Asia Pacific Journal of Research in Business Management
Vol. 11, Issue 10, October 2020 Impact Factor: 6.737,ISSN: (2229-4104)
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COMPARATIVE ANALYSIS OF PORTFOLIO: AN EVIDENCE FROM NBFC-MFIS AND SFBS IN INDIA

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ABSTRACT

Microfinance is considered the only powerful and profitable business model at the world level which, proved to be serving the bottom of the pyramid. Thus, the study of microfinance institutions and small finance banks becomes the utmost necessity in the present scenario. The present study examines the portfolio of all NBFC-MFIs and SFBs in India with selected criteria and also compares the performance between NBFC-MFIs and SFBs. To fulfill the objective above, the study employed a % change method, graphs, and charts for data interpretation, and an Independent Sample t-test. The secondary data have been sourced from the MIX market database from the financial year 2017-18 to 2019-20. The study concludes that there is a drastic growth observed in NBFC-MFIs and SFBs in terms of the number of entities, loan accounts, and loans outstanding. However, banks are also showing the highest level of loan accounts, which comparable to NBFC-MFIs and SFBs under the study period. Further, the study concludes that the presence of NBFC-MFIs and SFBs has increased during the study period and showing positive growth. Portfolio quality for NBFC-MFIs is decreasing while SFBs are increasing year on year. Moreover, all other criteria that measuring the portfolio of microfinance institutions are increasing under the study period. The development

of Non-Banking Financial Corporation considering only Microfinance Institutions and Small Finance Businesses are massive and significantly contributing to the growth of poor people and the country at large.

Key Words: Portfolio Analysis, NBFC-MFIs, SFBs, Loan Outstanding, Independent sample test.

1. INTRODUCTION

Financial inclusion is one way of empowering people to access social and economic justice. About 90% of the 180 million poor households in the region lack access to institutional financial services. Most formal financial institutions deny the poor their services because of perceived high risks, the high costs involved in small transactions, and the poor's inability to provide marketable collateral for loans. RBI defines microfinance as the provision of thrift, credit, and other financial services and products of small amounts to the poor in rural, semi-urban and urban areas for enabling them to raise their income levels and improve their living standards.'Micro-financing' was introduced in India in the 1980s as a solution to poverty and to empower women. There is a need to provide microfinance facilities to cater to India's largely rural population. The main objectives of microfinance in India were promoting socio-economic development at the grassroots level through a community-based approach, empowering women, and increasing the household income.Small Finance bank is a specific segment of banking created by RBI under the guidance of the Government of India to further financial inclusion by primarily undertake basic banking activities to un-served and underserved sections including small business units, small and marginal farmers, micro and small industries, and unorganized entities. Like other commercial banks, these banks can undertake all basic banking activities including lending and taking deposits.

2. LITERATURE REVIEW

There exists a vast literature on the performance analysis of Microfinance Institutions around the World. Yet, no specific study in India is witnessed in the literature that simultaneously analyzes the portfolio of NBFC-MFIs and SFBs. Therefore, the present paper is a new

milestone in the existing literature in that sense. The review is presented asfollows:

(Janda, Karel, Turbat, & Batbayar, 2013)Analyze the determinants of portfolio yield of microfinance institutions in Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan, Azerbaijan, Mongolia, Afghanistan, and China over the period 1998-2011. They confirm that targeting women borrowers improves the financial results of microfinance institutions whereas the effectiveness of group lending or advantages of rural lending, in contrast to the initial expectations, were not confirmed. They also consider the contributions of different governance forms of microfinance institutions and the macroeconomic factors potentially influencing the financial performance of microfinance institutions.

(Kar, Ashim Kumar, Swain, & Ranjula Bali, 2014) Used the Boone indicator as a measure for competition, their paper investigates the impact of competition on microfinance institutions' (MFIs) outreach, financial performance, and quality of loan portfolio. Analyzing the Microfinance Information Exchange data their empirical results show that increased competition in the microfinance sector leads to a larger average loan and a decrease in financial self-sustainability.

(R & Dr. Padamaja, 2017) Analyzed the financial performance of MFIs in India. The data have been collected from the Microfinance Information Exchange from the fiscal year 2007 to 2011. The statistical tools, namely, Descriptive statistics and growth rates have been used for analyzing the data. In terms of overall financial performance, Indian MFIs have better ROE and OSS. Indian MFIs have exhibited higher financial revenue by assets, the yield on the gross portfolio (nominal), and lower operating expenses by assets, but still, it could not cover the total expense and financial expenses.

