EXECUTIVE SUMMARY:

Finance is the life blood of any organization. The financial matters are of utmost importance to any business. The businesses are on the financial plans and strategies. To make proper plans financial trend analysis and performance analysis is essentially important. The basic duty of any financial manager is to have a look on the pecuniary trend of the company as well as the industry.

The project undertaken had been an attempt on my part to learn and comprehend the financial trends of the company over a period of five years with the ratios as the analysis tools. The start into the finance is through knowing to interpret the financial statements and assessing the short-term and long-term solvency, the efficacy in exploiting the resources and investment and on the whole prosperity of the company.

The project involves calculation of various ratios and margins using the data made available by the company. The documents made available to extract related data were the summarized balance sheet for five financial years from the period of 2003-04 to 2007-08. The summarized profit and loss account for the same period was also supplied with, in order to have a thorough study and derive appropriate conclusions.

The study undertaken involves liquidity ratios, leverage ratios, activity ratios, return on investment margin, profitability ratios, overall profitability of the company and the earning per share which are the key determinants of the financial health of any company. These ratios have been of great assistance in determining the financial status of the company under review. The studies have enabled in knowing the financial variables in a more comprehensive manner and understand & construe the statements of accounts in an appropriate approach.

The rationale behind ratio analysis lies in the fact that it makes data comparable. It is a systematic use of ratio to interpret the financial statements so that the strengths and weaknesses of a firm as well as its historical performance and current financial condition can be determined.
Title of the project:
FINANCIAL PERFORMANCE EVALUATION USING KEY RATIOS.

Objectives of the study:

➢ To know to interpret the Financial Statements of a firm.
➢ To understand and interpret the relationship between the financial variables which are influence each other like sales and profit.
➢ To know and assess the financial trend of the firm over the years.
➢ To understand the financial pattern and make more meaningful conclusions.
➢ To know the year on year improvement or decline in the firm’s finances due to their financial policies and decisions.

Data collection methods:
The source of information was secondary. Most of the financial information was made available through the annual reports of the company. The company profile was made available by the officials through several documents.

Additional information was given by the officials wherever required. Much support was extended in analyzing the data and making meaningful conclusions.

Theoretical help was derived from some books and magazines and past reports and records. Support from internet and other journals were also derived. The analysis was reviewed and necessary improvements were made to it.
Scope of the study:

The study has been framed to the extent of the interpretation of several ratios and their interpretations from the financial data collected for five years. It was an attempt to understand the financial statements properly and know how the items of the financial statements are interlinked and bear an influence on each other.

The present study is an endeavor to have a comprehensive understanding of the financial statements of Birla Kesoram Industries Limited.

Importance of the study:

As a tool of financial management, ratios are of crucial significance. The importance of ratio analysis lies in the point that it provides facts on a comparative basis and enables to draw conclusions regarding the performance of the firm.

- The conclusions based on ratio analysis are useful in the credit analysis of the firm by banks and short term lenders.
- Long term viability, adequate return to its owners, etc can be evaluated through ratios which are of concern to the long term creditors, present and potential owners and security analysts.
- These ratios depict the strength and weaknesses of the firm.
- The ratios show the level of efficiency of the management in utilizing the assets to generate profits.
- It enables the analysts to know the direction of movement of the firm financially, whether the movement is favorable or unfavorable.
Important findings of the study:

- The current, quick and net working capital ratios enumerate that the company is in a favorable short term liquidity position which is of utmost importance to the short term creditors as they commensurate with the standards.

- The company’s long term liquidity is beyond satisfaction. The company on the outset has a risk averting nature which is why full utilization of debts is not done.

- The gross profit margin was fluctuating throughout the period of 5 years. GPM & NPM were below satisfaction owing to the high operating expenses and other costs; however the GPM & NPM gradually rose in the later years. ROI ratios are maintained at adequate level.

- The activity ratios have shown that the current assets are better managed whether it is inventory or the debtors. Fixed assets require more attention.

Suggestions:

- The company can make better utilization of the current liabilities.

- There is lot of scope for the company to increase the level of debt which currently is in the proportion of 40-45% which can be raised 65% safely.

- There can be better utilization of fixed and current assets to turn up better sales by proper expansion plans by all the units of the company.
The expenses are too high for the company. The expenses must be controlled by bringing a proper system of material and machine handling, etc. The alternative may be to increase sales in proportion with the increase in expenses.

**Limitations of the study:**

The present study has the following limitations:

1. The difficulty in comparing data of one year with another due to changes in the circumstances and conditions in two different years.

2. The impact of inflation also acts as a serious limitation for the trend ratio analysis.

3. Heavy working schedule of the staff proved to be a communication barrier at several points.

4. Confidential nature of the financial data hindered it’s in-detail availability and also analysis of the same.
INDUSTRY PROFILE

Cement Industry:

The Indian Cement Industry is the second largest in the world after China with a capacity of 173 million tones. It has over 136 Cement Plants and over 350 mini plants indulged in the production of cement. Indian Cement industry is making commendable progress in capacity creation and extension, in order to conform to the global parameters in technology and production of every variety of cement. The Industry has also found the utility of the by-products of cement like fly-ash and slag for making blended cement.

Overall capacity utilization has been increased to 96%, which earlier was 94%. Infrastructure and Construction being the strategic factors in the growing demand for the cement, provides the industry with lot of opportunities to increase their capacity as well as their consumption. According to the 2007-08 updates, the per capita cement consumption in India is 0.14 tonne as compared to that of the world average which is 0.4 tonne per annum. This clearly indicates the growth opportunities for the industry. The cement story was in the limelight over the past few fiscals owing to the fact that the demand grew at a faster pace compared to supply and therefore, cement prices remained firm. The need to build up infrastructure to sustain a 9% GDP growth, also kept investors keen on the sector.

Prior to FY04, the sector was looming in the darkness. However, the turnaround post FY04 prices marched fast leading to significant improvement in the companies’ profitability owing to strong increase in demand with no major capacity additions.
taking place. With the increased cash flows companies started cleaning their balance sheets and lined up huge expansion plans to cater to increasing demand for the commodity and witness higher realizations.

The cement industry is highly cyclical in nature and depends largely on the economic growth of the country. There is a high degree of correlation between the GDP growth and the growth in cement consumption. The sector’s growth on account of robust demand grew at the rate of around 10% YoY.

**COMPANY PROFILE**

The family of Birla Group of Companies has been founded by Syt. G.D.Birla, the legendary person of Indian Industry and Business, a committed person to the cause of Swadeshi Movement, a close associate of Mahatma Gandhi, and a leading philanthropist. This is continued by his worthy son Syt.B.K.Birla.

Syt. B.K.Birla is the Chairman of B.K.Birla Group of Companies of which Vasavadatta Cement is a unit of KESORAM INDUSTRIES. Under the group there are many companies, which are effectively running and are engaged in producing wide variety of products and services.

Vasavadatta Cement is the 2nd Green field project of Kesoram Industries Ltd., located in district of Gulbarga, 3 Kms. away from the Sedam Town. 1st unit was conceived in the year 1983-84 and commercial production started in the year 1986. The 2nd line was commissioned in 1997 having latest state of the art technologies comparable to the best cement Plant in the World. Within a short span of commissioning, the expansion unit achieved more than 100% capacity utilization and now the work of the 3rd Unit is in full progress and the production has started in 2006. Accordingly, the clinker production capacity may go up from 2.05 million tonne per annum to 3.3 million tonne per annum. We have also set further vision of commissioning of 4th Unit.
The company is pioneer in bringing utilization to Sedam, the backward area in Gulbarga district of northern Karnataka. The company has provided direct and indirect employment to the people of the surrounding area. A sleepy unknown habitat until 1983, Sedam is today humming with industrial activities due to Vasavadatta Cement, which has made a favorable impact on the socio-economics of the region. The company has contributed significantly to the National Exchequer and is committed to the cause of corporate value addition to the quality of life and standard of living.

The company is using huge quantities of waste products of other industries i.e., Fly ash, Slag & Chemical Gypsum for making Cement, thus contributing to prevention of pollution and helping nation to combat pollution in general.

Performance of Vasavadatta cement has improved considerably due to increase in production as well as continued buoyancy in the cement industry. The commercial production from Unit 3 started from March 2007.

Production of Unit 3 would have been higher but for an unexpected breakdown in June 2007 resulting in production loss of about 2 lacs MT of Clinker. It is heartening to note that Unit 1 and Unit 2 have achieved their highest ever production capacity utilization this year. Production of blended cement (Birla Shakti) has risen by 37% from 11.73 lac MT to 16.02 lac MT. Consistent high quality of the product has enabled this section to improve its market share.

Captive power generation has increased from 182.05 million kWh last year to 280.56 million kWh during the year under review, thus meeting about 94% of the total power requirement of the section. This has been possible due to the commissioning of third power plant of 17.5 MW capacities in April 2007.

There has been an all round increase in the cost of raw materials as well as coal during the year. Due to the non availability of coal both in quantity and quality, the
section had to import more expensive coal with additional burden on the cost of production.

As reported earlier, the company has undertaken further expansion of cement capability by 1.65 million MT per annum and for this the civil work for cement plant as well as for Captive Thermal Power Plant are in advance stages of completion and supply of indigenous and imported machineries has started arriving. Erection of plant and machinery will commence shortly and the project is scheduled for commissioning in the first quarter of the calendar year 2009.

The section has undertaken various social welfare activities such as construction of water tank at Sedam town, tree plantation and water harvesting, health camps and vocational training centre, farmers’ training and rural development, etc,

**PRODUCT PROFILE**

In this competitive scenario of the cement market, it is important for the product to satisfy certain standards and benchmarks for its consumers’ acceptance. The requisites of quality cement are as follows:

- Comprehensive strength
- Fineness
- Soundness
- Setting time

The cement produced at Vasavadatta offers all the requisites and is considered as one of the most sought after brand for its superlative quality, unmatched fineness, strength and faster setting feature.

Vasavadatta now offers the following products which are changed and upgraded with the changing needs and preferences of the consumers. The products are as follows:

- 43 Grade OPC
- 53 Grade OPC
- Puzzolona Portland cement (PPC)

It offers PPC as Birla Shakti PPC, whereas the other two products are 43 Grade Vasavadatta Super and 53 Grade Vasavadatta Gold.

The packing of the product has been done using H.D.P.E. and Paper. Each pack weighs 50 kgs. The bags are transported through trucks which load at the factory premises and carry them to the destinations. Some of the cement bags are also transported through railway wagons from Sedam Railway station. The products all adhere to the quality specifications.

Different types of cement manufactured by Vasavadatta are used for different purposes like the 53 Grade OPC is used for industrial frame building, heavy construction, precast building, heavy roofing elements, etc. The type 43 Grade OPC is used in multistoried building construction, underground structures, foundation and pillars, dams and canals, power projects, etc.

The PPC cement is mainly useful in RCC building constructions, waste disposal pipes, electricity poles, fencing poles, ventilators, tiles industry, marine works, etc.
COMPANY POLICY

We, at Vasavadatta Cement are committed to:

- Produce and deliver quality cement & clinker as per customers’ requirement with an aim to enhance customer satisfaction.
- Continual improvement in quality, health, safety & environmental performance.
- Compliance of all applicable legal and other requirements.

We will achieve this by:

- Improvement in quality of raw material input.
- Reduction in chronic losses.
• Technological innovations.
• Prevention of pollution incidental to plant operation.
• Conservation of natural resources.
• Reduction of man days lost due to accidents.
• Reduction of level of risk by improving working conditions.
• Total involvement of employees through participative management activities and training to create awareness and upgrade skills.

