



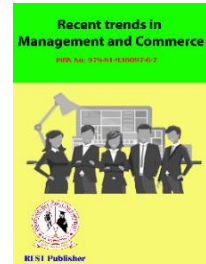
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# A Study On Financial Problems Faced by Cotton Textile Industry in Maharashtra

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**Abstract:** The Indian textile industry is diverse in its structure and skills. It occupies an important position in the Indian economy. It contributes considerably towards employment generation, industrial output and export earnings of the country. It provides employment to an estimated 45 million people directly and to another 60 million people indirectly through allied activities. It contributes 14% towards industrial production, 4% to GDP and 11% to the export earnings. In India, Maharashtra ranks second in terms of cotton production. Maharashtra has an average 30% of the country's total land under cultivation of cotton crop. Vidarbha, Marathwada and North-Maharashtra (Khandesh) are the main cotton producing areas in the state. Considering all the above facts it was necessary to study the cotton textile industry of Maharashtra. The cotton textile industry in Maharashtra majorly consists of Power looms. Approximately 60% of cloth in the country comes from power looms. The major power looms in Maharashtra are found in Bhiwandi, Ichalkaranji, Malegaon, and Solapur. Since last few decades, this industry is facing many problems leading to overall sickness in the industry. This study has covered the majority of the power loom units in the decentralized and unorganized segm. A sample of 410 power loom units is selected for study. The problems faced by these power loom units have been studied with the help of a structured questionnaire. The responses collected from these units were analyzed by using descriptive Statistics, Inferential analysis, ANOVA, F-test, post hoc (Games Howell), Friedman's ANOVA, and Structure Equation Modelent of the textile industry.

**Keywords:** Value Chain Management, Downstream Value Chain, Injectable Formulations, Centralized systems, Decentralized systems, Hub-and-spoke arrangements, Public Private partnerships.

## 1. INTRODUCTION

Maharashtra is the second largest state in India geographically which covers an area of 307,713 sq. km. It occupies the western and central parts of the country and spreads over the Sahyadri mountains; a vast stretch of 720 kilometers of the Arabian sea coast. The population of Maharashtra is around 11 crores as per Census 2011 (estimated to be 12.57 crores in 2022) which is around 9% of the total population in India. Around 45% of the state's population resides in urban areas. The contribution of agriculture and other allied activities is 13% of the state income whereas the contribution of industrial and service sectors is around 87% of the State domestic product. Maharashtra has 226.1 lakh hectares of land under cultivation, out of which 52.1 lakh hectares are under forest area. The state of Maharashtra has around 33% area under cotton cultivation of cotton as compared to that of India. in Maharashtra, the average yield of cotton is lower than that in India because of lower productivity. Maharashtra is said to be the industrial capital of India. It occupies an important position in the Indian economy. Mumbai is the commercial and financial capital of India. All the leading industries and corporate houses of the country are found in Mumbai. Maharashtra is the major producer of Sugarcane, Cotton, Soya bean, Sunflowers, and Vegetables

## 2. POWER LOOM CLUSTERS IN MAHARASHTRA

Bhiwandi, Ichalkaranji, Malegaon, and Solapur have the major power loom clusters in Maharashtra. These cities comprise a major portion of the power loom industries of Maharashtra as well as India. Nagpur has also contributed considerably to the production of cloth by making use of different types of fibres in the power loom

industry. These centres specialize in the pattern of weaving and are well known for their variety of clothes. Bhiwandi is located in Thane district which is near Mumbai. Bhiwandi has almost all the facilities that are available in Mumbai because of its proximity to Mumbai. Because of the financial assistance and support of mill owners from Mumbai, the power loom industry evolved and expanded well here. Ichalkaranji is one of the important centres for power looms in Maharashtra. It has given a new dimension and scope to textiles in India. This is done by setting up power looms, installing shuttle less looms, setting up sizing units, Export Oriented Units, etc. The unique feature of this centre is the production of multi coloured 'Patal' Sarees made from imported yarn. Post 1956, the weavers of Ichalkaranji changed their production to grey cloth in fine and superfine Dhotis and mulls. Ichalkaranji is well-known for its superfine Dhotis and multi-coloured saris. The weavers of Ichalkaranji are heading towards the modernization of power looms being influenced by the present age of modernisation. The weavers in Solapur are engaged in the manufacturing of bedsheets, Jacquard chaddars and terry-towels. These products are capable of earning a good amount of foreign exchange for the country are made in Solapur. Malegaon and Dhule are well known for the production of coloured saris made up of silk with a zari border. Apsara, Irkal, Mangla, Zari Zamin, are some of the well-known forms of saris. Besides, the grey cloth is an additional product of the centre. Today some power looms are manufacturing grey cloth made up of cotton, polyester etc.

### 3. PROBLEMS FACED BY POWER LOOMS IN MAHARASHTRA



FIGURE 1.

