CHAPTER-VII

Data Analysis
&
Interpretation

7.0: Introduction

This chapter presents the statistical test results and interpretation which has been obtained from the analysis of the collected data for the present study. The analysis has been done using various softwares like MS Excel, SPSS 23.0 version, and AMOS 23.0 version. Data is obtained as a total collected response of the 267 respondents who have registered at DIC (District Industries Centre) as well as have availed loan from different Public Sector Banks of the study area. Firstly, data screening and pre-analysis have been done on the variables which will be used to test the framed hypothesis. This screening and pre-analysis are to be required to apply SEM (Structural Equation Model) for further analysis. Secondly, descriptive analysis and percentage analysis were presented to summary each and every variable with Chi-square test which was used to make sure the significant differences among the responses in all the variables and Cramer's V test was used to measure the associations or relations between the variable and types of MSMEs. Thirdly, factor analysis has been used to make sure the items used in the questionnaire exist under selected constructs or not. And then Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were used to validate the constructs, as well as Cronbach's Alfa, is used to check the reliability of the constructs. Finally, Correlation, regression, path analysis, and SEM were applied to test the framed hypothesis.

7.1: Data screening and Pre- analysis

First, we have checked the response rate to see whether the rate is adequate for further analysis on not. Then, data screening for out of range values, assessment of missing data, multivariate outliers, normality test, and multicollinearity test have been done prior to

further statistical analysis. Data screening and pre-analysis were used only in variables which will be used to test the hypotheses.

7.1.1: **Response Rate**

Table 7.1 present the response rate of the respondents. Because of the non-accessibility and unavailability of the entrepreneurs even after tried for 2 to 3 times to meet, we got responses from 271 entrepreneurs out of selected 360 entrepreneurs. The response rate of 75.2% is a valid response rate. In a survey study, a response rate of 30% is acceptable (Sekaran & Bougie, 2010)[1]. Therefore, the response rate in this study is adequate for further analysis.

Table 7.1: Response rate of the respondents

Response	Total
No of selected respondents	360
No of met respondents	271
No of unmet respondents	89
Total Response rate	**75.2%**

7.1.2: Assessment of Missing Data

In this study, the first action we performed that was identifying the missing data collected for the survey. 271 questionnaires were filled-up by one-on-one interview method adopted to collect the data from the entrepreneurs directly. Thereafter, we have conducted a frequency analysis on collected data to check if there is any missing value or any coding mistake. After running the frequency analysis on SPSS version 23, no missing data is found.

[1] Sekaran U, Bougie R. Research methods for business: A skill building approaches (5th ed.). Chichester: John Willey & Sons Ltd, 2010.

7.1.3: Assessment of Multivariate Outliers

Next step of detecting multivariate outliers are done using **Mahalanobis distance (d2)** and **Cooks distance** statistical tools. Four outliers are found with the probability of D^2 less than 0.001 and none of the outliers had a cooks distance greater than 1. We have removed four outliers based on Mahalanobis D^2 as they could affect or distort the result of the data analysis. Mahalanobis D2 and cooks distance for all the cases are reported in Appendix B. Removing the four outliers, final dataset rests at 267 respondents.

7.1.4: Normality Assessment

To determine normality of the data we have applied statistics of Skewness and Kurtosis. The test of normality is run for every individual item of the questionnaire. On the rigorous data cleaning steps, we undertake the recommendations made by Kline (2011)[2] and Hair et al., (2010)[3]. All the observed variables are within the acceptable range i.e. within ±3 for skewness indices and within ±10 for kurtosis indices.

Table 7.2: Normality Test

Items	Skewness Statistic	Kurtosis Statistic	Absolute Skewness	Fitness of Kurtosis	Absolute Kurtosis	Fitness of Kurtosis
AV1	-0.10198	0.041511	-0.68409	Absolutely Fit	0.139737	Absolutely Fit
AV2	-0.14135	0.112397	-0.94821	Absolutely Fit	0.378359	Absolutely Fit
AV3	-0.03467	-0.04351	-0.23255	Absolutely Fit	-0.14645	Absolutely Fit
AV4	-0.01112	-0.13041	-0.07457	Absolutely Fit	-0.439	Absolutely Fit
AV5	-0.18124	0.330867	-1.21578	Absolutely Fit	1.113785	Absolutely Fit
AC1	-0.10589	-0.18724	-0.71035	Absolutely Fit	-0.6303	Absolutely Fit
AC2	-0.13646	0.04101	-0.9154	Absolutely Fit	0.138051	Absolutely Fit
AC3	-0.16569	0.34857	-1.11144	Absolutely Fit	1.173378	Absolutely Fit

[2] **Kline, R. (2011).** Principles and practice of structural equation modeling, (2nd ed.). New York: The Guilford Press.

[3] **Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., & Tatham, R.L. (2010).** *Multivariate Data Analysis*. 7th ed. New York: Pearson.

AC4	-0.06683	-0.08433	-0.44833	Absolutely Fit	-0.28386	Absolutely Fit
AC5	-0.00357	-0.23259	-0.02394	Absolutely Fit	-0.78296	Absolutely Fit
ER1	-0.19728	0.763404	-1.32338	Absolutely Fit	2.56982	Absolutely Fit
ER2	-0.37128	1.320354	-2.49059	Absolutely Fit	4.444662	Absolutely Fit
ER3	-0.20917	0.941949	-1.40313	Absolutely Fit	3.170849	Absolutely Fit
ER4	-0.24539	1.264705	-1.64612	Absolutely Fit	4.257334	Absolutely Fit
F1	-0.17076	0.668252	-1.14547	Absolutely Fit	2.249512	Absolutely Fit
F2	-0.09938	0.717412	-0.66666	Absolutely Fit	2.415	Absolutely Fit
F3	-0.30343	1.02341	-2.03546	Absolutely Fit	3.445069	Absolutely Fit
F4	-0.0393	0.79374	-0.26365	Absolutely Fit	2.67194	Absolutely Fit
TC1	-0.27708	1.738777	-1.85871	Absolutely Fit	5.853186	Absolutely Fit
TC2	-0.12837	0.539157	-0.86111	Absolutely Fit	1.814944	Absolutely Fit
TC3	-0.32716	2.68613	-2.19465	Absolutely Fit	9.042226	Absolutely Fit
TC4	-0.19497	1.22431	-1.30788	Absolutely Fit	4.121353	Absolutely Fit
UT1	-0.4554	1.973937	-3.05488	Slightly unfit	6.644796	Absolutely Fit
UT2	0.157261	2.074913	1.054921	Absolutely Fit	6.984708	Absolutely Fit
UT3	-0.21827	1.557352	-1.46416	Absolutely Fit	5.242461	Absolutely Fit
UT4	0.169953	2.732916	1.140063	Absolutely Fit	9.199721	Absolutely Fit
UT5	0.03617	1.214686	0.242633	Absolutely Fit	4.088956	Absolutely Fit
UT6	-0.06895	1.733316	-0.46253	Absolutely Fit	5.8348	Absolutely Fit
UT7	-0.08631	1.567388	-0.57897	Absolutely Fit	5.276243	Absolutely Fit
FP1	-0.02293	-0.25399	-0.15384	Absolutely Fit	-0.855	Absolutely Fit
FP2	-0.03592	-0.27698	-0.24098	Absolutely Fit	-0.9324	Absolutely Fit
FP3	-0.01267	-0.10595	-0.08499	Absolutely Fit	-0.35665	Absolutely Fit
CF1	0.478853	3.497214	3.2122	Unfit	11.77255	Unfit
CF2	0.425573	2.733085	2.854792	Absolutely Fit	9.200289	Absolutely Fit
CF3	0.137459	2.619134	0.92209	Absolutely Fit	8.816699	Absolutely Fit
CF4	-0.06381	2.441239	-0.42805	Absolutely Fit	8.217857	Absolutely Fit
CF5	0.216467	2.258655	1.452082	Absolutely Fit	7.603232	Absolutely Fit
CF6	0.147977	1.799448	0.992644	Absolutely Fit	6.057419	Absolutely Fit

So, the above test in Table 7.2 indicates that the response data are normality distributed as all the items except two items – UT1 and CF1 are under the range of skewness as well as kurtosis value. The item CF1 is unfit in both the case of skewness as well as kurtosis value range but UT1 is slightly unfit in only in the skewness value range. We have kept

these two items due to their importance though it is observed in later that these two items are removed in SEM Analysis. Therefore, the normality assumption of this study is not violated. Therefore, parametric tests can be used to further analyze the data.

7.1.5: Assessment of Multicollinearity

The result in Table 7.3 shows that the correlation coefficient values are within .218 to .489 which are not higher than the threshold of 0.7 or higher. It is, therefore, concluded that there is no problem of high correlation coefficient among the independent variables.

Table 7.3: Correlations among the Independent Variables

	Availability	Accessibility	Expected Reliance	Facilities	Terms and Conditions
Availability	1				
Accessibility	.244**	1			
Expected Reliance	.295**	.385**	1		
Facilities	.403**	.388**	.229**	1	
Terms and Conditions	.222**	.489**	.413**	.273**	1

**. Correlation is significant at the 0.01 level (2-tailed), N=267.

Secondly, multicollinearity was tested through examination of tolerance and VIF using regression results provided by the SPSS collinearity diagnostics output. As recommended (Hair Jr et al., 2010; Pallant, 2010[4]), these are the most important and reliable test of multicollinearity. In Table 7.4, it is clear that the tolerance ranges between 0.694 and 0.796 substantially greater than acceptable threshold 0.1 and VIF ranges from 1.330 to 1.506, far below than the strict threshold 5. The result shows that multicollinearity does not exist among the variables under study. Though, some researchers also argue that if

[4] **Pallant, J. (2010).** SPSS survival manual: A step by step guide to data analysis using SPSS. Maidenhead.

VIF more than 3, probably there might have multicollinearity problem. In the present case, VIF is less than 3, so no question of multicollinearity arises.

Table 7.4 Multicollinearity Test based on Tolerance and VIF

Independent Variables	Co-linearity Statistics	
	Tolerances	VIF
Availability	.792	1.262
Accessibility	.663	1.509
Expected Reliance	.754	1.326
Facilities	.745	1.342
Terms and Conditions	.696	1.437

7.2: Descriptive Statistics Analysis

Descriptive statistics analysis reflects the general characteristics of the data in a study. Hence, descriptive statistics using frequency and percentage are used to present the summary of data. The demographic profile of the entrepreneurs, details of the enterprises, activities of the enterprises, the purpose of taking loan, and satisfaction with the loan amount are presented in table 7.5, table 7.6, table 7.7, table 7.8, and table 7.9 respectively.

7.2.1: Demographic profiles of the entrepreneurs

Table 7.5 presented the frequency and percentage related to the data of demographic profiles of the entrepreneurs in respect of Micro, Small, and Medium Enterprises.

Table 7.5: Demographic Profiles of the Entrepreneurs

Variable	Sub-group / Category		Enterprises			Total
			Micro	Small	Medium	
Type	Enterprises	F	191	69	7	267
		%	71.5%	25.8%	2.6%	100
Area	West	F	109	30	4	143

	Medinipur	%	57.1%	43.5%	57.1%	53.6%
	East Medinipur	F	82	39	3	124
		%	42.9%	56.5%	42.9%	46.4%
Age	Less than 30 years	F	27	12	0	39
		%	14.1%	17.4%	0.0%	14.6%
	30 - 50 years	F	137	48	2	187
		%	71.7%	69.6%	28.6%	70.0%
	Above 50 Years	F	27	9	5	41
		%	14.1%	13.0%	71.4%	15.4%
Gender	Male	F	132	47	1	180
		%	69.1%	68.1%	14.3%	67.4%
	Female	F	59	22	6	87
		%	30.9%	31.9%	85.7%	32.6%
Education	Below Secondary	F	101	29	0	130
		%	52.9%	42.0%	0.0%	48.7%
	Higher Secondary	F	21	7	1	29
		%	11.0%	10.1%	14.3%	10.9%
	Graduate	F	67	30	6	103
		%	35.1%	43.5%	85.7%	38.6%
	Post Graduate	F	2	2	0	4
		%	1.0%	2.9%	0.0%	1.5%
	Others	F	0	1	0	1
		%	0.0%	1.4%	0.0%	.4%
Designation	Sole Proprietor	F	141	50	0	191
		%	73.8%	72.5%	0.0%	71.5%
	Partners	F	30	11	1	42
		%	15.7%	15.9%	14.3%	15.7%
	Manager	F	20	8	6	34
		%	10.5%	11.6%	85.7%	12.7%
	Others	F	0	0	0	0
		%	0.0%	0.0%	0.0%	0.0%

A total of 267 MSMEs responses are obtained of which 143 enterprises from West Medinipur and 124 enterprises for East Medinipur. The selected entrepreneurs were 191 from Micro enterprises, 69 from small enterprises and only 7 (due to unavailability of registered medium enterprises under DICs) from medium enterprises. Among the respondents, 70 % are under the age of 30 to 50 followed by 15.4 % above 50 and 14.6 % of less than 30 year age. 67.4 % are male respondents and rest 32.6 % are female respondents. 48.7 % are below secondary education background followed by 38.6 % graduated, 10.9 % higher secondary, 1.5 % post graduated, and only 0.4% from other educational backgrounds. And 71.5 % of the total respondents are the sole proprietor, 15.7 % are from partnership business and remaining 12.7 % are managers of the respective business.

7.2.2: Detailed Profile of the Enterprises

Table 7.6 presented the frequency and percentage related to the data of details of enterprises in respect of Micro, Small, and Medium Enterprises with the value of Chi-square test and Cramer's V test results are incorporated here.

