
Results and Discussion

An analysis of data is the process of illustrating, evaluating, and presenting the data logically through the application of statistical tools and techniques. The study relies on existing literature to achieve the stated objectives and test the hypotheses proposed in the study. The analytical chapters give an insight into the analyses and calculations done in the study. The sustainability and outreach of NBFC-MFIs were measured through the collected data from the women micro entrepreneurs, managers of NBFC-MFIs, and the operating performance of NBFC-MFIs was analysed through various descriptive and inferential statistical tools.

4.1 Socio-Economic, Business, and Loan Profiles of Women Micro Entrepreneurs

4.1.1 Socio-economic Profile of the respondents

4.1.2 Business Profile of the respondents

4.1.3 Loan Profile of the respondents

4.2 Awareness of Terms of Loans of NBFC-MFIs

4.3 Usage of Borrowed Funds by Women Micro Entrepreneurs

4.4 Growth and Development of Women Micro Entrepreneurs

4.4.1 Business Development of the respondents

4.4.2 Social Status of the respondents

4.4.3 Financial Status of the respondents

4.5 Sustainability of NBFC-MFIs

4.5.1 Sustainability based on Operating Performance

4.5.2 Sustainability based on Managers Perspective

4.5.3 Sustainability based on Women Micro Entrepreneurs Perspective

4.6 Perception on Outreach of NBFC-MFIs

4.6.1 Outreach based on Operating Performance of NBFC-MFIs

4.6.2 Outreach based on Women Micro Entrepreneurs Perspective

4.7 Determinants of Sustainability and Outreach of NBFC-MFIs

4.1 Socio-Economic, Business, and Loan Profiles of Women Micro Entrepreneurs

Socio-economic, business and loan profiles of the respondents include demographic, business characteristics and loan financial creditably. MFI creates a beneficial effect on the socio-economic conditions of the borrowers (Goel, 2024). The intersection of socio-economic status, business and loan profiles of women micro entrepreneurs deeply influences the performance of microfinance institutions. The following subsections discuss these aspects.

4.1.1 Socio-Economic Profile of the Respondents

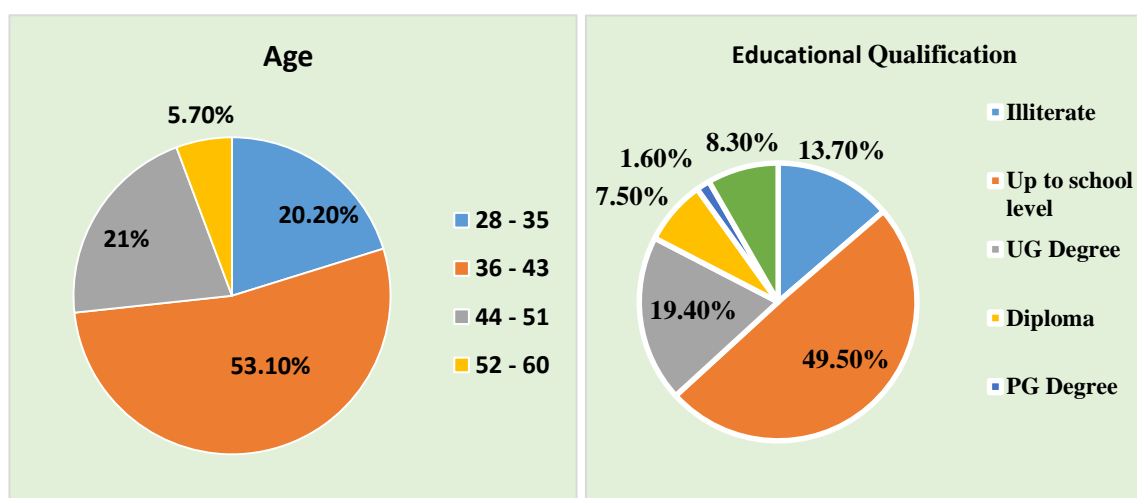
Socio-economic profile of the respondents has a great impact on research. Awareness and repayment of any loan depend on borrowers socio-economic profile. The socio-economic factors of the borrowers heavily impact the granting of microcredit (Deshpande and Burjorjee, 2002). These variables are one of the important reasons for non-payment of loan amounts (Garcia Perez et al., 2017). Therefore, socio-economic factors of the respondents have a great impact on the funding assistance.

The American Psychological Association (2018) defines socio-economic status (SES) as the social standing or class of an individual or group. The socio-economic status of an individual is the combination of their SES as well as their social position in society. A composite SES variable measures education, income, and occupation, and measures the different aspects of the family's background (Brese and Mirazchiyski, 2013). It is essential to consider the borrower's socio-economic background as well as their past profile when determining the default rate (Baklouti, 2013), with this background the study aims to analyse the socio-economic profile of the respondents in as presented in Table 4.1.

Table 4.1 Socio-Economic Profile of the Respondents

Socio-Economic Profile		No. of Respondents (n = 386)	Percentage
Age (in years)	28 - 35	78	20.2
	36 - 43	205	53.1
	44 - 51	81	21.0
	52 - 60	22	5.7
Educational Qualification	Illiterate	53	13.7
	Up to school level	191	49.5
	UG Degree	75	19.4
	Diploma	29	7.5
	PG Degree	6	1.6
	Professional Degree	32	8.3
Social Category	Backward	114	29.5
	Most backward	242	62.7
	SC/ST	30	7.8
Differently abled Person	Yes	6	1.6
	No	380	98.4
Type of Family	Nuclear	226	58.5
	Joint Family	160	41.5
Number of Members in the Family	1-2	13	3.4
	3-4	186	48.2
	5-6	130	33.7
	7-8	57	14.8
Earning Members in the family	One	5	1.3
	Two	214	55.4
	Three	98	25.4
	More than three	69	17.9
Area of Residence	Urban	120	31.1
	Semi urban	163	42.2
	Rural	103	26.7

Source: Primary Data



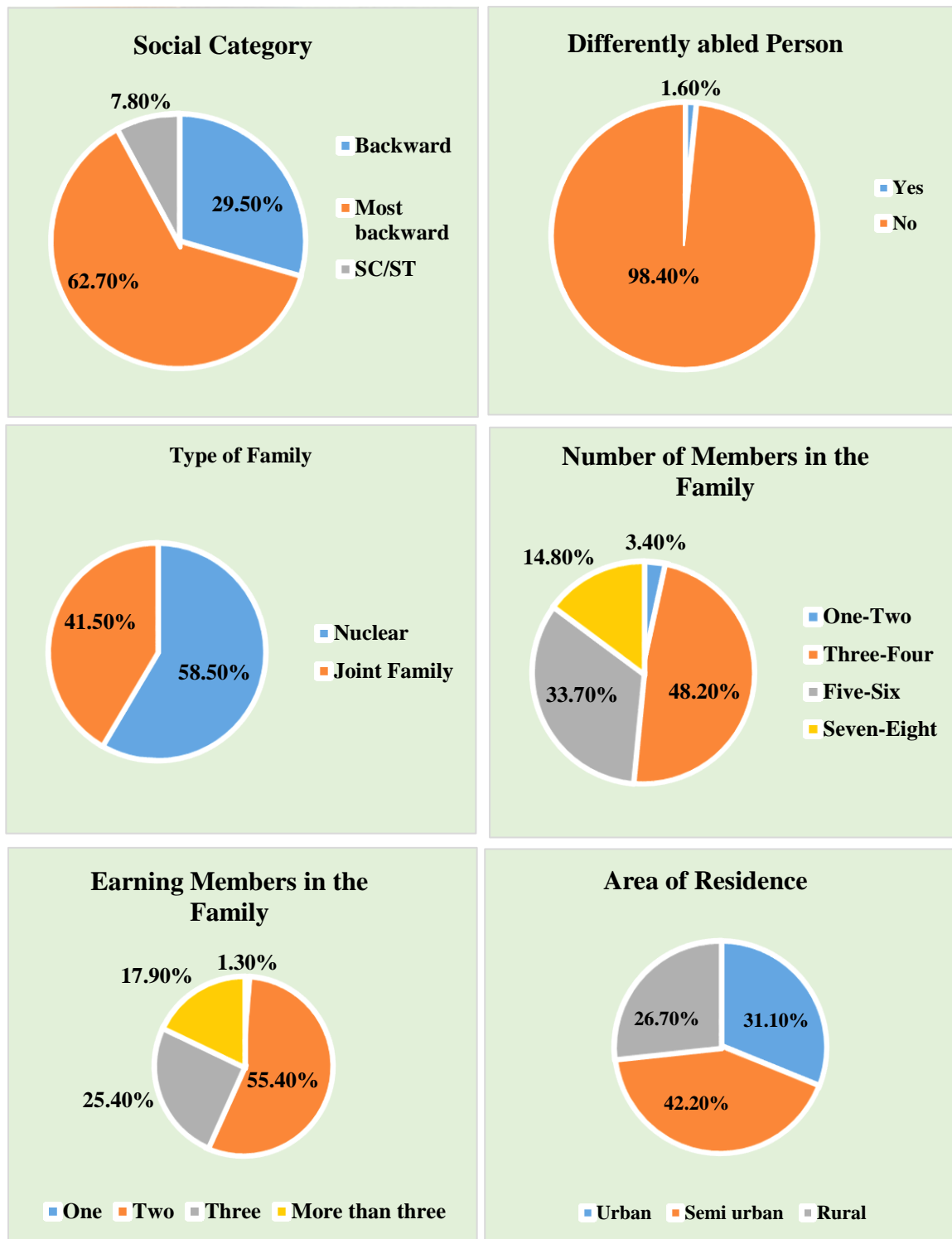


Figure 4.1 Socio -Economic Profile of the Respondents

Age of the respondents

The Age of the of the respondents is observed in Table 4.1. A borrower's age influences the default rate on loan repayments. It is noticed from the table that most of the respondents belong to the age group of 36-43 years (53.1%). 21 percent of the respondents

belong to the age group of 44-51 years. 20.2 percent of the respondents belong to the age group of 28-35 years. Only 5.7 percent of the respondents were in the age group of 52-60 years. Customers who are young age tend to exhibit lower credit risk since they have an advantage over the elderly in terms of better earnings prospects and a longer lifespan in activities that generate income (Sangwan et al.,2020).

Educational Qualification

Borrowers who possess a high educational qualification are more likely to be positive borrowers (Hadi et al.,2015). Educational qualification (Table 4.1) of the micro entrepreneurs revealed that a majority of them have a school level of education (49.5%), 19.4 percent respondents have an undergraduate qualification, and illiterate accounts to 13.7 percent. 7.5 percent of the respondents have a diploma level of qualification, 8.3 percent have a professional degree and less number of respondents have postgraduation qualification (1.6%). Most of the borrowers completed their school level of education, which implies their basic understanding of microfinance and business-related matters.

Social Category and Differently abled Person

Social category of the respondents indicated in Table 4.1 that the majority (62.7%) were from the Most Backward Class, 29.5 percent of respondents belong to the Backward Class and only less number of respondents (7.8%) belongs to SC/ST community. According to the majority of the respondents (98.4%) are not differently abled. Previous research studies revealed the correlation between women entrepreneurs performance and their community's cultural and religious background they belong (Abrahamand Balogun, 2012).

Type of Family

According to family status, majority of respondents (58.5%) were in the nuclear family system and 41.5 percent of respondents in joint family system. This reveals that distribution of income and expenditure is allocated based on the family type.

Number of Members in the Family

The size of the borrower's family influences their ability to obtain credit from lending institutions (Onyeneke and Iruo , 2012). A maximum of the respondents (48.2%,) have three to four members in the family, 33.7 percent of respondents have 5-6 members in

the family and only the least number of respondents (3.4%) have one to two members in their family.

Earning Members in the Family

In developing nations, it is typical to group women according to their family income and support for social advancement (Kabeer, 2001). It is understood from the study that 55.4 percent of the respondents have 2 earning members in the family and 24.4 percent have 3 earning members. 17.9 percent have more than 3 earning members. 1.3 percent of the respondents have one earning member.

Area of Residence

The MFIs loan distribution is influenced by the borrower's geographical location (Sangwan and Nayak, 2019). The study locality of respondents states, that 42.2 percent are from semi urban area and 31.1 percent from urban area and least respondents are from rural areas (26.6%).

4.1.2 Business Profile of the Respondents

Business characteristics of the respondents decide the borrowers business nature, financial factors like source of funds, business income, business expenditure, and profit derived from the business. Microfinance is an avenue for financial support that fosters growth and is vital for entrepreneurship (Liu et al., 2023). The sustainable development goal of decent work and economic growth (SDG 8) will be attained by growth in sustainable entrepreneurial activities by micro entrepreneur and remove unemployment. Socially, micro enterprises are becoming very important to the creation of wealth in communities for those who do not have access to traditional financial services. Microfinance has a huge effect on the development of businesses and significantly improves the growth of the business (Walker, 2011). Table 4.2. shows the business profile of the respondents.

4.1.3 Loan Profile of the Respondents

The loan profile of respondents with the NBFC-MFIs comprises the year of relationship and loan-related aspects in dealing with NBFC-MFIs. Identifying the relationship between borrowers satisfaction and service attributes has been difficult since services are not measured in nature. The loan profile of the borrowers are presented in Table 4.3 exhibits the loan profile of the respondents.

Table 4.2 Business Profile of the Respondents

Business Profile		No. of Respondents (n=386)	Percentage
Nature of Business	Vegetable vendor	31	8.0
	Fast food Stall	30	7.8
	Flower shop	33	8.5
	Tailoring shop	41	10.6
	Petty shop	32	8.3
	Garments	32	8.3
	Small Scale Farming	47	12.2
	Small- scale and cottage units	140	36.3
Years of Experience in Business	1-5years	110	28.5
	6-10 years	182	47.2
	11-15years	78	20.2
	Above 15 years	16	4.1
Source of Initial Fund	Borrowed from Banks	6	1.6
	NBFCs-MFI	208	53.9
	Own fund	72	18.7
	Borrowed from friends and relatives	47	12.2
	Borrowed from private money lenders	53	13.7
Monthly Income from the Business	₹10,000 – ₹20,000	61	15.8
	₹20,001 – ₹ 30,000	102	26.4
	₹30,001 – ₹40,000	126	32.6
	₹40,001 – ₹50,000	80	20.7
	Above ₹50,000	17	4.4
Monthly Business Expenditure	Upto ₹5,000	11	2.8
	₹5,001 - ₹10,000	84	21.8
	₹10,001 - ₹15,000	95	24.6
	₹15,001 - ₹20,000	118	30.6
	₹20,001 - ₹25,000	37	9.6
	₹25,001 - ₹30,000	33	8.5
	₹30,000 & above	8	2.1
Monthly Saving out of the Business Activity	Upto ₹5,000	6	1.6
	₹5,001 – ₹10,000	72	18.7
	₹10,001 – ₹15,000	109	28.2
	₹15,001 – ₹20,000	132	34.2
	₹20,001 – ₹25,000	50	13.0
	Above ₹25,001	17	4.4

Source: Primary Data

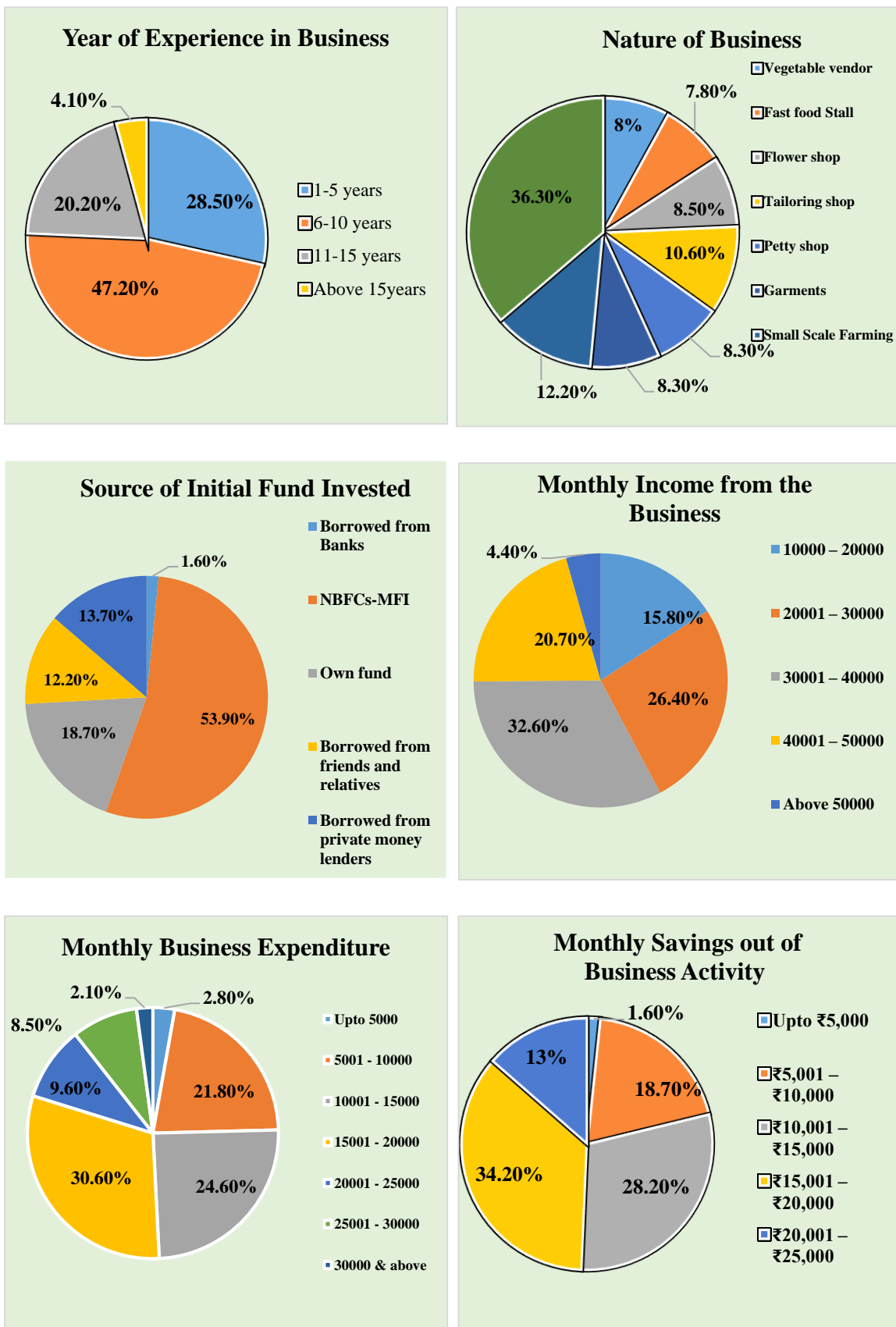


Figure 4.2 Business Profile of the Respondents

Nature of Business

Loan repayment behaviour by borrowers have a high impact on the nature of business accomplished by borrowers (Roslan and Abd Karim, 2009). Table 4.2 reveals the nature of business carried by the micro entrepreneurs, 12.2 percent of them doing small-scale farming business, tailoring work undertaken by 10.6 percent of the borrowers, 8% doing vegetable business, 8.5 percent of them doing flower business, petty shop and garments business by 8.3 percent of the respondents, fast food stall by 7.8 percent of the respondents. (A maximum number of respondents in the study area (36.3 %) were involved in small-scale and cottage units at a small level like food processing, handicraft, embroidery, artistic work etc.) Entrepreneurs who engage in non-farm business ventures will return their loans at a greater pace than those who engage in farming (Chaudhary and Ishafq, 2003). It is understood that women micro entrepreneurs are doing various diversified activities, based on their ability, skill, and knowledge.

Years of Experience in Business

Table 4.2 reveals, that 47.2 percent of the respondents had business experience of 6-10 years, 28.5 percent of them had the experience of 1-5 years, 20.2 percent of them had experience of 11-15 years and only 4.1 percent of them had the experience of above 15 years. It is understood in this analysis that most of the respondents in the study area have a maximum number of experiences in doing various business activities.

Source of Initial Fund Invested

Table 4.2 reveals that 53.9 percent of the respondents borrowed from NBFC-MFIs for their initial investment to start a business, 18.7 percent respondents had their own funds for making initial investment. 13.7 percent of micro entrepreneurs raised funds from private money lenders, 12.2 percent borrowed funds from friends and family relatives and less number of the respondents (1.6%) opted funds from the bank. The majority of them selected NBFC-MFIs as a main source of funds for initial investment. NBFC-MFIs give strong support in the form of initial financial assistance for entrepreneurs without any collateral securities.

Monthly Income from the Business

Table 4.2 points out that 32.6 percent of the women micro entrepreneurs have monthly income of ₹30,001-₹40,000, 26.4 percent of them have an income of ₹20,001-₹30,000. Income of ₹40,001-₹50,000 of the respondents occupied 20.7 percent 15.8 percent of them have an income of ₹10,000-₹20,000. Less number of the respondents (4.4%) of women micro entrepreneurs have monthly income of above ₹50,000. More number of respondents have an income of ₹30,001-₹40,000. MFIs have a willingness to give larger loan amounts to those with greater incomes (Dorfleitner et al.,2017). It is clear that women micro entrepreneurs are earning a sizeable amount of income from their business activity.

Monthly Business Expenditure

Table 4.2 states the monthly business expenditure of the respondents, 30.6 percent of them have business expenditure of ₹15,001-₹20,000, 24.6 percent of them have expenditure of ₹10,001-₹15,000, 21.8 percent of have expenditure of ₹5,001-₹10,000. 2.8 percent of them have incurred expenditure of below ₹15000. 9.6 percent of them have expenditure of ₹20,001-₹25,000 and 8.5 percent of them have expenditure of ₹25,001-₹30,000. Least of them (2.1%) have incurred expenditure of above ₹30,000. It is understood that the monthly expenditure varies based on the nature and the size of business operation.

Monthly Saving out of the Business Activity

Table 4.2 reveals that 34.2 percent of the respondents have monthly savings of ₹ 15,001-₹20,000, 28.2 percent of micro entrepreneurs have saving amounts to ₹10,001-₹15,000, 18.7 percent of micro entrepreneurs have savings of ₹ 5,001-₹10,000, 13.0 percent of micro entrepreneurs have a saving ₹20,001-₹25,000, 4.4 percent of them have saving of above ₹25,001 and 1.6 percent of them have saving of up to ₹5,000. The table portrays savings from a business based on the income level and the expenditure needed for the running of the business.

Table 4.3 Loan Profile of the Respondents

Loan Profile		No. of Respondents (n=386)	Percentage
Years of Association with NBFC-MFIs	2 - 3 years	44	11.4
	4 - 5 years	79	20.5
	6 - 7 years	144	37.3
	8 - 9 years	65	16.8
	10 years & above	54	14.0
Amount of Loan taken	Upto ₹35,000	35	9.1
	₹35,001 - ₹45,000	65	16.8
	₹45,001 - ₹55,000	56	14.5
	₹55,001 - ₹ 65,000	102	26.4
	Above ₹ 65,000	128	33.2
Availed Top-up Loans	Yes	95	24.6
	No	291	75.4
Point of Repayment of Loan	From collection points	123	31.9
	NBFCs Office	50	13.0
	Through Executives	192	49.7
	Online Payment	21	5.4

Source: Primary Data

Years of Association with NBFC-MFIs

Loyalty towards any relationship is based on the years they are associated. Table 4.3 exhibits the years they have been a customer of NBFC-MFIs. The data reveals that 37.3 percent of the respondents have six to seven years of association as customers of NBFC-MFI, 20.5 percent of the respondents have 4-5 years as customers of NBFC-MFI, 16.8 percent of the respondents have 8-9 years as customers of NBFC-MFIs, 14 percent of the respondents have more than 10 years of association with NBFC-MFI. 11.4 percent of them were 2-3 years as customers of NBFC-MFI. Borrowers who have an extensive record of obtaining credit from microfinance for long periods were more likely to receive a larger loan amount. Majority of them have 6-7 years of association, which shows the effective functionality and approaches of NBFC-MFIs towards women micro entrepreneurs.

