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A STUDY ON FINANCIAL PERFORMANCE USING DUPONT ANALYSIS WITH SPECIAL REFERENCE TO VOI JEANS RETAIL INDIA PVT LTD

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Abstract: *This evaluates the financial performance of Voi Jeans retail India pvt ltd company over a five-year period by the calculating return on equity by Dupont analysis. It can be shown that there are only slight variations between company average and industry averages in terms of net profit margin, asset turnover ratio, equity multiplier and return on equity from all of the aforementioned research using ratio analysis. Company averages are calculated values and industry averages are simply comparative values collected though web source. The Dupont Analysis is a well-known financial technique that assesses a company's performance thoroughly by looking at its return on equity (ROE) and pinpointing the main factors that contribute to it. The purpose of this project report is to investigate and use the Dupont Analysis to assess a company's financial performance. The return on equity, however, is negative in past years but in recent years it shows positive values. It shows the company is efficiently generating income on new investment.*

Introduction

In India, the textile industry is still the second-largest employer of workers. Over 35 million people in the nation can get direct work there. India is the second largest exporter of clothing and textiles in the world, with US$ 44.4 billion in exports in fiscal year 2022.The domestic garment and textile industry contributes 7% of industry output in value terms, or around 2% of India's GDP. Also, it is among the biggest employers in the nation. This shows how important the textile industry is to the Indian economy. A formula for monitoring a company's financial success is called the DuPont analysis. F. Donaldson Brown, a member of the DuPont Corporation, created it in 1914. His return-on-investment methodology combines earnings, investments, and working capital into a single number (ROI). It was copied by other businesses and turned become the norm for all DuPont departments. An effective way of cracking out the various factors that influence the business's return on investment is DuPont analysis. An investor can thus identify the financially important tasks responsible for ROE shifts.

Using a DuPont analysis, one may assess the various parts of a company's ROE. These details can be utilised by a way for an investor to determine financial actions that affect ROE

fluctuations the most. Using techniques like these, an investor can measure the operational efficacy of two firms. Management may utilise the DuPont analysis tool to identify strengths and weaknesses that require to be strengthened.

Statement of Problem

The qualities and shortcomings of any businesses comprehended by assessing monetary execution. The prudent approach is to look for what derives the return on investment, which is answered by DuPont analysis. And the purpose of a performance evaluation is to analyse the financial outcome of the past and present periods so that a company's performance and financial position can be analysed and evaluated. Investors may question why an average return on equity is preferable over one that's twice as high, three times higher, or even four times as high as its rivals. Well, if a company's primary net income compared to its equity is due only to superior leadership and performance, then a great equity yield might be advantageous to an investor. On the contrary hand, it denotes a risky investment if a company has a high return on net worth because of the low total shareholders' equity value relative to net earnings.

Objectives of the Study

1. To examine the Net margin, Total asset turnover ratio and equity multiplier of the company.
2. To evaluate the financial success measured by the company's return on net worth using the DuPont analysis method.

Review of Literature

Khan *et al.*(2021) have proposed Assessing And Evaluating Financial Performance Of Textile Companies Using DuPont Model: Evidence From Pakistan. For general purposes, estimates may be easily retrieved from financial data, making them available to professionals, current and potential financial supporters, and academic analysts. It has been used as a planning and management tool by many firms. Despite appearing straightforward, the DuPont model may be used for more intricate investigations. Therefore, it is feasible to conclude that NPM and EM significantly influence the return that shareholders or owners of Pakistani textile enterprises might receive.

Santhi & Varshini (2021) have examined on Financial Performance of Automobile Companies in India using Extended DuPont Approach. DuPont's investigation of the selected organisations revealed that, throughout the study period, productivity considerations and efficient resource utilisation were the main drivers of Return on Value. Profitability, efficient

asset management, and financial leverage were all three factors that Mahindra & Mahindra Limited successfully used to determine Return on Equity during the course of the research. DuPont analysis was used to efficiently gauge the underlying financial performance of the chosen companies.

Mohanasundari, Rajaand & Prakash (2020) have proposed Using DuPont Analysis to assess the financial performance of the selected companies in plastic industry. Due to the limited time that those who analyse financial statements have and the fact that these ratios are primarily correlated, the study used principal component analysis (PCA) to reduce the number of variables for any additional regression analysis from 17 variables to 4. In order to concentrate on a few ratios with the least amount of data loss, the number of ratios being analysed needs to be decreased.

Jayanthi & Lavanyain (2020) have examined on Financial Performance Analysis of Textile Companies in Tamilnadu with Reference To Coimbatore – A Study. A better insight of the company's financial history and financial performance is provided by Financial Performance Study of Textile Mills in Tamilnadu with Reference to Coimbatore. According to the study, the company's overall financial performance was only moderate and was mostly influenced by the availability and demand for raw materials, with some indirect effects from vehicle sales to a lesser amount. The net profits of the selected textile firms were all declining.

