A Study on the Financial Performance of Tamil Nadu Newsprint and Papers Limited, Kagithapuram, Karur District

SUMMER PROJECT REPORT
Submitted to the
Faculty Of Management Sciences, Anna University
In partial fulfillment of the requirement
For the award of the degree of
MASTER OF BUSINESS ADMINISTRATION

By

P. RAJESH KANNAH
71205631042

October 2006

DEPARTMENT OF MANAGEMENT STUDIES
KUMARAGURU COLLEGE OF TECHNOLOGY
COIMBATORE - 641006

DEPARTMENT OF MANAGEMENT STUDIES
KUMARAGURU COLLEGE OF TECHNOLOGY
COIMBATORE

BONAFIDE CERTIFICATE

Certified that this project titled 'A STUDY ON THE FINANCIAL PERFORMANCE OF TAMILNADU NEWSPRINT AND PAPERS LIMITED, KAGITHAPURAM, KARUR DISTRICT' is a bonafide work of **P.RAJESH KANNAH (71205631042)** who carried out this 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

Prof. S. GANESAN
Director

Evaluated and viva-voce conducted on......17.11.06......

Examiner I

Examiner II

DECLARATION

I, hereby declare that this project report entitled as "A Study on the Financial Performance of Tamilnadu Newsprint and Papers Limited, Kagithapuram, Karur Dist", 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 Mr. A. Senthil Kumar, during the academic year 2006-2007.

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

Place: Coimbatore
Date: 17.11.06

(P. RAJESH KANNAH)

TNPL

CSI
NATIONAL AWARD
FOR EXCELLENCE IN
CORPORATE GOVERNANCE

Tamil Nadu Newsprint and Papers Limited
(A Government of Tamil Nadu Enterprise)
Kagithapuram - 639 136, Karur Dist., Tamil Nadu, INDIA.
Phone : (0091) 04324 - 277001 to 277010
Fax : (0091) 04324 - 277025 Purchase : 277026
PMD : 04324 - 277027 Mktg : 277028 & 277029
Cell : 098 - 424 - 56940 to 56943 Grams : NEWSPRINT

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EN ISO 9001
Certificate : 04100853
DIN En ISO 14001
Certificate : 04 104 54
RWTUV

HR/TRG/PW-CER/**1077**

August 16, 2006

CERTIFICATE

This is to certify that **Thiru P.RAJESH KANNAH, M.B.A.,** student of **KUMARAGURU COLLEGE OF TECHNOLOGY, COIMBATORE** has undergone **PROJECT WORK** at our **ACCOUNTS DEPARTMENT** from **04.07.2006** to **12.08.2006.**

16/8/06

(S.RAMAMOORTHY)
MANAGER - HRD

To

Thiru P.Rajesh Kannah
Kumaraguru College of Technology
Coimbatore

ACKNOWLEGEMENT

By the grace and blessings of **the almighty**, I submitted my project report in full.

I wish to express my profound gratitude to **Dr. Joseph V Thanikal, Principal Kumaraguru College of Technology**, Coimbatore for providing facilities to do this project.

I express my sincere gratitude and thanks to **Dr. S. Ganesan, Director – KCT Business School** for permitting me to carry out the project.

I express my sincere gratitude to my project guide **Mr. A. Senthil Kumar, lecturer, KCT Business School,** for his advice and encouragement, Keen interest, able guidance and sincere co-operation through out my project.

I would like to express my sincere thanks to **Mr. R. Sreetharan** Chartered accountant for the necessary inspiration that they provide when needed in the most.

I express my genuine sentiments of gratitude to my parents and friends for their moral support and encouragement given through out my career.

EXECUTIVE SUMMARY (ABSTRACT)

The Project study on "**THE FINANCIAL PERFORMANCE OF TAMIL NADU NEWSPRINTS AND PAPERS LIMITED**" which is situated at Karur district.

The Main focus of the project was to analyze the financial position and capital structure of the organization under study.

A descriptive study was done, focusing the above said objective.

The Annual report of the organization (for a period of 5 years ranging from 2001-2005) forms the secondary data for the study. The tools such as Ratio Analysis, Leverages and Capital Structure approaches were used to throw light on the financial position of the organization.

The financial performance of the organization is found to be strong and there is enough scope to enstrengthen the same further in the future.

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INTRODUCTION

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 every enterprise, whether big, medium of small, needs finance to carry on its operations and to achieve its targets. In fact, finance is so indispensable today is rightly said to be the lifeblood of an enterprise. Without adequate finance, no enterprise can possibly accomplish its objective.

MEANING FOR FINANCIAL ANALYSIS:

Financial analysis is the process of determining the significant operating and financial characteristics of a firm accounting data. Financial analysis is the judgmental process, which aims to evaluate the current and past financial positions and the result for determining the best possible estimates and predictions about the future conditions.

Financial analysis is the process of identifying the financial strength and weakness of the firm by properly establishing relationships between the items of the balance sheets and the profit and loss account. Financial analysis can be undertaken by the management of the firms or by other parties outside the firm via owners, creditors, investors and other. The nature of analysis will differ depending on the purpose of the analyst.

Financial analysis depends to a very large extend on the use of ratios. Thus a direct examination of the magnitude of two related items is somewhat enlightening. But the comparison is greatly facilitated by expressing the relationship as a ratio.

1.2 PROBLEM OF THE STUDY

In order to run and manage a company funds are needed, right from the promotional stage up to the end. Finance plays an important role in every company's life. If funds are inadequate, the business will suffer. Therefore it is necessary that correct estimate of the current and future need of the capital is to be made. Capital structure helps to find the proportion of debt and equity and in which way it affects the value of the firm. Capital structure leads to maximum market valuation and to minimum cost of capital. The company is also in need to maintain a proper balance between profitability and liquidity and these will allow smooth operation of the firm as well as perfect interest of the creditors and investors. That is why, it is necessary for the company to evaluate from time to time the liquidity and profitability position. The dividend policy will aim to maximize the value of corporate wealth or the shareholders wealth. Currently, the company has planned to install a III unit of paper machine worth Rs. 1500 crores. It will increase its productivity to meet its market demand and therefore a justification on the current capital structure and how does the change affect the dividend of the shareholders is required, since the company is going to adopt a new capital structure it may leads to variations in the dividend policy. As the decision regarding the capital mid of debt-equity and value of the firm have become very important, a study on the financial performance of TNPL has become quint-essential.

1.3. OBJECTIVES OF THE STUDY

1.3.1 PRIMARY OBJECTIVE:

The primary objective of the study is to examine the financial performance appraisal of Tamil Nadu Newsprint and Papers Limited.

1.3.2 SECONDARY OBJECTIVES:

1. To analyze the profitability of the company.
2. To analyze the present status of leverages.
3. To calculate the cost of capital.
4. To analyze the capital structure of the company.
5. To suggest the measures for the improvement of financial position of the company.

1.4. SCOPE OF THE STUDY

The study aims to determine the financial appraisal practice followed by the TNPL and its major shift in the debt-equity financing over a period of time the data for 5 years each, primarily to observe the changes. For examining the financial appraisal of TNPL the ratios have been used. It is useful for the creditors to know the position of the firm. Ratios like proprietary ratio, fixed assets turnover ratio, etc. are likely to identify all the major dimensions of the capital structure practices of the company.

The cost of capital analysis is used in the budgeting as discount rate or the minimum required rate of return. It is also used in various other techniques like net present value, profitability index and internal rate of return to identify whether the proposal can be accepted or rejected. If the cost of capital is minimized, it helps to maximize the wealth of the investors. It also helps the company to attract the more investors to make available funds to the company.

To analysis the risk considerations, financial risk is measured in terms of financial leverage and operating risk is measured in terms of operating leverage. It is used to analyze the level of return available to shareholders under varying conditions of financing.

1.5. RESEARCH METHODOLOGY

1.5.1 TYPE OF THE STUDY:

The research is descriptive in nature as the study was done to find out the financial position and the profitability position of the organization.

1.5.2 DATA COLLECTION:

This study involves only secondary data. Secondary data were collected through annual reports for the five years ranging from 2000-01 to 2004-05 and information brochures of the company.

1.5.3 TOOLS OF ANALYSIS:

In order to analyze the financial appraisal of the company, the following statistical tools are used.

- Ratio analysis.
- Assessing the capital structure (Proportion of Equity-Debt).
- Leverage analysis.
- Cost of equity, Cost of debt
- EBIT and EPS relationship.
- Assessing the capital structure (NI and NOI Approach)

1.6. LIMITATIONS OF THE STUDY

- The study mainly depends on the secondary data taken from the Annual reports and internal records of the company.
- The figures taken from the financial statement for analysis were historical in nature; time value of the money is not being considered.
- This study is confined to a short period of five years. So it may not be picturise the long-term position of the company.
- The results are based on the statistical techniques alone.
- Every company will be having their own factors and situations. The findings of the study could be taken only as guidelines and cannot be applied directly to other companies of the same industry.

1.7. CHAPTER SCHEME

The study is reported in five chapters.

The first chapter discussed the background of study, problem, objectives, scope, limitations and methodology of study which includes type of study, data collection and tools of analysis.

The second chapter discusses about the organization profile that includes the history of organization, management, organization structure, products profile and market potential, competitive strength of the company, future plans and the description of various functional areas.

The third chapter discusses about the macro-micro economic analysis which deals with the prevailing economic scenario with the industry.

The fourth chapter deals with data analysis and interpretation.

The fifth chapter deals with the results and discussions and considered recommendations.

Organizational Profile

CHAPTER – 2

ORGANIZATIONAL PROFILE

2.1. HISTORY OF THE ORGANIZATION

2.1.1 ESTABLISHMENT:

Government of Tamil Nadu promoted TAMIL NADU NEWSPRINT AND PAPERS LIMITED- popularly known as TNPL- for the manufacturer of newsprint, printing and writing papers using bagasse as the primary raw material. The late Chief Minister of Tamil Nadu Dr. M.G.R has inaugurated the TNPL in 1986. Bagasse is a weak fibrous material left after the extraction of juice from the sugarcane and is normally burnt as in house fuel in the sugar mill boiler to generate steam and power.

2.1.2 LOCATION:

TNPL is located at Kagithapuram in Karur District of Tamil Nadu about 400kms south west of Chennai. The location has advantages in terms of nearest to sugar mills selling bagasse, proximity to River Cauvery for supplying water, access to broad gauge track for transportation of coal and there is also a well-developed road infrastructure.

2.1.3 CAPITAL:

The initial capital outlay was RS.239 crores. For expansion 1995, the World Bank rended direct loan assistance of US $ 75 million. The expansion's capital outlay was RS.585 crores. It increased its protection capacity in 2002-2003 with the capital cost of RS.15 crores.

TNPL started with an initial capacity of 90,000 tonnes per annum in 1986. The capacity was doubled to 1,80,000 tonnes per annum in 1996. To enhance the productivity and utilize the resources optimally. TNPL has upgraded the paper in 2003 and enhanced capacity to 2,30,000 tonnes per annum. Today, TNPL comprises the world finest equipment, advanced and sophisticated online process and a quality control system. It is supported by an ongoing, cutting edge research and development initiative in line with emerging global trends. The successful manufacturing of quality papers from bagasse is an indeed for the company's technological competence.

The machine is equipped with a metered size press, which facilitates the production of value-added products. Both the paper machine is equipped with shoe press, latest stat-of-art supplied by Voith, Germany. TNPL has a full-fledged finishing house for the mechanized conversation of reels into sheets to deliver a high quality of finished product. The installation of two of the world best known automated, online sheeting and packing machinery namely Bielomatik cutter with a cut –pack capacity of 50 td, ECH-cutter with a cut pack capacity of 100 td has elevated TNPL's paper conversation facility to international standards.

2.1.4 BAGASSE AS RAW MATERIAL:

TNPL uses bagasse as the primary raw material. By using around 8,00,000 Mts of bagasse per annum for production of newsprint and printing and writing paper. TNPL avoids deforestation of about 30,000 acres of land every year the wood used for manufacture of paper is sourced from social forestry schemes. The chemical consumption is less in bagasse pulping compared to wood. TNPL's treated effluent water completely complies with the norms of the pollution control board. The treated effluent water is used to irrigate 1500 acres of land abutting the factory.

The main raw materials used by the company are bagasse and hardwood. The company procured wood from Tamil Nadu Forest Plantation Corporation (TAFCORN). TNPL has entered into a tie-up with five sugar mills to produce bagasse on substitution basis. Sugar mills normally use most of the bagasse internally as fuel for generation of process of steam. Under the agreement the TNPL has installed its own coal, lignite fired boilers at the premises of sugar mills as also suitable fuel and handling system and other auxiliaries. The company operates the offsite boilers by supplying coal / lignite and by employing its own operating personnel. The sugar mills release bagasse to the company at an agreed ratio based on the steam supplied by the company's offsite boilers. The company also tied up with five more sugar mills to produce bagasse on fuel exchange basis.

