TRENDS AND FACTORS AFFECTING THE PROFITABILITY OF SELECTED PUBLIC LIMITED TEXTILE MILLS – A STUDY IN COIMBATORE DISTRICT

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Abstract

The Indian textile industry has a significant presence in the Indian economy as well as in the The Indian textile industry has a significant presence in the Indian economy as well as in the international textile economy. Its contribution to the Indian economy is manifested in terms of its contribution to the industrial production, employment generation and foreign exchange earnings. The industry also contributes significantly to the world production of textile fibres and yarns including jute. Profits are the ultimate test of any management's effectiveness. Profitability means ability to make profit from all the business activities of an organization, company, firm, or an enterprise. Coimbatore is one of the fastest growing tier-II cities in India and a major textile, industrial, commercial, educational, information technology, healthcare and manufacturing hub of Tamil Nadu. With more than 25,000 small, medium and large industries, the city's primary industries are engineering and textiles. Coimbatore is called the "Manchester of South India" due to its extensive textile industry fed by the surrounding cotton fields. The present study is aimed to study the trends in profitability and solvency of the selected public limited textile mills in Coimbatore district and also the factors influencing the Profitability position.
Keywords: Profitability, Trends, Overall Solvency position, Public Limited Textile Mills

Introduction

Lord Keynes remarked that 'Profit is the engine that drives the business enterprise'. It is the index to the economic progress, improved national income and rising standard of living. Management tries to maximize its profit keeping in mind the welfare of the society. Profit is the yardstick for judging not just the economic, but the managerial efficiency and social objectives also. Profitability is the ability to make profit from all the business activities of an organization, company, firm, or an enterprise. It shows how efficiently the management can make profit by using all the resources available in the market. Sometimes satisfactory profits can mark inefficiency and conversely, a proper degree of efficiency can be accompanied by an absence of profit. The change in operational efficiency is merely one of the factors on which profitability of an enterprise largely depends. Moreover, there are many other factors besides efficiency, which affect the profitability. The Indian textile industry has a significant presence in the Indian economy as well as in the international textile economy. In the world textile scenario, it is

the largest producer of jute, second largest producer of silk, third largest producer of cotton and cellulosic fibre\yarn and fifth largest producer of synthetic fibre\yarn. The Textile Sector in India ranks next to Agriculture. The textiles and clothing sector contributes about 14% to the industrial production and 3% to the gross domestic product of the country. About 27% of the foreign exchange earnings are on account of export of textiles and clothing alone. Around 8% of the total excise revenue collection is contributed by the textile industry. So much so, the textile industry accounts for as large as 21% of the total employment generated in the economy. Around 35 million people are directly employed in the textile manufacturing activities. Unlike other major textile-producing countries, India's textile industry is comprised mostly of small-scale, non integrated spinning, weaving, finishing, and apparel-making enterprises. This unique industry structure is primarily a legacy of government policies that have promoted labour-intensive, small-scale operations.

Statement of the Problem

Textile industry is one of the major industries contributing to the development of the Indian economy. In the country's total GDP 4% the contribution of textile industry in the year 2009-10 is 2.8%.[1] The Textile industry consists of both Private and Public Limited Companies. In case of public limited companies there are large numbers of stakeholders from all over the world. So, it is necessary to identify the exact financial performance of public limited textile companies by analyzing their profitability trends and solvency position. Coimbatore envisioned to build a strong foundry base for manufacture of agriculture, industrial and domestic pumps in India. Textile industry began to get backward-integrated, in the capital goods-front, by evolution of a strong textile-machinery manufacturing base. Simultaneously, the cotton spinning industry began to get forward-integrated by evolution of weaving capability, by hand loom or power loom, in the adjoining areas including Somanur, Palladam Thiruchengode, Pallipalyam, Karur etc. Hence, this study involves a study on trends and factors affecting the profitability of selected public limited textile mills in Coimbatore district.

Review of Literature

Shine and Soemen (1998) conducted the study about profitability and found that there is a strong negative relation between the cash sion cycle and corporate profitability for a large sample of listed American companies for the 1975-1994 periods.

A research done in Europe by **Lazaridis and Tryfonidis in the year 2006** in which they investigated the relationship between working capital management and corporate

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[1] *Ref: Annual Report of 2009 - 2010*

profitability of a sample of 131 companies listed in the Athens Stock Exchange. Data were collected from year 2001 – 2004. In this research, profitability was measured through gross operating profit and cash conversion cycle. Lazaridis and Tryfonidis's research also established that larger companies are cash-management-focused with more credit sales, which led to cash flow problems. Smaller scale firms are more focused on stock management and credit management.

