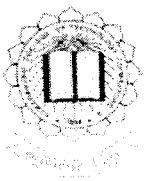
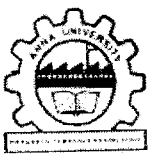
P - 2112.





FINANCIAL PERFORMANCE ANALYSIS OF ENNORE FOUNDRIES

P-2112

By

H.FAHMEEDHA PARVEEN BABI
Reg.no.71206631014

of

Department of Management Studies
Kumaraguru College of Technology
Coimbatore

A PROJECT REPORT
Submitted to the

FACULTY OF MANAGEMENT SCIENCES

In partial fulfillment of the requirements
for the award of the degree

of

MASTER OF BUSINESS ADMINISTRATION

August, 2007

DEPARTMENT OF MANAGEMENT STUDIES

KUMARAGURU COLLEGE OF TECHNOLOGY

COIMBATORE

BONAFIDE CERTIFICATE

Certified that this project report titled **"FINANCIAL PERFORMANCE ANALYSIS OF ENNORE FOUNDRIES"** is the bonafide work of Ms. **ILFAHMEEDHA PARVEEN BABI(71206631014)** who carried out the research under my supervision. Certified further, that to the best of my knowledge the work reported herein does not form part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

Faculty Guide

Director

Evaluated and vice-voce conducted on ..... 29/10/07 .....

Examiner I

Examiner II

Ennore Foundries Limited

27-A, DEVELOPED PLOTS (S.P.)
INDUSTRIAL ESTATE, GUINDY,
CHENNAI - 600 032.
☎ OFF : (044) 42120071, 42120073
FAX : (044) 42120074
Web : www.ennorefoundries.in

Date:31st July 2007

SUMMER INTERNSHIP PROJECT COMPLETION CERTIFICATE

This is to certify Ms H.Fahmeedha parveen babi(06MBA14)student of KCT Business School, Kumaraguru College of Technology, had undergone a project between 19th june and 31st july entitled "FINANCIAL PERFORMANCE ANALYSIS OF ENNORE FOUNDRIES".

During the tenure her performance was ***Good..***

Name and Designation
of Organisational Guide :V.SANKAR,CHIEF FINANCIAL OFFICER

Postal Address : ENNORE FOUNDRIES LIMITED
PLOT 27/A, DEVELOPED PLOTS (S.P)
INDUSTRIAL ESTATE, GUINDY
CHENNAI 600 032

Phone No. : 43563536
Fax :43563534
e-mail ID :

For ENNORE FOUNDRIES LTD.

Authorised Signatory

DECLARATION

I, hereby declare that this project report entitled as "Financial performance analysis of Ennore Foundries" has undertaken for academic purpose submitted to Anna University in partial fulfillment of requirement for the award of the degree of Master of Business Administration. The project report is the record of the original work done by me under the guidance of Prof. venkatesh during the academic year 2007-2008.

I, also declare hereby, that the information given in this report is correct to the best of my knowledge and belief.

Place: Coimbatore

Date: 29/10/07.

H. Fahmeedha

(H.FAHMEEDHA PARVEEN BABI)

ACKNOWLEDGEMENT

It is inevitable that thoughts and ideas of other people tend to drift into the subconscious when one feels to acknowledge helping derived from others. I acknowledge to all those who have helped me in the preparation of this project work.

I would like to thank the god almighty for his guidance without whom this project wouldn't have become reality.

I wish to express my deep gratitude to the principal Dr. Joseph V. Thanikal for his guidance and encouragement to complete my project work.

I wish to express my sincere thanks to Prof. Devanathan – Director, KCT Business School, for his continuous encouragement throughout my project.

I owe my heartfelt gratitude to Prof. Venkatesh, KCT Business School, for his help and valuable guidance given to me through out my project.

I express my sincere thanks to Mr. V.Shankar, chief financial officer, Ennore Foundries limited for granting permission to do my project work.

I extend my sincere gratitude to Mr. Ramachandran Manager Finance, Ennore Foundries limited for his guidance to complete my project successfully.

I extend my sincere thanks to Mr.S.Sheik Abdul Kader Project manager, Ennore Foundries limited for his guidance to complete this project successfully.

Lastly I thank all the employees in the organization who were involved knowingly or unknowingly to make this project work successful.

EXECUTIVE SUMMARY

Finance is defined as the provision of money at the time when it is required for every enterprise. In fact finance is so indispensable, today it is rightly said to be the lifeblood of an enterprise.

Measurement of financial performance is very important for every concern. It guides the management to display the scarce resources in an effective return to the shareholders.

Established in 1959, when the Indian automotive industries started growing. ENNORE FOUNDRIES LIMITED was the first largest automobile-jobbing Foundry in India.

Ennore Foundry is the largest automotive jobbing foundry with production capacity of 48000 MT of Grey Iron Casting and 3000 MT of aluminum gravity die-casting.
In India, one vehicle out 3 in India is fitted with EFL made Cylinder Block Casting.

The study is undertaken to analyze the financial performance in terms of liquidity, solvency, and profitability during the period 2002-03 to 2006-07. the data available in the annual reports of the company are used to study the financial performance of Ennore foundries .

Ratio analysis and leverage are employed to analyze the liquidity, solvency and profitability position of the company. Trend analysis is used to forecast the sales and net profit for the years 2008 and 2009 by the method of least squares.

The liquidity position of the company is found to be reasonably acceptable. The profitability of the company is good and expected to grow in the years to come. Solvency of Ennore foundries is satisfactory.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF TABLES

CHAPTER-1

1.1. BACKGROUND OF THE STUDY

In our present day economy, finance is defined as the provision of money at the time when it is required for every enterprise. whether big, medium or small, needs finance to carry on its operations and to achieve its targets. In fact finance is so indispensable, today it is rightly said to be the lifeblood of an enterprise.

Every concerns goal is to maximize the wealth of the shareholders. Measurement of financial performance is very important for every concern. It guides the management to display the scarce resources in an effective return to the shareholders. The financial statements provide a summarized view of the financial position and operations of a firm and much can be learnt about a firm from a careful examination of its financial statements as performance reports. Thus analysis of financial statements is an important aid to financial analysis.

1.2. STATEMENT OF THE PROBLEM Nowadays, competition is faced in all the fields such as production, marketing and service etc due to liberalization and globalization. A healthy competition is a boon to the consumer, because the consumer shall get good quilted products and services at the least cost.

Every concern therefore has to measure the financial performance to fit them to win the game of competition by making use of the available opportunities in an effective manner.

Financial performance measurement could give the following benefit to an organization

1. Operating profits and growth of the firm can be arrived and predicted.
2. Measurement of economic capability of any concern indicates the real worth of doing business.
3. better capital structure, efficient working capital and better utilization of assets which shall in turn increase the strength of every concern

Therefore the study concentrates over finding the financial performance of the company and giving suggestions to improve the same.

1.3. REVIEW OF LITERATURE

Board of Director Diversity and Firm Financial Performance

This study examines the relationship between demographic diversity on boards of directors with firm financial performance. This relationship is examined using 1993 and 1998 financial performance data (return on asset and investment) and the percentage of women and minorities on boards of directors for 127 large US companies. Correlation and regression analyses indicate board diversity is positively associated with these financial indicators of firm performance. Implications for both strategic human resource management and future research are discussed.

Source: Corporate Governance: An International Review, Volume 11 Issue 2 Page 102-111, April 2003

STRATEGIC PLANNING AND FINANCIAL PERFORMANCE: MORE EVIDENCE

A recently published meta-analysis of the impact of strategic planning on financial performance omitted a major study of corporate planning practice in *Fortune 500* manufacturing firms. This article briefly reviews that study in light of the results of the meta-analysis. Additional analysis examines performance and firm survival over a longer time period than in the original work. the overall conclusion is that a small but positive relationship between strategic planning and performance exists, and persists.

Source: Journal of Management Studies, Volume 31 Issue 1 Page 105-110, January 1994

Strategic Planning and Financial Performance in the Food Processing Sector

Research on the impact of formal strategic planning on firm performance has yielded mixed results. In this study, approximately 200 executives in five food processing industries were surveyed to examine the relationship between formal strategic planning and financial performance. A multiple indicator measure of strategic planning was assessed using confirmatory factor analysis. Results of the strategic planning–performance model indicate that use of strategic planning tools has a positive impact on financial performance as measured by the 3-year average pretax return on assets.

Source: Review of Agricultural Economics, Volume 25 Issue 2 Page 470-482, December 2003

1.4. OBJECTIVES OF THE STUDY

- To analyze the financial performance of Ennore Foundries during the period 2002 to 2007
- To study the liquidity position of Ennore Foundries ltd,
- To analyze the profitability of Ennore Foundries ltd,
- To study the solvency position of Ennore Foundries ltd.

1.5. SCOPE OF STUDY

The study is restricted to the period of five years from 2002-03 to 2006-07.The financial performance of Ennore foundries based on the companies balance sheet, profit and loss account, cash flow statement etc is analyzed. The profitability, liquidity, solvency positions of the company is studied.

1.6. RESEARCH METHODOLOGY

1.6.1. RESEARCH DESIGN:

The research design used in this study has been descriptive in nature. The analysis is confined to the existing facts and figures in respect to the financial performance of the company.

1.6.2. TYPE OF THE STUDY:

The study is descriptive in nature. The data available in the company balance sheet and other records are used to analyze the financial position of Ennore Foundries and it is aimed at studying the liquidity, solvency and profitability of the company.

1.6.3. METHOD OF DATA COLLECTION:

The study involves secondary data collected from the company annual reports (2002-03 to 2006-07), manuals and records.

1.6.4. TOOLS FOR ANALYSIS:

The following tools have been used to study the financial performance of the company

- Ratio Analysis
- Leverage
- Method of least squares

RATIO ANALYSIS

Ratio analysis is a widely used tool of financial analysis. It is defined as the systematic use of ratios to interpret the financial statements so that the strength and weaknesses of a firm as well as its historical performance and current financial condition can be determined. The term ratio refers to the numerical or quantitative relationship between two items/variables.

