

Income Diversification and Financial Sustainability of Indian Microfinance Institutions (MFIs): An Empirical Study

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Abstract

Microfinance institutions (MFIs) emerged intending to provide financial services to underserved populations, fostering economic inclusion and poverty alleviation. However, achieving this aim is wholly based on the MFIs' financial sustainability and profitability. MFIs' fundamental structural restrictions might make raising income through increased interest rates difficult. As a result, it is now widely acknowledged that MFIs with various revenue streams outperform those primarily focused on lending in terms of financial sustainability. This study investigates this link by assessing the impact of income diversification on the financial performance and financial self-sufficiency of the top ten listed Indian MFIs. The study uses eight years of panel data from 2016 to 2023, and analysis was made by applying descriptive statistics, Herfindahl-Hirschman Index (HHI), and panel data regression models. Our findings provide empirical support for the banking studies' preference for focused strategies over diversification strategies, showing that expanding income sources has no impact on the financial performance (return on equity/return on asset) and financial self-sufficiency (FSS) of Indian MFIs.

Keywords: Indian MFIs, Financial Sustainability, Income Diversification, Focused Strategy, Panel Data, HHI Index

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Introduction

Microfinance institutions (MFIs) have developed as an economic development tool for low-income people since the late 1990s. They are viewed as a strategy for poverty alleviation by expanding access to credit and financial services. According to Blavy et al. (2004), MFIs successfully supplement the traditional banking system by delivering financial services to the underprivileged. The rationale for improving finance is based on the premise that empowering people experiencing poverty through the creation of income-generating capacity allows the poor to access all development requirements to escape the multifaceted dimensions of poverty and reduce their vulnerability to unexpected events (Davis et al., 2004). By offering collateral-free financial services to people experiencing poverty, MFIs play an essential role in facilitating inclusion (Mehta, 2020), reducing poverty, and stimulating entrepreneurial activity (Khachatryan & Avetisyan, 2017). MFIs provide modest, uncollateralised loans using creative lending tactics, such as group lending and progressive loans, instead of banks (Sangwan & Nayak, 2020). Therefore, MFIs have emerged as a solution for small economic operators in the countryside and towns who have been evicted from traditional financing structures, as well as for all disadvantaged individuals who wish to develop an income-generating economic activity in order to improve their well-being and that of their immediate family (Ayi & Maty, 2010).

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Thus, MFIs have a social impact because their primary objective is to help the impoverished and underprivileged groups of society. This, however, is impossible to do when their financial sustainability is at risk. The beneficial effects of microfinance institutions on the socioeconomic well-being of low-income people can only be sustained if the organisations achieve strong economic viability. An MFI's financial sustainability may be described as its ability to pay all its expenditures with revenue while generating a profit to support its expansion. According to Schreiner (2000, p. 425), 'unsustainable MFIs may help the poor now, but they will not help the poor in the future because the MFIs will be gone.' Moreover, while working to enhance the social welfare of low-income people, MFIs should simultaneously work to improve their financial sustainability by minimising expenditures and maximising income (Ndiege et al., 2016). In order to combat this, MFIs are commercialising their services. Increased competition, technical developments, financial liberalisation and government regulation, all of which have a detrimental influence on MFI profitability (Hermes et al., 2011), have expedited the move towards financial sustainability. However, to survive in the long run, MFIs must maximise their profit. MFIs rely mostly on interest income; thus, to remain sustainable, they should either enhance their outreach to people in need or choose better affluent clients to save costs, enhance social performance and financial performance (Deb, 2019). Moreover, if not, MFIs must raise interest rates on loans, immediately leading to 'Mission Drift.'

Income diversification is another strategy for them to maximise their profits. Market competition leads to the diversification of income sources, primarily from interest to non-interest income (Williams, 2016; Zouaoui & Zoghalmi, 2020), and changes in income structure have an impact on the long-term sustainability of the banking industry (Abedifar et al., 2018; Doan et al., 2018). This means that participation in nonlending activities may promote MFI lending, improving performance and financial sustainability. Revenue or income diversification is a possible adaptive response to the financial viability of MFIs (Githiaga, 2022). So, should MFIs diversify or focus on a specific income-generating model, especially interest income? Some previous studies have attempted to address this issue, but they still need to fill gaps that need to be filled, mainly due to a lack of data on MFIs. Zamore (2018) also discovered evidence that using worldwide

data on MFIs diversity is advantageous for boosting performance, even though many banking studies favour a targeted strategy rather than a diversified strategy.

