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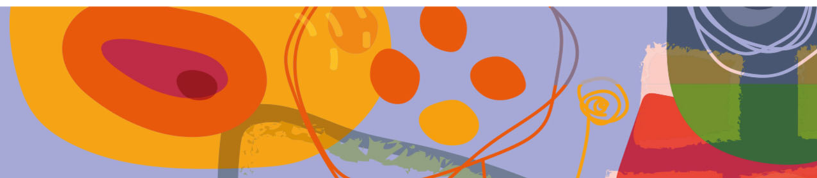

ARTICLE

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Does firm size affect client targeting? An investigation over the clients of the Indian Microfinance Institutions

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The study examines the impact of the Microfinance Institutions' (MFIs) size on their client targeting. Using MFI clients' household data, the study considers household income, wealth, human development, caste, settlement type, and purposes of loans as different client targeting dimensions. The analysis is based on a sample survey of over 301 women clients who had received loans exclusively from 12 big and 13 small MFIs.The results indicate that the MFI size has an adverse effect on social performance. As the MFIs grow in size, they tend to target and serve the wealthier and non-agriculturally employed clients residing in urban areas. The women's passive role in borrowing emerges as yet another concern. The instances of poverty penalty among the poor clients as reflected through higher interest rates for small-sized loans are yet another concern. The target towards poverty eradication may turn out to be a far cry under the large-sized MFIs.

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Introduction

The client targeting in Microfinance Institutions' (MFIs) loan disbursements remains a major research issue for the past many years as scholars failed to reach the consensus that the MFIs can achieve both financial and social performances simultaneously. In serving the poor, the MFIs have to incur high operating costs due to the provision of small loans and putting excessive efforts to control the uncollateralized loan losses (Zamore et al., 2021). The debate over the "financial system approach" versus the "poverty lending approach" does not seem to die down. While the former pays attention to the financial performance of the MFIs, the latter underlines microfinance as an instrument of poverty eradication, hence targeting the poor. Past studies have tended to prove that large-scale client outreach may be difficult to attain if MFIs compromise on their financial performance (Armendáriz and Morduch, 2010; Ranjani et al., 2022). The factors of high transaction cost and repayment risk involved in serving the poor are a concern for the financial sustainability of MFIs (Cruz Rambaud et al., 2023; Zamore et al., 2021). While meeting financial targets, MFIs often allegedly deviate from the mission of serving the poor to target wealthier clients (Mia and Lee, 2017; Simatele and Dlamini, 2019).

In the Indian context, there is evidence that the MFIs follow a "financial system approach" with a skewed microfinance distribution in favor of relatively developed regions, serving non-poor clients and disbursing loans primarily to the non-agricultural sector (Ranjani et al., 2022; Sangwan and Nayak, 2022). Such an approach seems to hinder financial inclusion and fails to achieve the target of socioeconomic equality across individuals and regions. According to the National Institution for Transforming India (NITI) Aayog and the Centre for Monitoring Indian Economy (CMIE) 2021 reports, India's poverty and unemployment rates stand at 25.01% and 7.86%, respectively. The biases in MFI outreach may further hamper our efforts toward overcoming such challenges.

Underling the above-mentioned facts, it is pertinent to assess whether the MFIs are still behaving in a biased manner or whether the adopted outreach/client targeting approach has changed over the years. Past studies have attempted to examine the MFIs' client targeting behavior accounting for different macro-level determinants like commercialization, regulation, competition, governance structure, legal form, subsidies, lending methodology, etc. (Hossain et al., 2020; Mia and Lee, 2017; Mohamed and Elgammal, 2023; Siwale and Okoye, 2017). However, there is a dearth of primary survey-based studies elucidating the MFIs' client targeting behavior. On a firm level, as the MFIs are operating in different life cycle stages, the impact of firm size on client targeting behavior is inevitable. A firm's size impacts its financial performance in terms of lowering the different kinds of cost structures such as transactional, regulatory, and capital financing (Hartarska et al., 2013). MFIs can translate these cost margins in lowering the interest rates that help them expand both the depth and breadth of outreach (Schmidt and Ramana, 2010). It signifies that the MFI size influences the loan distribution, affecting thereby the client targeting and offering important policy implications.