Garcia-Teruel and Martinez-Solano (2007) were involved in a research to provide evidence about the effects of working capital management towards to profitability of Spanish small and medium-sized (SME) enterprises. They collected a sample of over 8, 800 SMEs which covers the year 1996 – 2002 from the AMADEUS database. Their study confirmed that firms can improve profitability by lowering outstanding accounts receivables and payables and inventories. Return on Assets ratio was set as the dependent variable to establish profitability.

Brush, Bromiley, and Hendrickx(1999) found that both corporation and industry influence business unit profitability but corporation has the larger influence.

Eljelly (2004) study found that the cash conversion cycle was of more importance as a measure of liquidity than the current ratio that affects profitability.

Aubrylyimo, Dr.Reubenj.Lmwamakimbullahkiko, F.S.Hamza, (2010) found that costs of quality impacts negatively the profitability of the company (P.value-0.4582).

Dr. S.K. Khartiktitto Varghese, (2011) conducted a study and suggested 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 investors return points of view.

Asha Sharma and R.B. Sharma, (2011) have studied the movement of key financial parameters and their relationship with profitability of textile industry. It is an attempt to and the study whether the key identified parameters move in a synchronous way going up and coming down with basic profitability parameters.

The return on equity is an inevitable measure of profitability, **Zeynep, Ugur (2006)**. Finally supporting evidence to ZeynepUgur (2006) can be found in **Befekadu B. Kereta's (2007)** studies. Stating, MFIs are operational sustainable measured by return on equity and the industry's profit performance is improving over time.

Hassan and Akon (1997) did a case study on financing working capital of Bangladesh textile mills corporations. This case study covers 40 public sector textile units under the ownership and administration of Bangladesh Textile Mills Corporations. The study covered a period of twelve years from 1982 – 1993. According to him and Akon, well-known economists believed that current assets should be considered as working capital as the whole of it helps to generate profits.

Shin and Soenan (1998) did a study to test the efficiency of working capital management to create profitability. They used a sample of 58,985 firms covering the period 1975 – 1994. The relationship between the length of net trading cycle, corporate profitability and risk-adjusted stock return was examined. The outcome of the study shows strong negative relation between the length of firm's net trade cycle and profitability.

Objectives of the Study

The objectives of the present study include the following:
1. To study the trends in Profitability and Solvency position of the selected Public Limited Textile Mills in Coimbatore District.
2. To measure the relationship between Net Sales and Net Profit of selected Public Limited Textile Mills.
3. To analyse the various factors that affect the Profitability of selected Public Limited Textile Mills.

Scope of the Study

The present study covers the trends in profitability and factors affecting the profitability of selected textile mills only. The financial performance, investment pattern etc., are not included in this study and the present study covers the profitability of public sector mills only.

Methodology

The present study is an analytical research based on secondary data only. The required data were collected from the profit and loss account, balance sheet and annual reports of selected eight public limited textile mills among the 23 public limited textile mills in the Coimbatore district and the other relevant data were collected from books, journals, magazines, and e-journals available in the various websites.

Sampling Design

A sample of top eight public limited textile mills such as Amarjothi Spinning Mills, Ambika Cotton Mills, Gangotri Testile Mills, Precot Meridien, Shiva Texyarn, Super Spinning Mills, Super Sales India Mills and Vardhman Textiles has been selected among the total Public limited units of 23 in the Coimbatore district on the basis of their year of establishment as well as turnover. The sample technique used for the study is purposive sampling in which the samples are purposively selected based on the judgement of the researchers.

Framework of Analysis

The data were analysed with the help of statistical tools like Multiple Regression Analysis, T-test, and Trend Analysis which are available in IBM SPSS Statistics 20, MINITAB and MS Excel.

Period of the Study

The study covers the period of ten years from 2003-04 to 2012-13.

Hypotheses of the Study

The Hypotheses of the present study includes the following.

H_0: There is no significant relationship between Net Sales and Net Profit.

H_0: There is no significant relationship between Profitability and other influencing Factors.

Results and Discussion

The research deals with knowing the trends of profitability and solvency position of selected public limited textile mills, the results of which are presented below:

Profitability Trends and Solvency Position – Interpretation

The profitability trends and solvency position of selected public limited textile mills are presented with the help of trend ($Y = ax + b$) and ratio analysis. The following tables 1 and 2 reveal the overall profitability position and solvency position of the selected Public Limited Textile Mills in Coimbatore District.