2.2. MANAGEMENT

ADMINISTRATION

BOARD OF DIRECTORS

Thiru Shaktikanta Das, I.A.S	Chairman
Thiru S. Ramasundaram, I.A.S. (Held additional charge as Chairman and Managing Director from 8.8.05 to 17.5.06)	
Thiru V. Murthy, I.A.S.	Managing Director
Thiru K. Gnandesikan, I.A.S.	Director
Thiru Sandeep Saxena, I.A.S.	Director
Thiru R.S. Agarwal	Director
Thiru R.R. Bhandari	Director
Thiru N. Kumaravelu	Director
Thiru V.R. Mehta	Director
Thiru V. Narayanan	Director
Thiru G. Prabhakara	Director
Thiru A. Velliangiri	Director (Finance)

Registered Office:

67, Mount Road
Guindy – 600 032

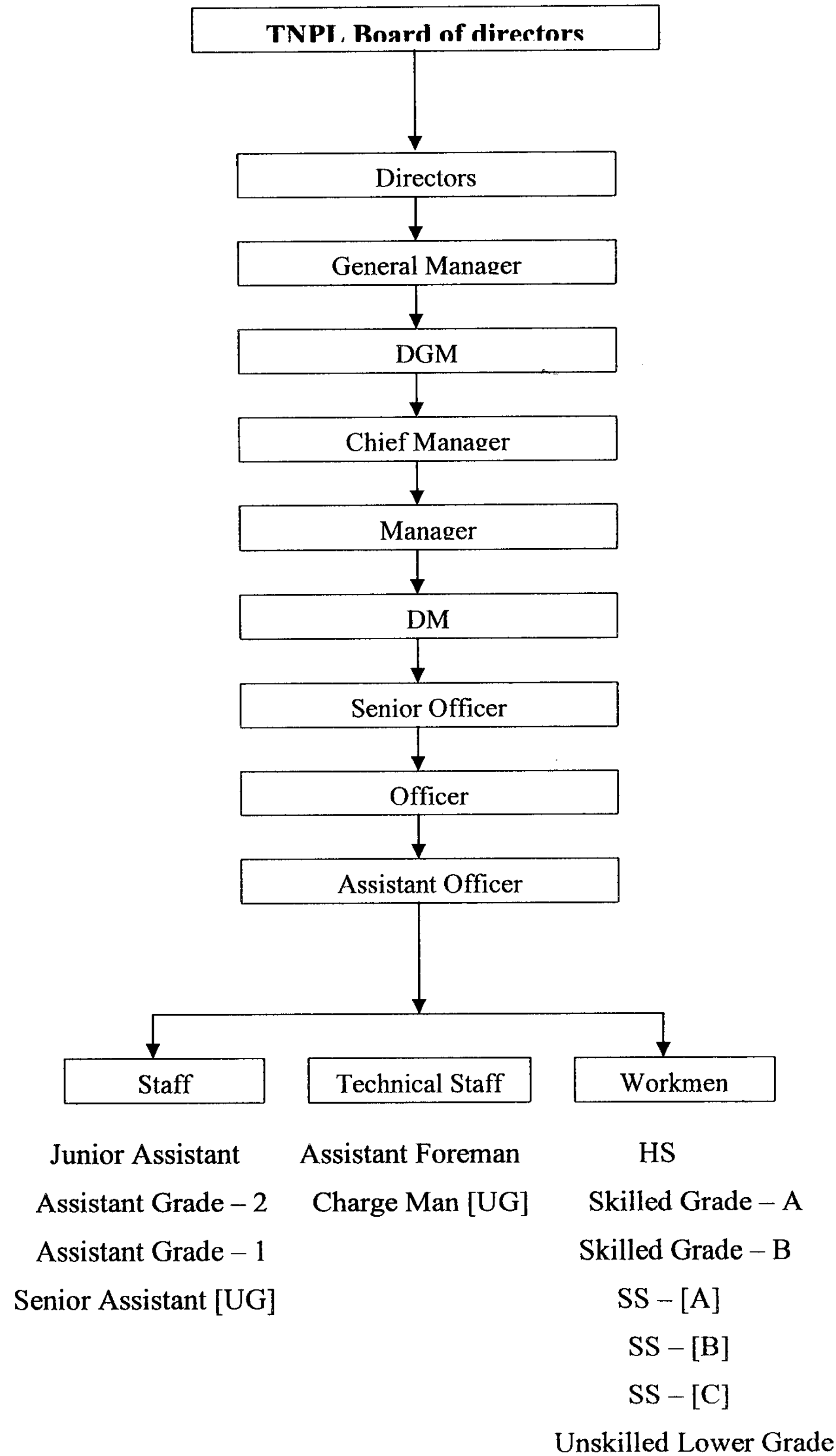
Factory:

Kagithapuram-639 136
Karur District, Tamilnadu.

Auditors:

Maharaj N.R. Suresh & Co.
Charted Accountants
New No.9, Old No.5, II Lane
II Main Road
Trustpuram, Kodambakkam
Chennai – 600 024

2.3 ORGANIZATIONAL STRUCTURE



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- ✓ The Papermaking Process
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  - Semi chemical pulp
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  - Preparation of stock
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2.4.2 Paper Properties and Uses

- ✓ Substance and quantity measurement
- ✓ Strength and durability
- ✓ Optical properties
- ✓ Paper grades
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  - Book paper
  - Bristol
  - Ground wood and Newsprint papers
  - Kraft wrapping
  - Paperboards
  - Sanitary papers

2.4.3 Papermaking process:

2.4.4. (i) Historical development:

Papermaking can be traced to about AD 105, when Ts'aiLun, an official attached to the Imperial court of china, created a sheet of paper using mulberry and other fibres along with old rags, and hemp waste. In its slow traced westward, the art of papermaking reached Samarqand, in central Asia, in 751 and in 793 the 1st paper was made in Baghdad during the time of Harun ar-Rashid, with the golden age of Islamic culture that brought papermaking to the frontiers of Europe. By the 14^{th} century a number of paper mills existed in Europe, particularly in Spain, Italy, France and Germany. The invention of printing in the 14505 brought a vastly increased demand for paper. Through the 18^{th} century the papermaking process remained essentially unchanged, with linen and cotton rags furnishing the basic raw materials paper milk was increasingly plagued by shortages, in the 18^{th} century they even advertised and solicited publicity for rags.

2.4.4. (ii) Improvements in materials and processes:

In 1800 a book was published that launched development of practical methods for manufacturing paper from wood pulp and other vegetable pulps. Several major pulping processes were gradually developed that relieved the paper industry of dependency upon cotton and linen rags and made modern large-scale production possible. These developments followed two distinct pathways. In one, fibres and fibre fragments were separated from the wood structure by mechanical means and in the other, the wood was exposed to chemical solution that dissolved and removed lignin and other wood components, leaving cellulose fibre behind. Made by mechanical methods, ground wood pulp contains all the components of wood and this is not suitable for papers in which high. Whiteness and

permanence are required ground wood pulp was first made in Germany in 1840,but the process did not came in to expensive use until about 1890,sada pulp was first manufactured from wood in 1852 in England, and in 1867 a patent was issued in the United states for the sulfite pulping process.

A sheet of paper composed only of cellulose fibre ("waterleaf") is water absorbent. Hence, water-based inks and other aqueous liquids will penetrate and speed in it. Impregnation of the paper with various substances that retrace such

In 1800 Moritz Friedrich Illig in Germany discovered that paper could be sized involves with rosin and alum. Although Illig published his discovery in 1807, the method did not come into wide use for about 25 years.

2.4.4. (iii) Papermaking

Formation of a matted or felted sheet, usually of cellulose fibres, from water suspension on a wire screen. Paper is the basic material used for written communication and the dissemination of information. In addition, paper and paperboard provide materials for hundreds of other uses, such as wrapping, packaging, toweling, insulating and photography.

The word paper is derived from the name of the reedy plant papyrus, which grows abundantly along the Nile River in Egypt. In ancient times, the fibrous layers within the stem of this plant were removed, placed side by side and crossed at right angles with another set of layers similarly arranged. The sheet so formed was dampened and pressed. Upon drying, the glue-like sap of the plant, acting as an adhesive, cemented the layers together. Complete defibring, an indispensable element in modern papermaking, did not occur in the preparation of papyrus sheets.

2.4.5 MARKET POTENTIAL:

TNPL have internal and external market for its products. For internal market, they mainly concentrate South and North region. Their export market includes countries like Australia, Egypt, Jordan, Kenya and Nigeria.

The demand for printing and writing paper was stable in the domestic market during the year. One price increase of Rs 1000/- per MT was effected from 1.4.2003 however, the prices in the international market softened since July 2003 till February 2004 in the meantime, softwood and hardwood pulp prices started hardening due to improved demand and lower inventory. Consequently the printing and writing paper prices started firming up from February/March 2004. This trend is likely to continue throughout the year.

During the year the Government of India has reduced exports incentives for newsprint and writing paper from 4% to 3% and increased the incentive for cut size papers and sheets to 9% with effect from 14th September 2004. TNPL Company has exported 41264 Mts of Printing and Writing paper during the year to 25 countries.

2.5 COMPETITIVE STRENGTH OF THE COMPANY

With the closer integration of the Indian economy with the global economy, the performance of the Indian paper Industry is getting increasingly linked to the trends in international paper prices, demand and supply. It is therefore necessary the mills produce Newsprint and Printing and Writing paper on a competitive basis. In the Indian Paper Industry continues to be plagued by the lack of 'Level playing field' in every activity. The major issues confronting the Indian Paper Industry are: Wide diverse structure of the country, Low economies of scale, Obsolescent technology, Low capacity utilization, High cost of raw materials and Emerging Global Competition. India, with 16% of the world population, consumes only 1.2% of global paper and board output. The per capita consumption of 5.5 Kg is far below the global average of 54 Kg. An average growth rate of 5-6% in demand for the next five years is anticipated. The capacity additions during 2005-06 are estimated to less than 1.00 lakh Mts. With the increase in exports and increase in consumption in the domestic market, the additional production can be absorbed without difficulties. The newsprint price may be stable in the range of USD 620-650 per MT during the year. TNPL will continue its focus on Printing and Writing paper. TNPL will strive to increase the exports to 45,000 Mts during 2005-06. In tune with the market trend, TNPL has increased the newsprint prices by Rs.1000 per Mt with effect from 01.04.2005 and the printing and writing paper prices by Rs.1000-1600 per Mt in the domestic market and USD 30 per Mt in the export market effective from 01.04.2005.

2.6. FUTURE PLAN OF ACTION

- ✓ TNPL plans to increase the installed capacity of the mill from the current level of 2, 30,000 tpa to 2, 45,000 after the ongoing MDP.
- ✓ Continuous improvements of product quality on par with market demands and requirements.
- ✓ Continuous improvement of process and products to customer satisfaction.
- ✓ Continuous improvement of mechanical bagasse pulping process by establishing the AMPM process.
- ✓ Exploring alternative raw materials for Papermaking.
- ✓ TNPL has been consistently expanding its market not only across the regions

2.7. DESCRIPTION OF VARIOUS FUNCTIONAL AREAS

HUMAN RESOURCE DEVELOPMENT:

TNPL continues its HR efforts of providing developmental inputs to the employees through structured training programmes to develop their knowledge, skills and attitudes in compliance with ISO 9001: 2000 Standards. "On the job" training was imparted to 123 employees on the areas like Distributed Control System (DCS), Refining, Fabric, Dry end controls, Winding Techniques and Packing by engaging our Internal Trainers.

CORPORATE GOVERNANCE:

The institute of Company Secretaries of India (ICSI), New Delhi has conferred on TNPL, the "ICSI National Award for Excellence in Corporate Governance" for the year 2004 in the category of public sector. This prestigious National Award is given every year to one company in public sector and two companies in the private sector by ICSI. For the year 2004, the Jury headed by Hon'ble Justice Shri B N Kirpal, Former Chief Justice of India has selected TNPL, as the winner of the Award in the Public Sector category.

The Award has been conferred on TNPL in recognition of the Company's application of best management practices, compliance of law in true letter and spirit and adherence to ethical standards for effective management and distribution of wealth and discharge of social responsibility for sustainable development of all stakeholders.

MARKETING MANAGEMENT:

The market for Newsprint and Printing & Writing Paper is intensely competitive. As newsprint price is highly cyclical and uneconomical, the company has reduced the newsprint production to 4% of the total production. TNPL is gradually reducing its dependence on Cream wove and increasing the production of Value Added Products. TNPL is a consistent player in exports with around 20% of total production exported to 21 countries around the world.

OPERATIONS MANAGEMENT:

During the year, the paper machines were shut for 58 machine days due to water shortage causing a production loss of 19658 Mts. Despite this adverse factor, the company has produced 196241 Mts of Newsprint and Printing and Writing Paper registering a capacity utilization of 85.47%. The Newsprint Production was restricted to 7708 Mts against 11581 Mts and 20496 Mts in the previous two years. Their production was 188533 Mts against 170634 Mts in the previous year. The flexibility in manufacturing Newsprint and Printing and Writing Paper has always been made use of for improving the profitability.

RESEARCH AND DEVELOPMENT MANAGEMENT:

Product development and product improvement are the priority areas under the R&D activities. TNPL R&D is equipped with state-of-art equipments so as to design and develop products that suits the ever increasing demands of the market. R&D has also put a continuous thrust on developing alternative raw material for papermaking. The commercial, economic and technical suitability of Wild sugarcane as an alternative to bagasse is being studied as a CESS funded project. Improvement in hardwood pulp production could be achieved through R&D studies. The increased exports of Copier and Hitech Maplitho bear testimony to the R&D efforts on product development.