Ratio analysis makes the related information comparable. It is a quantitative tool enabling the analysts to find out the profitability, liquidity, solvency position of a firm.

LEVERAGE

Leverage is an indication of the use a company makes of the borrowed funds to increase the return on owners equity. Leverage ratios measures the contribution of financing by owners compared with financing provided by the firm's creditors. Leverage is a test of solvency that attempts to monitor the ability of the firm to pay all its debts-current as well as non-current. The proportion of debt capital to the total capital of the firm is usually referred to as leverage or trading on the equity

METHOD OF LEAST SQUARES

By the method of least squares, a straight-line trend can be fitted, to be given time series data. It is a mathematical as well as analytical method. With its help, economic ad business time series data can be fitted and this helps in forecasting and predicting. The trend line is called the line of best fit.

The sum of deviations of the actual values of Y and the trend value (Yc) is 0 and the sum of squares of the deviations of the actual value is the least.

(Y_Yc) = 0 and (Y-Yc)^2 = least.

So this method is called the least squares method or the line of the best fit. The method of least squares can be used to explain the linear and non-linear ie a straight-line trend or parabolic trend.

1.7. LIMITATIONS OF THE STUDY

The project has been done using the tools which have their own inherent limitations and these form the limitations to the study undertaken.

Ratio analysis, one of the techniques used in the study suffers from the following limitations

- Position in the interim period is not revealed by ratio analysis moreover they give no clue to the future.
- Impact of inflation: Financial statements are prepared using historical cost and the values are not adjusted for price level changes.
- Conceptual diversity: Difference of opinion regarding the various concepts used to compute the ratios
- Ratios fail to take into consideration the market changes.
- The study is limited to the period 2002-2007

1.8. CHAPTER SCHEME

CHAPTER 1

This chapter deals with introduction. Objectives, scope, research methodology, research design, limitations pertaining to the study are covered under this chapter.

CHAPTER 2

This chapter conveys the history of ENNORE FOUNDRIES LTD. This chapter highlights the origin, development, objectives, product profile, market potential, management and future plans of the company.

CHAPTER 3

This chapter gives the macro and microanalysis of foundry industry with respect to ENNORE FOUNDRIES LTD.

CHAPTER 4

This chapter depicts the data analysis and interpretation.

CHAPTER 5

This chapter gives summary of findings from the study undertaken, the suggestions given and the conclusion..

CHAPTER-2
ORGANISATION PROFILE

2.1. HISTORY OF THE ORGANIZATION

Established in 1959, when the Indian automotive industries started growing. Ennore Foundry was the first largest automobile-jobbing Foundry in India.

Initially promoted by British Leyland, Ennore Foundry commenced commercial production in 1961. Since then the intricate castings manufactured at its high capacity plant has been catering to the major Automobile Industries across India.

Ennore Foundry is the associate company of Ashok Leyland, which is a Flagship Company of Hinduja group, a major commercial vehicle and diesel engine manufacture

Ennore Foundry is the largest automotive jobbing foundry with production capacity of 48000 MT of Grey Iron Casting and 3000 MT of aluminum gravity die-casting.

in India, one vehicle out 3 in India is fitted with EFL made Cylinder Block Casting.

Our commitment to quality was recognized when EFL was given ISO 9000 certification and QS 9000 CERTIFICATION. Ennore Foundry is certified for ISO14001 also in April 2005 .

LRLIH Limited, U.K. (earlier a part of a British Leyland Group, U.K.) acquired by Hindujas and Iveco Limited in 1987. Iveco is the second largest Commercial Truck manufacturing company in Europe and a part of FIAT Group in Italy.

Hinduja Group was founded by Shri Paramnand Deepchand Hinduja in 1914 at Mumbai

To-day Hinduja Group is a conglomerate with presence in 25 countries and employs over

25,000 personnel world over. HG includes Transport, Energy, Information Technology, Agri Business, Project Development, Banking and Finance and Trading

2.2. MILESTONES OF ENNORE FOUNDRIES

Year	Milestones
2005	Acquisition of Ductron Castings ISO 14001 Awarded
2003	Computer Solidification simulation for Casting Design Introduced
2000	Certified QS- 9000 Quality System
1997	Certified ISO 9001 Quality System
1996	CAD-CAD PRO-E workstation Installed
1991	Second High Pressure Moulding Line Installed
1990	Aluminium Foundry Expansion
1987	Ownership of Ennore Foundries changes from British Leyland to LRLIH Ltd Combine of HINDUJA and IVECO
1984	CNC Machine for Pattern Making Installed
1982	First High Pressure Moulding Line Installed
1961	Commercial Production Commenced
1959	Promoted by British Leyland

2.3 MANAGEMENT

CHAIRMAN

S.J.Shahaney

VICE CHAIRMAN

D.G.Hinduja

MANAGING DIRECTOR

V.Mahadevan

DIRECTORS

D.J. Balaji rao

Pravin N Ghatalia

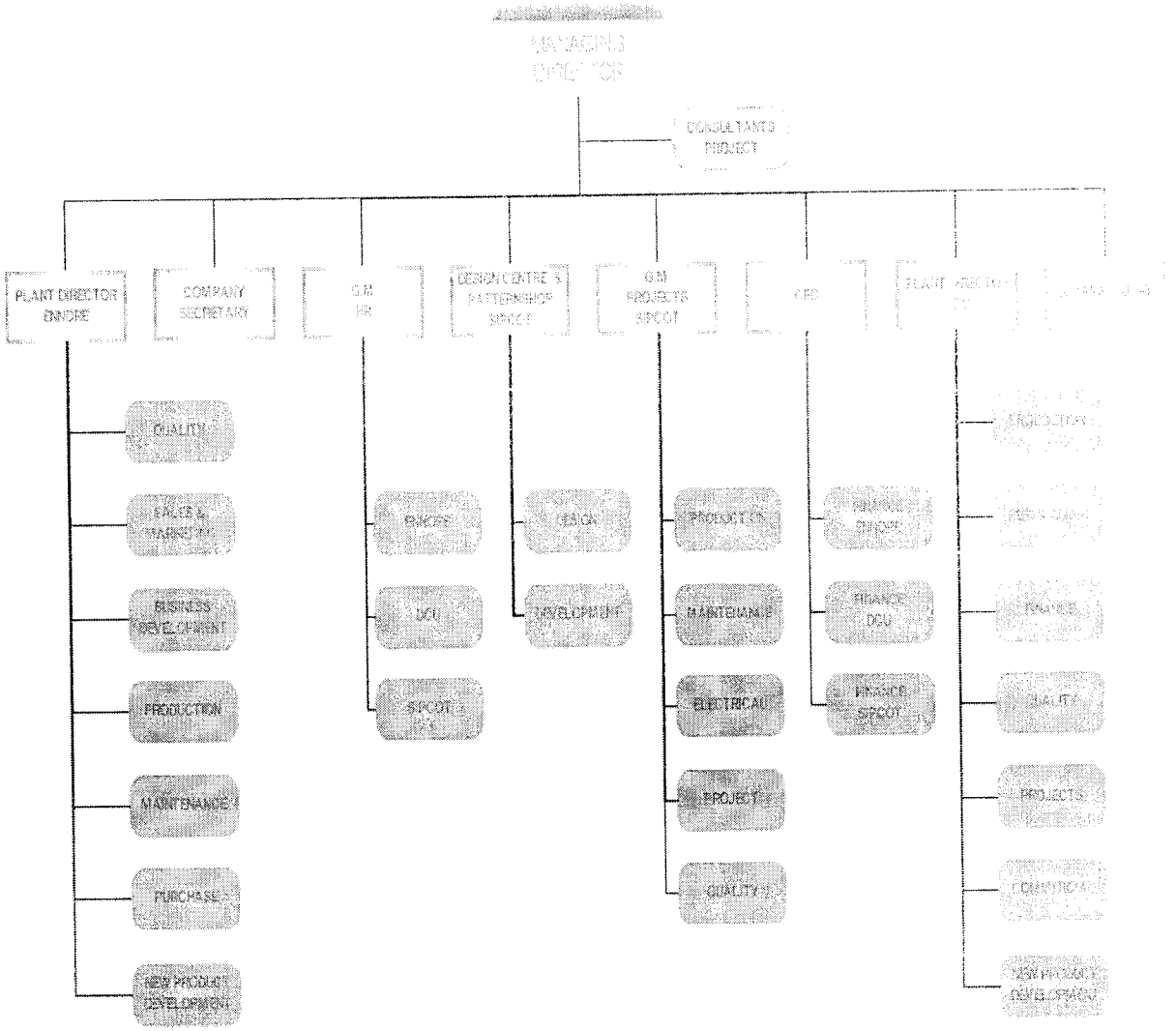
S. Ragothaman

F.Sahami

R.Seshasayee

Anders spare

2.4. ORGANISATION STRUCTURE:



2.5. PRODUCTS PROFILE

Ennore Foundry products are ranging from 10Kg to 300 Kg in gery iron and 0.5 to 16.5 Kg in Aluminum gravity die castings.

Product ranges include Cylinder Blocks, Cylinder Heads, Flywheels, Flywheel Housings, Transmission Casings, Clutch Plates, Brake Drums, Intake Manifolds and Clutch Housings for HCV, LCV and Car segments

Category	**Grey Iron - Product Profile**	**Weights - Kgs**
Car	3 / 4 Bore Cylinder Block	23 – 35
LCV	3 / 4 Bore Cylinder Block	34 – 106
	3 / 4 Bore Cylinder Head	158 - 210
HCV	Clutch Housing	30
	Flywhell Housing	40 – 54
	Gear Box	40 – 55
	6 Bore Cylinder Head	58 – 80
	3 & 4 Bore Cylinder Block	80 – 110
	6 Bore Cylinder Block	158 - 210
	6 Bore Cylinder Block	300
Tractor	3 / 4 Bore Cylinder Block	75 - 105

Composition of Grey Iron and Aluminium Alloys For Production of Casting	
Carbon	3.1 - 3.5

Silicon	2.0 - 2.5
Manganese	0.5 - 0.7
Phosphorous	0.12 – Max
Sulphur	0.18 - Max
Chromium	0.05 - 0.25
Copper, Tin and Molybdenum	Optional

Presently three grades of Grey Cast Iron are manufactured with tensile strength of 150, 200 & 250 N/mm2 Adhering to ISI 210 (BSS 1452). Alloying elements confined to ladle addition only.