Table 7.6: Detailed Profile of the Enterprises

Variable	Sub-groups/ Category	F/P	Type of enterprises			Total	Test Statistics
			Micro	Small	Medium		
Nature of enterprises	Manufacturing	F	124	35	2	161	**Chi-square = 11.330 Sig. = 0.001**
		%	64.9%	50.7%	28.6%	60.3%	
	Servicing	F	67	34	5	106	
		%	35.1%	49.3%	71.4%	39.7%	
	Cramer's V = 0.165, Sig.= 0.026						
Natures of ownership	Single proprietorship	F	142	51	0	193	**Chi-square =**
		%	74.3%	73.9%	0.0%	72.3%	

	Partnership	F	36	14	0	50	**334.723**
		%	18.8%	20.3%	0.0%	18.7%	**Sig. = 0.000**
	Private Ltd.	F	12	4	4	20	
		%	6.3%	5.8%	57.1%	7.5%	
	Public Ltd.	F	1	0	3	4	
		%	.5%	0.0%	42.9%	1.5%	
	Cramer's V = 0.459, Sig.= 0.000						
Year of obtaining Loan	2010-11	F	47	14	0	61	
		%	24.6%	20.3%	0.0%	22.8%	
	2011-12	F	32	12	0	44	
		%	16.8%	17.4%	0.0%	16.5%	**Chi-square = 26.165 Sig. = 0.000**
	2012-13	F	20	4	5	29	
		%	10.5%	5.8%	71.4%	10.9%	
	2013-14	F	57	21	1	79	
		%	29.8%	30.4%	14.3%	29.6%	
	2014-15	F	35	18	1	54	
		%	18.3%	26.1%	14.3%	20.2%	
	Cramer's V = 0.240, Sig.= 0.000						
No of Employees	Less than 15	F	145	16	0	161	
		%	75.9%	23.2%	0.0%	60.3%	**Chi-square = 116.494 Sig. = 0.000**
	15 to 50	F	44	44	1	89	
		%	23.0%	63.8%	14.3%	33.3%	
	Above 50	F	2	9	6	17	
		%	1.0%	13.0%	85.7%	6.4%	
	Cramer's V = 0.505, Sig.= 0.000						
Investment on Plant and Machinery or Equipment	< 10 lakhs	F	102	0	0	102	
		%	53.4%	0.0%	0.0%	38.2%	
	< 25 lakhs	F	89	0	0	89	
		%	46.6%	0.0%	0.0%	33.3%	**Chi-square = 66.648 Sig. = 0.000**
	< 1 Crore	F	0	59	2	61	
		%	0.0%	85.5%	28.6%	22.8%	
	< 5 Crore	F	0	10	5	15	
		%	0.0%	14.5%	71.4%	5.6%	
	> 5 Crore	F	0	0	0	0	
		%	0.0 %	0.0 %	0.0 %	0.0 %	
	Cramer's V = 0.765, Sig.= 0.000						
Turnover	< 10 lakhs	F	7	0	0	7	**Chi-square**

		%	3.7%	0.0%	0.0%	2.6%	=
	< 25 lakhs	F	61	0	0	61	**173.281**
		%	31.9%	0.0%	0.0%	22.8%	**Sig. = 0.000**
	< 1 Crore	F	123	3	0	126	
		%	64.4%	4.3%	0.0%	47.2%	
	< 5 Crore	F	0	59	2	61	
		%	0.0%	85.5%	28.6%	22.8%	
	> 5 Crore	F	0	7	5	12	
		%	0.0%	10.1%	71.4%	4.5%	
	Cramer's V = 0.768, Sig.= 0.000						

Author's Calculation
F=Frequency and P= Percentage

Chi-square test reveals in the Table 7.6 that there is a statistically significant difference among the sub-groups of variables types of enterprises (χ^2= 11.33, p < 0.01), Nature of ownership (χ^2= 334.72; p < 0.01), Year of obtaining loan (χ^2= 26.16, p < 0.01), No of employees (χ^2= 116.49, p < 0.01), Investment (χ^2= 66.64, p < 0.01) and Turnover (χ^2= 173.281; p < 0.01) except Area of the study (χ^2= 1.35; p= 0.245) across micro, small, and Medium Enterprises. As the p value of the chi-square is significant at 1 % level of significance.

When we applied the Cramer's V test to verify the association between the types of enterprise and enterprise variables, found that there is a weak positive significant association between the variables Year of obtaining Loan and types of enterprise (CV= 0.24; p < 0.01), whereas we find the Nature of ownership is moderately associated with the types of enterprises (CV= 0.459, p < 0.01). However, we notice a strong positive association between the types of enterprises and rest of the variables- Number of employees (CV= 0.50, p < 0.01), Investment (CV= 0.765, p < 0.01), and turnover (CV= 0.768, p < 0.01).

7.2.3: Activity of the Enterprises

We present the frequency and percentage distribution of activities of the enterprises in below Table 7.7. It has also presented graphically with the help of pie-charts separately for the activities of manufacturing units as well as for the activities of servicing units in Figure 7.1 and 7.2 respectively.

Table 7.7: Activity of the Enterprises

Manufacturing Industries	F/P	Value	Servicing Industries	F/P	Value
Rice processing units	F	18	Decorating Servicing units	F	12
	%	11.18%		%	11.32%
Cashew Processing units	F	26	DTP and Printing	F	14
	%	16.15%		%	13.21%
Fabricated Structural Products	F	14	Repairs and Maintenance	F	18
	%	8.70%		%	16.98%
Wooden Furniture	F	18	Hotel and Restaurant	F	6
	%	11.18%		%	5.66%
RMG mfg. unit	F	24	Hosiery tailoring cutting cloth	F	12
	%	14.91%		%	11.32%
Grill & Steel Mfg. units	F	14	Beauty parlour	F	15
	%	8.70%		%	14.15%
Mat Making	F	17	Household Electric Repairing	F	08
	%	10.56%		%	7.55%
Textiles	F	10	Lathe work	F	06
	%	6.21%		%	5.66%
Handicrafts	F	8	Human hair processing units	F	09
	%	4.97%		%	8.49%
Muri mfg. unit	F	12	Computer assembling & servicing	F	06
	%	7.45%		%	5.66%
Total		**161**	**Total**		**106**

Source: Author's Calculation; F = Frequency; P = Percentage.

Figure 7.1: Activities of manufacturing units

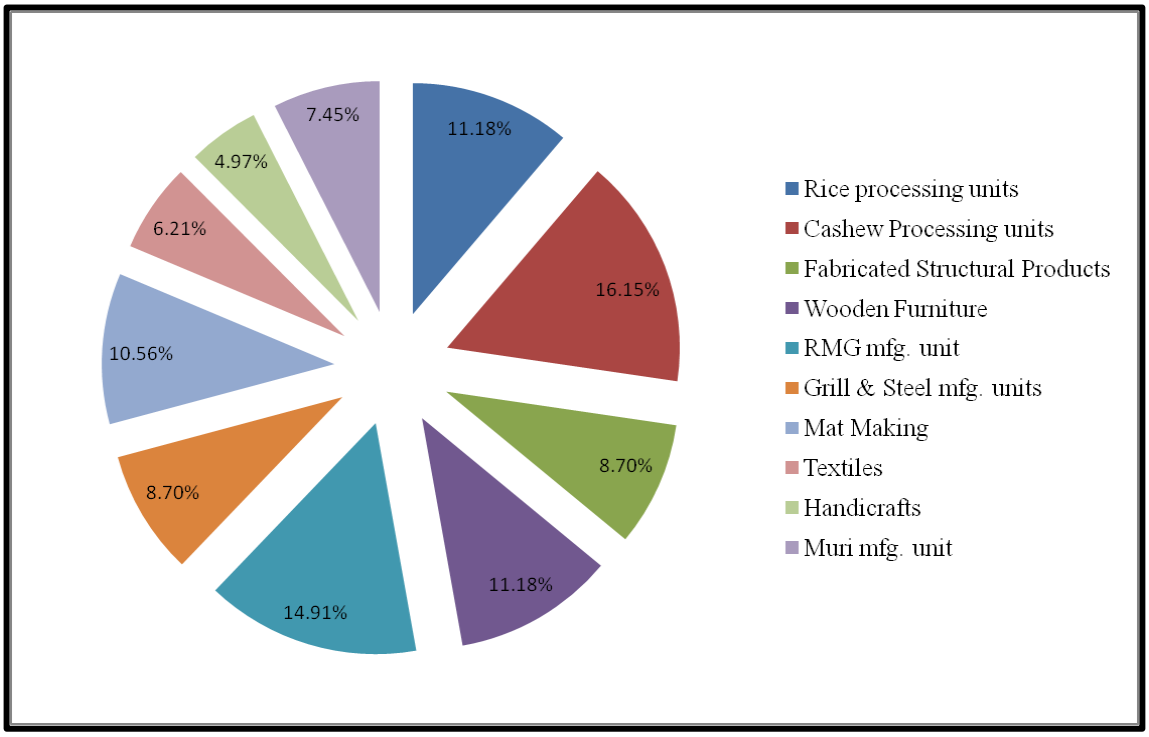
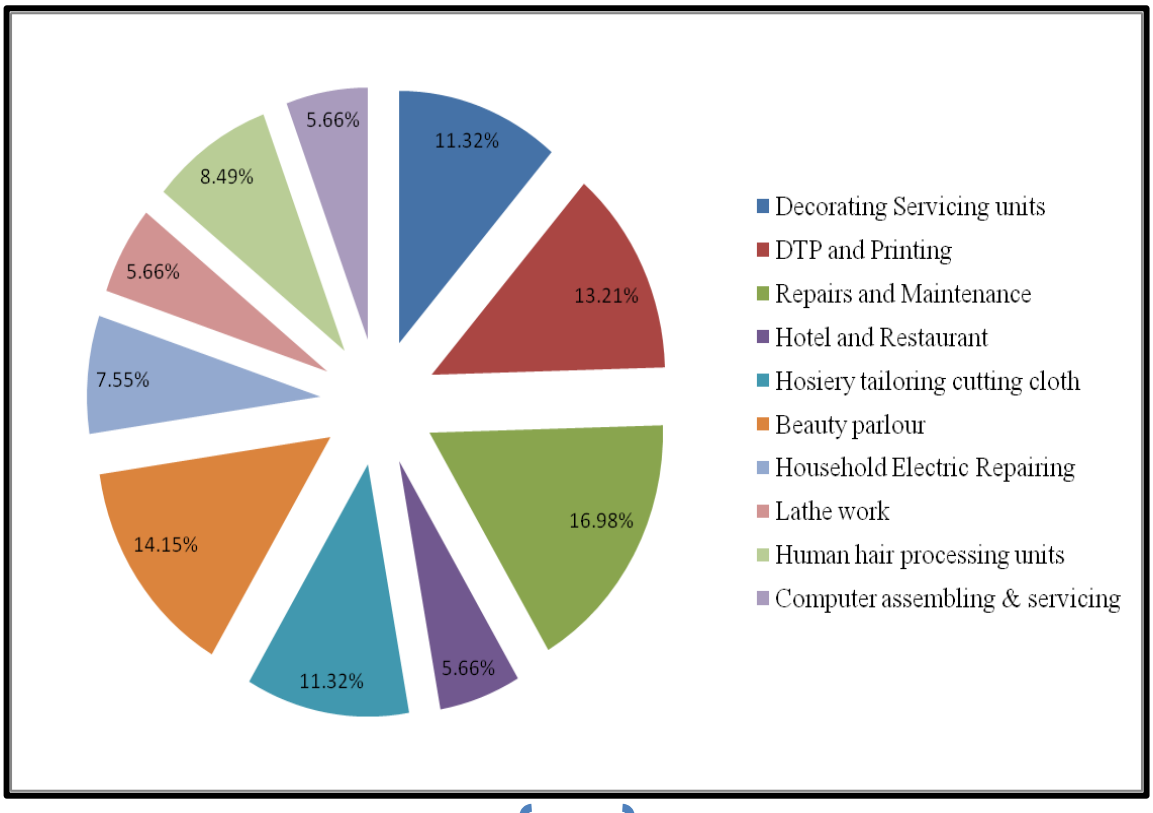


Figure 7.2: Activities of servicing units



The field survey covered both manufacturers as well as services industries. Based on the nature of work activities, each industry is classified into ten categories. Figure 7.1 show, 16.15 % of the total manufacturing units were from cashew processing units followed by RMG product mfg. and others. In the servicing units (Figure 7.2), 16.98 % of the total servicing units were from vehicles repair and maintenance units followed by Beauty Parlours and others.

7.2.4: Uses of Obtained Loan

Table 7.8 reflects the frequency and percentage of distributions of the uses of obtained loan from different public sector banks.