This policy is adopted as an integral part of business performance and we ensure to provide adequate and appropriate resources to manage the system efficiently.

COMPANY LOGO
Atlas, the Titan – Collective Strength

Atlas, bearer of the heavens is synonymous with vast, all encompassing strength and is used to symbolize the Group’s own collective strength. It reflects the combined qualities of astute and dynamic management while emphasizing the Group’s tendency, consistency, reliability and overall leadership.

The Sun – Enlightenment and Growth
The Sun, as a source of infinite energy and inspiration, is used here in conjunction with the Atlas head to represent the vitality and powerful presence of the Group—both in its industrial prowess and its financial, technological and intellectual skills.

**Earth Segments – Diversified Activities**

Each of the latitudes around the Titan represents various sections—industrial, agricultural, financial and other activities of the Group. As the earth is a composition of diverse materials, so is the strength of the Group, made up of its diverse activities.

**The Globe – Global Vision**

The Group’s global presence and vision is reflected in the entirety of the Earth’s sphere.

**The Base – Solid Foundations**

The strength of the entire edifice depends upon the strength of the foundation embedded in the bedrock, represented hereby the Group Name.

**The Symmetry – The Resilience, Versatility and Stability**

Seen in its entirety, each of the elements—Atlas, the Sun, the Earth divisions, the Globe and the Base, together sum up a well conceptualized and balanced conglomerate.

**DEPARTMENTS:**

**Name of Departments:**

1. Accounts
A PROJECT REPORT ON FINANCIAL PERFORMANCE EVALUATION WITH KEY RATIOS AT VASAVADATTA CEMENT KESORAM INDUSTRIES LTD SEDAM, GULBARGA

2 Stores
3 Purchase
4 HRD
5 Sales & Marketing
6 Mechanical
7 Process & Quality Control
8 Electrical
9 Civil
10 Mines
11 Power Plant
12 Packing Plant
13 Instrumentation
14 EDP
15 Safety & Environment
16 TPM

SENIOR EXECUTIVES OF COMPANY:

<table>
<thead>
<tr>
<th>SNo.</th>
<th>Name of Executives</th>
<th>Designations</th>
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<tr>
<th></th>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>1</td>
<td>Mr. D S Bindra</td>
<td>President</td>
</tr>
<tr>
<td>2</td>
<td>Mr. P R Sharma</td>
<td>Joint President</td>
</tr>
<tr>
<td>3</td>
<td>Mr. C K Jain</td>
<td>Joint President (O&amp;M and TPH)</td>
</tr>
<tr>
<td>4</td>
<td>Mr. R K Gandhi</td>
<td>Vice President (Production &amp; QC)</td>
</tr>
<tr>
<td>5</td>
<td>Mr. A C Basak</td>
<td>Vice President (Mines)</td>
</tr>
<tr>
<td>6</td>
<td>Mr. I K Purohit</td>
<td>Vice President (Sales &amp; Mktg)</td>
</tr>
<tr>
<td>7</td>
<td>Mr. P S Rao</td>
<td>Vice President (Projects)</td>
</tr>
<tr>
<td>8</td>
<td>Mr. B.K Sharma</td>
<td>Vice President (Mechanical)</td>
</tr>
<tr>
<td>9</td>
<td>Mr. O P Sharma</td>
<td>Vice President (Commercial)</td>
</tr>
<tr>
<td>10</td>
<td>Mr. Yashwant Mishra</td>
<td>Sr. Vice President &amp; Mktg Head.</td>
</tr>
<tr>
<td>11</td>
<td>Mr. Ajit Kulkarni</td>
<td>Vice President (HR)</td>
</tr>
</tbody>
</table>

**PRODUCTION PROCESS DESCRIPTION:**
The process of manufacturing Cement involves basically the following sequential unit operations and processes.

- Limestone mining
- Limestone crushing
- Stacking and reclaiming
- Raw material grinding
- Storage and homogenization of raw meal in continuous blending silo
- Coal grinding
- Clinkerisation – (kiln feed, preheating, burning & cooling)
- Cement grinding & Storage
- Cement packing & Dispatch

I) LIMESTONE MINING: Limestone mining is the first phase of Cement manufacturing process. Ours is Open Cast, Mechanized Mining. After removing 2 to 3 Mtrs. of over burden clay, grades will be classified (I bench low grade: 8 to 10 Mtrs. in depth. II and III bench High grade 10 to 12 Mtrs. in depth) then drilling and blasting will be done. The material will be loaded by shovels and transported to Crusher by Dumpers, having capacity of 30 MT in the required ratio.
II) **LIMESTONE CRUSHING:** Crushing of Limestone is carried in single stage by HAZEMAG IMPACT CURSHER, having a capacity of 800 TPH. The feed size of the material is maximum 1.6 Cu. Mtr. and product size maximum 80 mm. The material, which is entering the crushing chamber, encounters the impact by blow bars mounted on the rotor and revolving at a circumferential velocity of 44 m/sec. The fragments are flung against upper and lower bars. This process is repeated until they have been sufficiently crushed to pass through the blow bars. Grinding path/blow bars can be adjusted if the output material size is more than 80 mm. The crushed material will be transported to Stacker by means of Belt Conveyors.

III) **STACKING AND RECLAIMING:** For stacking the crushed limestone BELT TYPE BOOM STACKER is in operation, which is having capacity of 800 TPH. The boom stacker has been conceived for material stacking on CHEVRON METHOD. In this method the stacker travels to and fro on a runway between two defined limits, while building up stockpile. The material is always discharged constantly above the middle of the stockpile. With this method piling can be done uniformly with required grades. Four stockpiles of 130 Mtrs. long approximately 25000 MT capacities each can be made by turning the boom to the opposite direction.

**RECLAIMING:** For this BRIDGE SCRAPER is in operation. A triangular structure called harrows move to and fro across the stockpile width and scrap the material. Scrapped material slides down from face of the stockpile to get blended limestone. The blended limestone, which slides down is scrapped and conveyed by buckets to belt conveyor, which in turn will be transported to Raw Mill Hoppers. By means of stacking and reclaiming, the homogenization of limestone will take place.
IV) **RAW MATERIAL GRINDING:** Grinding operation is the second stage of operation in unit operation after crushing stage. In this stage crushed material is to be ground into finer material. The VERTICAL ROLLER MILLS of type 43/21/65 of Unit-I and 51/26/400 of Unit-II, supplied by Krupp Polysius are in operation. The capacity of Unit-II mill is 140 TPH and that of Unit-II is 210 TPH.

The raw materials (Blended limestone, laterite and Bauxite) are fed to the hoppers by belt conveyors. The materials from hoppers fed to the mill in required proportion by weigh feeders as predesigned by Quality Control Department. In between the grinding table and rollers grinding takes place by hydraulic pressure on rollers.

The ground material is conveyed outward over the edge of grinding bowl, entrained by the air stream emanating from the nozzle ring conveyed to the Electro Static Precipitator through the Static Separator of Unit-I and a dynamic separator of Unit-II, which is built above the chamber. The separator separates the ground material into the finished product (product fitness about 30% on 90 micron sieve) and coarse material. The coarse material drops back to the middle of the grinding bowl, while fines are carried by the air stream to the E.S.P. and then it will be transported through Bucket Elevator or by Airlift to Blending Silo. The hot gases coming out of the Kiln are being utilized for drying the material and entrainment of Raw Meal at required temperature. To control the outlet temperature of the Mill and to maintain constant material bed on the grinding table, water spraying system is provided inside the mill.

Recently the Unit-II Raw Mill has been upgraded by installing single chamber ball mill in tandem with VRM and the output increased from 210 TPH to 255 TPH.
V) **CONTINUOUS STORAGE AND HOMOGENISATION OF RAW MEAL IN BLENDING SILO:** Continuous flow Silo (capacity 12000 MT for each unit) is being used for storage and blending of Raw Meal. Continuous homogenization can be performed in this Silo to maintain uniform desired quality of Raw Mix.

VI) **COAL GRINDING:** The Raw Coal, received by rail/road is stored in Coal yard after crushing to 30 mm size by Reversible Impact roll Crusher. Crushed Raw Coal is fed to the Vertical Coal Mill (Capacity Unit-I 19 TPH and Unit-II 26 TPH) for grinding before firing in the Kiln and Pre-calciner. The coal grinding takes place inside the mill between grinding rollers and grinding table. The ground material (fine coal) is carried by the hot gasses drawn by C.A. fan. The hot gasses are used to remove the moisture from Coal. The ground coal is carried by hot gas stream through Static Separator in which the coarse material will be returned to the mill and fines will be conveyed to the fine coal bins by series of screw conveyors.

VII) **CLINKERISATION:** It is combined process of Pre-heating, Calcining, Burning and Cooling operation. Rotary Kiln is the main equipment for clinkerisation. Ours is a dry process plant consisting of DOPOL KILN (Size 3.8 Mtrs. Dia X 56 Mtrs. Length of Unit-I and 4 Mtrs. Dia X 60 Mtrs. Length of Unit-II) having capacities of 1500 TPD of Unit-I and 2000 TPD of Unit-II and are designed by M/S.KRUPP POLYSIUS, GERMANY and their counterparts M/S.KRUPP INDUSTRIES INDIA LTD., PUNE. The capacities have been optimized by carrying out retro fittings / modifications, etc. and present capacity is 2500 TPD for Unit-I and 3500 TPD for Unit-II.
After blending and homogenization process, the Raw Meal is conveyed to the Preheater through Poldos/Solid flow meter system, meant for weighing and feeding the Raw meal and bucket elevator / air lift from C.F.Silo. Kiln Feed is fed into the Cyclone I gas duct. Preheating and calcinations takes place in various stages of Cyclones due to heat transfer.

Fine Coal is fired at Kiln outlet end through a Burner pipe. Poldos SC system is used for main and precalciner firing. The hot gasses generated due to fine coal firing are taken out by Dopol Fan/ESP Fan through Pre-heater, Raw Mill and ESP.

Heat transfer takes place in Pre-heater as Kiln Feed moves downward and flue gasses move upwards causing counter flow in gas ducts. Kiln Feed after preheating (around 90% calcined material) enters at kiln inlet. Then such decarbonised material will flow to the Burning Zone due to the inclination and rotation of the rotary kiln in the direction of the hot zone (burning zone). The temperature of the Burning Zone is maintained at about 1400 deg.C. for proper clinkerisation. After this stage the material is known as CLINKER. This Clinker gets cooled in the cooler (i.e., combination of static and moving grates).

VIII) CEMENT GRINDING: Cement grinding is the final unit operation of cement making process. We have a Tube Mill of grinding capacity 115 TPH, having 16 Mtrs. length X 4.4 Mtrs. dia supplied by M/s.Buckau Wolf India Ltd., Pune for Unit-I. The material to be ground is extracted in desired proportions of clinker and gypsum from storage hoppers by means of Weigh Feeder and fed to the mill by conveying belt. In Cement Mill the material will ground into fine material by means of impact and attrition. The material is pre-crushed in I Chamber and ground in II Chamber. The final product i.e., CEMENT is conveyed to the silos through bucket elevator.
Recently close circuiting of this mill is carried out and output increased from 115 TPH to 140 TPH. Also started using Polycom of Unit-II as a pregrinder for Unit-I Cement Mill by installing clinker integration belt, for further improvement.