Kumar & Pol (2019) have examined Performance Analysis of Indian Public Sector Enterprise Using Factors of Du Pont Analysis. The study focuses on how these variables impact the firms' return on equity and assesses whether they have a significant effect or not. The performance of government-funded public sector organisations in India is poorer due to the system's extreme complexity and a lack of financial management skills. Ages 85 to 98. The study aims to understand how asset turnover ratio, net profit margin, and financial leverage impact return on equity in these enterprises.

Kim (2016) have proposed A study of financial performance using DuPont analysis in food distribution market. The whole collection of data that has been evaluated and retrieved by the Financial Supervisory Service of the Republic of Korea. A business may be in danger of declaring bankruptcy if it is unable to pay its debts; in the future, it may not be able to attract new lenders. Low leverage may be desirable, according to the majority of prior research, because highly leveraged enterprises may experience strong competition from less leveraged rivals and lose market share in an oligopoly product market.

Research Methodology

Type of Research: Research Methodology utilised in this research is descriptive research based on the secondary data. The goal of a descriptive study design is to methodically gather data to characterise a phenomena, circumstance, or population. This study uses the Dupont analysis to determine the return on equity.

Source of data and Variable Definition: The research paper is mainly based on secondary data which is provided by the business. The variables commonly used in analysis is Return on sales ratio, Total asset turnover, Equity multiplier which would help to know the ROE by these components. The study time period is considered for 5 years data (From 2019 to 2023).

Proposed Methodology/Conceptual Framework

Dupont Analysis: The DuPont Corporation popularised the DuPont analysis, a paradigm for evaluating basic performance. By employing the DuPont analysis technique, the numerous returns on equity (ROE) variables are broken down. Investors may concentrate on each of the important financial performance parameters independently to pinpoint strengths and problems because of the breakdown of ROE. The tool comes in two variations, one of which takes decomposition into account in three stages and another in five.

Return on Equity: The revenue generated for stakeholders are expressed in a percentage of the equity fund using the term return on equity, or ROE. It gauges how much a capital investor earns back on their stock investments in the company. It is a helpful indicator for determining a company's profitability and evaluating management choices

$$ROE_i = NPM_i * ATC_i * EM_i$$

Net profit margin: Net overall revenue is the degree of absolute pay you get to keep after all costs and charges are paid. A significant portion of your income will be used to settle with the tax office and cover business expenses. The piece of pay that is left toward the end is your net revenue.

NPM = Net profit / Revenue

Total asset turnover ratio: A measurement of how successfully a company is generating revenue or sales from its owned resources is the asset turnover ratio. The ratio shows what number of sales were made for every dollar of assets by comparing the company's gross revenue to the average number of assets.

ATR = Sales / Average total assets

Equity multiplier: A risk indicator known as the equity multiplier measures the proportion of a company's assets that are funded by shareholders' equity rather than debt. Divide a

company's total asset value by the total equity held in its stock to get the equity multiplier.

EM = Average total assets / Average shareholders' equity

Hypothesis

Ho: There is no significantly any difference in net margin between the company average and industry average

H1: There is a significantly difference in net margin between the company average and industry average

Ho: There is no significantly any difference in Total asset turnover between the company average and industry average

H1: There is a significantly difference in Total asset turnover between the company average and industry average

Ho: There is no significantly any difference in Equity multiplier between the company average and industry average

H1: There is a significantly difference in Equity multiplier between the company average and industry average

Ho: There is no significantly any difference in ROE between the company average and industry average

H1: There is a significantly difference in ROE between the company average and industry average

Limitations of study

- The annual report and financial statements were utilized; therefore, the collected data are of secondary importance.
- False Findings: The calculation would also be incorrect if the data used to evaluate them was incorrect.
- Some accounting ratios won't be exactly comparable since the different accounting policies followed by businesses.
- The study's analysis only covers five years.

Data Analysis and Interpretation

Calculation of the Net profit margin for period of 2019-2023 of Company average and Industry average

YEARS	COMPANY AVERAGE	INDUSTRY AVERAGE
2023	348.52	7.68
2022	147	5.20
2021	64.69	1.2
2020	85.12	13.15
2021	69.42	154.6

Source: Author's own calculation

Describes the outcomes of Independent t -test by Net profit margin

Test	Statistic	P Value	Decision
NPM	-2.77	0.024**	Reject H_0

Source: Author's calculation
***0.001, **0.05, *0.1 level of significance

Interpretation: Since the p-value aforementioned independent T-test is 0.024 which is less than 0.05 null hypothesis will be rejected i.e., there is a significantly difference in return on sales ratio between the company average and industry average, with the mean difference of -37.8 and equal variance assumed p-value is 0.005.