With this background, the study attempts to examine the MFIs' client targeting behavior and in particular, the role of MFI size in client targeting. This study is different from the earlier empirical works (Hartarska et al., 2013; Hossain et al., 2020; Ranjani et al., 2022; Wijesiri et al., 2017) on the following grounds. While earlier empirical studies have employed the MFIs' self-reported data (mixmarket.org), which has its obvious limitations, this study is based on a primary survey capturing the clients' perspectives. Needless to say, the firm-based studies lack the ability to capture the micro-environmental characteristics of geographical regions where the MFIs operate. These characteristics significantly influence the MFIs' client targeting. The micro-environmental elements such as local infrastructure development (e.g. product market, bank, communication, and transport facilities), population density, and other socioeconomic characteristics are well documented to have their impacts on MFI operations (Cruz Rambaud et al., 2022, 2023; Fianto et al., 2019; Sangwan and Nayak, 2019). These factors remain outside the scope of the firm-level analyses.

The present work is focused on the MFIs' loan disbursement pattern, and how the loan disbursements differ among the clients with respect to MFIs' size. This is addressed under a multi-dimensional framework wherein four different indicators are chosen to examine the client targeting. They are the proportion of borrowers, loan size, the number of loans disbursed per household, and the interest rate. The above indicators are examined according to several dimensions viz. socioeconomic status of the households, caste/community status, settlement types (urban/rural), and purposes of the loans. Here, the study adopts a two-way approach – within and between. In the within approach, the study examines the client targeting separately for big and small MFI firms, while under the between approach, the study compares the phenomenon between the two firm sizes. The empirical analysis is based on a sample survey of over 301 women clients who had received loans exclusively from 12 big and 13 small MFIs.

The study carries significance from the following standpoint. As many as 69% of Indian households struggle with financial insecurity and vulnerability (Business Standard, 2022). Over 46% of them have an income of <INR15,000 per month, pushing them into the low-income group. Around two-fifths of the households are unable to do any financial savings. A meager 11% of the households have active loans with banks and non-banking financial companies (NBFCs) (Business Standard, 2022). Under the given situation, it may be pertinent to analyze how the MFIs contribute to financial inclusion and provides financial products to the poor and disadvantaged people. Needless to say, access to financial services helps empower women by managing financial risk and increase savings for education and healthcare spending.

MFI size and client targeting

The MFIs operate with the purpose of achieving the double bottom line, namely financial and social. However, studies have revealed the increasingly shift of MFIs' focus towards financial performance. Prioritizing financial performance may influence their client targeting. As they tend to reach out to the wealthier individuals ignoring the poor, it tends to diminish the poverty alleviation potential of the MFIs. The degree of financial performance varies in accordance with factors like cost per borrower, the ratio of total income to financial expenses, which is also known as the operating expense ratio (OER), and the design of loan portfolios (Fan et al. 2019). The economies of scale are key determinants of these factors (Hartarska et al., 2013; Ranjani et al., 2022). Economies of scale ensue if with an increase in a firm's output, holding all input prices constant, there is a decrease in the total cost. It is widely supported in the microfinance literature that large-sized MFIs tend to have large economies of scale than small-sized MFIs (Hermes and Hudon, 2018; Wijesiri et al., 2017).

The OER defines the cost of delivering loans to the average loan portfolio. The increasing/decreasing OER trend indicates the efficiency of an MFI. The large firms have lower OER, which means that the cost is a small proportion of the gross loan portfolio. This might have been achieved by an initial emphasis

on lending out larger sums of money to wealthier clients while placing lower importance on catering to the poorest. However, once a certain level of stability is achieved, large firms may think about reversion to the original mission of serving the poor, given that they can now afford to expand their range of services and float policies that will be more beneficial in terms of outreaching the poor (Mersland and Strøm, 2010). Large firms may also lower the interest rates and fees because they no longer need a high rate of returns for boosting their own growth, as they begin to enjoy the economies of scale and their fixed costs are mostly already covered (Leite et al., 2019; Schmidt and Ramana, 2010). Large firms usually show better operational efficiency (Parameshwar et al., 2010; Quayes, 2012), which might lead them to more depth outreach. They may be in a better position to reinvest surplus than be driven by the need of profit maximization for the shareholders (Hudon and Périlleux, 2014) to finance further investments in the needs of the poorest clients and make them their priority.

On the other hand, small-sized firms may have a comparative advantage over large firms in certain aspects. As new, the promising firms, which usually show high growth rates of lending, if not profits, may attract investments in the initial stages (Parameshwar et al. 2010). They may begin exploring geographies and populations that have previously remained unbanked, which means reduced competition, costs of advertising, etc. This may enable these firms to lending out small amounts to the poorest. To create safeguards against lending out smaller amounts, small MFIs can afford to charge rates of interest, which are relatively higher without pressurizing the clients too much, as they are charged on a small principal amount. Borrowers of small loans might have better rates of repayment (Quayes, 2012), thus having a lesser potential for risk of loan write-off or default.

