AN EXAMINATION OF THE EFFECTS OF COTTON PRICE VARIABILITY ON THE FINANCIAL PERFORMANCE OF SELECTED TEXTILE MILLS

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ABSTRACT

Financial performance analysis is a verdict on a company's financial health and success. It is crucial for businesses since it assesses their financial well-being. Additionally, it supports them with in-depth insights into their revenue, expenses, assets, liabilities, and cash flow to make informed business decisions. Furthermore, regularly conducting financial performance analysis empowers companies to achieve their strategic goals more consistently than their peers. Financial analysis entails accurately establishing links between the items on the balance sheet and the profit and loss account to identify the firm's strengths and weaknesses. By keeping this in view an attempt has been made to assess the Impact of Cotton Price Volatility on the Financial Performance of Selected Textile Mills. To examine the financial performance of the textile mills, the study data spans a ten-year financial statement (2013–2022) of four textile mills . The data used was secondary in nature and taken from the annual reports and the company websites . Correlation and regression analysis was used to assess the effect of cotton price on company's financial performance. It was found that the price fluctuations

Key Words: ***Cotton Price, Price Fluctuations, Financial Performance, Correlation, Regression , Annual reports***

INTRODUCTION

The textile industry has served as a representation of India's cultural history, helping to unite the common people and further their economic goals (Pankaj Dixit, 2019). The textile industry is the one of the largest industries in world in terms of output, production and employee..The manufacturing of textiles directly employs about 35 million people and 60 million people are employed indirectly, for handling the agriculturally based raw materials like cotton (Hiralal R. Desrani, 2013). Mostly the textile industry is consisting of fibers, yarn, cloths, various chemicals India's top source of foreign exchange earnings is the textile sector. (G.Robin William Carey, 2021). Small and medium-sized firms currently dominate the textile industry, along with the unorganised sector. India is rated second in the world for textile exports with 7% of the market, and sixth for apparel exports with 3% of the market. India ranks fourth overall with 5% of world exports.The entire amount of cotton produced in India in 2021–2022 was 34.1 million bales. (Bales of 170 kg each).

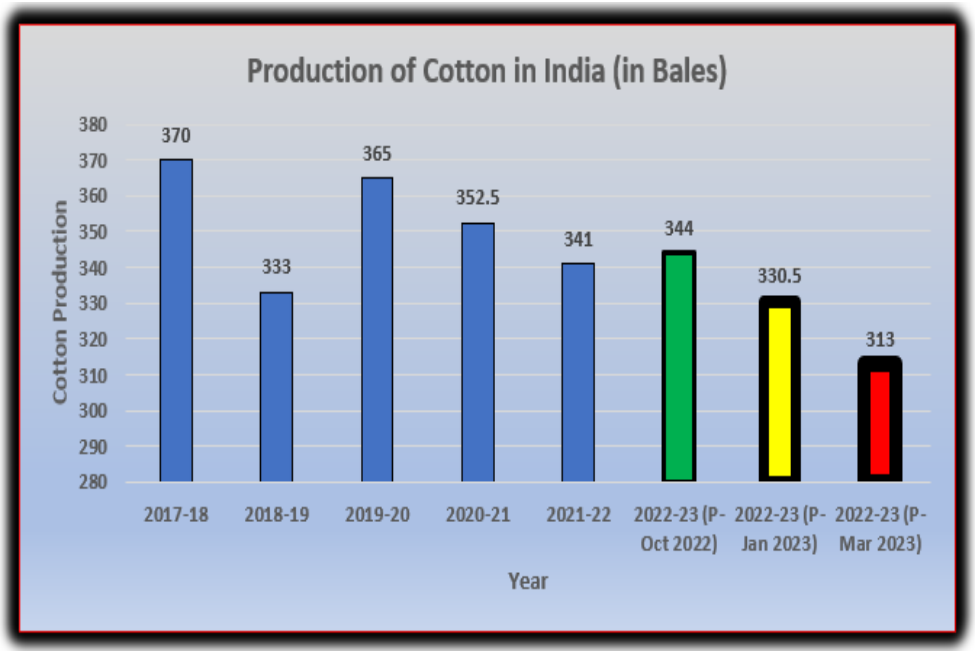
In the textile industry, cotton is a vital raw material that forms the foundation of innumerable textiles and clothing items used all over the world. The price of cotton is showing a very erratic picture. The Indian garment industry, which was just getting ready to capitalize on exports after the decline in demand for Chinese exports brought on by lockdown in China, has now begun to feel the effects of the volatility in cotton and cotton yarn prices, which had already been generating a streak of anxiety since last year. Every two

weeks, cotton prices have increased significantly. Due to the exorbitant prices, other orders were also cancelled in the interim.For the first two cotton seasons, the costs of cotton stayed incredibly low. Except for India, this led to a decline in the global cotton crop. In India, the government last year announced a number of initiatives to promote equitable growth as this was already taking place on a macro level. A 40 percent rise in the cotton support price was one of them. Due of this, cotton cultivation became a very lucrative industry. Additionally, since the export of cotton is simple and openly permitted, domestic cotton prices closely track those of the global market. 65–70% of the cost of yarn is made up of cotton, and a rise of 35% results in a 20% increase in yarn costs.Obtaining the most recent reports at the start of April,As per the latest reports fetched at the beginning of April, Local cotton prices have exceeded global rates by as much as Rs 1,500-2,000 per quintal.

The Study investigates how the financial performance of textile mills are impacted by the fluctuation in cotton prices. Working capital requirements for cotton yarn producers, particularly small businesses, have increased due to the significant increase in cotton prices and a drop in in cotton export volume. Other problems, including a decrease in the amount of land under cultivation, unusually heavy rain, and an extended monsoon, are to blame for the crop's low yield. All these elements, along with the farmers' reluctance to cultivate the crop, contribute significantly to the poor yield and high price of cotton. Due to this, many of the mills have cut production by 30% to 40% because it is no longer profitable to operate the units due to the fluctuating cotton price and have a direct impact on employment rate. Changes in the price of yarn will vary depending on changes in the price of cotton and it affects the profitability margin of the company.

There were only few studies, which discussed the financial performance of various textile mills, effect of raw materials over the yarn cost, cotton production and shortfall So, an attempt has been made to assess the relationship between the volatility ofcotton prices and the financial performance of textile mills.

Chart 1.2 Production of Cotton in India (In Bales)



As production is anticipated to decline in Maharashtra, Telangana, and Haryana, the Cotton Association of India (CAI) further decreased its estimate of the cotton harvest for the 2022–23 season by March 2023, bringing it to 313 lakh bales.