(Dr. Manpreet, Sunanda, Garima, & Dr. Abhishek, 2019)Measure and compare the financial performance of leading four MFIs, based on the highest gross loan portfolio in India for 3 years from 2015- 2017. The data is collected from annual reports of these MFIs and various ratios have been calculated measuring the aspects of CAMEL includes capital adequacy, asset quality, management efficiency, earning quality, and liquidity.

(Amulya, 2019)Discussed that SFBs have largely done well in maintaining profitability despite the more stringent regulatory mandates of the RBI, such as higher priority sector

lending requirement and loan size restrictions. This has been driven by the high spread between deposit and lending rates and holds despite their cost of funds for SFBs being double that of public and private sector banks. However, one must not jump to conclusions about the success of the SFB model towards meeting the objectives of financial inclusion as they are still very nascent in their functioning as full-service banks.

3. RESEARCH METHODOLOGY

3.1 Research Objective

The present paper aims to analyze the portfolio of NBFC-MFIs and Small finance banks in India. Further, It aims to compare the differences in the performance of NBFC-MFIs and SFBs. The analysis of the portfolio is done based on portfolio quality, No. of loan accounts & amount outstanding and Average disbursement size, and average loan outstanding.

3.2 Scope of the study

- The study is limited to only those NBFC-microfinance institutions which are reporting and regulated by Self-regulatory body Microfinance institutions network (MFIN).
- The study selected the period for 3 years (i.e. from 2017-18 to 2019-20) as the small finance bank given operating license from RBI in the year 2016.

3.3 Sample And sample design

84 NBFC-MFIs selected which are reporting and regulated by Self-regulatory body Microfinance institutions network (MFIN) and all 8 SFBs which are operational selected for the study.

3.4 Data collection method

Secondary data is used and collected for the study from various sources such as Micrometer, Microscope, Microfinance plus report, research papers, journals, and RBI website.

3.5 Time period

The study aims to analyze data for a period of three years i.e. from 2017-18 to 2019-2020.

3.6 Tools and technique

To analyze the data, various tools and techniques used such as % change method, graphs and charts, and Independent sample t-test.

4. DATA ANALYSIS

An overall position of the microfinance industry on various categories of lenders including NBFC-MFIs, Banks, SFBs, NBFCs, and other MFIs (including non-profit MFIs).

TABLE 1OVERALL STATUS OF PORTFOLIO OUTSTANDING AND LOAN ACCOUNTS

Type of entity	31 March 2018			31 March 2019			31 March 2020		
	No. of Entities	Loan Accounts (Cr)	Portfolio O/s (Rs Cr)	No. of Entities	Loan Accounts (Cr)	Portfolio O/s (Rs Cr)	No. of Entities	Loan Accounts (Cr)	Portfolio O/s (Rs Cr)
NBFC-MFIs	69	3.30	48,522	83	3.87	67,009	84	3.84	73,792
Banks	11	1.87	44,802	13	2.23	59,897	12	3.68	92,281
SFBs	8	1.65	27,824	8	1.49	30,322	8	1.85	40,556
NBFCs	36	0.74	13,027	29	0.95	20,191	45	1.04	22,702
Others	35	0.10	1,621	16	0.11	1,894	21	0.14	2456
Total	**100**	**7.66**	**1,35,795**	**149**	**8.66**	**1,79,314**	**170**	**10.54**	**2,31,788**

The above table indicates the overall status of portfolio outstanding and loan accounts for NBFC-MFIs, Banks, SFBs, NBFCs, and others for the last three years. Talking about the number of entities, in total it was 100 in the year 2018 and increased to 170 in the year 2020. 70% of an increase in the number of entities indicates significant growth in the financial service sector. Further loan accounts have also increased from 7.66 crores to 10.54 crore

