# DETERMINANTS OF THE RETURN ON EQUITY RATIO (ROE) ON TEXTILE COMPANIES IN TAMILNADU 

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## ABSTRACT

The purpose of this article is to present the possibilities of analyzing popular among investors ratio of ROE and identification the determinants of its growth or decline. Traditionally, according to the DuPont formula three indicators are presented as the primary determinants of ROE. The paper shows the possibility of a broader look at the issue and use of the five factors affecting the ROE. This approach reveals that, using various financial and operational strategies one can influence ROE. The analysis was conducted on the example of three textile companies from manufacturing sector.

KEYWORDS : Textile , Analysis, companies ROE, DuPont formula

## Introduction:

Material is one of the India's biggest ventures after farming. It gives guide work to around 350 needs individuals. The material business involves an interesting spot in our nation. One of the most punctual to appear in India. It represents 14\% of the aggregate Industrial creation, adds to almost $30 \%$ of the aggregate fares and is the second biggest work generator after agribusiness.

Material industry is giving a standout amongst the most fundamental needs of individuals and the holds significance; keeping up managed development for enhancing personal satisfaction. It has a one of a kind position as an independent industry, from the generation of crude materials to the conveyance of completed item, with significant esteem expansion at each phase of preparing; it is a noteworthy commitment to the country's economy.

Material generation by control linger and hosiery expanded by 2 for every penny and 9 for each penny, separately, amid February 2014. The aggregate material creation developed by 4 for every penny amid February 2014 and by 3 for each penny amid the period April 2013-February 2014. Materials trades remained at US\$ 28.53 billion amid April 2013- January 2014 when contrasted with US\$ 24.90 billion amid the relating time of the earlier year, enrolling a development of 14.58 for every penny. Piece of clothing sends out from India is relied upon to contact US\$ 60 billion throughout the following three years, with the assistance of government bolster, said Dr A Sakthivel, Chairman, Apparel Export Promotion Council (AEPC).

Subdivision of the material business into its different parts can be drawn closer from a few points. As indicated by reference [3], the established technique for arranging the business includes gathering the assembling plants as per the fiber being prepared, that is, cotton, fleece, or synthetics. The advanced way to deal with material industry order, be that as it may, includes gathering the assembling plants as indicated by their specific task.

- Wool Scouring
- Wool Finishing
- Dry Processing
- Woven Fabric Finishing
- Knit Fabric Finishing
- Carpet Manufacture
- Stock and Yarn Dyeing and Finishing


## Research Question

- Does the Companies face any difficulties in Equity returns?


## Objective

- To analyze the returns on equity of Tamilnadu textile industry on
selected companies and to suggest ways of improving financial strength.


## Research Methodology:

The three textile companies have been selected, sampling area of the study was selected by using multistage sampling method. In the second stage the companies were chosen by random sampling method. Under this method the company was selected randomly (Sri Nachammai cloth mills pvt Itd), (Tamilnadu jai bharathmils Itd.), (Loyal textile mills pvt Itd) data had been extracted from annual reports, journals and publications etc. For the period of 2009-2010 to 2014-2015.For the purpose of analysis and statistical tools have been used.

## Hypothesis:

- Ho: There is no significant difference in returns on equity of selected textile companies in Tamilnadu.
- H1: There is a significant difference in returns on equity of selected textile companies in Tamilnadu


## Reviews of Literature:

- Varsha Gupta(2017) Material industry are confronting numerous issues like deficiency of crude material, out of date apparatus, control shortage,low efficiency of work and rivalry in remote market. So the goal of the investigation is to quantify and look at the execution of chose material organizations in India amid most recent five years. The optional information gathered is dissected utilizing different factual apparatuses and strategies, for example, Ratio investigation and one way ANOVA. To gauge the money related execution of chose material organizations, as far as Managerial proficiency, Liquidity, Profitability and Solvency position of the organizations, proportion examination has been utilized. Assist one way ANOVA has been utilized to recognize if there exist a huge contrast in the mean and execution of various material companies. The comes about demonstrated that there is criticalness distinction in the Return on Capital Employed, Net Profit Margin, Current Ratio, Debt to Equity Ratio, and Fixed Asset turnover proportion of test Textile organizations at 5\% level of significance.
- S.Sathya*, Dr.R.Umarani**The study was carried out for the time of five years (2010-14) to break down the money related execution of the organization and the 5 organizations are Lakshmi Mills, Bannari Amman Spinning Mill, Sri Ramakrishna Spinning Mill, Kpr Spinning Mill and Super Spinning Mill are taken for ponder. The examination outline of the investigation is distinct research plan and auxiliary information was gathered from the distributed sites of association for the exploration. The apparatuses utilized for investigation is similar proportion examination of the asset report. Appropriate proportions were confined and computed to know the money related execution of the organization