It is observed that large firms often charge higher interest rates when they are in competition with small ones (Berger et al., 2007), which makes the services of the small firms more in demand and their outreach deeper. Competition to serve the non-poor is high and may force the small MFIs to stay directed toward the unbanked and poor clients (Guha and Chowdhury, 2013). For small firms, initial OER is very high, especially when considered as a proportion of their returns to assets. However, as fixed costs are taken care of, for example, through initial flushing in of the subsidy and the institutions start growing, it starts falling (Parameshwar et al., 2010).

The empirical evidence of the effect of MFI size on client targeting is diverse. In this context, a leading study by Ranjani et al. (2022) over 245 MFIs from India found that the MFI size has a negative influence on the number of poor served. On the contrary, Cull et al. (2011) in their study employing developing countries covering 346 MFIs found that the large MFIs are more inclined to disburse larger loan sizes. A recent study by Wijesiri et al. (2017), however, shows that the MFI size is positively associated with both financial performance and social performance, attributable to their higher economies of scale.

The debate on the impact of the MFI size on client targeting is still unsettled. The existing studies have basically employed the secondary dataset and are mostly based on the MFIs' self-reported database. This work is a deviation as it examines the nature of client targeting by integrating multiple dimensions from the perspective of the MFI clients.

Methodology and data

Measurement of MFI size. In India, the two self-regulatory microfinance organizations—Sa-dhan and Microfinance Institutions Network (MFIN)—have classified MFIs into three broad groups namely large (big), medium and small firms taking into account the client outreach (total number of clients served) and gross loan portfolio and age (years of operation in the microfinance sector). When the sample MFIs are classified on the basis of their client outreach as of March 2015 (the year prior to the data collection period), all the MFIs tend to qualify as big firms and they have their client outreach greater than 50,000 clients. Comparing MFI gross loan portfolio with the MFI age, the former is considered a better financial indicator. Hence, the study considers the former as a measure of MFI size, and correspondingly, it creates the MFI categories. In MFIN (2015) report, MFIs having gross loan portfolios above INR 5000 million are classified as big, those having INR 1000 million to INR 5000 million are termed as medium and those having below INR 1000 million are classified as Small.

Measurement of client targeting and its indicators. The study examines the MFI's client targeting behavior from the perspective of depth outreach. The depth of outreach is measured on the basis of the poverty level of the clients (Hermes and Hudon, 2018; Mia and Lee, 2017). From the standpoint of client targeting indicators, one may consider the average number of loans per household (Sangwan and Nayak, 2022), average loan size (Hossain et al., 2020) and average interest rate (Mendoza, 2011). Usually, credit agencies determine the number and size of loans according to the repayment capacity of the applicants. The larger number of loans and loan amounts may, therefore, denote that wealthier clients are served (Sangwan and Nayak, 2022; Wijesiri et al., 2017). For the interest rates, Mendoza (2011) argues that poor households are asked to pay higher interest rates compared to the non-poor for similar types of financial services, hence invoking the phenomenon of the poverty penalty. Further, Ranjani et al. (2022) argue that the essence of microcredit lies in providing services to the poorest of the poor. Therefore, the study considers the proportion of borrowers under different poverty categories as another indicator to examine client targeting. A conceptual framework that depicts the estimation procedure of client targeting is provided in Fig. 1.

Apart from assessing the client targeting within the MFI categories (big/small) using the above parameters, this study compares the level of client targeting between the two categories. First, it compares the number of clients, the average number of loans disbursed per household, and the average loan size of the non-poor categories between big and small MFI-served clients. Second, it compares the average interest rates of the respective MFIs' poor clients. Needless to say, the higher the number of non-poor clients, or higher the number of loans per household, or the bigger the loan size for non-poor clients, the MFIs are more focused on enhancing financial performance. On the other hand, higher interest rates on small loan amounts may reflect the poverty penalty.

The study classifies the MFIs' clients as non-poor, borderline poor, poor, and ultra-poor according to their household monthly per capita consumption expenditure (MPCE) and household wealth index (HWI). Following poverty lines as estimated by the Rangarajan Committee for 2011–12 (Government of India, 2014), it derives poverty lines for Odisha and West Bengal for both rural and urban areas. As the study period is different, the estimated values are inflation-adjusted based on consumer price indices (CPI). Taking tercile values, it derives poverty lines between borderline poor and poor.