Table 1: Overall Profitability position of the Selected Public Limited Textile Mills

Company	Overall Profitability (in %)
Amarjothi Spinning Mills	39.10
Ambika Cotton Mills	11.50
Gangotri Textile Mills	04.90
Precot Meridien	13.10
Shiva Texyarn	8.70
Super Spinning Mills	11.10
Super Sales India Mills	47.60
Vardhman Textiles	13.30

Source: Annual Reports of Companies

The solvency position is predicted through operating profit ratio, short term liquidity ratio, long term solvency ratio, stock turnover ratio, fixed asset management and working capital management and it is illustrated through time series analysis because the study period involves the time duration of ten years.

Table 2: Overall Solvency position of the Selected Public Limited Textile Mills

Company Name	Short term liquidity	Long term solvency	Stock Turnover (In times)	Fixed Asset mgt	Working capital mgt
Amarjothi SpinningMills	2.10	0.69	1.62	0.66	0.23
Ambika Cotton Mills	1.86	0.56	1.76	1.01	0.30
Gangotri Textile Mills	2.26	0.80	1.43	1.56	0.16
Precot Meridien	2.23	0.59	1.79	0.52	0.18
Shiva Texyarn	2.18	0.59	1.55	1.28	0.25
Super Spinning Mills	1.38	0.67	1.63	0.44	0.08
Super Sales India	1.54	0.56	2.17	0.62	0.11
Vardhman Textiles	3.02	0.58	1.84	0.76	0.31

Tables 1 and 2 reveal the profitability trends and solvency position of all the selected eight textile mills during the study period 2003 to 2013.

The Super Sales India Ltd has the highest overall profitability position with 47.60%. The Super Sales India's performance in stock turnover is also commendable. In Short term liquidity position and working capital management, the performance of Vardhman Textiles ranks first. Gangotri Textile Mills maintains first position in Long term solvency and in fixed asset management. The Super Sales India ltd, Gangotri Textiles and Vardhman Textiles have the good overall performance.

The trend value analysis involves the prediction of Positive or Negative trends of selected public limited textile mills during the study period of ten years from 2003 to 2013. The Positive trend is achieved when the company has the higher profitable position and the Negative trend is achieved when the company has the profitable position which is lower than the actual level and it is useful for the prediction of future trends too.

Form (1) Formula for calculating a Linear Trend – Y= ax + b

Table 3: Trend Value of Spinning Mills

Company	Year	Beta value	t-value	Sig
Amarjothi Mills	2003-13	-0.308	-0.915	0.387
Ambika Mills	2003-13	0.473	1.518	0.167
Gangotri Textiles	2003-13	-0.851	-4.589	0.002
Precot Meridien	2003-13	-0.851	-4.589	0.002
Shiva Texyarn	2003-13	-0.173	-0.496	0.634
Super Spinning Mills	2003-13	-0.284	-0.837	0.427
Super Sales India	2003-13	-0.912	-6.303	0.000
Vardhman Textiles	2003-13	-0.234	-0.681	0.515

The Ambika Cotton Mills has the positive trend during the study period as the calculated value i.e., 1.518 which is more than the table value i.e., 0.167. All other mills show a negative trend as the calculated value is lesser than the table value.

Relationship between Net Sales and Net Profit – Interpretation

The t-test is applied in order to analyse the relationship between net sales and net profit of selected public limited textile mills. It can be used to determine if two sets of data are significantly different from each other, and it is most commonly applied when the test statistic would follow a normal distribution if the value of a scaling term in the test statistic were known. The independent samples t-test is used in this study.

Form (2) Formula for calculating t value

$$t = \frac{r}{\sqrt{\frac{1-r^2}{n-2}}}$$

Where, r = Correlation Co-efficient; and n= number of Years

Hypothesis

H_0: There is no significant relationship between Net Sales and Net Profit.

The following table 4 reveals the relationship between net sales and net profit of all selected public limited textile mills in Coimbatore district with the help of t-test.

Table 4: Relationship between Net Sales and Net Profit - T-test

Company	t-value	Df	Sig (2-tailed)
Amarjothi Spinning Mills	9.459	9	S
Ambika Cotton Mills	5.437	9	S
Gangotri Textiles	24.806	9	S
Precot Meridien	7.917	9	S
Shiva Tex Yarn	4.336	9	S
Super Spinning Mills	31.246	9	S
Super Sales India	8.712	9	S
Vardhman Textiles	8.063	9	S

Note: * t-value is significant at 0.05 level (2-tailed),

Table value is 2.262 at 9 degrees of freedom

It is observed that all the eight public limited textile mills taken for our study in the Coimbatore district shows the highest positive relationship between net sales and net profit, because the calculated value of t is greater than table value. The null hypothesis is rejected and it is concluded that there is a relationship between net sales and net profit.