Table 7.8: Uses of Obtain Loan

Purpose of Loan			Micro	Small	Medium	Total	Test Statistics
To increase Size and Modernization	Yes	F	125	48	1	174	**Chi-square = 24.573 Sig. = 0.000**
		%	65.4%	69.6%	14.3%	65.2%	
	No	F	66	21	6	93	
		%	34.6%	30.4%	85.7%	34.8%	
	Cramer's V = 0.179, Sig.= 0.014						
To maintain Working Capital	Yes	F	150	54	2	206	**Chi-square = 78.745 Sig. = 0.000**
		%	78.5%	78.3%	28.6%	77.2%	
	No	F	41	15	5	61	
		%	21.5%	21.7%	71.4%	22.8%	
	Cramer's V = 0.190, Sig.= 0.008						
Towards Capital Formation	Yes	F	174	16	7	197	**Chi-square = 60.408 Sig. = 0.000**
		%	91.1%	23.2%	100.0%	73.8%	
	No	F	17	53	0	70	
		%	8.9%	76.8%	0.0%	26.2%	
	Cramer's V = 0.680, Sig.= 0.000						
To buy/ increase Fixed Assets	Yes	F	74	34	6	114	**Chi-square = 5.697 Sig. = 0.017**
		%	38.7%	49.3%	85.7%	42.7%	
	No	F	117	35	1	153	
		%	61.3%	50.7%	14.3%	57.3%	
	Cramer's V = 0.170, Sig.= 0.021						

Author's Calculation

The table reveals that the entrepreneurs who obtained loan for the various purposes to improve their business performance.

When chi-square is applied to verify the significant differences, it is found that 65.2 % of the total enterprises are used obtained loan for increasing the size or modernization of the business (χ^2= 24.57, p<0.01), 77.2 % for maintaining the working capital (χ^2= 78.74, p<0.01), 73.8 % for capital formation purpose (χ^2= 60.40, p<0.01), and 42.7 % for the purpose of buying the fixed assets (χ^2= 5.69, p<0.01) across micro, small, and Medium Enterprises. As the p-value of the chi-square is significant at 1 % level of significance.

Hence, Cramer's V shows that there is a statistically positive significant strong association between the variable Capital Formation and the types of enterprise (CV= 0.68, p < 0.01), whereas we find a statistically significant positive weak association between the rest variables and types of enterprises- To increase Size and Modernization (CV= 0.18, p < 0.05), To maintain Working Capital (0.19, p < 0.01), and To buy/ increase Fixed Assets (0.17, p < 0.05).

7.2.5: Level of Satisfaction with the availed loan

Table 7.9 reflects the frequency and percentage of distributions of the satisfaction with the availed loan obtained from different public sector Banks.

Table 7.9: Level of Satisfaction with the availed loan

Satisfaction level		F/P	Micro	Small	Medium	Total	Test Statistics
Loan amount invested in the Enterprise	Less than 50 %	F	13	5	0	18	**Chi-square = 123.633 Sig. = 0.000**
		%	6.8%	7.2%	0.0%	6.7%	
	51 % to 75%	F	58	22	3	83	
		%	30.4%	31.9%	42.9%	31.1%	
	Above 75 %	F	120	42	4	166	
		%	62.8%	60.9%	57.1%	62.2%	

	Cramer's V = 0.041, Sig.= 0.922						
Satisfaction level with the Loan	Low Satisfied	F	20	10	0	30	**Chi-square = 85.416 Sig. = 0.000**
		%	10.5%	14.5%	0.0%	11.2%	
	Moderately Satisfied	F	117	35	1	153	
		%	61.3%	50.7%	14.3%	57.3%	
	Highly Satisfied	F	54	24	6	84	
		%	28.3%	34.8%	85.7%	31.5%	
	Cramer's V = 0.151, Sig.= 0.016						

Author's Calculation

The Chi-square test reveals that there is also a statistically significant difference among the responses on loan amount invested in the enterprises (χ^2= 123.63, p< 0.01), 62.2 % of entrepreneurs have invested loan amount above 75 % out of total in total investment in their enterprises followed by 31.1 % of them having 51 % to 75 % loan amount and least 6.7 % of them having less than 50 % loan amount in their respective business in which Cramer's V was statistically non significant (CV= 0.041; p>0.05). Test also revealed a statistically significant difference in the response regarding to know the satisfaction level with the availed loan (χ^2= 85.41, p< 0.01), 31.5 % of respondents were highly satisfied followed by 57.3 % of them moderately satisfied and 11.2 l% low satisfied with the availed loan where Cramer's V was having weekly positive association (CV= 0.15; p<0.05) with the types of MSMEs.

7.2.6: Utility of PSB's Loan Facilities

To measure the PSB's Loan Facilities towards MSMEs, we have twenty two items under different five dimensions namely Availability of loan, Accessibility of the loan, Expected reliance upon the loan, facilities provided with the loan, and terms and conditions applied with the loan. Table 7.10 presented the frequency and percentage with mean, chi-square and Cramer's value of different items under these dimensions.

Table 7.10: Utility of PSB's Loan Facilities

Items	Responses		Micro	Small	Medium	Total	Test Statistics
Dimension 1: Availability of loan, Average mean for Availability is 3.8337							
Public Sector Banks developed a different type of loan schemes for the growth of MSMEs. **(AV1)**	Very insignificant	F	0	0	0	0	Chi-square = 154.539 Sig. = 0.000
		%	0.0%	0.0%	0.0%	0.0%	
	insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	fairly significant	F	49	15	2	66	
		%	25.7%	21.7%	28.6%	24.7%	
	Significant	F	131	48	2	181	
		%	68.6%	69.6%	28.6%	67.8%	
	Very much significant	F	11	6	3	20	
		%	5.8%	8.7%	42.9%	7.5%	
	Cramer's V = 0.165, Sig.= 0.006, Mean= 3.8277						
The schemes are designed to meet the need of this desired group of enterprise **(AV2)**	Very insignificant	F	0	0	0	0	Chi-square = 275.007 Sig. = 0.000
		%	0.0%	0.0%	0.0%	0.0%	
	insignificant	F	1	0	0	1	
		%	.5%	0.0%	0.0%	.4%	
	fairly significant	F	48	19	2	69	
		%	25.1%	27.5%	28.6%	25.8%	
	Significant	F	128	45	3	176	
		%	67.0%	65.2%	42.9%	65.9%	
	Very much significant	F	14	5	2	21	
		%	7.3%	7.2%	28.6%	7.9%	
	Cramer's V = 0.097, Sig.= 0.537, Mean= 3.8127						
The schemes are very transparent grip and within the ability of common entrepreneurs. **(AV3)**	Very insignificant	F	0	0	0	0	Chi-square = 140.427 Sig. = 0.000
		%	0.0%	0.0%	0.0%	0.0%	
	insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	fairly significant	F	50	13	3	66	
		%	26.2%	18.8%	42.9%	24.7%	
	Significant	F	125	48	4	177	
		%	65.4%	69.6%	57.1%	66.3%	
	Very much significant	F	16	8	0	24	
		%	8.4%	11.6%	0.0%	9.0%	
	Cramer's V = 0.081, Sig.= 0.476, Mean= 3.8427						
How will you rate	Very	F	0	0	0	0	Chi-square =

your experience regarding the process of getting loan with the Public Sector Bank **(AV4)**	insignificant	%	0.0%	0.0%	0.0%	0.0%	133.146
	insignificant	F	0	0	0	0	Sig. = 0.000
		%	0.0%	0.0%	0.0%	0.0%	
	fairly significant	F	50	18	1	69	
		%	26.2%	26.1%	14.3%	25.8%	
	Significant	F	125	45	4	174	
		%	65.4%	65.2%	57.1%	65.2%	
	Very much significant	F	16	6	2	24	
		%	8.4%	8.7%	28.6%	9.0%	
	Cramer's V = 0.081, Sig.= 0.476, Mean= 3.8351						
The Bank was able to fulfill your Expectation **(AV5)**	Very insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	fairly significant	F	44	13	2	59	Chi-square =
		%	23.0%	18.8%	28.6%	22.1%	177.528
	Significant	F	134	51	4	189	Sig. = 0.000
		%	70.2%	73.9%	57.1%	70.8%	
	Very much significant	F	13	5	1	19	
		%	6.8%	7.2%	14.3%	7.1%	
	Cramer's V = 0.051, Sig.= 0.851, Mean= 3.8502						
Dimension 2: Accessibility of loan, Average mean for Accessibility is 3.8127							
Entrepreneurs in this locality who are facing hardness to get money from other source used PSBs money for their growth. **(AC1)**	Very insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	fairly significant	F	57	18	0	75	Chi-square =
		%	29.8%	26.1%	0.0%	28.1%	147.125
	Significant	F	126	46	4	176	Sig. = 0.000
		%	66.0%	66.7%	57.1%	65.9%	
	Very much significant	F	8	5	3	16	
		%	4.2%	7.2%	42.9%	6.0%	
	Cramer's V = 0.191, Sig.= 0.001, Mean= 3.7790						
Now a day's these loans are easily accessible to start-up a business.	Very insignificant	F	0	0	0	0	Chi-square =
		%	0.0%	0.0%	0.0%	0.0%	159.258
	insignificant	F	0	0	0	0	Sig. = 0.000
		%	0.0%	0.0%	0.0%	0.0%	

(AC2)	fairly significant	F	51	16	0	67	
		%	26.7%	23.2%	0.0%	25.1%	
	Significant	F	132	47	3	182	
		%	69.1%	68.1%	42.9%	68.2%	
	Very much significant	F	8	6	4	18	
		%	4.2%	8.7%	57.1%	6.7%	
	Cramer's V = 0.242, Sig.= 0.000, Mean= 3.8165						
PSBs loan fund is used by the entrepreneurs for their business growth **(AC3)**	Very insignificant	F	0	0	0	0	Chi-square = 176.652 Sig. = 0.000
		%	0.0%	0.0%	0.0%	0.0%	
	insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	fairly significant	F	45	13	0	58	
		%	23.6%	18.8%	0.0%	21.7%	
	Significant	F	135	49	5	189	
		%	70.7%	71.0%	71.4%	70.8%	
	Very much significant	F	11	7	2	20	
		%	5.8%	10.1%	28.6%	7.5%	
	Cramer's V = 0.120, Sig.= 0.105, Mean= 3.8577						
The purpose of this fund is for the growth of people in general and it is encouraged by Bank authorities. **(AC4)**	Very insignificant	F	0	0	0	0	Chi-square = 144.562 Sig. = 0.000
		%	0.0%	0.0%	0.0%	0.0%	
	insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	fairly significant	F	49	20	1	70	
		%	25.7%	29.0%	14.3%	26.2%	
	Significant	F	132	43	2	177	
		%	69.1%	62.3%	28.6%	66.3%	
	Very much significant	F	10	6	4	20	
		%	5.2%	8.7%	57.1%	7.5%	
	Cramer's V = 0.225, Sig.= 0.000, Mean= 3.8127						
People unable to get money from another source, use this source for growth of personal venture etc. **(AC5)**	Very insignificant	F	0	0	0	0	Chi-square = 129.708 Sig. = 0.000
		%	0.0%	0.0%	0.0%	0.0%	
	insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	fairly significant	F	52	23	0	75	
		%	27.2%	33.3%	0.0%	28.1%	
	Significant	F	127	40	4	171	
		%	66.5%	58.0%	57.1%	64.0%	

	Very much significant	F	12	6	3	21	
		%	6.3%	8.7%	42.9%	7.9%	
	Cramer's V = 0.167, Sig.= 0.005, Mean= 3.7978						
Dimension 3: Expected Reliance upon the loan, Average mean for Expected Reliance is 3.9036							
PSBs loan fund is used by neighbours for their economic growth **(ER1)**	Very insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	fairly significant	F	30	18	1	49	Chi-square = 200.989
		%	15.7%	26.1%	14.3%	18.4%	
	Significant	F	149	45	3	197	Sig. = 0.000
		%	78.0%	65.2%	42.9%	73.8%	
	Very much significant	F	12	6	3	21	
		%	6.3%	8.7%	42.9%	7.9%	
	Cramer's V = 0.177, Sig.= 0.002, Mean= 3.8951						
PSBs loan fund is very much dependable and reliable. **(ER2)**	Very insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	fairly significant	F	32	10	2	44	Chi-square = 239.079
		%	16.8%	14.5%	28.6%	16.5%	
	Significant	F	150	53	4	207	Sig. = 0.000
		%	78.5%	76.8%	57.1%	77.5%	
	Very much significant	F	9	6	1	16	
		%	4.7%	8.7%	14.3%	6.0%	
	Cramer's V = 0.079, Sig.= 0.498, Mean= 3.8951						
PSBs loan fund has been used by me earlier satisfactorily **(ER3)**	Very insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	fairly significant	F	32	13	1	46	Chi-square = 211.169
		%	16.8%	18.8%	14.3%	17.2%	
	Significant	F	146	49	5	200	Sig. = 0.000
		%	76.4%	71.0%	71.4%	74.9%	
	Very much significant	F	13	7	1	21	
		%	6.8%	10.1%	14.3%	7.9%	
	Cramer's V = 0.052, Sig.= 0.832, Mean= 3.9064						

