

Profitability trend analysis: A case study of TNPL

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Abstract

Profitability is the primary goal of all business ventures. Without profitability the business will not survive in the long run. So measuring current and past profitability and projecting future profitability is very important. A variety of profits- gross profit, operating profit, pre-tax profit and net profit can be used to assess the efficiency and effectiveness of TNPL. The research is analytical in nature. The data used for the study is secondary data. The data required for the research were collected from the Annual Reports of the company from the period 2005-06 to 2014-15. In this research, researcher has done profitability trend analysis, which indicates direction of change – positive / negative trends in a company's earnings. She has found trend analysis of gross profit and operating profit registered an positive trend whereas pre-tax profit have fluctuating trend and net profit showed positive trend.

Keywords: Gross Profit, Net Profit, Operating Profit, Profitability, and Trend analysis

Introduction

Profit is the engine that drives the business enterprise. A business needs profits not to its existence but also for expansion, modernization, diversification etc. The term profitability bifurcates into two terms viz, profit and ability. The most important part of profitability is "ability" which means that organization level of ability to earn profit. Profit means it is an excess of revenues over expenses of the organization. A variety of profit can be used to assess the efficiency and effectiveness of business in different stages. The objective of trend analysis is to find out consistency in a company's earnings. Profit magnifies the value of the asset base because it shows some current (and presumably future) income. Increasing profitability is one of the most important tasks of the business managers. So measuring current and past profitability and projecting future profitability is imperative.

Literature Reviews

Dr. Nabi Rasool, D., Dr. Prabhakar, D. and Narayana Gowd, T. (2013) ^[10] in their study measured the profitability performance of Hyderabad Industries Ltd., through profitability ratios and impact of profitability on Return on common equity (ROE). The results found that the multiple correlation co-efficient of ROE on Gross Profit, Operating Profit, Net Profit, Earning Per Share and Return on Total Assets is 0.991 which reflects that ROE is highly influenced by selected profitability ratios. Hence, it is inferred that selected profitability ratios have significant impact on ROE of the company.

Maryam Mohammadi, Afagh Malek (2012) ^[8] their study emphasized on how accounting information aids budgetary decision-makers to evaluate the company financial performance, determine its future obligations, and take better investment decisions. According to their research, it can be interpreted that during year 2011, company did not operate well, and overall performance of the firm in terms of profitability, liquidity, and credit quality declined because of deterioration in the company's operating environment.

T. Venkatesan and DR. S. K. Nagarajan (2012) ^[14] in their study examined profitability analysis of selected steel companies in India during the period from 2005-06 to 2010-11. It is cleared from that profitability more or less depends upon the better utilization of resources, cut-off expenses and quality of management function in the products, customer services and to manpower and goodwill and market share. It is worthwhile to increase production capacity and use advance technology to cut down cost of production and wage cost in order to increase profitability, not only against the investment, but also for investor's return point of view.

Camelia Burja (2011) in his study found out the Factors Influencing the Companies' Profitability. The results of the study showed a strong dependent relationship between company performance and how the available resources are managed. For performance indicator Return on assets were one of the influencing factor that can contribute to increasing or lowering of the profitability of the company.

Anura De Zoysa, Athula Manawaduge, Anil Chandrakumara (2009) ^[2] Their research paper assessed the performance of Sri Lankan manufacturing companies in comparison to that of Malaysian manufacturing companies to obtain some insights into improving their current level of performance. Malaysian companies have overall performed slightly better than Sri Lankan companies in terms of ROE. However, inter-industry analysis showed that except in the agricultural products and plantations sector, all other manufacturing sectors in Sri Lanka have individually achieved a higher ROE than their Malaysian counterparts. Another major finding of this study is that Sri Lanka's relative position is poor – particularly in terms of equity investment in manufacturing – as the equity capital of Sri Lankan companies is only 46% compared to 60% for Malaysian companies.

Ioannis Lazaridis and Dimitrios Tryfonidis (2006) ^[4] investigated the relationship of corporate profitability and working capital management. The purpose of this study was to establish a relationship that is statistically significant between profitability, the cash conversion cycle and its components for

listed firms in the Athens Stock Exchange. The results of the study showed that there was statistical significance between profitability, measured through gross operating profit, and the cash conversion cycle. The study concluded that managers can create profits for their companies by handling correctly the cash conversion cycle and keeping each different component (account receivables, accounts payables and inventory) to an optimum level.