TOTAL QUALITY MANAGEMENT (TQM):

Creativity and lateral thinking offer scope for improving productivity. TQM is a system approach that considers every interaction between the various elements of the organization. TNPL has introduced TQM concepts for quite sometime. Some of the TQM projects implemented earlier have resulted in cost savings, quality improvement and simplification of work methods.

CHAPTER - 3

MACRO-MICRO ECONOMIC ANALYSIS

In the industrial paper segment, growth rates are likely to be better and at 10-12 per cent in the long term. The coated paperboard segment, where ITC Bhadrachalam has a strong position, may also show good growth given the rising preference for better packaging and the increasing spread of the kind of goods that entail such packing.

At the structural level, a key factor continues to be the high degree of fragmentation in the industry. There are less than 10 players with capacities of over 60,000 tpa in an industry where the annual demand is close to 4.4 million tonnes. Only a few such as ITC Bhadrachalam, Ballarpur Industries, Tamil Nadu Newsprint, J. K. Corp and Orient Paper have the volumes that could generate cash flows for further expansion plans. Orient Paper also has to complete its restructuring before it can embark on growth in the paper business.

What also stands out is the fact that unlike the global scenario, where consolidation has been a big-time game in the last two years, the Indian industry has simply not made a move in this direction.

To some extent, this may be due to the sizeable capacities that are not capable of being revived in a viable manner and the ambitions of the six main players to go it alone in the business.

It has contended that coated and uncoated papers are making their way into the market in the guise of LWC paper, and these should be reclassified as paper and not newsprint. The excise exemption to mills with capacities of less than 3,500 tpa has also been cited as a distortion. But changes appear unlikely given the cloud over the entire Budget proposals.

As far as the industry is concerned, the one segment where the price pressure has not emerged as a significant factor is newsprint. The standard deliveries have traded at levels unchanged since September, suggesting a firm trend for now unlike in the other segments. Newsprint prices continue to be firm at $625-$650 per tonne. But the sustainability of these price levels may be under pressure if there is a slowdown in the US.

In the Indian context, since TNPL has the capacity across products and the quality factor between domestic and imported newsprint, any downside in prices in this segment may not be a material factor in its profitability.

EARNINGS PERFORMANCE:

The company's earnings performance for 2000-01 was fairly impressive. Sales revenues grew by 21 per cent to Rs 596.39 crore compared to the corresponding previous period. In the same time-frame, operating margins improved to around 25 per cent from around 22 per cent. Post-tax earnings nearly quadrupled to Rs 76.40 crore compared to the previous year.

Better realizations, fall in interest expenditure and rising operational profits have contributed to the healthy bottom-line. On the equity base of Rs 69.12 crore, the per share earnings works out to around Rs 11. The big question is if the company will be able to maintain its high growth rate into the future?

The good earnings performance over the last couple of years has left the company comfortable on cash flows, as also the better management of finances in the recent past. For instance, the decision to repay expensive debt and replace it with low cost debt is a move in the right direction.

Though the paper industry has had a spell of good revenue and earnings growth, it is largely a price-driven trend. Volumes continue to be on the lower side. In the three years preceding the recent bullish phase in price, volume growth dipped below five per cent.

Though it may not be obvious, demand levels in the paper industry clearly do have linkages to the level of economic growth. In the writing and printing paper segment, the growth rates may continue to be 5-7 per cent on a long-term basis.

Much of the growth may come from higher value-added segments, where profitability has dipped over the years. As more players target this segment, the intense competition has curtailed the ability of producers to affect price hikes to maintain profitability levels that prevailed when only a couple of players dominated this segment.

Data Analysis and Interpretations

CHAPTER - 4

DATA ANALYSIS AND INTERPRETATIONS

4.1 Ratio Analysis

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4.1.4 Return on Shareholder's Net worth Ratio

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4.1.6 Net Profit Ratio

4.2 Capital Structure of TNPL (Proportion of Equity and Debt)

4.3 Leverages

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4.5 EBIT and EPS Analysis

4.6 Capital structure calculation

4.6.1 Net Income Approach

4.6.2 Net Operating Income Approach

4.1 RATIO ANALYSIS

4.1.1 DEBT-EQUITY RATIO

The debt-equity ratio is the measure of the relative claims of creditors and owners against the firm's assets. The debt-equity ratio is an important tool of financial analysis to appraise the financial structure of a firm. This ratio indicates the proportion of owner's stake in the business. Excessive liabilities tend to cause insolvency. The ratio indicates the extent to which the firm depends upon outsiders for its existence. The ratio provides a margin of safety to the creditors.

$$\text{Debt-equity ratio} = \frac{\text{Long-term debt}}{\text{Shareholder's fund}}$$

TABLE NO 4.1.1

Table showing the Debt-Equity Ratio

(Rs. in lakhs)

Year	Long-term Debt	Share holder's fund	Debt-Equity Ratio
2000-2001	29509.79	48829.06	0.60
2001-2002	27775.98	38039.96	0.73
2002-2003	28117.93	41138.07	0.68
2003-2004	22761.25	44923.55	0.50
2004-2005	15794.97	46543.33	0.33

Source: Data collection from the Annual Reports of the company

INTERPRETATION:

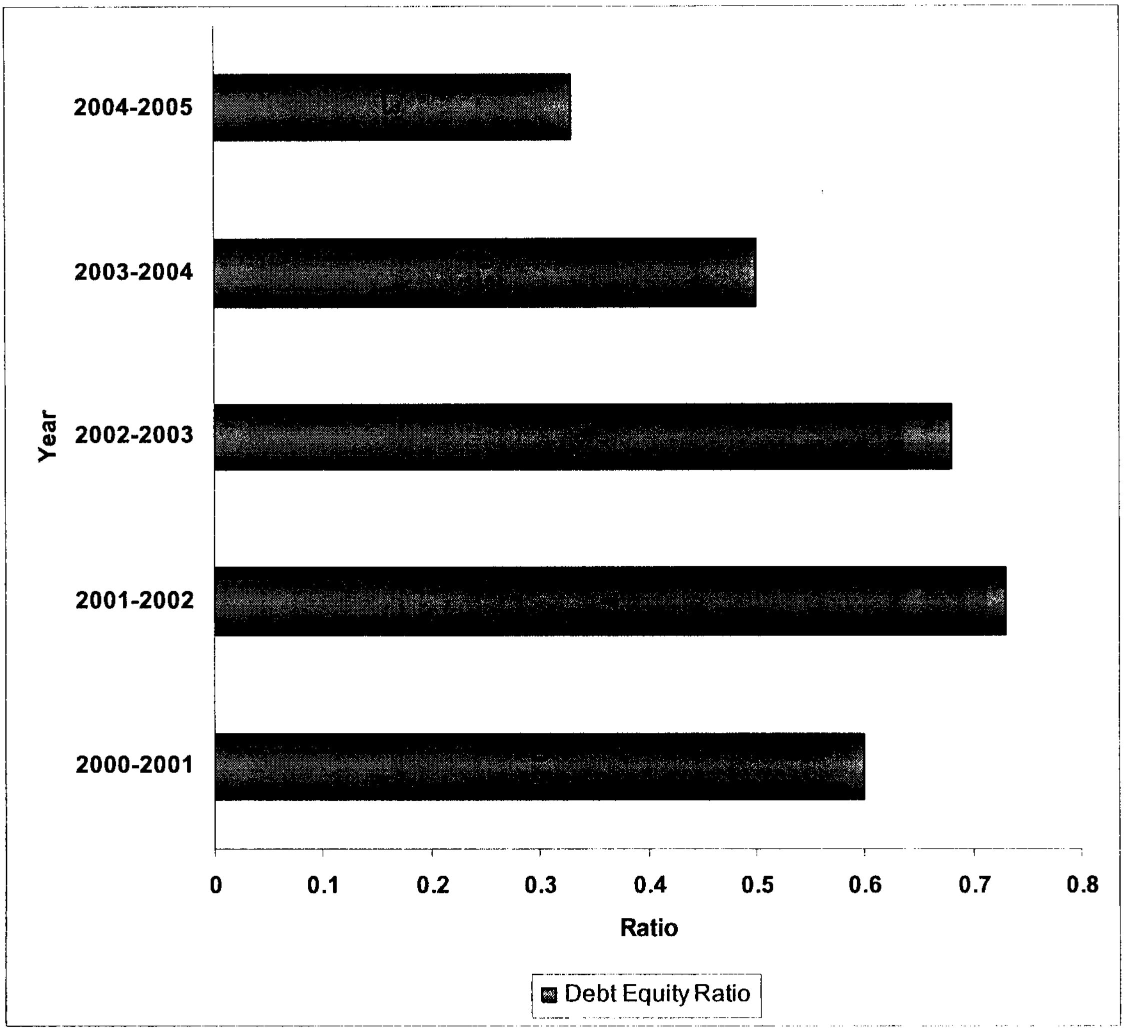
From this table it is observed that the debt equity ratio in 2000-2001 was 0.60 and 0.33 in the year 2004-2005. It has been changing from 0.60 to 0.33. In the year 2001-2002 has register the growth of 0.13 but the ratio has been decreasing till the end of the study. Hence the table shows that there is no proper utilization of debt in the firm.

INFERENCE:

Debt-Equity ratio was in the decreasing trend, due to the repayment of debt. Hence the debt component in the firm's capital is sequentially reduced over a period of time from 60% to 33%.

CHART NO 4.1.1

DEBT EQUITY RATIO



4.1.2 CAPITAL GEARING RATIO:

This ratio helps in determining the future financial structure of the business. A company is said to be highly geared if it has high capital gearing ratio and low geared if the capital-gearing ratio is low. A company, which is highly geared, will have to raise funds by issuing fresh equity shares; where as a low geared company would find it attractive to raise funds by way of term loans and debentures.

In computing the capital gearing ratio of TNPL funds bearing fixed interest taken as secured loans and equity shareholders fund consist of equity share capital and reserve and surplus.

$$\text{Capital gearing ratio} = \frac{\text{Equity share capital + Reserve \& surplus}}{\text{Long-term debt}}$$

TABLE NO 4.1.2

Table showing the Capital-Gearing ratio

(Rs. in lakhs)

Year	Long-term Debt	Equity share capital Reserves & surplus	Ratio (in %)
2000-2001	29509.79	48829.06	1.65
2001-2002	27775.98	38039.96	1.36
2002-2003	28117.93	41138.07	1.46
2003-2004	22761.25	44923.55	1.97
2004-2005	15794.97	46543.33	2.94

Source: Data collection from the Annual Reports of the company

INTERPRETATION:

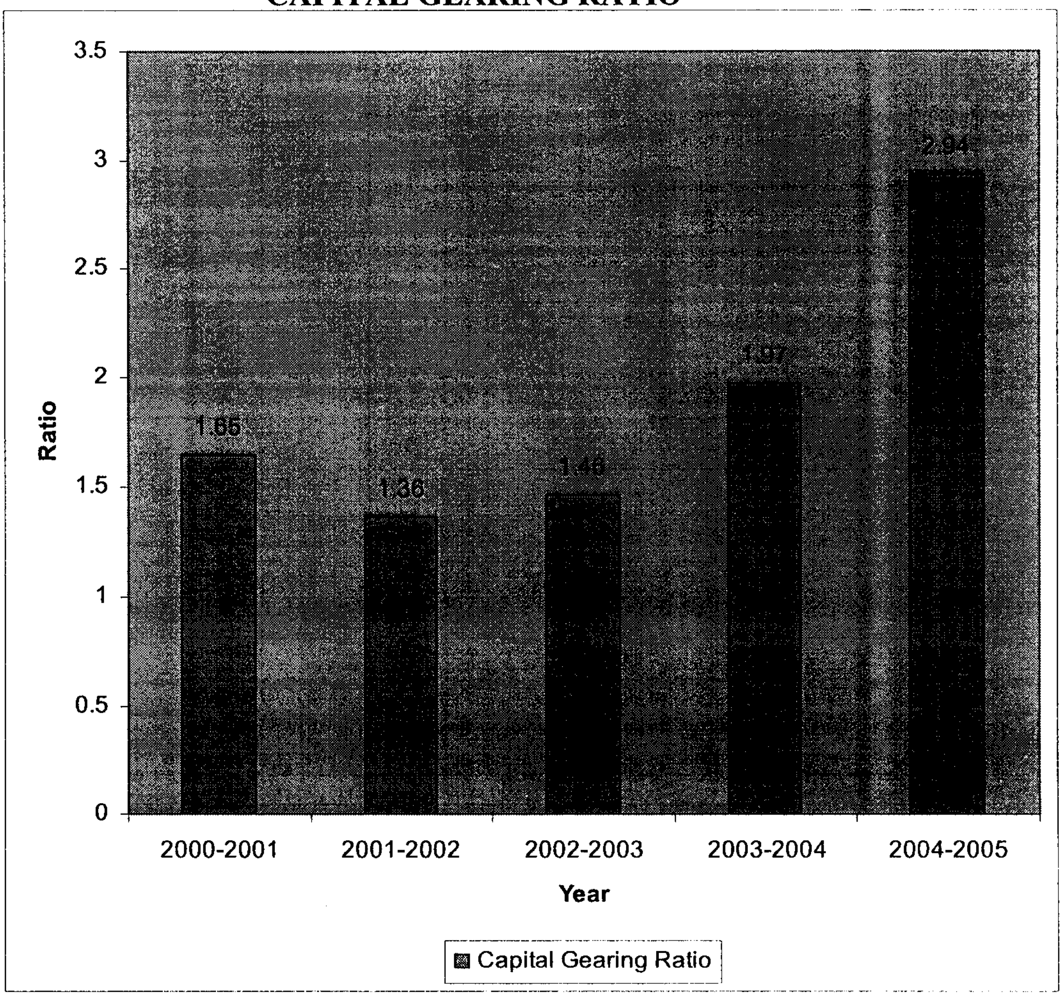
In 2000-2001 the Capital-gearing ratio was 1.65; in 2001-2002 it has decreased to 1.36 and thereafter the ratio was increasing till end of the study period. In 2004-2005 the ratio is high with 2.94.