Chart 1.3 State-Wise Production of Cotton 2022-2023 (P)

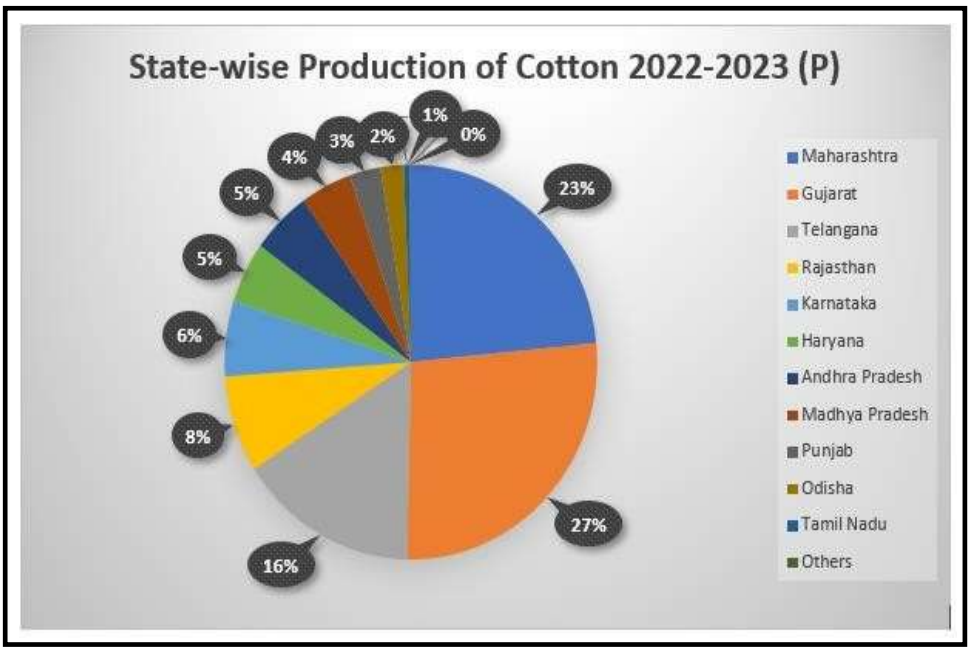
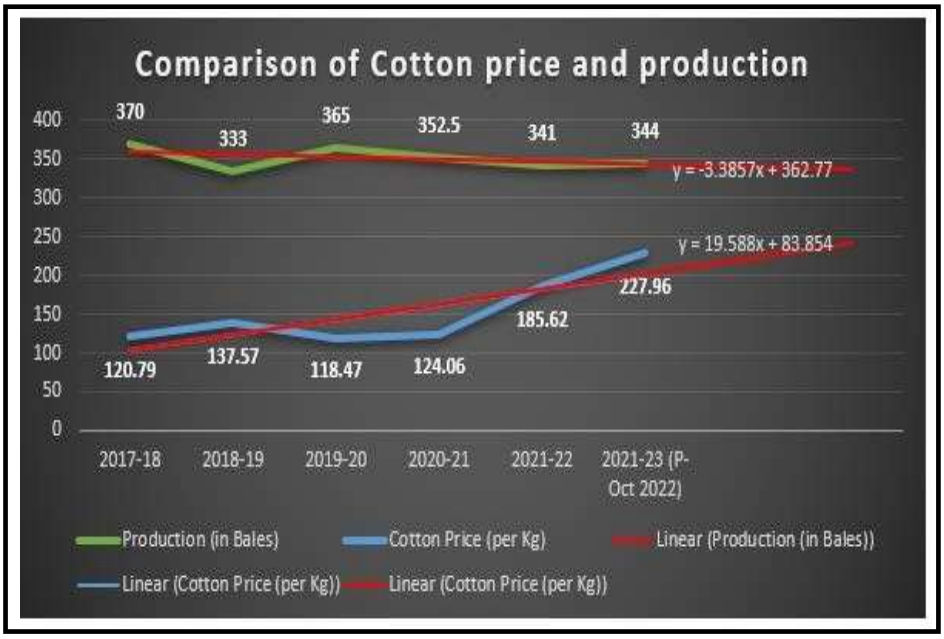
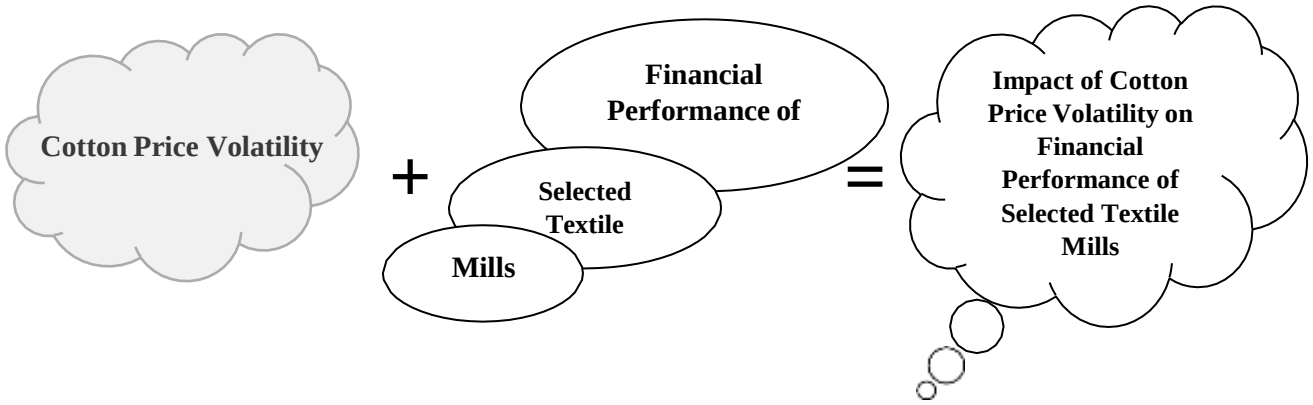


Chart 1.4 Comparison of Cotton Price And Production



CONCEPTUAL FRAMEWORK

Fig 2.1 Conceptual Framework



The study's focus is on the effect of cotton price volatility on textile mills, specifically how it may or may not have an influence on the financial performance. Financial performance of four textile mills is compared with the cotton price to understand latter's influence on financial statements.

LITERATURE REVIEW

Meenakshi Anand et al (2014) The financial analysis of the textile industry was studied to understand how efficiently the textile industry has utilised its resources effectively. Profitability, liquidity, and solvency positions of textile enterprises have been investigated and the outcome demonstrates that the profitability margins have slightly varied as a result of the erratic raw material costs and the erratic textile market.

E. Muthukumar, Nisha.K.G, (2014) studied on the Effect of Material Price Fluctuations on the Profitability of Yarn Industry in India. The financial data are collected from the Annual Report of the company and Karl-Pearson Correlation Analysis is used and found that the price of raw materials is affecting the overall cost of the product and had a impact on company's profitability.

(Kanupriya, 2021) looked at COVID-19 and the issues, challenges, and opportunities facing the Indian textile industries. In order to comprehend the overall impact of COVID-19, and the outcome demonstrates that one of the industry's most severely impacted by COVID-19 was the textile industry in India. This sector faced certain difficulties on the demand and supply sides even before the pandemic.

Y.Nagaraja et al (2023) studied the pattern of cotton arrivals in the Indian markets of Vijayapura, Haveri, Raichur, and Ranibennur. Both linear and nonlinear models were fitted, together with time series analysis, to analyse the trend arrivals of cotton. The outcome shows that s-curve model for Ranibennur market and quadratic model for Haveri and Raichur markets were the best fits, respectively.

Dionys Forster et al (2013) studied the yield and Economic Performance of Organic and Conventional Cotton-Based Farming Systems-Results from field Trial in India. The study analysed the agronomic and economic data from the conversion phase of farming systems comparison trial on a Vertisol soil in Madhya Pradesh, central India.

John Lee et al (2023-ebook) studied the financial performance of selected textile mills and observed ratios are frequently used to connect one piece of financial data to another. The ratio equalizes the bases of the two pieces of data, making the data more useful.

Moneylife Digital Team(2022) The mills were only operating at 40% of their capacity, according to M. Raja Shanmugam, head of the Tirupur Exporters' Association (TEA), because of financial strain. The TEA has made several demands to the Union government, including a temporary ban on the export of cotton and yarn, the removal of cotton from the list of commodities up for trade, and the inclusion of cotton in the scope of the Essential Commodities Act.