Category	**Aluminium - Product Profile**	**Weights – Kgs**
Car	Cylinder Heads	5.4 - 8.0
	Intake Mainfold	1.3 - 3.2
HCV	Cylinder Heads	5.4 - 8.0
	Intake Mainfold	1.3 - 3.2
	Cylinder Heads Cover	3.2
	Gear Case	16.5
	Side Water Rail	3.5

Gravity Die Casting are manufactured put of LM Series Alloys with specifications adhering to BSS 1490 - mainly LM4,LM5, LM, LM16, LM25 and JIS - AC4b, AC4C with / without Heat treatment.

2.6. FUTURE PLANS

Revamping of Ductron castings unit at Hyderabad

Ennore Foundries has got plans for investing around Rs. 20 Crores for modernizing and revamping of the existing line at Ductron Casting Unit at Hyderabad to enhance the capacity from 24000 MT to 36000 MT per annum.

New Green Field Foundry

Ennore Foundries plans to set up a new green field foundry near Chennai, but a different location from Ennore for producing around 50000 MT per annum of Grey Iron and S.G.Iron castings. The land has been selected already and equipment finalizing and ordering process have begun.

The New Foundry will incorporate state-of-art of technology in all facets of casting manufacturing. It will have air impact and squeeze moulding line with 100 moulds per hour. The box size of the moulding line will be 1300 x 1000 x 380 x 380 mm.

Also the melting shop will have facilities like dual track melting and holding furnace, with press pou

Future Plans on Anvil

- Setting up of modern pattern / tool making shop with simulation facilities.
- Setting up of machining facilities to meet the specific customer needs.
- Setting up of Aluminium High Pressure Die Casting line with a view to cater future needs of car blocks.
- Development of cluster foundries to enhance delivery capabilities.

Year	Plans
2008	HPDC line to aluminum
2007	New foundry with the capacity of 50000 Tons/Annum

CHAPTER-3

MICRO-MACRO ANALYSIS

3.1. INDIAN SCENARIO

India -the top ten economy in the world and has the second largest GDP among emerging economies, based on Purchasing Power Parity. It has opened up new business opportunity to the World

The Indian Foundry Industry occupies a special place in shaping the country's economy. India is currently among the 10 largest producers of ferrous and non-ferrous castings and has over 6500 foundries in the small, medium, and large scale sectors. Approximately 90% are in the small scale. India exports annually above Rs.700/- crores worth of castings to countries like USA, U.K., Canada, Germany etc.

The Indian foundry industry caters to the needs of a wide range of industries and is one of the most important sectors shaping the Indian economy.

- Output of the Indian foundry sector is estimated US$ 2.08 billion (Rs 10,000 Crore)
- Indian foundry industry is the sixth largest in the world after USA, China, Japan, Russia & Germany
- In terms of units & number of people employed India is the second largest player in the foundry industry after China
- Over 4,500 recognized foundry units including small, medium & large scale sectors all over the country, approximately 90% are in the small scale.

Indian foundry industry has a sizeable export turnover of goods valued at Rs 2,000 crore per year. The growth in the Industry is primarily due to growth in the auto component industry with a staggering market size of $650 - $700 billion.

With the new liberalized polices of Govt. of India, Foundries have taken a new shape to cater to the present domestic and export demand of the country

At present, the industry is growing at 6% a year, but we are determined to increase this to over 20% by 2010.

Since the 1980s, foundry, a unique business form in the semiconductor chip manufacturing industry has maintained a fast growth momentum. In the past few years, the global foundry market has grown even faster. In 2006, market size reached $23.274 billion. During the 4 years between 2002 and 2006, the market grew at a CAGR of 19.8%, far higher than the growth of the global semiconductor market during the same period.

Currently, pure-play foundries have gradually gained a dominant position in the global foundry market. During the 4 years between 2002 and 2006, pure- play foundries saw their sales revenues grow at a CAGR of 22.2%, far higher than the 9.7% CAGR of Non-pure-play foundries. Correspondingly, pure-play foundries saw their percentage of the total sales revenues in the global foundry market rise to 84.7% in 2006 from 78.3% in 2002.

In terms of structure, 300mm product lines and 90nm and under processors now account for a rising percentage of the sales revenues in the global market, reaching 19.9% and 18.7% in 2006 from 15.2% and 0% in 2002, respectively. As market demand grows fast, global foundry production capacity also grows fast. Between 2002 and 2006, global foundry production capacity expanded by 60%, reaching 23.56 million pieces/year (converted to 200mm silicon chips). 300mm production accounted for 18% of the total production capacity, while 90nm and under processors 14.5%.

As for brand structure, the global foundry market is currently controlled by 4 enterprises, namely TSMC, UMC, Charter and SMIC. In 2006, these 4 enterprises accounted for 69.5% of the global market. TSMC alone got a market share of 43.3%.

3.2. The Chinese market

Symbolized by the establishment of CSMC-HJ (now CSMC), China's foundry industry can be traced back to the 1990s. But, the market only achieved major growth in the true sense when a number of foundries including SMIC and Grace Semiconductor were put into operation in 2001. Statistics show that during the 4 years between 2002 and 2006, sales revenues in China's foundry industry expanded 6.8 times, with a CAGR of 67.2%. In 2006, China's foundry industry reached a size of 22.059 billion Yuan, accounting for 12% of the global market.

While sales revenues expand fast, China's foundry production capacity grows even faster. Between 2002 and 2006, the country saw its foundry production capacity expand 1.5 times, reaching 7.17 million pieces/year (converted to 200mm silicon chip), accounting for 27.2% of the global production capacity. In terms of wafer size and line width, foundry production capacity in China is still mainly dominated by 6 & 8inch and 0.35-0.11 micro processors. In 2006, 8inch wafers and 0.35-0.11micro processors respectively accounted for 53% and 55.7% of China's overall foundry production capacity. 12inch and 90nm processors were few, only accounting for 4% and 2.5% of the overall production capacity respectively

. In terms of development trend, the foundry market and industry will continue to grow fast both at home and abroad. In the next 5 years, the global foundry market is expected to have a CAGR of 11.7%, while sales revenues in China's foundry industry will grow at a CAGR of 17.9%, reaching 50.336 billion Yuan ($6.537 billion) by 2011, accounting for 15.9% of the global market then. By that time, China will become a major foundry industry hub in the world.

Basic technologies have not undergone much change but the emphasis has changed. The world has become more environmentally conscious and technologies have to conform to more and more stringent environment norms. The U.S. foundry population has declined by about one-third over the last 20 years largely due to the cost of legislative compliance. This has given the Indian producers a good opportunity for export market. But then a reemergence

in the developed world would be with cleaner technology. A study conducted by EXIM bank has shown that in the last 10 years the exports of castings from India have increased seven-fold.

However, there is a still lot need to be done. Even with these improvements the export of castings from India amounted to only one percent of the world requirement. In the near future there will be ample scope for the Indian foundry Industry to forge strategic alliances with their counterparts in the developed countries which are on the verge of closure primarily due to three major reasons: waste disposal and highly stringent pollution control regulations, high manpower costs, and acute shortage of trained personnel to work in foundries. This is where Indian foundries can make their presence felt in the international market by approaching foreign foundries to source castings from India at more economical prices and thus enhance their market share. In order to do this, Indian foundry have to equip themselves with the latest technologies such as Automation, Casting Simulation etc. Indian foundry industries can not afford to ignore environmental implications which will also become stringent in terms of implementation compliance.

CHAPTER-4

DATA ANALYSIS AND INTERPRETATION

4.1. RATIO ANALYSIS

The liquidity ratios are used to study the liquidity position of a company. Liquidity is the measure of the firm's ability to meet its current liabilities as they fall due and reflect the short-term financial strength of a firm.

The ratios which indicate the liquidity of a firm are

- Current ratio
- Acid test/quick ratios.
- Turnover ratio
- Profitability ratio

4.1.1. CURRENT RATIO

The current ratio is the ratio of total current assets to total current liabilities. The current ratio of a firm measures its short-term solvency, that is, its ability to meet short-term obligations. The higher is the current ratio, the larger is the amount of rupees available per rupee of current liability, the more is the firm's ability to meet current obligations, and the greater is the safety of funds of short term creditors.

$$\textbf{Current ratio} = \frac{\textbf{Current assets}}{\textbf{Current liabilities}}$$

TABLE-4.1.1

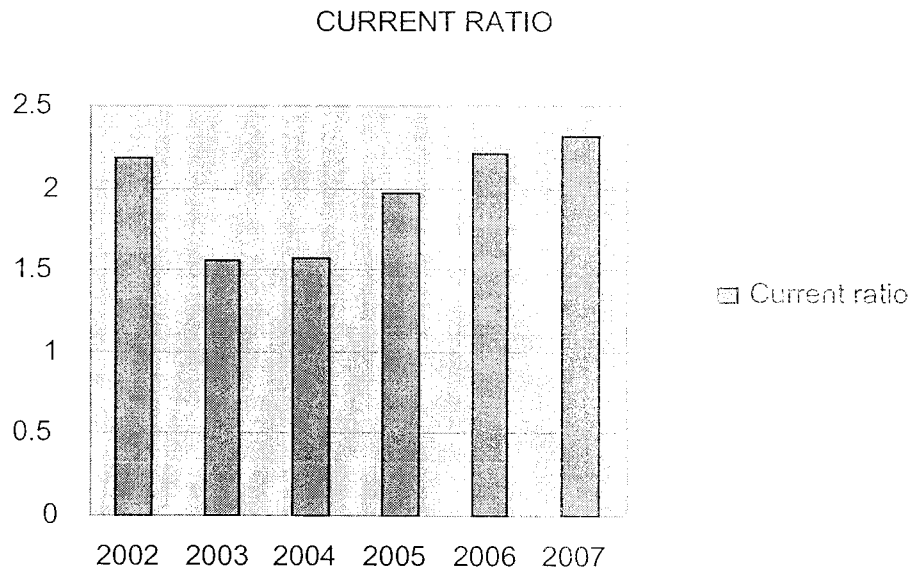
TABLE SHOWING CURRENT RATIO

(Rs in lakhs)

YEAR	CURRENT ASSET	CURRENT LIABILITIES	CURRENT RATIO
2002	5050.04	2316.22	2.18
2003	4162.78	2670.24	1.56
2004	5054.1	3222.37	1.57
2005	6684.22	3404.5	1.96
2006	12752.72	5784.68	2.21
2007	16631.94	7204	2.31

CHART-4.1.1

CHART SHOWING CURRENT RATIO



INTERPRETATION:

The current ratio of the company ranges from 1.5 to 2.3 during the period 2002 to 2007. The current ratio has increased from 2.2 to 2.3 during the period 2006-2007.