#### Financial Problems:

Power loom units in India have limited capital raising capacity due to which they find it difficult to implement new technology in their units. Installation of new machinery and modernisation of the existing machinery requires huge capital. So, these power loom units avoid the task of modernizing the units. As a majority of the power looms are from the unorganised and decentralised sector, the financial institutions do not extend any financial assistance easily to these power loom units. These power loom units also find difficulty in managing their working capital such as raising credit for the purchase of raw material, holding large inventories, and meeting their working capital needs. Due to a lack of funds, power loom unit owners try to sell off their products at the earliest to get instant cash. These power loom units do not avail of credit facilities offered by the banks because of the complex documentation process.

### 4. REVIEW OF LITERATURE

- Tajinder Singh Bedi and Dr. Jyotsana Khandelwal (2020) stated the importance of automation in the textile industry. The Indian textile industry is as diverse and complex as the country itself and equably combines this immense diversity into a coherent whole.
- Dr. Minaketan Bag and Dr. Balakrishna Behera (2020) pointed out that the textile industry of Odisha has a long history. It has been complimented worldwide due to its various design, quality and genuineness. Sambalpuri saree with Ikat type of weaving one among them is most famous in Odisha, India and overseas as well.
- D Amutha (2021) has thrown light on the fact that the textile business in India is connected to agriculture, ancient culture, and its traditions. The textile industry has significantly contributed to the economy by providing direct and indirect employment to large number of people and towards the net foreign exchange surplus.

- B. Prakash and Dr. Guna Sundari (2021) stated that the textile industry in India is one of the world's largest industries enriched with its raw material base. Indian economy is highly dependent on its textile industry along with the other major industries. This sector provides direct employment in textile manufacturing activities to large number of people and indirect employment including human resource involved in agriculturally based production of raw materials like cotton etc. The given study evaluated the problem and satisfaction level of power loom owners in Somanur. The problems faced by power loom owners of Somanur in their business include unavailability of raw material, problems related to GST and other such problems.
- Dr. S. Prakash, C, et al. (2021) stated that the Indian textile industry is a diverse industry. The basic objective of this study is to understand the impact of COVID -19 on the socio-economic condition of the power loom workers and to find out the challenges faced by the power loom owners due to lockdown.
- A Vishwakarma and G.S. Dangayach (2022) stated that the Indian textile industry is facing various challenges. These challenges include poor quality of raw materials, shortage of skilled manpower, poor infrastructural facilities, lack of government support and ever-changing trends in the apparel industry. The researchers have classified these challenges into different dimensions of sustainability.
- Srabani Sanyal and Ram Yash (2022) highlighted that the unorganized power loom sector in India is one of the ancient and major industries. In terms of employment generation and production of fabric, these power looms occupy a significant position in the textile sector. There are different types of looms in this industry varying from plain looms to technologically advanced shuttle less looms

## 5. OBJECTIVES OF THE STUDY

- To study the problems faced by cotton textile industries in Maharashtra.
- To study the impact of these problems on the cotton textile industrial units.
- To provide suitable suggestions based on research findings to improve the effectiveness and efficiency of cotton textiles units in Maharashtra.

## 6. RESEARCH METHODOLOGY

The essentials of the research process like research design, data collection methods, questionnaire design, sampling design, and statistical tools include:

Research Design: The research design used in this study included both Exploratory research design and Descriptive Research Design.

### Formulation of Hypothesis

- 1A) Null Hypothesis H01A: There is no significant difference in financial problems faced by the textile industrial units according to the size of the unit.
- Alternate Hypothesis H11A: There is a significant difference in financial problems faced by the textile industrial units according to the size of the unit.
- 1B) Null Hypothesis H01B: There is no significant difference in financial problems faced by the textile industrial units according to the type of the unit.
- Alternate Hypothesis H11B: There is a significant difference in financial problems faced by the textile industrial units according to the type of the unit.

### Data collection

**Primary data:** The primary data required for the research was collected using the survey method with a detailed self-administered questionnaire among the respondents to study the influence of Financial Problems affecting the performance of the textile industry.

**Secondary data:** Sources of secondary data for the study included national and international journals, research articles, books, newspapers, research reports by reputed agencies, and online data sources related to problems affecting the performance of the textile industry have been reviewed. In addition, online reports published by many popular newspapers, online news journals were used for the study

**Research area:** This study was conducted to understand the impact of post liberalization and the prospects of cotton textile industry of Bhiwandi, Ichalkaranji, Malegaon, and Solapur. The research area has been Bhiwandi,

Ichalkaranji, Malegaon, and Solapur to determine the various problems affecting the textile industry and its impact on the economic growth of the same.

**Type of Statistics used.**

Descriptive Statistics and Inferential Statistics are used in data analysis. Descriptive Statistics are used to tabulate the data, calculate the frequencies and generate the summary tables. Inferential Statistics are used to draw conclusions about the samples.