Iman Hidayat et al (2023) looked at how working capital turn and leverage affected profitability. Secondary data over a three-year period were used in the analysis. Descriptive statistical analysis, estimation of panel data regression, and common effect model are the statistical methods employed in the analysis. The outcome showed that working capital, leverage, and liquidity have no discernible impact on profitability.

Kumaresh S. Tikadar (2023) conducted a study on the perceptions, effects, and adaptation methods of marginalised cotton farmers in the Vidarbha region of central India. The respondent's information was elicited using a freshly created and prepared questionnaire. The study observed that the farmers have noticed the effects of climate change on sowing, crop growth, harvesting, and yield affect the profitability which demotivates them to keep away from cultivation

Jayanthi. R and Latha Lavanya (2022) studied the Financial Performance of Textile Companies operating in Coimbatore region. This study was conducted using secondary data and data collected from various sources including books, journals, websites, and newspapers. The analysis's findings indicate that the company's overall financial performance was moderate due to a sharp increase in raw material costs, which was mostly influenced by supply and demand factors and, to a lesser extent, directly related to auto sales.

Vasanthi.R and Thandayuthapani.A (2017) studied the financial analysis of the textile firms operating in India. The comparative ratio analysis method is used to determine the financial soundness of textile companies. The outcome demonstrates that the profitability margins have slightly varied as a result of the erratic raw material costs and the inconsistent textile market.

Fashion New Desk (2022) The whole textile industry's value chain has been disturbed in recent months by the high volatility of Indian cotton yarn pricing. Therefore, the Textile Advisory Group (TAG) has suggested creating the Yarn Index System to increase pricing predictability. The Cotton Association of India (CAI) would develop a policy to encourage ginners to use better ginning techniques, it was determined.

Billy Max, Chron newsletter(2022) Textile mills all over the world have hurried to capture available cotton stocks due to rising cotton prices and decreasing raw material stocks. Inflation in the textile industry has resulted as a result in many of the world's major cotton-producing nations. Despite being one of the world's top producers of cotton, the United States has a modest textile sector. A large portion of the cotton produced in the United States is exported to mills

throughout the globe, and completed cotton goods are imported from other nations.

OBJECTIVES

- To analyze the impact of Cotton price volatility on financial performance of selected Textile mill as samples.
- To study the relationship between cotton prices and sales of the selected textile mill.
- To assess how the price of cotton affects the selected textile mills' net profit during the study period.

RESEARCH METHODOLOGY

The current research paper takes a quantitative approach and is based on financial data from the past ten years (2013–2022) and cotton prices, which are secondary data from annual reports of sample textile factories and IndexMundi, respectively. The sample of four textile mills have been selected based on Stratified random sampling, as they possess similar Spindle capacity varying between 100000 and 150000, among the existing clients of Arima Karthi Pvt Ltd and they are,

- Textile Mill 1 - Ambika Cotton Mills Ltd
- Textile Mill 2 - Bannari Amman Spinning Mills Ltd
- Textile Mill 3 - Vardhman Textiles Ltd
- Textile Mill 4 - Lakshmi Mills Company Ltd.

The data collected from secondary sources are analyzed using Standard Deviation, Mean, Confidence Interval and statistical software includes Minitab for Correlation analysis & Regression Analysis, Power BI for dashboard creation, Excel for calculating ratios and other values.

ANALYSIS AND DISCUSSION

S. No.	Ratios	Textile Mill 1	Textile Mill 2	Textile Mill 3	Textile Mill 4	Acceptable Min Ratio	Acceptable Max Ratio
1	Current Ratio	3.55	0.93	2.06	1.40	1.33	3
2	Quick Ratio	0.75	0.47	0.95	1.03	1	2.5
3	Gross Profit Ratio	15%	8%	13%	5%	20%	
4	Net Profit Ratio	11%	2%	11%	2%	10%	
5	Return On Asset	11%	2%	9%	2%	5%	
6	Return On Equity	15%	6%	15%	3%	15%	
7	Debt To Equity	0.12	1.64	0.55	0.31		2
8	Debt To Asset	0.08	0.49	0.28	0.19		0.30
9	Interest Coverage Ratio	30.38	1.24	8.81	1.54	1.5	
10	Asset Turnover Ratio	1.06	0.89	0.78	0.66	1	
11	Return On Investment	20%	11%	17%	7%	7%	
12	Inventory Turnover Ratio	3.18	4.42	2.91	7.24	5	10
13	Working Capital Turnover Ratio	4.35	79.81	3.05	-11.97	1.5	2
14	Fixed Assets Turnover Ratio	2.28	1.61	2.10	2.86	1	
15	Proprietary Ratio	0.75	0.31	0.57	0.67	0.5	
16	Debtors Turnover Ratio	0.00	9.93	27.14	8.61	1	
17	Creditors Turnover Ratio	0.00	6.58	7.78	8.62	8	

Table 1. Mean Values of Different Ratios for Ten-Years (203-2022) Of Four (Sample)Textile Mills

Overall Performance analysis of all the four selected Textile Mills:

Textile Mill 1: Even though having a higher current ratio is helpful in managing current liabilities, having a ratio higher than 3 indicates that the mill has more liquid assets that are not being wisely invested. Textile Mill 1's current ratio is 3.55, which is above the maximum acceptable current ratio. A quick ratio of 0.75 shows that the mill does not have the necessary quick assets. It would therefore be advantageous for the Mill to lower its inventory and raise the value of another liquid asset. After paying all taxes and interest, the corporation makes a healthy profit, as seen by the net profit ratio of 11%.The company is generating good returns, as evidenced by the Return on Asset and Return on Equity metrics. The Mill is able to manage its debt with the available equity and assets rather than dependenton external sources because the debt-to-equity and debt-to-asset ratios are both kept within the upper bound of permitted ratios. The mill is capable of repaying its outstanding debt, according to the Interest Coverage ratio of 30.38. Asset turnover and return on investment ratios are higher than the minimum requirement, demonstrating the mill's superior performance.The mill is either storing too much inventory or its sales are falling short of expectations, as shown by the inventory turnover ratio of 3.18. As a result, focus must be paid to streamlining the inventory management. A working capital ratio of 4.35, which exceeds the permitted maximum of 2, shows that the mill is not making the most use of its resources. The Proprietary Ratio and Fixed Asset Turnover Ratio are more above the required minimal ratios, indicating good performance.