INFERENCE:

The current ratio of 2.3 during the previous year signifies that the current assets are 2.3 times the current liabilities. The company will be able to meet its short term obligation in full and for the creditors the firm is less risky. Conventionally the current ratio of 2 is considered satisfactory and hence the current ratio of the firm is reasonable.

4.1.2. QUICK RATIO OR ACID-TEST RATO

The acid-test ratio is the ratio between the quick assets and current liabilities. It is a rigorous measure of a firm's ability to service short-term liabilities. The acid-test ratio is widely accepted as the best available test of the liquidity position of a firm. The quick ratio is a more rigorous and penetrating test of the liquidity position of a firm.

$$\text{Acid-test ratio} = \frac{\text{Quick assets}}{\text{Current liabilities}}$$

TABLE-4.1.2

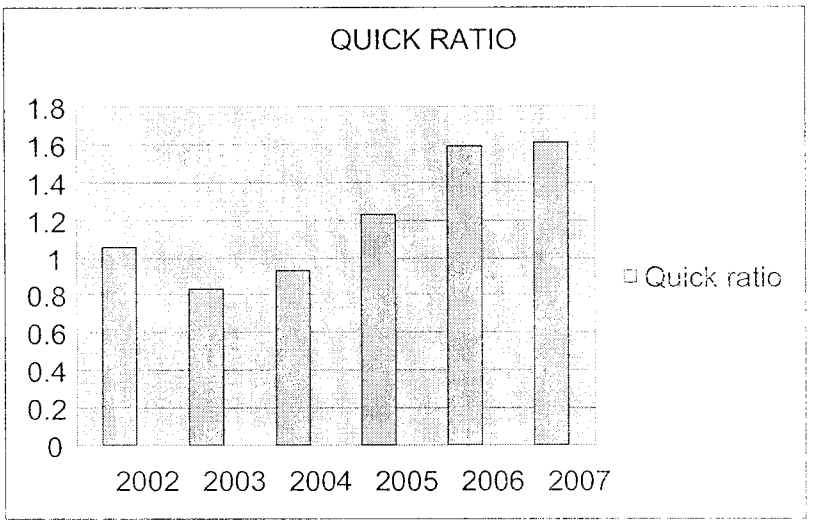
TABLE SHOWING QUICK RATIO

(Rs in lakhs)

YEAR	CURRENT LIABILITIES	QUICK ASSET	QUICK RATIO
2002	2316.22	2441.99	1.054
2003	2670.24	2217.88	0.830
2004	3222.37	2986.31	0.926
2005	3404.5	4166.04	1.223
2006	5784.68	9182.67	1.587
2007	7204	11594.55	1.609

CHART-4.1.2

CHART SHOWING QUICK RATIO



INTERPRETATION:

The above table shows the quick ratio of the company for the five year period 2002-2007. The quick ratio of the company has been maintained between 0.8 and 1.6. During the previous period 2006-07 the quick asset ratio is around 1.6.

INFERENCE

An acid test ratio of 1 is considered satisfactory for a firm to meet all current claims. The quick ratio of the company had been below the standard or the optimum one during the years 2003-04 however the company has maintained the quick ratio around 1 in the following years. The quick ratio of 1.6 during the previous year 2007 indicates that the firm's short-term liquidity position is satisfactory.

4.1.3. TURNOVER RATIOS

Another way of examining the liquidity is to determine how quickly certain current assets are converted into cash. The ratio to measure these are referred to as turnover ratios. The following are the turnover ratios used to analyze the liquidity position

- Inventory turnover ratio
- Debtors turnover ratio
- Creditors turnover ratio

INVENTORY TURNOVER RATIO

The inventory turnover ratio is computed by dividing the cost of goods sold by the average inventory. The ratio indicates how fast inventory is sold. A high ratio is good from the viewpoint of liquidity and vice versa. A low ratio would signify that inventory does not sell fast and stays on the shelf or in the warehouse for a longtime.

$$\textbf{Inventory turnover ratio} = \frac{\textbf{cost of goods sold}}{\textbf{Average inventory}}$$

TABLE-4.1.3

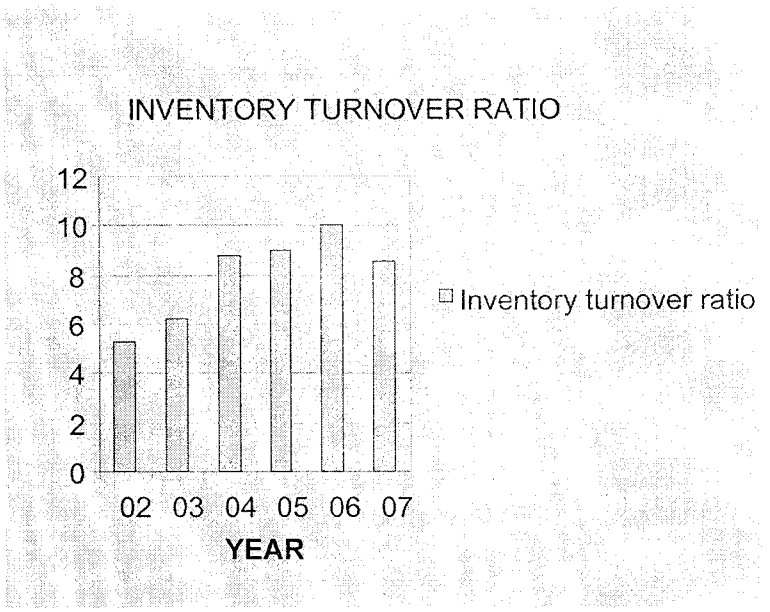
TABLE SHOWING INVENTORY TURNOVER RATIO

(Rs in lakhs)

YEAR	COGS	AVG INVENTORY	INVENTORY TURNOVER RATIO
2002	11696.85	2208.05	5.297
2003	14221.43	2276.47	6.247
2004	17581.19	2006.34	8.762
2005	20659.77	2292.98	9.010
2006	30558.91	3044.12	10.038
2007	36881.32	4303.72	8.569

CHART-4.1.3

CHART SHOWING INVENTORY TURNOVER RATIO



INTERPRETATION:

From the above table it is clear that the inventory turnover ratio of EFL is quiet high and has been increasing year by year from 5 to 10 except for the period 2006-07 where there is a decline. This decrease in the ratio can be attributed to low productivity.

INFERENCE:

The ratio indicates the speed of inventory conversion into sales. A high inventory turnover ratio of the firm is a sign of acceptable liquidity. It also indicates a better efficiency of inventory management.

INVENTORY HOLDING PERIOD

Inventory holding period refers to the ratio between the number of days in a period to the inventory turnover ratio.

$$\text{Inventory holding period} = \frac{\text{No of days in a year}}{\text{Inventory turnover ratio}}$$

TABLE-4.1.4

TABLE SHOWING INVENTORY HOLDING PERIOD

(Rs in lakhs)

Years	Inventory turnover ratio	No of operating days	Inventory holding period
2002	5.297	365	68.90 days
2003	6.247	365	58.42 days
2004	8.762	365	41.65 days
2005	9.010	365	40.51 days
2006	10.038	365	36.36 days
2007	8.569	365	42.59 days

INTERPRETATION:

The inventory holding period has been maintained between 36 to 68 days. Except during the previous year the number of days the stocks were shelved is found to be in the declining stage. The high inventory holding period during the year 2002-03 have later been reduced by about 50%.

INFERENCE:

The decreasing inventory holding period is a good sign of the fast movement of the products

DEBTORS TURNOVER RATIO

The debtors also constitute major portion of the current assets as that of the inventory. The liquidity of the firm depends upon the realization of debtors. The high realization of debtors implies that the firm is highly liquid and vice versa.