## ANALYSIS AND INTERPRETATIONS

## Return on Equity (ROE)

Return on Equity is a profitability ratio that measures the effectiveness of management in generating earnings for shareholders. ROE measures net income against total stockholder's equity. The three primary drivers of ROE are better sales, greater margins and higher debt levels, each of which can lead to a higher ROE. The DuPont formula can also analyze which factors affect the profitability by breaking down ROE and allowing investors to see which characteristics are driving ROE. Analysis of the DuPont formula allows you to determine whether management is generating value for shareholders effectively.


## DuPont model tells that ROE is affected by three things:

- Operating efficiency, which is measured by net profit margin;
- Asset use efficiency, which is measured by total asset turnover;
- Financial leverage, which is measured by the equity multiplier;

If ROE is unsatisfactory, the DuPont analysis helps locate the part of the business that is underperforming. Though a company can increase its ROE by taking on additional leverage, it is generally more desirable for firms to increase their margins or turnover.

## Net Profit margin

Net profit margin is the ratio of net profits to revenues for a company or business segment. Typically expressed as a percentage, net profit margins show how much of each dollar collected by a company as revenue translates into profit. The equation to calculate net profit margin is: net margin = net profit / revenue.

## Asset turnover

Asset turnover is a financial ratio that measures the efficiency of a company's use of its assets in generating sales revenue or sales income to the company. Companies with low profit margins tend to have high asset turnover, while those with high profit margins have low asset turnover.

## Equity multiplier

The equity multiplier is a financial leverage ratio that measures the amount of a firm's assets that are financed by its shareholders by comparing total assets with total shareholder's equity. In other words, the equity multiplier shows the percentage of assets that are financed or owed by the shareholders.
DuPont Analysis of Sri Naachiammai Mills

| Financial <br> Statement <br> Data | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 0 9}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sales | 182.75 | 150.99 | 103.6 | 126.73 | 115.12 | 53.59 | 51.21 |
| EBIT | 12.07 | 13.82 | 1.17 | 6.92 | 13.13 | 3.12 | -2.45 |
| Interest <br> Expense (Non- <br> Operating) | 6.56 | 6.82 | 8.7 | 7.18 | 5.91 | 3.49 | 5.88 |
| Tax Expense | 0.97 | 0 | -2.86 | 0.8 | 1.05 | 0 | 0.03 |
| Net Income <br> (Income for <br> Primary EPS) | 2.61 | 3.54 | -7.74 | -3.26 | 5.16 | 7.31 | -3.68 |
| Assets | 91.04 | 83.32 | 77.02 | 83.38 | 57.49 | 42.18 | 47.45 |
| Equity | 4.29 | 4.29 | 4.29 | 4.29 | 4.29 | 4.29 | 4.29 |


| Three-Step DuPont Model |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 0 9}$ |
| Net Profit <br> Margin (Net <br> Income $\div$ Sales) | 0.014 | 0.023 | -0.075 | -0.026 | 0.045 | 0.136 | -0.072 |
| Asset Turnover <br> (Sales $\div$ <br> Average Assets) | 2.096 | 1.883 | 1.292 | 1.799 | 2.310 | 1.196 | 1.151 |


| Equity <br> Multiplier <br> (Average Assets <br> $\div$ Average <br> Equity) | 20.322 | 18.688 | 18.695 | 16.418 | 11.617 | 10.446 | 10.375 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Return on <br> Equity | $\mathbf{0 . 6 0 8}$ | $\mathbf{0 . 8 2 5}$ | $\mathbf{- 1 . 8 0 4}$ | $\mathbf{0 . 7 6 0}$ | $\mathbf{1 . 2 0 3}$ | $\mathbf{1 . 7 0 4}$ | $\mathbf{- 0 . 8 5 8}$ |