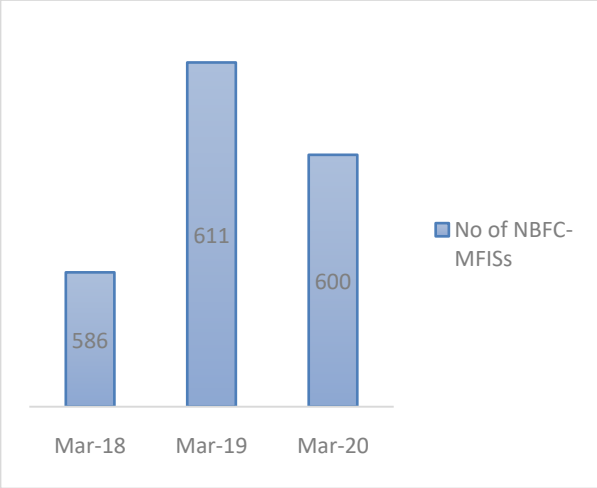
respectively and considerable change has been observed for portfolio outstanding from 1,35,795 crore to 2,31,788.

Change in the number of entities over the study period is observed in NBFC-MFIs, NBFCs only while Banks and SFBs remained constant while there is a decreased number of entities found for other categories. This shows that NBFC-MFIs and NBFCs are showing considerable growth in terms of the number of entities.

Moreover, loan accounts haveincreased for categories of financial institutions but highest observed for NBFC-MFIs and Banks which indicates the direct sales of financial products that have risen through MFIs and Banks.

Finally, portfolio outstanding variables have also increased for all categories of financial institutions under the study period. Banks showing the highest level of increment followed by NBFC-MFIs.

4.1Presence of NBFC-MFIs and SFBs across States/ UTs & districts



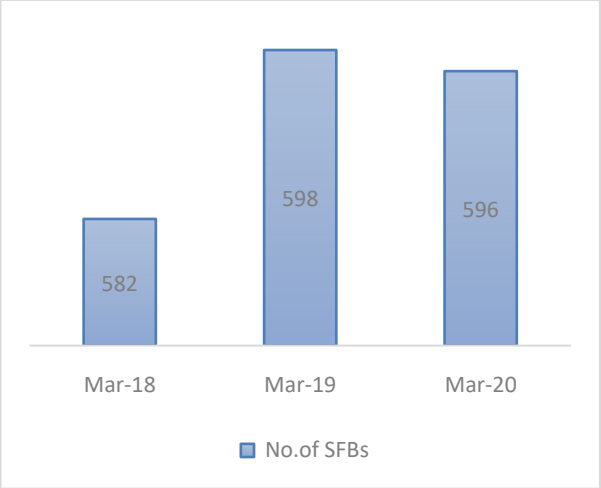
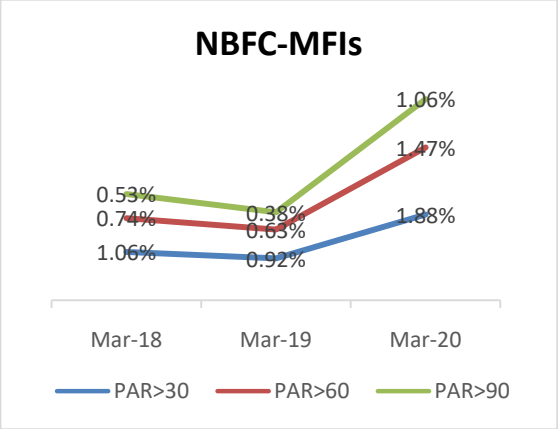


Chart number 4.1 indicates the presence of NBFC-MFIs and SFBs across various States, Union Territories, and districts in India. Talking about the first variable, the number of NBFC-MFIs was 586 in the year 2018 which increased to 611 in the year 2019 but there are 600 in the year 2020 which shows the downfall. So in the recent past, NBFC-MFIs have reduced their business compared to the previous year but the overall study period indicates increment across states, union territories, and districts.

Another part of the chart indicates the number of SFBs across the state, union territories, and districts in India. Again there is an increment in SFBs from 582 in the year 2018 to 598 in the year 2019 but then it has come down to 596 in the year 2020 which is not so considerable. So overall there is a rise in the SFBs across states, union territories, and districts.