Unit-II Cement Mill is a closed circuit Mill with POLYCOM (Roller Press) of 225 TPH capacity. Its length is 14.5 Mtrs. X dia 4.6 Mtrs. The Polycom Presses clinker into flakes. The fines are separated in the “V” separator circuit and rejects goes back to polycom for further size reduction. The “V” separator product is fed to the Ball Mill for further grinding along with Gypsum. The ground material is then fed to the Sepol dynamic Separator where the coarse and fines are separated. The Coarse material is fed back to the Mill. Fines i.e., Cement is conveyed to the Cement Silos by Bucket Elevator and stored for packing. Total 6 nos. of storage silos are there (3 for each unit).

To manufacture Portland Pozzolana cement and to meet the marketing requirement, 1000 MT capacity fly ash silo with storage and feeding arrangement has been installed.

To meet the power requirement for plant operation, two coal based Captive Power Plants of capacities 15.0 MW and 9.5 MW respectively, have been installed and balance power is taken from KPTCL with contract Demand of 7000 KVA. 3 Nos. of Fuji DG sets are available to meet emergency power requirement/during annual shutdown of Captive Thermal Power Plant.

IX) **PACKING AND DESPATCH:** Cement is extracted from the silo and filled in Packer Hoppers, from where the material will flow to the Packer Machine through bucket elevator and air slides. Six numbers of EEL make electronic Roto Packers of 120 TPH capacity in Unit-I & II are installed for packing
purpose. They have high degree of accuracy. Finally the 50 Kg. Cement Bag is transported by Belt Conveyor and stacked inside the Wagon/truck with the help of Wagon Loading and Truck Loading Machines.

TOTAL PRODUCTIVITY MAINTENANCE:

TPM stands for TOTAL PRODUCTIVITY MAINTENANCE. It is about Productivity, People and Profit. Recently, Indian Industries too have realized its importance and most of the leading companies have launched the TPM movement. Among them, is our Unit that has made lot of progress in terms of Production, reduction in cost of power consumption.

TPM is a powerful tool for organizational and cultural transformation that brings in total efficiency of the plant by tackling key aspects of plant utilization, quality and down-time, with the ultimate goal being Zero Breakdown, Zero Accident, Zero Defect, Optimum inventory and clean environment with the involvement of each and every employee right from Top Management to the Bottom Level person in the company.

TPM aims at involving all the employees of the organization through eight pillars of TPM.

They are:

1) Individual Improvement
2) Autonomous Maintenance
3) Planned Maintenance
4) Education & Training

5) Maintenance Preventive System

6) Quality Maintenance

7) Administration & Support

8) Safety & Environment

### AWARDS / TROPHIES WON BY VASAVADATTA CEMENT

<table>
<thead>
<tr>
<th>Description of Awards</th>
<th>Year</th>
</tr>
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<tbody>
<tr>
<td>National Award for Second Best Improvement in Energy Performance from NCCBM &amp; Ministry of Power</td>
<td>1990-01</td>
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<tr>
<td>National Award for Best Improvement in Energy Performance from NCCBM &amp; Ministry of Power</td>
<td>1991-92</td>
</tr>
<tr>
<td>National Award for Best Improvement in Electrical Performance from NCCBM &amp; Ministry of Power</td>
<td>1991-92</td>
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<tr>
<td>Award for Outstanding Contribution towards Growth of Industries from Hyderabad Karnataka Chamber of Commerce</td>
<td>1993</td>
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<tr>
<td>National Productivity Award from Hon’ble Prime Minister</td>
<td>1994-05</td>
</tr>
<tr>
<td>Environmental Award from Dept. of Ecology &amp; Environment, Govt. of Karnataka</td>
<td>1996</td>
</tr>
<tr>
<td>National Award for Third Best Improvement in Energy Performance</td>
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</table>
from NCCBM & Ministry of Power 1994-95

National Award for Best Improvement in Energy Performance from NCCBM & Ministry of Power 1994-95

Awards from Central Institute of Professional Management

2. Best Case Study Presentation in Production 1994
3. Best Theme under Production 1998

Best Improvement in Thermal Energy Performance (line-II) Award 2003-04 from NCBM

Second Best Environmental Excellence in Limestone Mines Award 2004-05 from NCBM

CII-National Energy Management Award, Excellent Energy Efficient Unit 2004

CII-National Energy Management Award, Excellent Energy Efficient Unit 2005

Three Leaves (Rank 10) in the Green Rating Project of the Indian Cement Industry by Center for Science and Environment 2005

Global Cement Award Lowest Specific Energy Consumption, Raw Meal Grinding –Second 2005

Global Cement Award Lowest Specific Energy Consumption, Clinker Grinding – Third 2006
Global Cement Award Lowest Specific Energy Consumption, 2006
Clinkerisation- Third

Global Cement Award Kiln Reliability- Honorable mention 2006

FAPCCI Award for “Excellence in Industrial Productivity” 2007

THEORY BACK UP

Finance being an important part of business has extended its scope to wider paradigms in the recent years. Due to its growing significance in today’s corporate world there has been introduction of scientific analysis of the financial information.

Financial Management is surrounded by financial planning and decision making either for long term or for short term and further to analyze the implications of such decision on the firm. Any firm makes its financial planning on the basis of its past records. The available data acts as a catalyst to make future decisions. Using the past financial information any firm would know if it is able to maintain the same trend or has its position deteriorated or improved over the years.

The rationale behind ratio analysis lies in the fact that it makes data comparable. It is a systematic use of ratio to interpret the financial statements so that the strengths and weaknesses of a firm as well as its historical performance and current financial condition can be determined.
The financial statements provide a summarized view of the financial position and operations of the firm. A lot of things can be learnt on analyzing the financial data and information regarding its operations. The financial statements are considered as the performance reports of a firm on the observation of which much can be understood.

The analysis of the financial statements is a process of evaluating the relationship between component parts of financial statements to obtain a better understanding of the firm’s position and performance. The financial statements can be analyzed by calculating various ratios and interpret them in a proper manner. Thus ratio analysis is widely used tool for financial analysis.

Ratios are relative figures reflecting the relationship between the variables. They enable us to draw conclusions regarding financial operations. Comparison with related facts is the basis of ratio analysis. Four types of comparison are involved:

1. Trend ratios: Trend ratios involve comparison of the ratios of the firm over time; that is, present ratios are compared with past ratios of the same firm. These indicate the direction of change in the performance of the firm.

2. Inter-firm comparison: These involve comparison of the ratios of the firm with those of others in the same line of business or for the industry as a whole reflects its performance in relation to its competitors.

3. Comparison of items within a single year’s financial statement of a firm: These ratios involve the comparison of various items within the balance sheet
of the firm in order to understand how one variable in the balance sheet can impact over the other.

4. Comparison with standards or plans: this kind of analysis helps in knowing to what extent have the firm been able to achieve the set standards and where have the firm been not able to commensurate with the planned action.

CLASSIFICATION OF RATIOS:

Liquidity Ratios:

The liquidity ratios measure the ability of the firm to meet its short-term obligations and assess its short-term solvency. While borrowing for short-term these liquidity ratios are of high importance as they are checked by the short term lenders before lending.

The following are the types of liquidity ratios:

Current Ratio

The current ratio is the total current assets to current liabilities. The current assets of the firm, represents the assets which in the normal course of the business can be converted into cash within a short span of time. The current liabilities are liabilities of the firm which mature in a short span of time. These ratios measure the short-term solvency, that is, its ability to meet short-term obligations. The current ratio is given by:

\[ \text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}} \]
Quick Ratio

This ratio is also known as Acid-Test Ratio. It is a measure of liquidity designed to convey the information regarding the composition of the current assets of the firm. It is referred to as quick ratio because it is a measurement of the firm’s ability to convert its current assets quickly into cash in order to meet its current liabilities. The quick ratio is between the quick current assets and the current liabilities. It is given by:

\[
\text{Quick Ratio} = \frac{\text{Quick Assets}}{\text{Current Liabilities}}
\]

Net working capital ratio:

The difference between the current assets and current liabilities is called as the net working capital of the firm. This is used as a measure of a firm’s liquidity. It is considered that, the firm having greater working capital is more liquid and is able to meet its current obligations with higher efficiency. In the above ratio the net working capital has been related to the net assets (capital employed).

\[
\text{Net Working Capital Ratio} = \frac{\text{Net Working Capital}}{\text{Net Assets}}
\]

Capital Structure/Leverage Ratios

Another category of ratios which are extensively used to measure the long term solvency of the firm are the leverage or the capital structure ratios.

These ratios are useful in the analysis of the firm in terms of its long term liquidity in order to satiate the long term creditors which prefer the assurance of periodic and regular payment of the interest and also of the principal with the arrival of the debt maturing date. Some of the Capital Structure Ratios are as follows-

- Debt-equity Ratio
- Total Liabilities-Total Assets Ratio
Coverage Ratio

- Interest coverage ratio
- Dividend coverage ratio
- Total coverage ratio.
- Total cashflow coverage ratio.
- Debt service coverage ratio.

Debt-Equity Ratio:

Debt - Equity Ratio = \( \frac{\text{Debt}}{\text{Equity}} \)

It reflects the level of debt indulged in the total capital structure. It shows the relative claims of the creditors as against the owners’ funds. Alternatively, it also indicates the relative proportions of debt and equity in financing the assets of the firm. This ratio acts as an indicator of the margin of safety to the creditors.

Debt to Total Capital Ratio:

This ratio explains the proportion of total debt (long term liabilities) to the total assets of the firm. One can understand that the debt to the total assets account for so much. This signifies the stake of creditors in the total assets of the firm. Thus the debt to total capital (total assets) is calculated as follows:

\[
\text{Debt to Total Capital Ratio} = \frac{\text{Total Debt}}{\text{Total Assets}}
\]
Coverage Ratios:

The second category of leverage ratios are coverage ratios. These ratios are computed from the information available in the profit and loss account. The obligations of the firm are normally met out of the earnings or the operating profits and not out of the permanent assets. Hence it is very important for the long term creditors to keep a check on the soundness of the firm to service their claims like interest on loans, repayment of the installment of the loans, redemption of preference capital on maturity, preference dividend, etc. This ability of the firm is indicated by the coverage ratios.

The coverage ratios measure the relationship between what is normally available from the operations of the firms and the claims of the outsiders. The important coverage ratios are interest coverage ratio, dividend coverage ratio, total coverage ratio, total cashflow coverage ratio, debt service coverage ratio.

Interest coverage ratio:

The interest coverage ratio or the times interest earned is used to test the firm’s debt-servicing ability. The interest coverage ratio is computed by dividing earnings before interest and taxes (EBIT) by interest charges.

\[
\text{Interest Coverage Ratio} = \frac{\text{Earnings Before Interest & Taxes}}{\text{Interest}}
\]

Profitability Ratios:

Equally important with the short term and long term solvency, is the financial soundness of the firm which can be judged using the profitability ratios which imply the profit earned by the firm through the sales. These ratios indicate the operating efficiency of the firm as well as the ability of the firm to ensure returns on the amounts invested by the shareholders by earning adequate profits.

Gross Profit Margin:
Gross profit is the measure of the relationship between profit and sales. This ratio indicates the gross profit earned out of sales. It shows the profits available for appropriations.