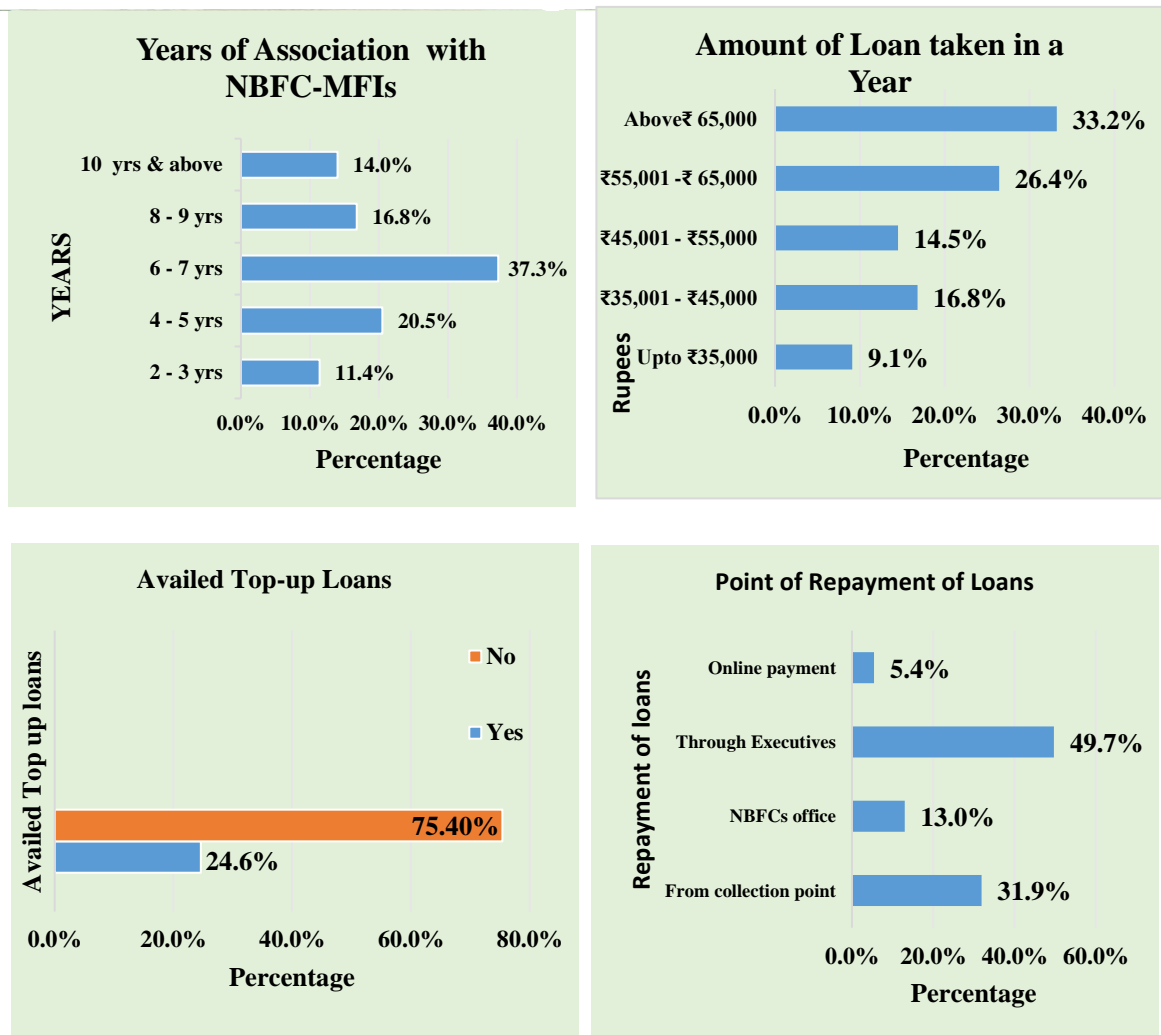


Figure 4.3 Loan Profile of the Respondents

Amount of Loan taken

Table 4.3 shows that 33.2 percent of them availed loan of above ₹65,000 in a year, ₹55,001-₹65,000 loan amount availed by 26.4 percent of respondents, 16.8 percent them availed loan amount of ₹35,001-₹45,000, 14.5 percent of them availed ₹45,001-₹55,000 and only 9.1 percent of them availed loan amount of up to ₹35,000. The majority of them availed loan amounts of above ₹65,000. Group members experiences with microloans have an impact on the total amount of loans they take out over time (Singh and Padhi, 2017).

Availed Top-up loans

Table 4.3 tells about the top-up loans availed from the institutions, which means the additional loan availed by the entrepreneurs against the existing loan, shows that the majority of the respondents not availed of any top-up loans (75.4%) and less number of respondents availed (24.6%) top-up loans. It is clear that micro entrepreneurs do not prefer

top up loans due to difficulty in fund rotation and they are not ready to borrow over their limited income level.

Point of Repayment of Loans

Table 4.3 revealed 49.7 percent of the respondents repaid the loan due amount through executives, those who collect loan dues from the business area of respondents. 31.9 percent of them repaid through collection point, 13.0 percent of them repaid at NBFC office, and only 5.4 percent of them preferred online payment mode. It is clear that majority of them preferred to pay the due amount through NBFC executives because they are collecting the loan amount from the place where they are doing business.

4.2 Awareness on the Terms of Loans of NBFC-MFIs

Financial literacy is one of the key aspects to know the borrowers outreach in microfinance (Hansen et al., 2021). Awareness of various loan procedures and schemes available highly influences the micro entrepreneurs to depend on NBFC-MFIs. Borrowers awareness is making them to know about their rights. It also states the knowledge and level of awareness about the products and services they receive (Prakash, 2012). Awareness of borrowers towards loan aspects of NBFC-MFIs is important for the successful operation of NBFC-MFIs. If the borrowers awareness of the the procedural aspects of loan terms leads to women empowerment (Datta, 2019).

The financial behaviour of borrowers is determined by their level of awareness of the institution's schemes and services. It makes it easier for the borrowers to understand, evaluate, and select schemes and services by providing them with the necessary knowledge, skill, and confidence (Rutledge et al., 2008). The awareness of loan terms of NBFC-MFIs results are shown in Table 4.4.

Table 4.4 Awareness on the Terms of Loans of NBFC-MFIs

Statements	HA			A			N			UA			HUA			Total Score	Mean	SD
	n	%	Score	n	%	Score	n	%	Score	n	%	Score	n	%	Score			
Eligibility criteria for availing loans from NBFC-MFIs	189	49	945	133	34.5	532	49	12.7	147	15	3.9	30	—	—	—	1654	4.28	0.83
Loan application process and required documentation	145	37.6	725	97	25.1	388	85	22	255	42	10.9	84	17	4.4	17	1452	3.76	1.18
Knowledge on available loan schemes offered by NBFC-MFI	237	6.4	1185	143	37.6	572	6	1.6	18	—	—	—	—	—	—	1775	4.59	0.52
Maximum loan amount eligible for borrowing	208	53.9	1010	172	44.6	512	6	1.6	18	—	—	—	—	—	—	1540	3.99	0.53
Applicable interest rates on loan amounts	213	55.2	1065	138	35.8	552	34	8.8	102	—	—	—	1	0.3	1	1720	4.45	0.67
Loan repayment schedule and terms	202	52.3	1010	128	33.2	512	50	13	150	3	0.8	6	3	0.8	3	1681	4.35	0.79
Advisory and financial guidance services provided by NBFC-MFIs	153	39.6	765	129	33.4	516	87	22.5	261	14	3.6	28	3	0.8	3	1573	4.08	0.91
Consequences and procedures in case of loan default	144	0.337	720	140	36.3	560	68	17.6	204	23	6	46	11	2.8	11	1541	3.99	1.02
Awareness of borrower rights and responsibilities	121	31.3	605	85	22	340	102	26.4	306	52	13.5	104	26	6.7	26	1381	3.58	1.24

Source: Computed Data (HA-Highly Aware, A-Aware, N-Neutral, UA-Unaware, HUA-Highly Unaware)

Table 4.4 states the awareness of loan terms of NBFC-MFIs. It is understood that the majority of the respondents were highly aware of the *various schemes offered* by the NBFC-MFIs to micro entrepreneurs with a mean score of 4.59. The mean and standard deviation values also support the consistency of the responses revealed by the respondents. The second rank was given to *the amount of loan eligible* (4.52) followed by *awareness of interest rate* (4.45) and *repayment schedule and terms* (4.35) were ranked subsequently. *Eligibility criteria for availing loans* were known to respondents with a mean score of 4.28, *advisory and financial services offered by NBFC-MFIs* are acknowledged by the respondents with mean score of 4.08

The mean score of 3.58 also reveals that the respondents were less aware of *rights and responsibilities* with the loan aspects and occupied the last position, the high standard deviation also supports the varied opinion. It is the responsibility of the executives to explain all the actions against default procedures, and loan procedures to the micro entrepreneurs, because in the study most of the respondents have only a school level of education.

It reveals that the respondents in the study area are almost *aware about the terms of loans of NBFC-MFIs*, but they should understand their *rights and responsibilities* before availing of any loans and also, they should be aware of the consequences of default.

4.2.1 Awareness of Loan Terms among Socio-Economic profile of the respondents

Awareness of loan terms among the socio-economic profile of the respondents is analysed to understand the loan terms offered by NBFC-MFIs to the borrowers. Analysis with the awareness of loan terms assumes that the observations are normally distributed and exhibit homogeneous variance across factors (Montgomery et al., 2013). By framing the following hypothesis, the results of ANOVA are presented in Table 4.5. Awareness score based on the type of family is presented in Table 4.6 by applying t-test.

H_{a1a}: There is a significant mean difference in awareness of loan terms among the socio-economic profile of the respondents.

Table 4.5 Awareness of Loan Terms and Socio-Economic Profile of the Respondents

Variables		Sum of Squares	Df	Mean Square	F	p	Result
Age (in years)	Between Groups	1177.631	3	392.544	16.176	0.0001	Significant
	Within Groups	9269.923	382	24.267			
Educational Qualification	Between Groups	2735.179	5	547.036	26.953	0.0001	Significant
	Within Groups	7712.376	380	20.296			
Social Category	Between Groups	169.269	2	84.634	3.154	0.044	Significant
	Within Groups	10278.286	383	26.836			
Earning Members in the Family	Between Groups	542.211	3	180.737	6.970	0.0001	Significant
	Within Groups	9905.343	382	25.930			
Area of Residence	Between Groups	1708.846	2	854.423	37.448	0.0001	Significant
	Within Groups	8738.709	383	22.816			

Source: Computed Data

Table 4.6 Awareness Score based on Type of Family

Type of Family	Mean	df	t value	p
Joint	38.07	384	1.789	0.074
Nuclear	37.11			

The Table 4.5 indicates that the socio-economic factors have a critical aspect in shaping the awareness of women micro entrepreneur on the terms of loans offered the NBFC-MFIs. Table 4.5 reveals the socio-economic variables such as *age* (0.0001), *educational qualification* (0.0001), *social category* (0.044), *earning members in the family* (0.0001), *area of residence* (0.0001) had shown a significant mean difference in awareness score among different Socio-economic profiles, hence the alternative hypothesis (H_{a1a}) is accepted.

With reference to Table 4.6, the variable *type of family* (0.074) there is no significant mean difference is found. This indicates that there is no evidence of mean difference in awareness scores among respondents based on their type of family either joint family or nuclear family. The mean square values of age, educational qualification, social group and area of residence are the highest, showing these variables are most important in forming women micro entrepreneur's levels of awareness. Because of these variables, how people understand loans is greatly affected and their strong relationship with awareness points out that NBFC-MFIs should find better ways to inform each socio-economic group.

It is evident from the analysis that the level of awareness about loan terms mainly depends on entrepreneurs age, level of education, where they stand in society and place of residence. While creating awareness MFIs should carefully consider the education, locality and social rank of women micro entrepreneurs, is key in adjusting loan schemes to meet their requirements. These findings suggest that NBFC-MFIs should implement differentiated strategies for women micro entrepreneurs based on socio-economic profile factors of age, education, social category, earning members in family and area of residence. By considering these factors in their outreach and loan scheme design, MFIs can enhance loan awareness, promote higher participation rates, and empower more women micro entrepreneurs with well-informed financial activities.

4.2.2 Awareness of Loan Terms among Business and Loan Profiles of the respondents

The significant mean difference on awareness of loan terms exhibits the relationship between the borrowers business and loan details, and their level of awareness and knowledge of the loan terms provided in Table 4.7.

H_{a1b} : There is a significant mean difference in awareness of loan terms among business and loan profiles of the respondents

Table 4.7, states that several variables, including years of experience in business (0.0001), nature of business (0.0001), monthly income from the business (0.0001), years of association with NBFC-MFIs (0.0002), and amount of loan taken (0.0001), had resulted in significant mean difference on awareness of loan terms offered by NBFC-MFIs. Given that all these *p-values are well below the significance threshold of 0.05*, therefore the alternative hypothesis is accepted (H_{a1b}) with respect to these variables.

Table 4.7 Awareness of Loan Terms and Business and Loan profiles of the Respondents

Variables		Sum of Squares	Df	Mean Square	F	p	Result
Years of Experience in business	Between Groups	676.860	3	225.620	8.821	0.0001	Significant
	Within Groups	9770.695	382	25.578			
Nature of Business	Between Groups	1151.292	7	164.470	6.688	0.0001	Significant
	Within Groups	9296.263	378	24.593			
Monthly Income from the Business	Between Groups	822.825	4	205.706	8.143	0.0001	Significant
	Within Groups	9624.729	381	25.262			
	Within Groups	8876.796	381	23.299			
Years of Association with NBFC-MFIs	Between Groups	584.565	4	146.141	5.645	0.0002	Significant
	Within Groups	9862.990	381	25.887			
Amount of Loan taken	Between Groups	724.061	4	181.015	7.093	0.0001	Significant
	Within Groups	9723.493	381	25.521			

Source: Computed Data

The results reveal that experienced business owners tend to be more aware of loan terms since they have accumulated more exposure to different financial products over the years. In addition, operating a business that makes products often means people are used to considering more complex loan terms because they require bigger loans. Profitable organizations tend to deal more often with financial institutions and are thus generally more aware of different loan terms. This indicates that business experience, the amount a woman earns, type of business, and loan size affect women micro entrepreneurs and comprehension of loan terms.

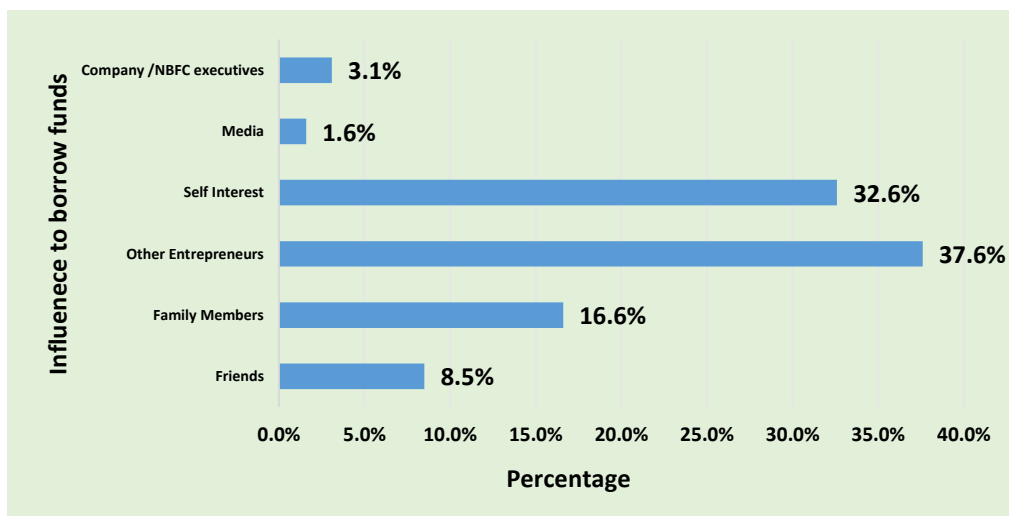
4.2.3 Influencer's to Borrow funds from NBFC-MFIs

The influencers to borrow funds from NBFC-MFIs reflect the strong role model in encouraging entrepreneurs and creating awareness of microcredit lending. Community connections and client endorsements can help NBFC-MFIs expand their outreach and customer base. Influencers to Borrow funds from NBFC-MFIs represented in Table 4.8

Table 4.8 Influencer's to Borrow funds from NBFC-MFIs

Influencers	No. of Respondents(n=386)	Percentage
Friends	33	8.5
Family Members	64	16.6
Other Entrepreneurs	145	37.6
Self Interest	126	32.6
Media	6	1.6
Company /NBFC Executives	12	3.1

Source: Computed Data

**Figure 4.4 Influencer's to Borrow funds from NBFC-MFIs**

The analysis reveals that, 37.6 percent of the respondents were influenced by other entrepreneurs to borrow funds from NBFC-MFIs, 32.6 percent borrowed funds, through self interest, family members influenced 16.6 percent of the respondents to borrowed funds, 8.5 percent of the respondents were influenced by their friends, 3.1 percent of them influenced to borrow through NBFCs executives. A minimum number of respondents were influenced by the media.

Most of the respondents are influenced by other micro entrepreneurs, it is understood that peer-to-peer influence played a vital role in borrowing loans from NBFC-MFIs.

4.2.4 Factors Influencing to Borrow Funds from NBFC-MFI

Women micro entrepreneurs were asked to rank a set of ten items that influenced them to borrow funds from NBFC-MFIs and the results are analysed by using Kendalls ranking technique. Rank percentage for factors influenced to borrow funds from NBFC-MFI are discussed in Table 4.9.

Table 4.9 Factors influencing to borrow funds from NBFC-MFIs

Factors		Rank										Mean Score	Rank
		1	2	3	4	5	6	7	8	9	10		
Prompt Sanctioning of Loan	No.	36	43	89	59	62	30	35	7	14	11	6.72	II
	%	9.3	11.1	23.1	15.3	16.1	7.8	9.1	1.8	3.6	2.8		
Less procedures	No.	21	75	82	67	41	23	19	33	13	12	6.69	III
	%	5.4	19.4	21.2	17.4	10.6	6	4.9	8.5	3.4	3.1		
Convenient	No.	115	43	34	60	24	29	9	19	29	24	6.98	I
	%	29.8	11.1	8.8	15.5	6.2	7.5	2.3	4.9	7.5	6.2		
Personal attention	No.	69	23	17	41	44	54	28	16	35	59	5.55	VI
	%	17.9	6.0	4.4	10.6	11.4	14	7.3	4.1	9.1	15.3		
Friendly Approach of employees	No.	67	39	17	23	58	50	28	36	22	46	5.77	V
	%	17.4	10.1	4.4	6	15	13	7.3	9.3	5.7	11.9		
Efficient &Speedy Service	No.	53	83	38	56	17	38	24	20	23	34	6.48	IV
	%	13.7	21.5	9.8	14.5	4.4	9.8	6.2	5.2	6	8.8		
Guidance and support	No.	11	25	62	16	43	33	43	35	64	54	4.73	VII
	%	2.8	6.5	16.1	4.1	11.1	8.5	11.1	9.1	16.6	14		
Safe Transactions	No.	13	30	19	45	43	35	43	51	56	51	4.63	VIII
	%	3.4	7.8	4.9	11.7	11.1	9.1	11.1	13.2	14.5	13.2		
Quick resolving of Complaint	No.	1	9	16	12	27	34	69	86	70	62	3.55	X
	%	0.3	2.3	4.1	3.1	7	8.8	17.9	22.3	18.1	16.1		
Follow up Activities	No.		14	13	8	27	60	87	83	62	32	3.89	IX
	%		3.6	3.4	2.1	7	15.5	22.5	21.5	16.1	8.3		

Source: Computed data

The Table 4.9 shows that, first rank was given to *Convenient* with a mean score of 6.98 which is found to be the most important factor that influenced the borrowings from NBFC-MFIs. It reveals that while getting loans from NBFC-MFIs the entrepreneurs feel convenient when compared to other similar financial institutions. The second important factor considered was the *prompt sanctioning of loans* with a mean score value of 6.72, which implies that the formation of NBFC-MFIs is mainly to promote small-scale business operations. *Less procedures for obtaining loans* and *efficient speedy service* from NBFC-MFIs ranked third and fourth with a mean score of 6.69 and 6.48 respectively. The *friendly approach from the institutions* to the borrowers holds fifth rank (Mean Score 5.77) which reveals that borrowers are get influenced when they receive personal attention from NBFC-MFIs. Rank six, seven and eight assigned to *personal attention from the institution*, *guidance and support and safe transactions* with a score of 5.55, 4.73 and 4.63 respectively. *Follow-up activities and resolving of complaints* are noted as the least influencing factor with ninth and tenth rank with a score of 3.89 and 3.55 respectively.

It is clear that Kendall's coefficient of concordance (W) was used to find the extent of similarity among the respondents in ranking the 10 items influencing the borrowing from NBFC-MFIs. Kendall's W ranges between 0 and 1. The higher the value of W, shows higher similarity in assigning ranks to the given items. The Kendall's W was found to be 0.406 which shows that there is a moderate similarity among the respondents in assigning the ranks.

4.2.5 Problems in Transacting with NBFC-MFIs

The main issues that micro entrepreneurs encounter when doing business with NBFC-MFIs are analysed in Table 4.10.

Table 4.10 Problems in Transacting with NBFC-MFIs

Problems	No. of Respondents (n=386)	Percentage
High Interest	80	20.7
Insufficiency of fund	55	14.2
Less Coordination	71	18.4
Delay in getting Fund	48	12.4
Less flexibility in repayment	97	25.1
Lack of Advisory Service	17	4.4
Technical Issues	18	4.7

Source: Computed Data

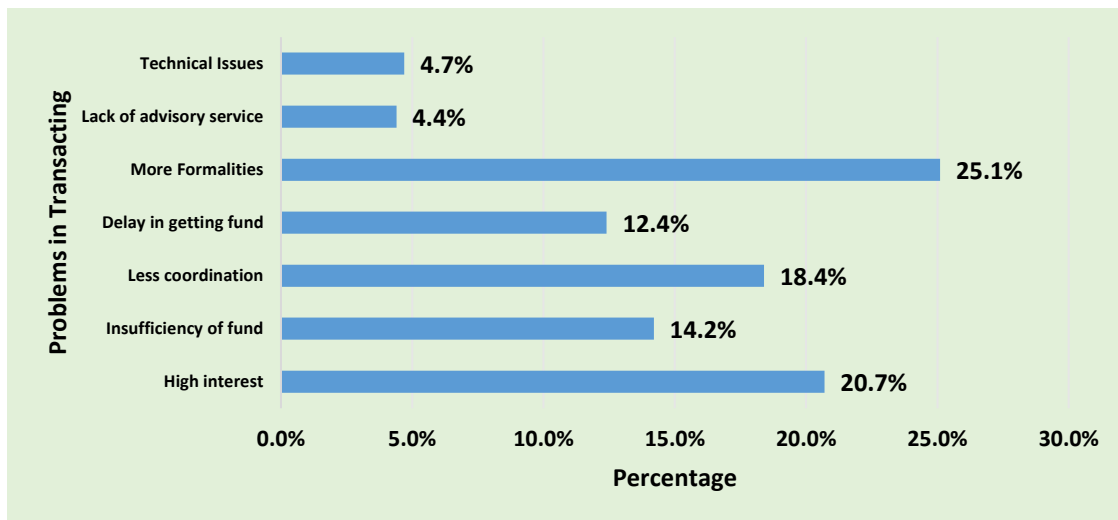


Figure 4.5 Problems in Transacting with NBFC-MFIs

Table 4.10 shows the problems faced by the respondents while transacting with NBFC-MFIs, 25.1 percent of the respondents pointed out that less flexibility in repayment of the loan, 20.7 percent of them faced the problem of the high rate of interest, less coordination by the executives was the problem for 18.4 percent the respondents, 14.2 percent of them indicated the problem of insufficiency of loan amount offered by NBFC-MFIs, 12.4 percent of them experienced a delay of getting funds, 4.7 percent of them have faced the technical issue and less respondents (4.4%) have a problem of lack of advisory service. Less flexibility in repayment of the loan, from NBFC-MFIs is the major problem encountered by the respondents in the study. NBFC-MFIs are recognized and controlled by RBI. So they have to follow a set of procedures before giving a loan to any micro entrepreneurs. It is suggested that they have to reduce the formalities to attract more micro entrepreneurs.