4.2 Portfolio quality



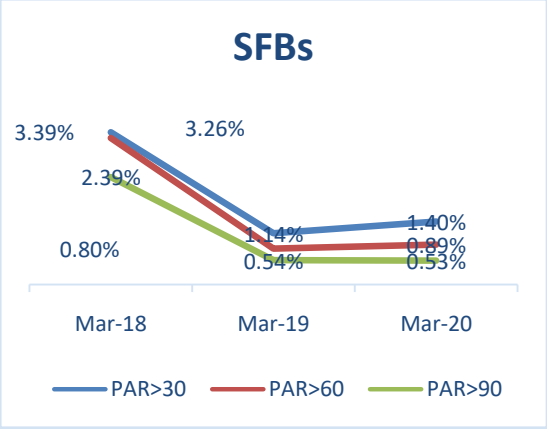
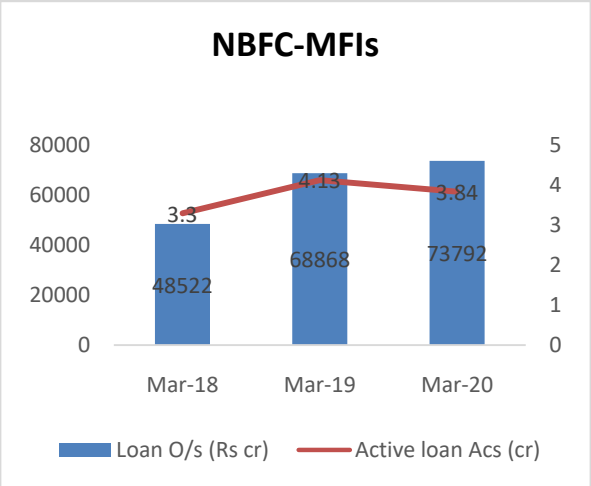


Chart number 2 shows the portfolio quality of NBFC-MFIs and SFBs in terms of selected criteria such as Portfolio at Risk for more than 30 days, Portfolio at Risk for more than 60 days, and Portfolio at Risk for more than 90 days. Looking at the charts and figures, all three variables under study showing a drastic increment in last year. Portfolio quality for NBFC-MFIs has deteriorated due to the increasing non-payment of installments from the poor people. Thus from 2019 to 2020, all categories of the portfolio at risk shows more than 1 value.

Further talking about the SFBs, it is showing the reverse pattern as compared to NBFC-MFIs. All three categories of variables showing downfall that means their portfolio quality has increased under the study period. Finally, we can interpret that there is a reverse movement between NBFC-MFIs and SFBs and also observed that long terms portfolio risk is less compared to medium and short terms portfolio at risk.

4.3 Loan account & amount outstanding



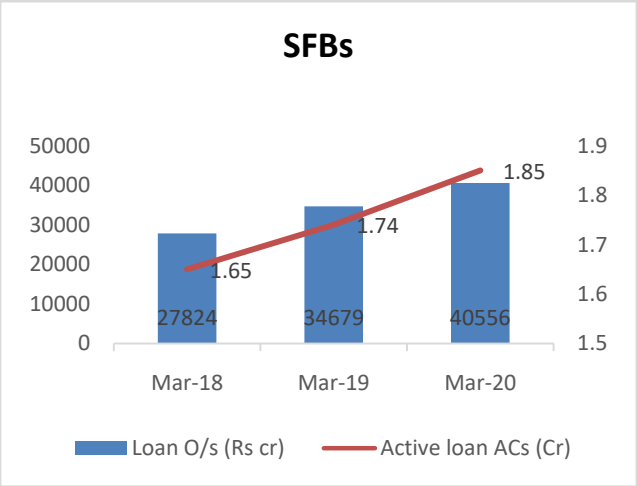
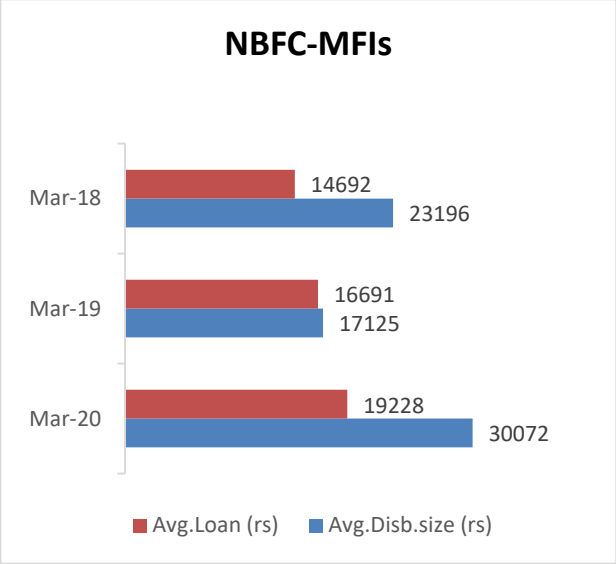