Sources of the data. The study examines the impact of MFI size on their client targeting using the primary household survey data based on questionnaire-cum-personal interviews. In India, MFIs have been operating in varied legal forms predominantly as

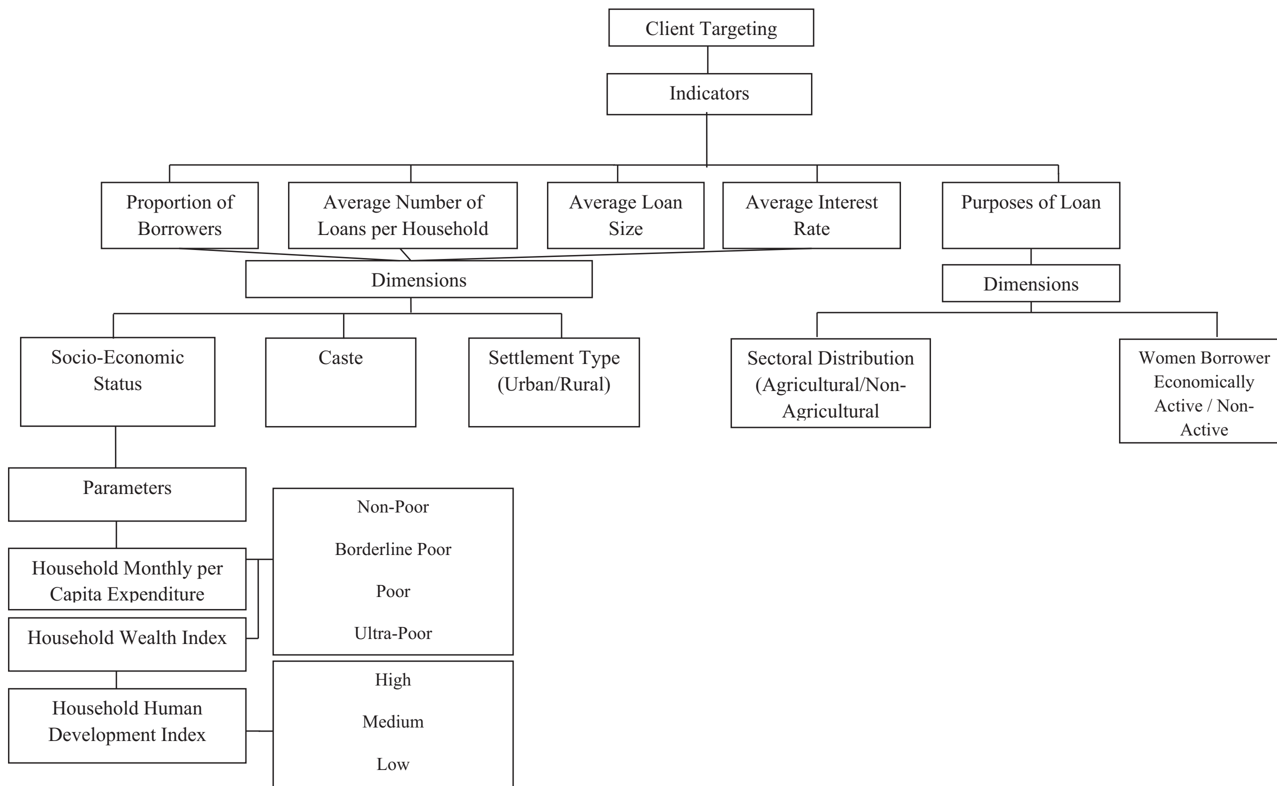

Fig. 1 Conceptual framework.

Table 1 Profile of the sample households between Big and Small MFI.

Characteristics	Big MFI clients ($N=167$) Mean	Small MFI clients ($N=134$) Mean	t-statistic
Household monthly per capita expenditure (INR)	5380.45	2837.32	3.96***
Household borrowing (INR)	40,677.52	25,110.80	6.85***
Household wealth index (number)	29.28	21.21	2.87***
Interest rate (%)	23.37	25.43	−3.32***
Average age (age > 14)(year)	33.38	33.73	−0.56
Mode years of schooling (number)	10.21	10.52	−0.25
Households residing in rural settlements	76 (45.51)	98 (73.13)	
Households having major occupation as Agriculture (%)	19 (11.38)	29 (21.64)	
Households having loans on weekly repayments (%)	142 (85.02)	87 (64.92)	

Source: Author's estimates. Significance level *** 1% level at one-tail test.