INFERENCE:

Capital gearing ratio shows an increasing trend in the 5 years except in 2001-2002. This ratio indicates that the company is said to be in a low gear.

CHART NO 4.1.2

CAPITAL GEARING RATIO



4.1.3 EARNINGS PER SHARE RATIO:

The earning per share ratio measures the profit available to the equity holders on per share basis i.e. the amount that they can get on every share held. EPS is a widely used ratio. It is used for analyzing effect of a change in leverage on the net operating earning to the ordinary share holders and giving the requirement of maximizing EPS.

$$\text{Earnings per share} = \frac{\text{Net profit after tax} - \text{Preferences dividend}}{\text{No. Of equity shares}}$$

TABLE NO 4.1.3

Table showing the Earnings per share

(Rs. in lakhs)

Year	Net profit after tax	No. Of equity share	EPS (in Rs.)
2000-2001	7642.77	69638000	10.97
2001-2002	3530.87	69638000	5.07
2002-2003	5203.95	69638000	7.47
2003-2004	5285.49	69638000	7.59
2004-2005	3794.60	69638000	5.45

Source: Data collection from the Annual Reports of the company

INTERPRETATION:

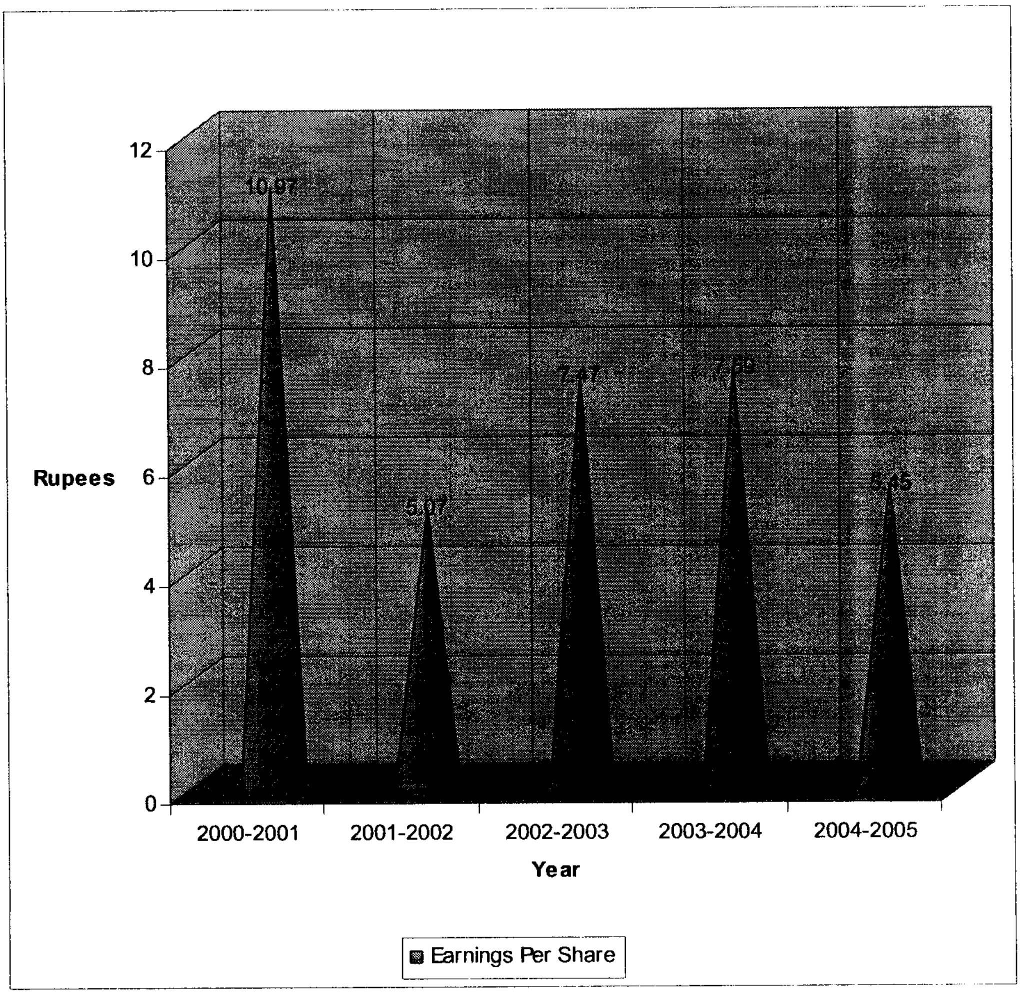
From the above table, the earnings per share shows high in the year 2000-2001 with Rs. 10.97 and low in 2001-2002 with Rs. 5.07 and next two years the earnings has increased and in the year 2004-2005 the earnings has been decreased to Rs. 5.45 because the net profit after tax has fluctuating from year to year. From this it is concluded that the earning power of the company is decreased form the period of study onwards.

INFERENCE:

The EPS has declined over the period of study, besides the fact that no further equity investments are made. It signals the sharp decline in NOPAT.

CHART NO 4.1.3

EARNINGS PER SHARE



4.1.4 RETURN ON SHAREHOLDER'S INVESTMENT:

This is probably the single most important ratio to judge whether the firm has earned a satisfactory return for its equity holders or not. The rate of return on ordinary shareholders equity is of crucial significance in ratio analysis from the point of the owners of the firm. It shows the relationship between net profit (after interest and tax) and the proprietor's funds. This ratio is of great importance to the present and prospective shareholders as well as the management of the company.

$$\text{Return on shareholder's net worth} = \frac{\text{net profit after interest and tax}}{\text{Shareholders funds}} \times 100$$

TABLE NO 4.1.4

Table showing the Return on shareholder's net worth

(Rs. in lakhs)

Year	Net profit after tax	Share holder's fund	Ratio (in %)
2000-2001	7642.77	48829.06	0.15
2001-2002	3530.87	38039.96	0.09
2002-2003	5203.95	41138.07	0.12
2003-2004	5284.49	44923.55	0.11
2004-2005	3794.60	46543.33	0.08

Source: Data collection from the Annual Reports of the company

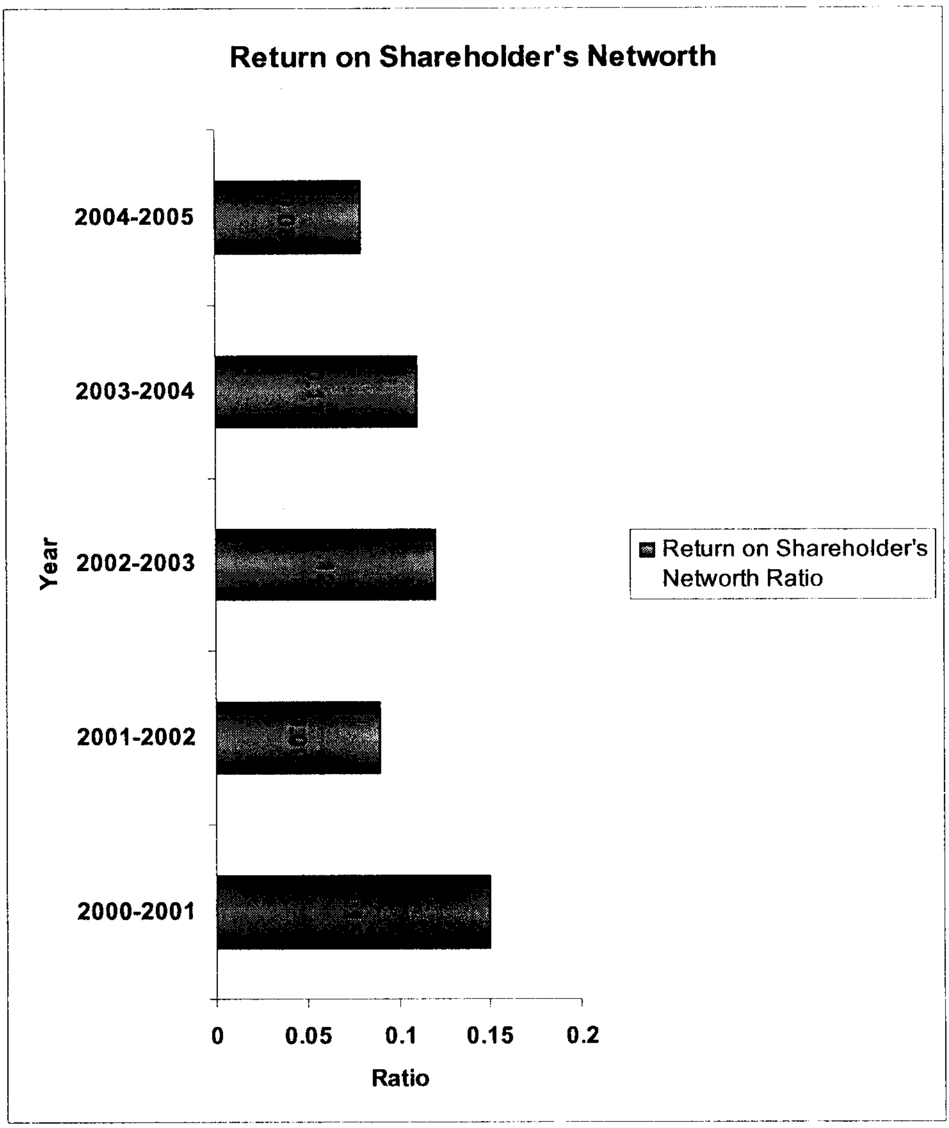
INTERPRETATION:

From the above table, the return on shareholders net worth is high in 2001-2002 with 0.15% and it was low in 2004-2005 with 0.08% in 2002-2003 the return was 0.12%. Since the company has repaid the loans in the year 2004-2005.

INFERENCE:

Return on shareholders investment shows that the net worth is low in 2004-2005, as the company has repaid the loans. The Return on Shareholders net worth ratio signals volatility,leading to a sharp decline of 46% over the early years.

CHART NO 4.1.4



4.1.5 GROSS PROFIT RATIO:

Gross profit ratio is highly significant. It is used to test the profitability and management efficiency. So maintenance of steady gross profit ratio is very important. A ratio of 25% to 30% may be considered as good.

$$\text{Gross profit ratio} = \frac{\text{Gross profit}}{\text{Net sales}} \times 100$$

TABLE NO 4.1.5

Table showing the Gross profit ratio

Year	Gross profit	Net sales	Gross profit ratio
2000-2001	17027	59638.87	28.29
2001-2002	15349	57832.12	26.59
2002-2003	14919	53986.82	27.63
2003-2004	14829	58359.42	25.41
2004-2005	11727	67128.52	17.47

Source: Data collection from the Annual Reports of the company

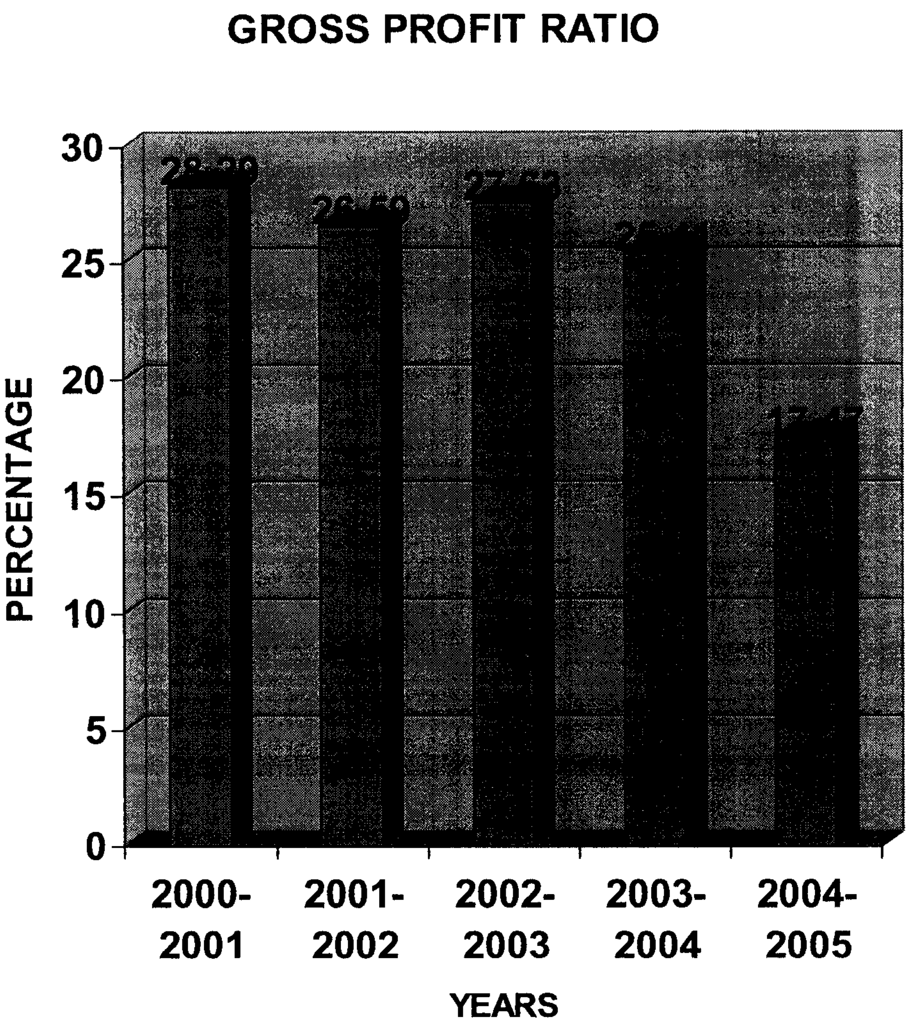
INTERPRETATION:

The table shows that the gross profit ratio was high in the year 2000-2001 as 28.29% and low in the year 2004-2005 as 17.47%.