Chart number 4.3 represents the loan outstanding and active loan accounts for both NBFC-MFIs and SFBs. Looking to the bar chart, loan outstanding has increased under the study period from 48522 in the year 2018 to 73792 in the year 2020 which is continuously growing and simultaneously active loan accounts have increased but in recent past, it has decreased. So we can interpret that loan outstanding has increased but the number of active accounts has decreased in the previous year.

Further SFBs showing continuously rise in the loan outstanding and active loan accounts too. Loan outstanding has increased from 27824 in the year 2017 to 40556 in the year 2020. This is almost 1.5 times more than the base year.

4.4 Average disbursement size & loan outstanding



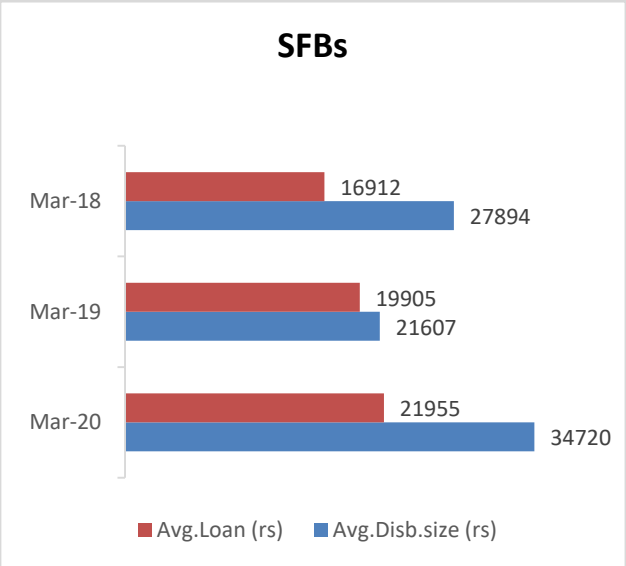


Chart number 4.4 defines the average disbursement size and loan outstanding for both NBFC-MFIs and SFBs. Disbursement size showing an overall rise from 23196 in the year 2018 to 30072 in the year 2020 and average loan outstanding also showing an increment in the year 2018 to 2020 i.e. 14692 to 19228. This shows that loan outstanding and disbursement size is moving upward simultaneously.

The same scenario is there for SFBs as both average loan outstanding and disbursement size showing increased value under the study period.

4.5 Results of Independent Sample t-test:

An independent group t-test is appropriate when two different groups have performed in each of the different conditions. In other words, when the participants in one condition are different from participants in other condition then two independent sample t-test is appropriate. So here I have grouped independent variables as male and female. And I wish to determine whether the difference between means of monthly mobile bills of respondents for the two sets (Male and Female) is significant. To conduct the test, the following is the hypothesis for the test.

H0: There is no significant difference between average loan accounts, loan outstanding, presence, portfolio quality between NBFC-MFIs and SFBs

Ha: There is no significant difference between average loan accounts, loan outstanding, presence, portfolio quality between NBFC-MFIs and SFBs

The independent group t-test has some assumptions as follows:

- Random sampling
- The measurement scale is at least interval
- Normal distribution of data sets
- Independencies of group
- Homogeneity of variance

All the above assumptions are checked except normality of data and homogeneity of variance which are as under:

Normality Test:

TABLE 2 TEST OF NORMALITY

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Loan Accounts	.266	6	.200*	.819	6	.086
Portfolio Outstanding	.175	6	.200*	.913	6	.456
Presence across India	.186	6	.200*	.960	6	.816
Portfolio at Risk @ 30%	.266	6	.200*	.792	6	.049
Portfolio at Risk @ 60%	.324	6	.048	.718	6	.009
Portfolio at Risk @ 90%	.350	6	.020	.712	6	.008

Table number 2 indicates the output for the test of normality which is the basic assumption to perform an independent sample t-test. Almost all probability values are greater than 0.05 so we fail to reject the null hypothesis of data that is normally distributed. In other words, we can interpret that all the variable data follows the normal distribution. Thus, we can perform a parametric independent sample t-test. The following are the results of the same.