Factors Influencing Profitability – Interpretation

　　Multiple Regression Analysis is used to find the factors influencing the profitability of selected public limited textile mills. Instead of a single independent variable, two or more independent variables are used to estimate the values of the dependent variable. The multiple regression equation describes the average relationship between these variables and this relationship is used to predict or control the dependent variable.

　　The formula for calculating Multiple Regression

Form (3) $Y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5$

　　Where, Y -　　Profitability (Dependent variable)

A -　　Constant
x_1 -　　Short term liquidity
x_2 -　　Long term solvency
x_3 -　　Stock Turnover
x_4 -　　Fixed Asset management
x_5 -　　Working capital management
b_1 to b_5 regression coefficient

Hypothesis

　　H_0: There is no significant relationship between Profitability and other influencing factors.

　　The following table 5 reveals the factors affecting Profitability of all the eight companies with the help of Multiple Regression Analysis.

Table 5: Profitability Factors for all the Eight Mills - Multiple Regression

Company Name	A	b1	b2	b3	b4	b5	R square	F value
Amarjothi Spinning Mills	-158.867	2.755	139.706	51.694	51.431	-95.940	0.802	3.233
Ambika Cotton Mills	155.488	-23.506	61.635	-88.181	9.334	36.801	0.500	0.801
Gangotri Mills	41.578	-7.665	-15.062	-6.500	-3.998	70.224	0.904	7.504
Precot Meridien	-82.409	-0.854	37.994	38.038	0.958	36.052	0.911	8.183
Shiva Texyarn	29.049	5.573	-33.708	-7.813	2.006	-11.535	0.637	1.401
Super Spinning Mills	-60.978	25.399	38.571	24.606	-41.810	-124.296	0.556	1.004
Super Sales India Ltd.	-233.338	35.540	505.904	14.064	-151.126	87.315	0.747	2.362
Vardman Textiles	61.397	3.597	-113.548	-5.926	22.359	-2.572	0.581	1.111
Over all	-209.34	-14.70	169.275	79.797	-9.579	110973	0.666	0.796

Table value is 5.19 in F table at the 5% level of Significance

It is observed from the above table that six selected textile companies are having F value which is lower than the calculated value at 5 percentage level of significance, except the Gangotri Mill and Precot Meridien Mill. Hence, it is concluded that there is no significant relationship between profitability and influencing factors. The co-efficient of long term solvency, stock turnover and working capital management are positively related to the profitability. The co-efficient of fixed assets management and short term liquidity are negatively related to the profitability. Among the five explanatory variables the Long term solvency has high influence with profitability.

Suggestions

Following suggestions are recommended by the researchers based on the observations made in the study.

1. Importance to Materials and Working Capital Management

It is suggested that the textile mills should well concentrate on stock or materials management and working capital management in order to reach a higher profitability.

2. Encourage Exports and Internal trade

The textile mills should increase their Sales by encouraging more exports as there is a positive correlation between net sales and net profit.

3. Better Fixed Assets and Investment Management

It is also suggested that the textile mills should concentrate on fixed assets management, short term and long term investments as they also influence the profitability.

Implications for further Research

This research is made to analyse the trends and factors affecting the profitability of public limited textile mills in Coimbatore district only. Similar research studies can be carried on in other districts of Tamilnadu to understand the factors determining the profitability of public limited textile mills and also the same study can be extended to other industry too.

Conclusion

The present study analyses the profitability trends and the factors which are affecting profitability of eight public limited textile mills in Coimbatore District. This study also forms the basis for other research studies such as investment analysis, risk and return analysis, working capital management analysis and inventory management analysis etc. The present study is done only for the textile mills and it also to be done in the other business areas such as manufacturing, automobile and any other trading concerns etc.