NBFCs, followed by others like non-government organizations (NGOs), cooperative societies, section 25 companies, and trusts. In the study sample, the data is comprised of NBFC-MFI-served clients. A total of 310 households having credit services from big and small MFIs were chosen for personal interviews. During the data cleaning process, those households (9 in number), which have mixed loans from different firm sizes or have incomplete and inconsistent information were dropped. Consequently, a comparable dataset of 301 MFI client households having loans exclusively from 12 big MFIs (167 clients) and 13 small MFIs (134 clients) was considered for analysis. The descriptive statistics of sample client households according to big and small MFIs are presented in Table 1.

The survey covered sample clients from West Bengal and Odisha. They happen to be the two prominent states as far as MFI penetration is concerned. The primary data was collected in the months of March-April, 2016 and February–March 2017 in West Bengal and Odisha, respectively.

Results and discussion

Client targeting among big vs. small MFIs: a multidimensional analyses

Clients' socioeconomic status

Household monthly per capita expenditure: As mentioned earlier, the sample households are profiled according to four different income categories. The poverty segments are then used to examine the client targeting across two different MFI sizes (Table 2a).

It is observed that in loan distribution, there exists a disparity among the targeted clients. Big MFIs disburse a significantly greater number of loans and bigger loan amounts to the non-poor compared to the poor. The number of loans and the loan amounts for the borrowers decrease as poverty becomes deeper. In the case of both big and small MFIs, the interest rate charged on borrowings increases with the increase in the client's poverty, confirming the presence of a poverty penalty (Mendoza, 2011). While making a comparison between the MFI sizes in terms of

Table 2 (a)-(c) Loan disbursement according to various dimensions of outreach (Big vs. Small MFI—Within and Between analyses) and (d) loan disbursement on the basis of household women's employment status (Big vs. Small MFI).

(a)[a]

Dimension		Category	Number of HH (%)	Average loans per HH	Within approach t-statistic	Average loan size (INR)	t-statistic	Average interest rate	t-statistic	Between approach (Big vs. Small) (t-statistic) Average loans per HH (B3 vs. S3)	Average loan size (B3 vs. S3)	Average interest rate (B1 vs. S1)
Household monthly per capita expenditure	Big (B)	Non-poor (3)	40(23.95)	1.90	3 vs. 2 1.98**	65,375.00	3 vs. 2 3.02***	23.31	3 vs. 2 0.91	2.25**	3.51***	−4.50***
		Borderline poor (2)	76(45.51)	1.51	3 vs. 1 2.42***	37,848.68	3 vs. 1 3.99**	23.36	3 vs. 1 0.98			
		poor(1)	51(30.54)	1.37	2 vs. 1 0.15	25,521.57	2 vs. 1 1.52*	23.42	2 vs. 1 0.50			
		Ultra-poor	0.00									
	Small (S)	Non-poor (3)	21(15.67)	1.19	3 vs. 2 0.61	28,514.29	3 vs. 2 0.73	24.05	3 vs. 2 1.99**			
		Borderline poor (2)	69(51.49)	1.28	3 vs. 1 0.84	23,753.62	3 vs. 1 0.46	25.51	3 vs. 1 2.00**			
		Poor(1)	44(32.84)	1.32	2 vs. 1 0.38	25,613.64	2 vs. 1 0.35	25.96	2 vs. 1 0.25			
		Ultra-poor	0.00									

(b)[b]