It is clear from the above table that Sri Naachiammai Mills ROE shows negative value in the year $2009(-0.858), 2012(-0.760), 2013(-1.804)$ and in few year such as 2015 ( 0.608 ), 2014 ( 0.825 ), 2011 (1.203), 2010 (1.704). The negative value shows there is no returns in the above said years because of net profit margin in those years were -0.072,-$0.026,-0.075$ shows the negative trend i-e. no profit in that years. Remaining years with less profit margin are 2015 (0.014), 2014 (0.0.23), 2011 (0.045), but this profit margin not exceed the 2010's profit which is 0.136 . Asset turnover increased from 1.151 in 2010 to 2.096 in the year 2015. Asset Turnover shows the ups and downs but in 2011 it is in peak i-e 2.310. Equity multiplier value shows that the firm has the circumstance of leveraging it is increased when compare with -0.858 in 2009 to 0.608 in 2015 . It is vivid that the management has to take steps to improve the profit margin in order to earn returns from their investment.

## DuPont Analysis of Tamil Nadu Jai Bharathi Mills

| Financial <br> Statement Data | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 0 9}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sales | 92.02 | 90.57 | 87.02 | 73.52 | 94.47 | 86.02 | 72.66 |
| EBIT | 6.76 | 11.34 | 13.45 | -11.09 | 20.18 | 10.16 | 2.48 |
| Interest Expense <br> (Non-Operating) | 7.48 | 11.39 | 13.04 | 14.47 | 9.33 | 10.09 | 9.65 |
| Tax Expense | -0.58 | -0.96 | -0.74 | -8.55 | 2.52 | -3.86 | 0.06 |
| Net Income <br> (Income for <br> Primary EPS) | -2.36 | -2.23 | -1.73 | -19.94 | 4.39 | 0.83 | -10.62 |
| Assets | 83.72 | 79.9 | 80.35 | 86.62 | 112.29 | 84.29 | 76.24 |
| Equity | 39.78 | 39.78 | 23.58 | 13.8 | 13.8 | 13.8 | 13.8 |
| Thre |  |  |  |  |  |  |  |

Three-Step DuPont Model

|  | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 0 9}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Net Profit Margin <br> (Net Income $\div$ <br> Sales) | -0.026 | -0.025 | -0.020 | -0.271 | 0.046 | 0.010 | -0.146 |
| Asset Turnover <br> (Sales $\div$ Average <br> Assets) | 1.125 | 1.130 | 1.042 | 0.739 | 0.961 | 1.072 | 0.879 |
| Equity Multiplier <br> (Average Assets $\div$ <br> Average Equity) | 2.057 | 2.529 | 4.467 | 7.207 | 7.122 | 5.816 | 5.988 |
| Return on Equity | -0.059 | -0.070 | -0.093 | -1.445 | 0.318 | 0.060 | -0.770 |

Jai Bharathi Mills ROE has been given in the above table, in most of the year there is no returns on their profit i-e. in 2009 (-0.770), 2012(1.445), 2013(-0.093), 2014 (-0.070), 2015 (-0.059). Company earns return on equity in the following years; The negative value shows there is no returns in the above said years because of net profit margin in those years were $-0.146,-0.271,-0.020,-0.025$ and -0.026 . In remaining years the company earns the less profit margin are 2010 ( 0.010 ) and in 2011 (0.046). Next component of DuPont is Asset turnover, it is increased from 0.879 in 2009 to 1.125 in the year 2015. Asset Turnover shows the ups and downs but in 2014 (1.130) it is slightly increased than 2015. Equity multiplier value shows that the firm is in deleveraging it is decreased when compare with 5.988 in 2009 to 2.057 in 2015 . It is vivid that the management has to take steps to improve the profit margin and leveraging ratios in order to earn returns from their investment.
DuPont Analysis of Loyola Mills

| Financial <br> Statement <br> Data | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 0 9}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Sales | 1411.41 | 1603.62 | 1247.39 | 910.59 | 962.45 | 462.07 | 440.55 |