As a company sells goods for both cash and credit, credit is used as a marketing tool by a number of companies. When the company extends credits it its customers, book debts are created in the company's accounts. Book debts are expected to be converted into cash over a short period and, therefore are included in current assets. The liquidity position of the company depends on the quality of debtors to a great extent.

$$\text{Debtors turnover ratio} = \frac{\text{Credit Sales}}{\text{Average Debtors}}$$

TABLE-4.1.5

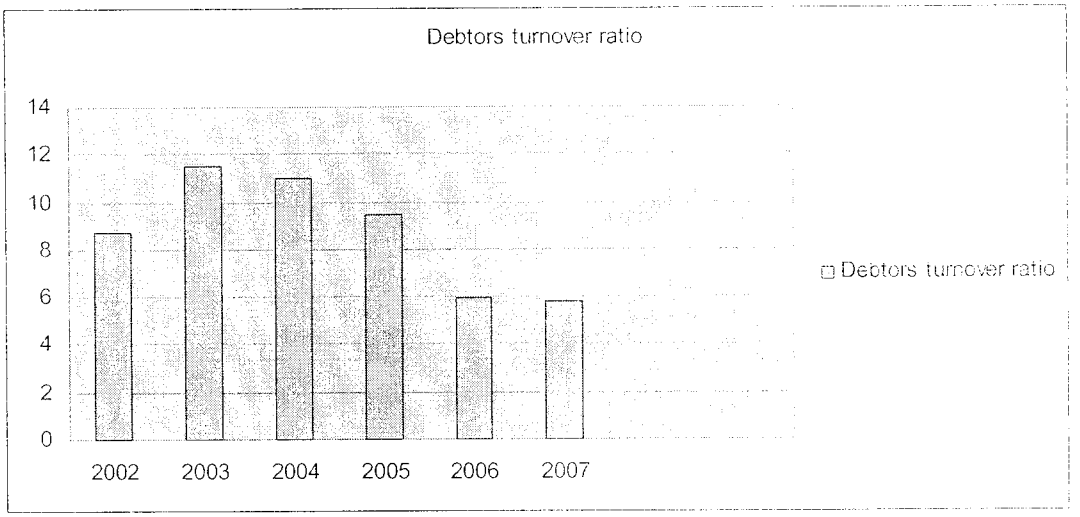
TABLE SHOWING DEBTORS TURNOVER RATIO

(Rs in lakhs)

Year	Credit sales	Average debtors	Debtors turnover ratio
2002	13890.88	1592.10	8.72
2003	14844.18	1286.53	11.53
2004	21061.43	1911.70	11.02
2005	25927.79	2744.31	9.45
2006	38305.82	6458.77	5.93
2007	46101.13	7997.37	5.76

CHART-4.1.5

CHART SHOWING DEBTORS TURNOVER RATIO



INTERPRETATION:

The above table shows that the debtors turnover ratio of EFL has varied between 5 to 11.5 for the six year period 2002 to 2007. The debtors turnover ratio has tremendously decreased during the last two years 2003 to 2005

INFERENCE:

The high debtors turnover ratio during the years 2003 to 2005 is indicative of the shorter time lag between credit sales and cash collection. The low ratio shows that debts are not being collected rapidly.

DEBT COLLECTION PERIOD

Debt collection period refers to the number of days credit allowed to the debtors. It is the ratio between the debtors and credit sales multiplied by the number of days. The average collection period measures the quality of debtors because: it measures the speed of their collection. It helps in ascertaining the company's comparative strength and advantages relative to its credit policy and performance vis-à-vis the competitors credit policies and performance.

$$\text{Debt collection period} = \frac{\text{Debtors}}{\text{Credit Sales}} * 365 \text{ days}$$

TABLE-4.1.6

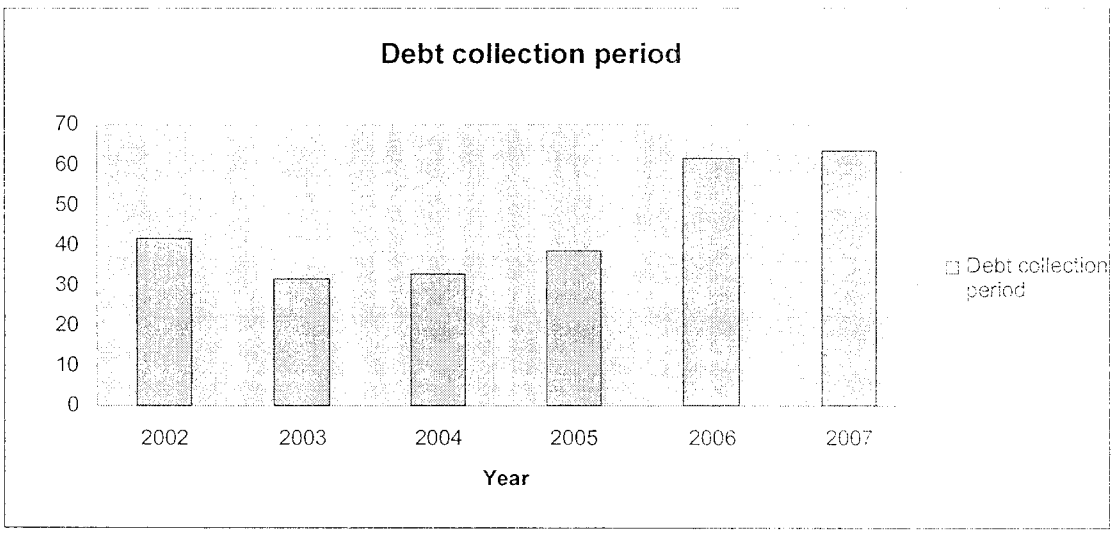
TABLE SHOWING DEBT COLLECTION PERIOD

(Rs in lakhs)

Credit sales	Average debtors	No of days in a year	Debt collection period
13890.88	1592.1	365	41.85 days
14844.18	1286.53	365	31.65 days
21061.43	1911.7	365	33.12 days
25927.79	2744.31	365	38.62 days
38305.82	6458.77	365	61.55 days
46101.13	7997.37	365	63.36 days

CHART-4.1.6

CHART SHOWING DEBT COLLECTION PERIOD



INTERPRETATION:

The debt collection period for the period 2002 to 2007 ranges between 31 to 63 days. It is found to have increased greatly during the previous year.

INFERENCE:

Shorter the average collection period, better is the quality of debtors as a short collection period implies the prompt payment by debtors. The increased longer collection period of the firm implies a very liberal and inefficient credit and collection performance. This certainly delays the collection of cash and impairs of the company's liquidity.

CREDITORS TURNOVER RATIO

It is a ratio between net credit purchases and the average amount of creditors outstanding during the year.

$$\text{Creditors turnover ratio} = \frac{\text{Net credit purchases}}{\text{Average creditor}}$$

TABLE-4.1.7

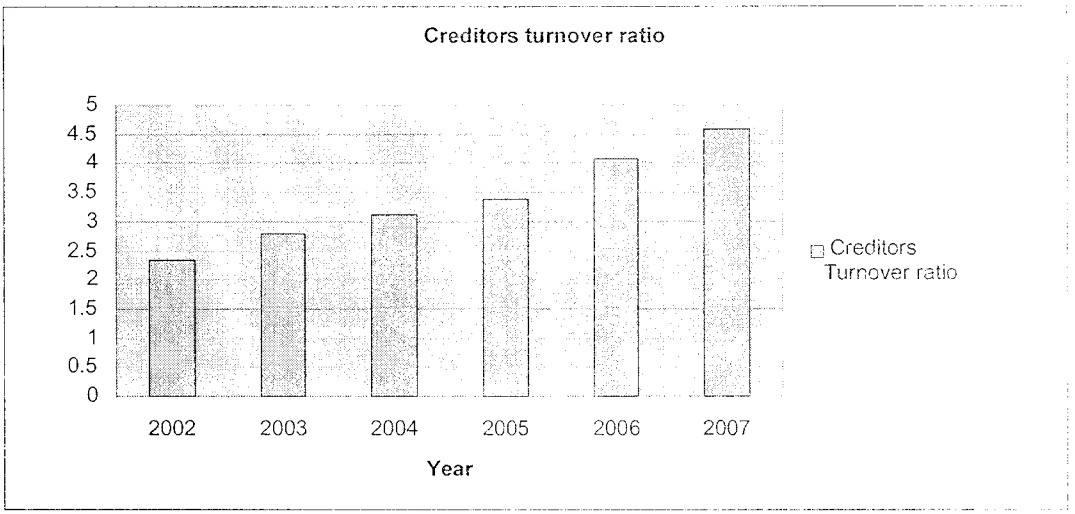
TABLE SHOWING CREDITORS TURNOVER RATIO

(Rs in lakhs)

year	Net credit purchases	Average creditors	Creditors turnover ratio
2002	4295.78	1841.36	2.33
2003	5541.22	1996.56	2.77
2004	7815.56	2519.97	3.10
2005	10418.37	3078.48	3.38
2006	16078.83	3938.37	4.08
2007	20245.6	4428.31	4.57

CHART-4.1.7

CHART SHOWING CREDITORS TURNOVER RATIO



INTERPRETATION

The creditors turnover ratio is found to be low during the years 2002 to 2005 but it has been moving in the upward trend. The creditors turnover ratio has increased to 5 in the previous year which is comparatively higher.

INFERENCE

The low turnover ratio indicates liberal credit terms granted by the suppliers. The extent to which trade creditors are willing to wait for payment is indicated by the creditors turnover ratio. The low turnover ratio would enable the firm to rely on suppliers credit.

WORKING CAPITAL TURNOVER RATIO

Working capital of a concern is directly related to sales (i.e.) the current assets like debtors, bills receivables, cash, and stock etc. change with the increase or decrease in sales.