4.3 Usage of Borrowed Funds by Women Micro Entrepreneurs

The borrowed funds from NBFC-MFIs are used properly to strengthen the business growth. Borrowed funds should be used effectively to generate returns and fulfill the intended purpose. Borrowers of microcredit, usually small entrepreneurs, self-employed individuals, use the funds for various productive and livelihood enhancing purposes for wealth creation. Through poverty reduction tools and better livelihood NBFC-MFIs help to achieve sustainable development goal of (SDG1) “No poverty”. Determinants of loan utilization among microfinance borrowers and their repayment behaviour lead to MFIs growth (Chamboko and Guvuriro, 2022). The different usage of funds by the micro entrepreneurs, indicated in Table 4.11

Table 4.11 Usage of Borrowed Funds by the Respondents

Statements	SA			A			N			DA			SDA			Total Score	Mean	SD
	n	%	Score	n	%	Score	n	%	Score	n	%	Score	n	%	Score			
The borrowed funds have been utilised as initial capital to launch the business	123	31.9	615	217	56.2	868	46	11.9	138	—	—	—	—	—	—	1621	4.20	0.63
The fund has supported day-to-day operational activities	226	58.5	1130	127	32.9	508	32	8.3	96	1	0.3	2	—	—	—	1736	4.49	0.65
The funds have facilitated business expansion and diversification	125	32.4	625	195	50.5	780	59	15.3	177	7	1.8	14	—	—	—	1596	4.13	0.72
The fund has provided financial support during unforeseen business challenges	166	13	830	128	33.2	512	76	19.7	228	12	3.2	24	4	1	4	1598	4.13	0.9
The fund has been utilized to acquire essential resources such as equipment, technology, and vehicles	118	30.6	590	173	44.8	692	50	13.0	150	38	9.8	76	7	1.8	7	1515	3.92	0.99

Source: Computed Data (SA-Strongly Agree,A-Agree,N-Neutral,DA-Disagree,SDA-Strongly Disagree)

Table 4.11 reveals the usage of borrowed funds by the respondents. Most of the borrowers used borrowed *money to cover regular operations* which ranks first with a 4.49 mean score. The *use of funds as startup capital* was also reported with a mean of 4.19, this indicates that the vast majority agree that without the borrowed money, the business would not have started. In addition, funds have been *utilized to assist with expanding and diversifying businesses* (Mean 4.13) indicating that they believe the fund is significant for business development. *Helping businesses overcome sudden challenges* by borrowing finance earned a mean score of 4.13.

Alternatively, the lowest use of funds was for *buying basic resources such as equipment, technology and vehicles* which received a mean score of 3.92. In brief, the use of borrowed funds is best suited for operational purposes (Mean 4.49), compared to the use for vital resources like equipment and vehicles (Mean 3.92). Since funds are used well for immediate needs, this shows that there is a need to manage business resources and investments better in the long run. The borrowed funds from MFIs are highly used for meeting day-to-day activities for running the business, therefore the working capital needs of the women micro entrepreneurs are attained through microcredit support.

4.3.2 Usage of Borrowed Funds among Socio-Economic profile of the respondents

Socio-economic profile and usage of funds reflect how they utilise the borrowed funds for the business activities. The ANOVA and t-test results analysed and presented in Table 4.12 and 4.13.

H_{a2a}: There is a significant mean difference in usage of borrowed funds among the socio-economic profile of the respondents.

Table 4.12 Usage of Borrowed Funds and Socio-Economic profile of the respondents

Variables		Sum of Squares	Df	Mean Square	F	p	Result
Age (in years)	Between Groups	25.620	3	8.540	1.930	0.124	Not Significant
	Within Groups	1690.235	382	4.425			
Educational Qualification	Between Groups	33.095	5	6.619	1.495	0.191	Not Significant
	Within Groups	1682.760	380	4.428			
Social Category	Between Groups	.392	2	.196	0.044	0.957	Not Significant
	Within Groups	1715.463	383	4.479			
Earning Members in the Family	Between Groups	39.383	3	13.128	2.991	0.031	Significant
	Within Groups	1676.472	382	4.389			
Area of Residence	Between Groups	4.153	2	2.076	0.465	0.629	Not Significant
	Within Groups	1711.702	384				

Source: Computed Data

Table 4.13 Usage of borrowed fund Score on Type of Family

Type of Family	Mean	df	t value	p
Joint	20.97	384	0.803	0.422
Nuclear	20.79			

Source: Computed Data

Tables 4.12 and 4.13 establish whether there is a association link between women micro entrepreneurs socio-economic status and the utilization of loans. The ANOVA results suggest that age, educational qualification, social group, family structure and residential area do not have a significant effect on the use of funds. In particular, the findings for *age* ($p = 0.124$), *educational qualification* ($p = 0.191$), *social category* ($p = 0.957$) *family type* ($t\text{-value} = 0.422$) and, *location of residence* ($p = 0.629$) reveal that social and economic background does not strongly affect how borrowed funds are spent. Hence, the null hypothesis (H_0) is accepted for these variables.

There is a strong link between households with their income ($p = 0.031$), households with multiple earners have more money available and it will be simpler to decide and use their finance for required business purposes. Hence, the alternative hypothesis shows that the number of people earning in a family is important for influencing how borrowed funds are used. Overall, these findings indicate that although family members' income changes the use of borrowed money, other factors like age, education, family type and location are not significant. Thus, for *earning members in the family*, the alternative hypothesis (H_{a2a}) is chosen as the most reliable and for the other socio-economic factors, the null hypothesis (H_0) is preferred.

4.3.3 Usage of Borrowed Funds across Business and Loan Profiles of the Respondents

Examining the relationship between business and loan characteristics with the fund utilisation by the respondents reflected in ANOVA shown in Table 4.14 by framing the following hypothesis.

H_{a2b} : There is a significant mean difference among usage of borrowed funds and business and loan profiles of the respondents.

Table 4.14 Usage of Borrowed Funds and Business and Loan profiles of the Respondents

Variables		Sum of Squares	Df	Mean Square	F	p	Result
Years of Experience in Business	Between Groups	16.803	3	5.601	1.259	0.288	Not Significant
	Within Groups	1699.051	382	4.448			
Nature of Business	Between Groups	83.770	7	11.967	2.772	0.008	Significant
	Within Groups	1632.085	378	4.318			
Monthly Income from the Business	Between Groups	3.903	4	.976	0.217	0.929	Not Significant
	Within Groups	1711.952	381	4.493			
Years of Association with NBFC-MFIs	Between Groups	26.755	4	6.689	1.509	0.199	Not Significant
	Within Groups	1689.100	381	4.433			
Amount of Loan taken	Between Groups	25.298	4	6.324	1.425	0.225	Not Significant
	Within Groups	1690.557	381	4.437			

Source : Computed Data

The analysis shown in Table 4.14 focuses on how different business and loan profiles of women micro entrepreneurs are related to the amount they use from their loans. The *nature of a business* is the only variable that links to how the borrowed money is used, but *years of experience* (0.288), *monthly business income* (0.929), *years with NBFC-MFI s* (0.199), and *taken loan amounts* (0.225) do not show a significant mean difference. Thus, these variables followed the null hypothesis (H_0).

There is a mean difference between *business type* ($p=0.008$) and borrowing funds, proving that the category of business affects funding decisions. The nature of the business determines the effectiveness of loan utilization by women micro entrepreneurs. The finding shows that to assess the borrowing habits of businesses; borrowers must consider their way of operating and the capital they have. The null hypothesis (H_0) is rejected and this testing process accepts (H_{a2b}) for this variable.

4.4 Growth and Development of Women Micro Entrepreneurs

Microfinance initiatives are essential for improving the socio-economic status of those who receive microcredit services (Goel, 2024). Socio-economic development of the entrepreneurs leads to the achievement of both social and business aspects in connection with their business and entrepreneurship. If the women empowered through by way of NBFC-MFIs funding assistance to start business units leads to Sustainable development goals of “Gender Equality” (SDG 5). Further financial empowerment is also studied by assets possessed and investments made in different schemes. In the current study the growth and development of women micro entrepreneurs are studied in three aspects, namely

- **Business development of women micro entrepreneurs**
- **Social status of women micro entrepreneurs**
- **Financial status of women micro entrepreneurs**

4.4.1 Business Development of the Women Micro Entrepreneurs

Business growth facilitates empowerment eliminate gender inequalities and increases skills. A higher level of confidence in doing business is reflected in business action through entrepreneurial activities. A microfinance institution provides a valuable service and offers a platform for a wide range of new business opportunities. Through the amount of loan disbursement, saving attitude, profitability in business, market potential analysis, and adherence to regulations provided thereby entrepreneurship development directly impacts the long-term sustainability and viability of microfinance institutions (Lamichhane et al., 2023). Business development score of the respondents depicted in Table 4.15.

Table 4.15 Business Development of the Respondents

Statements	SA			A			N			DA			SDA			Total Score	Mean	SD
	n	%	Score	n	%	Score	n	%	Score	n	%	Score	n	%	Score			
Increased market access for selling products and services	224	58	1120	128	33.1	512	33	8.5	99	1	0.2	2	—	—	—	1733	4.48	0.66
Strengthened customer relationships and retention	191	49.4	955	175	45.3	700	19	4.2	57	1	0.2	2	—	—	—	1714	4.44	0.6
Improved ability to analyze and respond to competitor strategies for risk management	170	44	850	143	37	572	56	14.5	168	17	4.4	34	—	—	—	1624	4.20	0.84
Enhanced confidence in business operations and decision-making	198	52.6	990	151	39.1	604	35	9.1	105	2	0.5	4	—	—	—	1703	4.41	0.67
Greater ease in accessing financial assistance and funding opportunities	203	52.5	1015	165	42.7	660	16	4.1	48	2	0.5	4	—	—	—	1727	4.47	0.6
Expanded collaboration and networking with industry peers	211	54.6	1055	99	25.6	396	69	17.8	207	7	0.8	14	—	—	—	1672	4.33	0.83
Strengthened brand identity and market presence	186	48.1	930	178	46.1	712	20	5.1	60	2	0.5	4	—	—	—	1706	4.42	0.67
Increased capacity for innovation and business growth	176	45.5	880	149	38.6	596	57	14.7	171	4	1.0	8	—	—	—	1655	4.29	0.72

Source: Computed Data (SA-Strongly Agree,A-Agree,N-Neutral,DA-Disagree, SDA-Strongly Disagree)

Table 4.15 reveals how the respondents businesses have developed, due to various factors. The results derived shows that people view the market, interact with customers, look at competitors, make decisions, receive financial help, team up, develop their brand and foster innovation.

Improved access to the market for selling goods and services had the highest ranking with the mean score of 4.48. Most of the respondents (58.0%) strongly believed that financial support rendered through NBFC-MFI facilitated them to enter the market. As a result, women micro entrepreneurs strongly believe that access to new markets is a key benefit they achieve from the resources spent. *Easier access to financial help and funding* was the second most important factor and it received a mean score of 4.47, implying that respondents have more trust in finding the needed financial support which helps the development of the business.

Enhancing relationships with customers and retention (Mean 4.44), building confidence in running the business (Mean 4.41) increasing brand recognition and market presence (Mean 4.42), collaboration and networking with industry peers (Mean 4.33) were also considered precious. It is clear from the results that the business has grown and more people agreed that their business relationships and reputation within the market are stronger than before. *Innovation and business growth* with a lowest mean score of 4.29, suggest that NBFC-MFIs must incorporate training on innovation and entrepreneurial education, promoting innovation will improves the borrower performance and institutional sustainability by assisting borrowers in diversifying their sources of incomes, and lowering business-related risks.

The least factor considered was the *assessing and reacting to the strategies of competitors in risk management*, with the mean score of 4.20, indicating that NBFC-MFIs should create awareness and educate the borrowers about broader market strategies and dynamics to overcome the competitors.

Overall, there is a substantial improvement in business development. Market access is the top-ranked factor and the least-ranked is the ability to manage competitions suggesting that the NBFC-MFIs have advanced more in business essential and external areas that need improvement.

4.4.1.1 Business Development of the respondents among Socio-Economic profile of the Respondents

The Relationship between Socio-economic characteristics and business development of women micro entrepreneurs examines how socio-economic factors influence business growth analysed through ANOVA presented in Table 4.16 and t-test in 4.17.

H_{a3a}: There is a significant mean difference in business development of the respondents among socio-economic profile of the respondents

Table 4.16 Business development of the respondents and Socio-Economic profile of the Respondents.

Variables		Sum of Squares	Df	Mean Square	F	p	Result
Age (in years)	Between Groups	65.102	3	21.701	6.090	0.0001	Significant
	Within Groups	1361.274	382	3.564			
Educational Qualification	Between Groups	182.034	5	36.407	11.118	0.0001	Significant
	Within Groups	1244.342	380	3.275			
Social Category	Between Groups	21.358	2	10.679	2.911	0.056	Not Significant
	Within Groups	1405.018	383	3.668			
Earning members in the Family	Between Groups	82.188	3	27.396	7.786	0.0001	Significant
	Within Groups	1344.188	382	3.519			
Area of Residence	Between Groups	52.981	2	26.491	7.387	0.001	Significant
	Within Groups	1373.395	383	3.586			

Source: Computed Data

Table 4.17 Business Development Score on Type of Family

Type of Family	Mean	df	t value	p
Joint	61.52	384	0.387	0.699
Nuclear	61.34			

The analysis in Table 4.16 explores whether the socio-economic profile background of women micro entrepreneurs impacts on their business development. The significant relationship ($p = 0.0001$) between *age* and business development indicates that age is very important for the success of a business. It means that the ages of borrowers play a crucial role in how much their businesses growth because of things like experience or different entrepreneurial ways among generations. Also, business development is strongly influenced by an individual's *educational background* ($p = 0.0001$). Likely that those who have higher education perform well in business because they have more expertise and access to more resources. *Number of members earning in the family* ($p = 0.0001$) is a significant predictor of how the business operates. The earning members in the family determine the resources and support provided which can affect the business's ability to thrive. The *area of residence* ($p = 0.001$) also appears to have a major impact on business development. Women living in cities often benefit from easier marketing, better infrastructure and more business contacts which promotes their entrepreneurial achievements when compared to other places. Therefore, for the above variables, alternative hypothesis (H_{a3a}) is, accepted.

The social category ($p = 0.056$) does not demonstrate a major connection with business progress, it reveals that the particular community does not strongly influence the business growth, (H_0) the null hypothesis, is accepted when it comes to social category Table 4.18 reveals *Family type* (t -value = 0.699) has not shown a significant difference, suggesting that a woman micro entrepreneurs family background does not have an impact on their business. So, the null hypothesis is accepted for this particular variable.

Findings indicate that age, educational qualifications, family members who earn money and area of residence all have a significant role and impact in the development of a business, whereas social category does not have a significant difference. For the variables found to be significant, the alternative hypothesis (H_{a3a}) holds, but the null hypothesis (H_0) is accepted for the social category and type of family. It proves that a strong education, positive family support and a helpful environment are vital to achieve success for women-owned businesses.

4.4.1.2 Business development of of the respondents among Business and Loan Profiles

The analysis of variance reveals the relationship between loan and business profiles and how it enhances the business success of women entrepreneurs and focused economic empowerment. The test results of ANOVA presented in Table 4.18

H_{a3b} : There is a significant mean difference in business development of the respondents among business and loan profiles of the respondents.

Table 4.18
Business Development of the Respondents and Business and Loan profiles

Variables		Sum of Squares	Df	Mean Square	F	p	Result
Years of Experience in Business	Between Groups	126.020	3	42.007	12.340	0.0001	Significant
	Within Groups	1300.355	382	3.404			
Nature of Business	Between Groups	54.648	7	7.807	2.151	0.038	Significant
	Within Groups	1371.728	378	3.629			
Monthly Income from the Business	Between Groups	15.133	4	3.783	1.021	0.396	Not Significant
	Within Groups	1411.243	381	3.704			
	Within Groups	1272.763	381	3.341			
Years of Association with NBFC-MFIs	Between Groups	41.436	4	10.359	2.850	0.024	Significant
	Within Groups	1384.940	381	3.635			
Amount of Loan taken	Between Groups	44.273	4	11.068	3.051	0.017	Significant
	Within Groups	1382.103	381	3.628			

Source: Computed Data

Table 4.18 examines the relationships between factors of the business and loan profiles and development in the business activities. There is a significant difference ($p=0.0001$) between *experience in business* and business development which reveals experienced entrepreneurs often perform better with the knowledge, resources and strategies they have accumulated. The *nature of the business involved* ($p = 0.038$) also proves it makes a difference, revealing that business growth depends on the products or services they offer. The *years dealing with NBFC-MFIs* ($p = 0.024$) are significant, which indicates that a lengthy relationship with financial institutions supports business growth. Besides, the *amount of loan requested in a year* ($p = 0.017$) is also related to business development, since it helps the business to manage other key tasks. Thus, alternative hypothesis (H_{a3b}) is accepted for these factors.

The *income the business makes each month* ($p = 0.396$) had no significant difference with its development, proving income levels alone do not strongly influence how the business develops. Thus, the null hypothesis is supported for monthly income and business development.

In summary, experience in business, type of business, years of connection to NBFC-MFIs and loans taken over a year give a positive contribution to business growth, but there is no noticeable effect of monthly income on business growth. It demonstrates that women-owned businesses need certain experience, types of business and involvement with finances to help them succeed and grow. Thereby sustainable development goal (SDG 1) of “No poverty” was attained through the better daily livelihood of the underprivileged section of the community, having a strong business profile and an efficient relationship between MFIs have a high impact on business development.

4.4.2 Social Status of Women Micro Entrepreneurs

The borrowers perception and outcome towards the social status of the micro entrepreneurs were collected through associated statements using five point scaling technique. The NBFC-MFIs focusing the women entrepreneurs which facilitate to focus “Gender Equality” (SDG 5). A key aspect of the social upliftment of women is addressing areas of gender inequality between women and men (Srivstav, 2001). The social status derived from the women as an entrepreneur in society as well as family makes a strong role in empowering women. By providing women with an opportunity to invest, microfinance empowers them and enhances their social standing (Hermes and Lensink,2011). Table 4.19 portrayed, the computed analysis of the respondents social status.

Table 4.19 Social Status of the Respondents

Statements	SA			A			N			DA			SDA			Total Score	Mean	SD
	n	%	Score	n	%	Score	n	%	Score	n	%	Score	n	%	Score			
Enhanced participation in social and community activities	151	39.1	755	149	38.6	596	86	22.3	258	—	—	—	—	—	—	1609	4.16	0.76
Gained recognition and respect within society	118	30.6	590	222	57.5	888	46	11.9	138	—	—	—	—	—	—	1616	4.18	0.62
Take decision in family budget planning	219	56.7	1095	140	36.3	560	25	6.5	75	2	0.5	4	—	—	—	1734	4.49	0.64
Greater involvement in family decision-making	191	49.5	955	178	46.1	712	17	4.4	51	—	—	—	—	—	—	1718	4.45	0.58
Expanded and strengthened social networks	204	52.8	1020	155	40.2	620	21	5.4	63	3	0.8	6	3	0.8	3	1712	4.43	0.7
Ability to Manage Household Emergency	227	58.8	1135	151	39.1	604	8	2.1	24	—	—	—	—	—	—	1763	4.56	0.53
Increased confidence and self-efficacy to build social capital	179	46.4	895	189	49	756	18	4.7	54	—	—	—	—	—	—	1705	4.41	0.58
Attained leadership roles in community initiatives	199	51.6	995	147	38.1	588	26	6.7	78	13	3.4	26	1	0.3	1	1688	4.37	0.77

Source: Computed Data (SA-Strongly Agree, A-Agree, N-Neutral, A-Disagree, SDA-Strongly Disagree)

Table 4.19 highlights the social status of the participants by considering entrepreneurs involvement in society, their opinions, their role in major family matters, and the self-confidence they attained. People felt that their entrepreneurship has helped them grow in their communities. The *skill to respond well to emergency situations* at home earned the highest score of 4.56, proving that managing a business provides the ability to cope with unexpected events at home. The mean score for *making decisions in family budget planning* with 4.49 score pointing out that most of the respondents (56.7%) took the lead in budgeting, leading to stronger financial responsibilities and empowerment. Being *involved in family decisions, expanding social connections, and gaining increased confidence in doing things* are other important aspects that prove a strong social impact with the mean scores of 4.45, 4.43, and 4.41, respectively. According to this, women running their businesses are becoming more confident and strengthening their relationships with others. *Getting leadership roles in the community* (Mean 4.37), as a result, even the women participated in community initiatives only a few of them reached leadership positions.

The least rank was assigned to *recognition and respect from others* (Mean 4.18) and *take part in social and community gatherings* (Mean 4.16), which shows that they take a more active role in external events has the lowest mean scores among the features mentioned, but this is still a good result, showing that some aspects of social empowerment are slowly improving. Even though women micro entrepreneurs manage their own and their families daily decisions, their level of leading in the community can still improve for better social standing.

4.4.2.2 Social Status of the Respondents among Socio-Economic Profile

This relationship reflects the relationship between socio-economic profiles and how they impact the social status of women micro entrepreneurs. The ANOVA and t-test results presented in Table 4.20 and 4.21

H_{a4a}: There is a significant mean difference in social status of the respondents among socio-economic profile of the respondents.

Table 4.20 Social Status of the Respondents and Socio-Economic Profile

Variables		Sum of Squares	Df	Mean Square	F	p	Result
Age (in years)	Between Groups	65.102	3	21.701	3.320	0.020	Significant
	Within Groups	1361.274	382	3.564			
Educational Qualification	Between Groups	182.034	5	36.407	5.667	0.0001	Significant
	Within Groups	1244.342	380	3.275			
Social Category	Between Groups	21.358	2	10.679	5.872	0.003	Significant
	Within Groups	1405.018	383	3.668			
Earning Members in the Family	Between Groups	82.188	3	27.396	4.540	0.004	Significant
	Within Groups	1344.188	382	3.519			
Area of Residence	Between Groups	52.981	2	26.491	7.62	0.001	Significant
	Within Groups	1373.395	383	3.586			

Source: Computed Data

Table 4.21 Social Status score on Type of Family

Type of Family	Mean	df	t value	p
Joint	67.35	384	1.120	0.263
Nuclear	66.93			

In Table 4.20, the relationship between the socio-economic background of women micro entrepreneurs and their social status is discussed. From the ANOVA, it is observed that a number of socio-economic aspects shape the social status, whereas some have no significant difference effect. In particular, *age* ($p = 0.020$), *educational qualification* ($p = 0.0001$), *social category* ($p = 0.003$), *earning members in the family* ($p = 0.004$), and *area of residence* ($p = 0.001$) indicate a notable effect on social status and involvement in social and community activities. Because of these factors, things such as age, education, family income, and lifestyle environment make a big difference in how women are included in the community and why they can assume leadership roles. The alternative hypothesis (H_{a4a}) is accepted for these variables.

Table 4.21 exhibits alternatively, that family type (t-value = 0.263) does not have a significant impact on their social status. Thus, the null hypothesis (H_0) is supported by this particular variable. The findings reveal that the socio-economic profile of the micro entrepreneurs has a significant impact and influence on their social standing as a result of engaging in entrepreneurial activities.

4.4.2.4 Social Status of the Respondents among Business and Loan profiles

Social status of women micro entrepreneurs studied through relationship between business and loan-related attributes of and their perceived or actual social standing within their families, communities, or society. The ANOVA was used and the results were presented in Table 4.22

Table 4.22 Social Status of the Respondents and Business and Loan profiles

Variables		Sum of Squares	Df	Mean Square	F	p	Result
Years of Experience in Business	Between Groups	98.671	3	32.890	6.715	0.0001	Significant
	Within Groups	1871.155	382	4.898			
Nature of Business	Between Groups	135.372	7	19.339	3.985	0.0001	Significant
	Within Groups	1834.455	378	4.853			
Monthly Income from the Business	Between Groups	49.718	4	12.430	2.466	0.045	Significant
	Within Groups	1920.108	381	5.040			
	Within Groups	1950.031	381	5.118			
Years of Association with NBFC-MFIs	Between Groups	44.669	4	11.167	2.210	0.067	Not significant
	Within Groups	1925.158	381	5.053			
Amount of Loan	Between Groups	33.271	4	8.318	1.636	0.164	Not significant
	Within Groups	1936.555	381	5.083			

Source: Computed Data

H_{a4b} : There is a significant mean difference in social status of the respondents among business and loan profiles of the respondents.

In Table 4.22, the analysis determines the relationship between the social status of women micro entrepreneurs and the factors related to business and loan profile. In particular, *experience in business* ($p = 0.0001$), *type of business they have* ($p = 0.0001$), and *their monthly business profits* ($p = 0.045$) appear to be significant difference in social status. The findings show that entrepreneurs with more experience, those running product or service firms, who make a higher income, are more likely to receive social recognition, be involved in community events, and have an increase in social status. Therefore, for these variables, the null hypothesis (H_0) is rejected in favour of alternative (H_{a4b}).

There is no significant difference between social status and *years of relationship between person dealt with NBFC-MFIs* ($p=0.067$) and *the amount of loan* ($p = 0.164$). Accordingly, women's years of experience in financial companies or how much they borrow are not major factors in their recognition or social lives. Hence, the null hypothesis (H_0) is valid for these variables. In summary, social status is mainly affected by experience in business, business type, and money one earns, more than by financial relations or how much one borrows.