References

1. Chawla Deepak , Sondhi Neena, (2011), Research Methodology –Concepts and Cases, First Edition ,Vikas Publishing House Pvt.ltd, Noida , New Delhi.
2. George Darren, Mallery Paul,(2009).SPSS for Windows- step by step, Eighth Edition, Pearson Education, New Delhi.
3. Gupta, S.P. , Gupta M.P. , Business Statistics ,Fifth Edition, Sultan Chand & sons, New Delhi.
4. Arya ,P.P., Pal Yash, Research Methods in Management ,Second Revised Edition, Deep & Deep publications pvt ltd. New Delhi.
5. Mehta Diwan, Gupta Umesh , Research Methods in Management , Second Revised Edition, RBD Professional Publications, New Delhi.
6. Nakkiran,S., Nazer,M., GirmayFisseha, Business Research Methods, Avinash Paperbacks, New Delhi.
7. Pandey, I.M. (2005). Financial Management (9th edition).New Delhi; Vikas Publishing House PVT LTD.
8. Pallant J. (2004). SPSS Survival Manual- A step by step guide to data analysis using SPSS. Open University press. McGraw-Hill House.
9. Ben-Caleb, E. (2009). Working Capital Management and Profitability of Listed Companies in Nigeria: Nigeria Research Journal of Accountancy; Vol 1 (1) PP 44-57
10. Bhunia, A. and Brahma, S.B. (2011). Importance of Liquidity Management on Profitability Asian Journal of Business Management. Volume3 no.2 pp 108-117
11. Bhunia, A. and Khan, I.U. (2011). Liquidity Management Efficiency of Indian Steal Companies: A Case Study. Far East Journal of Psychology and Business: Volume 3 Number 3 pp 3-13
12. Bhunia, A., Khan, I and Mukhuti, S, (2011). A Study of Managing Liquidity. Journal of Management Research; volume 3 No.3. Retrieved from www.macrothink.org/jmr
13. Dash, M. and Hanuman R. (2008). A Liquidity-Profitability Trade-Off Model for Working Capital Management. Retrieved from http://ssrn.com/abstract=1408722
14. Deloof, M. (2003). Does Working Capital Management Affect Profitability of Belgian Firms Journal of Business Finance and Accounting, 30(3) & (4). Retrieved15/03/08fromhttp://papers.ssrn.com/sol3/papers.cfm?abstract_id=415364
15. Eljelly A. (2004). Liquidity-profitability tradeoff: an empirical investigation in an emerging market. International Journal of Commerce and Management.
16. Falope O.I, Ajilore O.T. (2009). Working capital management and corporate profitability: evidence from panel data analysis of selected quoted companies in Nigeria. Research Journal of Business Management.
17. Garcia-Teruel P.J and Martinez-Solano PM, (2007). Effects of working capital management on SME profitability. International Journal of Managerial Finance.

18. Khan Z. Jawaid S.T, Arif I. and Khan M. N.(2011) Working capital management and firm's profitability in Pakistan: A disaggregated analysis Business Graduate, IQRA University Karachi-75300, Pakistan.
19. Lamberg, S. &Valming, S. (2009). Impact of Liquidity Management of Profitability: A Study of the Adaptation of Liquidity Strategies in a Financial Crisis. Umea. Umea School of Business
20. Lazaridis, J. and D.Tryfonidis, (2006), Relationship between Working Capital Management and Profitability of listed companies in the Athens Stock Exchange, 19 Journal of Financial Management and Analysis.
21. Mathuva D. (2009) The influence of working capital management components on corporate profitability: a survey on Kenyan listed firms. Research Journal of Business Management.
22. Nobanee, H. and AlHajjar, M. (2005). A Note on Working Capital Management and Corporate
23. Profitability of Japanese Firms. Retrieved from http://ssrn.com/abstract=1433243
24. IOSR Journal of Business and Management (IOSR-JBM)e-ISSN: 2278-487X.Volume 9, Issue 1 (Mar. - Apr. 2013), PP 13-21
25. IRJC International Journal of Marketing, Financial Services & Management ResearchVol.1 Issue 10, October 2012, ISSN 2277 3622
26. Journal of Managerial Sciences, Volume VI, Page Number 2-12
27. Finance India (The quarterly journal of Indian Institute of Finance) Vol xxiii no.4 December 2009 Pages 1325-1335
28. Pandey S. and Jaiswal V.K. (2011) Effectiveness on Profitability: Working Capital Management SCMS Journal of Indian Management.
29. Raheman A. and Nasr M. (2007) Working Capital Management And Profitability – Case Of Pakistani Firms International Review of Business Research PapersVol.3 No.1.
30. Saleem Q. &Rehman R.U. (2011) Impacts of liquidity ratios on profitability (Case of oil and gas companies of Pakistan) Inter disciplinary Journal of Research in Business Vol. 1, Issue. 7.
31. Uyar, A. (2009). The Relationship of Cash Conversion Cycle with Firm Size and Profitability: An Empirical Investigation in Turkey.
32. International Research Journal of Finance and Economics, Issue 24 pp 186-193
33. Journal of Business Finance & Accounting, Vol.30, No. 3 & 4, pp.573-587.
34. Salauddin, D. A. (2001). "Profitability of Pharmaceutical Companies of Bangladesh" *The Chittagong University Journal of Commerce*, Vol.16, pp. 54.