}$$

(or)

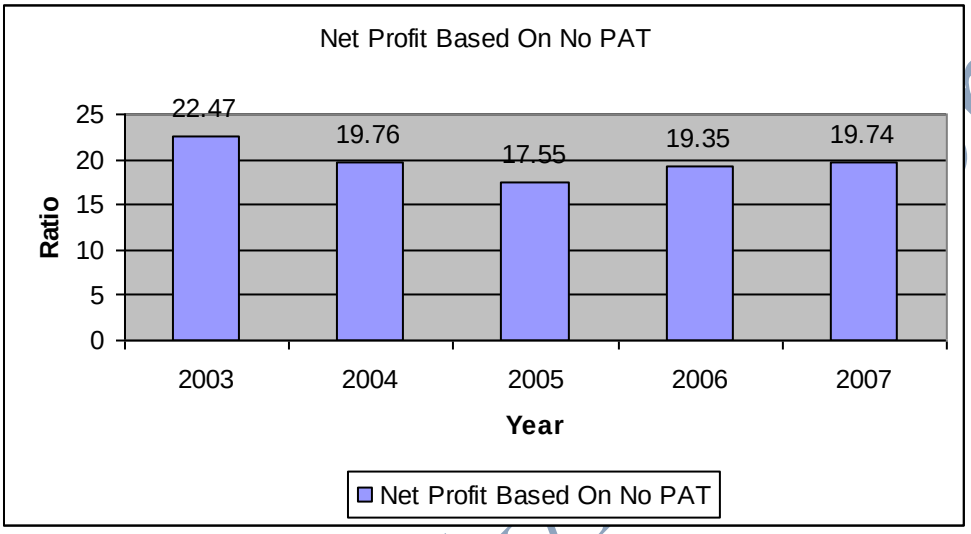
$$\frac{EBIT}{Sales}$$

TABLE 4-19

Year	EBIT	sales	ratio

2003	3381.65	17417.14	22.47
2004	4372.30	26734.80	19.76
2005	8437.42	54339.16	17.55
2006	15055.89	85012.43	19.35
2007	24212.469	132147.33	19.74

(Source : Annual Reports)



Return on Investment Ratio:

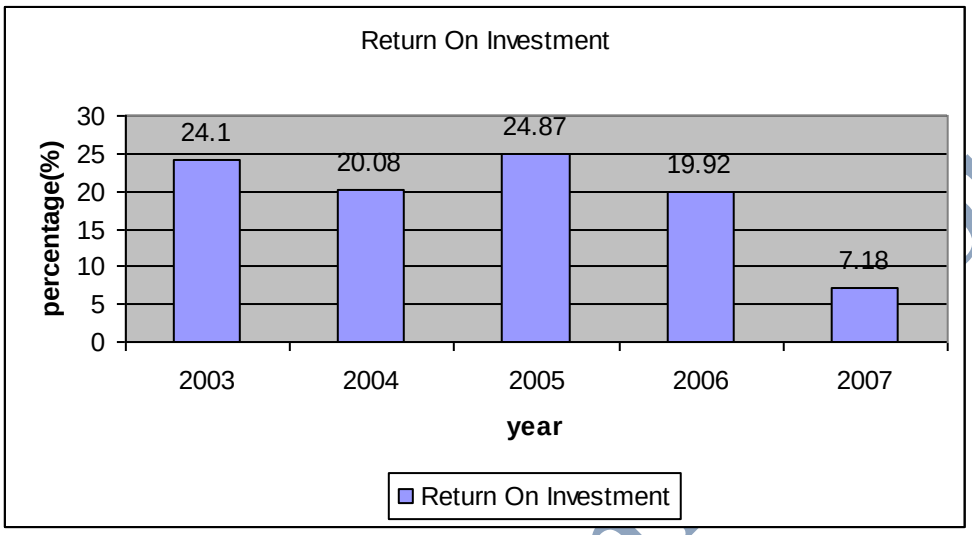
$$ROI = ROTA = \frac{EBIT}{\text{Total assets}} = \frac{EBIT}{TA}$$

TABLE 4-20

Year	EBIT	Total assets	Ratio	Percentage%
2003	3381.65	14033.27	0.24	24.10

2004	4372.30	21775.87	0.20	20.08
2005	8437.42	33924.33	0.25	24.87
2006	15055.89	75566.90	0.20	19.92
2007	24212.469	337301.62	0.07	7.18

(Source: Annual Reports)



INFERENCE: Return on investment ratio was 24.1, 20.08, 24.87,19.92 and 7.18 in respective year of 2003, 2004, 2005, 2006 and 2007 so the company achieved maximum Return on investment ratio in 2005.