4.4.3 Financial Status of Women Micro Entrepreneurs

Financial status reflects the financial wealth of the women micro entrepreneurs after the business start-up. Financial status consists of income level, assets purchased, and various investments made by the entrepreneurs. An increase in income before and after starting the business units is identified to know the financial soundness of the women micro entrepreneurs. The income status of the respondents depicted in Table 4.23.

Table 4.23 Income Status of the Respondents

Status	No.of Respondents (n=386)	Percentage
Increased	318	82
Decreased	23	6
Constant	45	12
Total	386	100

Source: Primary Data

Table 4.23 states that 82 percent of the respondents have agreed their income has increased after starting the business, while 6 percent of the respondents have the opinion that their income has not increased and also it is found that 12 percent of the respondents

have the opinion that their income is constant. The majority of the respondents agreed that their income is raised after starting the business which shows the enhancement in the financial status of women micro entrepreneurs.

4.4.3.1 Assets Possessed by Women Micro Entrepreneurs before and after Starting the Business

The women micro entrepreneurs assets, such as fixed assets and deposits in different investment schemes, demonstrate how their wealth increased before and after they started their businesses. The key factor in determining the growth and development of the respondents is financial wealth by possessing assets (Quadrini, 2000). Wealth Possessed before and after starting business by the respondents are presented in Table 4.24

Table 4.24 Wealth Possessed before and after Starting Business by the Respondents

Nature of Assets		Possession of wealth before Starting the Business	Possession of Wealth after Starting the Business			
			New (a)	Newly Added (b)	Remained same (c)	Total (a)+(b)+(c)
Land	No.	110	62	16	94	172
	%	28.5	16.1	4.1	24.4	44.6
House	No.	328	11	16	312	339
	%	85.0	2.8	4.1	80.8	87.8
Shop/Building	No.	5	37	0	5	42
	%	1.3	9.6	0.0	1.3	10.9
Machinery	No.	24	6	17	7	30
	%	6.2	1.6	4.4	1.8	7.8
Gold	No.	386	0	369	17	386
	%	100	0	93	4.4	100.0
Cattles	No.	80	46	57	23	126
	%	20.7	11.9	14.8	6.0	32.6
Fixed Deposits	No.	3	44	0	3	47
	%	.8	11.4	0.0	0.8	12.2
Insurance Policies	No.	94	137	90	4	231
	%	24.4	35.5	23.3	1.0	59.8
Savings in Post office	No.	20	191	12	8	211
	%	5.2	49.5	3.1	2.1	54.7
Savings in Bank	No.	5	84	3	2	89
	%	1.3	21.8	0.8	0.5	23.1
Others	No.	140	25	95	45	165
	%	36.3	6.5	24.6	11.7	42.7

Source: Computed Data

The wealth and assets that women micro-entrepreneurs have accumulated after starting their businesses are compared in Table 4.24. It indicates how entrepreneurship can lead to wealth creation and asset retention. Land (16.1%), insurance policies (35.5%), post office savings (49.5%), bank savings (21.8%), and shop/building (9.6%) reveal a significant increase in possession, suggesting that after starting a business reflected on improvement in accumulation in houses (2.8%), machinery (1.6%) and other assets (6.5%) exhibit moderate fluctuation but positive asset growth after starting of the business. Gold stayed steady, showing prior wealth stability rather than development caused by businesses.

The results clearly show that, although traditional assets like gold remained largely unchanged, women micro entrepreneurs greatly increased their ownership of financial and productive assets after launching their businesses. This illustrates how entrepreneurship promotes financial inclusion, saving practices, and investment in productive capital, all of which have a positive effect on economic empowerment.

4.4.3.2 Comparison between Assets owned by the respondents before and after starting the Business

The following hypothesis was framed to test the significant difference between assets owned by the respondents before and after starting the business by applying “Z test of proportion” and shown in Table 4.25.

H_{a5}: There is a **significant difference** in the possession of assets before and after starting the business

Table 4.25 Comparison between Assets owned by the Respondents before and after starting the Business

Assets	Possession of assets (Before) (No.)	Possession of assets (After) (No.)	Z Ratio	Result
Land	110	172	4.634	Significant
House	328	339	1.155	Not significant
Shop/Building	5	42	5.569	Significant
Machinery	24	30	0.847	Not significant
Gold	386	386	0.0	-----
Cattles	80	126	3.743	Significant
Fixed Deposits	3	47	6.434	Significant
Insurance	94	231	9.987	Significant
Savings in Post Office	20	211	15.012	Significant
Savings in banks	5	89	9.245	Significant
Other Assets	140	165	1.841	Not significant

Source: Computed Data Critical value: 1% level- 2.58,

The test of proportions was applied to find whether there was any change in the assets possessed by the respondents before and after starting the business. Table 4.25 clearly states that the test value (z ratio) for land 4.634, Shop/Building (5.569), Cattles (3.743), Fixed Deposits (6.434), Insurance (9.987), Savings in Post Office (15.012), and Savings in banks (9.245) are higher than the critical value of 2.58 at 1% level of significance. It reveals that there is a significant increase in the assets and investments before and after starting the business.

With respect to the test value of the House (1.155), Machinery (0.847), Gold (0.0) and Other Assets (1.841) shows that there is no significant increase in terms of different forms of assets before and after starting the business. It shows that the respondents are showing less interest to purchase the above assets.

After starting the business, the entrepreneurs have attained significant growth in the possession of assets which reflect the improvement and profit level of the business. And also the entrepreneurs showed a keen interest in purchasing the assets and investing in various schemes for improving their wealth condition. The results reveal the empowerment of micro entrepreneurs by improving business and purchase of the needed assets for the business as well as personal purposes.

4.5 Sustainability of NBFC-MFIs

In this research, the sustainability of NBFC-MFIs is analysed through both quantitative and qualitative dimensions to provide complete knowledge of long-term viability. Quantitative dimension analysed the operational performance and describes the financial well-being, resilience, and efficiency of NBFC-MFIs. The qualitative dimension is based on primary data obtained from NBFC-MFI managers and women micro entrepreneurs, and includes information on the institutional practices, challenges and social impact. The sustainability is measured in the following terms;

4.5.1 Sustainability based on operating performance of NBFC-MFIs

4.5.2 Sustainability from the perspective of NBFC-MFIs managers

4.5.3 Sustainability of NBFC-MFIs from the perspective of women micro entrepreneurs

4.5.1 Sustainability based on Operating Performance of NBFC-MFIs

The growth and development of NBFC-MFIs serve as important factors to measure its performance. In order to reduce poverty of borrowers the economic development of the microfinance institutions must be financially sustainable (Maenuddin et al., 2023). The

loan practices followed by NBFC-MFIs are crucial criteria for analysing the sustainability of MFIs. There is a positive and significant correlation between the number of borrowers and the financial stability of microfinance institutions (Adhikari et al., 2024). Thus, loan portfolio, microcredit portfolio, loan amounts disbursed, number of branches, loans and advances, total assets and the client growth rate are important criteria to measure the sustainability of NBFC-MFIs. For NBFC-MFIs in India, 2019 was a landmark year marked by notable expansions in loan portfolios, customer outreach and financial stability (MFIN, 2019).

4.5.1.1 Financial Metrics of NBFC-MFIs to Measure the Sustainability

Metrics of financial growth are crucial for assessing institutions effectiveness and sustainability. These growth metrics show how well-equipped the organisations are to increase their sustainability, preserve their financial stability, and guarantee the effectiveness of their service delivery. The findings of growth metrics of NBFC-MFIs exhibited in Table 4.26 to 4.30.

Table 4.26 Gross Loan Portfolio Growth Rate of NBFC-MFIs

Year	Gross Loan Portfolio (in crore)	Growth rate (%)
2018-2019	68207	41.82
2019-2020	74,371	9.04
2020-2021	81,475	9.55
2021-2022	96,561	18.52
2022-2023	1,21,102	25.42
2023-2024	1,56,884	29.55
LAGR (%)	37.69	
CAGR (%)	21.06	

Source: Compiled and Computed Data from MFIN Annual Reports (2018-2024)

The growth rate of loans provided by NBFC-MFIs increased during the period 2018-2019 to 2023-2024 revealed in Table 4.26. The sector experienced a strong increase of 41.82 percent in 2018-2019 which was followed by high development and increased demand from borrowers before the pandemic started. After this outstanding growth, the growth rate dropped sharply to 9.04 percent in 2019-2020 and 9.55 percent in 2020-2021 as

institutions spooled back lending due to market uncertainty and a lack of economic activity, with a turn towards recovery that began in 2021-2022. NBFC-MFI sector recorded 18.52 percent growth continuing this positive momentum strongly in 2022-2023 (25.42 percent) and peaking in 2023-2024 at 29.55 percent.

The return to strong growth indicates that NBFC-MFIs were back to operating with confidence with their lending operations and were able to respond to increased borrower demand. The linear growth rate (LAGR) of 37.69 percent denotes that the gross loan portfolio will grow at 37.69 percent every year. The CAGR of the gross loan portfolio is 21.06 percent, which explicates the net growth attained during the six years. Overall, the profile of loan growth shows that NBFC-MFIs continue to strengthen their sustainability base and also systematically expand their market to attain a progressive growth to meet the goal of sustainability.

Table 4.27 Microcredit portfolio Growth Rate of NBFC-MFIs

Year	Microcredit portfolio (in crore)	Growth rate (%)
2018-2019	67009	39.79
2019-2020	73792	10.12
2020-2021	80549	9.16
2021-2022	100407	24.65
2022-2023	1,38,310	37.75
2023-2024	1,70,903	23.57
LAGR (%)	42.76	
CAGR (%)	22.29	

Source: Compiled and Computed Data from MFIN Annual Reports (2018-2024)

The sector exhibited favourable and vigorous changes in microcredit portfolio trends between 2018-2019 and 2023-2024. Table 4.27 exhibits that the 2018-2019, the microcredit portfolio sustained strong levels of growth at 39.79 percent, due to continual micro-lending activity increases and demand for microcredit customers. However, the COVID-19 pandemic's disruptions and the cautious lending practices used to reduce credit risks during uncertain economic times were the main causes of the growth rates' notable slowdowns in 2019–2020 and 2020–2021, which were 10.12 percent and 9.16 percent, respectively.

Beginning in 2022, the borrowing community had renewed confidence and microloan portfolio kick-started in 2022-2023, and 2023-2024 and increased to 24.65 percent annual microloan portfolio growth, indicating a vigorous rebound. Additionally, the sector level growth increased to 37.75 percent in 2022-2023, due to sector level strong post-pandemic recovery, but unsupported by strong microcredit sector efforts to promote activity and work with clients. The growth trend slowed a little in 2023-2024, which accounts for 23.57 percent, which indicates improved attention to responsible lending. The LAGR of 42.76 percent denotes the microcredit portfolio will grow at the rate of 42.76 percent each year. The CAGR of microcredit portfolio is 22.29 percent, which explains the net growth attained during the six years

On the whole, it is understood that improvements and growth of their microcredit portfolios provide more alignment evidence reveals NBFC-MFIs are strengthening and better able to cope with market challenges.

Table 4.28 Client Growth Rate of NBFC-MFIs

Year	Clients (in Crore)	Growth rate (%)
2018-2019	3.17	25.30
2019-2020	3.22	1.58
2020-2021	3.13	-2.80
2021-2022	3.40	8.63
2022-2023	3.90	14.71
2023-2024	4.30	10.26
LAGR (%)	11.66	
CAGR (%)	9.12	

Source: Compiled and Computed Data from MFIN Annual Reports (2018-2024)

Table 4.28 shows client growth of NBFC-MFIs. There have been drastic contrasts in the client growth rate of NBFC-MFIs during those times, associated with economic changes and behavioural management. During the year 2018-2019, the NBFC-MFIs had very strong client growth rates at 25.30 percent due to sustained efforts to gain clients and offer services. Following 2019-2020 MFIs with a sharp decline in growth and down to 1.58 percent reveals both borrowers and field staff were greatly affected by the pandemic. The

impact on clients was more personally disastrous during the year 2020-2021, as it recorded a negative client growth rate of 2.80 percent. NBFCs renewed their focus on clients and their efforts to stabilize their current market aided recovery with 8.63 in growth reported during 2021-2022. The trend continued into 2022-2023 and 2023-2024 with an increase to 14.71 and 10.26 represented leading to two consecutive years of rebuilding and strengthening of client bases. The LAGR of 11.66 percent denotes that it expected that the client growth rate will grow at 11.66 percent. The CAGR of client growth is 9.12 percent, which explains the net growth attained during the study period. Apart from the COVID pandemic's obvious impact, the NBFC-MFIs sector has added lasting increases in clients to demonstrate that it has been able to rebound its potential to continue serving disadvantaged populations to achieve sustainability.

Table 4.29 Loan amount Disbursed Growth Rate of NBFC-MFIs

Year	Loan amount disbursed (in crore)	Growth rate (%)
2018-2019	82,928	39.07
2019-2020	77,072	-7.06
2020-2021	57,891	-24.89
2021-2022	83,354	43.98
2022-2023	1,30,563	56.64
2023-2024	1,38,297	5.92
LAGR (%)	18.94	
CAGR ((%)	14.72	

Source: Compiled and Computed Data from MFIN Annual Reports (2018-2024)

The growth of loan distribution by NBFC-MFIs from 2018-2019 to 2023-2024 revealed in Table 4.29 shows significant fluctuations, during 2018 and 2019, NBFC-MFIs showed a sharp growth of 39.07 percent in their lending, a sign that borrower interest and lending were both high. During 2019-20 and 2020-21, NBFC-MFIs experienced a decline of 7.06 percent and 24.89 percent. Lower loan disbursement during COVID-19 was caused by people and institutions being more cautious with their finances, the passage of strong credit policies and feeling unsure about the economic outlook. There was a significant growth of 43.98 percent in 2021-2022 which shows the sector responded fast to new conditions by boosting how much it lent. In 2022-2023 and 2023-2024, expanding by a remarkable growth of 56.64 percent and shows new trust among institutions, strong interest

from borrowers and a bigger commitment to reaching more customers. The rate of growth dropped substantially to 5.92 percent in 2023-2024, revealing that institutions are now more cautious about their lending activity and also showing the boom of the other financial institutions. The LAGR denotes that the loan disbursement growth rate will grow at 18.94 percent every year. The CAGR of loan disbursement growth is 14.72 percent, which explains the net growth attained during the six years.

The shift in the way of disbursements happen proves that the sector is vulnerable to outside shocks but also demonstrates that it can adopt, grow, recover and stabilize for a better financial future.

Table 4.30 Loan Accounts Growth Rate of NBFC-MFIs

Year	Loan Accounts (Rs in Crore)	Growth rate (%)
2018-2019	3.88	36.62
2019-2020	3.91	0.77
2020-2021	3.77	-3.58
2021-2022	3.9	3.44
2022-2023	4.6	17.95
2023-2024	5.2	13.04
LAGR (%)	11.37	
CAGR ((%)	10.82	

Source: Compiled and Computed Data from MFIN Annual Reports (2018-2024)

Over the six years from 2018-2019 to 2023-2024, the loan account data shows a variation but generally positive trend in the reach out of microfinance institutions. Table 4.30 indicates the number of loan accounts increased by a 36.62 percent in the fiscal year that ended in 2018-2019, demonstrating a robust expansion of financial inclusion initiatives. But in 2019-2020, growth abruptly slowed to 0.77 percent, indicating that new account openings had almost stopped, perhaps as a result of early indications of economic uncertainty due to the pandemic's economic effects on both lenders and borrowers, the number of loan accounts decreased by 3.58 percent in 2020-2021. With a modest growth of 3.44 percent in 2021-2022, recovery was evident, followed by a more dramatic increase of 17.95 percent in 2022-2023, which was a reflection of both increased borrower demand for credit and a resurgence of confidence in the lending ecosystem. With a 13.04 percent increase in loan accounts in 2023-2024, the upward trend persisted, pointing to ongoing

improvements in credit availability and growing financial penetration across industries. The LAGR of 11.37 percent denotes that the loan accounts will grow at 11.37 percent every year. The CAGR of loan accounts is 10.82 percent, which explains the net growth attained by NBFC-MFIs during the six years.

Despite, brief setbacks brought on by outside economic disruptions, the trend generally indicates a growing borrower base, driven by institutional outreach, demand for microcredit and policy support.

4.5.1.2 Performance Ratios to measure the Sustainability of NBFC-MFIs

The NBFC-MFIs performance ratios were an aid in assessing their institutional and financial sustainability. An NBFC-MFIs operational efficiency, financial sustainability, and social impact are all determined by the combined analysis of the performance ratios. The section summaries the main performance ratios of NBFC-MFIs, including the Microcredit Portfolio to Gross Loan Portfolio, Loan per Client, Clients per Branch, Average ticket size, Loan to Asset, Debt to Equity and Borrowing to Asset Ratios.

❖ Operational Sustainability Ratios

Operational sustainability ratios are performance metrics used to assess sustainability of NBFC-MFIs based on efficiency and financial health. These ratios aid in assessing the institutions capacity to maintain operations through efficient loan distribution and long-term client service. Ratios relating to institutional sustainability were assessed though Microcredit Portfolio to Gross Loan Portfolio, Loan per Client, Clients per Branch, and Average Ticket Size. These ratios measure operational efficiency and long-term growth which shows the profitability of the NBFC-MFI, presented in Table 4.31.

Table 4.31 Operational Sustainability Ratios

Year	Microcredit Portfolio to Gross Loan Portfolio (%)	Loan per Client (in times)	Clients per Branch (in times)	Average Ticket Size (in times)
2018-2019	98.24	21,516	2583	21,373
2019-2020	99.22	23,097	2257	19,712
2020-2021	98.86	26,030	2135	15,356
2021-2022	103.98	28,400	2013	21,373
2022-2023	114.21	31,052	2081	28,383
2023-2024	108.94	36,485	2113	26,596

Source: Compiled and Computed Data from MFIN Annual Reports (2018-2024)

Microcredit Portfolio to Gross Loan Portfolio Ratio of NBFC-MFIs

Table 4.31 exhibits the microcredit portfolio to gross loan portfolio ratio of NBFC-MFIs, 2018-2019 to 2023-2024, there has been an increasing importance of microcredit lending as a total lending activity of NBFC-MFIs. In 2018–2019 year, 98.24 percent of the portfolio was allocated to microfinance activities. Despite a large-scale pandemic (COVID-19) disrupting both years, the institutions were still engaged with their mission. In 2019-2020, microcredit came in at 99.22 percent, and for 2020-2021, the loan portfolio represented 98.86 percent. This shows that microcredit began to represent an ever-greater share of total lending activity starting in 2021-2022. The percentage allotted for microcredit homed in at 114.21 percent in 2022-2023. This suggests that there remains a pronounced preference for developing microcredit over other types of delivery loans. In 2023-2024, the ratio decreased slightly to 108.94 percent, even though it was vastly higher than before the pandemic, showing microfinance lending remains the top contributor to NBFC-MFIs growth.

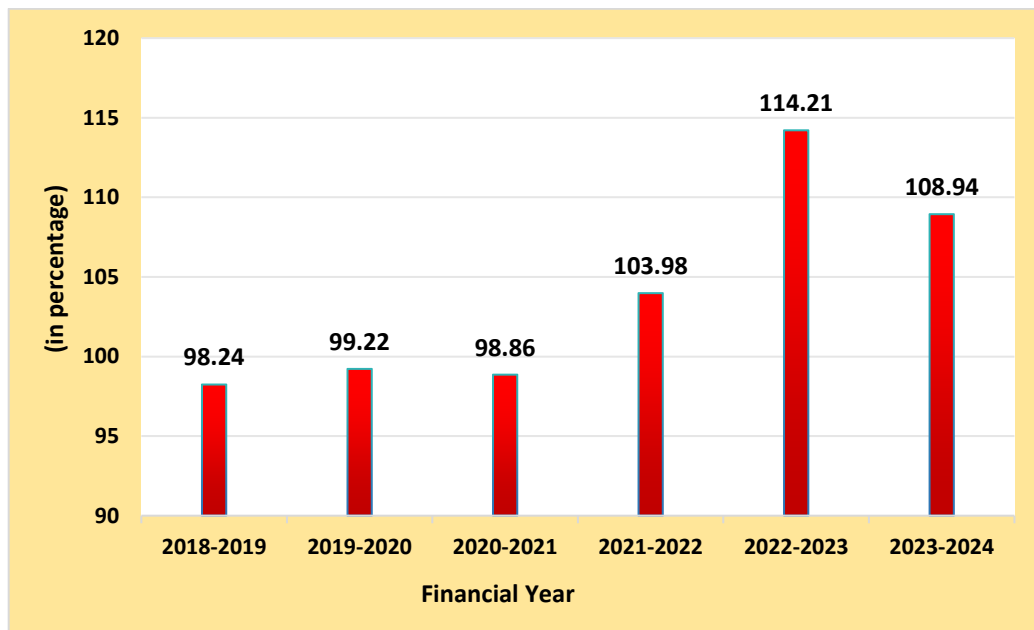


Figure 4.6 Microcredit Portfolio to Gross Loan Portfolio Ratio of NBFC-MFIs

The ratio over the years proves reveals financial strength and continuing outreach to achieve sustainable growth of the NBFC-MFIs.

Loan per Client of NBFC-MFIs

The loan per client for NBFC-MFIs went up significantly from 2018-2019 to 2023-2024, showing that the strategy was focused on lending more per user. Table 4.31

represents that the time period, the median loan given to each client was ₹21,516 representing typical, lower-priced microfinance loans. Despite the pandemic, the loan given to clients increased from ₹23,097 in 2019-2020 to ₹26,030 in 2022-202. Because of this, they began to increase the average amount they gave out, but they were careful throughout the economic downturn to make sure that they were able to meet borrowers' needs. For the years 2021-2022 to 2023-2024, the loan per client increased steadily, from ₹28,400 in 2021-2022 to ₹36,485 in 2023-2024. Because of this rise, borrowers are seeking more credit to invest or improve their livelihood which also reveals that MFIs believe their clients and can pay back what they owe. Even so, greater amounts of lent money can be profitable and strengthen client partnerships, but it also exposes the financial institution to greater risk on each loan, so risk assessment and watching the whole portfolio are especially essential.

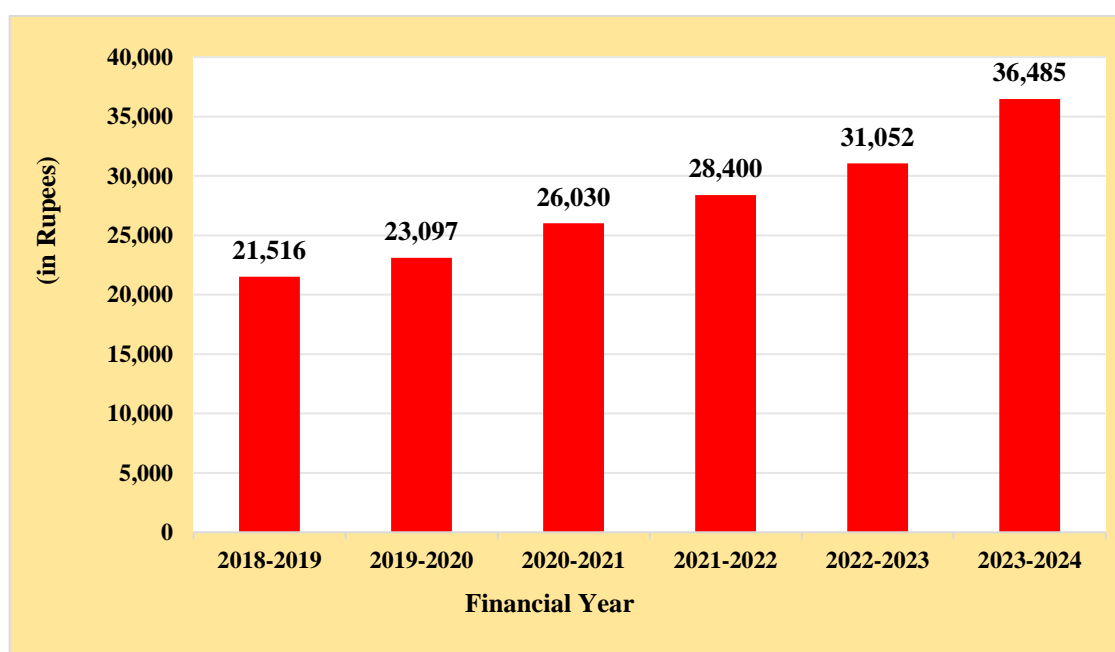


Figure 4.7 Loan per Client of NBFC-MFIs

On the whole, larger loans per client support from NBFC-MFIs financially and suggest that borrowers are now better able to manage bigger responsibilities. An increase in the loan per client ratio ultimately reveals the sustainability of NBFC-MFIs.