INFERENCE:

The average 25.07% suggests that the firm enjoys one fourth of its sales revenue as gross profit. However, the gross profit has significantly got reduced over the period of study.

CHART NO 4.1.5



4.1.6 NET PROFIT RATIO:

The Net Profit ratio is indicative of management's efficiency and ability to operate the business with sufficient success to leave a margin of reasonable compensation to the owners for providing their capital at risk. Higher the ratio of net operating profit to sales better is the operating efficiency of the concern. This ratio is used to measure the overall profitability and hence it is very useful to proprietors.

$$\text{Net profit ratio} = \frac{\text{Net profit}}{\text{Net sales}} \times 100$$

TABLE NO 4.1.6

Table shows the net profit ratio

Year	Net profit	Net sales	Net profit ratio
2000-2001	7643	59638.87	12.7
2001-2002	3531	57832.12	6.11
2002-2003	5204	53986.82	9.64
2003-2004	5280	58359.42	9.05
2004-2005	3795	67128.52	5.65

Source: Data collection from the Annual Reports of the company

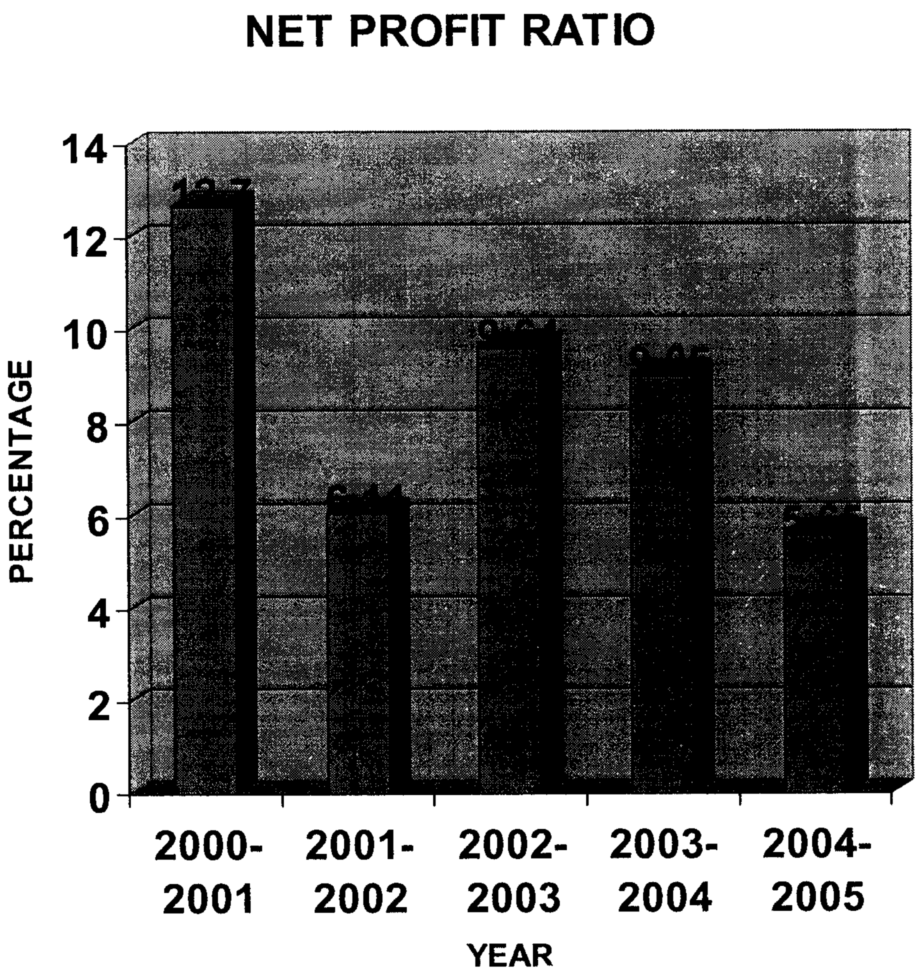
INTERPRETATION:

The table shows that the net profit ratio was low in the year 2004-2005 as 5.65% and high in the year 2000-2001 as 12.7%. The net profit ratio has decreased in the year 2000-2001 and increases the next two years.

INFERENCE:

Due to the impact of operating expenses, the net profit ratio of these periods show decreasing trend.

CHART NO 4.1.6



4.2 CAPITAL STRUCTURE OF TNPL

(Proportion of equity and debt capital)

The capital structure is the combination or the proportion of different sources of financing (debt and equity) to the total capitalization. It is the permanent financing of a firm represented by long-term debt plus preferred stock plus net worth. The main problem in framing the capital structure is choosing the best mix of debt and equity.

TABLE NO 4.2

Table showing the Proportion of capital structure of TNPL

(Rs. in lakhs)

Year	Equity capital includes reserves & surplus	Debt capital both long & short term	Proportion of Equity and Debt capital
2000-2001	48829	33549	59:41
2001-2002	38039	32510	54:46
2002-2003	41138	31924	56:44
2003-2004	44923	25399	64:46
2004-2005	46543	25003	65:35

Source: Data collection from the Annual Reports of the company

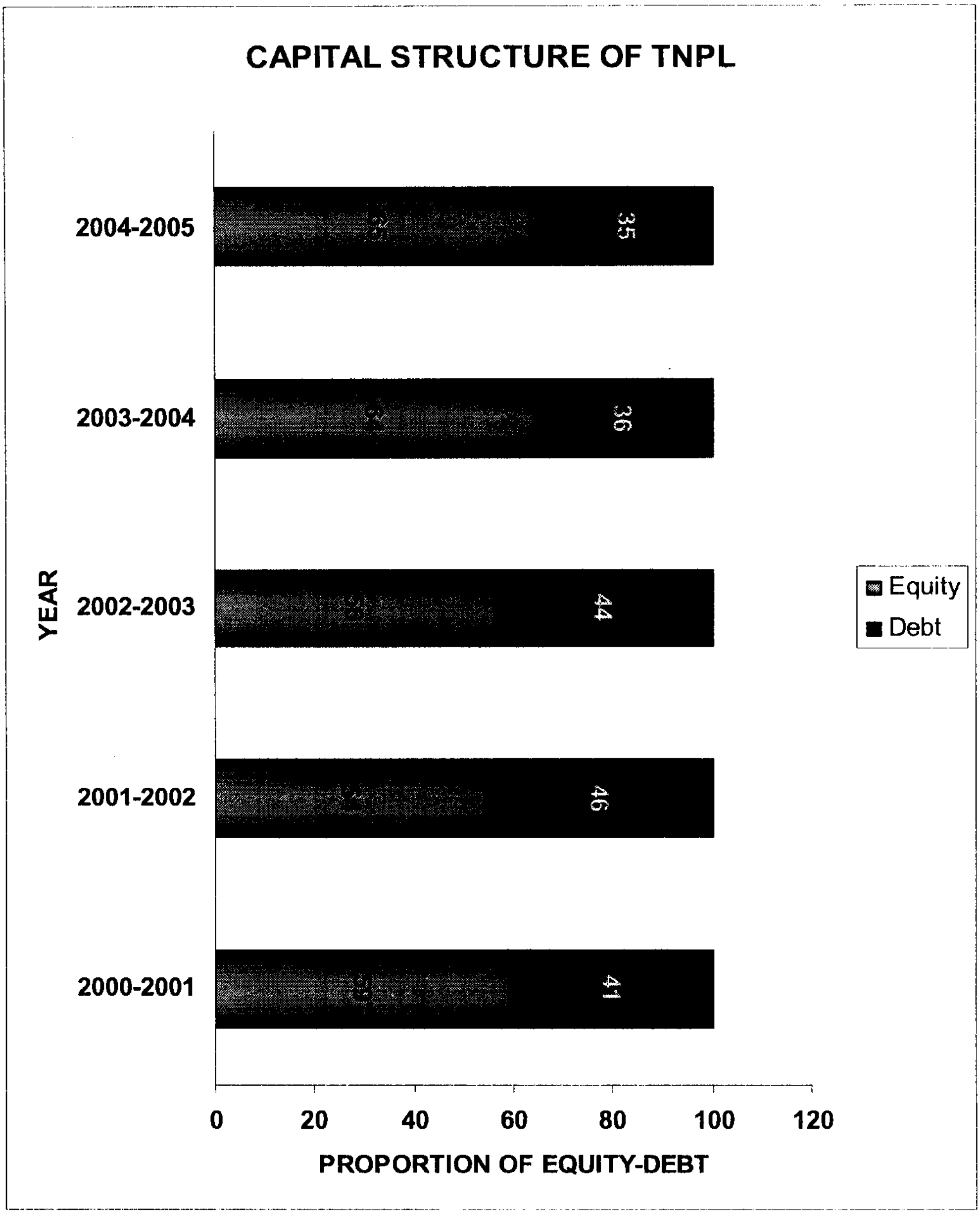
INTERPRETATION:

The above table shows the proportion of equity and debt in the capital structure of TNPL. During the five years the company uses more equity capital then debt capital. In the year 2004-2005 the equity capital is maximum. Since the company has repaid its loans. So the debt capital is showing a decreasing trend.

INFERENCE:

The Capital Structure of TNPL reveals that debt capital proportion is in decreasing trend due to repayment of debt.

CHART NO 4.2



4.3 LEVERAGES

4.3.1 OPERATING LEVERAGE:

Operating leverage results from the presence of fixed costs that help in magnifying net operating income fluctuations flowing from small variations in revenue. It is said to exist when the firm has to pay fixed cost regardless of volume of output or sales. The firm is said to have a high degree of operating leverage if it employs a greater amount of fixed cost and a small of variable cost.

$$\text{Degree of operating leverage} = \frac{\text{Contribution}}{\text{Earnings before interest and tax}}$$

Where,

Contribution = Sales – Variable cost

TABLE NO 4.3.1

Table showing the Operating Leverage

(Rs. in lakhs)

Year	Contribution	EBIT	Operating Leverage (in times)
2000-2001	30621.95	17082.47	1.79
2001-2002	28498.78	16115.14	1.76
2002-2003	27044.43	15249.91	1.77
2003-2004	27660.63	14672.87	1.88
2004-2005	25396.99	11618.29	2.18

Source: Data collection from the Annual Reports of the company

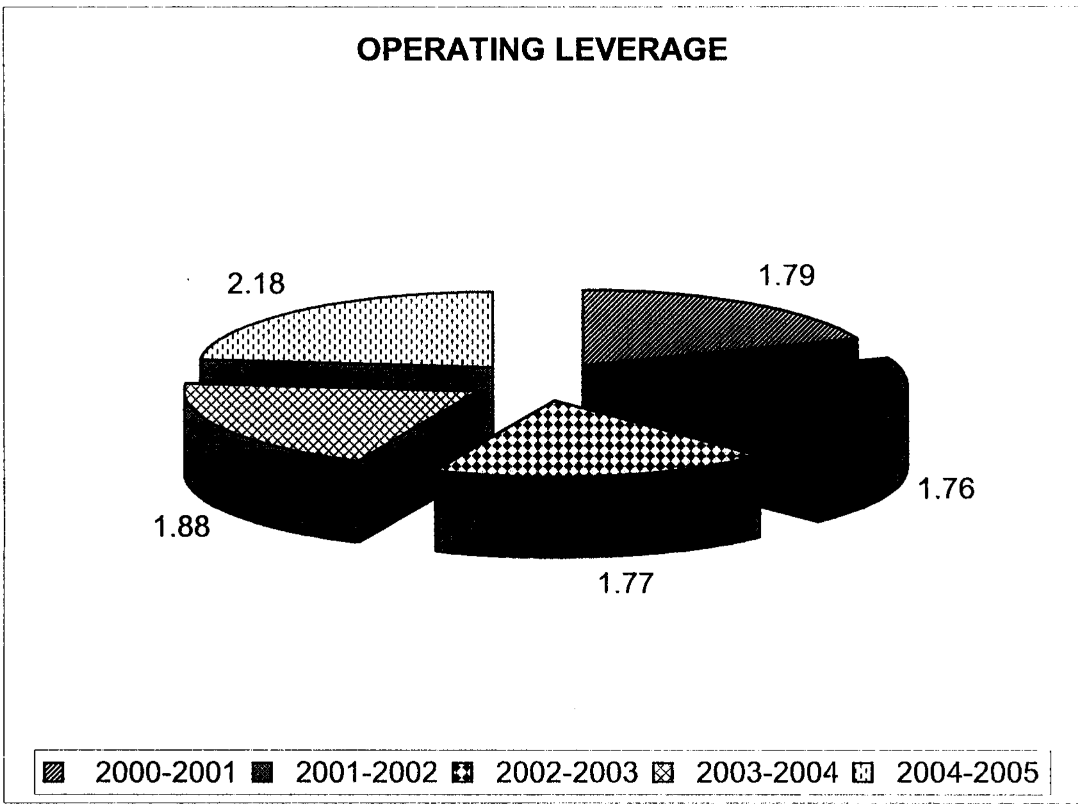
INTERPRETATION:

The above table reveals that the operating leverage exists in all the year as the degree of operating leverage is greater than. It was high in the year 2004-2005 with 2.18 times and lower in the year 2001-2002 with 1.76 times. On an average operating leverage implies that every 1% change in sales has result in 1.88% change in EBIT in the direction of sales. Since EBIT has decreased to a greater extent than reduction in contribution, hence the operating leverage is high.