Dimension		Category	Number of HH (%)	Within approach Average loans per HH	t-statistics	Average loan size (INR)	t-statistics	Average interest rate	t-statistics	Between approach (Big vs. Small) (t-statistic) Average loans per HH (B3 vs. S3)	Average loan size (B3 vs. S3)	Average interest rate (B1 vs. S1)
Household wealth index	Big (B)	Non-poor (3)	66(39.52)	1.92	3 vs. 2 2.22**	56,093.94	3 vs. 2 3.64***	23.26	3 vs. 2 0.63	1.96**	3.64***	−5.46***
		Borderline poor (2)	75(44.91)	1.42	3 vs. 1 2.45***	33,388.25	3 vs. 1 4.09***	23.36	3 vs. 1 0.92			
		Poor(1)	26(15.57)	1.30	2 vs. 1 1.30*	22,550.35	2 vs. 1 2.13**	23.54	2 vs. 1 0.48			
		Ultra-poor	0.00									
	Small (S)	Non-poor (3)	49(36.57)	1.37	3 vs. 2 1.36*	27,104.90	3 vs. 2 0.41	24.19	3 vs. 2 1.94**			
		Borderline poor (2)	53(39.55)	1.17	3 vs. 1 1.40*	24,418.30	3 vs. 1 0.56	25.45	3 vs. 1 1.99**			
		Poor(1)	32(23.88)	1.16	2 vs. 1 0.13	23,431.25	2 vs. 1 0.32	25.99	2 vs. 1 0.96			
		Ultra-poor	0.00									
Human development index	Big (B)	High (3)	73(43.71)	2.01	3 vs. 2 2.41***	50,056.30	3 vs. 2 3.21***	23.33	3 vs. 2 0.62	2.12**	3.75***	−4.74***
		Medium (2)	80(47.90)	1.56	3 vs. 1 2.39***	35,702.25	3 vs. 1 4.39***	23.38	3 vs. 1 0.95			
		Low (1)	14(8.38)	1.57	2 vs. 1 −0.05	20,142.86	2 vs. 1 2.18**	23.68	2 vs. 1 0.51			
	Small (S)	High (3)	46(34.33)	1.30	3 vs. 2 0.34	27,189.22	3 vs. 2 1.15	24.06	3 vs. 2 2.04**			
		Medium (2)	82(61.19)	1.27		23,895.76		25.66				
		Low (1)	6(4.48)	1.17		25,633.33		26.27				

(c)[c]

Dimension		Category	Number of HH (%)	Average loans per HH	Within approach t-statistic	Average loan size (INR)	t-statistic	Average interest rate	t-statistic	Between approach (Big vs. Small) (t-statistic) Average loans per HH (B2 vs. S2)	Average loan size (B2 vs. S2)	Average interest rate (B1 vs. S1)
Caste	Big (B)	GN (2)	69(41.32)	1.94	1.96**	50,783.91	3.01***	23.36	0.69	1.98**	4.77***	−6.14***
		Others (1)	98(58.68)	1.31		33,582.24		23.61				
	Small (S)	GN (2)	65(48.51)	1.23	−0.90	25,573.85	0.82	25.02	−0.94			
		Others (1)	69(51.49)	1.32		24,690.43		24.92				
Settlement type	Big (B)	Urban (2)	91(54.49)	1.99	1.78**	45,329.9	3.36***	23.42	0.54	2.96***	5.36***	−6.39***
		Rural (1)	76(45.51)	1.50		35,048.68		23.61				
	Small (S)	Urban (2)	36(26.87)	1.10	−1.66**	18,833.33	−3.37***	24.33	2.73***			
		Rural (1)	98(73.13)	1.52		27,410.61		25.84				
Primary occupation	Big (B)	Non-agriculture (2)	148(88.62)	1.59	2.47***	42,083.84	3.24***	23.68	−0.20	−1.26	5.63***	−5.03***
		Agriculture (1)	19(11.38)	1.07		29,789.47		23.63				
	Small (S)	Non-Agriculture (2)	105(78.36)	1.91	3.30***	26,013.29	2.23**	24.97	2.12**			
		Agriculture (1)	29(21.64)	1.01		21,824.14		25.95				

(d)[d]

Borrower in economic activity		Number of households (%)	Number of loans (%)	Loan amount (INR in millions) (%)
Big	Inactive	95(56.89)	154(57.85)	3.85(56.74)
	Active	72(43.11)	113(42.15)	2.94(43.26)
Small	Inactive	83(61.94)	104(60.82)	2.14(63.58)
	Active	51(38.06)	67(39.18)	1.23(36.42)

[a]*Source*: Author's estimates. *HH* households. Significance level *10% level, **5% level, ***1% level at one-tail test.
[b]*Source*: Author's estimates. *Note*: High: HDI ≥ 0.550, Medium: 0.550 < HDI ≥ 0.367, Low: HDI < 0.367. *HH* households. Significance level: *10% level, **5% level, ***1% level at one-tail test.
[c]Note: *HH* households. Significance level: **5% level, ***1% level at one-tail test.
[d]*Source*: Author's estimates.

their level of client targeting, the proportion of non-poor clients served (24%), the average number of loans per non-poor household (nearly two loans), and the average loan size (INR 65, 375) disbursed to them are significantly higher for the big MFIs. While the interest rate charged to poor clients is significantly higher in the case of small MFIs (25.96%).