Working capital = current asset – current liability

Working capital turnover ratio indicates the velocity of the utilization of net working capital. This ratio indicates the number of times the working capital is turned over in the course of a year. A higher ratio indicates efficient utilization of working capital and a low ratio indicates otherwise.

$$\text{Working capital turnover ratio} = \frac{\text{Sales}}{\text{Working capital}}$$

TABLE-4.1.8

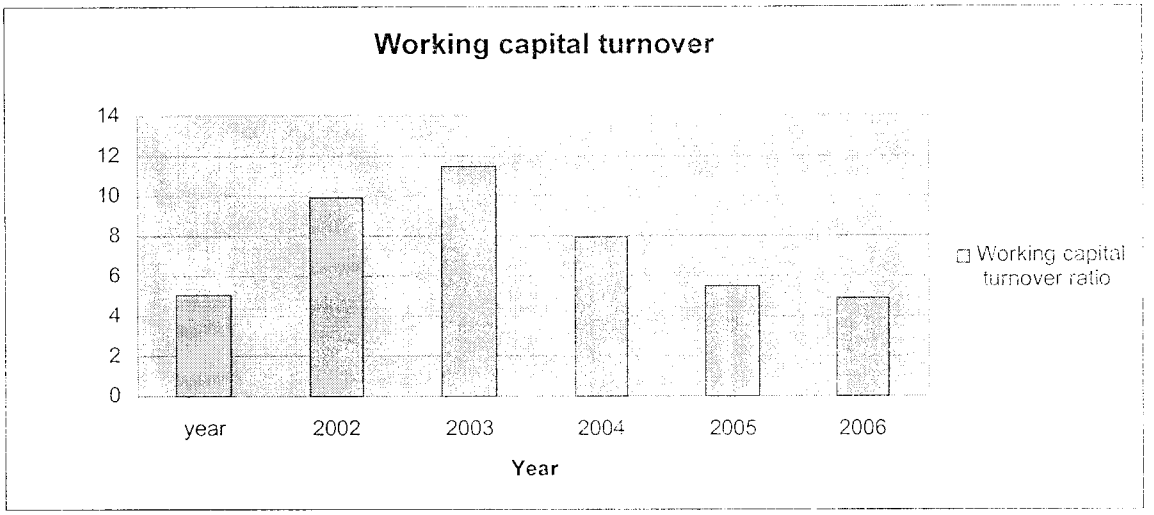
TABLE SHOWING WORKING CAPITAL TURNOVER RATIO

(Rs in lakhs)

Year	cost of goods sold	net working capital	working capital turnover ratio
2002	13890.88	2733.82	5.08
2003	14844.18	1492.54	9.94
2004	21061.43	1831.73	11.49
2005	25927.79	3279.72	7.90
2006	38305.82	6968.04	5.49
2007	46101.13	9427.94	4.89

CHART-4.1.8

CHART SHOWING WORKING CAPIYAL TURNOVER RATIO



INTERPRETATION

The working capital ratio has increased from 5 to 11 during the year 2002 to 2004 and has again decreased to 5 during the previous year.

INFERENCE

High sales in comparison to working capital means over trading, and low sales in comparison to working capital means under trading. A higher working capital turnover shows that there is low investment in working capital.

4.1.4. PROFITABILITY RATIO

The Profitability of a firm can be measured by its profitability ratios. Profitability ratios can be determined on the basis of either sales or investments.

The following profitability ratios are used for the analysis

- Profit margin
- Return on assets
- Return on capital employed

Profit margin

The profit margin measures the relationship between profit and sales.There are two types of profit margin:

- **Gross profit margin**
- **Net profit margin**

GROSS PROFIT MARGIN:

Gross profit ratio is calculated to understand the relationship between gross profit and sales, gross profit is found which indicates the selling price of goods per unit may decline without resulting in loss from operations to the firm.

$$\textbf{Gross profit ratio} = \frac{\textbf{Gross profit}}{\textbf{Net Sales}} * 100$$

TABLE-4.1.9

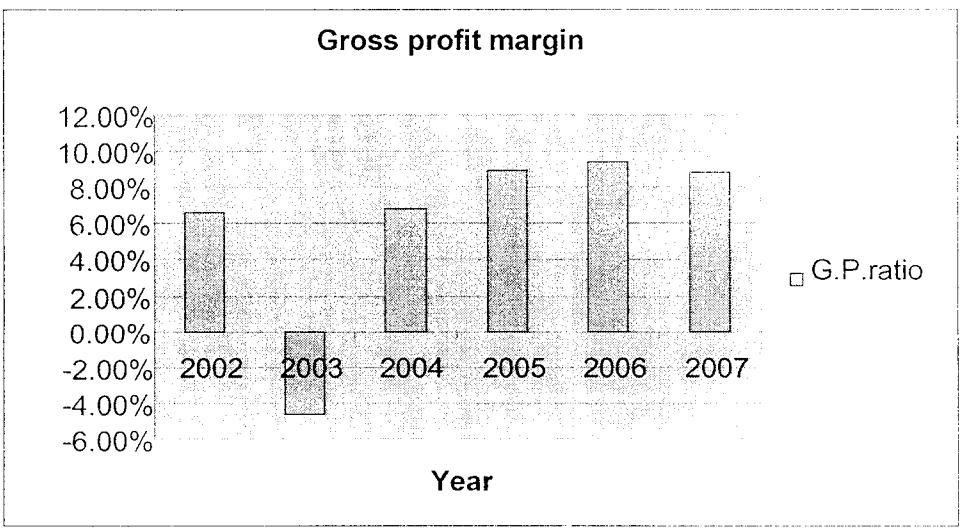
Table showing gross profit ratio

(Rs in lakhs)

year	Gross profit	Net sales	Gross profit ratio
2002	917	13890.88	6.6%
2003	-683	14844.18	-4.6%
2004	1445	21061.43	6.86%
2005	2315	25927.79	8.93%
2006	3621	38305.82	9.45%
2007	4089	46101.13	8.86%

CHART-4.1.9

CHART SHOWING GROSS PROFIT MARGIN



INTERPRETATION:

From the table it could be seen that gross profit margin is moving in an upward trend except during the period 2003 and 2007. the gross profit ratio varies from -4.6 to 9.45. the high ratio is during the year 2006. the gross profit ratio as a whole is in the positive trend during the last four years.

INFERENCE:

The increase in gross profits and the gross profit margin is a sign of good management. The increase is a result of the increased turnover and reduced cost. The reasonable gross profit margin ensures adequate coverage for operating expenses of the firm and sufficient return to the owners of the business.

NET PROFIT MARGIN

To understand the relationship between net profit and sales, the net profit is being calculated which indicate the efficiency of the management in manufacturing, administering and selling the products. This ratio measures the overall of the overall ability of the firm to turn each rupee of sales into net profit. The net profit is measured by dividing net profit by sales.

$$\text{Net profit ratio} = \frac{\text{Net profit}}{\text{Sales}} * 100$$

TABLE-4.1.10

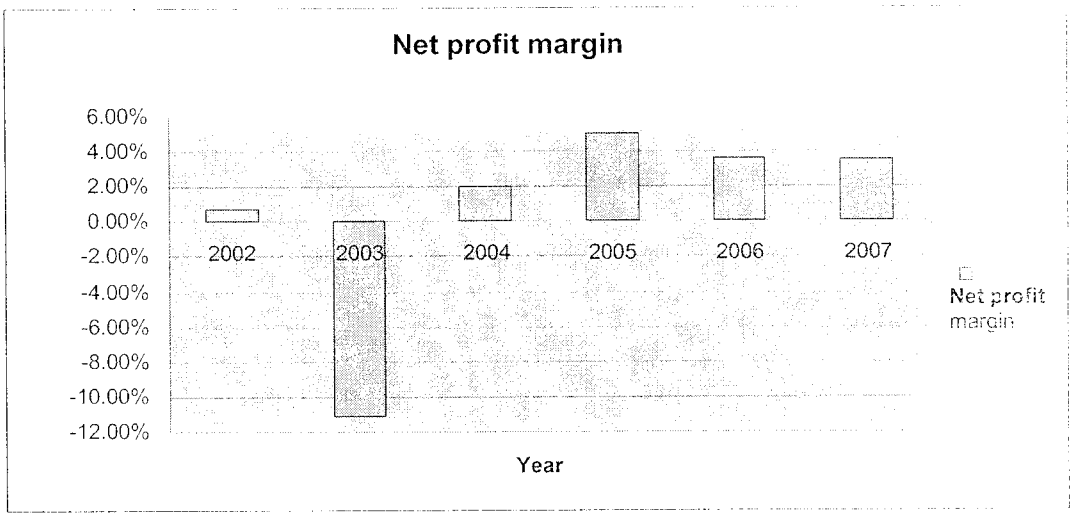
TABLE SHOWING NET PROFIT RATIO

(Rs in lakhs)

Year	Sales	Net profit	NP ratio
2002	13890.88	95	.68%
2003	14844.18	-1656	-11.15%
2004	21061.43	418	1.98%
2005	25927.79	1308	5.04%
2006	38305.82	1396	3.64%
2007	46101.13	1616	3.50%

CHART-4.1.10

CHART SHOWING NET PROFIT MARGIN



INTERPRETATION:

The net profit of the Ennore foundries has seen vast fluctuations without steady increase or decrease during the last five years. The company has experienced heavy loss during the period 2003 which was the result of drastic fall in the demand for castings. The net profit has been high during the year 2005 and thereafter it has been at 3.5 during the previous period.

INFERENCE:

The gross profit and the net profit margin show the same trend during the previous 5 years. This shows constant indirect expenses during the study period. The net profit margin is indicative of management's ability to operate the business with sufficient success not only to recover revenues of the period. The net profit margin during the recent years is satisfactory since the inventory turnover ratio is high during the respective years.