Sanjay J. Bhayani (2006) [13] made an attempt to study the impact assets utilization on profitability of Indian Industry. For the purpose of study 24 Indian Industry has been selected which comprises 641 Indian firms. The results of the study indicate that fixed assets turnover and profitability has shown a positive relationship. So, it indicates that high fixed assets turnover higher profitability. Further, the results of analysis of multiple determinations make it clear that 40.70 percent of total variation in the corporate profitability was accounted for by the joint variation in the efficiency of inventory and receivable management.

Narware (2004) [9] in his empirical study envisaged that the assess the impact of working capital on profitability, the combine effect of the ratios relating to working capital management and profitability and determination the working capital leverage in National Fertilizer Limited for the period ten years from 1991 to 2000. This study concluded that working capital management and profitability has both the negative and positive association, three ratios registered negative correlation with profitability ratio, ROI and in working capital leverage increase in the profitability of the company was less than proportion to decrease in working capital.

Research Gap

It is obvious that all these studies have attempted to examine the importance of profitability analysis and impact of profitability on Return on investment of the companies. None of these studies has, however made any effort to analyze the efficiency and effectiveness of profitability management by using trend analysis. Hence, the researcher identified this area as research gap and the present study is therefore focused on highlighting the above said aspect.

Present status of Paper Industry

India holds fifteenth rank among paper producing countries in the world. Total installed capacity is approximately 12.75 million tonnes. The per capita consumption of paper is around 11 Kgs. against the global average of 56 Kgs. and Asian average of 40kgs. The industry is fragmented with over 750 paper mills, of which only 50 mills have a capacity of 50000 tonnes per annum or more. The industry is working at 89% capacity utilization. India's share in world paper production is about 2.6%

The current demand is estimated at 13.0 million tons, export of 0.53 million tones and import of 2.25 million tonnes by 2024-25. India is the fastest growing market for paper in the world with a growth rate of about 6% per year. Increase of per capita paper consumption by 1 kg will increase the demand by about 1.25 million tonnes per annum.

Profile of TNPL

Tamil Nadu Newsprint and papers Limited (TNPL) was promoted by the Government of Tamil Nadu in the year 1979

to produce Newsprint and Printing & writing paper using bagasse as the primary raw material. The factory is located at pugalur in karur district. The plant was commissioned in 1984 with an initial capacity of 90,000 tons per annum. Since the company has enhanced the capacity to 4,00,000 tonnes per annum.

Confederation of Indian Industry in its 15th National Award for Excellence in energy Management 2014, has selected TNPL as one of the 49 companies for the Excellence energy efficient Unit Award. The company has received "IPMA paper mill of the year Award" for the year 2013-14 from Indian Paper Manufacturers' Association (IPMA). The company has received the above award fourth time.

Objectives of the study

This research aims

- i) To compare the profitability trends and profitability position of the TNPL.
- ii) To examine efficiency and effectiveness of profitability management of TNPL.
- iii) To assess the future tendency of the business.

Period of the Study

The period of the study selected only ten years from 2005-06 to 2014-15.

Methodology

The study is analytical in nature. The data used for the study is secondary data. The required data for the Tamil Nadu Paper Boards Ltd. was collected from the Annual reports for the period 2005-06 to 2014-15. Some of the data collected from journals, websites, books etc. Editing, classification and tabulation of the financial data, which will be collected from the above-mentioned sources, will be done as per the requirements of the study.

Statistical Tools

For typical analysis and interpretation, accounting and statistical tools such as trend analysis, Chi-square test etc. have been employed in the study to the effect of arriving logical conclusion.

Hypothesis of the Study:

- There is no significant difference between actual and trend values of Gross Profit
- There is no significant difference between actual and trend values of Operating Profit
- There is no significant difference between actual and trend values of Pre-tax Profit
- There is no significant difference between actual and trend values of Net Profit

Limitations of the Study

The data used in this study have been taken only from secondary sources and as such it findings depends entirely on the accuracy of such data.

Findings of the study

Profit is one of the tools of measuring the performance of the company. As a measuring rod of efficiency, profitability trend analysis is highly relevant as it presents the composite reflection of the trend analysis of gross profit, operating profit,

pre-tax profit and net profit. The direction of change in profitability position over the period of time is an indication of the efficiency or otherwise of the profitability management of the company.

Table No.1 reveals that the Gross profit Position of the TNPL during the study period from 2005-06 to 2014-15. Gross profit shows increasing trend during the study period except in the year 2012-13. The direction of change in gross profit was registered positive trend which indicates that TNPL efficiently managed its cost of goods sold and to provide for direct charges.