Entrepreneurs are satisfied with the bank dealings **(ER4)**	Very insignificant	F	0	0	0	0	Chi-square = 229.506 Sig. = 0.000
		%	0.0%	0.0%	0.0%	0.0%	
	insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	fairly significant	F	30	11	1	42	
		%	15.7%	15.9%	14.3%	15.7%	
	Significant	F	149	53	3	205	
		%	78.0%	76.8%	42.9%	76.8%	
	Very much significant	F	12	5	3	20	
		%	6.3%	7.2%	42.9%	7.5%	
	Cramer's V = 0.157, Sig.= 0.011, Mean= 3.9176						
Dimension 4: Facilities provided with the loan, Average mean for Facilities is 3.9232							
PSBs gives the scope of strategic development of the firm **(F1)**	Very insignificant	F	0	0	0	0	Chi-square = 193.775 Sig. = 0.000
		%	0.0%	0.0%	0.0%	0.0%	
	insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	fairly significant	F	28	20	2	50	
		%	14.7%	29.0%	28.6%	18.7%	
	Significant	F	150	40	5	195	
		%	78.5%	58.0%	71.4%	73.0%	
	Very much significant	F	13	9	0	22	
		%	6.8%	13.0%	0.0%	8.2%	
	Cramer's V = 0.149, Sig.= 0.019, Mean= 3.8951						
There is special provision for a subsidy **(F2)**	Very insignificant	F	0	0	0	0	Chi-square = 191.191 Sig. = 0.000
		%	0.0%	0.0%	0.0%	0.0%	
	insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	fairly significant	F	31	14	0	45	
		%	16.2%	20.3%	0.0%	16.9%	
	Significant	F	144	45	6	195	
		%	75.4%	65.2%	85.7%	73.0%	
	Very much significant	F	16	10	1	27	
		%	8.4%	14.5%	14.3%	10.1%	
	Cramer's V = 0.093, Sig.= 0.333, Mean= 3.9326						
Bank gives special discount in interest in case of repaying	Very insignificant	F	0	0	0	0	Chi-square = 345.899 Sig. = 0.000
		%	0.0%	0.0%	0.0%	0.0%	
	insignificant	F	1	0	0	1	

before the time of repay **(F3)**		%	.5%	0.0%	0.0%	.4%	
	fairly significant	F	36	13	0	49	
		%	18.8%	18.8%	0.0%	18.4%	
	Significant	F	143	47	5	195	
		%	74.9%	68.1%	71.4%	73.0%	
	Very much significant	F	11	9	2	22	
		%	5.8%	13.0%	28.6%	8.2%	
	Cramer's V = 0.129, Sig.= 0.179, Mean= 3.8914						
Bank gives special look in case of bad time of business **(F4)**	Very insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	fairly significant	F	26	13	0	39	Chi-square = 193.236 Sig. = 0.000
		%	13.6%	18.8%	0.0%	14.6%	
	Significant	F	146	45	5	196	
		%	76.4%	65.2%	71.4%	73.4%	
	Very much significant	F	19	11	2	32	
		%	9.9%	15.9%	28.6%	12.0%	
	Cramer's V = 0.106, Sig.= 0.196, Mean= 3.9738						
Dimension 5: Terms and Conditions applied with the loan, Average mean for Terms and Conditions is 3.9335							
Earlier loans had been taken and complied with the terms and conditions. **(TC1)**	Very insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	fairly significant	F	25	12	0	37	Chi-square = 252.674 Sig. = 0.000
		%	13.1%	17.4%	0.0%	13.9%	
	Significant	F	152	53	6	211	
		%	79.6%	76.8%	85.7%	79.0%	
	Very much significant	F	14	4	1	19	
		%	7.3%	5.8%	14.3%	7.1%	
	Cramer's V = 0.096, Sig.= 0.654, Mean= 3.9326						
There are provisions to make the terms and conditions flexible in genuine causes.	Very insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	Chi-square = 182.899 Sig. = 0.000
	insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	fairly	F	40	9	2	51	

(TC2)	significant	%	20.9%	13.0%	28.6%	19.1%	
	Significant	F	135	55	2	192	
		%	70.7%	79.7%	28.6%	71.9%	
	Very much significant	F	16	5	3	24	
		%	8.4%	7.2%	42.9%	9.0%	
	Cramer's V = 0.160, Sig.= 0.008, Mean= 3.8989						
Since the terms and conditions are the soft and pro-people need. People mostly comply with these. **(TC3)**	Very insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	insignificant	F	1	0	0	1	
		%	.5%	0.0%	0.0%	.4%	
	fairly significant	F	22	6	1	29	Chi-square = 433.929 Sig. = 0.000
		%	11.5%	8.7%	14.3%	10.9%	
	Significant	F	151	58	4	213	
		%	79.1%	84.1%	57.1%	79.8%	
	Very much significant	F	17	5	2	24	
		%	8.9%	7.2%	28.6%	9.0%	
	Cramer's V = 0.094, Sig.= 0.584, Mean= 3.9738						
Terms and conditions are regularly development economic growth to meet the need of Entrepreneurs **(TC4)**	Very insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	fairly significant	F	25	15	1	41	Chi-square = 224.921 Sig. = 0.000
		%	13.1%	21.7%	14.3%	15.4%	
	Significant	F	149	50	5	204	
		%	78.0%	72.5%	71.4%	76.4%	
	Very much significant	F	17	4	1	22	
		%	8.9%	5.8%	14.3%	8.2%	
	Cramer's V = 0.082, Sig.= 0.461, Mean= 3.9288						

7.2.6.1: Availability of PSB's Loan: hence, we have used five different items to measure the satisfaction level of MSMEs on the availability of loan from Public Sector Banks which is influencing the utilization of the loan in their respective business. During the field survey, it was observed that majority of the entrepreneurs (i.e., lowest 65.2% in AV4 and Highest 70.8% in AV5) opined that the availability of loans provided by public sector

banks is significant (Mean= 3.8337) for the improvement of utilization. No one said that the items under availability of loan from PSBs are insignificant. There are statistically significant differences exists among the responses in each items of accessibility of PSB's loan (i.e., χ^2= 154.539; p < 0.01 (AV1), χ^2= 275.007; p < 0.01 (AV2), χ^2= 140.427; p < 0.01 (AV3), χ^2= 133.146; p < 0.01 (AV4), and χ^2= 177.528; p < 0.01 (AV5)).

Further comparison between items of availability of loan and the types of MSMEs revealed that there is weak and positive association relationship between the AV1 and types of MSMEs (CV= 0.165; p < 0.01) and rests of the items have no significant association with the types of MSMEs where p > 0.01.

7.2.6.2: Accessibility of the loan: Hence, we have tried to measure the accessibility of the loan availed from PSBs towards MSMEs to get better the utilization of loan in the Enterprises. During the field survey, it was observed that majority of the entrepreneurs (i.e., lowest 64% in AC5 and Highest 70.8% in AC3) opined that the accessibility of loan provided by public sector banks is significant (Mean= 3.8127) for the improvement of utilization. No one said that the items under the accessibility of that loan are insignificant. There are statistically significant differences exists among the responses in each items of accessibility of loan (i.e., χ^2= 147.125; p < 0.01 (AC1), χ^2= 159.258; p < 0.01 (AC2), χ^2= 176.652; p < 0.01 (AC3), χ^2= 144.562; p < 0.01 (AC4), and χ^2= 129.708; p < 0.01 (AC5)).

When Cramer's V was applied to test the association between the items of Accessibility of loan and the types of enterprises, it was found that there are significant association exists among all items of accessibility of loan except AC3 with the types of enterprises though the association was weak and positive (i.e., CV= 0.191; p < 0.01 (AC1), CV= 0.242; p < 0.01 (AC2), CV= 0.225; p < 0.01 (AC4), and CV= 0.167; p < 0.01 (AC5)).

7.2.6.3: Expected reliance upon the loan: Next, we have developed four items under expected reliance to understand the expected reliance of the entrepreneurs upon the PSB's loan which is influencing the utilization of the PSB's loan. The survey reveals that the majority of the entrepreneurs (i.e., lowest 73.8% in ER1 and Highest 77.5% in ER2) opine the utilization is significantly depending on the PSB's loan (Mean= 3.9036). No one said that the items under expected reliance are insignificant. There are statistically significant differences exists among the responses in each items of expected reliance (i.e., χ^2= 200.989; $p < 0.01$ (ER1), χ^2= 239.079; $p < 0.01$ (ER2), χ^2= 211.169; $p < 0.01$ (ER3), and χ^2= 229.506; $p < 0.01$ (ER4)).

Cramer's V revealed that there is significant association exists among the items ER1 and ER4 under the expected reliance with the types of enterprises though the association was weak and positive (i.e., CV= 0.177; $p < 0.01$ (ER1), and CV= 0.157; $p < 0.05$ (ER4)). Rests are shows the insignificant relationship.

7.2.6.4: Facilities provided with the loan: Again, we have developed four items under facilities to measure the satisfaction level with the facilities provided with the loan from PSBs to influence the utilization freely in the business. Majority of the entrepreneurs (i.e., 73% in almost all the items) give their opinion that they are mostly happy with the PSBs facilities (mean= 3.9232). Only one entrepreneur says that the item F3 under facilities of PSBs is insignificant. There are also statistically significant differences exists among the responses in each items of PSBs facilities (i.e., χ^2= 193.775; $p < 0.01$ (F1), χ^2= 191.191; $p < 0.01$ (F2), χ^2= 345.899; $p < 0.01$ (F3), χ^2= 193.236; $p < 0.01$ (F4)).

Cramer's V shows a significant association exists among the item F1 under the facilities with the types of enterprises which has weak and positive association (i.e., CV= 0.149; $p < 0.05$).

7.2.6.5: Terms and Conditions applied with the loan: Lastly, we have developed another four items under terms and conditions applied with the loan facilities towards the MSMEs. The majority of the entrepreneurs (i.e., lowest 71.9% in TC2 and Highest 79.8% in TC3) strongly feel that terms and condition of PSBs are flexible and regularly developed for the MSMEs (Mean= 3.9335). According to them the flexibility of terms and conditions are also influencing the utilization. Again, only one of the total entrepreneur said that the item TC3 under terms and conditions applied by PSBs is insignificant. There are also statistically significant differences exists among the responses exists in each items of terms and conditions (i.e., χ^2= 252.674; $p < 0.01$ (TC1), χ^2= 182.899; $p < 0.01$ (TC2), χ^2= 433.929; $p < 0.01$ (TC3), χ^2= 224.921; $p < 0.01$ (TC4)).

Cramer's V shows a significant association exists among the item TC2 under the terms and conditions with the types of enterprises which have a weak and positive association (i.e., CV= 0.160; $p < 0.01$).

7.2.7: Utilizations of Bank's Loan

Hence, we have developed seven items under the utilization dimension to know how they have utilized the obtained loan fund for the improvement of Financial Performance as well as Capital Formation in the future. Below Table 7.11 presented the frequency and percentage with mean, chi-square and Cramer's value of different items under the dimension.

Table 7.11: Utilization of Bank's Loan in the MSMEs

Items	Responses	F/P	Micro	Small	Medium	Total	Test Statistics

Entrepreneurs are able to allocation the loan fund on a priority basis **(UT1)**	Very insignificant	F	0	0	0	0	Chi-square = 353.120 Sig. = 0.000
		%	0.0%	0.0%	0.0%	0.0%	
	insignificant	F	3	0	0	3	
		%	1.6%	0.0%	0.0%	1.1%	
	fairly significant	F	28	6	0	34	
		%	14.7%	8.7%	0.0%	12.7%	
	Significant	F	140	54	4	198	
		%	73.3%	78.3%	57.1%	74.2%	
	Very much significant	F	20	9	3	32	
		%	10.5%	13.0%	42.9%	12.0%	
	Cramer's V = 0.137, Sig.= 0.126, Mean= 3.9700						
Entrepreneurs are able to disburse the allocated fund to the stakeholders **(UT2)**	Very insignificant	F	0	0	0	0	Chi-square = 263.798 Sig. = 0.000
		%	0.0%	0.0%	0.0%	0.0%	
	insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	fairly significant	F	17	5	0	22	
		%	8.9%	7.2%	0.0%	8.2%	
	Significant	F	152	58	4	214	
		%	79.6%	84.1%	57.1%	80.1%	
	Very much significant	F	22	6	3	31	
		%	11.5%	8.7%	42.9%	11.6%	
	Cramer's V = 0.121, Sig.= 0.101, Mean= 4.0337						
Fund helps to meet up the Working Capital Management **(UT3)**	Very insignificant	F	0	0	0	0	Chi-square = 370.109 Sig. = 0.000
		%	0.0%	0.0%	0.0%	0.0%	
	insignificant	F	1	0	0	1	
		%	.5%	0.0%	0.0%	.4%	
	fairly significant	F	26	9	0	35	
		%	13.6%	13.0%	0.0%	13.1%	
	Significant	F	145	51	5	201	
		%	75.9%	73.9%	71.4%	75.3%	
	Very much significant	F	19	9	2	30	
		%	9.9%	13.0%	28.6%	11.2%	
	Cramer's V = 0.084, Sig.= 0.711, Mean= 3.9738						
All transactions are completed timely in a	Very insignificant	F	0	0	0	0	Chi-square = 289.506 Sig. =
		%	0.0%	0.0%	0.0%	0.0%	
	insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	

cost-efficient manner **(UT4)**	fairly significant	F	14	6	0	20	0.000
		%	7.3%	8.7%	0.0%	7.5%	
	Significant	F	158	57	5	220	
		%	82.7%	82.6%	71.4%	82.4%	
	Very much significant	F	19	6	2	27	
		%	9.9%	8.7%	28.6%	10.1%	
	Cramer's V = 0.078, Sig.= 0.514, Mean= 4.0262						
Allotted funds keep little financial obligations for the next cycle of production **(UT5)**	Very insignificant	F	0	0	0	0	Chi-square = 219.124 Sig. = 0.000
		%	0.0%	0.0%	0.0%	0.0%	
	insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	fairly significant	F	19	11	0	30	
		%	9.9%	15.9%	0.0%	11.2%	
	Significant	F	149	50	4	203	
		%	78.0%	72.5%	57.1%	76.0%	
	Very much significant	F	23	8	3	34	
		%	12.0%	11.6%	42.9%	12.7%	
	Cramer's V = 0.123, Sig.= 0.088, Mean= 4.0150						
Funds are sufficient to recover due financial liabilities if any **(UT6)**	Very insignificant	F	0	0	0	0	Chi-square = 246.899 Sig. = 0.000
		%	0.0%	0.0%	0.0%	0.0%	
	insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	fairly significant	F	21	10	0	31	
		%	11.0%	14.5%	0.0%	11.6%	
	Significant	F	154	51	5	210	
		%	80.6%	73.9%	71.4%	78.7%	
	Very much significant	F	16	8	2	26	
		%	8.4%	11.6%	28.6%	9.7%	
	Cramer's V = 0.095, Sig.= 0.302, Mean= 3.9813						
Entrepreneurs are able to control the transaction as required basis **(UT7)**	Very insignificant	F	0	0	0	0	Chi-square = 238.944 Sig. = 0.000
		%	0.0%	0.0%	0.0%	0.0%	
	insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	fairly significant	F	26	6	1	33	
		%	13.6%	8.7%	14.3%	12.4%	
	Significant	F	148	58	2	208	
		%	77.5%	84.1%	28.6%	77.9%	