Return on equity ratio:

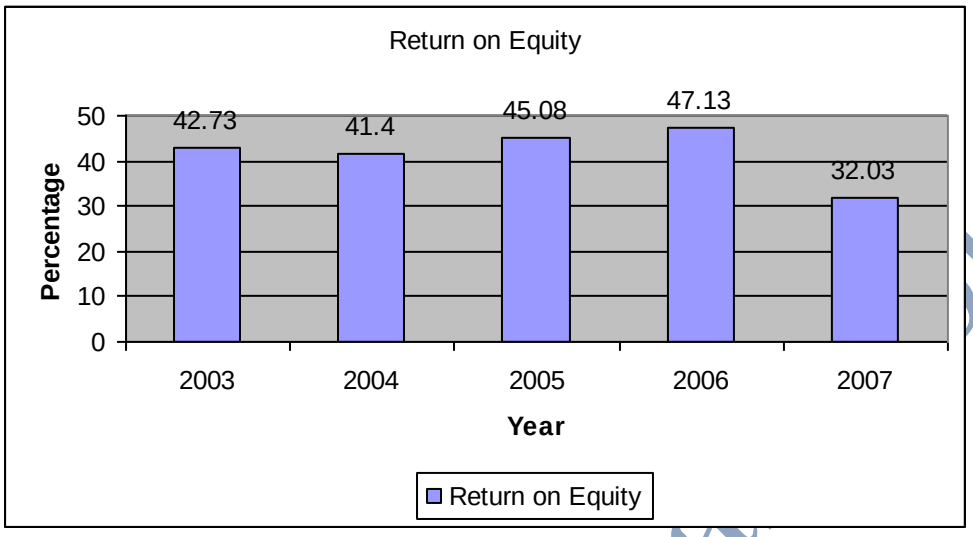
$$ROE = \frac{\text{Profit after taxes}}{\text{Net worth (Equity)}} = \frac{PAT}{NW}$$

TABLE 4-21

Year	**PAT**	**Net worth**	**Ratio%**
2003	1529.92	3580.79	42.73
2004	2400.90	5798.87	41.40
2005	4607.65	10221.72	45.08

2006	8977.64	19048.73	47.13
2007	13559.83	42340.98	32.03

(Source: Annual Reports)



INFERENCE: Return on equity ratio was 42.73, 41.4, 45.08, 47.13 and 32.03 in respective year of 2003, 2004, 2005, 2006 and 2007 so the company achieved maximum Return on equity ratio in2006.

Earning per share ratio:

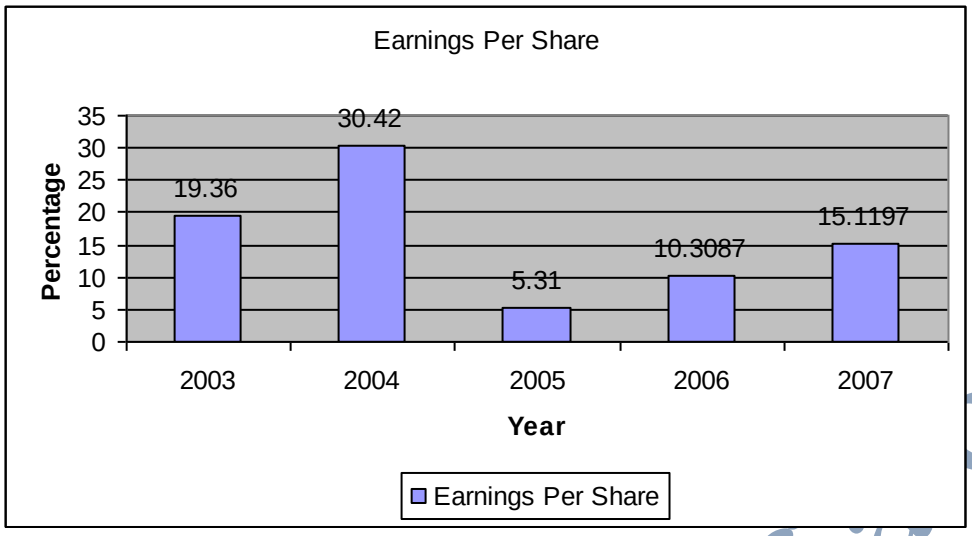
$$EPS = \frac{\text{Profit after tax}}{\text{Number of share outstanding}}$$

TABLE 4-22

Year	**PAT**	**No of eq shares**	**Ratio%**
2003	152541968	7878160	19.36
2004	239640391	7878160	30.42
2005	460764761	86659760	5.31
2006	8977640	87087956	10.3087

2007	13559830	89683018	15.1197

(Source: Annual Reports)



INFERENCE: Earning per share ratio was 19.36, 30.42, 5.31, 10.30 and 15.11 in respective year of 2003, 2004, 2005, 2006, and 2007 so the company achieved maximum earning per share ratio in 2004.

References

- www.google.com
- www.wikipedia.com
- www.studymafia.org