Gross profit Indices

The Gross profit of TNPL registered an increasing trend throughout the period of the study except in the year 2012-13. The gross profit indices started from 114.32 in the year 2006-07 and reached peak 278.77 in the year 2013-14 which due to substantial increase in gross profit. It expressed that TNPL’s administration of cost of goods sold were satisfactory.

Trend values of Gross Profit

The linear least square trend values of gross profit of TNPL are presented in Table No. 1. The trend values of gross profit increased throughout the period of study for which negative deviations were shown in the year 2006-07, 2010-11, 2012-13 and 2014-15.

H₀ = There is no significant difference between actual and trend values of Gross Profit

H₁ = There is significant difference between actual and trend values of Gross Profit

To test the significance difference between the actual values and trend values of Gross profit of TNPL, chi-square test has also been applied. It can be observed that the calculated value (737.093 lakhs) of chi-square is more than the tabulated value(16.919) at 5 per cent level of significance and hence null hypothesis is rejected(Appendix vide Table 1). Therefore, it is evidently proved that there is significance difference between actual values and trend values of Gross profit of TNPL.

Table No. 2 describes that Operating profit, Operating profit indices and trend values of Operating profit of TNPL.

Table No.2 reveals that the Operating profit Position of the TNPL from the period of 2005-06 to 2014-15. Operating profit shows increasing trend during the study period except in the year 2012-13. The direction of change in Operating profit was registered positive trend which indicates that TNPL efficiently managed its Operating expenses and to provide for direct charges.

Table 1: Gross profit, its Indices and Trend Values of TNPL. (Rs. In Lakhs)

Year	Gross Profit	Indices (2005-06=100)	Trend Values (YC)
2005-06	18768	100	18142.67
2006-07	21455	114.32	22018.54
2007-08	26266	139.95	25894.42
2008-09	30792	164.07	29770.29
2009-10	31980	170.40	33646.16
2010-11	36274	193.28	37522.04
2011-12	43543	232.01	41397.91
2012-13	42207	224.89	45273.78
2013-14	52320	278.77	49149.66
2014-15	52236	278.32	53025.53

Source: Compiled from the Annual Reports

Operating profit Indices

The Operating profit of TNPL registered an increasing trend throughout the period of the study except in the year 2012-13. The Operating profit indices started from 121.18 in the year 2006-07 and reached hike 320.59 in the year 2014-15 which due to substantial increase in Operating profit. It implied that TNPL’s administration of cost of goods sold and administrative expenses, selling and distribution expenses were satisfactory.

Trend values of Operating Profit

The linear least square trend values of Operating profit of TNPL are presented in Table No. 2. The trend values of Operating profit increased throughout the period of study for which negative deviations were shown in the year 2009-10, 2010-11, 2011-12 and 2012-13.

H₀ = There is no significant difference between actual and trend values of Operating Profit

H₁ = There is significant difference between actual and trend values of Operating Profit

To test the significance difference between the actual values and trend values of Operating profit of TNPL, chi-square test has also been applied. It can be observed that the calculated value (1776.09 lakhs) of chi-square is more than the tabulated value(16.919) at 5 per cent level of significance and hence null hypothesis is rejected(Appendix vide Table 2). Therefore, it is evidently proved that there is significance difference between actual values and trend values of Operating profit of TNPL.

Tables No.3 highlights that pre-tax profit, Pre-tax profit indices and trend values of Pre-tax profit of TNPL.

Table 2: Operating profit, its Indices and Trend Values of TNPL. (Rs. In Lakhs)

Year	Operating Profit	Indices (2005-6=100)	Trend Values (YC)
2005-06	12011	100	11888.8
2006-07	14555	121.18	14430.8
2007-08	18697	155.67	16972.8
2008-09	20712	172.44	19514.8
2009-10	20424	170.04	22056.8
2010-11	23938	199.30	24598.8
2011-12	26638	221.78	27140.8
2012-13	24708	205.71	29682.8
2013-14	33089	275.49	32224.8
2014-15	38506	320.59	34766.8

Source: Compiled from Annual Reports of TNPL

Pre-tax profit position

Table No.4 obvious that the Pre-tax profit Position of the TNPL during the study period from 2005-06 to 2014-15. Pre-tax profit exhibits fluctuating trend during the study period, initially it starts increasing trend then declines in the year 2008-09 and 2011-12. The direction of change in Pre-tax profit was registered positive trend which reached hike in the year 2014-15 but slightly fluctuating. Moreover, TNPL earned good Pre-tax profit throughout the study period.