	Very much significant	F	17	5	4	26	
		%	8.9%	7.2%	57.1%	9.7%	
	Cramer's V = 0.195, Sig.= 0.000, Mean= 3.9738						
The average mean for Utilization is **3.9963**							

Hence, we have tried to measure the utilization status of the loan availed from PSBs towards MSMEs to get better the financial performance as well as the capital formation for the future. The survey shows that the majority of the entrepreneurs (i.e., lowest 74.2% in UT1 and Highest 80.1% in UT2) opined that the PSBs loan helps to utilize the money in the business more perfectly (Mean= 3.9963) which could be influencing the financial performance and capital formation. Very few entrepreneurs said that the bank's loan facilities help to improve the utilization was insignificant. There are statistically significant differences exists among the responses in each items of utilization of loan (i.e., χ^2= 353.120; $p < 0.01$ (UT1), χ^2= 263.798; $p < 0.01$ (UT2), χ^2= 370.109; $p < 0.01$ (UT3), χ^2= 289.506; $p < 0.01$ (UT4), χ^2= 219.124; $p < 0.01$ (UT5), χ^2= 246.899; $p < 0.01$ (UT6), and χ^2= 238.944; $p < 0.01$ (UT7)).

When Cramer's V is applied to verify the association between the items of utilization of loan and the types of enterprises, it is found that there is a significant association among the UT7 of utilization of loan only with the types of enterprises and the association is weak and positive (i.e., CV= 0.195; $p < 0.01$). Six Cramer's V values for the rest of the six items of utilization are found non-significant.

7.2.8: Financial Performance of the Enterprises

Hence, we have developed only three items under the financial performance to understand their business performance which could help to form capital for the future. Table 7.12 presented the frequency and percentage with mean, chi-square and Cramer's value of different items under the dimension.

Table 7.12: Financial Performance of the Enterprises

Items	Responses	F/P	Micro	Small	Medium	Total	Test Statistics
Net Cash Flow increased in business **(FP1)**	Strongly Disagree	F	0	0	0	0	Chi-square = 108.966 Sig. = 0.000
		%	0.0%	0.0%	0.0%	0.0%	
	Disagree	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	Moderately	F	32	10	0	42	
		%	16.8%	14.5%	0.0%	15.7%	
	Agree	F	124	42	3	169	
		%	64.9%	60.9%	42.9%	63.3%	
	Strongly Agree	F	35	17	4	56	
		%	18.3%	24.6%	57.1%	21.0%	
	Cramer's V = 0.117, Sig.= 0.119, Mean= 4.0524						
Annual Sales increased **(FP2)**	Strongly Disagree	F	0	0	0	0	Chi-square = 107.663 Sig. = 0.000
		%	0.0%	0.0%	0.0%	0.0%	
	Disagree	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	Moderately	F	30	9	0	39	
		%	15.7%	13.0%	0.0%	14.6%	
	Agree	F	118	47	3	168	
		%	61.8%	68.1%	42.9%	62.9%	
	Strongly Agree	F	43	13	4	60	
		%	22.5%	18.8%	57.1%	22.5%	
	Cramer's V = 0.108, Sig.= 0.183, Mean= 4.0787						
Sufficient growth in Net Profit. **(FP3)**	Strongly Disagree	F	0	0	0	0	Chi-square = 125.865 Sig. = 0.000
		%	0.0%	0.0%	0.0%	0.0%	
	Disagree	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	Moderately	F	23	10	0	33	
		%	12.0%	14.5%	0.0%	12.4%	

	Agree	F	131	41	2	174	
		%	68.6%	59.4%	28.6%	65.2%	
	Strongly Agree	F	37	18	5	60	
		%	19.4%	26.1%	71.4%	22.5%	
	Cramer's V = 0.150, Sig.= 0.018, Mean= 4.1011						

Hence, we have tried to understand the financial performance after utilizing the PSB's loan effectively. The survey shows that the majority of the entrepreneurs (i.e., lowest 62.9% in FP2 and Highest 65.2% in FP3) agreed that the financial performance has been improved for the good utilization on PSBs loan followed by strongly agreed and moderately agreed. The mean value is 4.0774 on the basis of three items under the financial performance. No one has disagreed or strongly disagreed with statements of financial performance. Though, there are statistically significant differences exists among the responses exists in each items of financial performance (i.e., χ^2= 108.966; $p < 0.01$ (FP1), χ^2= 107.663; $p < 0.01$ (FP2), and χ^2= 125.865; $p < 0.01$ (FP3).

When Cramer's V is applied to verify the association between the items of Financial Performance and the types of enterprises, it is found that there is significant association exists among FP3 of Financial Performance only with the types of enterprises and the association is weak and positive (i.e., CV= 0.150; $p < 0.05$). Two of Cramer's V result for the rest of the two items of Financial Performance is found non-significant.

7.2.9: Capital Formation in the Enterprises

Hence, we have developed six items under the capital formation to understand their ability to form capital for future business. The table 7.13 presented the frequency and percentage with mean, chi-square and Cramer's value of different items under the dimension.

Table 7.13: Capital Formation in the Enterprises

Items	Responses	F/P	Micro	Small	Medium	Total	Test Statistics
Using this loan, the capital generated in the form of surplus is up to the expectation. **(CF1)**	Very insignificant	F	0	0	0	0	Chi-square = 379.775 Sig. = 0.000
		%	0.0%	0.0%	0.0%	0.0%	
	insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	fairly significant	F	7	2	0	9	
		%	3.7%	2.9%	0.0%	3.4%	
	Significant	F	174	59	6	239	
		%	91.1%	85.5%	85.7%	89.5%	
	Very much significant	F	10	8	1	19	
		%	5.2%	11.6%	14.3%	7.1%	
	Cramer's V = 0.086, Sig.= 0.417, Mean= 4.0375						
After returning the principal amount with interest, the excess fund is sufficient for capital investment. **(CF2)**	Very insignificant	F	0	0	0	0	Chi-square = 361.978 Sig. = 0.000
		%	0.0%	0.0%	0.0%	0.0%	
	insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	fairly significant	F	3	2	0	5	
		%	1.6%	2.9%	0.0%	1.9%	
	Significant	F	167	63	5	235	
		%	87.4%	91.3%	71.4%	88.0%	
	Very much significant	F	21	4	2	27	
		%	11.0%	5.8%	28.6%	10.1%	
	Cramer's V = 0.094, Sig.= 0.320, Mean= 4.0824						
Capital generation is sufficient for expansion and growth of the Firm. **(CF3)** .	Very insignificant	F	0	0	0	0	Chi-square = 285.034 Sig. = 0.000
		%	0.0%	0.0%	0.0%	0.0%	
	insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	fairly significant	F	18	3	0	21	
		%	9.4%	4.3%	0.0%	7.9%	
	Significant	F	154	62	3	219	
		%	80.6%	89.9%	42.9%	82.0%	
	Very much significant	F	19	4	4	27	
		%	9.9%	5.8%	57.1%	10.1%	
	Cramer's V = 0.197, Sig.= 0.000, Mean= 4.0225						
There is a	Very	F	0	0	0	0	Chi-

growth of capital year wise. **(CF4)**	insignificant	%	0.0%	0.0%	0.0%	0.0%	square = 311.753 Sig. = 0.000
	insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	fairly significant	F	18	4	0	22	
		%	9.4%	5.8%	0.0%	8.2%	
	Significant	F	161	58	6	225	
		%	84.3%	84.1%	85.7%	84.3%	
	Very much significant	F	12	7	1	20	
		%	6.3%	10.1%	14.3%	7.5%	
	Cramer's V = 0.073, Sig.= 0.582, Mean= 3.9925						
The business has come over shortage of net business fund, if any on the utilization of loan amount. **(CF5)**	Very insignificant	F	0	0	0	0	Chi-square = 272.517 Sig. = 0.000
		%	0.0%	0.0%	0.0%	0.0%	
	insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	fairly significant	F	15	5	0	20	
		%	7.9%	7.2%	0.0%	7.5%	
	Significant	F	158	54	4	216	
		%	82.7%	78.3%	57.1%	80.9%	
	Very much significant	F	18	10	3	31	
		%	9.4%	14.5%	42.9%	11.6%	
	Cramer's V = 0.125, Sig.= 0.079, Mean= 4.0412						
Long term fund requirement is met from this bank loan **(CF6)**	Very insignificant	F	0	0	0	0	Chi-square = 251.416 Sig. = 0.000
		%	0.0%	0.0%	0.0%	0.0%	
	insignificant	F	0	0	0	0	
		%	0.0%	0.0%	0.0%	0.0%	
	fairly significant	F	17	6	0	23	
		%	8.9%	8.7%	0.0%	8.6%	
	Significant	F	150	58	3	211	
		%	78.5%	84.1%	42.9%	79.0%	
	Very much significant	F	24	5	4	33	
		%	12.6%	7.2%	57.1%	12.4%	
	Cramer's V = 0.167, Sig.= 0.005, Mean= 4.0375						
The average mean for capital formation is **4.0356**							

Hence, we have tried to measure the ability of Capital Formation for the future business. During the survey, it is observed that the majority of the entrepreneurs (i.e., lowest 79.0%

in CF6 and Highest 89.5% in CF1) opine that they are able to generate capital for future business (Mean= 4.0356) by the help of PSBs loan service facilities. Though, Very few entrepreneurs said that they are not able to generate capital for future business. There are also statistically significant differences exists among the responses in each items of Capital Formation (i.e., χ^2= 379.775; $p < 0.01$ (CF1), χ^2= 361.978; $p < 0.01$ (CF2), χ^2= 285.034; $p < 0.01$ (CF3), χ^2= 311.753; $p < 0.01$ (CF4), χ^2= 272.517; $p < 0.01$ (CF5), and χ^2= 251.416; $p < 0.01$ (CF6)).

Cramer's V reveals that there are significant positive association exists between CF3 and types of enterprises (CV= 0.197; $p < 0.01$) and between CF6 and types of enterprises (CV= 0.167; $p < 0.01$) where rest four Cramer's V values for the rest four items of Capital Formation are non-significant.

The above tables are used to present the summary of items which are also used to measure the Utility of PSB's Loan services, utilization of loan services in the respective enterprises, financial performance, and capital formation in the enterprises. These data will be used for further analysis to test the hypothesis framed to achieve the objective for the present study.

7.3: Factor Analysis

Factor analysis is an independence technique whose primary purpose is to define the underlying structure among the variables in the analysis. The basic objective of factor analysis is grouping highly inter-correlated variables into distinct set (Hair et al, 2014)[5].

In the present analysis, we have applied the Exploratory Factor Analysis (EFA) to ensure the items used in each dimension (factor) are statistically structured. Confirmatory Factor Analysis (CFA) to ensure the scale is the validity of the scale.

7.3.1: Exploratory Factor Analysis (EFA)

EFA is used to identify the dimensional structure of factors contributing to the utility of loan in the MSME business borrowers' segment. One critical assumption underlying the appropriateness of factor analysis was to ensure that the data matrix has sufficient correlations to justify its applications. Factor analysis has involved three critical steps as follows:- (i) The first step involves the visual examination of the correlations to identify those data matrix that was statistically significant. (ii) The second step involves the assessment of the overall significance of the correlation matrix by using Bartlett's test of sphericity. The desired correlations must be significant at $p < 0.01$ among at least for some of the variables. (iii) The final step of the factor analysis involves the measuring of sampling adequacy by using the Kaiser-Meyer-Olkin (KMO) technique identified by an appropriate index (Kaiser, 1970)[6] (above 0.9 = marvellous; between 0.80 to 0.89 = meritorious; between 0.70 to 0.79 = middling; between 0.60 to 0.69 = mediocre; between 0.50 to 0.59 = acceptable; and less than 0.50 = unacceptable).

Table 7.14: Correlation among the dimensions of Utility of Bank Loan

[5] **Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014).** Exploratory factor analysis. *Multivariate data analysis, 7th Pearson new international ed. Harlow: Pearson.*

[6] **Kaiser, H. F. (1970).** A second generation little jiffy. *Psychometrika*, *35*(4), 401-415.

	Availability	Accessibility	Expected Reliance	Facilities	Terms & Conditions
Availability	1				
Accessibility	.244**	1			
Expected Reliance	.295**	.385**	1		
Facilities	.403**	.388**	.229**	1	
Terms & Conditions	.222**	.489**	.413**	.273**	1

**. Correlation is significant at the 0.01 level (2-tailed), N=267.

The above table 7.14 shows that the correlation coefficients are within .218 to .489 and all the correlations are significant at the 0.01 level. Therefore, hence the first assumption is fulfilled to do factor analysis.