INFERENCE:

The Operating leverage exists in all the years as the degree of operating leverage is greater than 1. On an average operating leverage implies that 1% change in sales has 1.88% change in EBIT in the direction of sales. So the operating leverage is high.

CHART NO 4.3.1



4.3.2 FINANCIAL LEVERAGE:

The financial leverage may be defined as the tendency of the residual net income to vary disproportionately with operating profit. It indicates the change that take place in the taxable income as a result of change in the operating income. It signifies the existence of fixed interest or fixed dividend bearing securities in the total capital structure of the company.

The use of long-term fixed interest bearing debt and preference share capital along with equity share capital is called financial leverage or trading on equity.

$$\text{Degree of financial leverage} = \frac{\text{Earnings before interest and tax}}{\text{Profit before tax}}$$

TABLE NO 4.3.2

Table showing the Financial Leverage

(Rs. in lakhs)

Year	EBIT	Profit before tax	Financial Leverage (in times)
2000-2001	17082.47	8354.73	2.04
2001-2002	16115.14	7025.51	2.29
2002-2003	15249.91	6657.04	2.29
2003-2004	14672.87	6857.58	2.13
2004-2005	11618.29	3916.95	2.96

Source: Data collection from the Annual Reports of the company

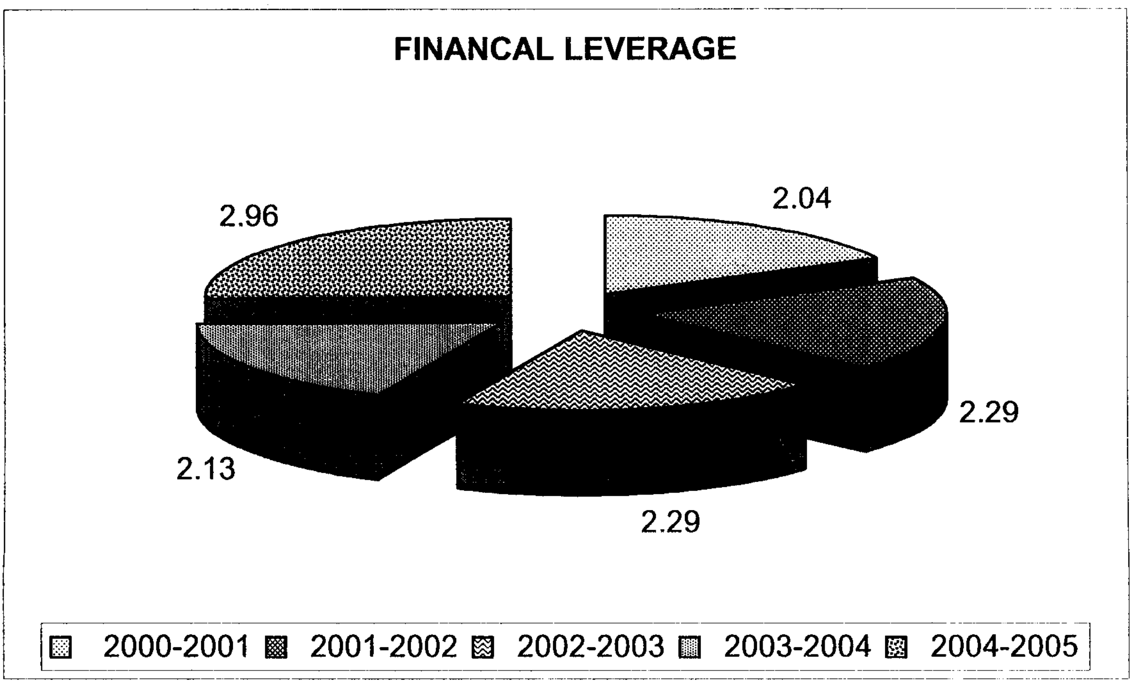
INTERPRETATION:

The above table reveals that the financial leverage was low in the year 2000-2001 with 2.04 times and high in the year 2004-2005 with 2.96 times. In 2001-2002 and 2002-2003 the financial leverage was constant with 2.29 times. Since profit before tax has decreased to a greater extent than the reduction of EBIT in the last two years of the study. Thus it can be concluded that a low rate of financial leverage indicates a low interest outflow and consequent lower borrowing and vice versa.

INFERENCE:

Financial leverage shows an increasing trend in the five years except in the year 2003-2004. This indicates that the profit before tax has decreased to a greater extent than the reduction of EBIT. So the low rate of financial leverage was due to low interest outflow and consequently lowers borrowings.

CHART NO 4.3.2



4.3.3 COMPOSITE LEVERAGE:

Both financial and operating leverage magnify the revenue of the firm. Operating leverage affects the income, which is the result of production. On the other hand the financial leverage is the result of financial decisions. The composite leverage focuses attention on the entire income of the concern. The management before using the composite leverage should properly assess the risk factor. The high financial leverage may be offset against low operating leverage or vice versa.

Composite Leverage = Operating Leverage x Financial Leverage

TABLE NO 4.3.3

Table showing the Composite Leverage position

Year	Operating leverage	Financial leverage	Composite Leverage (in times)
2000-2001	1.79	2.04	3.65
2001-2002	1.76	2.29	4.03
2002-2003	1.77	2.29	4.05
2003-2004	1.88	2.13	4.00
2004-2005	2.18	2.96	6.45

Source: Data collection from the Annual Reports of the company

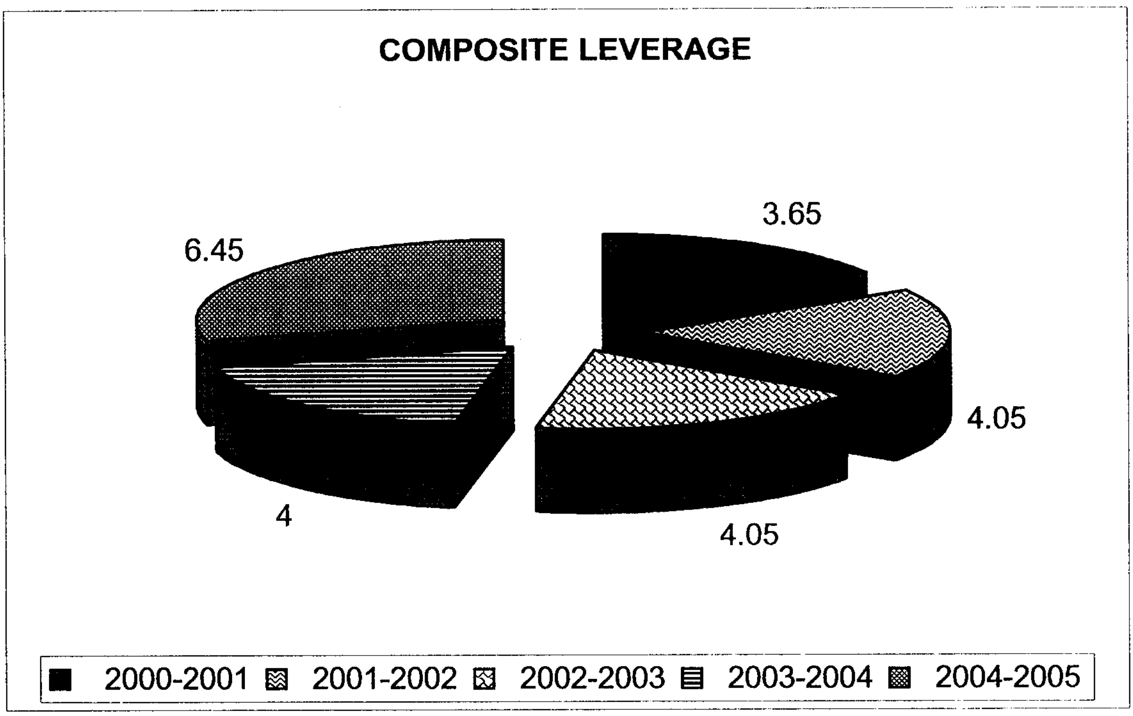
INTERPRETATION:

The above table reveals that the composite leverage is high in the year 2004-2005 with 6.45 times and low in 2000-2001 with 3.65 times. Since the operating leverage is high and financial leverage is high, hence composite leverage is also high.

INFERENCE:

The Composite leverage shows an increase trend because the operating and financial leverage is high. Hence the composite leverage is also high.

CHART NO 4.3.3



4.4 COST OF CAPITAL

4.4.1 COST OF EQUITY:

Firm's may raise equity capital internally buy retaining earnings. Alternatively, they could distribute the entire earnings to equity shareholders and raise equity capital externally buy issuing new shares. In both cases, shareholders are providing funds to the firms to finance their capital expenditures. Therefore the equity shareholders required rate of return would be the same whether they supply funds by purchasing new shares or by foregoing dividends, which could have been distributed to them.

$$\text{Cost of equity} = \frac{\text{Dividend per share}}{\text{Market price per share}} \times 100$$

OR

$$\text{Cost of equity} = \frac{\text{Dividend per share}}{\text{Book value per share}} \times 100$$

TABLE NO 4.4.1 (i)

Table showing the cost of equity under book value

Year	Dividend per share (Rs.)	Book value per share (Rs.)	Cost of equity
2000-2001	2.50	10.00	25
2001-2002	2.50	10.00	25
2002-2003	2.75	10.00	27.5
2003-2004	2.75	10.00	27.5
2004-2005	2.75	10.00	27.5

Source: Data collection from the Annual Reports of the company

TABLE NO 4.4.1 (ii)

Table showing the cost of equity under market price value

Year	Dividend per share (Rs.)	Market price per share (Rs)	Cost of equity
2000-2001	2.50	38.06	6.56
2001-2002	2.50	29.45	8.48
2002-2003	2.75	48.35	5.68
2003-2004	2.75	79.17	3.47
2004-2005	2.75	69.47	3.95

Source: Data collection from the Annual Reports of the company

INTERPRETATION:

The above table reveals that the cost of equity was high in the year 2000-2001 with 6.56%. The market price was fluctuating for all the years. The decline in the market price was due to recession in the Indian economy. So the cost of equity will also differ from year to year.

INFERENCE:

The market price was fluctuating for all the years. The book value price also fluctuates in increasing trend. So the cost of equity will also differ from year to year. The cost of equity in relation with book value exposes the organization in high-cost zone, whereas the cost of equity in relation with market value exposes the organization to low-cost zone. It signals the surging of market confidence.