**Inferential analysis:** Inferential analysis has been used to derive logical conclusions from the samples. The following techniques have been used in the inferential analysis by using IBM SPSS Statistics 26. Simple Percentage method, One Way Analysis of Variance (ANOVA), Test of homogeneity of variance, Robust test of equality of means (Welch test), Post Hoc (Games Howel), Friedman test for testing the hypotheses, the researcher has used the following statistical tools: ANOVA:

ANOVA stands for Analysis of Variance. This statistical model was developed by R.A. Fisher to analyse the variations among and between the groups. The researcher has used ANOVA as there are more than two groups and it is used to test whether the means of various groups are equal.

**7. DATA ANALYSIS**

**TABLE 1.** Nature of Textile Unit

		Nature of unit			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Power loom	378	92.2	92.2	92.2
	Auto looms	32	7.8	7.8	100.0
	Total	410	100.0	100.0	

(Source: Compiled by researcher based on primary data)

**Interpretation:** The above table shows that out of 410 units, 378 units are power looms, and 32 units are auto looms. Hence, it is concluded that most of the units selected by the researcher are power looms.

**TABLE 2.** Type of the firm

		Type of the firm			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Sole Proprietor	302	73.7	73.7	73.7
	Partnership Firm	42	10.2	10.2	83.9
	Limited Company	30	7.3	7.3	91.2
	Co-operative Society	4	1.0	1.0	92.2
	Joint Hindu Family Business	32	7.8	7.8	100.0
	Total	410	100.0	100.0	

**Interpretation:** The above table indicates that there are 302 firms owned by sole proprietors, 42 firms are partnership firms, 15 firms are limited companies, 4 firms are co-operative societies, and 32 firms are of Joint Hindu family business type. Therefore, it can be concluded that a maximum number of firms are sole proprietor firms.

**TABLE 3.** Size of the textile unit

		Size of the textile unit			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Micro Enterprise - Investment in Plant and Machinery does not exceed Rs.25 lakhs	182	44.4	44.4	44.4
	Small Enterprise - Investment in Plant and Machinery More than 25 lakhs but does not exceed Rs. 5 crores	150	36.6	36.6	81.0
	Medium Enterprise - Investment in Plant and Machinery More than 5 crores but does not exceed Rs. 10 crores	68	16.6	16.6	97.6
	Large Enterprise - Investment in Plant and Machinery More than 10 crores	10	2.4	2.4	100.0
	Total	410	100.0	100.0	

**Interpretation:** The above table shows that 182 firms are micro enterprises, 150 firms are small enterprises, 68 firms are medium enterprises, and 10 firms are large enterprises. Hence it can be concluded that the majority of the textile units selected by the researcher are micro and small enterprises.

## Financial Data

**TABLE 4.** Investment in Fixed Capital

Fixed Capital					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than Rs.25 lakhs	188	45.9	45.9	45.9
	Rs.25 lakhs to Rs.50 lakhs	144	35.1	35.1	81.0
	Rs.50 lakhs to Rs.75 lakhs	0	0	0	0
	Above Rs.1 crore	78	19.0	19.0	100.0
	Total	410	100.0	100.0	

**Interpretation:** The above table shows that 188 firms have less than Rs.25 lakhs invested in fixed capital, 144 firms have invested between Rs.25 lakhs to Rs.50 lakhs in fixed capital and 78 firms have invested above Rs.1 crore in fixed capital. Thus, it can be concluded that the majority of the respondents being micro firms have a fixed capital investment of less than Rs.25 lakhs followed by small scale firms having fixed capital investment between Rs. 25 lakhs to Rs.50 lakhs. Very few medium enterprises and large-scale enterprises have a fixed capital investment of more than Rs.1 crore.

**TABLE 5.** Investment in Working Capital

Investment in Working Capital					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than Rs.5 lakhs	188	45.9	45.9	45.9
	Rs.5 lakhs to Rs.10 lakhs	122	29.8	29.8	75.6
	Rs.10 lakhs to Rs.15 lakhs	44	10.7	10.7	86.3
	Rs.15 lakhs to Rs.20 lakhs	42	10.2	10.2	96.6
	Rs.20 lakhs and above	14	3.4	3.4	100.0
	Total	410	100.0	100.0	

**Interpretation:** The above table indicates that 188 firms have less than Rs.5 lakhs of investment in working capital, 122 firms have invested around Rs.5 lakhs to Rs.10 lakhs, 44 firms have invested around Rs.10 lakhs to Rs.15 lakhs, 42 firms have invested around Rs. 15 lakhs to Rs.20 lakhs and 14 firms have invested more than Rs.20 lakhs in working capital. Hence it can be concluded that majority of the firms being micro firms have their working capital investment of less than Rs.5 lakhs followed by small-scale firms with investment of around Rs.5 lakhs to Rs.10 lakhs in working capital. Few firms have investment of around Rs.10 lakhs to Rs.15 lakhs and Rs.15 lakhs to Rs.20 lakhs whereas the large-scale enterprises have more than Rs.20 lakh investment in working capital.