Table 7.15: KMO and Bartlett's Test

Kaiser-Meyer-Olkin	Measure of Sampling Adequacy.	.864
Bartlett's Test of Sphericity	Approx. Chi-Square	2738.496
	df	231
	Sig.	.000

The above table 7.15 shows that the overall significance of correlation matrix by using Bartlett test of sphericity is .000 which meets the desired value. And the KMO is above 0.80 means the sample adequacy is meritorious. As all the three assumptions have been fulfilled in this analysis, therefore, the data are suitable for factor analysis. The correlation coefficients are within .218 to .489 and all the correlations are significant at the 0.01 level. Therefore, hence the first assumption was fulfilled to do factor analysis.

Exploratory factor Analysis involves two major steps as follows:- (i) All the proposed items of the questionnaire are subjected to factor analysis by employing the maximum likelihood procedure that was followed by a Promax rotation. This was done to determine

which items/variables are to be included in a factor. A variable indicates factor loading greater than 0.5 is included otherwise excluded (Hair et al., 1995)[7]. Constructed factors Eigen-values are greater than 1.0 are retained (ii) The next step is to assess the communality of each variable in order to decide which item is worth considering in explaining the factors. The variable's communality which represents the amount of shared variance accounted for a factor solution is assessed to ensure the acceptable level of explanation. If the communalities in the variables are below 0.30, it is to be considered too low for having sufficient explanation.

Table 7.16: Communalities and Total Variance Explained

Factor	Communalities Extractions	Initial Eigen-values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings
		Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	.628	6.755	30.706	30.706	6.317	28.715	28.715	4.683
2	.455	2.763	12.559	43.266	2.336	10.619	39.334	3.830
3	.605	2.053	9.332	52.598	1.632	7.419	46.753	3.734
4	.566	1.488	6.763	59.361	1.063	4.832	51.585	3.724
5	.543	1.431	6.506	65.867	1.001	4.551	56.136	3.945
6	.552	.736	3.347	69.214				

*Note: Subsequent factors are not shown as Eigen-value is less than 1 for 6th factor onwards.

Table 7.17: Pattern Matrix

	Factor				
	1	2	3	4	5
AC1		.859			

[7] **Hair, J. F. J., Anderson, R. E., Tatham, R. L., & Black, W. C. (1995).** Multivariate data analysis. Saddle River.

AC2		.647			
AC3		.751			
AC4		.741			
AC5		.653			
AV1	.721				
AV2	.728				
AV3	.757				
AV4	.719				
AV5	.846				
ER1			.803		
ER2			.613		
ER3			.650		
ER4			.827		
F1				.761	
F2				.715	
F3				.635	
F4				.787	
TC1					.733
TC2					.552
TC3					.771
TC4					.777

Extraction Method: Maximum Likelihood.
Rotation Method: Promax with Kaiser Normalization

The above EFA result in table 7.16 reveals that five dimensions as factors having Eigen-value greater than 1 with 65.86% of total variance explained. It is satisfactory as suggested by Salta and Tzougraki, 2004[8] (47%), Spinner and Fraser, 2005[9] (42%). All the factor loading of each item or variable is greater than 0.5.

7.3.2: Confirmatory Factor Analysis (CFA)

[8] **Salta, K., & Tzougraki, C. (2004).** Attitudes toward chemistry among 11th grade students in high schools in Greece. *Science Education*, *88*(4), 535-547.

[9] **Spinner, H., & Fraser, B. J. (2005).** Evaluation of an innovative mathematics program in terms of classroom environment, student attitudes, and conceptual development. *International Journal of Science and Mathematics Education*, *3*(2), 267-293.

Exploratory factor analysis is a useful preliminary technique for developing the survey instrument (questionnaire) but a subsequent confirmatory factor analysis is necessary to refine the resulting instrument for unidimensionality.

The Confirmative factor analysis is used to compare the factors emerging from the EFA in an attempt to validate the factor structure of Utility of Bank fund.

All the unobserved variables (latent variables) are used obtained from exploratory factor analysis. The CFA shows the interrelationship between the indicators and the unobserved variables. All the indicator variables have a standardized regression weight either above 0.7 or very close to 0.7. By convention, these regression weights 0.7 or higher indicate good model fit. To establish the CFA model, the model fit and validity are explained in Table 7.18.

Figure 7.3: The Measurement Model of Utility of PSBs loan

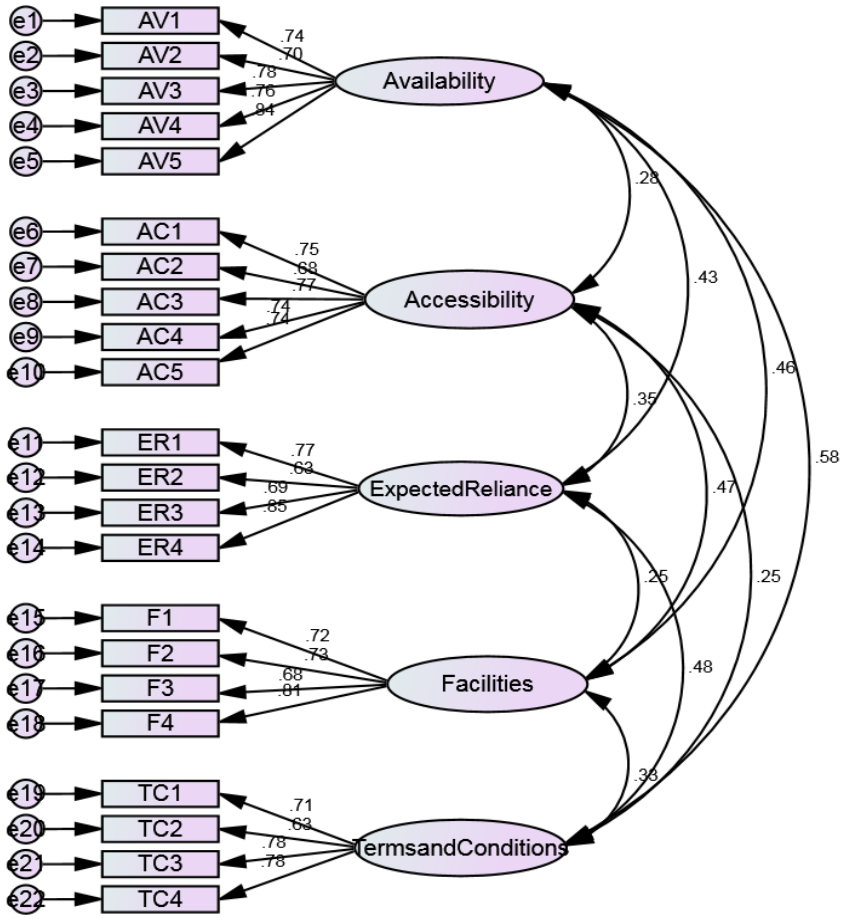


Table 7.18: Model fit indices

Measure	Estimate	Threshold	Interpretation
CMIN	322.921	---	---
DF	199	---	---
CMIN/DF	1.623	Between 1 to 3	Excellent
CFI	0.952	>0.95	Excellent
SRMR	0.047	<0.08	Excellent
RMSEA	0.048	<0.06	Excellent

P Close	0.599	>0.05	Excellent

The resulting Model fit indices of measurement model are shown in the above Table 7.18. The estimated value of CMIN/DF (1.623), CFI (0.952), SRMR (0.047), RMSEA (0.048) and P Close (0.599) are excellent which meet the cut-off criteria, it is a perfect fit for the CFA model as prescribed by Hu and Bentler (1999)[10] and Gaskin, J. & Lim, J. (2016)[11].

7.4: Construct Validity

In the present research work, construct validity is examined by evaluating the convergent validity and divergent/discriminant validity suggested by Cambell & Fiske,1959[12].

7.4.1: Convergent Validity

First, to make sure adequate convergent validity exploratory factor analysis is used, it is found that items belonging to the same construct should exhibit a factor loading of 0.60 or higher on a single factor. Here the factors loading for this study are given below in Tables 7.19 to prove convergent validity. The convergent validity table calculated from the given pattern matrix table.

Table 7.19: Summary of Pattern Matrix for Validity Test

[10] **Hu, L. T., & Bentler, P. M. (1999).** Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling: a multidisciplinary journal*, *6*(1), 1-55.

[11] **Gaskin, J., & Lim, J. (2016).** Model Fit Measures. *Gaskination's StatWiki*.

[12] **Campbell, D. T., & Fiske, D. W. (1959).** Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin*, *56*(2), 81-105.

	Factor				
	1	2	3	4	5
ACC1	0.017	**0.859**	-0.061	-0.118	-0.036
ACC2	-0.081	**0.647**	-0.027	0.043	0.126
ACC3	-0.028	**0.751**	-0.057	0.117	-0.034
ACC4	0.094	**0.741**	0.035	-0.08	0.006
ACC5	-0.022	0.653	0.123	0.108	-0.057
AVL1	**0.721**	-0.018	0.009	0.097	-0.044
AVL2	**0.728**	0.001	0.115	-0.11	-0.032
AVL3	**0.757**	0.036	-0.047	0.055	0.02
AVL4	**0.719**	-0.002	0.056	0.038	-0.019
AVL5	**0.846**	-0.027	-0.093	-0.021	0.1
ER1	0.031	-0.045	**0.803**	0.048	-0.052
ER2	-0.044	-0.051	**0.613**	0.012	0.097
ER3	0.031	0.023	**0.65**	0.03	0
ER4	0.013	0.054	**0.827**	-0.086	0.033
F1	0.04	-0.053	0.015	**0.761**	-0.073
F2	0.022	0.012	-0.078	**0.715**	0.067
F3	-0.068	0.075	0.135	**0.635**	0.013
F4	0.034	0.006	-0.041	**0.787**	0.014
TC1	-0.048	-0.05	0.043	0.028	**0.733**
TC2	0.056	0.035	0.078	-0.031	**0.552**
TC3	-0.021	-0.049	0.03	0.048	**0.771**
TC4	0.066	0.079	-0.064	-0.048	**0.777**

Table 7.20: Average loading of Constructs

Construct	Average loading	Convergent Validity
Availability	.754>.7	Supported
Accessibility	.730>.7	Supported
Expected Reliance	.723>.7	Supported
Facilities & Features	.725>.7	Supported
Terms & Conditions	.708>.7	Supported

Table 7.20 shows that all the average loading of all the constructs are greater than 0.60. So the convergent validity is established here.

Table 7.21: Model Validity

	CR	**AVE**	**MSV**	**ASV**
Availability	0.876	0.585	0.338	0.202
Accessibility	0.855	0.541	0.222	0.120
Expected Reliance	0.826	0.546	0.235	0.151
Facilities	0.825	0.542	0.222	0.151
Terms and Conditions	0.819	0.532	0.338	0.187

Second, to establish convergent validity using Confirmatory factor analysis, we take the help of model validity Table 7.21. The table calculated from factor analysis shows that the Composite Reliability (CR) score is greater than 0.70 and the Average Variance Explained (AVE) is greater than 0.50 for all the constructs. Eventually, CR is greater than AVE for all latent variables. The above two criteria have confirmed the convergent validity (Gaskin, J. & Lim, J. 2016).

7.4.2: Discriminant validity

First, to establish the discriminant validity, exploratory factor analysis is used, it is found that the correlation between the item of one factor with the other factor should be 0.30 or less (Bhattacherjee, 2012)[13].

From the above pattern matrix Table 7.20, it is visible that no one item factor loading exceeds 0.30 with any other factors. So, the discriminant validity is established here.

Second, to establish discriminant validity confirmatory factor analysis is used, Table 7.21 shows that MSVs are less than AVEs in all cases. And MSVs are greater than corresponding ASVs. Hence, these two criteria support the discriminant validity.

7.4.3: Content Validity

Content validity is the coverage the questions of the instrument and the scores from these questions represent all possible questions that could be asked about the content or skill (Creswell, 2005)[14]. It ensures that the questionnaire includes an adequate set of items that tap the concept. There is no statistical test to determine whether a measure adequately covers a content area, content validity usually depends on the judgment of experts in the field. The present study used content validity to examine the information regarding Utilization of Loan (UT), Financial Performance (FP), and Capital Formation (CF). Five experts are employed as assessors to determine the construct content of UT, FP, and CF. Assessor response can be calculated as percent-agreement. Percent-agreement statistics can be easily calculated and explained. The simple table of percent-agreement proposed

[13] **Bhattacherjee, A. (2012).** Social science research: Principles, methods, and practices.

[14] **Creswell, J. W. (2005).** Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research (2nd Ed.). Pearson Merrill Prentice Hall.

by Abu Bakar and Bhasah (2008)[15] is used to determine the assessor scores as shown in Table 7.22. Three scales were used to evaluate the constructs: scale 1 represents items are unsuitable for measurement; scale 2 represents items can be measured, and scale 3 represents items should be improved.

Table 7.22: Percent Agreement of Utilization, Financial Performance and Capital Formation

Items	**E1**			**E2**			**E3**			**E4**			**E5**			**Percent Agreement**
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	
Utilization Scale																
UL1		√			√				√		√			√		80 %
UL2		√			√			√			√			√		100 %
UL3		√			√			√			√			√		100 %
UL4		√			√				√		√				√	60 %
UL5			√		√			√			√			√		80 %
UL6			√			√		√			√			√		60 %
UL7		√			√				√		√			√		80 %
Financial Performance Scale																
FP1		√			√			√			√			√		100 %
FP2		√			√			√			√			√		100 %
FP3		√			√			√			√			√		100 %
Capital Formation Scale																
CF1		√				√			√		√			√		60 %
CF2			√		√			√			√			√		80 %
CF3		√			√			√			√			√		100 %
CF4		√				√		√			√			√		80 %
CF5		√			√			√			√				√	80 %
CF6		√			√			√			√			√		100 %

[15] **Nordin, A. B., & Bakar, B. A. (2008).** *Penaksiran dalam pendidikan dan sains sosial*. Universiti Pendidikan Sultan Idris.