4.4.2 COST OF DEBT:

A company may raise debt in a variety of ways. It may borrow funds from financial institutions or public either in the form of public deposits or debentures (bonds) for a specified period of time at a certain rate of interest. The cost of debt is the rate of interest payable on debt.

$$\text{Cost of debt} = \frac{\text{Interest}}{\text{Total debt}} \times 100$$

TABLE NO 4.4.2

Table showing the cost of debt

(Rs. in lakhs)

Year	**Interest**	**Total debt**	**Cost of debt**
2000-2001	3209.55	33549.91	9.57%
2001-2002	2986.14	32510.80	9.19%
2002-2003	2098.45	31924.75	6.57%
2003-2004	1066.98	25399.20	4.20%
2004-2005	1185.92	25003.25	4.74%

Source: Data collection from the Annual Reports of the company

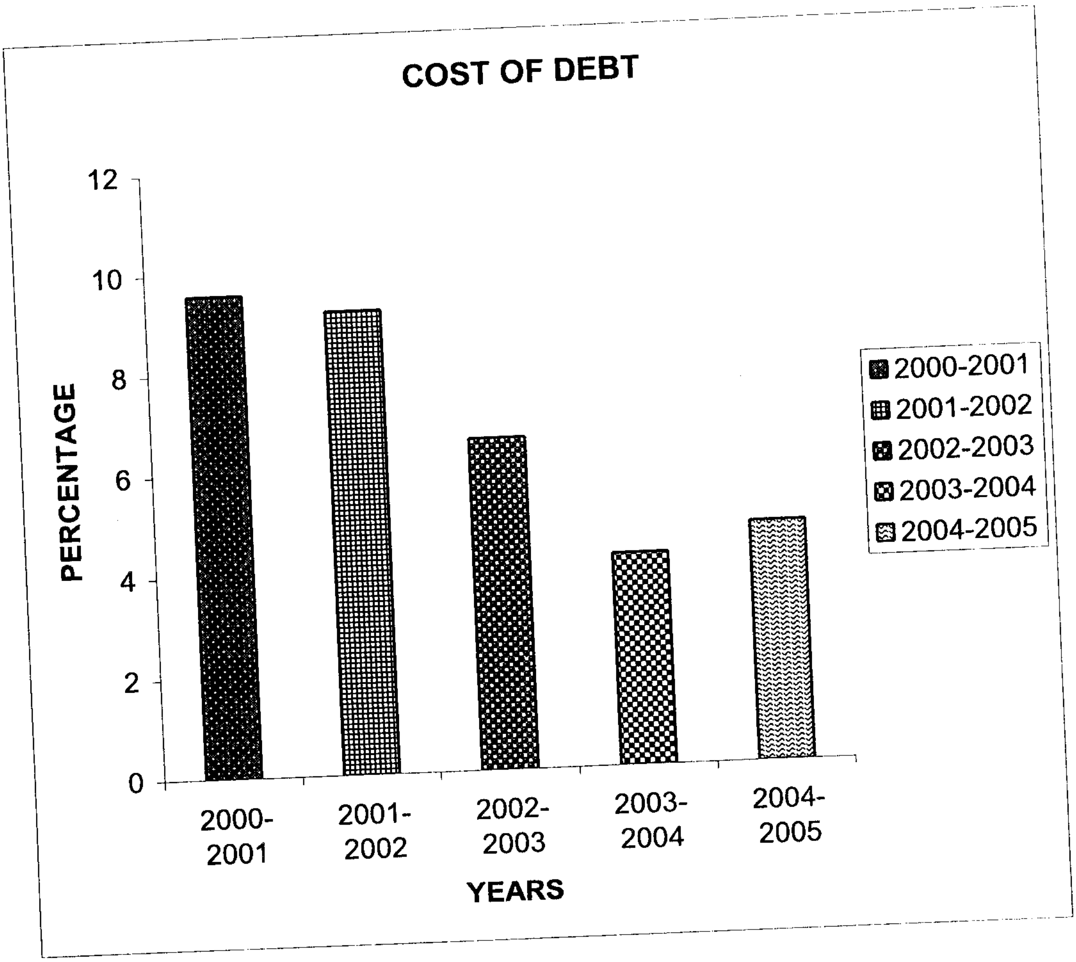
INTERPRETATION:

From the above table it is clear that the cost of debt has shows a decreasing trend expects in the year 2004-2005. The cost of debt was high in the year 2000-2001 with 9.57% and it was low in the year 2003-2004 with 4.20%. Due to the high rate of interest in the year 2000-2001. So the cost of debt is maximum.

INFERENCE:

The Cost of debt shows a decreasing trend except in the year 2004-2005. Due to the high rate of interest, cost of debt was maximum in 2000-2001. The company have identified cheaper sources of finance which in turn reduced the cost of debt.

CHART NO 4.4.2



4.5 EBIT AND EPS ANALYSIS:

In our search for an appropriate capital structure, we need inter alia, to understand how sensitive is earnings per share (EPS) to changes in earnings before interest and tax (EBIT) under different years.

TABLE NO 4.5

Table showing the EBIT and EPS relationship

(Rs. in lakhs)

PARTICULARS	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005
EBIT (or) Operating Profit	17082	16115	15250	14673	11618
Less Interest	3886	3224	2863	1625	1622
Earnings before tax	13196	12896	12387	13048	9996
Less tax	712	3495	1453	1573	1614
Earnings after tax	12484	9401	10934	11475	8382
No. Of equity shares (in units)	696.38	696.38	696.38	696.38	696.38
EPS	17.92	13.49	15.70	16.47	12.03

Source: Data collection from the Annual Reports of the company

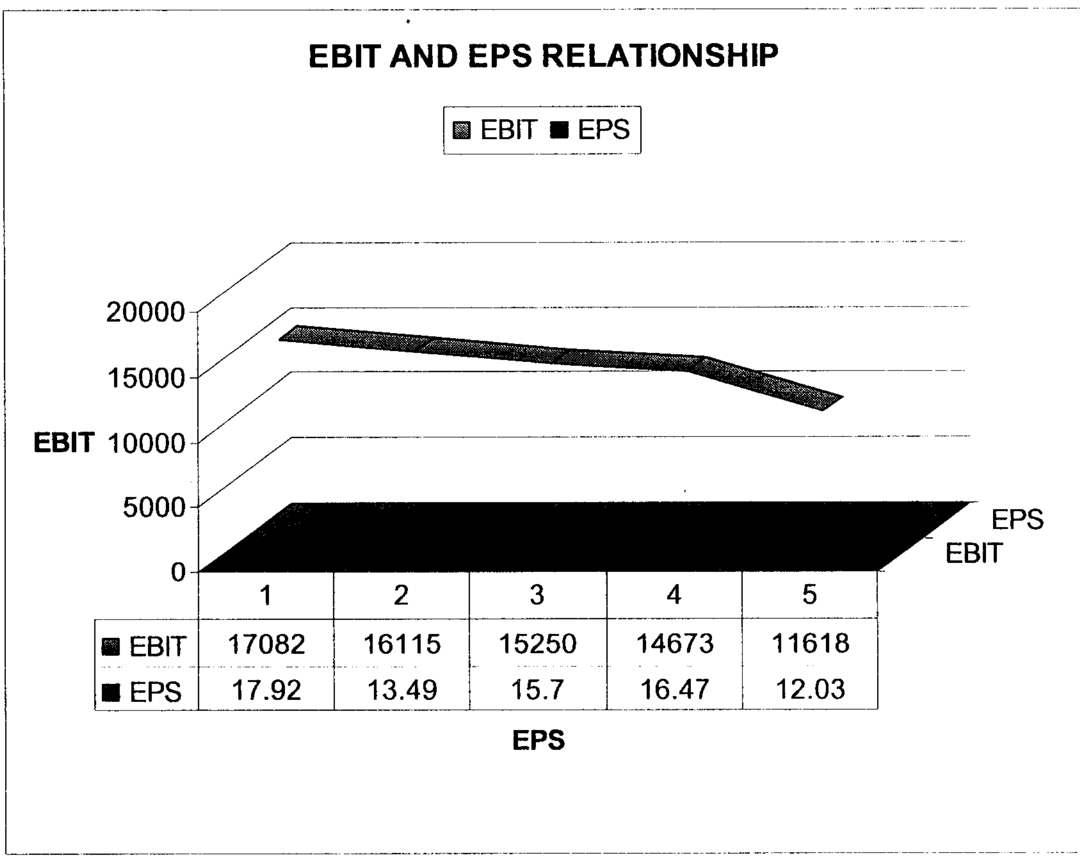
INTERPRETATION:

In 2000-2001 the EBIT was 17082 lakhs and their EPS is Rs. 17.92; in 2001-2002 the EBIT was decreased to Rs. 16115 lakhs and their EPS has also decreased to Rs. 13.49 since the earnings have decreased in this year. In 2002-2003 the EBIT was Rs.15250 lakhs and their EPS is Rs.15.70; in 2003-2004 the EBIT was Rs.14673 lakhs and EPS was Rs. 16.47; in 2004-2005 the EBIT was 11618 lakhs and EPS was decreased to Rs. 12.03 since in this year 2004-2005 the operating profit is decreased.

INFERENCE:

The EBIT-EPS relationship is found sensitive for the organization. Lower the debt proportion, higher is the EPS. It signals the excessive amount left to the equity shareholder, after servicing the debt. However in the later years, the cost of debt have reduced and pulled down the EPS, amidst the low leverage because of the reduced EBIT.

CHART NO 4.5



4.6 CAPITAL STRUCTURE CALCULATION

4.6.1 UNDER NET INCOME APPROACH METHOD:

FORMULA

Net Income available to share holders = Earnings before interest And tax – Interest

Total Market value of firm $V = S + D$

Where,

S = Market value of equity shares,

$$= \frac{\text{Net Income}}{\text{Equity Capitalization Rate}}$$

D = Market Value of Debt

And,

K_o = Overall cost of capital

$$= \frac{\text{Earnings before interest and tax}}{V}$$

FOR THE YEAR 2003-2004

Debt Capital = 25399.20 lakhs

Cost of debt = 4.20%

Cost of equity = 27.5%

Earnings before interest and tax		=	14672.87
Less: Interest		=	1066.98
Net Income available to shareholders		=	13605.89
Market value of equity	S	=	$\frac{13605.89}{0.275}$
		=	49475.96 lakhs
Add: Market value of Debt D		=	25399.20
	V	=	74875.16
	K_o	=	$\frac{14672.87}{748758.16}$
		=	19.59%

IF DEBT IS INCREASED BY 100 CRORES (10,000 LAKHS)

I.e. if debt is 35399.20 lakhs

Earnings before interest and tax		=	14672.87
Less: Interest		=	1486.76
Net Income available to shareholders		=	13186.11 lakhs
Market value of equity	S	=	13186.11 / 0.275
		=	47949.49 lakhs
Add: Market value of Debt	D	=	35399.20
	V	=	83348.69 lakhs
	Ko	=	14672.87 / 83348.69
		=	17.60%

INTERPRETATION:

The above is the net income approach calculation of the company for the year 2003-2004. It shows that EBIT is 14672.87 lakhs. The debt capital is 25399.20 lakhs. The value of the firm is 74875.16 lakhs. The overall cost of capital is 19.59%

By this assumption, if the debt is increased by 100 crores i.e. 35399.20 lakhs, then the value of the firm will be increased to 83348.69 lakhs and also reduces the overall cost of capital from 19.59% to 17.60%

FOR THE YEAR 2004-2005

Debt Capital = 25003.25 lakhs

Cost of debt = 4.74%

Cost of equity = 27.5%

Earnings before interest and tax		=	11618.29
Less: Interest		=	1185.92
Net Income available to shareholders		=	10432.37
Market value of equity	S	=	10432.37 / 0.275
		=	37935.89
Add: Market value of Debt	D	=	25003.25

$$K_o = \frac{11618.29}{62939.14}$$

$$= 18.45\%$$

IF DEBT IS INCREASED BY 100 CRORES (10,000 LAKHS)

I.e. if debt is 35003.25 lakhs

Earnings before interest and tax		=	11618.29
Less: Interest		=	1659.15
Net Income available to shareholders		=	9959.14 lakhs
Market value of equity	S	=	$\frac{9959.14}{0.275}$
		=	36215.05 lakhs
Add: Market value of Debt	D	=	35003.25
	V	=	71218.30 lakhs
	Ko	=	$\frac{11618.29}{71218.30}$
		=	16.31%

INTERPRETATION:

The above is the net income approach calculation of the company for the year 2004-2005. It shows that EBIT is 11618.29 lakhs. The debt capital is 25003.25 lakhs. The value of the firm is 62939.14 lakhs. The overall cost of capital is 18.45%

By this assumption, if the debt is increase by 100 crores i.e. 35003.25 lakhs, Then the value of the firm will be increased to 71218.30 lakhs and also reduces the overall cost of capital from 18.45% to 16.31%

4.6.2 NET OPERATING INCOME APPROACH METHOD:

IN 2003-2004

EBIT = 14672.87 lakhs

Debt Capital = 25399.20 lakhs

Cost of debt = 4.20%

Cost of equity = 27.5%

Value of the firm = EBIT / K_o

= 14672.87/ 0.1959

V = 74899.79 lakhs

Market value of Equity (S) = V – D

= 74899.79 – 25399.20

= 49500.59 lakhs

Equity capitalization Rate $= \dfrac{\text{EBIT} - \text{Interest}}{\text{V} - \text{D}}$

$= \dfrac{14672.87 - 1066.98}{74899.79 - 2539.20}$

= 27.5%

IF DEBT IS INCREASED BY 100 CRORES (10,000 LAKHS)

I.e. if debt is 35399.20 lakhs

EBIT = 14672.87 lakhs

Less: Interest = 1486.76

13186.76 lakhs

Value of the firm V $= \dfrac{14672.87}{19.59}$

= 74899.79 – 35399.20

= 39500.59 lakhs

Equity Capitalization Rate $= \dfrac{\text{EBIT} - \text{Interest}}{\text{V} - \text{D}}$

$= \dfrac{13186.11}{39500.59}$

= 33.38%

$Ko = Ke[S/v] + Kd[D/v]$

$= 0.3338 [39500.59 / 74899.79] + 0.042 [35399.20 / 74899.79]$

$= 0.176 + 0.019$

$= 19.5\%$

INTERPRETATION:

The above detail shows the capital structure calculation of TNPL under the net operating income approach in the year 2003 – 2004. The EBIT is 14672.87 lakhs. The value of the debt capital is 25399.20 lakhs. The value of the firm is 74899.79 lakhs. The weighted average cost of capital is 19.5%. The cost of equity is 27.5%.

If the debt is increased by 100 crores (10000 lakhs) that is 35399.20 lakhs, the value of the firm remains the same as 74899.79 lakhs. But the equity capitalization rate is increased to 33.38%. The weighted average cost of capital will remain constant as 19.5%. Thus it is clear that according to NOI approach, change in capital structure does not affect the value of the firm and weighted average cost of capital.