Clients per Branch of NBFC-MFIs

The clients per branch for NBFC-MFIs between 2018-2019 and from 2023-2024 shown in Table 4.31, the growth in the industry, and also changes in customer service. In 2018-2019, each branch served around 2,583 clients which showed that operations were

very efficient yet it could put more pressure on a branch. The average number of clients at each branch dropped to 2,257 by 2019-2020, 2,135 by 2020-2021 and 2,013 by 2021-2022. Network expansion is the reason behind this drop, as NBFC-MFIs opened more branches close to their clients to cut down the burden on each branch. The Client per branch move upward and showing increasing trend in 2022-2023 of 2,081 and 2023-2024 2,113. A smaller number of clients at each branch usually means improved customer service, better client relationships and better risk control by field employees. Still, unless these growths happen together, it will lead to higher operational costs.

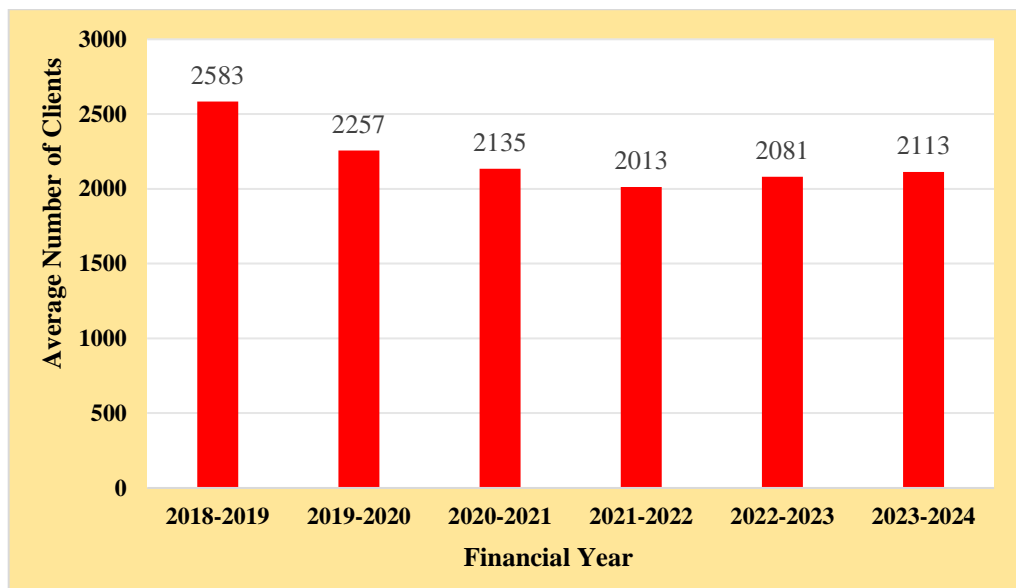


Figure 4.8 Client Per Branch of NBFC-MFIs

To summarize, the clients per branch statistics reflect the institution's intention to expand their operational activities evenly while maintaining good services which is important for sustainability.

Average Ticket Size of NBFC-MFIs

The average ticket size (ATS) per loan account revealed in Table 4.31, a significant change over a period of time. The ATS in 2018-2019 was ₹21,373, revealing that borrowers received a moderate amount of credit from MFIs. But in 2019-2020 and 2020-2021, declined to ₹19,712 and ₹15,356, respectively, due to cautious financing due to economic uncertainty due to the pandemic. The average ticket size increased gradually to ₹21,373 in 2021-2022 and peaked at ₹28,383 in 2022-2023, indicating a recovery phase in 2022-2023. However, it decreased to ₹26,596 in 2023-2024, but it was significantly greater than in previous years.

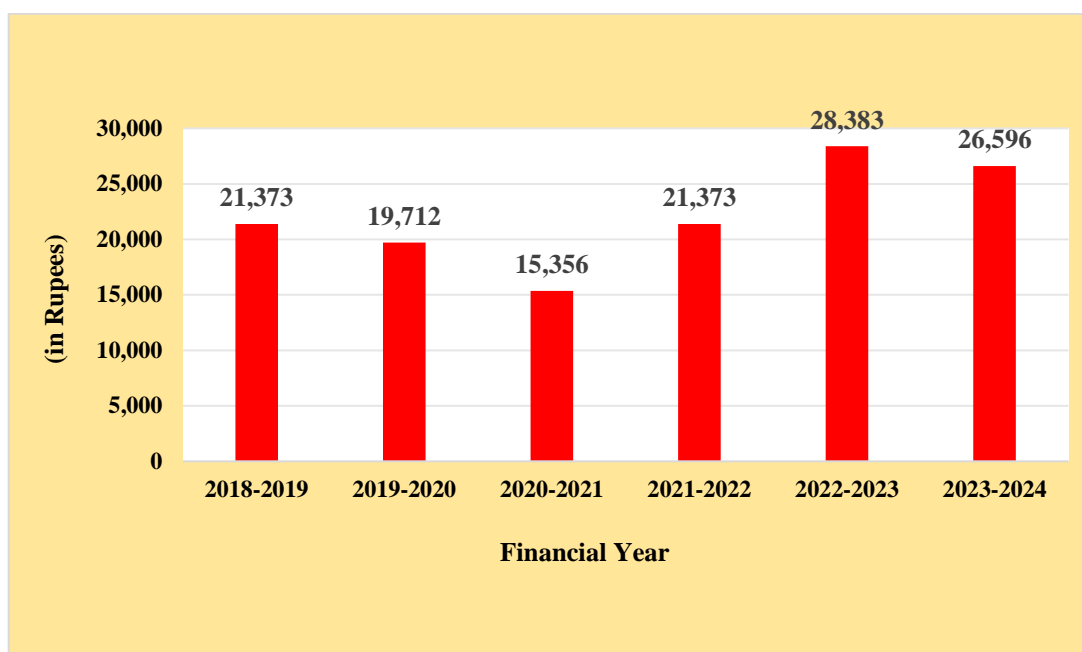


Figure 4.9 Average Ticket Size of NBFC-MFIs

An upward trend in ATS suggests that NBFC-MFIs are giving out loans per borrower by increasing operational efficiency and lowering the cost per unit of disbursement leading to institutional sustainability.

❖ Financial Sustainability Ratios

Financial sustainability ratios, help assess the financial structure, leverage, and stability of an NBFC-MFI. Asset utilization, Leverage position and financial risk are reflected in sustainability ratios. It provides insight into how efficiently the NBFC-MFI manages its funding and resources. Financial sustainability ratios are analysed and presented in Table 4.32

Table 4.32 Financial Sustainability Ratios

Year	Loan to Assest (%)	Debt to Equity(%)	Borrowing to Asset (%)
2018-2019	78.86	3.3	65.63
2019-2020	79.27	3.3	70.32
2020-2021	77.43	3.5	70.79
2021-2022	78.42	3.6	72.35
2022-2023	82.87	3.7	75.03
2023-2024	82.72	3.3	73.50

Source: Compiled and Computed Data from MFIN Annual Reports (2018-2024)

Loan to Asset Ratio of NBFC-MFIs

The percentage of a financial institution's total assets are allocated to loans and advances is measured by the loan to asset ratio. A larger ratio denotes a larger portion of assets allocated to lending, which is essential to NBFC-MFI operations. Table 4.32 reveals, the loan to asset ratio has been comparatively steady from 2018–2019 to 2023–2024, ranging between 78.86 percent and 82.87 percent. The ratio marginally increased to 79.27 percent in 2019–2020, indicating slightly increased lending activity. A minor decline to 77.43 percent in 2020–2021 might indicate cautious lending during that time, perhaps as a result of outside economic factors like the pandemic. The ratio rose gradually to a peak of 82.87 percent in 2022–2023 and then settled at 82.72 percent in 2023–2024.

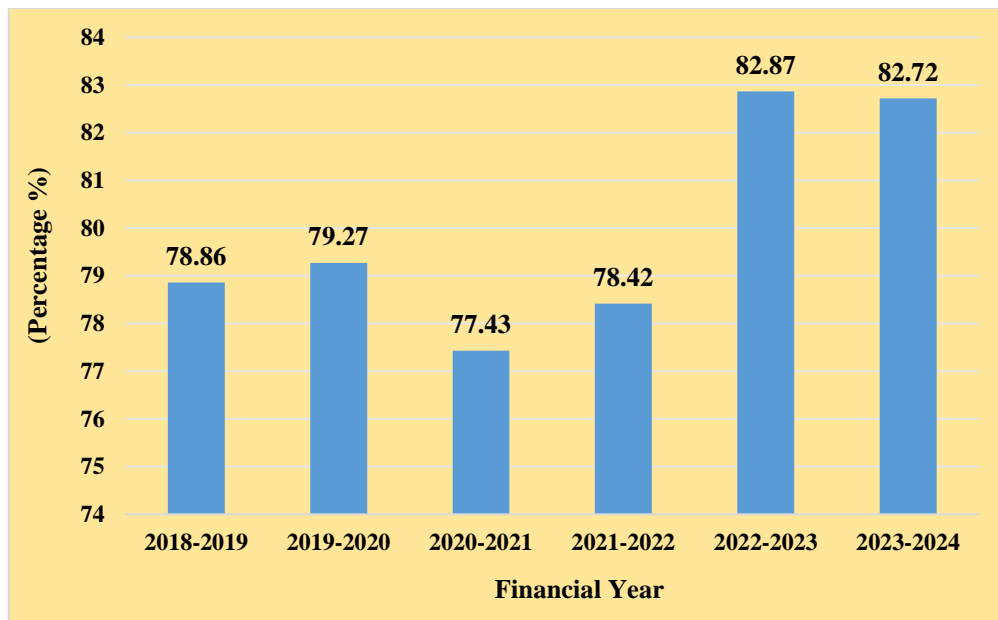


Figure 4.10 Loan to Asset Ratio of NBFC-MFIs

NBFC-MFIs have continuously maintained a strong lending orientation, therefore the sustainability is enhanced by this stability, which is a sign of institutional efficiency and a sound balance between portfolio growth and asset utilization.

Debt-Equity Ratio

Table 4.32 exhibits Ratio of borrowed money to owners' capital is termed as debt-to-equity ratio, the ratio steadily increased from 3.3 to 3.7 between 2018–19 and 2022–2023, suggesting that NBFC-MFIs were using more debt to fund their operations and loan portfolios. A period of growth and confidence in the credit markets, bolstered by expanding equity bases and increased investor interest, is reflected in this upward trend. A moderate

and steady debt-to-equity ratio is essential for NBFC-MFIs to preserve their financial viability and ensure credit availability for subsequent lending. The ratio fell back to 3.3 in 2023–2024, indicating a period of capital strengthening and deleveraging. This reflects the result of less reliance on debt and more equity infusions.

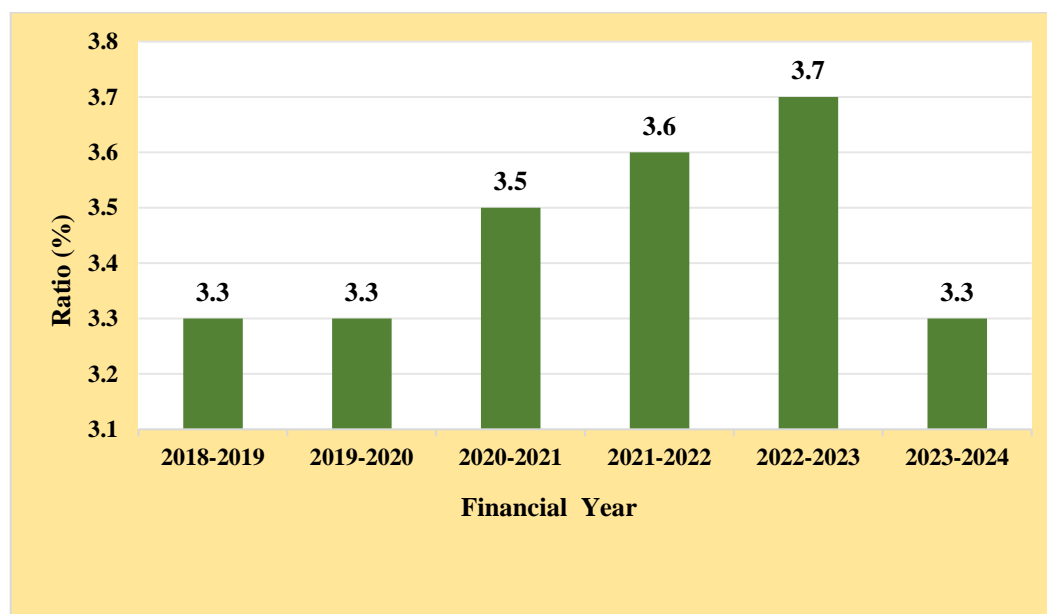


Figure 4.11 Debt-Equity Ratio of NBFC-MFIs

Over the six years, the debt-to-equity ratio stayed within a healthy and moderate range of 3.3 to 3.7. The institution's debt-to-equity ratio has continuously remained above 3:1, above the accepted limit of 1:1 to 2:1. This indicates that NBFC-MFIs managed their capital structure in a balanced manner, so they had enough leverage for expansion without taking on too much debt. The decline in FY 2023–2024 suggests a wise move in the direction of increased financial stability.

Borrowing to Asset Ratio

Borrowing to asset ratios for NBFC-MFIs have gradually gone up from 2018–2019 to 2023–2024, revealed in Table 4.32 they use more borrowed money to finance their lending. In 2018-2019, two-thirds of the institutions assets accounts 65.63 percent came from borrowing externally. The ratio of borrowings to assets went up to 70.32 percent in 2019-2020 and stayed fairly steady, at 70.79 percent in 2020-21, pointing to more borrowing by NBFC-MFIs to continue their functions when the market was slow. Higher external support for credit allowed the ratio to reach 72.35 percent in 2021-2022 and increased further to 75.03 percent in 2022-2023. During 2023-2024 the ratio of borrowed

funds to assets moderated to 73.50 percent, suggesting that the company is being more cautious about its lending. Because NBFC-MFIs do not accept savings from the public, they usually have a higher borrowing ratio as they depend a lot on debt for their funding. Increased use of leverage allows NBFC-MFIs to grow and serve more customers, but their financial strength depends on good risk management.

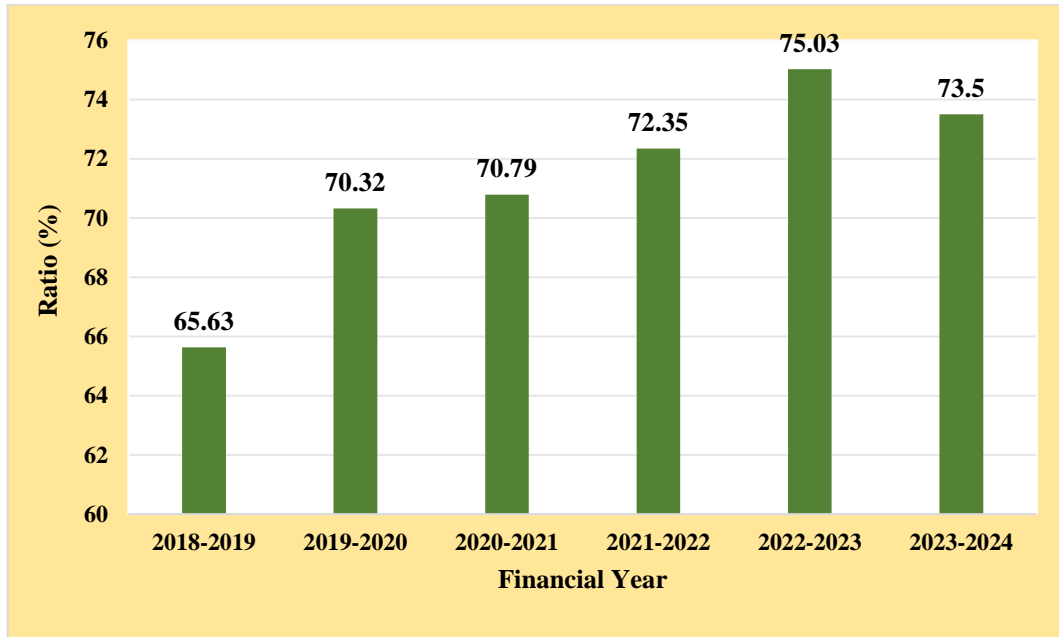


Figure 4. 12 Borrowing to Asset Ratio of NBFC-MFIs

Generally, the rise in borrowing to asset ratio helps the sector to grow and highlights the importance of managing its debt carefully for sustainability.

4.5.2 Sustainability of NBFC-MFIs based on Managers Perspective

The perception of NBFC-MFIs managers is used to assess their sustainability. The behaviour, attitude, and relationship maintenance practices of borrowers are seen as sustainability criteria for the NBFC-MFIs. Maintaining long-term institutional viability and keep meet the financial requirements of underserved and low-income people, NBFC-MFIs managers have to maintain a balance between social goals and profitability. NBFC-MFIs must continue to be client-focused, operationally effective, and financially sustainable to ensure long-term viability.

The growth aspects and development of MFIs are decided by the risk related to loan amount distribution. The analysis from the manager's point of view becomes essential for analyzing the sustainability.

4.5.2.1 Lending Framework of NBFC-MFIs

NBFC-MFIs branch manager's opinions are collected and analysed to determine the MFIs sustainability from the institutions point of view. The section deals perception of the managers about NBFC-MFIs operational performance and ability to reach borrowers the results are shown in Table4.33.

Table 4.33 Lending Framework of NBFC-MFI

Statements		No. of Respondents (n=30)	Percentage
Consideration of Nature of Business for lending loan	Yes	7	23.3
	No	23	76.7
Nature of Business Preferred to lend	Vegetable vendor	2	28.6
	Tailoring shop	1	14.3
	Small Scale Farming	2	28.6
	Petty shop	1	14.3
	Small scale and cottage units	1	14.3
Schemes covered all the borrowers' needs	Yes	30	100
Preferable factor to offer loan	Business nature	12	40.0
	Recommendation	2	6.7
	Group members	16	53.3
Basis to fix the amount of loan	Policies & Regulations of the institution	30	100.0
Updating of borrowers business profile	Yes	30	100.0
Support of Government policies to microcredit lending activities	Yes	28	93.3
	No	2	6.7
Repayment ability of borrowers	High	27	90.0
	Average	3	10.0
Preference to give top up loans	Yes	15	50.0
	No	15	50.0
Factors to be consider to give top up loans	Regular repayment of interest of previous loans	8	53.3
	Better business profile	3	20.0
	Profit level of the existing business	2	13.3
	Interest accumulation	2	13.3

Source: Primary Data

The lending framework of NBFC-MFIs about the borrowers is observed in Table 4.33 the nature of the business of micro entrepreneurs is not to be consider as a major factor while giving loans. 76.7 percent of NBFC-MFIs were not to be considered about the nature

of business to offer microcredit. The results are contractiary, one of the factors the institution should take into account when approving a loan is the kind of business the borrowers are doing (Armendariz and Morduch,2010).

The most important factor considered by NBFC-MFIs is the ability of the group members (53.3%) to repay the availed loan and less number of NBFC-MFIs (6.7%) considering recommendation. Majority of the NBFC-MFIs preferred the joint liability model due to the lack of risk and responsibility spread to all members of the group. In par with the results (Ghosh and Van Tassel, 2011), group-based lending methods adopted in MFIs increase the economic viability and repayment rates of the borrowers.

All the NBFC-MFIs in the study are offering loans as per the policies & regulations of the institution and regularly updating borrower's business profile. Maintaining solid client relationships and repayments is facilitated by visiting in person to the borrowers location (Das, 2012). Majority of the NBFC-MFIs (93.3%) states that Government policies are favourable to micro credit lending activities. Government actions, such as interest rate fixing and funded initiatives, impact the overall efficiency of the microfinance industry (Sinha, 2015).

With reference to the repayment ability of borrowers of the NBFC-MFIs, 27 of the respondents (90%) stated that high and less number of respondents (10%) states repayment ability of the borrowers is average. Majority of them reported high repayment of the loan amount from the borrowers. To prevent non repayment of funds outstanding and other risks related to the funds distributed, almost all NBFC-MFIs should maintain a strong relationship with their borrowers (McIntosh and Wydick, 2005).

The results regarding the preference to give top-up loans carry a neutral opinion where half of the managers prefer to give top-up loans and half re-framing to provide. With reference to factors be consider to give top-up loans the majority of the NBFC-MFIs consider the regular repayment of interest of previous loans (53.3%),20 percent consider better business profile and 2 each of the respondents (13.3%) consider the profit level of the existing business and interest accumulation. Regular repayment habits help the institution's visibility (Karlan and Zinman, 2011).

The lending framework of the MFIs is to encourage financial inclusion by focusing on client growth, the lending institution's profitability, and the competitive factor. In order

to assist the micro entrepreneurs strong emphasis on social commitment, repayment, and level of administration is needed. For women micro entrepreneurs, this microcredit structure supports to attainment socioeconomic development and long-term financial access.

4.5.2.2 Perspective of NBFC-MFIs Managers about the Borrowers

Customer behaviour highly reflects the the operational and financial sustainability of the MFIs. While sanctioning funds the institution should consider the factors that lead to profitability. The effectiveness of MFIs shows the institutional quality and governance which are the important factors that influence sustainability (Hermes et al., 2011). Effective loan recovery techniques guarantee steady cash flow, enabling the MFI to expand its reach and give more loans to women entrepreneurs. Outreach broadens the clientele and diversifies sources of income, which enhances sustainability. The data was collected from managers of NBFC-MFIs to assess the respondents practices and adaptability and illustrated in Table 4.34.

Table 4.34 NBFC-MFIs Managers Perspective about the Borrowers

Statements	H		S		NS		DS		HDS		Score	Mean	SD
	n	%	n	%	n	%	n	%	n	%			
Awareness on scheme of loan	10	33.3	20	66.7	-	-	-	-	-	-	130	4.33	0.477
communication and understandability	16	53.3	14	46.7	-	-	-	-	-	-	136	4.53	0.5
Promptness in repayment of interest	7	23.3	18	60	4	13.3	1	3.3	-	-	121	4.03	0.71
Awareness of technology	14	46.67	6	20	8	26.67	1	3.33	1	3.33	121	4.03	0.93
promptness in repayment of principal amount	12	40	10	33.3	8	26.7	-	-	-	-	124	4.13	0.81
Documents And Records	16	53.3	12	40	2	6.7	-	-	-	-	134	4.46	0.62
Respectable Behaviour	11	36.7	17	56.7	2	6.7	-	-	-	-	129	4.3	0.59
Efficiency in handling funds	16	53.3	11	36.7	3	10	-	-	-	-	133	4.43	0.67
Business interest	15	50	13	43.3	2	6.7	-	-	-	-	133	4.43	0.62
Business Nature/Profile	10	33.3	17	56.7	3	10	-	-	-	-	127	4.23	0.62
Literacy level of the borrowers	9	30	11	36.7	6	20	4	13.3	-	-	111	3.83	1.01
Time element in repayment of loan	16	53.3	13	43.3	1	3.3	-	-	-	-	135	4.5	0.57
Personal profile of the borrowers	8	26.7	18	60	4	13.3	-	-	-	-	124	4.13	0.62

Source: Computed Data (HS-Highly Satisfied, S-Satisfied, NS-Not Satisfied, DS-DisSatisfied, HDS-Highly DisSatisfied)

The analysis of client-related variables in microfinance operations reveals in Table 4.34, that the highest mean score, 4.53 with a standard deviation (SD) of 0.50, was assigned to *communication and understandability* which is supported by the previous research that the Institutions which implemented clear communication strategies had higher levels of customer satisfaction and participation (Srinivasan, 2009). This suggests that there is broad consensus among respondents regarding the importance of clear communication, and that this opinion is largely consistent throughout the sample. *Time element in repayment of loans* comes in second with a mean of 4.50 and SD of 0.57, indicating that there is a moderate variation in responses and that timelines will be very important in service delivery, repayment plans, and decision-making. High scores are also found for *documents and records* (Mean 4.46, SD 0.62), *financial management efficiency in handling funds*, and *business interest* (Mean 4.43, SD 0.67 and 0.62, respectively). These imply that upholding

appropriate documentation and exercising financial restraint are essential qualities that are valued in MFI operations.