A higher ratio implies better management and indicates that the cost of production is low; in contrast the lower margin is a danger sign for the firm. Thus gross profit margin indicates the health of the company.

\[
\text{Gross Profit Ratio} = \frac{\text{Gross Profit}}{\text{Sales}} \times 100
\]

**Net Profit Margin:**

This measure is an indicator of the management’s ability to operate the business with sufficient success not only to recover from revenues of the period, the cost of merchandise or services, the expenses of operating the business (including depreciation) the cost of the borrowed funds, but also leave a margin of reasonable compensation to the owners for providing their capital at risk. The ratio of net profit (after interest and taxes) to sales essentially expresses the cost price effectiveness of the operation.

A higher margin would ensure adequate return to the owners as well as enable a firm to withstand adverse economic conditions when selling price is declining, cost of production is rising and demand for the product is falling. The lower margin has the contrasting effect.

These are the various ratios of the net profit margin:

- **Operating profit ratio** = \( \frac{\text{Earnings before interest & taxes (EBIT)}}{\text{Sales}} \times 100 \)

- **Net profit ratio** = \( \frac{\text{Earnings after taxes (EAT)}}{\text{Sales}} \times 100 \)
Expenses Ratio:

Expenses Ratios are also a measure of profitability. It can be obtained by dividing expenses by sales. There are different kinds of variants of expenses ratio. The expenses ratios are related to both gross and net margin. These act as a measure of profitability. As a working proposition the firm should maintain a low ratio. A high ratio is unfavorable as it leaves a small share of sales to meet all other obligations like interest, taxes, etc. The different variants of expenses ratio are illustrated below:

- **Cost of Goods Sold Ratio:**
  \[ CGSR = \frac{\text{Cost of Goods Sold}}{\text{Net Sales}} \]

- **Operating Expenses Ratio:**
  \[ OER = \frac{(\text{Administrative Expenses} + \text{Selling Expenses}) \times 100}{\text{Net Sales}} \]

- **Operating Ratio:**
  \[ OR = \frac{(\text{Cost of Goods Sold} + \text{Operating Expenses}) \times 100}{\text{Net Sales}} \]

Return on Investments:

It would be unwise if only the profitability ratios are considered with sales and no return on investments are considered; the return on investments act as a parameter of knowing if the profits earned justify themselves.
Any firm may earn fairly good percent of profit of sales but when calculated on the total investment the profit percent may seem low. This signifies the importance of the return on investment calculation. The various types of return on investment ratios are:

- Return on Assets
- Return on Equity
- Return on Capital Employed
- Return on Total shareholders’ Equity
- Earnings per share
- Overall profitability

**Return on Assets:**

This ratio is one of the important ratios which assess the return on the assets employed. Here the profitability is measured in terms of the relationship between net profits and assets. The ROA measures the profitability of the total funds/ investments of a firm.

The return on assets is calculated as follows:

\[
\text{ROA} = \frac{\text{Net profit after taxes} + \text{Interest}}{\text{Average total assets}}
\]

**Return on equity:**
The ordinary shareholders’ are given their dividends out of the profits after taxes. Therefore a return on shareholders’ equity is calculated to see the profitability on the owners’ investment.

The return on equity is net profit after taxes divided by shareholders’ equity. This ratio reflects the extent to which the objective of earning a satisfactory margin on owners’ funds is accomplished. Thus this ratio is very important from the viewpoint of the prospective shareholders and also management of the firm who has the responsibility of maximizing the shareholders’ wealth. The return on equity calculation can be done using the formula below:

\[
\text{ROE} = \frac{\text{Profit after taxes}}{\text{Net Worth (Equity)}}
\]

**Return on Capital Employed:**

ROCE is another type of ROI. It is similar to the ROA except in one respect. Here the profits are related to the capital employed. The capital employed basis provides a test of profitability related to the sources of long term funds. A comparison of this ratio with the industry average and over time would provide sufficient insight into how efficiently the long term funds of owners and creditors are being used.

ROCE can be calculated as follows:

\[
\text{ROCE} = \frac{\text{Net Profit after taxes/ EBIT}}{\text{Average total capital employed}} \times 100
\]

**Return on total Shareholder’s Equity:**

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According to this ratio, profitability can be measured by dividing the net profits after taxes (but before preference dividend) by the average total shareholders’ equity. The term total shareholders’ equity comprises of

- Preference share capital
- Ordinary shareholders’ equity consisting of equity share capital, share premium, reserves and surplus (excluding accumulated losses).

This ratio reveals how profitably the funds of the owners have been utilized by the firm.

As the equity shareholders or the ordinary shareholders are supposed to bear all the risks of the business, they are called as real owners of the business. Hence the ratio which emphasizes the return on ordinary shareholders’ equity is also termed as net worth. If the company does not have any preference shareholders, so the ratio of return on total shareholders’ equity will be equal to the net worth.

Return on total shareholders’ equity is given by:

\[
\text{Return on total shareholders' equity} = \frac{\text{Net profit after tax}}{\text{Average shareholders’ equity}} \times 100
\]

**Earnings per Share:**

EPS measures the profit available to the equity shareholders on a per share basis, that is, the amount that they can get on every share held. It is calculated by dividing the profits available to the shareholders by the number of the outstanding shares. The profits available to the ordinary shareholders are represented by net profits after taxes and preference dividend. Thus EPS is given by:

\[
\text{EPS} = \frac{\text{Net profit available to equity holders}}{\text{Number of ordinary shares outstanding}}
\]
Overall Profitability:

The firm can assess its overall profitability by calculating the earning power of the firm using total assets and the net profit after taxes. This is a central measure of the overall profitability and the operational efficiency of the firm. However, this can also be called as a product of the net profit margin and the investments turnover ratio.

Earning power = Net profit margin * Investment turnover

Net profit margin = \( \frac{\text{Net profit after taxes}}{\text{Sales}} \)

Investment turnover = \( \frac{\text{Sales}}{\text{Average total investment}} \)

Therefore, Earning power can be simplified as:

Earning power = \( \frac{\text{Net profit after taxes}}{\text{Sales}} \) * \( \frac{\text{Sales}}{\text{Average total investment}} \)
Activity Ratios:

Creditors and owners invest in the various assets of the company in order to generate profits out of the business. Sales of the firm can be enhanced with the proper management of the assets of the firm. Activity ratios are employed to evaluate the efficiency of asset management and their utilization by the firm. These are also called as turnover ratios as these indicate the speed with which these get themselves converted into cash.

These ratios measure the liquidity of the firm; these like the current ratio determine how quickly certain current assets get converted into cash. The relevant turnover ratios are:

**Inventory Turnover Ratio:**

Inventory turnover indicates the efficiency of the firm in producing and selling its products. It is calculated by dividing the cost of goods sold by the average inventory. From the following table we can calculate the inventory turnover ratio for the five successive years. The inventory turnover ratio is given by:

\[
\text{Inventory Turnover Ratio} = \frac{(\text{Sales} - \text{Gross profit margin})}{(\text{Average inventory})}
\]

\[
\text{Average inventory} = \frac{(\text{opening inventory + closing inventory})}{2}
\]

\[
\text{Inventory Holding Period} = \frac{\text{Months in a year}}{\text{ITR}}
\]
Debtors Turnover Ratio:

Firms also sell their goods on credit, this creates the debtors account in the books of the firm. Debtors are included in the current assets as they are convertible into cash. Thus the liquidity position to a large extent depends on the quality of debtors as debtors form a major part of the current assets.

Debtors turnover ratio indicates the number of times debtors turnover each year. High ratio implies that the firm has been able to collect its debts efficiently and the debtors have good credibility. A lower ratio states the firm needs to revise its credit policies and see to it that the debtors’ turnover is increased.

It is given by:

- **Debtors Turnover Ratio** = \( \frac{Sales}{Debtors^*} \)
- **Average Collection Period** = \( \frac{Months (Days) in a year}{DTR} \)

Assets Turnover Ratio:

It is also known as Investment Turnover Ratio. It measures the efficiency of the firm in managing and utilizing its assets. There are several variants in the ratio depending on the variants of the assets like total assets, fixed assets, current assets, etc.,

- **Fixed Assets Turnover Ratio:**
This ratio determines the extent to which the firm uses the fixed assets efficiently in order to earn more sales and profits. A higher ratio implies that the firm has been managing and utilizing its fixed assets. A lower ratio suggests more scope for proper management of fixed assets.

\[
\text{FATR} = \frac{\text{Cost of Goods Sold}}{\text{Average Fixed Assets}}
\]

- **Current Assets Turnover Ratio:**

  This ratio depicts how quickly a company can turn its current assets. This ratio is a measure of the utilization of current assets by the firm. The current assets turnover ratio is given by:

  \[
  \text{CATR} = \frac{\text{Cost of Goods Sold}}{\text{Average Current Assets}}
  \]

- **Total Assets Turnover Ratio:**

  This ratio indicates the firm’s ability in generating sales from all the financial resources committed to assets. The total assets turnover ratio is given by:

  \[
  \text{TATR} = \frac{\text{Cost of Goods Sold}}{\text{Average total assets}}
  \]

- **Capital Turnover Ratio:**

  This ratio indicates the turnover of capital. It studies the efficiency with which the capital employed generates sales. Higher the ratio better is the utilization of the funds employed.

  \[
  \text{CTR} = \frac{\text{Cost of goods sold}}{\text{Average capital employed.}}
  \]

- **Working capital Turnover Ratio:**
This ratio indicates the ability of the firm to generate the sales with the efficient use of the working capital of the firm. A lower ratio implies poor usage of the working capital.

\[ \text{WCTR} = \frac{\text{Cost of Goods Sold}}{\text{Net Working Capital}} \]
Liquidity Ratios:

Current Ratio = \frac{Current\ Assets}{Current\ Liabilities}

Table No: 1 (Rs in lacs)

<table>
<thead>
<tr>
<th>Year</th>
<th>Current Assets</th>
<th>Current Liabilities</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-08</td>
<td>120627.29</td>
<td>63342.50</td>
<td>1.904</td>
</tr>
<tr>
<td>2006-07</td>
<td>86811.49</td>
<td>36253.41</td>
<td>2.395</td>
</tr>
<tr>
<td>2005-06</td>
<td>60981.33</td>
<td>23745.25</td>
<td>2.568</td>
</tr>
<tr>
<td>2004-05</td>
<td>63063.52</td>
<td>23072.27</td>
<td>2.733</td>
</tr>
<tr>
<td>2003-04</td>
<td>53951.48</td>
<td>21480.90</td>
<td>2.512</td>
</tr>
</tbody>
</table>

The above table reveals the current ratio of the firm for five succeeding years. The higher the current ratio, higher is the liquidity of the firm, which also means lower profitability but by maintaining a consistent ratio the firm has managed a trade-off.
between liquidity and profitability. However the ratio has declined in the year 2007-08. When seen for the five years from 2003-04 which showed a considerably high ratio of 2.5:1 to 2007-08 which reduced its current ratio to 1.9:1. In the years 2004-05 and 2005-06 the current ratios were the highest.

The industry ratio is 2:1, that is, for every rupee of current liability the firm must have two rupees as its current assets to pay them off. The company complies with the industry average.