IN 2004 – 2005

EBIT = 11618.29 lakhs

Debt capital = 25003.25 lakhs

Cost of debt = 4.74%

Cost of equity = 27.5%

Value of the firm = EBIT / Ko

= 11618 / 0.1845

V = 62971.76 lakhs

Market value of Equity (S) = V – D

= 62971.76 – 25003.25

= 37968.51 lakhs

Equity capitalization Rate $= \frac{\text{EBIT} - \text{Interest}}{V - D}$

$= \frac{11618.29 - 1185.92}{62971.76 - 25003.25}$

$= 27.5\%$

IF DEBT IS INCREASED BY 100 CRORES (10,000 LAKHS)

I.e. if debt is 35003.25 lakhs

EBIT	= 11618.29 lakhs
Less: Interest	= 1659.15
	9959.14 lakhs

Value of the firm V $= \frac{11618.29}{18.45}$

$= 62971.76$ lakhs

Market value of Equity (S) $= V - D$

$= 62971.76 - 35003.25$

$= 27968.51$ lakhs

Equity capitalization Rate $= \frac{\text{EBIT} - \text{Interest}}{V - D}$

$= \frac{9959.14}{27968.51}$

$= 35.60\%$

Ko $= \text{Ke}\,[S / v] + \text{Kd}\,[D / v]$

$= 0.3560\,[27968.51 / 62971.76] + 0.0474\,[35003.25 / 62971.76]$

$= 0.1580 + 0.0263$

$= 18.43\%$

Conclusion

CHAPTER – 5
CONCLUSION

RESULTS OF THE STUDY:

✓ Debt equity ratio was in the decreasing trend, due to the repayment of debt. Debt is more than equity in all the years and so the ratio is satisfactory to the company.

✓ Capital gearing ratio shows an increasing trend in the 5 years except in 2001-2002. This ratio indicates that the company is said to be in a low gear.

✓ The Earnings per share ratio was high in 2000-2001 because the company earns a higher profit and in the remaining years the earnings per share ratio was low due to lower profits in every year.

✓ Return on shareholders investment shows that the net worth is low in 2004-2005, as the company has repaid the loans. The Return on Shareholders net worth ratio signals volatility leading to a sharp decline of 46% over the early years.

✓ The average 25.07% suggests that the firm enjoys one fourth of its sales revenue as gross profit. However, the gross profit has significantly got reduced over the period of study.

✓ Due to the impact of operating expenses, the net profit ratio of these periods show decreasing trend.

✓ The Capital Structure of TNPL reveals that debt capital proportion is in decreasing trend due to repayment of debt.

✓ The Operating leverage exists in all the years as the degree of operating leverage is greater than 1. On an average operating leverage implies that 1% change in sales has 1.88% change in EBIT in the direction of sales. So the operating leverage

- ✓ Financial leverage shows an increasing trend in the five years except in the year 2003-2004. This indicates that the profit before tax has decreased to a greater extent than the reduction of EBIT. So the low rate of financial leverage was due to low interest outflow and consequently lowers borrowings.

- ✓ The Composite leverage shows an increase trend because the operating and financial leverage is high. Hence the composite leverage is also high.

- ✓ The market price was fluctuating for all the years. The book value price also fluctuates in increasing trend. So the cost of equity will also differ from year to year. The cost of equity in relation with book value exposes the organization in high-cost zone, whereas the cost of equity in relation with market value exposes the organization to low-cost zone. It signals the surging of market confidence.

- ✓ The Cost of debt shows a decreasing trend except in the year 2004-2005. Due to the high rate of interest, cost of debt was maximum in 2000-2001. The company have identified cheaper sources of finance which in turn reduced the cost of debt.

- ✓ The EBIT-EPS relationship is found sensitive for the organization. Lower the debt proportion, higher is the EPS. It signals the excessive amount left to the equity shareholder, after servicing the debt. However in the later years, the cost of debt have reduced and pulled down the EPS, amidst the low leverage because of the reduced EBIT.

- ✓ Capital structure calculation of TNPL under Net Income Approach shows that an increase in debt capital increases the value of the firm and reduces the overall cost of capital.

- ✓ Capital structure calculation of TNPL under NOI approach shows that an increase in the proportion of debt capital in capital structure does not affect the value of the firm and overall cost of capital.

DISCUSSIONS

- ✓ The Company shall maintain the same proportion of debt-equity ratio.
- ✓ In future the company shall use equity capital for long-term obligations and debt capital for the short-term obligations as equity capital is best suited for long run and debt capital is best suited for day-to-day activities.
- ✓ The Company shall increase the dividend rate of satisfy the shareholders as it is maintaining more reserves and surplus and also earning more profit.
- ✓ The Company shall give special attention to increase the earnings per share to safeguard and improve the welfare of its shareholders.
- ✓ The Company shall reduce operating expenses and financial burdens by reducing the manpower strength.
- ✓ The Company shall take necessary steps to minimize the cost of capital to earn high return in the future.
- ✓ Capital gearing ratio shall be maintained at the same level.
- ✓ The company shall retain the leader position in the paper industries and it can try to get first position in Asian continent.

CONSIDERED RECOMMENDATIONS

In India, success and development of the public sector undertaking are depending upon the ultimate result of the individual unit performance. The study on financial appraisal of Tamil Nadu Newsprint and Papers Limited reveals that,
Leverage analysis of the company states that both financial and operating risk associated with the company is less and they are very efficient in using the operating cost. Cost of capital analysis of the company states that the company had taken steps to minimize their cost of capital and they were able to minimize it. It shows how effectively they had used the capital. The overall financial performance of the company is also good and they are maintaining it. Capital structure decisions are dynamic for every year. Payment of dividend should be increased. Overall, the company's capital structure is optimum. The study suggests the company to earn higher return in future.

APPENDICES

PROFIT & LOSS ACCOUNT FOR THE YEAR ENDED 31st MARCH 2005

I. INCOME		**(Rs. In lakhs)**
Sales		67128.52
Other income		2716.52
	A	69845.04
II. EXPENDITURE		
Manufacturing expenses		44448.05
Personal expenses		5358.00
Administration, selling and other expenses		8312.26
Interest and finance charges		6188.30
Depreciation		1621.48
	B	65928.09
III. NET PROFIT BEFORE TAX	**A – B**	3916.95
Provision for tax		122.35
IV. NET PROFIT AFTER TAX		3794.60
Balance brought forward and from last year		2006.78
V. PROFIT AVAILABLE FOR APPROPRIATION		5801.38
VI. APPROPRIATIONS		
Transfer to General reserve		1600.00
Proposed dividend		1907.42
Tax on dividend		272.40
VII. SURPLUS CHARGED TO BALANCE SHEET		2020.15
		5801.38

PROFIT & LOSS ACCOUNT FOR THE YEAR ENDED 31st MARCH 2004

		(Rs. In lakhs)
I. INCOME		
Sales		58359.62
Other income		2849.72
	A	61209.34
II. EXPENDITURE		
Manufacturing expenses		33548.71

Personal expenses		4706.13
Administration, selling and other expenses		8125.49
Interest and finance charges		1625.10
Depreciation		6015.20
	B	54357.76
III. NET PROFIT BEFORE TAX	**A – B**	6857.58
Provision for tax		1573.09
IV. NET PROFIT AFTER TAX		5284.49
Balance brought forward and from last year		2078.67
V. PROFIT AVAILABLE FOR APPROPRIATION		7363.16
VI. APPROPRIATIONS		
Transfer to General reserve		3200.00
Proposed dividend		1907.45
Tax on dividend		244.41
VII. SURPLUS CHARGED TO BALANCE SHEET		2006.78
		7363.16

PROFIT & LOSS ACCOUNT FOR THE YEAR ENDED 31st MARCH 2003

I. INCOME		**(Rs. In lakhs)**
Sales		53986.82
Other income		1671.45
	A	55658.27
II. EXPENDITURE		
Manufacturing expenses		28613.84
Personal expenses		4320.53
Administration, selling and other expenses		7865.02
Interest and finance charges		2863.47
Depreciation		5398.43
	B	49001.23
III. NET PROFIT BEFORE TAX	**A – B**	6657.04
Provision for tax		1453.09
IV. NET PROFIT AFTER TAX		5203.95
Balance brought forward and from last year		2706.47

VI. APPROPRIATIONS	
Transfer to General reserve	3700.00
Proposed dividend	1891.75
Tax on dividend	242.38
VII. SURPLUS CHARGED TO BALANCE SHEET	2078.67
	7910.36

PROFIT & LOSS ACCOUNT FOR THE YEAR ENDED 31st MARCH 2002

I. INCOME		**(Rs. In lakhs)**
Sales		57832.12
Other income		1677.97
	A	59510.09
II. EXPENDITURE		
Manufacturing expenses		31011.31
Personal expenses		3795.62
Administration, selling and other expenses		9353.96
Interest and finance charges		3223.92
Depreciation		5099.77
	B	52484.58
III. NET PROFIT BEFORE TAX	**A – B**	7025.51
Provision for tax		3494.24
IV. NET PROFIT AFTER TAX		3530.24
Balance brought forward and from last year		2634.60
V. PROFIT AVAILABLE FOR APPROPRIATION		6165.47
VI. APPROPRIATIONS		
Transfer to General reserve		1800.00
Proposed dividend		1714.58
Tax on dividend		0.00
VII. SURPLUS CHARGED TO BALANCE SHEET		2076.41
		6165.47

PROFIT & LOSS ACCOUNT FOR THE YEAR ENDED 31st MARCH 2001

I. INCOME		**(Rs. In lakhs)**
Sales		59638.87
Other income		1838.08
	A	61476.95
II. EXPENDITURE		
Manufacturing expenses		30855.00
Personal expenses		3850.58
Administration, selling and other expenses		9744.34
Interest and finance charges		3886.48
Depreciation		4785.82
	B	53122.22
III. NET PROFIT BEFORE TAX	**A – B**	8354.73
Provision for tax		711.96
IV. NET PROFIT AFTER TAX		7642.77
Balance brought forward and from last year		1910.00
V. PROFIT AVAILABLE FOR APPROPRIATION		9552.77
VI. APPROPRIATIONS		
Transfer to General reserve		5037.00
Proposed dividend		1740.95
Tax on dividend		177.58
VII. SURPLUS CHARGED TO BALANCE SHEET		2634.60
		9552.77

BALANCE SHEET AS ON 31st MARCH 2005

I. SOURCES OF FUNDS	**(Rs. in Lakhs)**	
Shareholder's funds		
Share capital	6935.99	
Reserves and surplus	39607.34	
		46543.33
Loans funds		
Secured loan	15794.96	

		25003.25
Deferred tax		16857.00
		88403.58
II. APPLICATIONS OF FUNDS		
Fixed assets		72885.16
Investments		144.05
Current assets, loans and advances	38734.43	
Less: Current liabilities and provisions	23349.85	
Net current assets		15384.58
		88403.5

BALANCE SHEET AS ON 31st MARCH 2004

I. SOURCES OF FUNDS	**(Rs. In Lakhs)**	
Shareholder's funds		
Share capital	6935.86	
Reserves and surplus	37987.69	
		44923.55
Loans funds		
Secured loan	22761.25	
Unsecured loan	2637.95	
		25399.20
Deferred tax		17603.00
		87925.75
II. APPLICATIONS OF FUNDS		
Fixed assets		76003.93
Investments		814.76
Current assets, loans and advances	30568.81	
Less: Current liabilities and provisions	19547.82	
Net current assets		11020.99
		87925.66

BALANCE SHEET AS ON 31st MARCH 2003

I. SOURCES OF FUNDS	(Rs. In Lakhs)	
Shareholder's funds		
Share capital	6879.18	
Reserves and surplus	34258.89	
		41138.07
Loans funds		
Secured loan	28117.93	
Unsecured loan	3806.82	
		31924.75
Deferred tax		16549.91
		89612.73
II. APPLICATIONS OF FUNDS		
Fixed assets		78875.10
Investments		114.05
Current assets, loans and advances	26155.12	
Less: Current liabilities and provisions	15531.54	
Net current assets		10623.58
		89612.79

BALANCE SHEET AS ON 31st MARCH 2002

I. SOURCES OF FUNDS	(Rs. In Lakhs)	
Shareholder's funds		
Share capital	6858.30	
Reserves and surplus	31181.66	
		38039.96
Loans funds		
Secured loan	27775.98	
Unsecured loan	4734.82	
		32510.80
Deferred tax		15589.91
		86140.67

II. APPLICATIONS OF FUNDS

Fixed assets		68643.66
Investments		144.05
Current assets, loans and advances	30761.82	
Less: Current liabilities and provisions	13378.86	
Net current assets		17382.96
		86140.67

BALANCE SHEET AS ON 31st MARCH 2001

I. SOURCES OF FUNDS

	(Rs. In Lakhs)	
Shareholder's funds		
Share capital	6911.74	
Reserves and surplus	41917.32	
		48829.06
Loans funds		
Secured loan	29509.79	
Unsecured loan	4040.12	
		33549.91
Deferred tax		NILL
		82378.97

II. APPLICATIONS OF FUNDS

Fixed assets		68963.01
Investments		144.05
Current assets, loans and advances	26627.37	
Less: Current liabilities and provisions	13325.46	
Net Current Assets		13301.91
		82378.97

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