From the above percent agreement table 7.22, we have seen that the assessor score was within 60 % to 100 % for the items. The experts agreed that the scales of UL, FP, and CF can be measured with the respective items.

7.4.4: Reliability

The most popular test of inter-item consistency reliability is Cronbach's Alpha Coefficient (Cronbach's alpha: Cronbach, 1951)[16] which is used for multipoint scaled items. The higher the coefficients, the better the measuring instrument. In this study, the researcher has calculated the alpha value for each separated dimension as well as overall reliability statistics.

Table 7.23: Summary of Reliability

Questionnaire	**No. of Items**	**Inter-item consistency (using Cronbach's Alpha)**
Availability	5	.854
Accessibility	5	.874
Expected Reliance	4	.822
Facilities & Features	4	.823
Terms & Conditions	4	.812
Utility of Bank Loan	**22**	**.891**
Utilizations	7	.801
Capital Formation	6	.762
Financial Performance	3	.808
Overall Instruments	**39**	**.945**

The above table of reliability statistics (Table7.23) entails us about the value of the Cronbach's alpha for the research scale is 0.945=94.5%. This gets over the percent of

[16] **Cronbach, L. J. (1951).** Coefficient alpha and the internal structure of tests. Psychometrika, 16, 297−334.

90%, which is an excellent indicator of the internal consistency of the overall instrument. With this, we have checked the Cronbach's alpha value of each scale namely UBL, UT, FP, and CF was above 70 %. Alpha values of the five constructs of Utility of Bank Loan (UBL) are above 80% which implies a great internal consistency of items in the constructs being assessed.

7.5: Testing of Hypotheses

The study is carried out by performing further data analysis to fulfill the objectives of this study. Three hypotheses on the basis of objectives 1, 2, and 3 developed in chapter V have been tested by deploying multiple correlations and linear regression methods. The fourth hypothesis derived out of the fourth objective developed in the same chapter has been tested by structural equation model.

H_{01}: Utility of Bank Loan Fund of PSBs doesn't influence the Financial Performance in MSME Sector.

H_{11}: Utility of Bank Loan Fund of PSBs influences the Financial Performance in MSME Sector.

To investigate the relations between the utility of loan fund services dimensions such as Availability, Accessibility, Expected Reliance, Facilities, and Terms and Conditions provided by Public Sector Banks with the Financial Performance in MSME sector the correlation analysis is used (Table 7.24) It is illustrated that the utility of loan fund services dimensions (Availability with 0.478, Accessibility with 0.669, Expected Reliance with 0.583, Facilities with 0.586, and Terms and Conditions with 0.603) are positively significantly related with the Financial Performance at 1 % level of significance.

Table 7.24: Correlations between Utility of Bank Loan and Financial Performance

	Availability	Accessibility	Expected Reliance	Facilities	Terms & Conditions	Financial Performance
Financial Performance	.478**	.669**	.583**	.586**	.603**	1
Sig.	.000	.000	.000	.000	.000	

**. Correlation is significant at the 0.01 level (2-tailed).

Again, to examine the influence of the Utility of Bank Loan services as the independent variable on the Financial Performance in MSME sector as the dependent variable the regression analysis is used (illustrated in Table 7.25). The test revealed that the Utility of Loan fund services dimensions (Availability with $\beta = 0.116$, $t = 4.591$ & $p < 0.01$, Accessibility with $\beta = 0.209$, $t = 7.912$ & $p < 0.01$, Expected Reliance with $\beta = 0.249$, $t = 6.994$ & $p < 0.01$, Facilities with $\beta = 0.254$, $t = 7.575$ & $p<0.01$, and Terms and Conditions with $\beta = 0.232$, $t = 6.169$ & $p < 0.01$) are positively significantly influencing the Financial Performance. The value of R is 0.859 and the value of R^2 is 0.738 in this model. It states that 73.8% of the variance of Financial Performance can be attributed to the Utility of PSBs' loan fund. The regression result indicates that there is a strong direct positive relationship between the dimensions of Utility of Bank Loan and Financial Performance at 1 % level of significance. This means the Utility of bank loan fund plays a vital role in the Financial Performance of MSME sector where Facilities and Expected Reliance are playing relatively most important role.

Table 7.25: Regression Model for Utility of Bank Loan and Financial Performance

Model 1	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	β	Std. Error	Beta		
(Constant)	-5.518	.677		-8.149	.000
Availability	.116	.025	.164	4.591	.000

Accessibility	.209	.026	.308	7.912	.000
Expected Reliance	.249	.036	.255	6.994	.000
Facilities	.254	.034	.278	7.575	.000
Terms & Conditions	.232	.038	.234	6.169	.000
Model	**R**	**R Square**	**Adjusted R Square**	**F**	**Sig.**
1	.859	.738	.733	146.749	.000

The following equation describes the regression fitted for first hypothesis:

Financial Performance = -5.518 + 0.116 (Availability) + 0.209 (Accessibility) + 0.249 (Expected Reliance) + 0.254 (Facilities) + 0.232 (Terms & Conditions)

H_{02}: Utility of Bank Loan of PSBs doesn't facilitate the Capital Formation in MSME Sector.

H_{12}: Utility of Bank Loan of PSBs facilitates the Capital Formation in MSME Sector.

Similarly now, to investigate the relations between the Utility of loan fund services with the Capital Formation in MSME sector the multiple correlation analysis is used (Table 7.26). The table shows that the Utility of loan fund services dimensions (Availability r = 0.413, Accessibility r = 0.588, Expected Reliance r = 0.576, Facilities r = 0.485, and Terms and Conditions r = 0.547) are positively significantly related with the Capital Formation at 1% level of significance.

Table 7.26: Correlation between the factors of Utility of Bank loan fund and the Capital Formation

	Availability	Accessibility	Expected Reliance	Facilities	Terms & Conditions	Capital Formation
Capital Formation	.413**	.588**	.576**	.485**	.547**	1
Sig.	.000	.000	.000	.000	.000	.000

**. Correlation is significant at the 0.01 level (2-tailed).

To examine the influence of the Utility of Bank Loan fund services as the independent variable on the Capital Formation in the MSME sector as the dependent variable the regression analysis is used (Table 7.27). The test exposed that the Utility of loan fund services dimensions (Availability with $\beta = 0.099$, $t = 2.974$ & $p < 0.01$, Accessibility with $\beta = 0.184$, $t = 5.293$ & $p < 0.01$, Expected Reliance with $\beta = 0.316$, $t = 6.728$ & $p < 0.01$, Facilities with $\beta = 0.199$, $t = 4.501$ & $p < 0.01$, and Terms and Conditions with $\beta = 0.221$, $t = 4.455$ & $p < 0.01$) are positively significantly influencing the Capital Formation. And, the value of R is 0.772 and the value of R^2 is 0.595 in this model. It states that 59.5% of the variance of Capital Formation can be explained by the Utility of PSBs' loan fund. The regression result indicates that there is also a strong direct positive relationship between the dimensions of Utility of Loan Fund and the Capital Formation at 1 % level of significance. This means the Utility of loan fund plays a vital role in the Capital Formation for future business in the MSME sector, where Expected Reliance and Terms and Conditions are playing the most important role. Therefore, correlation coefficients and linear multiple regression depict that Utilization of fund facilitates the Capital Formation for the MSMEs.

Table 7.27: Regression Model for Utilization of loan fund and Capital Formation

Model 1	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	7.269	.892		8.150	.000
Availability	.099	.033	.132	2.974	.003
Accessibility	.184	.035	.256	5.293	.000
Expected Reliance	.316	.047	.305	6.728	.000
Facilities	.199	.040	.205	4.501	.000
Terms & Conditions	.221	.050	.210	4.455	.000
Model	**R**	**R Square**	**Adjusted R Square**	**F**	**Sig.**
1	.772	.595	.588	76.778	.000

The below equation describes the regression fitted for second hypothesis:

Capital Formation = 7.269 + .099 (Availability) + .184 (Accessibility) + .316 (Expected Reliance) + .199 (Facilities) + .221 (Terms & Conditions)

H_{03}: The quantum of loan doesn't enhance the Financial Performance in MSME Sector.

H_{13}: The quantum of loan enhances the Financial Performance in MSME Sector.

The study also hypothesizes that loan amount invested in MSME sector enhances the financial performance. To explore the relations between loan amount invested in the MSMEs and the Financial Performance of the MSMEs in terms of growth in Net cash flow, Growth in sales and Growth in net profit, the correlation has been used (Table 7.28). The Table 7.28 shows that the invested loan amount is strongly positively

associated with the Financial Performance (Net cash flow with 0.681, net sales with 0.686, and net profit with 0.690) at the 1 % level of significance.

Table 7.28: Correlation between growth in Net cash flow, Growth in sales, Growth in net profit and percentage of used Loan Amount

	Financial Performance		
	Net cash flow	**Sales**	**Net profit**
Loan Amount	.681**	.686**	.690**
Sig.	.000	.000	.000

Regression analysis is shown to investigate the impact of loan amount investment as the independent variable on the Financial Performance of MSMEs as the dependent variable in table 7.29. The test showing that the invested loan amount strongly and positively associated with the Financial Performance ($\beta = 0.658$, $t = 22.197$ & $p < 0.01$). And, the value of R is 0.806 and the value of R^2 is 0.650 in this model. It states that 65% of the variance of Financial Performance can be explained by the invested loan amount. The regression result indicates that there is also a strong direct positive relationship between the Quantum of Loan amount and Financial Performance at 1 % level of significance. This means the investment of Loan amount plays a vital role in the Financial Performance in the MSME sector. Thus, both test correlation, as well as regression analysis, proved that the third hypothesis is also supported.

Table 7.29: Regression Model for a percentage of Quantum of Loan Amount and Financial Performance

Model 1	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.628	.068	.806	38.752	.000
Loan amount	.658	.030		22.197	.000
Model	**R**	**R Square**	**Adjusted R Square**	**F**	**Sig.**
1	.806	.650	.649	492.692	.000

The following equation describes the regression fitted for the third hypothesis:

Financial Performance = 2.628 + 0.658 (investment of loan amount)

7.6: Structural Equation Model

A comprehensive model among Utility of Bank Loan, Utilization of Loan, Financial Performance and Capital Formation

After the above-stated analysis, SEM is conducted to develop a model to find out the pattern of causal relations among the variables.

Figure 7.4: The Developed Hypothesized Model

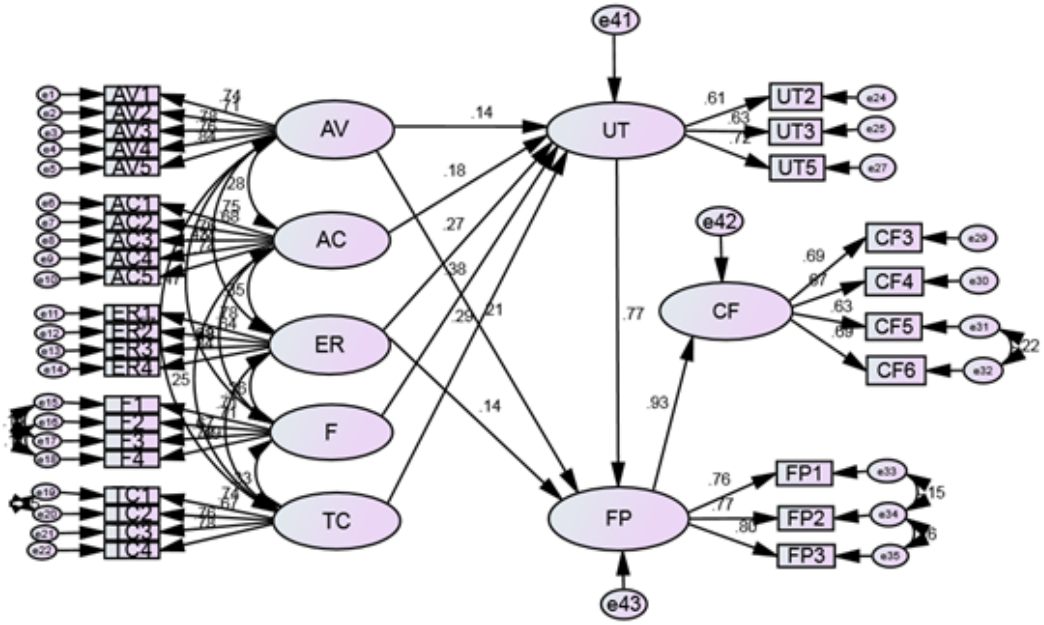


Table 7.30: Model Fit Indices of SEM

Measure	Estimate	Threshold	Interpretation
CMIN	582.565	---	---
DF	439	---	---
CMIN/DF	1.327	Between 1 to 3	Excellent
CFI	0.965	>0.95	Excellent
SRMR	0.044	<0.08	Excellent
RMSEA	0.035	<0.06	Excellent
P Close	1.000	>0.05	Excellent

According to the threshold criteria given in Table 7.30 suggested by Hu and Bentler (1999) and Gaskin, J. & Lim, J. (2016), the model is well fit. The final structural model fit indices shown in the above table, suggest a good fit to the data as all the main measuring indicators have fulfilled the threshold. We have also checked some other

indices like GFI (0.881), AGFI (0.857), IFI (0.966), and TLI (0.961). Except GFI and AGFI, all other indices are within the recommended range. Zimud W.G, (2003) argued that values of GFI and AGFI lower than 0.9, do not necessarily mean that the model has a poor fit. In our study, GFI and AGFI are greater than 0.85 which is also well accepted for model fit.