| EBIT | 159.19 | 174.12 | 135.5 | 93.68 | 115.19 | 67.54 | 47.45 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Interest <br> Expense <br> (Non- <br> Operating) | 68.84 | 75.81 | 61.72 | 44.98 | 26.05 | 24.26 | 25.06 |
| Tax <br> Expense | -5.29 | 13.27 | 6.17 | -4.76 | 22.1 | 1.03 | -6.88 |
| Net Income <br> (Income for | 14.99 | 19.7 | 5.04 | -1.94 | 31.37 | 1.97 | -14.13 |
| Primary <br> EPS) |  |  |  |  |  |  |  |
| Assets | 601.98 | 640.38 | 709.72 | 772.69 | 738.21 | 440.99 | 475.38 |
| Equity | 4.82 | 4.82 | 4.82 | 4.82 | 4.82 | 4.7 | 4.7 |


| Three-Step DuPont Model |  |  |  |  |  | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 0}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 0 9}$ |  |
| Net Profit <br> Margin <br> (Net <br> Income $\div$ <br> Sales) | 0.011 | 0.012 | 0.004 | -0.002 | 0.033 | 0.004 | -0.032 |
| Asset <br> Turnover <br> (Sales $\div$ <br> Average <br> Assets) | 2.272 | 2.376 | 1.683 | 1.205 | 1.632 | 1.008 | 0.929 |
| Equity <br> Multiplier <br> (Average | 128.876 | 140.052 | 153.777 | 156.732 | 123.866 | 97.486 | 100.851 |
| Assets $\div$ <br> Average <br> Equity) |  |  |  |  |  |  |  |
| Return on <br> Equity | $\mathbf{3 . 1 1 0}$ | $\mathbf{4 . 0 8 7}$ | $\mathbf{1 . 0 4 6}$ | $\mathbf{- 0 . 4 0 2}$ | $\mathbf{6 . 5 9 0}$ | $\mathbf{0 . 4 1 9}$ | $\mathbf{- 3 . 0 0 6}$ |

The above table explain about the Loyola Mills ROE in 2007 (3.006) has increased to 4.087, 3.110, in 2014 \& 2015and it is raised to the peak in the year 2011(6.590). But this return is decreased in the year $2013(1.046), 2010(0.419)$ and goes to the negative trend in the year $2012(-0.402)$ and $2009(-0.032)$. The main reason for these ups and downs in the ROE which is majorly influenced by the Net profit Margin which is highest in the year2009(0.032) followed by 2011 (0.033), 2014 ( 0.012 ), 2015 ( 0.011 ) and in 2010 ( 0.004 ). It falls to negative range in the year $2009(-0.032)$ and $2012(-0.002)$. Asset turnover value is high in 2014 (2.376) and 2015 (2.272). In the remaining years it shows the positive trends 2013(1.683), 2012(1.205), 2011(1.632), 2010(1.008), 2009(0.929). Equity multiplier value shows that the firm has the circumstance of leveraging it is increased when compare with 100.851 in 2009 to 128.876 in 2015. It is vivid that the management has to take steps to improve the profit margin in order to earn returns from their investment.

## Findings

- Sri Naachiammai Mills ROE shows negative value, the management has to take steps to improve the profit margin in order to earn returns from their investment.
- Return on equity of in most of the year there is no returns on their profit. The management has to take steps to improve the profit margin and leveraging ratios in order to earn returns from their investment.
- Loyola Mills ROE has ups and downs, which is majorly influenced by the Net Profit Margin. The management has to take steps to improve the profit margin in order to earn returns from their investment.


## Suggestions

- For increasing returns on equity they should improve its turnover to earn more profit.
- The Companies should reduce the overheads to improve turnover in the competitive market. They should maintain the profitability to survive in the competitive business world.
- For improving financial healthiness of companies, they adopt innovative technology to increase the turnover by improve marketing capability to increase profitability.
- In Overall returns on equity of the selected companies is not satisfactory status. For improving their financial healthiness successfully, they should replace the old and worn out machinery to adopt modernization to reduce cost of production and increase profit margin.


## Conclusion:

Material division is the most established and the biggest assembling area in India. The investigation of profit for value assumes a huge part in judging the money related soundness of the organizations. The real organizations need to take every one of the endeavors need to balance out their profit. The present examination proposes that the organizations should expand the net revenue through their turnover. The investigation at last uncovers that chose organizations are not productive in net revenue and its general effectiveness in rates of profitability is direct.

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