**Quick Asset Ratio:**

Quick Ratio = \(
\frac{\text{Quick Assets}}{\text{Current Liabilities}}
\)

Table: 2  
(Rs. in lacs)

<table>
<thead>
<tr>
<th>Year</th>
<th>Quick Assets</th>
<th>Current Liabilities</th>
<th>Quick Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-08</td>
<td>76410.28</td>
<td>63342.50</td>
<td>1.21</td>
</tr>
<tr>
<td>2006-07</td>
<td>49123.21</td>
<td>36253.41</td>
<td>1.35</td>
</tr>
<tr>
<td>2005-06</td>
<td>35462.81</td>
<td>23745.25</td>
<td>1.49</td>
</tr>
<tr>
<td>2004-05</td>
<td>40039.45</td>
<td>23072.27</td>
<td>1.74</td>
</tr>
<tr>
<td>2003-04</td>
<td>33644.86</td>
<td>21480.90</td>
<td>1.57</td>
</tr>
</tbody>
</table>

The table above gives an idea about the quick assets held by the company as against their current liabilities. It can be interpreted as for every one rupee of current assets
the company holds Re.1.24 in the year 2007-08. Investing more in the liquid assets would affect the profitability. Therefore the company has been cautious enough to reduce the amount of quick assets to current liabilities ratio. The company has thus been reducing the investment in the liquid assets. The quick ratio was nearly Rs. 2 in the year 2004-05 which came down to Rs.1.50 in the year 2005-06. Since then the quick ratio has been on the declining trend. The industry average for the quick ratio is 1:1. This means that the company has been able to comply with the standards with ease.

Net working capital ratio:

\[
\text{Net Working Capital Ratio = } \frac{\text{Net Working Capital}}{\text{Net Assets}}
\]

Table: 3 (Rs. in lacs)

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Working Capital</th>
<th>Net Assets</th>
<th>NWCR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-08</td>
<td>57284.79</td>
<td>233950.91</td>
<td>0.245</td>
</tr>
<tr>
<td>2006-07</td>
<td>50558.08</td>
<td>163964.37</td>
<td>0.308</td>
</tr>
<tr>
<td>2005-06</td>
<td>37236.08</td>
<td>103740.45</td>
<td>0.359</td>
</tr>
<tr>
<td>2004-05</td>
<td>39991.25</td>
<td>99958.87</td>
<td>0.400</td>
</tr>
<tr>
<td>2003-04</td>
<td>32470.58</td>
<td>91962.70</td>
<td>0.353</td>
</tr>
</tbody>
</table>
In the above table one can see that the net working capital has been increasing but at a declining rate which is why the ratio has been on the decreasing over the five financial year period. One can observe that the ratio in the year 2004-05 was the highest which gradually reduced to the level of 0.359 in the year 2005-06, then to 0.308 in the year 2006-07, finally to 0.245 in the year 2007-08.

This means that if the capital employed (net assets) is Rs.100 then the net working capital was Rs. 40 in the year 2004-05, Rs. 30.8 in the year 2006-07 and Rs.24.5 in the year 2007-08.

**Activity Ratios:**

- **Inventory Turnover Ratio** = \( \frac{\text{Sales-Gross profit margin}}{\text{Average inventory}} \)
- **Average Inventory** = \( \frac{\text{opening inventory} + \text{closing inventory}}{2} \)
- **Inventory Holding Period** = \( \frac{\text{Months in a year}}{\text{ITR}} \)

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales-G/P</th>
<th>Average</th>
<th>ITR (in)</th>
<th>Inventory Holding</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table: 4 (Rs in lacs)
This table clearly shows the time taken by the inventory to turn into cash. In the year 2007-08 it can be observed that inventory turns almost every 2 months. In the sense that the inventory runs fast i.e., it runs for almost 6 times in the same year. Whereas in the other years that is the four preceding years one can see that the inventory took almost the same time. However it had been nominally high in the years 2004-05 and 2005-06 through efficient management and sudden rise in the demand for cement. This means that the firm has been managing inventory well to make sure that the inventory is not shelved up.

A low inventory turnover implies excessive inventory levels than warranted by the production and sales activities. An excessively high inventory turnover ratio is also unfavorable which leads to stock-outs.
Debtors Turnover Ratio:

Debtors Turnover Ratio = \( \frac{Sales}{Debtors} \)

Average Collection Period = Months (Days) in a year

DTR

Table: 5

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales</th>
<th>Debtors</th>
<th>DTR (in times)</th>
<th>ACP (in months)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The table reveals that the debtor turnover ratio is considerably high, which means the firm has a very good debtor management system. The ratio has been increasing which is a healthy trend. The average collection period is 1.10 months i.e. almost 33 days. This means that the debtors in the year 2007-08 have been liquidated within 33 days.

When compared with the previous years it can be observed that the ratio was lowest and the collection period the highest in the year 2003-04, the collection period being 56 days. The ratio saw an increase in the year 2005-06 from 6.97 times to 8.75 times. The later years also mention an increase in the debtors’ turnover and thus implying a lower average collection period from debtors.

### Assets Turnover Ratio:

#### Fixed Assets Turnover Ratio:

\[ \text{FATR} = \frac{\text{Cost of Goods Sold}}{\text{Average Fixed Assets}} \]

<table>
<thead>
<tr>
<th>Year</th>
<th>Cost of goods sold</th>
<th>Average fixed assets</th>
<th>FATR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003-04</td>
<td>129193.06</td>
<td>20079.44</td>
<td>6.43</td>
</tr>
<tr>
<td>2004-05</td>
<td>140395.47</td>
<td>20142.28</td>
<td>6.97</td>
</tr>
<tr>
<td>2005-06</td>
<td>161411.55</td>
<td>18437.25</td>
<td>8.75</td>
</tr>
<tr>
<td>2006-07</td>
<td>220408.93</td>
<td>24594.53</td>
<td>8.96</td>
</tr>
<tr>
<td>2007-08</td>
<td>298509.07</td>
<td>27307.35</td>
<td>10.93</td>
</tr>
</tbody>
</table>
The table represents the ratios assessing the efficiency of the firm in utilizing their fixed as well as their current asset. The table reveals that the ratios have been deteriorating year after year which means the firm has ample chance to expand its operations and make full utilization of the available resources.

Here one can see that the cost of goods sold to fixed assets ratio in the year 2006-07 was the highest. In the year 2007-08 the ratio was 1.66, in the sense, that the firm utilizes its fixed assets 1.66 times. The ratios in the years 2004-05 and 2005-06 are quite high comparatively.

Current Assets Turnover Ratio:

\[
\text{CATR} = \frac{\text{Cost of Goods Sold}}{\text{Average Current Assets}}
\]

Table: 7 (Rs. in lacs)
The table depicts the current assets turnover ratio of the company wherein one can observe that the current assets turnover is faster than the fixed assets turnover of the company. If taken in comparison, we can observe that the current assets are well managed than the fixed assets. The CATR was the highest in the year 2006-07 and it is comparatively lower in the year 2007-08. We can compare the fixed assets turnover ratio and current assets turnover ratio of the company in the years 2004-05 and 2005-06 and say that both the ratios were almost equal.

These ratios infer by reciprocating them. Considering the ratios of 2007-08, for one rupee of cost of goods sold the fixed asset investment would be Rs.0.60 (1/1.66) and Rs.0.44 (1/2.26) in the current assets should be invested. Thus this is the explanation of the above ratios.

- **Total Assets Turnover Ratio:**

  \[
  \text{TATR} = \frac{\text{Cost of Goods Sold}}{\text{Average total assets}}
  \]

  Table: 8 (Rs. in lacs)
The table gives a clear picture of total assets turnover of the company for the period of 5 years. The total assets turnover has been declining since the year 2005-06 when it was the highest. The falling rate is not a very healthy trend. It implies that Rs.0.94 is the investment in total assets that is in both current and fixed assets in order to incur Re.1 on the cost of goods sold.

Similarly the amount for different years can be interpreted as above, stating that for the cost of goods sold of Re. 1 the total asset investment in the year 2003-04 was Rs. 1.02 and for the year 2004-05 the investment was Rs. 1.10, which meant that the asset handling had been improved. In the year 2005-06, the total asset investment was Rs. 1.13 as against the cost of Re. 1 which gradually deteriorated to Rs. 1.06 and Re.0.94. This however clarifies the total asset turnover ratio was never high in the span of five years for the company.

- Capital Turnover Ratio:

\[
CTR = \frac{\text{Cost of goods sold}}{\text{Average capital employed}}
\]
The table reveals the ratios which can be interpreted as follows- the capital turnover ratio had been the highest in the years 2005-06 and 2005-04 mainly because of the lower profits in those two years. The ratio can be interpreted as the capital employed to be at Re.1 against Rs. 1.26 of the cost of goods sold in the year 2007-08. The ratio has been declining since the year 2005-06. The capital employed against the cost of goods sold by reciprocating the ratio, one can find that Re. 0.79 has to be the capital employed against the cost of goods sold in the financial year 2007-08.

The ratios of the other years can also be interpreted in the same manner.

- **Working capital Turnover Ratio:**

  \[
  WCTR = \frac{\text{Cost of Goods Sold}}{\text{Working capital}}
  \]
Net Working Capital

Table: 10

<table>
<thead>
<tr>
<th>Year</th>
<th>Cost of goods sold</th>
<th>Net Working Capital</th>
<th>WCTR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-08</td>
<td>234328.97</td>
<td>57284.79</td>
<td>4.091</td>
</tr>
<tr>
<td>2006-07</td>
<td>180399.96</td>
<td>50558.08</td>
<td>3.568</td>
</tr>
<tr>
<td>2005-06</td>
<td>148161.46</td>
<td>37236.08</td>
<td>3.979</td>
</tr>
<tr>
<td>2004-05</td>
<td>130694.99</td>
<td>39991.25</td>
<td>3.268</td>
</tr>
<tr>
<td>2003-04</td>
<td>115534.31</td>
<td>32470.58</td>
<td>3.558</td>
</tr>
</tbody>
</table>

The ratios calculated in the above table reveals the level of working capital employed to expend the cost on the goods sold. In the year 2007-08, the cost of goods sold is 4 times the working capital. The working capital required is 4 times to generate the sales. Similarly in the year 2006-07 the working capital to cost of goods sold is 3.5. The turnover ratio is 4 times and 3.2 times in the years 2005-06 and 2004-05.