Table 7.31: Regression weight of SEM and supported hypotheses

Null hypotheses	Path	Estimate	S.E.	C.R	P	**Standardized Regression**	Results
H_{04a}	Utilization ← Availability	.109	.053	2.040	.041	.143	Supported
H_{04b}	Utilization ← Accessibility	.118	.039	3.064	.002	.177	Supported
H_{04c}	Utilization ← Expected Reliance	.186	.050	3.704	***	.268	Supported
H_{04d}	Utilization ← Facilities	.288	.057	5.056	***	.384	Supported
H_{04e}	Utilization ← Terms and Conditions	.231	.055	4.181	***	.286	Supported
H_{05a}	Financial Performance ← Availability	.240	.072	3.339	***	.210	Supported
H_{05c}	Financial Performance ← Expected Reliance	.159	.070	2.266	.023	.137	Supported
H_{07}	Financial Performance ← Utilization of loan	1.292	.175	7.378	***	.769	Supported
H_{09}	Capital formation ← Financial Performance	.597	.055	10.829	***	.934	Supported

The result of above regression weight Table 7.31 is used to find out the influencing relationship between the variables. We found nine influencing relationships between the

different variables. Among the found relationship, we see that all the factors of Utility of PSB's Loan fund are directly influencing the Utilization of Loan fund. While only two factors namely **Availability** and **Expected reliance** are directly influencing the Financial Performance. But no one factor is directly influencing the Capital Formation.

In the model, we have got another two important direct influencing relationships. First, the Utilization of Loan fund is directly influencing the Financial Performance. And second, the Financial Performance is directly influencing the Capital Formation. But there is no direct relationship between Utilization of Loan and Capital Formation.

Table 7.32: Direct, Indirect and Total Effect of SEM

Path Co-efficient	Direct Effect	Indirect Effect	Total Effect
Utilization ← Availability	0.143	-----	0.143
Utilization ← Accessibility	0.177	-----	0.177
Utilization ← Expected Reliance	0.268	-----	0.268
Utilization ← Facilities	0.384	-----	0.384
Utilization ← Terms and Conditions	0.286	-----	0.286
Financial Performance ← Availability	**0.210**	**0.110**	0.320
Financial Performance ← Accessibility	-----	**0.136**	0.136
Financial Performance ← Expected Reliance	**0.137**	**0.206**	0.343
Financial Performance ← Facilities	-----	**0.295**	0.295
Financial Performance ← Terms and Conditions	-----	**0.220**	0.220
Financial Performance ← Utilization	0.769	-----	0.769
Capital Formation ← Availability	-----	**0.299**	0.299
Capital Formation ← Accessibility	-----	**0.127**	0.127
Capital Formation ← Expected Reliance	-----	**0.320**	0.320
Capital Formation ← Facilities	-----	**0.276**	0.276
Capital Formation ← Terms and Conditions	-----	**0.205**	0.205
Capital Formation ← Utilization	-----	**0.718**	0.718

Capital Formation ← Financial Performance	0.934	-----	0.934

In the above Table 7.32, we have observed that those variables don't have direct relation, they have indirect relation. Like three factors namely accessibility, facilities, and terms & conditions have no direct relationship but they have an indirect relationship with the Financial Performance.

Though we have found that the two factors i) availability and ii) expected reliance are influencing in both ways directly and indirectly to the Financial Performance.

7.7: Path Analysis

In this model, we can assume that the Utilization variable is acting as a mediating variable between Utility of Bank Loan and Financial Performance and between Utility of Bank Loan and Capital Formation. To be sure the relationships, path analysis is conducted.

We formulated two hypotheses for two path analysis. The formulated hypotheses are:

For Path Analysis 1:

$H_{0\ 10}$: Utilization of Loan fund doesn't act as a Mediating variable between Utility of Bank Loan and Financial Performance.

$H_{1\ 10}$: Utilization of Loan fund acts as a Mediating variable between Utility of Bank Loan and Financial Performance.

For Path Analysis 2:

$H_{0\ 11}$: Utilization of Loan fund doesn't act as a Mediating variable between Utility of Bank Loan and Capital Formation.

$H_{1\ 11}$: Utilization of loan fund acts as a Mediating variable between Utility of Bank Loan and Capital Formation.

Path Analysis 1

Let us examine the effect of Utilization of Loan fund as a mediating variable to the relationship between Utility of Bank Loan (which is represented by five dimensions, viz. Availability, Accessibility, Expected Reliance, Facilities, and Terms & Conditions) and Financial Performance.

Path analysis has been used to check the above-said relation where the factors of Utility of Bank Loan viz. Availability, accessibility, Expected Reliance, Facilities, and Terms & Conditions act as independent variables, Utilization of Loan fund as mediating variable and Financial Performance as dependent variable.

Figure 7.5: Utilization as mediating Variable between Utility of PSBs loan and Financial Performance

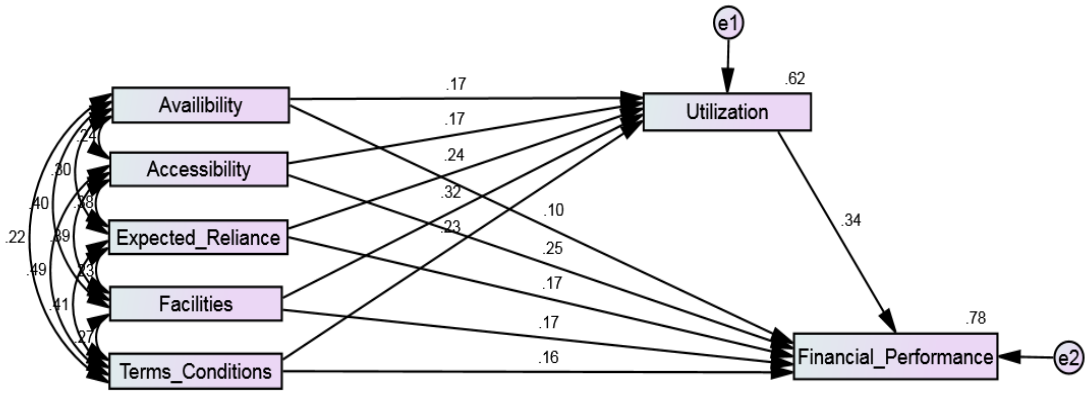


Table 7.33: Regression Weights of Path Analysis 1

Path Co-efficient	Estimate	S.E.	C.R.	P	Standardized Regression
Utilization ← Availability	.181	.045	4.037	***	.172
Utilization ← Accessibility	.175	.047	3.732	***	.174

Utilization ⟵ Expected Reliance	.347	.063	5.479	***	.240
Utilization ⟵ Facilities	.440	.060	7.375	***	.325
Utilization ⟵ Terms and Conditions	.340	.067	5.082	***	.231
Financial Performance ⟵ Availability	.074	.023	3.160	.002	.105
Financial Performance ⟵ Accessibility	.169	.034	4.991	***	.173
Financial Performance ⟵Expected Reliance	.153	.033	4.600	***	.167
Financial Performance ⟵ Facilities	.154	.036	4.326	***	.155
Financial Performance ⟵Terms and Conditions	.074	.023	3.160	.002	.105
Financial Performance ⟵Utilization	.231	.031	7.415	***	.342

From the above regression weights Table 7.33 of path analysis, we noticed that all path-coefficients of the above relation are significant as the p-value is less than 0.05. Therefore all the factors are directly influencing the Utilization as well as financial Performance. We have also found that utilization has direct influences on financial performance.

Table 7.34: Direct, Indirect and Total Effect Path Analysis 1

Path Co-efficient	Direct Effect	Indirect Effect	Total Effect
Utilization ⟵ Availability	0.172	0.000	0.172
Utilization⟵ Accessibility	0.174	0.000	0.174
Utilization ⟵ Expected Reliance	0.240	0.000	0.240
Utilization ⟵ Facilities	0.325	0.000	0.325
Utilization ⟵ Terms and Conditions	0.231	0.000	0.231
Financial Performance ⟵ Availability	0.105	**0.059**	0.164
Financial Performance⟵ Accessibility	0.249	**0.060**	0.308
Financial Performance⟵ Expected Reliance	0.173	**0.082**	0.255
Financial Performance⟵ Facilities	0.167	**0.111**	0.278
Financial Performance⟵ Terms and Conditions	0.155	**0.079**	0.234
Financial Performance⟵ Utilization	0.342	0.000	0.342

From the above Table 7.34, we noticed that the Utilization of Loan fund generates an additional indirect effect on the relationship between factors of Utility of Bank Loan fund and Financial Performance. Therefore, the Utilization of Loan functions acts as a mediating variable in this relationship.

Path Analysis 2:

Let us examine the role of Utilization of Loan fund acts as a mediating variable to the relationship between the factors of Utility of Bank Loan and Capital Formation. Again, Path analysis has been used to check the above-said relationship. The independent variables and mediating variable are the same as the previous one. But here Capital Formation acts as dependent variable.

Figure 7.6: Utilization as mediating Variable between Utility of PSBs loan and Capital formation

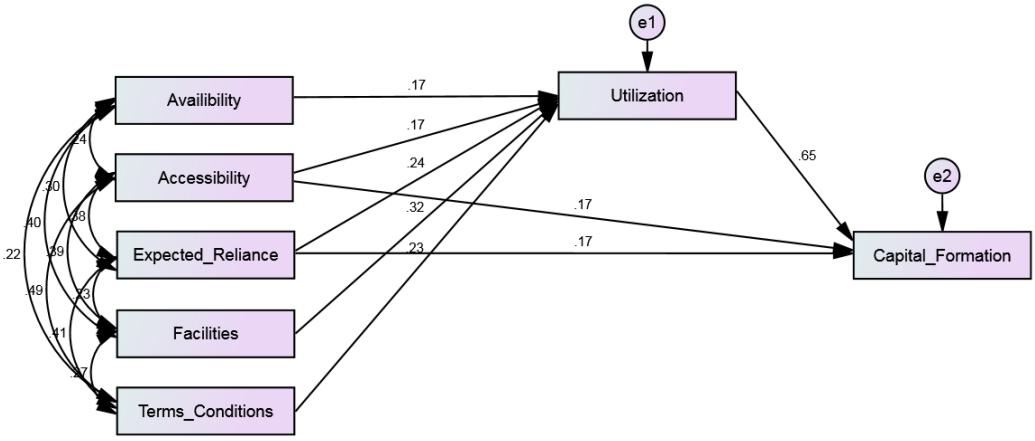


Table 7.35: Regression Weights of Path Analysis 2

Path Co-efficient	Estimate	S.E.	C.R.	P	Standardized Regression
Utilization ← Availability	.181	.045	4.037	***	.172
Utilization ← Accessibility	.175	.047	3.732	***	.174
Utilization ← Expected Reliance	.347	.063	5.479	***	.240

Utilization ← Facilities	.440	.060	7.375	***	.325
Utilization ← Terms & Conditions	.340	.067	5.082	***	.231
Capital Formation ← Accessibility	.120	.027	4.390	***	.167
Capital Formation ← Expected Reliance	.175	.039	4.514	***	.169
Capital Formation ← Utilization	.465	.030	15.764	***	.651

From the above regression weight Table 7.35 of path analysis, noticed that eight out of eleven path coefficients are significant in order to the significant level of the p-value. We have found that all the factors under Utility of Bank Loan are directly influencing the Utilization of Loan but only two factors are directly influencing the Capital Formation.

Table 7.36: Direct, Indirect and Total Effect Path Analysis 2

Path Co-efficient	Direct Effect	Indirect Effect	Total Effect
Utilization ← Availability	0.172	0.000	0.172
Utilization ← Accessibility	0.174	0.000	0.174
Utilization ← Expected Reliance	0.240	0.000	0.240
Utilization ← Facilities	0.325	0.000	0.325
Utilization ← Terms and Conditions	0.231	0.000	0.231
Capital Formation ← Availability	0.000	**0.112**	0.112
Capital Formation ← Accessibility	**0.167**	**0.113**	0.280
Capital Formation ← Expected Reliance	**0.169**	**0.156**	0.325
Capital Formation ← Facilities	0.000	**0.211**	0.211
Capital Formation ← Terms and Conditions	0.000	**0.151**	0.151
Capital Formation ← Utilization	0.651	0.000	0.651

From the above Table 7.36, we have also found that the Utilization of Loan fund generating an additional indirect effect on the relationship between the Utility of Bank

Loan and the Capital Formation. Therefore, the Utilization of Loan also works as a mediating variable in this relation.

7.8: Limitation of the Study

However, there are several constraints and limitations those may come up in process of reliance or use of public sector bank finance for growth and development of MSMEs that requires necessary consideration.

There come up several changes in internal systems of the fund issuing public sector banks. India is a developing country and in course of changes in economic policy of ruling Government authorities, several market players are coming in the scenarios. Even in several market areas where so long MSMES had been operating, large sectors are also coming up and are turning to be competitors of MSMEs creating big financial upset for them. Big houses like ITC etc are coming to industrial markets normally occupied by MSMEs like stationeries, paper products, low price variety of snacks etc. These all cause a threat to the operation and financial performances of MSMEs. These work as limiting or constraining factor to the overall operation and especially financial performance using bank loan facilities for the MSMEs.