Pre-tax profit Indices

The Pre-tax profit of TNPL showed that fluctuating trend during the study period. The Pre-tax profit indices started from 123.22 in the year 2006-07 and doubled 226.80 in the year 2014-15 which due to substantial increase in Pre-tax profit. It reflected that TNPL’s efficiency in the management of

operating expenses and fixed charges.

Trend values of Pre-tax Profit

The linear least square trend values of Pre-tax profit of TNPL are highlighted in Table 4. The trend values of Pre-tax profit reveals increasing trend but slowly for which negative deviations were shown in the year 2005-06, 2006-07, 2011-12 and 2012-13.

H₀ = There is no significant difference between actual and trend values of Pre-tax Profit

H₁ = There is significant difference between actual and trend values of Pre-tax Profit

To test the significance difference between the actual values and trend values of Pre-tax profit of TNPL, chi-square test has also been applied. It can be showed that the calculated value (5993.691 lakhs) of chi-square is more than the tabulated value(16.919) at 5 per cent level of significance and hence null hypothesis is rejected(Appendix vide Table 3). Therefore, it is evidently proved that there is significance difference between actual values and trend values of Pre-tax profit of TNPL.

Table No.4 discloses that the Net profit Position of the TNPL from 2005-06 to 2014-15. Net profit shows fluctuating trend during the study period, initially it starts increasing trend then declines in the year 2008-09, 2011-12 and 2012-13. The direction of change in Net profit was registered positive trend which reached peak in the year 2014-15 but slightly fluctuating due to adverse economic conditions. Moreover, TNPL earned good profit throughout the study period, which indicates that TNPL's capacity to face adverse economic conditions.

Table 3: Pre-tax profit, its Indices and Trend Values of TNPL. (Rs. In Lakhs)

Year	Pre-tax Profit	Indices (2005-06=100)	Trend Values (YC)
2005-06	10147	100.00	11877
2006-07	12503	123.22	12759
2007-08	16306	160.70	13641
2008-09	15785	155.56	14523
2009-10	15806	155.77	15405
2010-11	19514	192.31	16287
2011-12	12511	123.30	17169
2012-13	12611	124.28	18051
2013-14	20268	199.74	18933
2014-15	23013	226.80	19815

Source: Compiled from the Annual Reports of TNPL

Net profit Indices

The Net profit of TNPL observed that fluctuating trend during the study period. The Net profit indices started from 106.84 in the year 2006-07 and doubled 206.99 in the year 2014-15 which due to substantial increase in Net profit. It showed that TNPL's efficiency in the management of manufacturing, administrative, selling and other activities.

Trend values of Net Profit

The linear least square trend values of Net profit of TNPL are presented in Table 4. The trend values of Net profit shows increasing trend but slowly for which negative deviations were shown in the year 2005-06, 2006-07, 2011-12 and 2012-13.

H₀ = There is no significant difference between actual and trend values of Net Profit

H₁ = There is significant difference between actual and trend values of Net Profit

To test the significance difference between the actual values and trend values of Net profit of TNPL, chi-square test has also been applied. It can be found that the calculated value (3102.645 lakhs) of chi-square is more than the tabulated value(16.919) at 5 per cent level of significance and hence null hypothesis is rejected(Appendix vide Table 4). Therefore, it is evidently proved that there is significance difference between actual values and trend values of Net profit of TNPL.

Table 4: Net profit, its Indices and Trend Values of TNPL. (Rs. In Lakhs)

Year	Net Profit	Indices (2005-06=100)	Trend Values (YC)
2005-06	8055	100.00	8568
2006-07	8606	106.84	9309
2007-08	11283	140.07	10050
2008-09	10738	133.31	10791
2009-10	12606	156.50	11532
2010-11	14899	184.97	12272
2011-12	10894	135.25	13013
2012-13	9148	113.57	13754
2013-14	16118	200.10	14495
2014-15	16673	206.99	15236

Source: Compiled from the Annual Reports of TNPL

Conclusion

Profitability position of TNPL appears to be satisfactory as evidenced by Table No.1, 2, 3 and 4. The direction of change in profit - trend analysis of gross profit and operating profit registered an positive trend whereas pre-tax profit have fluctuating trend and net profit showed positive trend. It is an indicative of the company ability to operate the business with sufficient success not only to recover from the revenues of the period but also to leave a margin of reasonable compensation to the owners for providing their capital at risk, which reflects high operational and managerial efficiency. Thus, the research envisages that which will be continue in future also.

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