Leverage Ratio:
Debt-Equity Ratio:

- Debt - Equity Ratio = \(\frac{\text{Debt}}{\text{Equity}}\)

Table: 11 (Rs in lacs)

<table>
<thead>
<tr>
<th>Year</th>
<th>Debt</th>
<th>Equity</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-08</td>
<td>121481.39</td>
<td>98192.09</td>
<td>1.24</td>
</tr>
<tr>
<td>2006-07</td>
<td>87280.00</td>
<td>65443.44</td>
<td>1.33</td>
</tr>
<tr>
<td>2005-06</td>
<td>62135.45</td>
<td>41605.00</td>
<td>1.49</td>
</tr>
<tr>
<td>2004-05</td>
<td>50455.24</td>
<td>37714.56</td>
<td>1.33</td>
</tr>
<tr>
<td>2003-04</td>
<td>44663.73</td>
<td>34848.27</td>
<td>1.28</td>
</tr>
</tbody>
</table>

The above table reveals that the firm maintains a mediocre ratio of debt and equity. To explain it precisely with the data available, it is clear that for every Rs.1.24 of debt there is owners’ equity of Re.1 which means that both the owners and creditors are almost equal level of risk and gain. The lower ratio has helped the firm to raise more funds for the expansion plan. The ratio was the highest in the year 2005-06. It was almost Rs.1.50 for Re.1. However, the debt-equity ratio of 2006-07 and 2007-08 were Rs.1.33 and finally to Rs.1.24 against Re.1 respectively. The prescribed standard for debt-equity ratio is 2:1. The company maintains a low level of debt-equity ratio compared to the standard.
Debt to Total Capital Ratio:

Debt to Total Capital Ratio = \( \frac{\text{Total Debt}}{\text{Total Assets}} \)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Debt (Rs. in lacs)</th>
<th>Total Assets (Rs. in lacs)</th>
<th>DTCR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-08</td>
<td>121481.39</td>
<td>297293.42</td>
<td>0.4086</td>
</tr>
<tr>
<td>2006-07</td>
<td>87280.00</td>
<td>200217.78</td>
<td>0.4359</td>
</tr>
<tr>
<td>2005-06</td>
<td>62135.45</td>
<td>138204.81</td>
<td>0.4496</td>
</tr>
<tr>
<td>2004-05</td>
<td>50455.24</td>
<td>123031.14</td>
<td>0.4101</td>
</tr>
<tr>
<td>2003-04</td>
<td>44663.73</td>
<td>113443.60</td>
<td>0.3937</td>
</tr>
</tbody>
</table>

The total debt to total assets ratio reveals the proportion of debt to total assets. It is another way of interpreting the debt to equity ratio. One can see that the proportion of the debt to total assets is Re. 0.40 if the total assets are Re. 1 in the year. The company has constantly been maintaining the same level of debt to total assets ratio. In the year 2003-04 it was Re.0.39 in the total assets of Re.1. The total debt has not been varying too much in fraction out of total assets. In the year 2005-06 the proportion was the highest, it was almost Re.0.45 of Re.1. In the year 2004-05 it was Re.0.41 against Re.1, similarly it was Re.0.43 and 0.41 in the years 2006-07 and 2007-08.
Coverage Ratios:

Interest coverage ratio:

Interest Coverage Ratio = \( \text{Earnings Before Interest & Taxes} \) / Interest

Table: 13 (Rs. in lacs)

<table>
<thead>
<tr>
<th>Year</th>
<th>EBIT</th>
<th>Interest</th>
<th>ICR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-08</td>
<td>60463.93</td>
<td>5210.72</td>
<td>11.60</td>
</tr>
<tr>
<td>2006-07</td>
<td>37169.62</td>
<td>2991.29</td>
<td>12.43</td>
</tr>
<tr>
<td>2005-06</td>
<td>10371.89</td>
<td>2278.97</td>
<td>4.55</td>
</tr>
<tr>
<td>2004-05</td>
<td>6392.38</td>
<td>2041.10</td>
<td>3.13</td>
</tr>
<tr>
<td>2003-04</td>
<td>11449.3</td>
<td>3149.73</td>
<td>3.64</td>
</tr>
</tbody>
</table>

This ratio shows the number of times the interest charges are covered by funds that are ordinarily available for their payments. In the above table one can see that the interest coverage ratio in the year 2006-07 was the highest; it was 12.43 times. This means that the firm is able to service its interest almost 12.5 times with the same earnings. In the year 2007-08, it reduced to 11.6 but this reduction is not detrimental. The ratio is high, despite reduction. The other years have low interest coverage ratios.

From the above calculation one can infer that a high ICR is a favorable sign for the company as it has got greater ability to service the interest on debts.
Profitability Ratio:

Gross Profit Ratio = \( \frac{\text{Gross Profit}}{\text{Sales}} \) * 100

Table: 14

<table>
<thead>
<tr>
<th>Year</th>
<th>Gross profit</th>
<th>Sales</th>
<th>GPM (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-08</td>
<td>64810.10</td>
<td>298509.07</td>
<td>21.71</td>
</tr>
<tr>
<td>2006-07</td>
<td>40008.97</td>
<td>220408.93</td>
<td>18.15</td>
</tr>
<tr>
<td>2005-06</td>
<td>13250.09</td>
<td>161411.55</td>
<td>8.20</td>
</tr>
<tr>
<td>2004-05</td>
<td>9700.48</td>
<td>140395.47</td>
<td>6.91</td>
</tr>
<tr>
<td>2003-04</td>
<td>13658.75</td>
<td>129193.06</td>
<td>10.57</td>
</tr>
</tbody>
</table>

The ratios calculated for the five succeeding years in the above table tell us the percentage of gross profit on sales. The table indicates a very progressive growth in the gross profits. However, one can observe a decline in the gross profit percentage level in the year 2004-05 which is the lowest in the five-year data followed by an increase in the gross profits indicating a positive sign. But the data show a sharp increase in the gross profits continuing the same trend.
Net Profit Margin:

- Operating profit ratio = \( \text{Earnings before interest & taxes (EBIT)} \) / Sales

Table: 15
(Rs in lacs)

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales</th>
<th>EBIT</th>
<th>OPR (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-08</td>
<td>298509.07</td>
<td>60463.93</td>
<td>20.26%</td>
</tr>
<tr>
<td>'2006-07</td>
<td>220408.93</td>
<td>37169.62</td>
<td>16.86%</td>
</tr>
<tr>
<td>2005-06</td>
<td>161411.55</td>
<td>10371.89</td>
<td>6.43%</td>
</tr>
<tr>
<td>2004-05</td>
<td>140395.47</td>
<td>6392.38</td>
<td>4.55%</td>
</tr>
<tr>
<td>2003-04</td>
<td>129193.06</td>
<td>11449.3</td>
<td>8.86%</td>
</tr>
</tbody>
</table>

This table shows operating profitability margin calculated using sales as a measure. These margins indicate the level of operating profit, that is, the profit available before interest and taxes but after deducting the necessary operating expenses. One can see that the operating profit margin in the year 2003-04 was almost 9% owing to the high expenses which can be seen in the expenses ratio. The margin is highest in the year 2007-08, due to reduction in the expenses over the years and improvement in sales. This improvement in the margin commenced from 2005-06 which saw an increased...
margin from 4.5% in the year 2004-05, to 6.4%. Since this rise in the margin, the company saw a drastic rise in the margin in the year 2006-07 of about 16%, due to the reduction in the expenses of the company and also better sales.

- Net profit ratio = \( \frac{\text{Earnings after taxes (EAT)}}{\text{Sales}} \)

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales</th>
<th>EAT</th>
<th>NPR (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-08</td>
<td>298509.07</td>
<td>38335.05</td>
<td>12.84%</td>
</tr>
<tr>
<td>'2006-07</td>
<td>220408.93</td>
<td>26568.35</td>
<td>12.05%</td>
</tr>
<tr>
<td>2005-06</td>
<td>161411.55</td>
<td>4750.92</td>
<td>2.83%</td>
</tr>
<tr>
<td>2004-05</td>
<td>140395.47</td>
<td>3463.78</td>
<td>2.47%</td>
</tr>
<tr>
<td>2003-04</td>
<td>129193.06</td>
<td>6491.25</td>
<td>5.02%</td>
</tr>
</tbody>
</table>

The table here depicts the net profit margins calculated for the company over the period of 5 years which sees a fluctuation over the period. The company had a low margin in the year 2003-04, which further deteriorated in the year 2004-05, leaving a meager amount as earnings for the shareholders. Similar was the case in the year 2005-06 which followed the same trend of lower profits. However, the company saw a drastic change in the year 2006-07, which had the profitability margin of 12% and has led to an improvement in the margin from 12% to 13% in the year 2007-08.

The above table clearly shows that the operating and the net profit margins have been increasing ever since the decline in the year 2004-05. This means that the firm has
been effective in managing the business properly with due care so that it could provide margin of reasonable compensation to the owners for providing their capital at risk.

Expenses Ratio:

- Cost of Goods Sold Ratio:

\[ CGSR = \frac{\text{Cost of Goods Sold}}{\text{Net Sales}} \]

<table>
<thead>
<tr>
<th>Year</th>
<th>Cost of Goods Sold</th>
<th>Sales</th>
<th>CGSR (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-08</td>
<td>234328.97</td>
<td>298509.07</td>
<td>78.5</td>
</tr>
<tr>
<td>2006-07</td>
<td>180399.96</td>
<td>220408.93</td>
<td>81.85</td>
</tr>
<tr>
<td>2005-06</td>
<td>148161.46</td>
<td>161411.55</td>
<td>91.79</td>
</tr>
<tr>
<td>2004-05</td>
<td>130694.99</td>
<td>140395.47</td>
<td>93.09</td>
</tr>
<tr>
<td>2003-04</td>
<td>115534.31</td>
<td>129193.06</td>
<td>89.43</td>
</tr>
</tbody>
</table>

The table reveals that the cost of the goods sold in the five years had been considerably high. In the year 2003-04 it was about 89% of sales, that is,
Rs.114981.8, leaving only a small gross profit margin of 11%. This margin increased in the next years leaving a lean margin of profits for the shareholders. However the cost of goods sold has been reduced indicating efficiency in the cost management.

The cost of goods sold margin should be maintained at a lower level so that a fairly good amount of earnings remain for the shareholders. The margin shows the direct impact on the profitability and earnings of the firm.

- Operating Expenses Ratio:

\[
OER = \left(\frac{\text{Administrative Expenses} + \text{Selling Expenses}}{\text{Net Sales}}\right) \times 100
\]

<table>
<thead>
<tr>
<th>Year</th>
<th>Administrative &amp; Selling Expenses</th>
<th>Sales</th>
<th>OER</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-08</td>
<td>60343.68</td>
<td>298509.07</td>
<td>20.22</td>
</tr>
<tr>
<td>2006-07</td>
<td>50112.51</td>
<td>220408.93</td>
<td>22.74</td>
</tr>
<tr>
<td>2005-06</td>
<td>39086.08</td>
<td>161411.55</td>
<td>24.22</td>
</tr>
<tr>
<td>2004-05</td>
<td>35730.37</td>
<td>140395.47</td>
<td>25.45</td>
</tr>
<tr>
<td>2003-04</td>
<td>29556.53</td>
<td>129193.06</td>
<td>22.88</td>
</tr>
</tbody>
</table>

The above table reveals that the operating costs like administrative and selling expenses to what extent occupy the sales. The margins show the proportion of
amount spent as operating expenses. One can see that the operating expenses in the year 2004-05 was the highest amounting to Rs.35730 lacs, which again has a bad impact on the profits of the company. However the company has put in efforts to considerably reduce the expenses in the year 2007-08, which shows a margin of 20%. The company has been able to decline the margin from 24% to 22% from the year 2005-06 to 2006-07.

- Operating Ratio:

\[
OR = \frac{(\text{Cost of Goods Sold} + \text{Operating Expenses})}{\text{Net Sales}} \times 100
\]

Table: 19

<table>
<thead>
<tr>
<th>Year</th>
<th>Cost of goods sold+ Administrative &amp; Selling Expenses</th>
<th>Sales</th>
<th>Operating Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-08</td>
<td>294672.65</td>
<td>298509.07</td>
<td>98.71</td>
</tr>
<tr>
<td>2006-07</td>
<td>230512.47</td>
<td>220408.93</td>
<td>104.58</td>
</tr>
<tr>
<td>2005-06</td>
<td>187247.54</td>
<td>161411.55</td>
<td>116.01</td>
</tr>
<tr>
<td>2004-05</td>
<td>166425.36</td>
<td>140395.47</td>
<td>118.54</td>
</tr>
</tbody>
</table>
The table shows that the operating ratio, that is, both operating costs and the cost of goods sold together account for almost 112% of sales in the year 2003-04, which however raised to 118% in the year 2004-05, the same got reduced however by 2%, that is, 116% of the sales. This margin got reduced to 104% in the year 2006-07, which showed the considerable control of the company over the expenses. However, the company has now been able to reduce the level of expenses in the overall sales by bringing down the expenses to sales margin to 98% in 2007-08 from 104% the previous year.