**TABLE 6.** Sources of Capital

Major Sources of Finance	
Particulars	Percentage
Owned Funds	40 – 50 %
Bank Loan	20 – 30 %
Other Financial institutions	20 – 30 %
Private Sources	20 – 30%
Total	100 %

**Interpretation:** The above table 4.8. shows that about 40 – 50% of the capital is raised by owned funds, 20 - 30% of the capital is raised by bank loans, 20 – 30% of the capital is raised from other financial institutions and 20 – 30% is being raised from private sources.

**TABLE 7.** Proportion of spending on following factors:

Particulars	Percentage
Raw Material	50 %
Labor Wages and Staff salaries	20 %
Electricity	10 %
Marketing	10 %
Others	10 %
<b>Total</b>	<b>100 %</b>

**Interpretation:** The above table shows that the firms are spending around 50% on raw materials, 20% on labour wages and staff salaries, 10% on electricity, 10% on marketing, and 10% on other expenditures. Thus, it can be concluded that these firms are spending a major part of their cost of production on raw materials followed by

labour wages, staff salaries, and electricity. A considerably smaller proportion is being spent on marketing activities.

**Financial Problems**

**TABLE 8.** Non availability of adequate and timely credit

<b>Financial Problems [Non availability of adequate and timely credit]</b>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	12	2.9	2.9	2.9
	Disagree	42	10.2	10.2	13.2
	Neutral	12	2.9	2.9	16.1
	Agree	170	41.5	41.5	57.6
	Strongly Agree	174	42.4	42.4	100.0
	Total	410	100.0	100.0	

**Interpretation:** From the above table it can be interpreted that the statement “**Non availability of adequate and timely credit**” has been strongly agreed by 174 respondents, agreed by 170 respondents whereas 12 respondents have given a neutral response to it. 42 respondents disagreed, and 12 respondents strongly disagreed with the statement.

**TABLE 9.** Shortage of Working Capital

<b>Financial Problems [Shortage of Working Capital]</b>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	6	1.5	1.5	1.5
	Disagree	52	12.7	12.7	14.1
	Neutral	6	1.5	1.5	15.6
	Agree	176	42.9	42.9	58.5
	Strongly Agree	170	41.5	41.5	100.0
	Total	410	100.0	100.0	

**Interpretation:** From the above table 4.11, it can be interpreted that the statement “**Shortage of Working Capital**” has been strongly agreed by 170 respondents, agreed by 176 respondents whereas 6 respondents have given a neutral response to it. 52 respondents disagreed, and 6 respondents strongly disagreed with the statement.

**TABLE 10.** Delay in receiving loans from banks

<b>Financial Problems [Delay in receiving loans from banks]</b>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	10	2.4	2.4	2.4
	Disagree	46	11.2	11.2	13.7
	Neutral	14	3.4	3.4	17.1
	Agree	178	43.4	43.4	60.5
	Strongly Agree	162	39.5	39.5	100.0
	Total	410	100.0	100.0	

**Interpretation:** From the above table, it can be interpreted that the statement “**Delay in receiving loans from banks**” has been strongly agreed by 162 respondents, agreed by 178 respondents whereas 14 respondents have given a neutral response to it. 46 respondents disagreed, and 10 respondents strongly disagreed with the statement.

**TABLE 11.** Complex documentation process for availing credit

<b>Financial Problems [Complex documentation process for availing credit]</b>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	8	2.0	2.0	2.0
	Disagree	48	11.7	11.7	13.7
	Neutral	6	1.5	1.5	15.1
	Agree	188	45.9	45.9	61.0
	Strongly Agree	160	39.0	39.0	100.0
	Total	410	100.0	100.0	

**Interpretation:** The above table shows that the statement “**Complex documentation process for availing credit**” has been strongly agreed by 160 respondents, agreed by 188 respondents whereas 6 respondents have given a neutral response to it. 48 respondents disagreed, and 8 respondents strongly disagreed with the statement.

**TABLE 12. High cost of credit**

Financial Problems [High cost of credit]					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	12	2.9	2.9	2.9
	Disagree	42	10.2	10.2	13.2
	Neutral	12	2.9	2.9	16.1
	Agree	194	47.3	47.3	63.4
	Strongly Agree	150	36.6	36.6	100.0
	Total	410	100.0	100.0	

**Interpretation:** The above table indicates that the statement “**High cost of credit**” has been strongly agreed by 150 respondents, agreed by 194 respondents whereas 12 respondents have given a neutral response to it. 42 respondents disagreed, and 12 respondents strongly disagreed with the statement.

**TABLE 13. High Collateral/ Security Requirements**

Financial Problems [High Collateral/ Security Requirements]					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	8	2.0	2.0	2.0
	Disagree	52	12.7	12.7	14.6
	Neutral	12	2.9	2.9	17.6
	Agree	156	38.0	38.0	55.6
	Strongly Agree	182	44.4	44.4	100.0
	Total	410	100.0	100.0	

**Interpretation:** From the above table, it can be interpreted that the statement “**High Collateral/ Security Requirements**” has been strongly agreed by 182 respondents, agreed by 156 respondents whereas 12 respondents have given a neutral response to it. 52 respondents disagreed, and 8 respondents strongly disagreed with the statement.