Independent Sample t-test:

TABLE 3 GROUP STATISTICS - AVERAGE PERFORMANCE

	Type of Financial Companies	Mean
Loan Accounts	NBFC_MFIs	3.67
	SFBs	1.66
Portfolio Outstanding	NBFC_MFIs	63107.67
	SFBs	32900.67
Presence across India	NBFC_MFIs	599.00
	SFBs	592.00
Portfolio at Risk @ 30%	NBFC_MFIs	1.29
	SFBs	1.98
Portfolio at Risk @ 60%	NBFC_MFIs	0.95
	SFBs	1.65
Portfolio at Risk @ 90%	NBFC_MFIs	0.66
	SFBs	1.15

TABLE 4 TEST RESULTS FOR INDEPENDENT SAMPLE T-TEST

	Levene's Test for Equality of Variances			**t-test for Equality of Means**		
Variables		F	Sig.	t - Stat.	Prob. Value	Mean Difference
Loan Accounts	Equal variances assumed	2.14	0.22	9.44	0.00	2.01
	Equal variances not assumed			9.44	0.00	2.01
Portfolio Outstanding	Equal variances assumed	1.80	0.25	3.56	0.02	30207.00
	Equal variances not assumed			3.56	0.04	30207.00
Presence across	Equal variances assumed	0.22	0.66	0.79	0.47	7.00

India	Equal variances not assumed			0.79	0.48	7.00
Portfolio at Risk @ 30%	Equal variances assumed	4.12	0.11	-0.90	0.42	-0.69
	Equal variances not assumed			-0.90	0.44	-0.69
Portfolio at Risk @ 60%	Equal variances assumed	6.46	0.06	-0.83	0.45	-0.70
	Equal variances not assumed			-0.83	0.48	-0.70
Portfolio at Risk @ 90%	Equal variances assumed	6.31	0.07	-0.76	0.49	-0.50
	Equal variances not assumed			-0.76	0.51	-0.50

In the first column, Levene's tests for equality of variances assumes that population variances are relatively equal. So, the hypothesis can be…

H0: Population variances are relatively equal
Ha: population variances are not equal

So, looking at Levene's test, the probability value for all the variables is greater than 0.05, you can assume that the population variances are relatively equal. Therefore, we can use t-value and two-tailed significance for the equal variance assumed row to determine whether NBFC-MFIs and SFBsdiffer in selected criteria. If the probability value is found less than 0.05 then we have to use equal variance not assumed row.

Further three-column of t-value, probability value, and mean difference whereby two-tailed significance value is 0.000 and 0.02 for loan accounts and portfolio outstanding respectively which is less than 0.05 so we reject the null and interpret that there is some significant difference in the average performance of NBFC-MFIs and SFBs. Further presence across India and portfolio quality measures are showing probability greater than 0.05 so we fail to reject the null hypothesis and interpret that there is no significant difference in average presence and portfolio quality of NBFC-MFIs and SFBs in India.

5. CONCLUSION

The study aimed at identifying the portfolio of NBFC-MFIs and SFBs in India for the last three year periods. To fulfill the said objective, percentage change, graphs, and charts are used to analyze and interpret the past data. The necessary data have been sourced from mix market database. The study concludes that there is a drastic growth observed in NBFC-MFIs and SFBs in terms of the number of entities, loan accounts, and loans outstanding. However, banks are also showing the highest level of loan accounts which is comparable to NBFC-MFIs and SFBs under the study period.

The further study concludes that the presence of NBFC-MFIs and SFBs has increased the understudied period and showing positive growth. Portfolio quality for NBFC-MFIs is decreasing while SFBs are increasing year on year. Moreover, all other criteria that measuring the portfolio of microfinance institutions are increasing under the study period. The growth of Non-Banking Financial Corporation considering only Microfinance Institutions and Small Finance Banks is massive and significantly contributing to the growth of poor people and the country at large.

Moreover, independent sample t-test results conclude that NBFC-MFIs and SFBs are differing in loan accounts and portfolio outstanding whereby NBFC-MFIs average performance is much higher compared to SFBs which is statistically significant. However, they are equally as well in terms of presence across India and portfolio quality measures.

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