Respectable behaviour (mean 4.30, SD 0.59) and *loan scheme awareness* (mean 4.33, SD 0.47) indicate the the significance of customers comprehending loan products and acting with decency. The results show comparatively low SD, demonstrating participant agreement. *Business nature/profile* have a mean of 4.23, with SD of 0.62.

Both *promptness in principal repayment and the personal profile of the borrowers* have a mean of 4.13, however, *personal profile* has a low SD (0.62), which suggests very consistent responses. With a mean of 4.03 and a comparatively high SD of 0.71 and 0.93 for *promptness in interest repayment* indicating the importance but varies noticeably in practice and awareness of technology suggests that although technology awareness is regarded as important, borrowers knowledge varies greatly as a result of varying degrees of digital exposure or literacy.

Finally, the most varied and least stressed factor in this dataset is the *literacy of the clients*, as evidenced by the lowest mean of 3.83 and the highest SD of 1.01. Both disparities in educational backgrounds and a potential decrease in the perceived need for literacy as a result of MFI leading's streamlined processes could be reflected in this. As stated by (Wright, 2000) highlights the need for microfinance providers to improve understandability by using simple phrases and local languages.

Borrowers are helping to lead sustainability and social outreach goals of the NBFC-MFIs. Their activities are shaped the interactions, awareness, repayment behaviour, effective business dealing and proper understanding about the loan. Borrowers as generally responsible, resilient, and committed to improving their livelihood, the strong group lending model and increasing borrower empowerment to contribute positively to loan performance and institutional sustainability.

4.5.2.3 Risk Factors considered by NBFC-MFIs Managers

The numerous unanticipated or potential risks that could have a detrimental effect on the operations, long-term viability, and financial stability of microfinance institutions are referred to as risk factors for MFIs. The effectiveness of the institution's services for low-

income clients will be impacted by these risks, which result from internal flaws and external difficulties.

Table 4.35 Risk factors associated with of NBFC-MFIs from managers perspective

Factors		Rank											Mean Score	Rank	
		1	2	3	4	5	6	7	8	9	10	11			12
Government policies and regulations	No.	1				1	1		1	1	3	11	11	2.6	XII
	%	3.3				3.3	3.3		3.3	3.3	10	36.7	36.7		
Default in interest amount	No.	1					1	2		3	1	11	11	2.63	XI
	%	3.3					3.3	6.7		10	3.3	36.7	36.7		
Death, Accident, Disability	No.	4	1	3	5	5	1	5	1	1	1	1	2	7.57	IV
	%	13.3	3.3	10	16.7	16.7	3.3	16.7	3.3	3.3	3.3	3.3	6.7		
Natural Disaster like flood, Drought, Earthquake, others etc	No.		2	2	5	7	5	2	5		1	1		7.33	V
	%		6.7	6.7	16.7	23.3	16.7	6.7	16.7		3.3	3.3			
Delay in repayment of loan	No.			1		2	12	5	4	2	3	1		5.97	VII
	%			3.3		6.7	40	16.7	13.3	6.7	10	3.3			
Group members conflict	No.	2	1	1		4	1	7	2	5	3	2	2	5.7	VIII
	%	6.7	3.3	3.3		13.3	3.3	23.3	6.7	16.7	10	6.7	6.7		
Business Failure	No.	7	6	3	6	3			4	1				9.4	II
	%	23.3	20	10	20	10			13.3	3.3					
Frequent Change of business	No.	2	4	6	2			1	2	5	4	2	2	6.67	VI
	%	6.7	13.3	20	6.7			3.3	6.7	16.7	13.3	6.7	6.7		
Irregular repayment schedule	No.	9	9	7	2			2			1			10.33	I
	%	30	30	23.3	6.7			6.7			3.3				
Industrial recession	No.	2	7	4	7	2	1	2	2	2	1			8.67	III
	%	6.7	23.3	13.3	23.3	6.7	3.3	6.7	6.7	6.7	3.3				
Funds used for unproductive purpose	No.	1		2	1	4	5	1	3	4	7		2	5.6	X
	%	3.3		6.7	3.3	13.3	16.7	3.3	10	13.3	23.3		6.7		
Family issues of Borrowers	No.	1		2	2	1	4	3	5	6	5	1		5.67	IX
	%	3.3		6.7	6.7	3.3	13.3	10	16.7	20	16.7	3.3			

Source: Computed Data

Table 4.35 displays the perceived importance or seriousness of the different elements that affect loan repayment difficulties. A higher perceived level of risk or severity is indicated by a lower mean. The most important factor influencing repayment was *irregular repayment schedule* which came in first with the mean score of 10.33. *Business failure* ranks second with a mean score of 9.40, which severely impairs the ability to repay. It represents the risk of entrepreneurship that micro businesses entail. Loan repayment is indirectly impacted by external factors that affect business sustainability and cash flow, such as the *industrial recession* (Mean Score 8.67). Death, accidents, disability ((Mean Score 7.57) and natural disasters like droughts or floods that affect livelihoods and business operations ((Mean Score 7.33), particularly in the informal or agricultural sectors, *Regular business changes* ((Mean Score 6.67) and *loan repayment delays* (Mean Score 5.97) were ranked fourth, fifth, sixth, and seventh, respectively. Peer accountability and loan discipline are disrupted by disputes among group members, and ranked in eighth position. Borrowers' *family issues* (Mean Score 5.67) affected their focus, stability, and priorities, which resulted in late payments.

Misuse of loan funds for non-income-generating activities was ranked tenth ((Mean Score 5.60), which lowers the ability to generate returns needed for repayment. *Default in interest amount* ((Mean Score 2.63) and *government policies and regulations* (Mean Score 2.60) were ranked eleventh and twelve, respectively. For NBFC-MFIs, the aforementioned factors are not as significant or dangerous but they determine and impact the sustainability of the business. The *Kendall's W* was found to be 0.50 which shows that there is high similarity among the respondents in assigning the ranks.

According to the analysis, the biggest influence on loan repayment is irregular repayment schedule, business failure and recession. Administrative or regulatory factors are thought to have a moderate amount of influence, followed by personal and natural factors. Government regulations and loan interest repayment have less impact on borrower.

4.5.2.4 Maintain a Regular Relationship with Women Micro Entrepreneurs

Maintaining a regular relationship with the customers was obtained by adding the ratings given by each respondent for the 6 statements using 3-point Likert scaling technique. The earliest indicators of default can be found by keeping a close watch on customer profiles and information. Routine monitoring also enables NBFC-MFIs to comprehend how borrowers requirements for credit are growing (Basu and Srivastava, 2005).

Table 4.36 Opinion to maintain a Regular Relationship with the Borrowers

Statements	SA		N		DA		Total Score	Mean	SD
	No.	%	No.	%	No.	%			
Update the customers about procedural aspects	27	90	2	6.7	1	3.3	86	2.87	0.43
Monitor the customers records periodically	19	63.3	9	30	2	6.7	77	2.57	0.62
Follow up through SMS alerts	4	13.3	15	50	11	36.7	53	1.77	0.67
Regular visit by the Executives	19	63.3	7	23.3	4	13.3	75	2.50	0.72
Retain good customers	22	73.3	8	26.7	-	-	82	2.73	0.44
Severe actions against defaults	23	76.7	5	16.7	2	6.7	81	2.70	0.59

Source: Computed Data (SA-Strongly agree, N-Neutral, DS-Disagree)

Using mean scores and standard deviations (SD), Table 4.36 illustrates the different risk mitigation techniques used by microfinance Institutions, a higher mean denotes greater agreement or frequency of implementation. With the highest rank (mean 2.87) and standard deviation of 0.43 among the variables listed, *updating customers about procedural aspects* indicates methodical procedures that are applied consistently across institutions. With a mean of 2.73 and a lower SD of 0.44, *Retaining good customers* comes in second rank suggesting that this is a widely accepted tactic with comparatively consistent application. Retaining customers appears to be a consistently valued strategy for guaranteeing sustainability and lowering risk. *Severe actions against defaults* (mean 2.70) indicates that MFIs place a high priority on taking stringent measures to address loan defaults. *Monitoring customer records periodically* (2.57) demonstrates a fundamental role in risk management via efficient record-keeping and transparent communication.

Regular visits by the Executives show a mean of 2.50, indicating that direct client interaction and personal follow-ups are valued. Nevertheless, this variable also exhibits the greatest variability (SD 0.73), indicating that the frequency or efficacy of executives. *Follow-up through SMS alerts* has the lowest mean (1.77), along with a comparatively higher SD (0.67), suggesting that this technological approach is applied less frequently.

Although SMS follow-ups are employed, the variation implies that not all institutions give this equal priority or encounter difficulties in successfully putting it into practice. Adoption of technology and digital payment in MFIs improves operational efficiency and security (Sharma and Goyal, 2015).

In conclusion, MFIs mainly depend on stringent default management and direct executive communication to reduce risk, while the steady foundation of operations is made up of update procedural aspects and retains good customers. Even though they are beneficial, technology-based follow-ups seem to be the least prioritized and differ more in actual use.

4.5.2.4 Competitive Factors from Similar Institutions

The external market dynamics and internal characteristics provide NBFC-MFI with a competitive advantage over its peers in the same industry. These elements affect NBFC-MFIs capacity to attract customers, provide services effectively, and maintain their financial viability. Cost effectiveness, outreach, social impact, upholding customer confidence and innovation must all be balanced by NBFC-MFI for a long-term competitive edge.

Table 4.37 Competitive Factors from Similar Institutions

Variables		No. of Respondents (n = 30)	Percentage
Facing competition from similar Institution	Yes	19	63.3
	No	11	36.7
Competitive factors from similar Institution	Low interest rate	4	21.1
	New and attractive schemes	1	5.3
	Flexibility in repayment	2	10.5
	Immediate sanction of amount	8	42.1
	Large fund sanction	4	21.1

Source: Primary Data

It is understood from Table 4.37, 63.3 percent of NBFC-MFIs were facing severe competition from similar institutions. Immediate sanction of loans is considered to be the most significant competitive factor (42.1%) for NBFC-MFIs arisen from similar institutions.

4.5.3 Sustainability of the NBFC-MFIs from the Perspective of Women Micro Entrepreneurs

The sustainability of NBFC-MFIs is deeply influenced by micro entrepreneurs. Providing best practices in fund dispersal, loan-related aspects, ethics, and engagement directly impacts institution's long-term viability and growth. The sustainability of MFIs is positively and significantly impacted by the number of borrowers (Herath et al., 2023). A sustainable business environment requires safe, secure, and efficient banking services. Customers are more likely to support institutions that actively engage in sustainable practices (Hahn and Kuhnen, 2013). Promote sustained and sustainable economic growth by self-employment and wealth creation by attaining sustainable development goal "Decent Work and Economic Growth" (SDG 8) which is prompted through NBFC-MFIs. The results of sustainability impacted by the borrowers are displayed in Table 4.38

TABLE 4.38 Sustainability of the NBFC-MFIs based on Micro Entrepreneurs Perspective

Statements	HS			S			NS			DS			HDS			Total score	Mean	SD
	n	%	Score	n	%	Score	n	%	Score	n	%	Score	n	%	Score			
Timely disbursement of funds by NBFC-MFIs	124	32.1	620	168	43.5	672	49	12.7	147	35	9.1	70	10	2.6	10	1519	3.93	1.02
Adequacy of funding to meet business financial needs.	115	29.8	575	165	42.7	660	52	13.5	156	47	12.2	94	7	1.8	7	1492	3.86	1.03
Ease and convenience in loan repayment procedures	56	14.5	280	94	24.4	376	110	28.5	330	82	21.2	164	44	11.4	44	1194	3.09	1.21
Flexibility in repayment options to accommodate financial situations	54	14	270	79	20.5	316	116	30.1	348	82	21.2	164	55	14.2	55	1153	2.98	1.24
Fair and acceptable interest rates and terms	141	36.5	705	104	26.9	416	57	14.8	171	65	16.8	130	19	4.9	19	1441	3.73	1.24
Secure and reliable financial transactions with NBFC-MFIs.	192	49.7	960	120	31.1	480	68	17.6	204	6	1.6	12	-	-	-	1656	4.29	0.8
Continuous technological advancements implemented by NBFC-MFIs.	79	20.5	395	89	23.1	356	164	42.5	492	42	10.9	84	12	3.1	12	1339	3.46	1.03
Efficient and responsive customer service.	238	61.7	1190	111	28.8	444	33	8.5	99	4	1.0	8	-	-	-	1741	4.51	0.69
Added new services or benefits over time	126	32.6	630	121	31.3	484	78	20.2	234	61	15.8	122	-	-	-	1470	3.8	1.06
Prompt responses to customer queries and concerns	164	42.5	850	155	40.2	620	41	10.6	123	23	6.0	46	3	0.08	3	1612	4.17	0.9
Adherence to ethical financial practices	250	64.8	1250	103	26.7	412	27	7.0	81	6	1.6	12	-	-	-	1755	4.54	0.69
Transparent communication regarding loan terms and conditions.	241	62.4	1205	109	28.2	436	31	8.03	93	5	1.2	10	-	-	-	1744	4.52	0.7
Smooth and user-friendly transaction processes	236	61.3	1180	106	27.4	424	38	9.8	114	6	1.5	12	-	-	-	1730	4.48	0.73
Higher satisfaction with NBFC-MFIs compared to other financial institutions.	223	57.7	1115	118	30.5	472	43	11.1	129	2	0.51	4	-	-	-	1720	4.46	0.71

Source: Computed Data (HS-Highly Satisfied,S-Satisfied,NS-Not Satisfied,DS-DisSatisfied,HDS-Highly DisSatisfied)

Several significant insights are revealed by the examination of the sustainability of NBFC-MFIs from borrowers perspective from Table 4.38. With the highest mean score of 4.54 among all the service attributes assessed, *adherence to ethical financial practices* shows that respondents are extremely satisfied with NBFC-MFIs ethical behaviour. *Transparent communication about loan terms and conditions* (4.52) and *effective and responsive customer service* (4.51) are second and third, respectively, demonstrating that borrowers value timely service and clear communication. The next highly rated features include *easy-to-use and seamless transaction processes* (4.48) and a general increase in *satisfaction with NBFC-MFIs over other financial institutions* (4.46), indicating a clear preference for NBFC-MFIs over conventional lenders.

Trust in the institutions financial operations was demonstrated by the high score of 4.29 revealing the *safe and dependable financial transactions*. *Prompt responses to customer inquiries* (4.17), *timely fund disbursement* (3.93), and the *sufficiency of funding to meet business needs* (3.86) showed a moderate level of influence for sustainability factors. Aspects like *fair interest rates and terms* (3.73) and *additional new services or benefits* (3.80) received average scores, indicating the potential for improvement. There is a need for improved digital infrastructure and more straight forward loan repayment procedures, as evidenced by lower sustainability levels with ongoing *technological advancements* (3.46) and *ease and convenience of loan repayment procedures* (3.09). The low score of 2.98 discloses that the *flexibility in repayment* options to accommodate financial situations, received the lowest sustainability suggesting that current repayment structures would not be well-suited to borrowers facing financial difficulties.

In order to improve the overall borrower experience, NBFC-MFIs must make improvements in technology use, repayment flexibility, and process simplification, even though they have done a good job of fostering trust, transparency, and sustainability. NBFC-MFIs that actively address customer needs, uphold ethical practices, and embrace sustainable initiatives are more likely to build loyal customer connection strengthen their reputation, and achieve long-term stability. By focusing on these areas, MFIs can create a mutually beneficial relationship with customers, ensuring their sustainability in the changing financial landscape.

4.5.3.1 Factors influencing the Sustainability of NBFC-MFIs from the Perception of Women Micro Entrepreneurs

The purpose of factor analysis is to find a method of summarizing the information contained in a number of original variables into a smaller set of new composite factors with minimum loss of information. Factor analysis is well documented, provides evidence based test content, internal structure and key components of construct validity (Nunnally and Bernstein, 1994). That is the underlying dimensions explaining the set of original variables are extracted using factor analysis technique. Perception of the customers on sustainability of NBFC-MFIs measured on a 5-point rating scale to identify the underlying dimensions.

A correlation matrix was analyzed to identify the possible inclusion in factor analysis. The main purpose of factor analysis is to obtain “factors” which help to explain the correlations. It ensures that the variables are related to each other for the model. The validity of the model was tested using “KMO test and Bartlett’s Test of Sphericity”. The results are given below in Table 4.39.

Table 4.39 Validation of Factors Influencing the Sustainability of NBFC-MFIS

KMO and Bartlett's Test		
Kaiser-Meyer-Olk in Measure of Sampling Adequacy.	.645	
Bartlett's Test of Sphericity	Approx. Chi-Square	757.687
	df	91
	Sig.	.000

Source: Computed Data (** - Significant at 1% level (P<0.01))

Bartlett’s test of sphericity is used to find whether the correlation matrix is an identity matrix all the diagonal terms in the matrix are 1 and the off-diagonal terms in the matrix are 0 in an identity matrix. In short, it is used to test whether the correlation between all the pairs of variables is 0. The test value is found to be and resulted well with appropriate Chi-square value of 757.687 at 1% level of significance.

A higher value of KMO tells that the goodness of fit is more for the data and the variables. According to Kaiser's criteria, factors whose value was greater than 1 were selected (1960). KMO is closer to 0, so the factor analysis is not a good idea for the variables and data. The value of the test statistic is 0.645 which means the factor analysis for the selected variables is found to be adequate to the data.

Table 4.40 Total variance Explained for Borrowers Perception for the Sustainability of NBFC –MFIs

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
Timely disbursement of funds by NBFC-MFIs	2.494	17.817	17.817	1.893	13.525	13.525
Adequacy of funding to meet business financial needs.	1.89	13.499	31.316	1.822	13.012	26.537
Ease and convenience in loan repayment procedures	1.454	10.389	41.705	1.69	12.07	38.607
Flexibility in repayment options to accommodate financial situations	1.177	8.41	50.115	1.344	9.602	48.209
Fair and acceptable interest rates and terms	1.057	7.552	57.667	1.324	9.458	57.667
Secure and reliable financial transactions with NBFC-MFIs.	0.93	6.643	64.31			
Continuous technological advancements implemented by NBFC-MFIs.	0.882	6.302	70.612			
Efficient and responsive customer service.	0.781	5.577	76.188			
Added new services or benefits over time	0.684	4.884	81.072			
Prompt responses to customer queries and concerns	0.669	4.776	85.848			
Adherence to ethical financial practices	0.638	4.558	90.407			
Transparent communication regarding loan terms and conditions.	0.56	3.999	94.406			
Smooth and user-friendly transaction processes	0.427	3.053	97.459			
Higher satisfaction with NBFC-MFIs compared to other financial institutions.	0.356	2.541	100			

Source: Computed Data (Extraction Method: Principal Component Analysis)

(Extraction Method: Principal Component Analysis)

The satisfactory result from KMO and Bartlett test leads to conduct of the factor model, then the next step is to determine of factor extraction by applying Principal Components Analysis (PCA). An analysis can be conducted either with or without rotational operations using principal component analysis (Lenka et al., 2021). A set of correlated variables can be converted into a set of uncorrelated variables using PCA for the variables chosen for each component to be connected and the factors to be unrelated. If the primary aim of the method is to decrease the number of original items in the desired instrument to a lesser number (Tabachnick and Fidell, 2013). The results derived from PCA analysis are given in Table 4.40.

The results from the analysis provide insight into the number of components that explain the variance in the data. Initially, the eigenvalues represent the total variance explained by each component. The *first component has an eigenvalue of 2.494*, which accounts for 17.82 percent of the total variance. The *second component, with an eigenvalue of 1.890*, explains an additional 13.50 percent of the variance, bringing the *cumulative variance explained by the first two components to 31.32 percent*. The components continue to explain less variance as move down the list. By the time we reach the fifth component, the total variance explained has reached 57.6 percent. Beyond the fifth component, the eigenvalues were found to be, with the sixth component having an eigenvalue of 0.930, explaining only 6.64% of the variance. The cumulative percentage of variance explained by the first five components was considered for the analysis.

For further down the list, the additional variance explained by each successive component becomes marginal. The cumulative percentage reaches 100 percent after the fourteenth component, but the eigenvalues for these components are below 1, indicating that they contribute little to the overall explanation of variance. Therefore, based on the eigenvalue greater-than-1 rule (Kaiser, 1960), it is reasonable to retain the first five components, which collectively explain 57.67 percent of the total variance, these components are the most significant in explaining the underlying structure of the variables.

The rotation phase of the factor analysis attempts to transfer the initial matrix into one that is easier to interpret “Varimax Rotation”, the generally used method, which minimize the number of variables that have high loading on a factor (Hair et al., 2019). This should enhance the interpretability of the factors. The Rotated Factor Matrix analysis on factors the NBFC-MFIs sustainability from the perception of women micro entrepreneurs using Varimax rotation is given in the following Table 4.41. The factor is identified by highlighting the few sets of variables which have high correlations. The variables that identify each of the factors have been sorted in decreasing order and highlighted.

Table 4.41 Extraction of Factors Influencing the NBFC-MFIs Sustainability

Rotated Component Matrix^a					
	Component				
	1	2	3	4	5
Secure and reliable financial transactions with NBFC-MFIs.	.842	.089	-.044	.087	-.027
Fair and acceptable interest rates and terms.	.834	.105	.052	.076	-.053
Adequacy of funding to meet business financial needs.	.604	-.148	.085	-.309	.128
Prompt responses to customer queries and concerns.	.058	.809	.081	-.099	.060
Adherence to ethical financial practices.	.133	.790	.079	.037	-.030
Higher satisfaction with NBFC-MFIs compared to other financial institutions.	.205	-.536	-.295	-.209	-.027
Flexibility in repayment options to accommodate financial situations.	.053	.195	.668	-.047	-.147
Ease and convenience in loan repayment procedures.	.095	-.111	.637	.018	-.356
Efficient and responsive customer service.	-.059	.175	.608	.068	.282
Added new services or benefits over time	.016	.157	.539	.474	.162
Timely disbursement of funds by NBFC-MFIs.	-.034	-.099	-.075	.695	.162
Transparent communication regarding loan terms and conditions.	-.036	-.127	-.203	-.659	.300
Continuous technological advancements implemented by NBFC-MFIs.	.181	.251	-.125	.148	.552
Smooth and user-friendly transaction processes.	.097	.138	-.044	.093	-.789
<i>Extraction Method: Principal Component Analysis.</i>					
<i>Rotation Method: Varimax with Kaiser Normalization.</i>					

Source: Computed Data

From the results from factor Table 4.41, factor score coefficients were calculated for all variables (since each factor is a linear combination of all variables) which are then used to calculate the factor scores for each individual. Since PCA was used in the extraction of initial factors, all methods will result in estimating the same factor score coefficients. However, for the study, the original values of the variables were retained for further analysis and factor scores were thus obtained by adding the values (ratings given by the respondents) of the respective variables for that particular factor, for each respondent. Based on the meaning conveyed by the group of statements the factors are names. The extracted factors are presented in Table 4.42

Table 4.42 Factors Influencing the Sustainability of NBFC-MFIs

Statements	Factors Identified	Factors Described
Secure and reliable financial transactions with NBFC-MFIs	Factor 1	Financial Adequacy and Security
Fair and acceptable interest rates and terms		
Adequacy of funding to meet business financial needs.		
Prompt responses to customer queries and concerns	Factor 2	Customer Support and Ethical Practices
Adherence to ethical financial practices		
Higher satisfaction with NBFC-MFIs compared to other financial institutions		
Flexibility in repayment options to accommodate financial situations	Factor 3	Effective Customer Service
Ease and convenience in loan repayment procedures		
Efficient and responsive customer service		
Added new services or benefits over time		
Timely disbursement of funds by NBFC-MFIs	Factor 4	Communication and Transparency
Transparent communication regarding loan terms and conditions		
Continuous technological advancements implemented by NBFC-MFIs	Factor 5	Technological Advancements
Smooth and user-friendly transaction processes		

Source: Computed Data

- **Factor 1 - Financial Adequacy and Security**

Three items were loaded in first factor named as *Financial Adequacy and Security* showed a 13.525 percent variation. Financial safety in dealing with NBFC-MFIs, adequacy of funding support provided by NBFC-MFIs in combined with fair interest rate emphasis the NBFC-MFIs in better operational efficiency and sustainability of NBFC-MFIs. All these components highlight how funding support is to fostering and sustaining long-term operations.