**TABLE 14. Limited access to other sources of capital**

Financial Problems [Limited access to other sources of capital]					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	8	2.0	2.0	2.0
	Disagree	46	11.2	11.2	13.2
	Neutral	6	1.5	1.5	14.6
	Agree	210	51.2	51.2	65.9
	Strongly Agree	140	34.1	34.1	100.0
	Total	410	100.0	100.0	

**Interpretation:** From the above table, it can be inferred that the statement “**Limited access to other sources of capital**” has been strongly agreed by 140 respondents, agreed by 210 respondents whereas 6 respondents have given a neutral response to it. 46 respondents disagreed, and 8 respondents strongly disagreed with the statement.

**TABLE 15. High cost of production**

Financial Problems [High cost of production]					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	10	2.4	2.4	2.4
	Disagree	50	12.2	12.2	14.6
	Neutral	8	2.0	2.0	16.6
	Agree	154	37.6	37.6	54.1
	Strongly Agree	188	45.9	45.9	100.0
	Total	410	100.0	100.0	

**Interpretation:** The above table shows that the statement “**High cost of production**” has been strongly agreed by 188 respondents, agreed by 154 respondents whereas 8 respondents have given a neutral response to it. 50 respondents disagreed, and 10 respondents strongly disagreed with the statement.

**TABLE 16.** Delay in recovery of credit sales

Financial Problems [Delay in recovery of credit sales]					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	10	2.4	2.4	2.4
	Disagree	44	10.7	10.7	13.2
	Neutral	6	1.5	1.5	14.6
	Agree	222	54.1	54.1	68.8
	Strongly Agree	128	31.2	31.2	100.0
	Total	410	100.0	100.0	

**Interpretation:** The above table indicates that the statement “Delay in recovery of credit sales” has been strongly agreed by 128 respondents, agreed by 222 respondents 6 respondents were neutral, 44 respondents disagreed, and 10 respondents strongly disagreed with the statement.

**TABLE 17.** Low profit margin on sales

Financial Problems [Low profit margin on sales]					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	6	1.5	1.5	1.5
	Disagree	30	7.3	7.3	8.8
	Neutral	6	1.5	1.5	10.2
	Agree	170	41.5	41.5	51.7
	Strongly Agree	198	48.3	48.3	100.0
	Total	410	100.0	100.0	

**Interpretation:** From the above table, it can be interpreted that the statement “Low profit margin on sales” has been strongly agreed by 198 respondents, agreed by 170 respondents whereas 6 respondents have given a neutral response to it. 30 respondents disagreed, and 6 respondents strongly disagreed with the statement.

**TABLE 18.** Descriptive Statistics – Financial Problems

	N	Minimum	Maximum	Mean	Std. Deviation
Financial Problems	410	1.00	5.00	4.0951	.90609
Valid N (listwise)	410				

Based on the above observations, it can be concluded that most of the units are facing financial problems in terms of non-availability of adequate and timely credit, shortage of working Capital, delay in receiving loans from banks, complex documentation process for availing credit, high cost of credit, high Collateral/ Security Requirements, limited access to other sources of capital, delay in recovery of credit sales and low-profit margin on sales

## 8. TESTING OF HYPOTHESIS

- **1A) Null Hypothesis  $H_{0IA}$ :** There is no significant difference in financial problems faced by the textile industrial units according to the size of the unit.
- **Alternate Hypothesis  $H_{1IA}$ :** There is a significant difference in financial problems faced by the textile industrial units according to the size of the unit.

As the sample size is unequal for every size of the textile unit, there is a need to test the homogeneity of variance.

**TABLE 19.**

Test of Homogeneity of Variances					
		Levene Statistic	df1	df2	Sig.
Financial Problems	Based on Mean	36.621	3	406	.000
	Based on Median	27.854	3	406	.000
	Based on Median and with adjusted df	27.854	3	135.656	.000
	Based on trimmed mean	33.901	3	406	.000

**Interpretation:** From the above table, it can be interpreted that as the p-value (sig value) is less than 0.05, the variance is not equal across the different sizes. Hence, there is a violation of the homogeneity of variance assumption. To test the above hypothesis, ANOVA is used, and F-test is applied. The results are as follows:

**TABLE 20. ANOVA**

Financial Problems					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	276.392	3	92.131	629.734	.000
Within Groups	59.398	406	.146		
Total	335.790	409			

**Interpretation:** The above table shows that most of the micro and small-scale textile units are facing financial problems in terms of non-availability of adequate and timely credit, shortage of working Capital, delay in receiving loans from banks, complex documentation process for availing credit, high cost of credit, high Collateral/ Security Requirements, limited access to other sources of capital, delay in recovery of credit sales and low-profit margin on sales.

Because of the financial problems faced by most of the micro and small-scale textile units, the calculated p-value (sig value) of the F-test is 0.000 which is less than the standard p-value of 0.05 (5% level of significance). Hence, the F-test is rejected. Thus, the null hypothesis is rejected, and the alternate hypothesis is accepted.