The outcomes of both the within and between approaches indicate that the big MFIs after attaining high financial performance tend to become more profit-oriented and consequently, they get drifted away from the social objective of catering financial services to the poorest of the poor. The probable reason behind the big MFIs to become profit-oriented is their need to maintain a consistently high financial performance trend, which decides easier access to cheaper commercial loans, investments from outside, and powerful equity demand (Christen, 1997). Ensuring regular profit necessitates bigger-sized loan disbursement and lending to those who have greater potential for increased return on assets.

Household wealth index: In addition to considering MPCE to create poverty categories, the HWI is constructed capturing household assets viz. livestock, land holding, number of rooms in the house, wall and roof material, sources of cooking, etc. It is analyzed how clients are treated based on their wealth. The sample clients are divided into the same four categories from non-poor to ultra-poor by deriving the median values of the wealth index and finding the values above and below the median.

In the case of the big MFIs, there exists disparity across poverty categories in financial services exhibiting improved credit provisions for the wealthier clients (Table 2b). The number of loans per household and the loan amount decrease as poverty gets deeper, while the interest rate increases with the increase in poverty. In small MFIs, the biasness according to the wealth of the borrowers seems to be absent. Comparing the two firms, the proportion of non-poor and the loan amount disbursed to them is significantly higher under the loan distribution by the big MFIs, while the average interest rate charged upon the poor is significantly higher in case of the small MFIs.

Household human development index: The household human development index (HDI) is yet another parameter considered to categorize the client households. The HDI index is constructed comprising household monthly income per capita, household average education level, and the ratio of household monthly health expenditure to total monthly consumption expenditure. Accordingly, it is analyzed how MFIs distribute loans according to the levels of households' human development. Table 2b illustrates that bigger loan sizes are distributed to those households, which record relatively higher human development. Comparing the two types of firms, it seems that the big MFIs compared to the small MFIs are engaged in catering to the financial demands of the high HDI households more.

Caste/community status. In the Indian social hierarchy, the scheduled tribe (ST) and scheduled caste (SC) households are the deprived ones. Analyzing the NSSO survey data 2011–12, Panagariya and More (2014) find that about 29.4 % of SC and 43 % of the ST population live below the poverty line, while only about 12.5% of the general caste and 15.1% of other backward caste population are below the poverty line. It may, thus, be pertinent to examine how these marginalized groups are being financially served by the MFIs.

Caste data shows that the clients from the upper castes (general caste) are given more preference in terms of average loan amount under both firms (Table 2c). The difference in average loan size between castes widens under the big MFIs. Comparing the two firms, the average loan size disbursed to the general caste is significantly higher for the big MFIs, while the interest rate charged to other castes is found significantly higher in the case of small MFIs.

Settlement type (urban/rural). In India, poverty is widely considered as a rural phenomenon. More than 4/5th of India's poor reside in rural areas (Government of India, 2014). It may be worth exploring how the MFIs are catering to the financial demands of rural households. Interestingly, the study finds that both firms behave differently in their client targeting. Big MFIs are found to serve more in urban settlements, whereas small MFIs pay more attention to rural settlements. In small MFIs, the different credit disbursement parameters namely the number of clients, the average number of loans and the average loan size are found significantly higher for rural clients (Table 2c). One probable reason behind small MFIs having larger rural outreach can be the avoidance of market competition from big MFIs who have high economies of scale, enabling them to offer loans at lower interest rates (Schmidt and Ramana, 2010).

Purposes of loans

Sectoral distribution (agricultural/non-agricultural purpose). Households engaged in agricultural activities are generally anticipated to have a risk of irregular and uncertain income generation (Sangwan et al., 2021; Sangwan and Nayak, 2022). Under such situations, MFIs tend to be averse to clients having loan demands for agriculture purposes (Hishigsuren, 2007). Here, the results are on the expected lines. In both cases, <22% of the clients have loan demands for agriculture purposes (Table 2c). It appears that MFIs are biased against lending to the agricultural sector. The probable reasons for low agriculture lending could be that as the demand for these loans is seasonal and the repayments follow more irregular patterns, the MFIs carry a fear of credit risk. Hence, the contribution of the MFIs toward the primary sector growth seems negligible.

Women borrowers' economical status. Alongside poverty alleviation, women's empowerment is also a component of MFIs' social mission (Cruz Rambaud et al., 2022; Garikipati et al., 2017; Mohapatra and Sahoo, 2016). Being recipients of the MFI loans, they are expected to utilize the funds in some income-generating activities.