RETURN ON ASSETS

Here the profitability is measured in terms of the relationship between net profits and assets. The ROA may also be called profit-to-asset ratio. The ROA measures the profitability of the total funds /investments of a firm. However it does not throw light on the profitability of the different sources of funds which finance the total assets.

$$\text{Return on total assets} = \frac{\text{Net profit after taxes}}{\text{Total assets}} * 100$$

TABLE-4.1.11

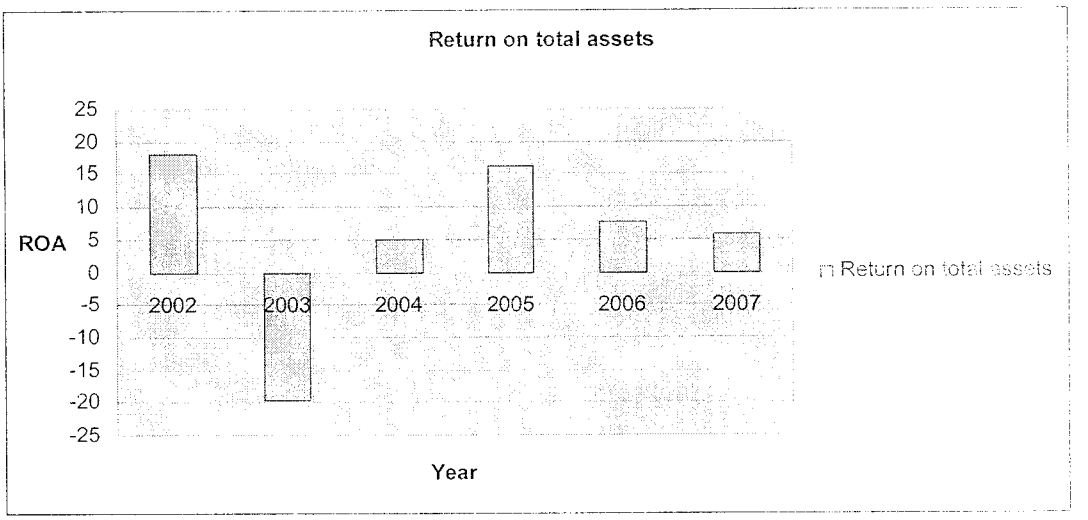
Table showing return on assets

(Rs in lakhs)

Year	Net profit	Total asset	Return on total assets
2002	1308	7196	18.18
2003	-1656	8391	-19.73
2004	418	8314	5.03
2005	1308	8075	16.20
2006	1396	18124	7.70
2007	1616	28749	5.62

CHART-4.1.11

CHART SHOWING RETURN ON ASSETS



INTERPRETATION:

The ROA during the year 2002 had been very high at 18.18 but has gown down during the successive years. The ROA has increased during the period 2003 to 2006 and has dropped a little to 5.62 during the previous year 2007.

INFERENCE:

The ROA measures the profitability of the total funds of a firm. A high ratio indicates that the fir has generated good profit out of the total asset in an effective manner. But when it is low the firm is not using the assets effectively. The ROA of the firm is acceptable.

RETURN ON CAPITAL EMPLOYED

Return on capital employed is the ratio between net profit after taxes and average capital employed. The term capital employed refers to the long-term funds supplied by the creditors and owners of the firm. This ratio is a test of profitability related to the sources of long term funds. The higher is the ratio the more efficient is the use of capital employed.

$$ROCE = \frac{\text{Net profit after taxes}}{\text{Capital employed}} * 100$$

TABLE-4.1.12

TABLE SOWING RETURN ON CAPITAL EMPLOYED

year	Net profit	Capital employed	Return on capital employed
2002	1308	4879.78	26.80
2003	-1656	5720.76	-28.94
2004	418	5091.63	8.20
2005	1308	4670.5	28.01
2006	1396	12339.32	11.31
2007	1616	21545	7.51

INTERPRETATION:

The return on capital employed varies from -28.9 to 28. The ROCE is high in the year 2005 and thereafter it follows the decreasing trend as seen in the table. It is negative in the year 2003.

INFERENCE:

The ROCE indicates the utilization of capital employed in the business. The higher ROCE during 2002, 2005, and 2006 indicates the effective utilization of the capital.

4.2 LEVERAGE:

Leverage or capital structure ratios may be defined as financial ratios which throw light on the long-term solvency of a firm as reflected in its ability to assure the long-term creditors. The leverage or capital ratios used to study the long-term solvency of EFL are

- Debt equity ratio
- Debt to total assets
- Proprietary ratio

4.2.1 DEBT EQUITY RATIO

Debt equity ratio also known as external – internal equity ratio, is being calculated in order to know the relationship between the shareholders fund and outsiders fund. The outsider's debt includes all long term and short term debts. While share holders fund consist of paid up capital, reserve and surplus.

Debt equity ratio is calculated by dividing the long term debt by internal equity.

$$\textbf{Debt equity ratio} = \frac{\textbf{Total debt}}{\textbf{Shareholders fund}}$$

TABLE-4.2.1

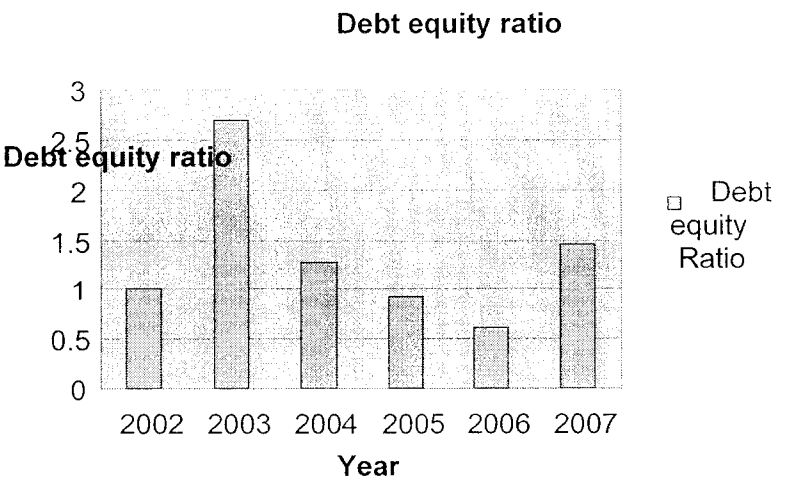
Table showing debt equity ratio

(Rs in lakhs)

Years	total long term debt	shareholders fund	debt equity ratio
2002	3521	3475	1.01
2003	4801	1779	2.69
2004	3891	3031	1.28
2005	3814	4176	0.91
2006	6662	10847	0.61
2007	16695	11449	1.45

CHART-4.2.1

CHART SHOWING DEBT EQUITY RATIO



INTERPRETATION:

From the above table the debt ratio is found to be on the higher side during the years 2002-03 whereas during the years 2004-06 it is in the negative trend. The debt equity ratio varies from 0.61 to 2.69.

INFERENCE:

A conventional rule of a debt equity ratio of 1:2 is considered to be satisfactory. The debt equity ratio during the years 2003, 2004 indicates heavy debt. The debt to equity ratio of 0.61 in the year 2006 is satisfactory

4.2.2 DEBT TO TOTAL ASSETS

The debt to total asset ratio is the ratio between the total debt and the total assets of the firm. The total debt of the firm comprises long-term debt plus current liabilities. The total assets consists of permanent capital plus current liabilities.

$$\text{Debt to total assets ratio} = \frac{\text{Total debt}}{\text{Total assets}}$$

TABLE-4.2.2

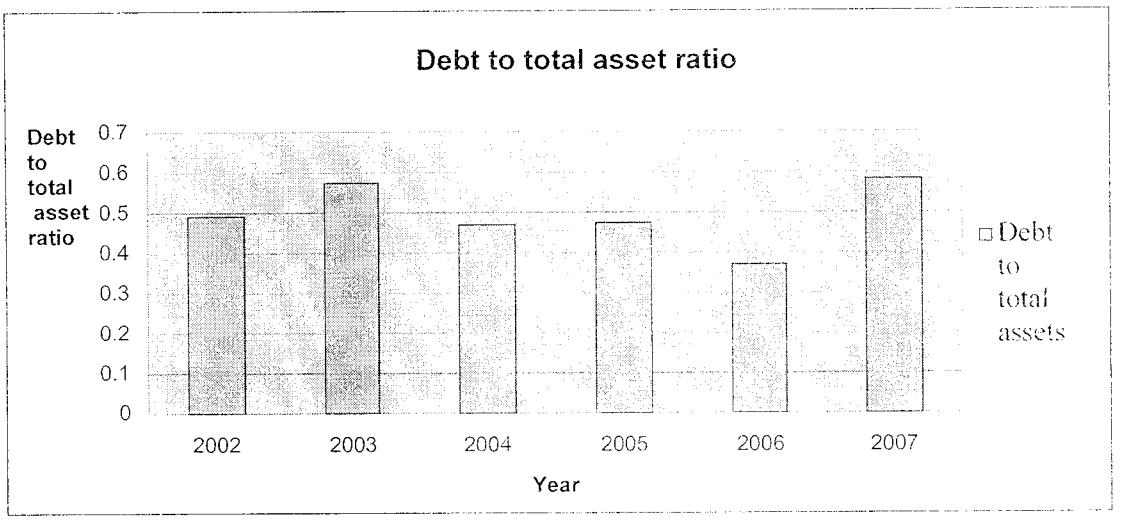
Table showing debt to total assets turnover

(Rs in lakhs)

Years	total debt	total assets	debt to total assets
2002	3521	7196	0.49
2003	4801	8391	0.57
2004	3891	8314	0.46
2005	3814	8075	0.47
2006	6662	18124	0.37
2007	16695	28749	0.58

CHART-4.2.2

CHART SHOWING DEBT TO TOTAL ASSET RATIO



INTERPRETATION:

The debt to total assets varies from 0.37 to 0.58 during the period 2002-2007. The debt to total assets is high in the year 2007 and low in the year 2006

INFERENCE:

A low ratio of debt to total assets is desirable for the creditors as there is sufficient margin of safety available to them. A high ratio would expose the creditors to high risk. The debt to total assets ratio of the company is considered risky.

4.2.3 PROPRIETARY RATIO

Proprietary ratio is calculated to judge the owner's contribution to total fund applications.

Proprietary fund means share capital, both equity, preference shares and reserve and surplus. However for this purpose only free reserves should be counted.

$$\text{Proprietary ratio} = \frac{\text{Proprietary/shareholders fund}}{\text{Total assets}}$$

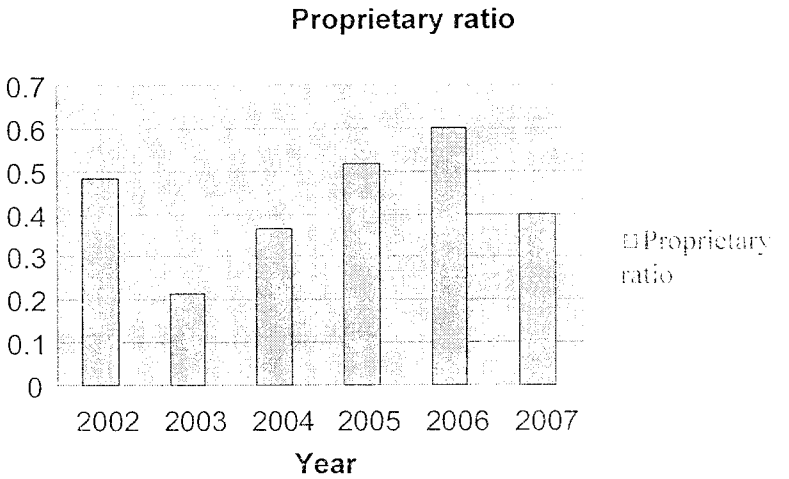
TABLE-4.2.3

Table showing proprietary ratio

Year	shareholders fund	total asset	proprietary ratio
2002	3475	7196	0.48
2003	1779	8391	0.21
2004	3031	8314	0.36
2005	4176	8075	0.52
2006	10847	18124	0.60
2007	11449	28749	0.40

CHART-4.2.3

CHART SHOWING PROPRIETARY RATIO



INTERPRETATION:

The proprietary ratio of the firm varies from 0.21 to 0.60 during the period 2002 to 2007.