There is a significant difference in financial problems faced by the textile industrial units according to the size of the unit. To study findings, the mean scores of financial problems for each size of the textile unit are obtained and presented in the following:

**TABLE 21.**

Financial Problems			
	N	Mean	ion
Micro Enterprise			
Small Enterprise	150	4.3027	.21611
Medium Enterprise	68	2.6206	.74183
Large Enterprise	10	1.4200	.44920
Total	410	4.0951	.90609

**Interpretation:** The above table indicates that the mean score of financial problems of 182 micro enterprises is 4.6220, for 150 small enterprises is 4.3027, for 68 medium enterprises is 2.6206, and for 10 large enterprises is 1.40951. When there are unequal sample sizes and the heterogeneity of variance, the welch test is appropriate.

The results of the welch test are as follows:

**TABLE 22.**

Robust Tests of Equality of Means				
Financial Problems				
	Statistic <sup>a</sup>	df1	df2	Sig.
Welch	314.699	3	39.455	.000
a. Asymptotically F distributed.				

As the p-value (sig value) of the Welch test is less than 0.05, there is a statistically significant difference in financial problems faced by the textile industrial units according to the size of the unit. Due to the heterogeneity of variances and to test whether the difference in financial problems between every two firms is significant or not, the Games-Howell - POST HOC test is applied.

The results of the test are as follows:

**TABLE 23. Multiple Comparisons**

Dependent Variable: Financial Problems					
Games-Howell					
(I) Size of the textile unit	(J) Size of the textile unit	Mean Difference (I-J)	Std. Error	Sig.	Inference
Micro Enterprise	Small Enterprise	.31931*	.02700	.000	Significant
	Medium Enterprise	2.00139*	.09225	.000	Significant
	Large Enterprise	3.20198*	.14351	.000	Significant
Small Enterprise	Micro Enterprise	-.31931*	.02700	.000	Significant
	Medium Enterprise	1.68208*	.09167	.000	Significant
	Large Enterprise	2.88267*	.14314	.000	Significant
Medium Enterprise	Micro Enterprise	-2.00139*	.09225	.000	Significant
	Small Enterprise	-1.68208*	.09167	.000	Significant
	Large Enterprise	1.20059*	.16814	.000	Significant
Large Enterprise	Micro Enterprise	-3.20198*	.14351	.000	Significant
	Small Enterprise	-2.88267*	.14314	.000	Significant
	Medium Enterprise	-1.20059*	.16814	.000	Significant

\*. The mean difference is significant at the 0.05 level.

**Interpretation:**

- There is a significant difference in financial problems faced by textile units among micro, small, medium and large enterprises.

- **1B) Null Hypothesis H<sub>01B</sub>:** There is no significant difference in financial problems faced by the textile industrial units according to the type of the unit.
- **Alternate Hypothesis H<sub>11B</sub>:** There is a significant difference in financial problems faced by the textile industrial units according to the type of the unit.

As the sample size is unequal for every type of textile unit, there is a need to test the homogeneity of variance.

**TABLE 24.**  
**Test of Homogeneity of Variances**

		Levene Statistic	df1	df2	Sig.
Financial Problems	Based on Mean	77.339	4	405	.000
	Based on Median	29.973	4	405	.000
	Based on Median and with adjusted df	29.973	4	141.751	.000
	Based on trimmed mean	74.651	4	405	.000

**Interpretation:**

From the above table it can be interpreted that as the p-value (sig value) is less than 0.05, the variance is not equal across the different types. Hence, there is a violation of the homogeneity of variance assumption.

To test the above hypothesis, ANOVA is used, and F-test is applied. The results are as follows:

**TABLE 25.**

ANOVA					
Financial Problems					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	216.732	4	54.183	184.315	.000
Within Groups	119.058	405	.294		
Total	335.790	409			

**Interpretation:** The above table shows that most of the sole proprietorship type of textile units are facing financial problems in terms of non-availability of adequate and timely credit, shortage of working Capital, delay in receiving loans from banks, complex documentation process for availing credit, high cost of credit, high Collateral/ Security Requirements, limited access to other sources of capital, delay in recovery of credit sales and low-profit margin on sales. Due to the financial problems faced by most of the sole proprietors, the calculated p-value (sig value) of the F-test is 0.000 which is less than the standard p-value of 0.05 (5% level of significance). Hence, F-test is rejected. Thus, the null hypothesis is rejected, and the alternate hypothesis is accepted.

There is a significant difference in financial problems faced by the textile industrial units according to the type of unit. To study findings, the mean scores of financial problems for each type of textile unit are obtained and presented in the following:

**TABLE 26.**

Financial Problems			
	N	Mean	Std. Deviation
Partnership Firm	42	3.6238	.99849
Limited Company	30	2.0667	.79278
Co-operative Society	4	2.3000	.34641
Joint Hindu Family Business	32	3.1938	.89621
Total	410	4.0951	.90609

The above table indicates that the mean score of financial problems of 302 Sole proprietorship type firms is 4.4815, for 42 Partnership firms is 3.6238, for 30 Limited companies is 2.0667, for 4 Co-operative societies is 2.3000 and 32 Joint Hindu family business is 3.1938. When there are unequal sample sizes and heterogeneity of variance, the welch test is appropriate.