- **Factor 2 - Customer Support and Ethical Practices**

Second factor identified was *Customer Support and Ethical Practices* factor accounted for 13.012, include promptness, ethical behaviour and higher satisfaction with

NBFC-MFIs over other institutions. The negative loading implies that while responsive and ethical practices are valued, they might not be the only factors influencing customer satisfaction. This suggests a possible discrepancy between overall satisfaction and perceived service quality, which needs to be fixed to improve sustainability over the long run.

- **Factor 3 - Effective Customer Service**

Four items were loaded in factor three *Efficient Customer Service* in loan sanctioning, which accounted for 12.070 percent variation states that *flexibility in* repayment processes, convenience in procedural aspects, responsive customer service and added new services encourage borrowers to choose MFIs for long-term financial support. These operational factors have a direct impact on customer satisfaction and repayment patterns, which benefits the institution's long-term financial and social viability.

- **Factor 4 - Communication and Transparency**

The fourth factor identified was of *Transparent Ccommunications*, loaded with two items accounted for 9.602 percent variation. It consists of prompt funds distribution as well as transparent communication about loan conditions, the transparent communication exhibits a negative loading, this suggests that although clients appreciate prompt payment, there are situations when it may come at the expense of transparency. Retaining trust and reducing default risks requires striking a balance between speed and clarity.

- **Factor 5 - Technological Advancements**

Fifth factor identified was *Technological advancements* accounted for 9.458 percent, It comprises continuous technological advancements and smooth, user-friendly transaction processes, with negative loading for the user friendly transaction. This suggests that improved user experience is not always a result of the implementation of innovative technology. Adoption of technology must be accompanied by usability and accessibility for long-term sustainability.

The five factors together contributed 57.667 percent impact on the sustainability of NBFC-MFIs. In conclusion, the existence of a few negatively loaded variables provides important insights into underlying trade-offs, even though the majority of items positively contribute to the core operational, financial, and service-oriented strengths of NBFC-MFIs long term sustainability. The NBFC-MFIs should give due attention to factors 1,2,3 which account major influence on sustainability. The contribution of factors 4 and 5 is less ,

the NBFC-MFIs should give attention to the communication system they built and the innovation in technology they adopt to survive. The sustainability is not to be a single time effort, it is a long journey through consistent effort and ethical behaviour practices, the NBFC-MFIs will sustain for the long run.

4.6 Outreach of NBFC –MFIs

NBFC-MFIs operational performance is significantly shaped by the extent of outreach, as pointed by a number of branches and borrowers. Outreach (Breadth) depends on the number of active borrowers in the institutions (Churchill, 2020). In general, more borrowers strengthen the financial viability of MFIs by generating more revenue, and strategic branch growth also enhances accessibility and service delivery. Rapid expansion, however, will increase operating expenses and the quality of the risk portfolio if it is not well managed. To maintain strong operating performance while fulfilling social objectives, an outreach strategy combining client growth with infrastructure and risk management is essential. Number of borrowers funded by NBFC-MFIs revealed the potential growth and outreach. In the present study outreach of NBFC-MFIs are studied through analysing the operating performance of NBFC-MFIs and women micro entrepreneur's perspective.

4.6.1 Operating Performance of NBFC-MFIs

The performance of MFIs depends largely on how far their operations can reach, as represented by the number of branches and clients. Outreach is evaluated by the number of borrowers in an institution and a higher number of active borrowers usually improves its earnings and accessibility (Schreiner, 2002). The borrowers were able to get support from NBFC-MFIs demonstrating their ability to grow and reach more communities. As the number of borrowers rises, an institution's reputation and policy get stronger. If the MFIs open more branches in place that don't have many financial options, it will help strengthen their social purposes (Armendáriz & Morduch, 2010) The social goals of these institutions are significantly served by branch expansion. Expanding outreach, preserving the mission and ensuring the organization's survival depends on choosing branch locations wisely.

4.6.1.1 Outreach based on Number of Branches of NBFC-MFIs in India

The MFIs social mission will be strengthened if the new branches focus on underserved or rural areas, as this could deepen outreach. Branch expansion only makes a significant contribution to the institution's social goals when it targets underprivileged, rural,

or neglected communities (Ledgerwood et al., 2013). In order to have a balance between outreach expansion, mission integrity, and long-term viability, prudent branch placement is vital. The outreach performance based on branches reflected in Table 4.43

Table 4.43 Number of Branches of NBFC-MFIs in India

Year	Branches
2018-19	12277
2019-20	14275
2020-21	14673
2021-22	16890
2023-23	18739
2023-24	20348
Mean	15325.57
S.D	3465.44
C.V	22.61
AGR (%)	12.26
LAGR (%)	12.26
CAGR (%)	12.24

Source: Compiled and Computed Data from MFIN Annual Reports (2018-2019 to 2023-2024)

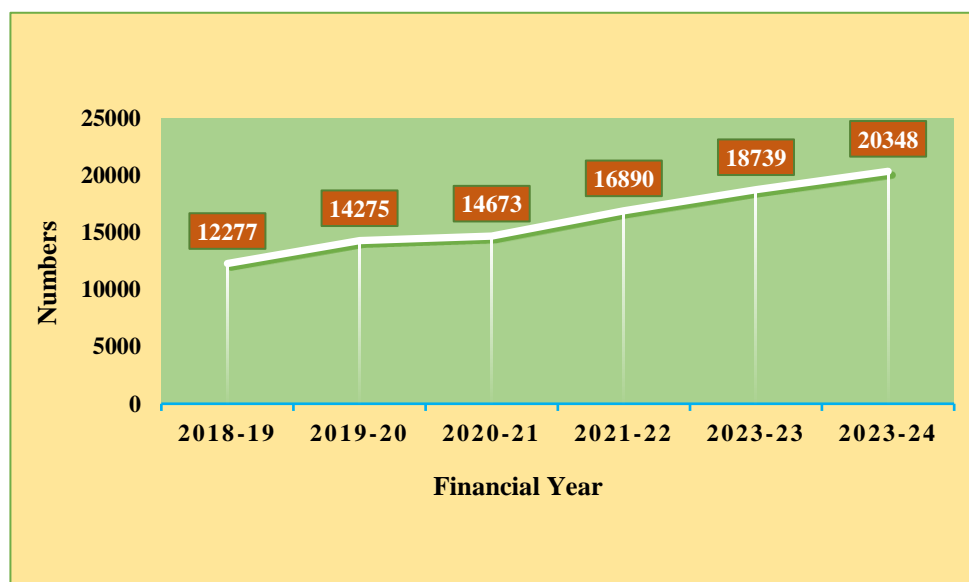


Figure 4.13 Branches of NBFC-MFIs in India

Table 4.43 demonstrates the number of branches of NBFC-MFIs between 2018-2019 and 2023-24, revealing that these institutions are expanding their operation into more areas and providing more financial services. In the years 2018-19, the sector had 12,277

branches which gradually increased to 20,348 by the year 2023-24. The branch expansion in six years has more than doubled the institutions presence, showing that NBFC-MFIs are striving to offer services in more remote and rural areas. At this stage, the NBFC-MFIs maintained an average of 15,325.57 branches, with a standard deviation of 3,465.44 which means that expansion was steady over the years. Coefficient of variation (CV) is at 22.61 percent, this shows that the growth is managed and not too unpredictable. Stable and healthy development in the sector is also shown by an average annual growth rate (AGR) of 12.26 percent and CAGR of 12.24 percent. The linear annual growth rate (LAGR) of 12.26 percent each year underlines the expansion of physical outreach.

The study reveals that a steady increase in a number of branches of NBFC-MFIs determined the sector is to increase financial access and promote sustainable growth. The branch network serves as a basis for deeper rural penetration and in their continuing financial inclusion and demonstrates the outreach of NBFC-MFIs

4.6.1.2 Outreach based on Number of Clients of NBFC-MFIs in India

An increase in users of financial service means that the MFI is serving a greater number of people. Rising interest income is possible with an increase in clients. Because of more customers, bottlenecks in the system could occur unless the institution increases its operational power and improves its systems (Rao, and Fitamo, 2014). The number of clients or borrowers an MFI serves is known as its outreach and is a sign of its volume of operations illustrated in Table 4.44.

Table 4.44 Number of Clientsof NBFC-MFIs in India

Year	Clients (Rs.in Crore)
2018-19	3.17
2019-20	3.22
2020-21	3.13
2021-22	3.40
2022-23	3.90
2023-24	4.30
Mean	3.38
S. D	0.53
C.V	15.56
AGR (%)	9.95
LAGR (%)	11.66
CAGR (%)	9.12

Source: Compiled and Computed Data from MFIN Annual Reports (2018-2019 to 2023-2024)

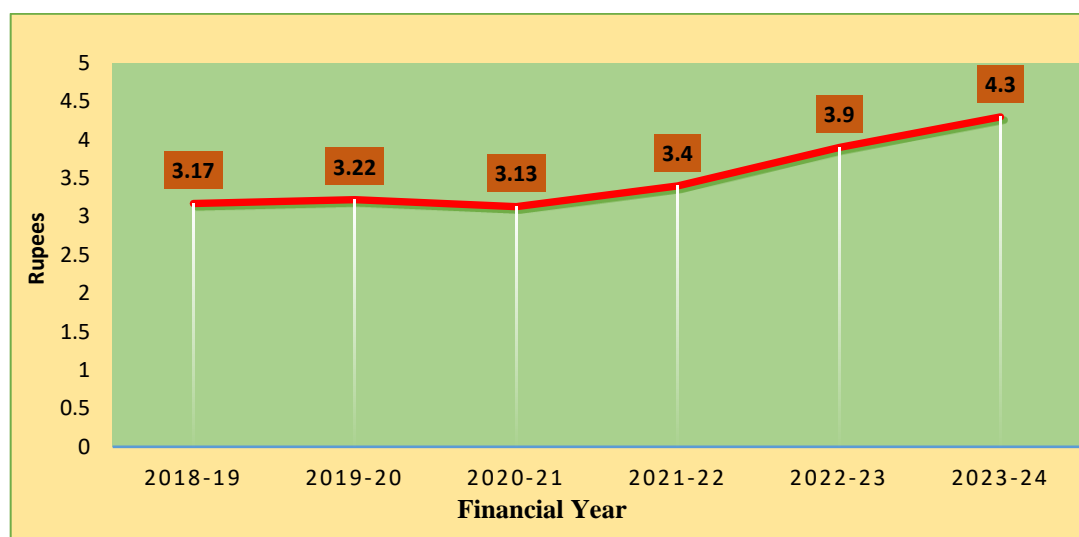


Figure 4.14 Clients of NBFC-MFIs in India

More clients are using the services of NBFC-MFIs between 2018-2019 and 2023-24 reflected in Table 4.44, clients outreach of NBFC-MFIs to serve unbanked communities. From 2018-19, NBFC-MFIs handled services for 3.17 crore clients which went up to 4.30 crore clients by 2023-24. While there were slight declines during the pandemic after that, the NBFC-MFIs has enjoyed steady growth. There were an average of 3.38 crore clients during the period and the standard deviation of 0.53 shows that the growth was mostly steady with reasonable fluctuations. The coefficient of variation (CV) being 15.56 percent, observations indicate that the client base is not highly variable. Average annual growth rate (AGR) of 9.95 percent and a compound annual growth rate (CAGR) of 9.12 percent show that the NBFC-MNFIs is significantly increased its client engagement at a constant pace during the past six years. The sector's steady growth in addition to new clients is clear from the LAGR of 11.66 percent people signing up per year. The continual rise in clients proves that the NBFC-MFI sector will reach more people and can carry out its mission and maintain a stable business. It reveals that the marginalised communities are benefited and boost the aspirant entrepreneurs.

4.6.2 Outreach of NBFC-MFIs based on Perspective of Women Micro Entrepreneurs

Customer perception on outreach is an important parameter to measure the growth and development of NBFC-MFIs. Perception of borrowers about different services and activities offered by NBFC-MFIs decides the outreach level of NBFC-MFIs. The benefit derived from the entrepreneurship and profitability level of customer's enterprise shows the true picture of the NBFCs. Institutions were considered successful if they expanded outreach to the poor (Robinson 2001). Positive outreach shows the success of the institution in the long run.

Table 4.45 Perception on the Outreach of NBFC –MFIs

Statements	SA			A			N			DA			SDA			Total Score	Mean	SD
	n	%	Score	n	%	Score	n	%	Score	n	%	Score	n	%	Score			
Trustable place to borrow loan	175	45.3	875	177	45.9	708	33	8.5	99	1	1.3	2	-	-	-	1684	4.36	0.64
Systematic approach in sanctioning loans	121	31.3	605	194	50.3	776	61	15.8	183	10	2.6	20	-	-	-	1584	4.1	-
Received prompt services from NBFCs-MFI	163	42.2	815	126	32.6	504	79	20.5	237	12	3.1	24	6	1.6	6	1586	4.1	0.93
Offers adequate support to start business	192	49.7	960	146	37.8	584	42	10.9	126	4	1	8	2	0.5	2	1680	4.35	0.75
Acceptable rate of interest and fee	127	32.9	635	121	31.3	484	52	13.5	156	68	17.6	136	18	4.7	18	1429	3.7	1.22
Treats all borrowers equally	155	40.2	775	119	30.8	476	93	24.1	279	19	4.9	38	-	-	-	1568	4.06	0.91
Follow latest technology in operating activities	77	19.9	385	97	25.1	388	156	40.4	468	33	8.5	66	23	6	23	1330	3.44	1.08
Never too busy to respond to customers request	137	35.5	685	101	26.2	404	107	27.7	321	34	8.8	68	7	1.8	7	1485	3.84	1.06
Feel safe in transacting with NBFCs-MFI	131	33.9	655	88	22.8	352	90	23.3	270	72	18.7	144	5	1.3	5	1426	3.69	1.15
Keeps its records accurately	203	52.6	1015	130	33.7	520	47	12.1	141	5	1.3	10	1	0.3	1	1687	4.37	0.76
Convenient operation hours	160	41.4	800	126	32.7	504	95	24.6	285	5	1.3	10	-	-	-	1599	4.14	0.83
NBFCs-MFI understands the needs of the customers	183	47.4	915	97	25.1	388	68	17.7	204	34	8.8	68	4	1	4	1579	4.09	1.04
Employees are polite in offering services	100	26	500	83	21.5	332	138	35.7	414	53	13.8	106	12	3.1	12	1364	3.53	1.1
Individualised attentions to customers	86	22.2	430	91	23.6	364	60	15.6	180	102	26.4	204	47	12.1	47	1225	3.17	1.36
Effective management practices	225	58.2	1125	101	26.2	404	50	13	150	6	1.6	12	4	1	4	1695	4.39	0.84
Offering Doorstep services	110	28.4	550	108	28.0	432	17	4.4	51	95	24.7	190	56	14.6	56	1279	3.31	1.46
Recommend the NBFCs-MFI to others	245	63.4	1225	102	26.4	408	24	6.2	72	10	2.6	20	5	1.3	5	1730	4.48	0.82

Source: Computed Data (SA-Strongly Agree,A-Agree,N-Neutral,DA-Disagree,SDA-Strongly Disagree)

Table 4.45 portrays high mean scores across a number of service aspects which indicate that women micro entrepreneurs have a generally positive opinion of NBFC-MFIs. Borrowers *recommend the NBFC-MFIs services to others* have ranked top (mean score 4.48), followed by *effective management practices* of NBFCs-MFI with a mean score (Mean 4.39), suggesting that the borrowers value these institutions effective operations. Strong trust and confidence in the dependability and transparency of NBFC-MFIs are indicated, *keeps its records accurately* (Mean 4.37) and *trustable place to borrow loans* (Mean 4.36). *Operational flexibility and support for entrepreneurial endeavors* were also highlighted by the high ratings for *offers adequate support to start business* (Mean 4.35) and *operation hours are convenient* (Mean 4.14).

Systematic approach in sanctioning loans (Mean 4.10), *received prompt services from NBFC-MFIs* (Mean 4.10), and *NBFCs-MFIs understanding the needs of the customers* (Mean 4.09) all had moderately high mean scores, indicating efficient service delivery and customer comprehension. Fair and prompt service behavior is also indicated by *treating all borrowers equally* (Mean 4.06) and *never too busy to respond to customer requests* (Mean 3.84). Satisfactory score for an *acceptable rate of interest and fee* (Mean 3.70) and *feel safe in a transaction with NBFCs-MFI* (Mean 3.69).

Factors with relatively lower mean scores include *following latest technology in operating activities* (Mean 3.44). *customers receive individualized attention* (Mean 3.17), These elements suggest areas that require further improvement in customer service personalization and tech-driven service enhancements.

4.6.2.1 Factor influencing the Outreach of NBFC-MFI from Perception of Women Micro Entrepreneurs

Factor Analysis is used in this research study, to identify the underlying factors in the set of variables relating to the scale consisting of customer perception of outreach of NBFC-MFIs. The validity of the model was tested and the results are given in Table 4.46.

Table 4.46 Validation of Factors Influencing outreach of NBFC-MFIs

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.657
Bartlett's Test of Sphericity	Ap. Chi-Square	751.170
	Df	138
	Sig.	.000

Source: Computed Data (** - Significant at 1% level (P<0.01))

The test value is found to be significant with the **chi-square value of 751.170** at 1% level of significance reveals the *Bartlett's test of sphericity*. *Kaiser-Meyer-Olkin (KMO)* measure and reveals the sampling adequacy. *The value of test statistic is given above as 0.657* which means the factor analysis for the selected variables is found to be adequate.

Table 4.47 Total Variance Explained for borrowers perception on Outreach of NBFC-MFIs

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
Trustable place to borrow loan	2.699	15.878	15.878	1.83	10.765	10.765
Systematic approach in sanctioning loans	1.638	9.638	25.516	1.686	9.915	20.68
Received prompt services from NBFCs-MFI	1.548	9.108	34.624	1.63	9.591	30.271
Offers adequate support to start business	1.22	7.178	41.802	1.603	9.427	39.698
Acceptable rate of interest and fee	1.165	6.85	48.652	1.325	7.794	47.492
Treats all borrowers equally	1.066	6.269	54.921	1.263	7.43	54.921
Follow latest technology in operating activities	0.966	5.684	60.605			
Never too busy to respond to customers request	0.942	5.541	66.146			
Feel safe in transacting with NBFCs-MFI	0.838	4.931	71.078			
Keeps its records accurately	0.766	4.504	75.582			
Convenient operation hours	0.745	4.38	79.962			
NBFCs-MFI understands the needs of the customers	0.673	3.961	83.923			
Employees are polite in offering services	0.658	3.868	87.791			
Individualised attentions to customers	0.622	3.657	91.448			
Effective management practices	0.567	3.336	94.785			
Offering Doorstep services	0.481	2.831	97.615			
Recommend the NBFCs-MFI to others	0.405	2.385	100			

Source: Computed Data (Extraction Method: Principal Component Analysis)

The results and findings from Table 4.47, the factor analysis provide insight into the number of components that explain the variance in the data. The first component has an *eigenvalue of 2.69*, which accounts for 15.87 percent of the total variance. The second component, with an *eigenvalue of 1.63*, explains an additional 9.63 percent of the variance, bringing the *cumulative variance explained by the first two components to 25.51 percent*. The components continue to explain less variance subsequently by the time the sixth

component, the total variance explained has reached 54.92 percent. Beyond the sixth component, the eigenvalues were found to be merged with the seventh component having an eigenvalue of 0.966, explaining only 5.68 percent of the variance. The cumulative percentage of variance explained by the first six components was 54.92 percent which is considered for further analysis.

Table 4.48 Factor Influencing the Outreach of NBFC-MFI from the Perception of Women Micro Entrepreneurs

Statements	Component					
	1	2	3	4	5	6
Keeps its records accurately	.691	.080	-.112	-.108	.008	.013
Treats all borrowers equally	.661	-.069	.137	.252	.022	-.038
Never too busy to respond to customers request	.561	.077	.133	.343	-.151	.247
Customers individualised attentions	.167	.719	-.008	.028	.140	.045
Followed effective management practices	.175	-.661	.016	.032	.141	.001
Employees are polite in offering services	.429	.539	.171	.095	.054	-.081
Received prompt services	-.041	.115	.703	.021	.241	-.062
Trustable place to borrow loan	.165	-.019	.701	-.099	-.048	-.057
Systematic approach in sanctioning loans	-.026	-.024	.682	.184	-.008	.220
Operation hours are convenient	.186	.114	-.071	.698	.057	-.171
Recommend the service NBFCs-MFI to others	-.141	-.180	.064	.656	-.144	.257
Follow latest technology in operating activities	.381	.146	.130	.625	.236	-.095
Acceptable Rate of interest and fee	-.192	-.011	-.020	.112	.748	.126
Feel safe in transaction with NBFCs-MFI	.093	.217	.233	-.117	.539	.269
Offers adequate support to Start business	.283	-.252	.074	.000	.491	-.296
Doorstep services	-.056	.350	.058	.118	-.156	-.722
NBFCs-MFI understands the needs of the customers	.028	.331	.115	.082	.062	.578

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

Source: Computed Data

However, the additional variance explained by each successive component becomes marginal. The cumulative percentage reaches 100 percent after the fourteenth component, but the eigenvalues for these components are below 1, indicating that they contribute little to the overall explanation of variance. Therefore, based on the eigenvalue greater-than-1 rule, it is reasonable to retain the first six components, which collectively explain 54.92

percent of the total variance, as these components are the most significant in explaining the underlying structure of the data variable.

The Rotated Factor Matrix factor resulted in with the outreach of NBFC-MFIs using *Varimax rotation* is given in the Table 4.48. The factor is identified by highlighting the few sets of variables that have high correlations.

The factor analysis shown in Table 4.48, 17 variables in the data were reduced to 6 factors and each factor with the corresponding variables are listed in Table 4.51.

Table 4.49 Factors influencing the Outreach of NBFC-MFIs

Statements	Factors Identified	Factors names
Keeps its records accurately	Factor 1	Administration
Treats all borrowers equally		
Never too busy to respond to customers request		
Customers individualised attentions	Factor 2	Customer Attention
Effective management practices followed by NBFCs-MFI		
Employees are polite in offering services		
Received prompt services from NBFCs-MFI	Factor 3	Service Quality
Trustable place to Borrow loan		
Systematic Approach in Sanctioning loans		
Operation hours are convenient	Factor 4	Information Referrals
Recommend the service NBFCs-MFI to others		
Follow latest technology in operating activities		
Acceptable Rate of interest and fee	Factor 5	Customer Confidence
Feel safe in transaction with NBFCs-MFI		
Offers adequate support to Start business		
Doorstep services	Factor 6	Accessibility
NBFCs-MFI understands the needs of the customers		

Source: Computed Data

- **Factor 1- Administration**

The factor **Administration** highlights the administrative effectiveness of NBFC-MFIs taken to three items loaded with 10.765 percent variance. It demonstrates how well the institutions keep their records, equality, adhere to methodical procedures in customers request. The trust, transparency, and efficiency that borrowers experience are directly impacted by the efficient performance of institutions, which is facilitated by effective administration. By maintaining excellent administrative standards, NBFC-MFIs provide a reliable foundation that enables them to serve a greater segment of the population by improving their outreach and influence in achieving financial inclusion.

- **Factor 2 - Customer Attention**

Three items were loaded in the factor **Customer Attention**, emphasizing the customer-centric approach of NBFC-MFIs accounted for 9.915 percent variance. It demonstrates concentration, and civility in maintaining relationships with customers, effective management practices and individualized attention. "Effective management practices" on the Customer Attention factor suggests an inverse relationship—respondents who value strong administration and management may perceive less individualized attention. This highlights that efficient systems reflect feel impersonal, highlighting a possible trade-off between structured operations and personal customer care.

Factor 3- Service Quality

Service quality by NBFC-MFIs refers the systematic approach in loan sanctioning, promptness with which NBFC-MFIs respond to customer needs and trust enhances the effective responsiveness and service quality loaded with three items explained 9.591 percent variance customer relationship. An important factor in NBFC-MFI outreach is service quality. Providing high-quality services fosters client loyalty and institutional reputation which are critical for expanding outreach. More acceptability, more clients, and a better community presence result from effective outreach.

- **Factor 4 - Information Referrals**

NBFC-MFIs ability to build a positive reputation through referrals is reflected in three items loaded with 9.427 percent variance as **information Referrals**. The adoption of modern and updated technology, and, convenient working hours further ensures credibility and efficiency in MFIs operation. Information referrals are tactical tools that assist MFIs

reach a wider audience by extending services, creating community networks, and linking clients to further options. As a result, they are crucial for enhancing the scope and depth of outreach, which eventually supports the institution's social goal.