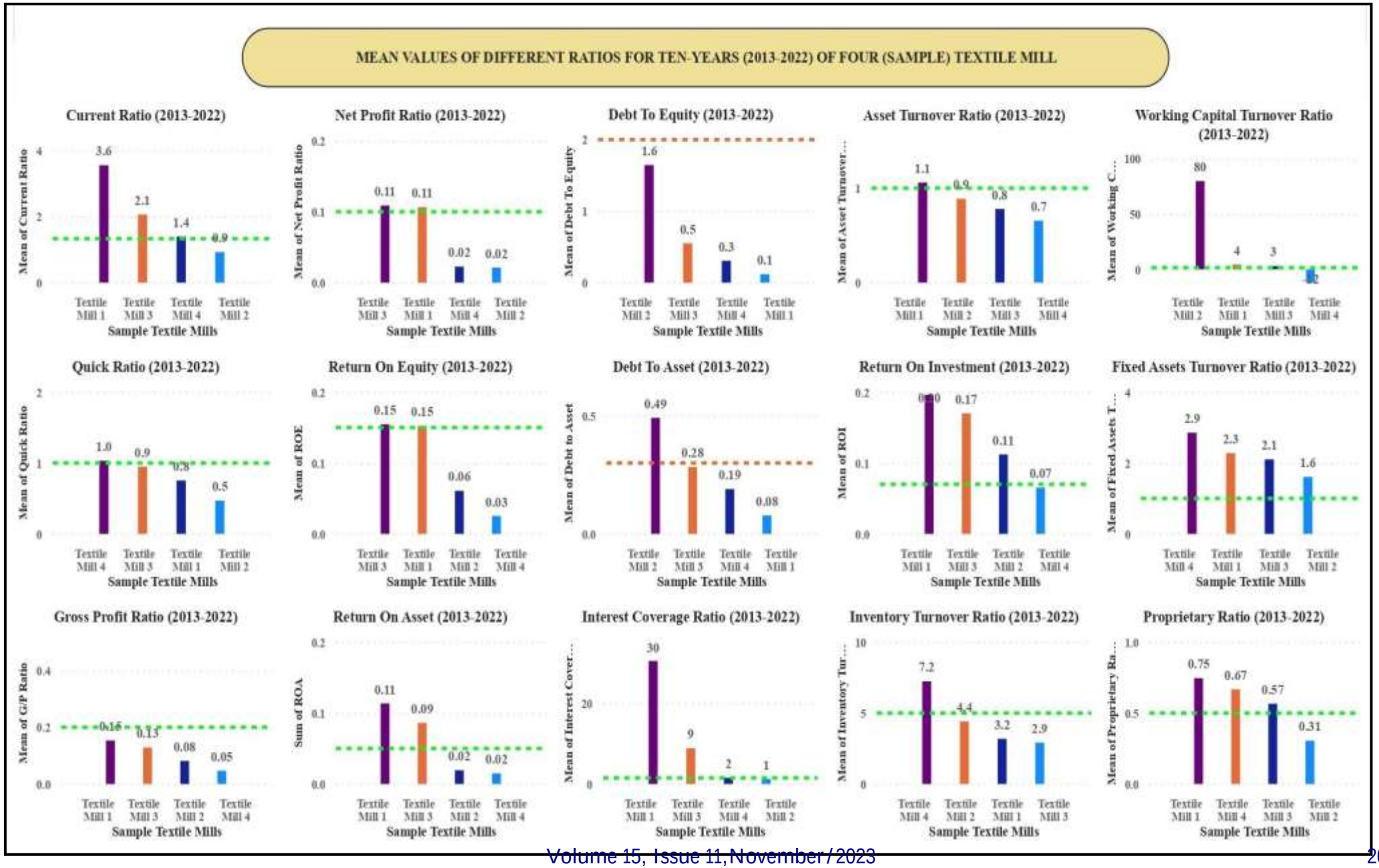
Textile Mill 2: The mill is retaining more current liabilities than current assets, which is a condition that is not healthy, as seen by the current ratio of 0.93, which is lower than the minimum needed ratio of 1.33. The current ratio alone is less than the minimal ratio, hence the Quick Ratio of 0.47 is obviously below the minimum ratio.The Net Profit ratio is significantly lower than the Gross Profit ratio, which confirms that the Mill is paying more on taxes and financial expenses.The Interest Coverage Ratio is 1.24, which is lower than the statutory ratio of 1.5 and shows that the Mill faces a significant danger of not being able to pay its interest. Asset Turnover Ratio is 0.89, which is less than the minimum necessary ratio of 1, indicating that the Mill is not using the available asset to generate enough sales. The company benefits from having a Return-on-Investment ratio of 11%, which is higher than the minimum necessary ratio, but it has little effect on the company's overall success.
The mill's inventory management has to be improved because its inventory turnover ratio of 4.42 suggests that either too much inventory is being held or sales are not proceeding as expected. The abnormal number of 79.81 for the working capital turnover ratio indicates that the mill is not using its resources effectively. When compared to the fixed assets being used, their fixed asset turnover ratio of 1.61 shows how well they do in terms of sales.

Textile Mill 3: A healthy ratio, the mill's current ratio of 2.06 shows that it has enough liquid assets to cover its current obligations. They can manage the debts with their fast assets, which do not include inventory value, as seen by their quick ratio of 0.95, which is more in line with the minimal needed ratio. Although the gross profit of 13% is not terrible, it needs to be increased to 20% for greater operating profitability. After deducting all taxes and interest, the net profit ratio is 11%, which is higher than the anticipated minimum net profit percentage of 10%. The mill can pay its expenses with the available shareholder equity and is not reliant on outside sources of funding, as seen by the debt-to-equity ratio of 0.55, which is below 1. When the debt-to-asset ratio is less than the upper bound, as it is when it is 0.28, it means that internal resources will be used to pay off the debt rather than external capital. The mill will be able to pay off its present debts because its interest coverage ratio is 8.81, which is over 7 times greater than the required minimum ratio. Asset Turnover Ratio of

0.78, which is lower than the necessary minimum ratio, shows that insufficient net sales were generated to cover the use of the assets. The fact that the Return on Investment (17%) is 10 times higher than the necessary minimum ratio demonstrates that the Mill is producing enough returns on invested capital.The inventory turnover ratio of 2.91 indicates that the inventory management system needs to be improved to decrease the amount of surplus inventory that is stored or to boost the mill's sales value. The Proprietary Ratio (0.57) and Fixed Asset Turnover Ratio (2.10) are higher than the minimum ratios of 1 and 0.5, respectively.

Textile Mill 4: The Mill can manage its current liability with the current assets that are currently available, according to the current ratio of 1.40. With a quick ratio of 1.03, the mill has enough liquid assets to cover its present obligations without resorting to inventories. A gross profit of 5% indicates that the cost of goods sold needs to be studied and reduced or sales need to be boosted in order to raise the gross profit ratio.The Mill's 2% net profit ratio shows that it is paying the majority of its gross profit in taxes and interest, which must be reducedin order to raise the net profit ratio. Return on Asset (2%) and Return on Equity (3%) are less than the minimum required percentages of their respective ratios of 5% and 15%, and it is clear that in order to raise the percentages, either expenses must be cut or sales must be increased. Debt to Equity (0.31) and Debt to Asset (0.19) are lower than the minimum permitted ratios, indicating that the Mill has the resources and other assets necessary to fulfil its debts. The mill can pay its outstanding debts, as shown by its interest coverage ratio of 1.54. The mill must raise sales in order to cover the cost of the assets being used, according to the asset turnover ratio of 0.66.The fact that the mill's return on investment is 6.5%, which is almost the minimal ratio required of 7%, shows that it is producing high returns on the capital invested. The mill's inventory turnover ratio of 7.24, which is a healthy ratio, shows that it is keeping a sound inventory management system in which neither too much nor too little inventory is kept on hand. Working capital turnover ratios that are negative, as in this case of -11.97, are generally considered to be bad signs. However, the Mill is able to produce cash more quickly to satisfy its short-term commitments as compared to the current ratio, quick ratio, and interest coverage ratio. Therefore, in this instance, the mill is not significantly impacted by the negative working capital; rather, the mill must make efforts to turn the working capital ratio into a positive or neutral value. Both the Fixed Asset Turnover Ratio (2.86) and the Proprietary Ratio (0.67), which are above the minimal needed ratios, are good.