**Return on Investments:**

**Return on Assets:**

\[
\text{ROA} = \frac{\text{Net profit after taxes} + \text{Interest}}{\text{Average total assets}} \times 100
\]

Average total assets

<table>
<thead>
<tr>
<th>Year</th>
<th>PAT+ Interest</th>
<th>Average Total Assets</th>
<th>ROA (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-08</td>
<td>43545.77</td>
<td>248755.60</td>
<td>17.51%</td>
</tr>
<tr>
<td>2006-07</td>
<td>29559.62</td>
<td>169211.30</td>
<td>17.47%</td>
</tr>
<tr>
<td>2005-06</td>
<td>6849.89</td>
<td>130617.98</td>
<td>5.24%</td>
</tr>
<tr>
<td>2004-05</td>
<td>5504.88</td>
<td>118237.37</td>
<td>4.66%</td>
</tr>
</tbody>
</table>
Here through the table we can infer that the utilization of assets have been effective and to a fairly good extent. The figures in the table indicate that the assets have been earning a fairly good amount of profits, though the year 2004-05 had a decline in the ROA but in the later year one can see that the ROA has been increasing. The profit before interest but after taxes acts as a good measure in knowing the return on assets. The return was the highest in the year 2007-08, with 17.5%, but this was only a nominal rise in the returns when compared the same with the returns of 2006-07 wherein the returns were 17.4%. Prior to this year the returns on assets were low which can be examined from the table. This implies that over the years; since the decline the firm has been trying to manage and utilize its assets, so as to maximize the returns on assets.

Return on Equity:

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

<table>
<thead>
<tr>
<th>Year</th>
<th>PAT</th>
<th>Net Worth</th>
<th>ROE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-08</td>
<td>38335.05</td>
<td>98192.1</td>
<td>0.390</td>
</tr>
<tr>
<td>2006-07</td>
<td>26568.33</td>
<td>64443.44</td>
<td>0.412</td>
</tr>
<tr>
<td>2005-06</td>
<td>4750.92</td>
<td>41605</td>
<td>0.114</td>
</tr>
<tr>
<td>2004-05</td>
<td>3463.78</td>
<td>37714.59</td>
<td>0.092</td>
</tr>
</tbody>
</table>
One can observe the return on equity ratios calculated in the above table, here the ratios depicts the earnings on the equity invested by the owners in the firm. These ratios are an answer of the proper handling or mishandling of the funds invested of the firm. The ratios here consider the profit after interest and taxes, which has all the appropriations deducted of it and is available for the distribution of the same to the owners of the firm. The ratio can converted to % to have a better understanding of them.

One can see that the returns in the year 2006-07 were the highest showing 41% of returns on equity; there is a slight reduction in the % of returns in the year 2007-08, showing 39% returns. The returns were low in the years 2004-05 and 2005-06. The return in the year 2003-04 was also low but in comparison to the years 2004-05 and 2005-06, the returns were good.

Return on Capital Employed:

ROI = Net Profit after taxes/ EBIT *100

Average total capital employed

<table>
<thead>
<tr>
<th>Year</th>
<th>EBIT</th>
<th>Average total capital employed</th>
<th>ROCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-08</td>
<td>38335.05</td>
<td>185698.46</td>
<td>20.64</td>
</tr>
</tbody>
</table>

Table: 22 (Rs. in lacs)
These margins measure the returns that a firm has managed to generate on the average capital employed. It takes into consideration the earnings before interest and taxes with the average of the total capital employed in the business.

One can see that the return on capital employed had been the lowest in the years 2004-05 and 2005-06. However the company raised the return on capital employed from almost 5% in the year 2005-06 to 21% in the year 2006-07. The company is trying to keep up the same trend in the years to come. The company has been successful in maintaining the same level of return on capital in the year 2007-08. The % of returns to the capital employed is 20.8%.

Return on Total Shareholder’s Equity:

Return on Total shareholders’ Equity = \( \frac{\text{Net profit after tax}}{\text{Average shareholders’ equity}} \) *100

Table: 23

<table>
<thead>
<tr>
<th>Year</th>
<th>NPAT</th>
<th>Average shareholders’ equity</th>
<th>Return on shareholders’ equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003-04</td>
<td>6491.25</td>
<td>79512</td>
<td>8.16</td>
</tr>
<tr>
<td>2004-05</td>
<td>3463.78</td>
<td>83840.915</td>
<td>4.13</td>
</tr>
<tr>
<td>2005-06</td>
<td>4750.92</td>
<td>95955.14</td>
<td>4.95</td>
</tr>
<tr>
<td>2006-07</td>
<td>26568.33</td>
<td>127731.94</td>
<td>20.80</td>
</tr>
</tbody>
</table>
The table here represents the return on the total shareholders’ equity which is offered to them after all the necessary appropriation like interest and taxes from the profits earned are done. The table can be understood in the manner that the earnings available to the shareholders on the average of their capital invested in the year 2007-08 is 47% of their average capital invested. Similarly in the year 2006-07 it is 50% which is the highest. In the other years, one can see that the earnings on the shareholders’ equity were less. It was 12% in the year 2005-06 and 9.5% in 2004-05. It had higher earnings in the year 2003-04 when the same is compared to the years 2005-06 and 2004-05.

### Earnings per Share:

\[
EPS = \frac{\text{Net profit available to equity holders}}{\text{Number of ordinary shares outstanding}}
\]

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Profit</th>
<th>ROE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-08</td>
<td>38335.05</td>
<td>47.14</td>
</tr>
<tr>
<td>2006-07</td>
<td>26568.33</td>
<td>50.11</td>
</tr>
<tr>
<td>2005-06</td>
<td>4750.92</td>
<td>11.98</td>
</tr>
<tr>
<td>2004-05</td>
<td>3463.78</td>
<td>9.55</td>
</tr>
<tr>
<td>2003-04</td>
<td>6491.25</td>
<td>18.63</td>
</tr>
</tbody>
</table>
This table illustrates the earning per share held by the equity shareholders of the firm. The main objective of the company is maximization of the shareholders’ wealth which means to maximize earnings per share of the ordinary shareholders’ who bear the risk and are uncertain about the returns on their investment.

The company has been able to increase the earnings per share since the fall in the same in the year 2004-05. The following years had seen a boost in the earnings per share, there was a rise of Rs. 3 in the year 2005-06 and later in the year 2006-07 it enhanced to Rs 58, that is, an improvement of Rs.48 since 2005-06. The trend followed in the year 2007-08 which estimated earnings per share of Rs. 83.8 implying the management’s endeavour to enhance the owners’ wealth.

**Overall Profitability:**

Earning power = Net profit margin * Investment turnover
Earning power = Net profit after taxes * Sales

Sales                      Average total investment

\[
\text{Earning Power} = \frac{\text{Net Profit after Taxes}}{\text{Total Assets}} \times 100
\]

Table: 25

<table>
<thead>
<tr>
<th>Year</th>
<th>NPAT</th>
<th>Total Assets</th>
<th>Earning Power (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-08</td>
<td>38335.05</td>
<td>297293.42</td>
<td>12.89</td>
</tr>
<tr>
<td>2006-07</td>
<td>26568.33</td>
<td>200217.78</td>
<td>13.27</td>
</tr>
<tr>
<td>2005-06</td>
<td>4750.92</td>
<td>138204.81</td>
<td>3.31</td>
</tr>
<tr>
<td>2004-05</td>
<td>3463.78</td>
<td>123031.14</td>
<td>2.82</td>
</tr>
<tr>
<td>2003-04</td>
<td>6491.25</td>
<td>113443.60</td>
<td>5.72</td>
</tr>
</tbody>
</table>

The table reveals that the earning power has been satisfactory. In the year 2004-05 and 2005-06 the overall profitability had a steep plunge which however was recuperated by the company through their intelligent management. Therefore the company has a satisfying overall profitability at present.

The table gives us a picture of how the overall profitability of the company been fluctuating all the way from 2003-04 to 2007-08. The year 2003-04 saw a low profitability which deteriorated in the following years. There was a recovery of the same in the next years of the abrupt fall of the profitability of the company.

**FINDINGS**
The following are the findings of the analysis done on calculation of various ratios and percentages in order to study the financial health of the company over a period of five years.

- **Liquidity of the company**
  - The current ratio has been according to the standards prescribed by the industry. The company maintained the current ratio above the industry standards in the previous years. However, the company realized the excessive funds being invested in the current assets.
  - The quick ratio also was maintained high by the company. This shows the inclination of the company towards liquidity. The liquid assets held by the company were more. The company has constantly been keeping up the quick ratio above the standards of 1:1 emphasizing on short-term liquidity.
  - The net working capital ratio has been on fall like the other two ratios. The net working capital has been on decline from year to year giving away the pattern of justified liquidity towards which the company is slowly moving from excessive liquidity. Despite the rise in the working capital year on year the ratio shows the declining trend.

The ratios when combined enumerates that the company is in a favorable short term liquidity position which is of utmost importance to the short term creditors.
Capital Structure of the company

- The debt to equity ratios have been below the industry standard of 2:1. The company has been not utilizing the debts fully in its capital structure. Though the company has been increasing the debt level in its capital structure year after year the company has not been able to increase the debt-equity mix in the total assets of the company.

- The total debt to total assets ratio shows the extent of the hold of creditors in the total assets (total capital). The ratio had been in the range of Re.0.40 to Re.0.45 per Re.1 of the total assets whereas the standards specify that the satisfactory level of debt to total assets is \(\frac{2}{3}\) or 66% of the total assets.

- Interest coverage ratio has been above satisfaction for the company. The company in the recent years (2006-07 & 2007-08) has been considerably good. This explains that company is in a position to service its debts with ease by such higher coverage ratio.

The leverage ratios illustrate the long term liquidity of the company. The company’s long term liquidity is beyond satisfaction. The company on the outset has a risk averse nature which is why full utilization of debts is not done. The long term liquidity which is highly material to the creditors is good. This high liquidity defines higher margin of safety for the creditors and a better hold of owners’ of the business.
Profitability of the company

- The gross profit margin was fluctuating throughout the period of 5 years. GPM was below satisfaction which gradually rose owing to the high operating expenses and other costs. The operating profits and the net profits were also struck by the high level of expenses which are at an adequate level at present.

- The expenses ratio was a good measure in estimating their effect on the profits of the company. The assessment helped in analyzing that the company previously had high expenses which left only a meager part of the sales for the shareholders. This was an alarming situation for the company. The total expenses had been 100% and more of the sales.

- The cost of goods sold had been ranging from 75% to 90% of the total sales deteriorating the profit position. The operating profits had been 25% which currently has been controlled at the level of 20%. There have been efforts in minimizing the higher ratios of expenses to sales.

The return on investments also estimates the profitability position and utilization of the funds invested in the business

- ROA has been brought up to a reasonable level with proper management of assets. ROTSE & ROCE has been following a rising pattern in order to provide the shareholders with the compensation for departing from their capital.

- EPS has been spectacular in the year 2007-08 assuring the shareholders a growing tendency of the company. EPS has grown beyond expectation within a span of two years exemplifying the efforts of management.