- **Factor 5 - Customer Confidence**

Customer confidence leads safety that customers feel when engaging with the NBFC-MFIs. Customer retention is dependent on fair rates of interest, secure transactions, and offers adequate funding assistance to start the business with items loaded accounted 7.794 percent variance. Customers' degree of confidence demonstrates the institution's successful outreach. It helps NBFC-MFIs strengthen their position, increase their customer base, and provide better customer service. With adequate funding support, borrowers can participate in financial systems, expanding the institution's reach

- **Factor 6- Accessibility**

Two items were loaded under **Accessibility** highlights the importance of customer-centric operations, including doorstep services and an understanding of customer needs with a 7.430 percent variance. Easy access to NBFC-MFIs is ensured by their accessibility. Negative loading indicates that respondents who perceived greater overall accessibility from NBFC-MFIs were less likely to associate this with effective doorstep service. Accessibility is crucial, especially in rural and underprivileged areas. By offering easily accessible, customized, and inclusive services, the NBFC-MFIs can significantly expand their reach, promote financial inclusion, and support community development.

All of these factors show 54.921 percent cumulative variance, that clients desire individualized support, trust, and accessibility in addition to fair treatment and effective procedures when interacting with NBFC-MFIs. Factors 1,2, and 3 highly contributed to the effective administration better service quality and customer attention that led to wider expansion and outreach of NBFC-MFIS. Other factors also contribute a significant growth and outreach by easy accesabilty and wider knowledge on MFIs. The results can help NBFC-MFIs enhance their reputation, customer satisfaction, and service performance. These factors collectively contribute to operational excellence and business growth.

4.7 Determinants of Sustainability and Outreach of NBFC-MFIs

The sustainability and outreach of NBFC-MFIs can be determined through several factors. The current study aims to develop a Path Model by analysing the relationship

between awareness, usage of borrowed funds, business development, social status, sustainability and outreach of NBFC-MFIs. The model envisages the sustainability of women micro entrepreneurs which helps to determine the outreach of NBFC-MFIs. Structural Equation Modelling (SEM) using Path Analysis was used to achieve the objective.

Path analysis is far superior to standard regression methods, because it simultaneously does several regression analyses and generates an overall evaluation of the model's fit, typically based on a chi-square statistic (Singh and Wilkes,1996). The Path model explains the causal relationships of factors relating to customers awareness of loan terms offered by NBFC-MFI, usage of borrowed funds, business development achieved, enhancement in social status, sustainability of the the NBFC-MFIs and finally the outreach of the NBFC-MFIs as perceived by the customers.

It is assumed that awareness of terms of loans of NBFC-MFIs influences the customers usage, business development of women micro entrepreneurs, social status of women micro entrepreneurs as well as sustainability and outreach of NBFC-MFIs. These attributes were measured on a five point rating scale. The awareness score was made up of sum of the ratings given by the respondents towards various activities of NBFC-MFIs. In the same manner various dimensions namely, usage of borrowed funds, business development, enhancement in social status of women micro entrepreneurs, ustainability and outreach were measured by calculating the scores for these dimensions.

The following specific objectives were framed to test the path model.

1. To examine the effect of awareness of loan terms, usage of borrowed funds, business development of women micro entrepreneurs, social status of the respondents, sustainability of NBFC-MFIs and outreach of NBFC-MFIs.
2. To analyse the effect of the usage of borrowed funds on business development of the respondents.
3. To study the influence of business development and social status of the respondents on sustainability of NBFC-MFIs.
4. To examine the indirect effects of usage of borrowed funds, awareness of loan, business development and social status factors on sustainability and outreach of NBFC-MFIs.

5. To determine the effect of sustainability of NBFC-MFIs on the outreach of NBFC-MFIs.

Once the overall goodness of fit of the model is established, the following hypotheses will be tested.

- ❖ H₁: Awareness of loan terms significantly influences the usage of borrowed funds, business development of the respondents, social status of the respondents, sustainability and outreach of NBFC-MFIs.
- ❖ H₂: Usage of borrowed funds significantly influences the business development of the respondents.
- ❖ H₃: Business development of the respondents significantly influences the sustainability of NBFC-MFIs.
- ❖ H₄: Business development of the respondents significantly influences the outreach of NBFC-MFIs.
- ❖ H₅: Social status of the respondents significantly influences the sustainability of NBFC-MFIs.
- ❖ H₆: Sustainability of NBFC-MFIs significantly influences the outreach of NBFC-MFIs.
- ❖ H₇: Usage of borrowed funds mediates between awareness of loan terms and business development of the respondents.
- ❖ H₈: Business development of the respondents mediates between awareness of loan terms and sustainability NBFC-MFIs.
- ❖ H₉: Business development of the respondents mediates between awareness of loan terms and outreach of NBFC-MFIs.
- ❖ H₁₀: Social status of the respondents mediates between awareness of loan and sustainability of NBFC-MFIs
- ❖ H₁₁: Sustainability of NBFC-MFIs mediates between social status of the respondents and outreach of NBFC-MFIs.
- ❖ H₁₂: Sustainability of NBFC-MFIs mediates between business development of the respondents and outreach of NBFC-MFIs.

The regression estimates produced by AMOS for unstandardized regression are given below. The regression weights were estimated by “Maximum Likelihood method”. AMOS version 20 was used to estimate the path coefficients. The following model fit statistics were used to test the goodness of fit of the model

CMIN: CMIN given by AMOS is a chi-square statistic, which compares the tested statistics with the theoretical model. A non-significant chi-square value will indicate that the data fits the model well.

CMIN/DF: It is a relative chi-square measure, is an index of how much the fit of data to the model has been reduced by one or more paths. The index having a value of 3 or below 3 says the data best fits the model, whereas a value between 3 and 5 is good. In this study the value was less than 5 (3.760), which is within the admissible limit.

GFI: The Goodness of Fit Index, explains the proportion of the variance in the sample variance-covariance is accounted for by the model. This should be above 0.90 and below 1 for a good model fit, accepted with the test result of the study.

NFI: Normed Fit Index is simply the difference between the chi-square values of two models (default and independent) divided by the chi-square value of the independent model. The NFI value above 0.90 is considered to be good fit, accepted with the test result of the study.

CFI: The Comparative Fit index uses a similar approach and is said to be a good index which can be used for even a small sample. The value above 0.90 is considered to be good fit, accepted with the test result of the study.

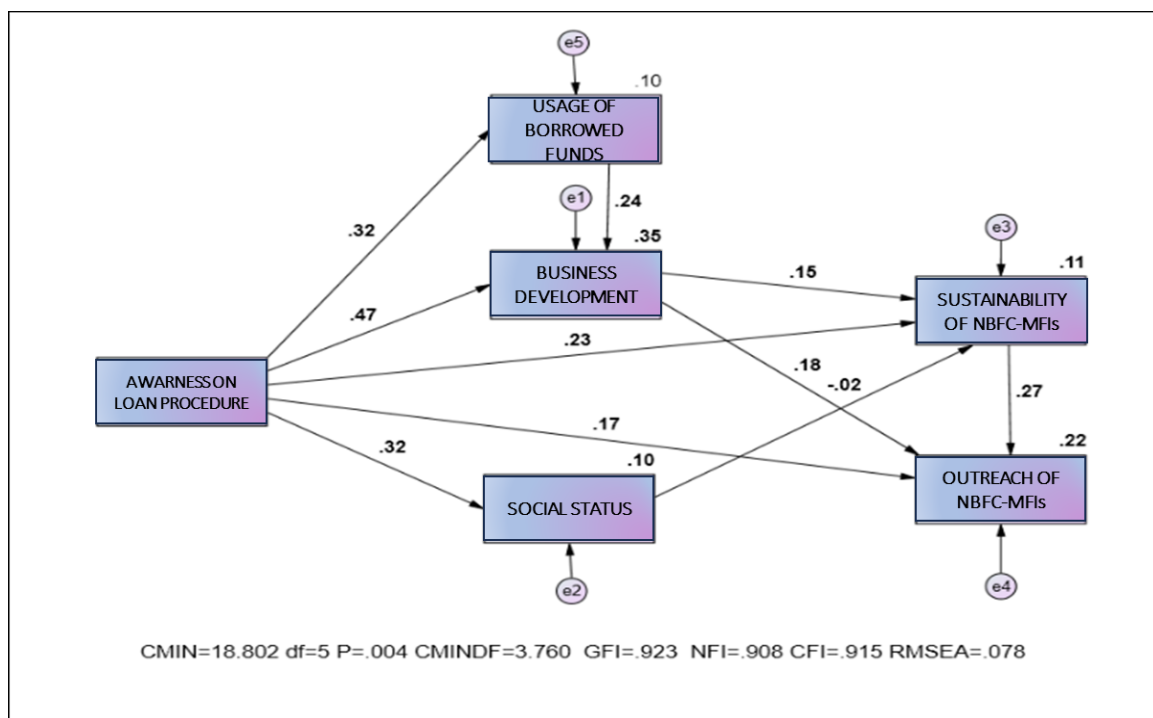
RMSEA: The Root Mean Square Error of approximation estimates the lack of fit compared to the saturated model. RMSEA value of 0.05 or less indicates good fit and a value between 0.05 and 0.08 indicates the model fit is adequate. The RMSEA value was 0.078, considered as admissible.

Table 4.50 Model Fit Values to Determine the factors influencing Sustainability and Outreach of NBFC-MFIs

Goodness of Fit	Values	Acceptable Range of value
CMIN	18.802	P < 0.05
CMIN/DF	3.760	Between 3-5
GFI	0.923	Above 0.90
NFI	0.908	Above 0.90
CFI	0.915	Above 0.90
RMSEA	0.078	Between 0.05 - 0.08

Source: Computed Data

The developed model shows that all goodness of fit indices are within the recommended limits and it can be inferred that the model fit is good.



Source: Computed Data

Figure 4.15

The model in Figure 4.15, shows the standardized regression weights of the respective factors. The regression weights show that these coefficients are comparable since they are independent of units of measurement. It is seen that the awareness of loan terms has direct positive effect on all other factors namely, usage of borrowed funds (0.32),

business development, (0.47) social status (0.32) sustainability of NBFC-MFIs (0.23) and outreach of NBFC-MFIs (0.17). It is understood that there is a unit of change in the awareness of loan terms, which highly impacts business development. The leading arrows are the effects of one factor on the other factor with regression weights which are given in brackets. The effect of usage of borrowed funds is a direct positive effect (0.24) on business development. Business development has a positive effect on the sustainability of NBFC-MFIs with a regression weight of (0.15) but social status has negative effect on the sustainability of NBFC-MFIs with a regression weight of (-0.02). It is clear that if the social status increases the dependency on NBFC-MFIs will decrease. Improvements in borrowers' social standing do not always result in measurable growth for MFIs. The model further shows that business development has positive effect on the outreach of NBFC-MFIs with a regression weight of (0.18). The effect of the sustainability of NBFC-MFIs on the outreach of NBFC-MFIs is positive with regression weight of (0.27). Sustainable NBFC-MFIs are better able to increase their branch locations, provide consistent financial products, and broaden their services, all of which increase their visibility and accessibility among low-income groups

Using the unstandardized regression weights generated by AMOS, which are provided in Table 4.51, the strength and direction of the association between each of the variables in the model are examined in depth.

The estimates revealed in Table 4.51 are unstandardized regression estimates of the respective independent variables. Standard Errors of respective regression coefficients are given as S.E and the Critical ratio is given as C.R, which is the ratio of regression estimate values to S.E Probability (p) shows which regression weights significantly contribute to the dependent variables.

- Awareness of loan terms contributes positively to the usage of borrowed funds (0.128), business development of women micro entrepreneurs (0.174), social status of women micro entrepreneurs (0.139), sustainability of NBFC-MFIs (0.223) and outreach of NBFC-MFIs (0.202) at 1 percent level of significance. These results show that, when the factor scores of awareness increase then the scores of usage, business development and social status, sustainability and outreach will also increase. Awareness plays a lead role in deciding the respondent's growth. Hence the hypothesis (**H₁**) is accepted.

Table 4.51 Effect of various Factors on Sustainability and Outreach of NBFC-MFIs

Variable To	Path	Variable From	Estimate	S.E.	C.R.	p	Result
Usage of borrowed funds	←	Awareness on terms of loans	.128	.020	6.518	0.000	Significant
Business development of women micro entrepreneurs	←	Awareness on terms of loans	.174	.016	10.844	0.000	Significant
Social status of women micro entrepreneurs	←	Awareness on terms of loans	.139	.021	6.617	0.000	Significant
Business development of women micro entrepreneurs	←	Usage of borrowed funds	.219	.039	5.541	0.000	Significant
Sustainability of NBFC-MFIs	←	Business development of women micro entrepreneurs	.395	.147	2.680	0.007	Significant
Sustainability of NBFC-MFIs	←	Awareness on terms of loans	.223	.057	3.941	0.000	Significant
Sustainability of NBFC-MFIs	←	Social status of women micro entrepreneur	-.045	.111	-.408	0.683	Not Significant
Outreach of NBFC-MFIs	←	Awareness on terms of loans	.202	.064	3.132	0.002	Significant
Outreach of NBFC-MFIs	←	Sustainability of NBFC-MFIs	.332	.059	5.614	0.000	Significant
Outreach of NBFC-MFIs	←	Business development of women micro entrepreneurs	.573	.173	3.321	0.000	Significant

Source: Computed Data (Significant at 1% level)

Usage of borrowed funds contributes positively to the business development of women micro entrepreneurs with a regression weight of 0.219, effective fund utilisation in income generating activities promotes business development and hence the hypothesis (**H₂**) is accepted.

- Business development contributes positively to the sustainability of NBFC-MFIs (0.395) and outreach of NBFC-MFIs (0.573) at 1% level of significance. This means that as the factor scores of business development of women micro entrepreneurs increases the sustainability of NBFC-MFIs and outreach of NBFC-MFIs will also increase. Business development of women micro entrepreneurs greatly contributes to the sustainability of NBFC-MFIs in long run. The businesses develop and prosper, NBFC-MFIs reach also grows as a result of increasing demand, confidence, and

community awareness among the micro entrepreneurs, hence (**H3** and **H4**) hypotheses are accepted.

- In the case of social status, it is found to have no significant effect on the sustainability of NBFC-MFIs with a negative regression weight of 0.045. The institutional growth of MFIs is frequently driven by financial sustainability, outreach expansion, and operational efficiency, is not impacted by the improvement in borrower's social status and hence the hypothesis (**H5**) is rejected.
- The effect of sustainability on the outreach of NBFC-MFIs was found to be positive (0.332) and significant at a 1% level. Sustainability in an institution's growth helps to higher outreach, hence the hypothesis (**H6**) is accepted.

Table 4.52 Direct and Indirect Effect of Factors Influencing the Sustainability and Outreach of NBFC MFIs

Variable effect	Awareness of Loan Terms	Usage of Borrowed Funds	Business Development of Women Micro Entrepreneurs	Social Status of Women Micro Entrepreneurs	Sustainability of NBFC-MFIs
Direct effects					
Usage of Borrowed Funds	0.128				
Business Development of Women Micro Entrepreneurs	.174	.219	---	---	---
Social Status of Women Micro Entrepreneurs	.139		---	---	---
Sustainability of NBFC-MFIs	.223		.395	-.045	---
Outreach of NBFC-MFIs	.202		.573	---	.332
Indirect Effects					
Usage of Borrowed Funds					
Business Development of Women Micro Entrepreneurs	---		---	---	---
Social Status of Women Micro Entrepreneurs	---		---	---	---
Sustainability of NBFC-MFIs	.073	.086	---	---	---
Outreach of NBFC-MFIs	.214	.154	.131	-.015	---
Total effects					
Usage of Borrowed Funds	.128				
Business Development of Women Micro Entrepreneurs	.202	.219	---	---	---
Social Status of the Women Micro Entrepreneurs	.139		---	---	---
Sustainability of NBFC-MFIs	.296	.086	.395	-.045	---
Outreach of NBFC-MFIs	.416	.154	.704	-.015	.332

Source: Computed Data

● Estimates of Direct Effects

The direct effects of several factors affecting the sustainability and outreach of NBFC-MFIs are shown in Table 4.52. Among these, knowledge of loan terms has a direct impact on how borrowed funds are used (a direct effect of 0.128), suggesting that a better grasp of loan terms promotes efficient use of borrowed funds.

Both knowledge of loan terms (0.174) and use of borrowed funds (0.219) are prime factors in the business development of women micro entrepreneurs. This implies that well-informed borrowers who make prudent use of their money are more likely to grow or enhance their companies. The empowerment that results from financial literacy and self-assurance in managing loans is demonstrated by the positive impact that awareness of loan terms has on the social status of women micro entrepreneurs, with a direct effect of 0.139.

Several factors have direct effects on the sustainability of NBFC-MFIs, including social status (-0.045), business development (0.395), and loan terms awareness (0.223). The significant positive impact of business development highlights how the expansion and prosperity of micro enterprises significantly enhance the institutional stability of MFIs. An inverse relationship with social status might point to intricate socio-economic dynamics or difficulties with repayment behavior as status expands.

Lastly, awareness (0.202), business development (0.573), and sustainability (0.332) all have a direct impact on NBFC-MFI outreach, which measures their capacity to serve and connect with more clients. Its crucial role in extending the reach and influence of MFIs is highlighted by the remarkably high direct effect from business development, as successful entrepreneurs. The direct effects demonstrate that raising borrower awareness, fund utilization, and business development is essential to enhancing NBFC-MFIs' internal sustainability and external outreach.

● Estimates of Indirect Effects

Table 4.40 also explains the indirect and positive effects of awareness of loan terms on sustainability of NBFC-MFIs (0.073), and outreach of NBFC-MFIs (0.214). The direct effect of awareness of loan terms on sustainability of NBFC-MFIs was higher than indirect effect (0.223), and the direct effect of awareness of loan terms on outreach of NBFC-MFIs was lesser (0.202) than indirect effect. Indirect and positive effects of usage on borrowed funds on sustainability of NBFC-MFIs was (0.086), and outreach of NBFC-MFIs (0.154).

Business development of women micro entrepreneurs (0.131) has an indirect positive effect on the outreach of NBFC-MFIs where as social status of the women micro entrepreneurs (-0.015) has negative indirect effect on the outreach of NBFC-MFIs.

- **Mediation Effects**

The mediation effects of usage of borrowed funds, social status and business development of the women micro entrepreneurs between awareness of loan terms of and sustainability of NBFC-MFIs are tested using Sobel's test. The Sobel's test checks the significance of the indirect effect of the independent variable on the dependent variable when mediated by another variable (Wegener and Fabrigar, 2000). Similarly, the mediation effect of business development of women micro entrepreneurs between awareness and outreach of NBFC-MFIs and that of sustainability of NBFC-MFIs between business development of the women micro entrepreneurs and outreach of NBFC-MFIs were also studied. In the Sobel test, it is examined whether including a mediator (M) would decrease the effect of the independent variable (X) on the dependent variable (Y) (Preacher, 2020).

Table 4.53 Mediating Effect of Various Factors Influencing the Sustainability and Outreach of NBFC-MFIs

Variable To	Path	Variable From	Regression Weights	S. E	Sobel's Test Statistic	S. E	Prob.	Sig.
Usage of borrowed funds	<---	Awareness of loan terms	0.128	0.020	4.221	0.007	0.000**	Significant
Business Development of women micro entrepreneurs	<---	Usage Borrowed Funds	0.219	0.039				
Business Development of women micro entrepreneurs	<---	Awareness of loan terms	0.174	0.016	2.609	0.026	0.009**	Significant
Sustainability of NBFC-MFIs	<---	Business Development of women micro entrepreneurs	0.395	0.147				
Business Development of women micro entrepreneurs	<---	Awareness of loan terms	0.174	0.016	3.168	0.0314	0.001**	Significant
Outreach of NBFC-MFIs	<---	Business Development of women micro entrepreneurs	0.573	0.173				
Social Status of women micro entrepreneurs	<---	Awareness of loan terms	0.139	0.021	-0.4046	0.0154	0.6857**	Not Significant
Sustainability of NBFC-MFIs	<---	Social status of women micro entrepreneurs	-0.045	0.111				
Sustainability of NBFC-MFIs	<---	Social Status of women micro entrepreneurs	-0.045	0.111	-0.4043	0.0369	0.6859	Not significant
Outreach of NBFC-MFIs	<---	Sustainability of NBFC-MFIs	0.332	0.059				
Sustainability of NBFC-MFI	<---	Business Development of women micro entrepreneurs	0.395	0.147	2.4248	0.0541	0.0153*	Significant
Outreach of NBFC-MFIs	<---	Sustainability of NBFC-MFI	0.332	0.059				

Source: Computed Data, (** - Significant at 1% level, * - Significant at 5 % level)

The probability value is less than 0.05 shows that the indirect effect of independent variable on the dependent variable is significantly different from zero. As mediators explain how variables affect each other, they may lead to the development of new theoretical models to simplify relationships (MacKinnon et al., 2007) Mediating effect of various factors influencing the Sustainability and Outreach of NBFC-MFIs presented in Table 4.53.

- Usage of borrowed funds mediates between awareness of loan terms and business development of the women micro entrepreneurs is sustained, hence H₇ is accepted
- Probability value was 0.009 therefore, business development of women micro entrepreneurs mediates between awareness of loan terms and sustainability of NBFC-MFIs, is sustained, hence H₈ is accepted.
- Probability value was 0.001, therefore business development of women micro entrepreneurs mediates between awareness of loan terms and outreach of NBFC-MFIs H₉ is accepted.
- Probability value is 0.6857, therefore Social status of the women micro entrepreneurs mediates between awareness of loan terms and sustainability of NBFC-MFIs could not be sustained, hence H₁₀ is rejected.
- Probability value 0.6859 is therefore Sustainability of NBFC-MFIs mediates between social status of women micro entrepreneurs and outreach of NBFC-MFIs, hence H₁₁ is not accepted.
- Probability value is 0.0153, therefore Sustainability NBFC-MFIs mediates between business development of women micro entrepreneurs and outreach of NBFC-MFIs, hence H₁₂ is accepted.

Path Analysis was attempted to develop an outreach model with the help of awareness of terms of loans, usage of borrowed funds, business development of women micro entrepreneurs, social status of women micro entrepreneurs, sustainability and outreach of NBFC-MFIs. The model attempts to find the influence of awareness of terms of loans on usage of borrowed funds, business development of women micro entrepreneurs, social status of women micro entrepreneurs as well as on the sustainability of NBFC-MFIs and outreach of NBFC-MFIs. Further, the direct and indirect effects of the mediator variables namely, usage of borrowed funds, business development of women micro entrepreneurs, social status of women micro entrepreneurs between awareness of terms of

loans and outreach of NBFC-MFIs were also studied. The direct effect of sustainability of NBFC-MFIs and outreach of NBFC-MFIs was also attempted.

The direct, indirect, and overall effects of exogenous and endogenous variables were finally determined by estimating the path coefficients. The regression weights, both standardized and unstandardized, were determined. The results highlighted that awareness of terms of loans, usage of borrowed funds, business development of women micro entrepreneurs, social status of women micro entrepreneurs and sustainability of NBFC-MFIs have a significant direct effect on outreach of NBFC-MFIs at either 1 percent or 5 percent level. Business development and sustainability of NBFC-MFIs also have significant positive effect on outreach of NBFC-MFIs. Usage of borrowed funds will have significant positive effect on business development of women micro entrepreneurs. The Social status of women micro entrepreneurs does not have any significant influence on sustainability of NBFC-MFIs. Market orientation, loan size, and repayment rates have a greater impact on MFI growth than the borrowers' social identities (cull et al.,2009), whereas the direct effect of business development of women micro entrepreneurs had significant positive effect on sustainability of NBFC-MFIs.

The indirect effects of awareness of loan terms on business development of women micro entrepreneurs, sustainability of NBFC-MFIs and outreach of NBFC-MFIs were found to be significant. Indirect effect of usage of borrowed funds on sustainability of NBFC-MFIs and outreach of NBFC-MFIs were significant. The indirect effect of social status of women micro entrepreneurs on outreach of NBFC-MFIs was not significant where as the indirect of business development of women micro entrepreneurs on outreach of NBFC-MFIs was found to be significant.

4.8 Summary

The study analyse the determinants of sustainability and outreach of NBFC-MFIs measured by borrowers context. As an external factor to the institutions growth, micro entrepreneurs awareness, socioeconomic development to be examined and concentrated to study the sustainability and outreach. Apart from women micro entrepreneurs view the study takes into account NBFC-MFIs managers' perspectives and the overall performance of the NBFC-MFIs with reference to operating performance. As a whole, the research concentrated on the women micro entrepreneurs overall development and its impact on institutions growth.