The results of the welch test are as follows:

**TABLE 27.**

Robust Tests of Equality of Means				
Financial Problems				
	Statistic <sup>a</sup>	df1	df2	Sig.
Welch	114.814	4	19.337	.000

a. Asymptotically F distributed.

As the p-value (sig value) of the Welch test is less than 0.05, there is a statistically significant difference in financial problems faced by the textile industrial units according to the type of the unit. Due to the heterogeneity of variances and to test whether the difference in financial problems between every two firms is significant or not, Games-Howell - POST HOC test is applied.

The results of the test are as follows.

**TABLE 28.** Multiple Comparisons

Dependent Variable: Financial Problems					
Games-Howell					
(I) Type of the firm	(J) Type of the firm	Mean Difference (I-J)	Std. Error	Sig.	Inference
Sole Proprietor	Partnership Firm	.85765*	.15530	.000	Significant
	Limited Company	2.41479*	.14605	.000	Significant
	Co-operative Society	2.18146*	.17430	.004	Significant
	Joint Hindu Family Business	1.28771*	.15963	.000	Significant
Partnership Firm	Sole Proprietor	-.85765*	.15530	.000	Significant
	Limited Company	1.55714*	.21139	.000	Significant
	Co-operative Society	1.32381*	.23181	.002	Significant
	Joint Hindu Family Business	.43006	.22099	.303	Not Significant
Limited Company	Sole Proprietor	-2.41479*	.14605	.000	Significant
	Partnership Firm	-1.55714*	.21139	.000	Significant
	Co-operative Society	-.23333	.22572	.834	Not Significant
	Joint Hindu Family Business	-1.12708*	.21459	.000	Significant
Co-operative Society	Sole Proprietor	-2.18146*	.17430	.004	Significant
	Partnership Firm	-1.32381*	.23181	.002	Significant
	Limited Company	.23333	.22572	.834	Not Significant
	Joint Hindu Family Business	-.89375*	.23473	.024	Significant
Joint Hindu Family Business	Sole Proprietor	-1.28771*	.15963	.000	Significant
	Partnership Firm	-.43006	.22099	.303	Not Significant
	Limited Company	1.12708*	.21459	.000	Significant
	Co-operative Society	.89375*	.23473	.024	Significant

\*. The mean difference is significant at the 0.05 level.

### Interpretation:

The above table reveals the following:

- There is a significant difference in financial problems faced by the textile industrial units among sole proprietor and partnership firm, sole proprietor and limited company, sole proprietor and joint Hindu family business, sole proprietor and co-operative society.
- There is a significant difference in financial problems faced by the textile industrial units among partnership firm and limited company, partnership firm and co-operative society.
- There is no significant difference in financial problems faced by the textile industrial units among partnership firm and joint Hindu family business.
- There is a significant difference in financial problems faced by limited company and joint Hindu family business.
- There is no significant difference in financial problems faced by the textile industrial units among limited company and co-operative society.
- There is a significant difference in financial problems faced by the textile industrial units among co-operative society and joint Hindu family business.

## 9. FINDINGS OF THE STUDY

- The Textile Industry of Maharashtra is said to have 'islands of excellence', but the ability and working of the small firms is not very eminent when compared to those in various other nations. The technology and operational methods adopted in Maharashtra Textile Industry are obsolete. There are different limitations in the whole structure of the textile industry, such as in processes like ginning and dyeing and to some extent in weaving also because of its incapacity to weave high value fabric, lack of product innovation, poor shop floor practices, use of traditional management practices, insufficient maintenance of machinery etc.

- Due to the unavailability of proper financing facilities from banks and other lending institutions, the micro and small firms in the unorganized sector are compelled to function at the sub-optimum level. These firms are greatly suffering due to lack of working capital. They are forced to buy raw materials from the middlemen at higher prices and sell their final products at lower prices.
- As the small producers are unable to borrow from formal lending institutions, they can neither buy raw materials from the input market nor sell their final products in the output market. They are forced to take raw materials from the bigger firms and sell the output to them. They are forced to buy raw materials from bigger firms and sell their final products to them. In short, they are functioning as the outsourced units of bigger firms.
- Although micro and small firms are an integral part of the lending policy of the banks, there is no fixed quota for this sector like agriculture. Due to this, the portion of loans to this small sector remains speculative.
- Another problem which is faced by these micro and small firms is they get delayed payments from those to whom they have sold the goods. They are not able to get credit from the suppliers of raw materials.
- The actual data regarding the number of power loom units manufacturing cloth in the state is not available. No organized surveys are conducted by the concerned agencies and detailed reports are also not available in the public domain.