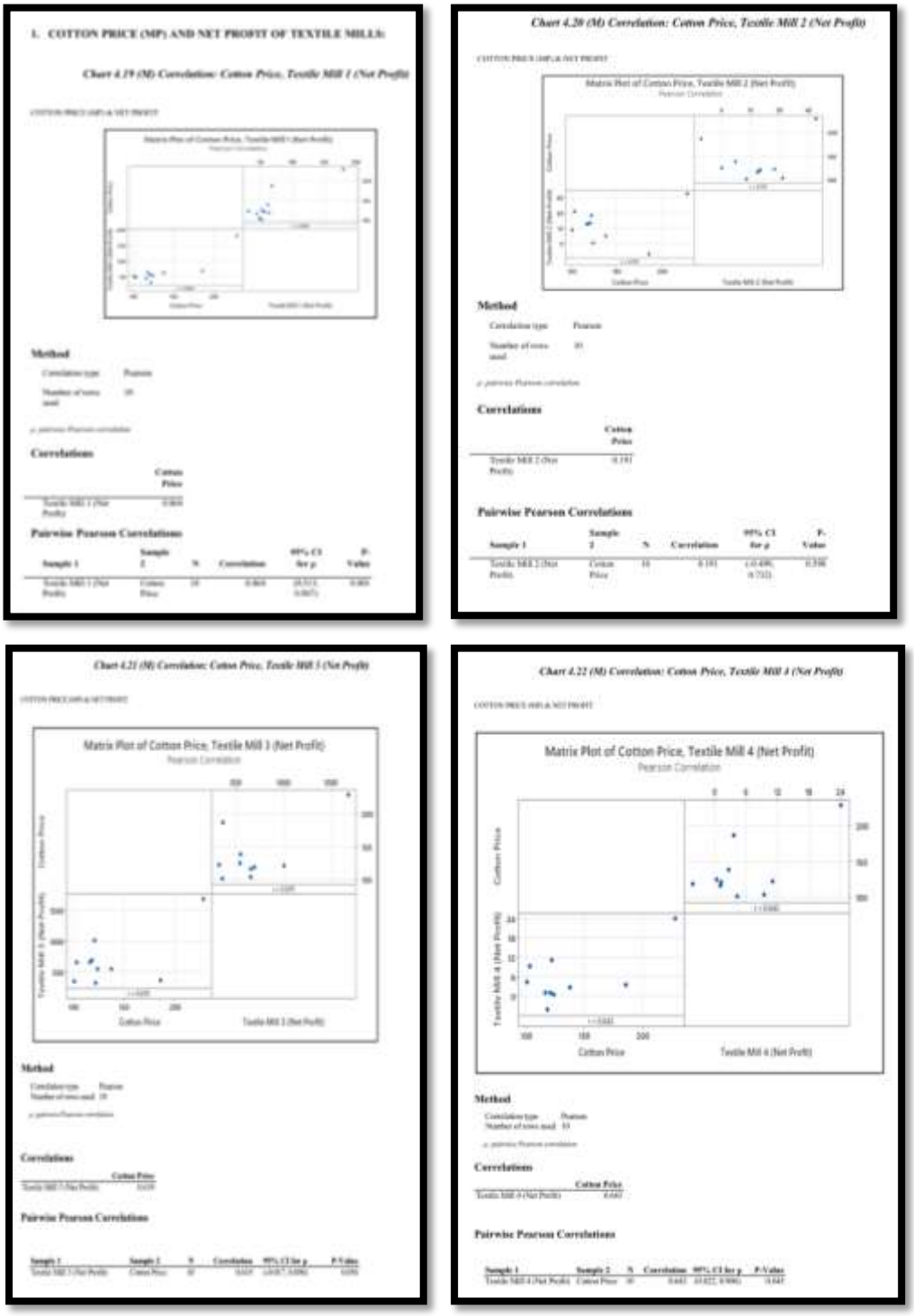
Chart 3 Mean Values Of Different Ratios For Ten-Years (203-2022) Of Four (Sample)Textile Mills



CORRELATION ANALYSIS

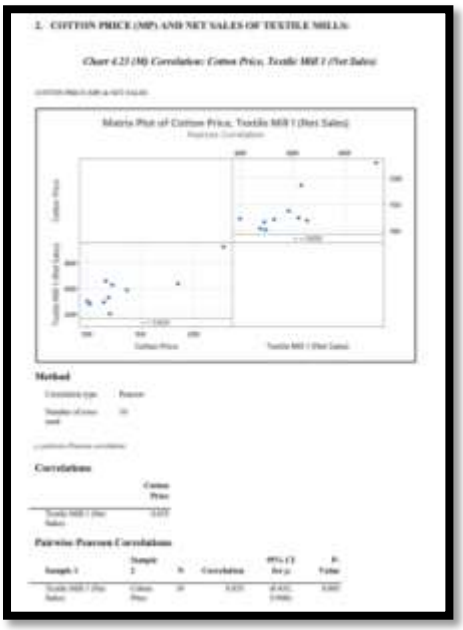
The estimated Karl Pearson correlation was used to analyze the degree of connection between the price of cotton and the net profit and net sales of the selected textile mill.The Relationships' strength might range from -1 to +1. The stronger the Correlation, the closer the correlation coefficient comes to ±1.

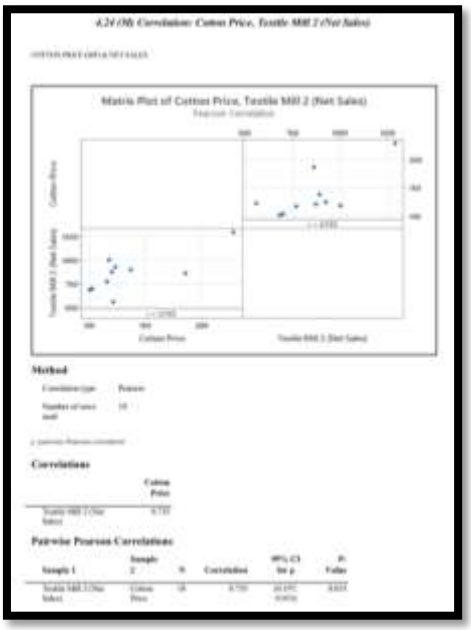
Chart 4 Showing the relationship between Cotton price and Net profit of the Selected Textile firms

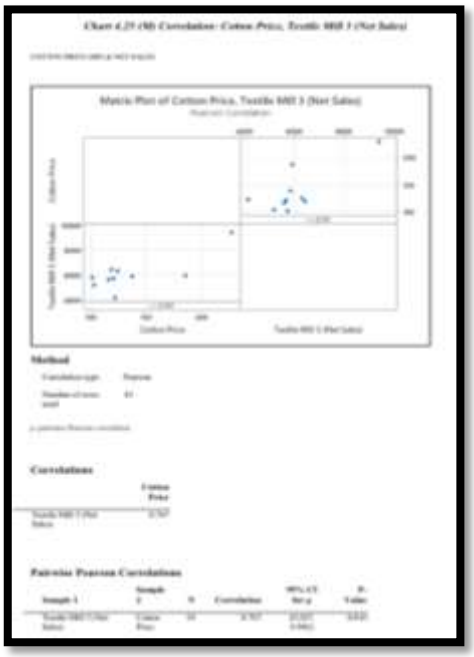


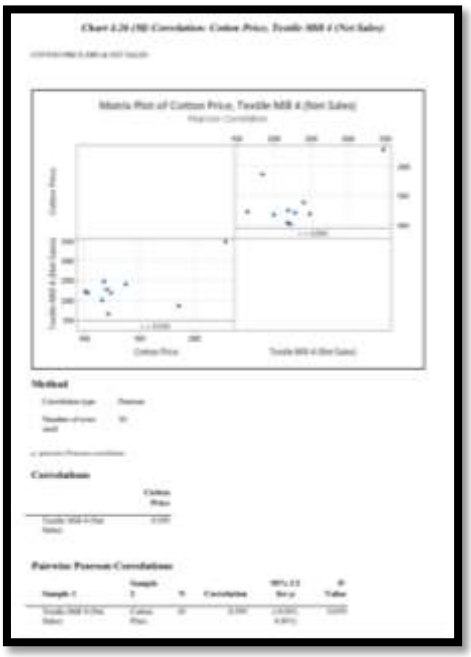
from 2013-2022

Chart 5 Showing the relationship between Cotton price and Net Sales of the Selected Textile firms from 2013-2022