It is high in the year 2006 and low in the year 2003.

INFERENCE:

A higher ratio indicates a secured position to creditors and a low ratio indicates greater risk to creditors. A ratio below .0.50 may be alarming for the creditors since they may have to lose heavily in the event of company's liquidation on account of heavy losses.

4.3 TREND ANALYSIS

The straight-line trend or the first-degree parabola is represented by the mathematical equation.

$Yc = a+bx$

Yc = required trend value

X = unit of time

Here a and b are constants or unknowns.

In the equation for the first degree parabola $Yc = a+bx$, the values of the unknowns or constants can be calculated by the following two normal equations.

$\sum Y = na+b\sum x$

$\sum xy = a\sum x+b\sum X$

N = the number of years or months for which data are given.

When x = 0, the equation will take the form of

$\sum Y = Na$ since $b\sum x = 0$

$\sum xy = b\sum X^2$ since $a\sum x = 0$

By these equations we can know the value of a and b i.e.

$a = \sum Y/N$ and $b = \sum Y/\sum X^2$

4.3.1. SALES

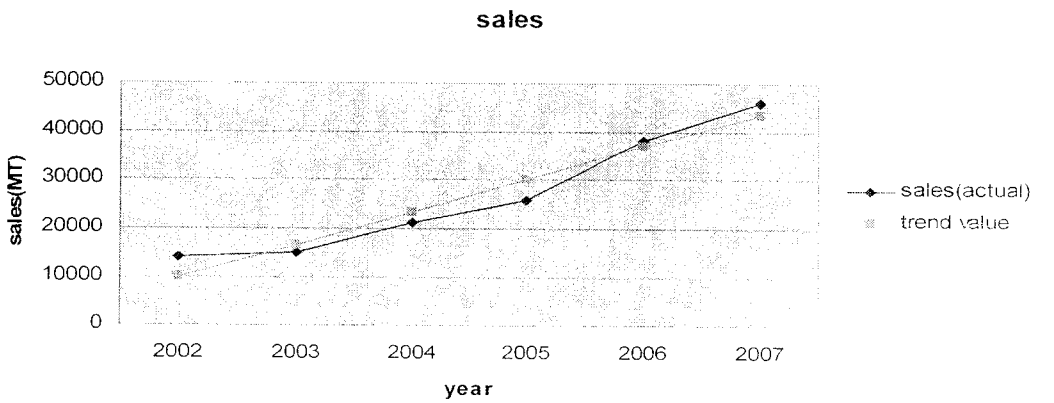
TABLE-4.3.1

TABLE SHOWING TREND VALUE FOR SALES

year	sales	X	X^2	XY	Trend values
2002	13890.88	-5	25	-69454.4	9809.75
2003	14844.18	-3	9	-44532.5	16561.25
2004	21061.43	-1	1	-21061.4	23312.75
2005	25927.79	1	1	25927.79	30064.25
2006	38305.82	3	9	114917.5	36815.75
2007	46101.13	5	25	230505.7	43567.25
	$\sum Y$=160131.23	$\sum X$=0	$\sum X^2$=70	$\sum xy$=236302.5	

GRAPH 4.3.1

GRAPH SHOWING ACTUAL AND TREND VALUES FOR SALES



INTERPRETATION:

The projected sales for the years 2008 and 2009 as calculated using the straight line trend are 50318.75 lakhs and 57070.25 lakhs respectively. It is evident from the above values that the trend for sales will continue to raise if the same level of increase in demand exists.

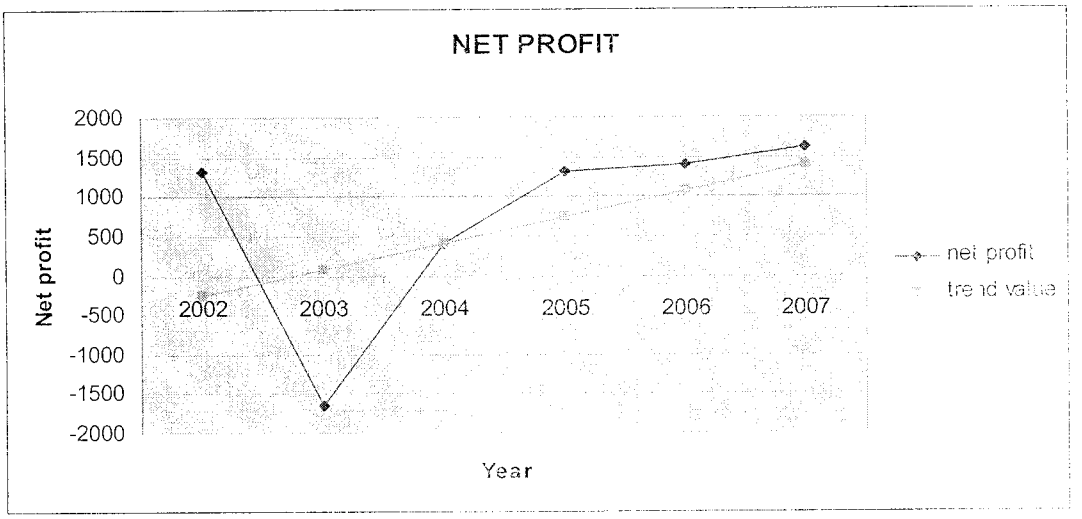
TABLE-4.3.2

TABLE SHOWING TREND VALUE FOR NET PROFIT

Year	Net profit	X	X^2	XY	Trend value=Yc
2002	1308	-5	25	-6540	-262.55
2003	-1656	-3	9	4968	68.47
2004	418	-1	1	-418	399.49
2005	1308	1	1	1308	730.51
2006	1396	3	9	4188	1061.53
2007	1616	5	25	8080	1392.55
	$\sum Y=4390$	**$\sum X=0$**	**$\sum X^2=70$**	**$\sum X^2=11586$**	

GRAPH-4.3.2

GRAPH SHOWING ACTUAL AND TREND VALUES OF NET PROFIT



INTERPRETATION:

The projected net profit for the year 2007-08 and 2008-09 are 1723.57 lakhs and 2054.59 lakhs respectively. If the same level of performance is maintained the trend for net profit for the future period will continue to raise.

CHAPTER-5
FINDINGS & SUGGESTIONS

5.1. FINDINGS

- Current ratio maintained by the firm is found to match the conventional ratio which indicates the firm will be able to met the short term obligations in full.
- Quick ratio is found to be satisfactory except for the year 2003-04. This ensures lesser risk for the creditors.
- Inventory turnover ratio is found to be in the increasing trend and it indicates an acceptable liquidity
- The inventory holding period is found to have reduced by 50% from 2002 to 2006 Which is a sign of the fast movement of goods
- Debtors turnover ratio is found to be in the decreasing trend which shows that the debts are not collected rapidly.
- Debt collection period is found to have increased during the recent years which symbolizes inefficient credit and collection performance, and in turn impairs the company's liquidity.
- Creditors turnover ratio is in the upward trend which indicates lesser reliance on suppliers credit.
- Working capital turnover ratio is irregular and during the recent years the company is found to have made a low investment in working capital.
- Gross profit margin is moving in the upward trend indicating increased turnover and reduced cost ensuring sufficient return to owners of the business.
- Net profit margin is satisfactory which can be attributed to constant indirect expenses
- Return on assets of the company is acceptable.
- Return on capital employed indicates an effective utilization of capital.
- Debt equity ratio has increased during the previous year which is indicative of the heavy debt component in the capital

- Debt to total assets is constant over the period but the ratio sounds to be risky.
- Proprietary ratio below 0.5 during the period 2002 to 2005 is alarming to creditors
- Trend analysis is used to predict the sales for the years 2008, 2009 which is expected to be at 50318.75 and 57070.25 lakhs respectively.
- Trend analysis using the method of least square indicates that the projected net profit for the years 2008 and 2009 are 1723.57 and 2054.59 lakhs respectively.

5.2. SUGGESTIONS:

- The company should make optimum investment in working capital.
- Steps should be taken to collect balances from debtors not allowing them to turn into bad debts.
- The proportion of debt in the capital structure should be reduced and the debt equity ratio should be maintained at the conventionally accepted rate.
- Profitability can be maintained at the same rate.
- Cost reduction and control methods are adopted promptly.

5.3. CONCLUSIONS:

The study on financial performance of ENNORE FOUNDRIES LIMITED for the period 2002-03 to 2006-07 was carried out by applying ratio analysis, leverage and trend analysis and the financial position is found to be satisfactory though the company has incurred losses during the year 2003.

The liquidity of the company is reasonably acceptable. The profitability is high and in its growing trend and the solvency position of the company is satisfactory.

The study will be helpful to the management in improving its financial efficiency

BIBLIOGRAPHY

REFERENCES:

1. I. M. Pandey, Financial Management, Ninth Edition
2. Research Methodologies, Uma shekaran
3. Khan .M.K., Jain .P.K, Financial Management, Second Edition
4. Jain and Narang, cost Accounting
5. www.google.com
6. web.ebscohost.com
7. www.wikipedia.com

S