## 10. SUGGESTIONS

The cotton textile industry in Maharashtra is facing various problems like financial problems, labour problems, raw material related problems, marketing problems, technological problems, and a lack of government support. Adequate steps must be taken to protect this industry from the ongoing crisis. One of the objectives of the current research study is to provide suitable suggestions based on research findings to improve the effectiveness and efficiency of cotton textile units in Maharashtra. These suggestions have been categorized based on the challenges faced by the industry. Following are some of the suggestions provided by the researcher:

### **Financial Support:**

- Due to the lack of availability of required finance from the official lending institutions, the unorganized sector of power looms is facing difficulties in availing of credit. Hence, they are forced to operate at a compromised level. Due to the paucity of working capital, all the units under survey are found to suffer enormously. As the small power loom owners are excluded from the process of formal lending, they are not able to buy raw materials directly from the supplier and need to depend on the middlemen similarly to sell their products they need to resort to middlemen. Due to the non-availability of required finance, the micro and small firms are forced to work as outsourced units of larger firms. The units in this unorganised sector refrain to approach banks and other financial institutions due to lack of collaterals. Adequate measures are required to provide financial support to these small power loom owners.
- Timely credit should be provided to the small textile owners under the Pradhan Mantri Credit scheme.
- The government scheme of Mudra loan meant for the benefit of small-scale entrepreneurs should be reviewed so that it can be more effective in disbursing loans as it has become difficult in getting loans under this scheme, prolonged delays in getting loans are adding to the problems of small-scale weavers.
- A specific quota of loans should be provided to the power loom sector like agriculture as they represent an integral part of the priority sector lending policy of the banks like agriculture.
- Timely credit should be made available at a reasonable cost to micro and small enterprises so that they can improve their production processes and ultimately the quality of their product.
- One of the major problems faced by the micro and small enterprises in power loom sector is the delayed payments which they receive from those units to whom they supply their finished goods. This hampers their liquidity position. Banks can play an important role here by acting as intermediaries on behalf of micro and small-scale power loom units to collect their dues and discount their bills at reasonable charges. This will help them in managing their working capital requirements. It will also solve the problem of dependency on middlemen.
- Information bureaus or counselling centres to provide various information about credit to the micro and small-scale weavers should be established by every bank or in every block so that it reduces the dependence on middlemen for information about various bank schemes. This will ensure better funding to the small-scale power loom owners who otherwise face many difficulties like high cost of credit, high administrative cost, indifferent behaviour of bank officials, and huge collateral requirements in availing credit from the formal lending institutions.
- In order to ensure better credit facilities for the small-scale textile units, policies should aim at providing funds, ensuring better and prompt disbursement of funds, and linking the present government schemes should be undertaken.

- If an explicit portion of the loan is fixed for micro and small units, and the new firms with good potential are treated distinctively for disbursement of credit along with the concessional rate of interest on such loans, the provision of factoring services by banks at the institutional level can ensure better funding to these under-privileged units who are forced to work as outsourced units of the bigger firms. This would help them in operating at their full potential which would intern more employment opportunities and value addition.
- There should be a sovereign certifying agency which should be established to provide ratings to the units and the quality of its products. This would help the small firms in raising long-term funds for investing in technology upgradation.

## 11. CONCLUSION & RECOMMENDATIONS

Maharashtra is one of the largest centres of the power loom sector in India. The state has major power loom units in Bhiwandi, Ichalkaranji, Malegaon, and Solapur. The majority of the textile units in these areas come under decentralised sector which has contributed significantly towards the total cloth production of the country. Since this industry has the scope and potential to develop, expand and increase the exports of the nation, there is a need to uplift this industry. Government schemes such as the Technology Upgradation Fund Scheme, Pradhan Mantri Mudra Yojna, Power Tex India Schemes, Credit Linked Capital Subsidy Scheme, etc., and the awareness of such schemes among the Micro and Small units will be of great help to prevent these units from going towards sickness. There is a need to uplift this power loom industry in order to ensure the overall economic development of Maharashtra state and the nation as a whole. Maharashtra State Government and the Government of India should adopt a holistic method towards the power loom sector in terms of providing loans at subsidized rates of interest, reduction in duties and taxes, imparting skilful training to the workers, providing access to quality raw materials as and when requires at appropriate prices, develop a platform so that these small-scale units get an exposure to sell their products directly to the customers. The power loom owners in Maharashtra should unite and form clusters to share the infrastructural and technological resources. They should also try to associate through joint ventures or tie-ups with peer group companies abroad. This could help them to get the benefits of global markets which is possible through adequate support from the government. To encourage innovation in the power loom sector, research and development activities should be undertaken on a continuous basis and the reports should be shared with the micro and small-scale power loom owners so that they are also aware of the market dynamics. These power loom units should focus on exporting their products to western countries with the support of the government. The workforce in these units should be trained properly and the government should develop training institutes for the same. The power loom sector significantly contributes to the nation's economy. Therefore, there is an immense need to develop this sector which is possible only if all the stakeholders work in this regard.

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