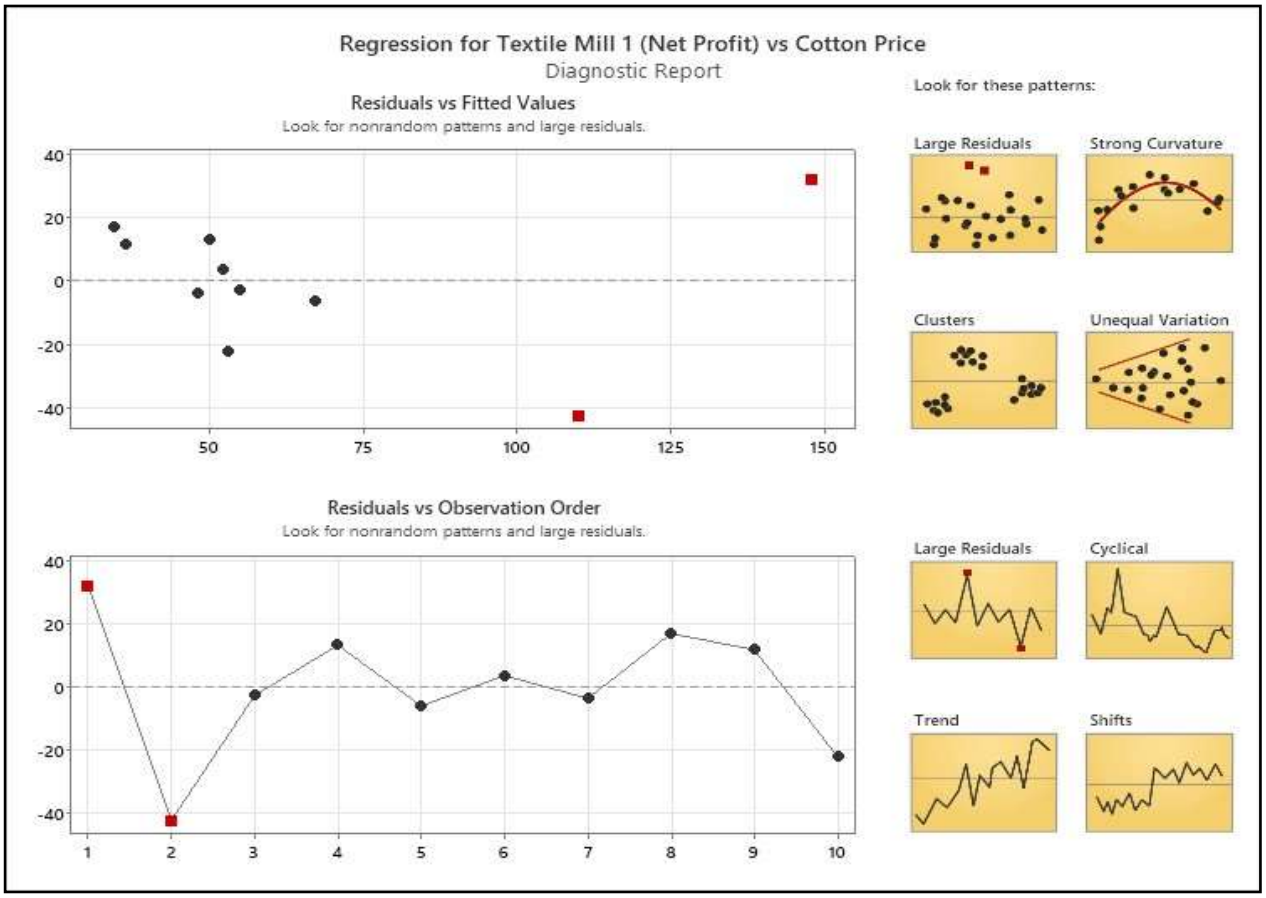


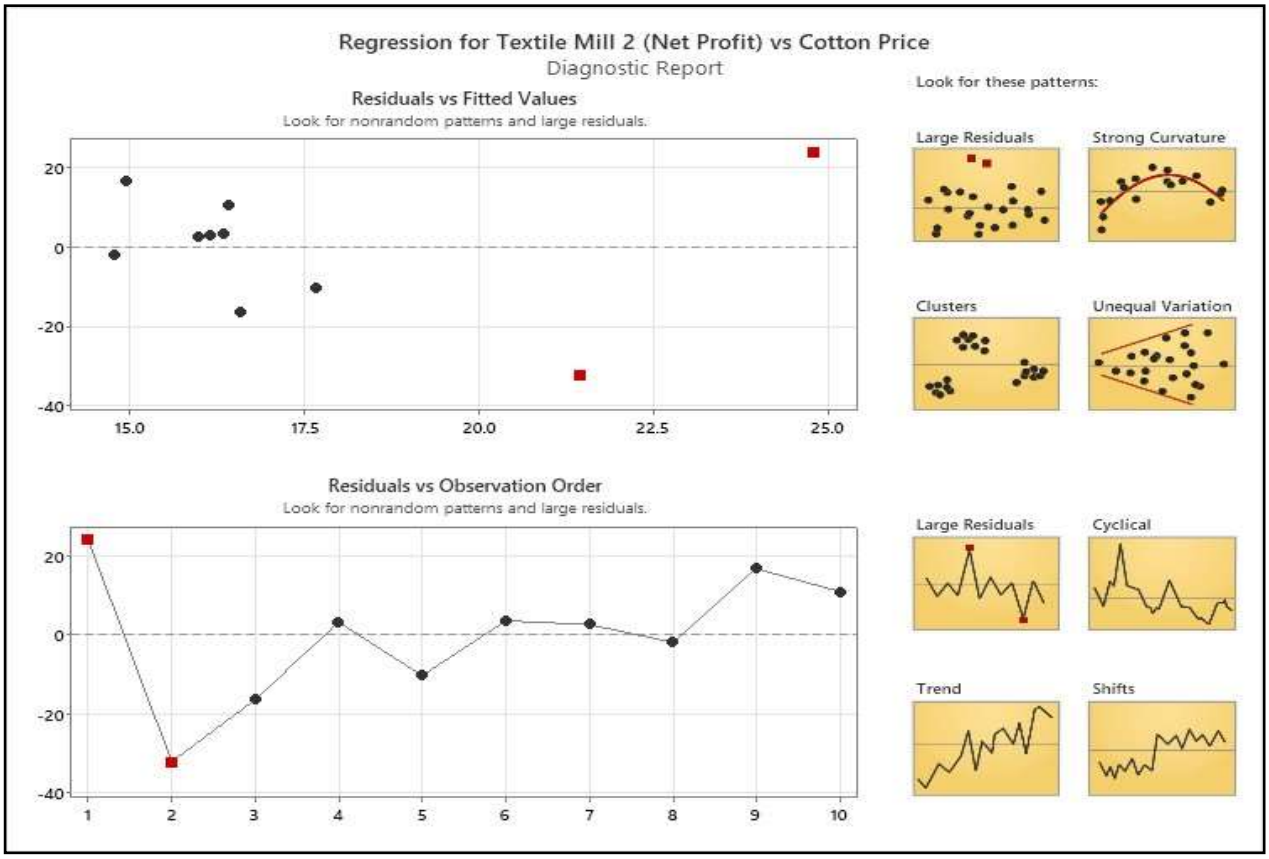


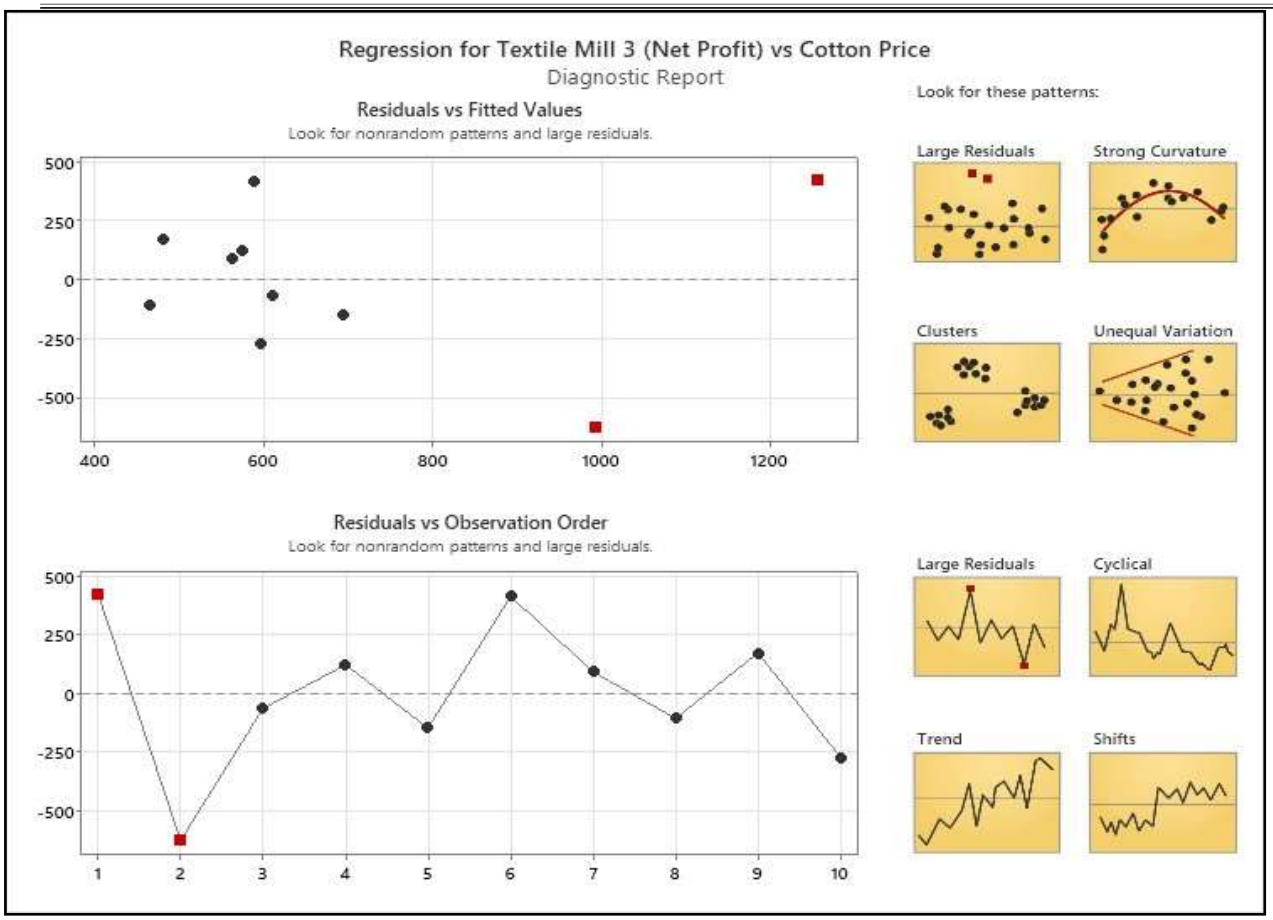


REGRESSION ANALYSIS

Chart 6 showing the Relationship between Cotton price and Net Profit of the selected Textile Mills from 2013-2022




Regression for Textile Mill 2 (Net Profit) vs Cotton Price
Diagnostic Report
Residuals vs Fitted Values
Look for nonrandom patterns and large residuals.