- The overall profitability of the company has also increased comparatively but there is a reduction of the same in the year 2007-08, which can be of
concern if not taken care. However overall the company had been profitable.

- Activity Ratios determine the level of activities carried out to turn up more sales:
  - Inventory turnover ratio had been quite good for the firm over the years. Even in the years in which the firm had seen low profits, the ITR had been good implying the efficient management of the inventory. The inventory to cash cycle has been low of the firm.
  - Like inventory the debtors have also been good for the company. The debtor to cash cycle has been low signifying the proper and efficient collection system.
  - The fixed assets turnover ratio has been low providing scope for improvement in the generation of sales with the use of the fixed assets. The fixed assets turnover has been declining year after year. However the current assets have been used efficiently in order to generate more sales.
  - The total assets turnover ratio is a combination of both fixed and current assets. These turnover ratios explain that the company can further make the most of the total assets available to them.
  - The working capital turnover ratios define how well the working capital is able to produce the goods which in turn are sold to derive profits. The WCTR are above satisfaction indicating that the working capital has been able to generate the goods 4 times more in the year 2007-08. This shows that firm is properly utilizing its working capital.
  - The total capital employed turnover ratio is quite satisfactory over the years, but the turnover has seen a decline with the passage of time.

These activity ratios show how far the company is able to properly manage its assets irrespective of fixed or current. These show the level of reciprocation of the funds in the
form of assets or capital to enhance production in order to have higher sales and thus profits.

**SUGGESTIONS:**

An endeavour has been done to circumspectly examine and analyze the various financial statements of the company, spread over a period of five years. On careful assessment and analysis the following suggestions have been put forth:

- The liquidity ratios have been above the prescribed norm, so to suggest one can say that the company can make better utilization of the current liabilities. The company has scope to enhance the use of current liabilities.

- There can be some disinvestment in the quick assets as the quick assets are maintained above the prescribed level. This will make the company move towards profitability than to stick with liquidity.

- The company has not been adequately using the leverage in its capital structure effectively. There is lot of scope for the company to increase the level of debt which currently is in the proportion of 40-45% which can be raised 65% safely. The interest coverage ratios also suggest the capacity of the company to enhance its debt structure in the capital of the company.

- The asset turnover ratios suggest that there can be better utilization of fixed and current assets to turn up better sales by proper expansion plans by all the units of the company.

- The expenses are too high for the company; though they have been reduced they must be maintained at a lower level, in order to see that they do not eat away the profits of the company. The expenses must be controlled by bringing a proper system of material and machine handling, etc. The alternative may be to increase sales in proportion with the increase in expenses.
• Financial system has to take care of the fluctuations in the trend ratios of the company. The company must essentially be cautious about the market trends and fashion so as to avoid such fluctuation in the key ratios of the company.

CONCLUSION:

The company has diverse business at various locations. The financial strength depends on the operation of all the units of the company. From the performance evaluation of the company for five years using the financial information made available one can conclude that the company had been running its business in a very safe mode by taking fewer risks. However, it is very essential that the company uses the market opportunities of debt in order to have leverage in its capital structure. This would help the company to maximize the owners’ wealth.

The financial statements of the company illustrates that the company had been into lot of financial turbulences in the past five years. The company had seen a great fall in the profitability in the years 2004-05 & 2005-06, owing several reasons for such decline. Prior to these years also the company did not present excellent results. Despite all the steep falls in the finances and the profitability of the company especially in the financial years 2004-05 and 2005-06, it has been able to come out of the crisis and rise to profitability. This is a sign of proper management of the company as well as its overall finances.
BIBLIOGRAPHY

- **FINANCIAL MANAGEMENT**
  - AUTHORS: KHAN & JAIN
  - PUBLICATION: TATA MC GRAW HILL

- **GOOGLE.COM**

- **WWW.VASAVADATTACEMENT.COM**

- **FINANCIAL MANAGEMENT**
  - AUTHOR: I M PANDEY
  - PUBLICATION: VIKAS PUBLICATION HOUSE
# Summarised Balance Sheet for the Five Years

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<tbody>
<tr>
<td><strong>ASSETS OWNED BY THE COMPANY</strong></td>
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<td></td>
<td></td>
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<td>1. Net Fixed Assets</td>
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<tr>
<td>Gross fixed assets</td>
<td>253003.71</td>
<td>182712.44</td>
<td>142353.37</td>
<td>120437.89</td>
<td>115471.98</td>
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<tr>
<td>Less: depreciation</td>
<td>81120.26</td>
<td>72193.43</td>
<td>68031.4</td>
<td>63280.52</td>
<td>58478.89</td>
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<tr>
<td></td>
<td>171883.45</td>
<td>110519.01</td>
<td>74321.97</td>
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<td>2. Investments</td>
<td>4782.67</td>
<td>2887.28</td>
<td>2901.51</td>
<td>2819.25</td>
<td>2499.03</td>
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<td>3. Inventories</td>
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<td>25518.52</td>
<td>23024.07</td>
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<td>4. Sundry Debtors</td>
<td>27307.35</td>
<td>24594.53</td>
<td>18957.25</td>
<td>20142.28</td>
<td>20079.44</td>
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<td>5. All other Current Assets</td>
<td>49102.93</td>
<td>24528.68</td>
<td>17025.56</td>
<td>19897.17</td>
<td>13565.42</td>
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<td><strong>Total Assets</strong></td>
<td>297293.42</td>
<td>200217.78</td>
<td>138204.81</td>
<td>123031.14</td>
<td>113443.6</td>
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<td><strong>LIABILITIES OF THE COMPANY</strong></td>
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<td>1. Secured loans</td>
<td>97106.02</td>
<td>64319.7</td>
<td>41336.84</td>
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<td>30678.1</td>
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<td>2. Unsecured loans</td>
<td>24375.37</td>
<td>22960.3</td>
<td>20798.61</td>
<td>24403.88</td>
<td>13895.63</td>
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<td>3. Other Liabilities</td>
<td>30303.24</td>
<td>22682.92</td>
<td>16123.31</td>
<td>18559.95</td>
<td>14537.6</td>
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<td>4. Provisions</td>
<td>33039.27</td>
<td>13570.49</td>
<td>7621.94</td>
<td>4512.32</td>
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<td>5. Deferred Tax Liability (Net)</td>
<td>14277.42</td>
<td>11240.93</td>
<td>19719.11</td>
<td>11789.04</td>
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<td>199101.32</td>
<td>134774.34</td>
<td>96599.81</td>
<td>85316.55</td>
<td>78595.33</td>
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<tr>
<td><strong>Total Liabilities</strong></td>
<td>297293.42</td>
<td>200217.78</td>
<td>138204.81</td>
<td>123031.14</td>
<td>113443.6</td>
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<td><strong>COMPANY’S NET WORTH REPRESENTED BY</strong></td>
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<td>1. Ordinary Share Capital</td>
<td>4574.16</td>
<td>4574.16</td>
<td>4574.16</td>
<td>4574.15</td>
<td>4574.15</td>
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<td>2. Reserves and Surplus</td>
<td>93617.94</td>
<td>60869.28</td>
<td>37030.84</td>
<td>33140.44</td>
<td>30274.12</td>
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<td></td>
<td>98192.1</td>
<td>65443.44</td>
<td>41605</td>
<td>37714.59</td>
<td>34848.27</td>
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<tr>
<td><strong>Total Liabilities</strong></td>
<td>297293.42</td>
<td>200217.78</td>
<td>138204.81</td>
<td>123031.14</td>
<td>113443.6</td>
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</table>
# Summarised Profit & loss Account for the Five Years

<table>
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<tbody>
<tr>
<td><strong>RECEIPTS</strong></td>
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<tr>
<td>1. Sales</td>
<td>344032.16</td>
<td>251645.89</td>
<td>187781.55</td>
<td>170901.53</td>
<td>156572.15</td>
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<tr>
<td>2. Income from Operations</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>24.41</td>
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<tr>
<td>3. Miscellaneous Receipts</td>
<td>3689.94</td>
<td>4505.05</td>
<td>4377.89</td>
<td>6410.87</td>
<td>6323.38</td>
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<td>4. Increase/Decrease in Stock</td>
<td>2222.72</td>
<td>1507.42</td>
<td>-2592.67</td>
<td>-1406.62</td>
<td>609.39</td>
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<td><strong>Total Receipts</strong></td>
<td>349944.82</td>
<td>257698.36</td>
<td>189566.77</td>
<td>175905.78</td>
<td>163529.49</td>
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<td><strong>EXPENDITURE</strong></td>
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<tr>
<td>1. Raw Materials</td>
<td>112796.87</td>
<td>93605.78</td>
<td>73522.23</td>
<td>64488.2</td>
<td>57387.23</td>
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<td>2. Stores and Power</td>
<td>47203.03</td>
<td>28862.82</td>
<td>26734.15</td>
<td>24688.69</td>
<td>23706.08</td>
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<td>3. Salary, Wages &amp; other amenities</td>
<td>15324.34</td>
<td>12860.03</td>
<td>11840.62</td>
<td>11362.06</td>
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<td>4. Excise Duty</td>
<td>45523.09</td>
<td>31236.96</td>
<td>26370.39</td>
<td>30506.06</td>
<td>27379.09</td>
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<td>5. Sales Expenses</td>
<td>45019.34</td>
<td>37252.46</td>
<td>27507.39</td>
<td>23899.75</td>
<td>18194.47</td>
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<td>6. Manufacturing and Other</td>
<td>14687.33</td>
<td>10880.03</td>
<td>8740.88</td>
<td>8692.08</td>
<td>8652.08</td>
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<td>Miscellaneous Expenses</td>
<td>5210.72</td>
<td>2278.97</td>
<td>2041.1</td>
<td>3149.73</td>
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<td><strong>Total Expenses</strong></td>
<td>285764.72</td>
<td>217689.39</td>
<td>176316.68</td>
<td>166205.3</td>
<td>149870.74</td>
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<td><strong>GROSS PROFIT</strong></td>
<td>64180.1</td>
<td>40008.97</td>
<td>13250.09</td>
<td>9700.48</td>
<td>13658.75</td>
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Reversal of Debenture Redemption Ratio | 0 | 0 | 0 | 112.5 | 187.5
Excess provision for previous year’s proposed Dividend written back | 0 | 0 | 0 | 0 | 4.18

**APPROPRIATIONS AND TRANSFERS**

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<tr>
<td>1. Depreciation (net)</td>
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<td>5830.64</td>
<td>5157.17</td>
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<td>5359.18</td>
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<td>16500</td>
<td>7500</td>
<td>3400</td>
<td>1000</td>
<td>2000</td>
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<td>3. Provision for Deferred Taxation</td>
<td>281.16</td>
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<td>4. Provision for Fringe Benefit</td>
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<td>110</td>
<td>122</td>
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<td>5. Proposed Dividend</td>
<td>2943.46</td>
<td>2086.35</td>
<td>1564.76</td>
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<td>6. Share Buy Back Reserve</td>
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<td>18.51</td>
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<td>Reserves</td>
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<td>3000</td>
<td>500</td>
<td>350</td>
<td>630</td>
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<td>8. Surplus / (Deficit)</td>
<td>31391.59</td>
<td>21481.98</td>
<td>2506.16</td>
<td>1809.81</td>
<td>4552.63</td>
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<td><strong>Surplus / (Deficit)</strong></td>
<td>64180.1</td>
<td>40008.97</td>
<td>13250.09</td>
<td>9812.98</td>
<td>13850.43</td>
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