Determination on Total Asset turnover for period of 2023-2019 of Company average and Industry average

YEARS	COMPANY AVERAGE	INDUSTRY AVERAGE
2023	1.620	0.66
2022	0.404	0.61
2021	-19.183	40.83
2020	-7.633	52.33
2019	-6.162	63.81

Source: Author's own calculation

Describes the outcomes of Independent t -test by Total Asset turnover

Test	Statistic	P Value	Decision
ATR	1.74	0.119	Do not Reject H_0

Source: Author's calculation
****0.001, **0.05, *0.1 level of significance*

Interpretation: Since, the p-value from the above analysis is above 0.05 i.e., 0.119 the null hypothesis would be accepted and stating there is no significantly difference in Total asset turnover at the company average and industry average values with the mean score of 143 and 36.3 and equal variance assumed is to be 0.360 as p-value.

Calculation of Equity multiplier for period of 2023-2019 of Company average and Industry average

YEARS	COMPANY AVERAGE	INDUSTRY AVERAGE
2023	2.987	4.27
2022	0.311	-0.43
2021	-25.46	11.16
2020	-16.19	16.53
2021	-12.348	10.69

Source: Author's own calculation

Describes the outcomes of independent t -test by Equity multiplier

Test	Statistic	P Value	Decision
EM	0.945	0.372	Do not Reject H_0

*Source: Author's calculation ***0.001, **0.05, *0.1 level of significance*

Interpretation: Since the p-value in independent T-test is 0.372 which is greater than 0.05. hence the conjecture is accepted that is there is no significantly difference on equity multiplier between the company average and industry average, with the mean score of 1.88 and 1.31. equal variance assumed is to be 0.909.

Calculation of Return on equity for period of 2019-2023 of Company average and Industry average

YEARS	COMPANY AVERAGE	INDUSTRY AVERAGE
2023	0.529	1.5
2022	1.414	0.288
2021	2.052	2.654
2020	2.492	0.43
2021	2.888	1.66

Source: Author's own calculation

Describes the outcomes of Independent t -test by Return on equity

Test	Statistic	P Value	Decision
ROE	-3.07	0.015**	Reject H_0

*Source: Author's calculation **0.001, **0.05, *0.1 level of significance*

Interpretation: Since, the p-value is independent T-test is 0.015 which is less than 0.05 H_1 is accepted that is there is a significantly difference at ROE between the company average and industry average. With the mean difference of -18.6 and the equal variance assumed is 0.164.

Findings

- Businesses in the garment retail sector often have greater net income margin when they have strong brand positioning and effective cost control techniques. However, this margin may be significantly impacted by fierce competition and growing operational costs.

- The business net profit is negative from 2019 to 2021 which indicates that company is having a loss which affects the company in its operation, and it gain profit in 2022 and 2023 and meet the industry average.
- Asset turnover gauges how well a business uses its assets to drive sales. High inventory turnover in the clothes retail industry is a sign of excellent inventory management and high consumer demand. Having the flexibility to adjust to shifting customer tastes and fashion trends is also essential for keeping a good asset turnover ratio.
- The assets of the company are well utilized for production and meet the industry averages and in 2023 the company will have the maximum value of ATR.
- Financial leverage is a word that describes how much a company relies on debt to finance its operations. In the retail clothes industry, moderate levels of leverage are usual, although high debt levels can lead to higher interest rates and other financial risks.
- From 2019 to 2023 the EM is decreasing as it shows the company is less dependency on debt.

Conclusion

In the retail clothing sector, Dupont Analysis offers a thorough insight of a business's financial performance. Stakeholders may find opportunities for development and make wise decisions by examining the net income margin, total asset turnover, and financial leverage components of ROE. Maintaining growth and profitability in this quick-paced market also depends on tracking key performance metrics and being competitive. As indicated, profit margin, which gauges a company's capacity to turn a profit from its sales, is a significant factor in calculating ROE. Higher profit margin apparel businesses are typically better at managing price policies, cost management, and profitability. Asset turnover, which evaluates how well a company uses its assets to generate income, is another critical factor determining ROE. A company's capacity to efficiently use its resources and inventories to boost sales is indicated by a higher asset turnover rate, which increases profitability. In the end, financial leverage measures the amount of debt that a company is employing to finance its operations. Although it can increase profitability, leverage also increases risk and interest expense.

Suggestions

- Investigate the income produced by various sales channels, including brick-and-mortar businesses, e-commerce sites, and wholesale networks. Determine each revenue stream's potential growth and profitability**.**

- Calculate the operating margin to gauge how well expenditures are controlled, accounting for things like rent, staff pay, marketing expenses, and operational efficiency.
- To evaluate the profitability created for shareholders' investments, calculate the return on equity. To discover market leaders, examine the ROE of several firms.

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