Residuals vs Observation Order
Look for nonrandom patterns and large residuals.
Look for these patterns:
Large Residuals
Strong Curvature
Clusters
Unequal Variation
Large Residuals
Cyclical
Trend
Shifts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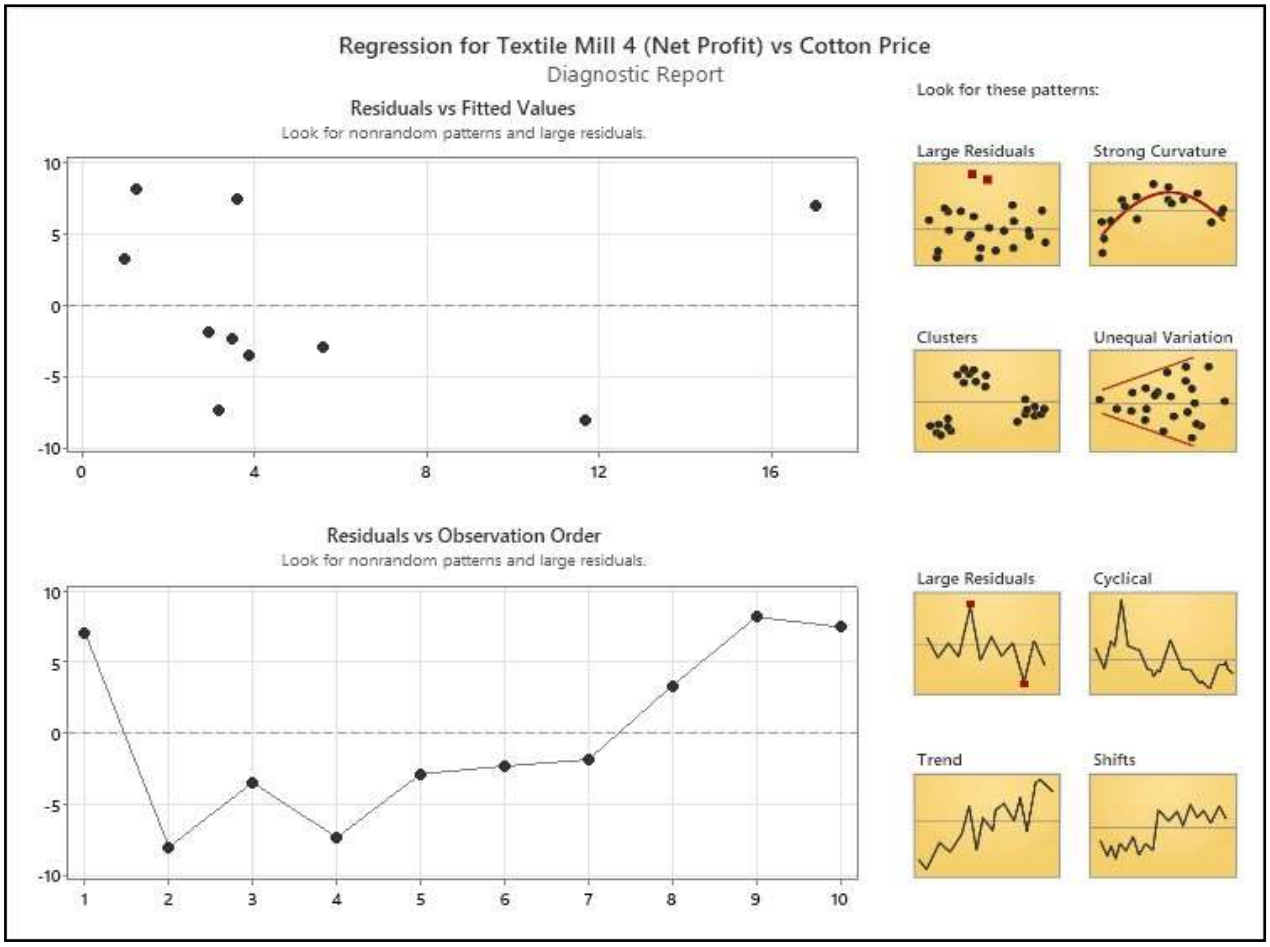
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Overall Summary on Correlation and Regression Analysis:

Although there may not be a statistically significant association between two variables, it is implied by a high correlation coefficient between two variables and a high p-value for the regression that there is a strong positive relationship between the two variables. In other words, even while there may be a substantial correlation between the two variables, it is possible that the observed correlation is not a true cause-and-effect link but rather the consequence of chance or other unrelated causes. It's crucial to remember that a connection does not necessarily indicate a cause. Before making any judgements regarding the association between the two variables, it could be important to look into additional variables, such as confounding variables. In conclusion, a high correlation coefficient and high p-value show a significant positive link between two variables. However, caution should be used when interpreting the findings because statistical significance has not yet been established. Despite the fact that the volatility of the cotton price is linked to the financial performance of the textile mills, other factors are also having an impact on the performance. However, the movement of Net sales in relation to the cotton price demonstrates a direct relationship between the rise or fall in the price of cotton and the mills' selling price of yarn.

SUGGESTIONS:

- Quick ratio of the selected sample textile mills has to be increased, which may be done by enhancing the collecting period, removing unproductive assets, avoiding withdrawals, paying off current liabilities.
- Asset turnover ratio of majority of the sample textile mills are low, which has to be raised by focusing on various way to increase their net sales. For example, provide store credit instead of refunds, or consider introducing new items or service line that don't require additional assets.
- Inventory turnover ratio has to be maintained to a defined ratio in order to avoid excess or less stocking. It can be maintained by employing Just In Time inventory management, plan for seasonality, enhance sales by by attracting more consumers, lower the chance of products being returned.
- Working capital turnover ratio has to be enhanced in order ensure smooth sales of the mills, which can be done by selling more higher-margin products or boosting margins throughout the offerings. Tightening up credit management practices and collecting payments faster is also effective.
- It is good to raise the debtors turnover ratio by enhancing the effectiveness of collection, establish strong customer connections.
- By anticipating the cotton price, one can avoid being struck by growing cotton costs and buy the necessary cotton at a fair price, boosting their profit.
- Despite the price of cotton growing, the marketing team needs to concentrate on strategies to enhance sales.

5.1 CONCLUSION:

The second-largest industry in India is the textile sector, although financial performance analysis is necessary to comprehend any industry's success. We may better understand that the cotton price fluctuation in India causes yarn price variations, which are reflected in the financial performance of the textile mills, according to the analysis done in this study for the financial performance of a few chosen textile mills. The price of cotton yarn rises in lockstep with the price of raw cotton,

demonstrating that the textile industry's financial health is unaffected directly by the rise in cotton prices. The inability to set a fair price for yarn and the difficulty of finding raw cotton at a reasonable cost are two issues that textile mills must deal with, but which can be resolved with efficient inventory control, consistent monitoring of the accounts receivable, recurring sales volume, and net profit. In order to cut costs and boost mill profits, accurate monitoring and forecasting of cotton pricing and financial performance is essential. Thus, the study helps Arima Karthi Pvt Ltd to make the Textile Mills understand there was no relationship between the cotton price and net sales, profit and inventory, there by acquiring the projects from the mills that pretends increase in cotton price leads to poor industrial growth.

REFERENCES:

- **Meenakshi Anand et al**, "*A Study of Financial Analysis in Textile Sector*", Journal of Business Management & Social Science Research (JBM&SSR), Volume 3, No. 6, June 2014.
- **MuthuKumar and Nisha.K.G**, " *A Study on the Effect of Material Price Fluctuationson the Profitability of Yarn Industry in India (with Special Reference to Precot Meridian Ltd)"*, Research Journal of Finance and Accounting, ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online), Vol 5, No. 19, 2014.
- **Kanupriya**, "*COVID-19 and the Indian Textiles, Sector: Issues, Challenges and Prospects"*, Sage Publications, Vision 25(1) 7-1 1, January 20,2021.
- **Nagaraja, Y. and Jahnavi, A. P. and Vinay, H. T. and ., Sushma**, "*Analysis of Trend in Cotton Arrivals in Vijayapura, Haveri, Raichur and Ranibennur Markets of Karnataka, India".* Asian Journal of Agricultural Extension, Economics & Sociology, 41 (2). pp. 31 - 37. ISSN 2320-7027, 2023.
- **Dionys Forster et al**, "*Yield and Economic Performance of Organic and Conventional Cotton-Based Farming Systems – Results from a Field Trial in India*", December 4, 2013.
- **Iman Hidayat & Filla Oktapia Sulistia Dewi**, "*The Effect of Liquidity, Leverage, and Working Capital Turn on Profitability*", ATM, Vol 7, No. 1, January 2023.
- **Kumaresh S. Tikadar & Rahul K. Kamble,** "*Climate change impact on insect pest prevalence and sustainable adaptation strategies for their management*", Sustainability, Agri, Food and Environmental Research, Vol. 11, January 25, 2023.
- **Jayanthi. R & Latha Lavanya . B** , "*Financial Performance Analysis of Textile Companies in Tamilnadu with Reference To Coimbatore – A Study*", Mukt Shabd Journal, ISSN No: 2347-3150, 2022.
- **Vasanthi. R and Thandayuthapani**, A, "*A Study of financial Analysis in Textile Sector* ", International Journal of Research Institute, ISSN Online: 2348-2095.
- **Sathya S & Umarani. R**, "*A Study on Financial Performance Analysis of Spinning Mills of Coimbatore City*", Internationl Journal of Scientific research and management
- **Hiralal. R. Desrani**, "*Comparative Study of Ratio Analysis of Selected Textile Companies of India*", International Journal of Research in Humanaities and Social Science, Vol 1, Issue: 4, June 2013.
- **Nithya. L & Divya Dharshini**, "*A Study On Financial Performance Analysis Of Textile Industries In India",* International Journal of Research and Analytical Reviews, Volume 6, Issue 1, Jan – Mar 2019.
- **Elnara, Aslanova & Ceyhuna, Hajiyeva & Abbasova, Gunay.** (2023). "*Assesment of technological indicators of cotton",* Seybold report, Research gate publication, January 2023.
- **İkiz, Ahmet & Erkus, Sefa. (2017).** *"Determinants of World Cotton Price Does Market Clear. Ulakbilge Dergisi".* 5. 10.7816/ulakbilge-05-18-11.