However, the results tend to suggest that there is a serious problem regarding the participation of women in economic activities. In both MFI lending, there is a large sample of women borrowers who are found to be economically inactive and are not involved in any income-generating activities (Table 2d). The women borrowers are found to be working as homemakers only, while the borrowed loans are utilized by the male family members. The women clients being passive participants in this development initiative may lead to a serious setback towards achieving their empowerment through the MFI movement. In this respect, the role of the NGOs may become instrumental in imparting skill training among the women to engage them in some gainful economic activities and provide opportunities towards making productive use of loans.

Concluding remarks

A large volume of microfinance literature has tried to capture the MFIs' client targeting behavior through the use of secondary data (Mia et al., 2022; Ranjani et al., 2022). However, this study uses primary survey data for analyzing the same. The assessment of the impact of the MFI size on their client targeting is a notable contribution of this study to the existing literature. It is observed

that the big MFIs seem to discriminate between the non-poor and poor clients. This is reflected in terms of the number of loans and the loan amount disbursed. The big MFIs tend to serve greater proportions of wealthier clients. Consequently, poor clients are the laggards in credit availability.

The findings seem to indicate the possible failure of big MFIs to contribute to the process of financial inclusion. Against the expectation that the positive progress in financial performance or economies of scale would facilitate the MFIs to encompass more poor clients in their financial services, the big MFIs are rather found to be following the path of the formal banks, preferring to serve the wealthier clients while crowding out the poor. This superseding of financial objective over social objective is a type of mission drift, indicating a clear deviation from the primary social mission of serving the poor and disadvantaged to financial profitability.

The small MFIs are found to be more inclined to their social mission of poverty alleviation. There are no biases among the small MFIs in loan disbursements to the households on the basis of their income categories. Moreover, small MFIs are more focused on financial services in rural settlements. From the standpoint of financial inclusion, the small MFIs seem to be filling the gaps. However, the small MFIs are not free from shortcomings. In small MFIs, the interest rates charged to clients rise as the poverty level increases, hence creating the problem of the poverty penalty. The implications of such a phenomenon are twofold. On one side, if the loans issued to the poor are charged higher interest rates, the poor may tend to default more. Consequently, they may be put into over-indebtedness, increasing thereby their debt burden further. Alternatively, if they are deprived of loans for being potential defaulters, they become the victims of discrimination, leading to further deprivation.

In general, the compelling factors behind MFIs' financial performance and their preference to serve the wealthier clients are the high transaction cost and repayment risk involved in serving the poorer clients. However, the advent of financial technologies (FinTech) in the microfinance sector seems to have been helping the MFIs to simplify the processes and offer financial services at a minimal cost. This has possibly resulted in an increase in microfinance outreach to remote rural settings. For the financially excluded people, FinTech has been beneficial in many ways, including account opening, fund transfers, savings, and making digital payments conveniently (https://www.bankbazaar.com/personal-loan/financial-inclusion.html). In order for the repayment risk to be minimized, the MFIs need to bear in mind all alternative means, including considering the socioeconomic characteristics of borrowers and the organizational factors while identifying the reliable borrower's recent literature (Cruz Rambaud et al., 2022, 2023; Sangwan et al., 2020).

The present study is, however, not free from limitations. As the study is based on a relatively smaller number of observations covering only two states of India, the findings may not represent MFIs' outreach behavior comprehensively. Further, the socioeconomic and regional characteristics may have spatial ramifications. The results may thus vary according to geographical locations. However, the study provides a scope for future research. The work can be replicated by analyzing data from other microfinance-infested states of India or from other world economies. Borrowers' data comprising other development indicators (e.g. electricity, sanitation, hygiene, drinking water, literacy, house type, etc.) can also be used for assessing MFIs' client targeting behavior. Micro-Fintech refers to a technological advancement that involves the utilization of software and digital platforms to offer microfinance services to customers. By utilizing Micro-Fintech, microfinance services can be provided seamlessly, rapidly, and with great efficiency, especially in underdeveloped regions with limited or no physical banking infrastructure (Moro Visconti, 2019). Considering this, the impact of the adoption of Micro-FinTech on MFIs' client targeting behavior can be another area of future research.

Data availability

The data that support the findings of this study are available from the corresponding author with a reasonable request.

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Competing interests

The authors declare no competing interests. This study is the author's independent research without any institutional help and financial assistance.

Ethical approval

The authors confirm that all research was performed in accordance with relevant guidelines/regulations applicable when human participants are involved.

Informed consent

Authors confirm that informed consent was obtained from all participants and/or their legal guardians.

Additional information

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