Literature Review

The existing literature explored the profitability of financial institutions, both MFIs and banks, worldwide. As there is little information regarding MFIs diversification, we have also considered empirical studies regarding the impact of income diversification on banking institutions. First, it is critical to understand that social performance is the primary success criterion for MFIs. However, such performance may not be sustained in the absence of profitability. MFIs function as hybrid institutions to achieve social effects while financially sustainable. According to Lam et al. (2020), for-profit MFIs prefer to convert financial performance to achieve social performance, but non-profit MFIs can only convert social performance to achieve financial performance. Hudon et al. (2020) used a paradigm that focuses on profitability, social mission, pricing and surplus distribution to investigate the fairness of profits among MFIs. Despite being feasible, they discovered that achieving all four requirements was challenging for businesses.

The finance literature has extensively addressed two income-generating techniques: diversified and focused strategies. The former offers many products or services, whereas the latter only offers interest-bearing loans. (Duhó et al., 2021). Income Diversification across income streams improves MFI sustainability and profitability. Microfinance practitioners might diversify their revenue-generating companies by growing and sustaining them. Once an organisation has achieved self-sufficiency, it may amass more resources to adequately serve disadvantaged people, placing it in a stronger position to achieve its primary aim of financial inclusion (Zamore, 2018). Githiaga's (2022) findings also support the current portfolio theory's claim that firms may reduce earnings volatility by diversifying. As a result, MFIs with several revenue streams are more likely to be financially stable than those only focused on lending. According to William and Rajaguru (2007), the increase in non-interest revenue is utilised to complement a fall in the net interest margin in the Australian banking industry, implying that fluctuations in the net interest margin may motivate banks to diversify into non-traditional businesses. In European

banks, a similar association exists (Landi & Venturelli, 2001). Between 1989 and 2001, DeYoung and Rice (2004) show relationships between non-interest income, corporate strategies, the market environment, technology advancements and financial success in the US banking sector. Well-managed banks are less prone to participate in non-interest activities.

Diversification, on the other hand, may have a negative impact if the intended goals are not met. Furthermore, an agency problem arises when managers diversify for personal gain rather than for the benefit of owners, donors or the pro-poor customers they must serve (Jensen, 1986). Berger et al. (2010) discovered evidence in the Chinese setting that income diversification, regardless of the parameter utilised, had a detrimental influence on performance among small banks. They contended that a concentrated strategy is far more cost-effective and results in higher earnings. Goddard et al. (2008) discovered evidence that revenue diversification is not favourable in the setting of Credit Unions in the United States, except in the case of large enterprises. Similarly, Stiroh (2004) discovered that revenue diversification does not boost financial institution profitability since non-interest income is often volatile. A similar conclusion was observed in Ghanaian banking institutions, as suggested by Duho et al. (2020); this is consistent with Duho et al. (2021) that MFI earnings in Ghana are pretty low, and their diversification techniques are typically below average; also, income diversification has a negative influence on MFIs' return on assets and return on equity. Following the debate over whether or not income diversification impacts Indian MFIs, we have conducted an empirical study on the impact of income diversification on the financial performance and financial sustainability of India's top 10 listed MFIs.

Methodology

Data and Sample

The study is based on secondary sources of data and quantitative methods. Data is extracted from the annual report of the selected MFIs, their official websites, and a web-based database, www.moneycontrol.com. We have selected the top 10 listed MFIs in India for the study purpose. The sample period is from 2016 to 2023 for at

least two reasons: first, most of the selected MFIs started their journey from Non-Government Organisations to non-banking financial companies, and finally a universal bank after 2015. Secondly, too many data points of some companies are missing, and data before 2015 is unavailable for some companies.

Variables' Definitions and Measurement

Financial Sustainability

Measuring the financial sustainability of MFIs' is a difficult task. However, financial self-sufficiency (FSS) is a widely used financial sustainability indicator (Kinde, 2012; Tehulu, 2013; Rahman & Mazlan, 2014; Githaiga, 2022). Therefore, FSS is determined as the ratio of total operating income to total operating expenses as follows:

$$FSS = \frac{\sum \Pi}{\sum X}$$

Where FSS stands for financial self-sufficiency, Π is for total operating income, and X is for total operating expenses of i^{th} MFI in the t^{th} year. Some Previous research employed return on asset (ROA) and return on equity (ROE) as metrics of financial sustainability (Bayai & Ikhide, 2018; Meyer, 2019; Githaiga, 2022). To test the robustness of the results, we include ROE ROA as dependent variables in the alternative models, which are also MFI performance indicators.

Income Diversification (IDIV)

Commercial banks' entire income is divided into interest income (INTI) and noninterest income (NINTI). Income diversification (IDIV) refers to the proportions of interest and noninterest income (Zhou, 2014). The study employs the HHI to measure IDIV following Meslier et al. (2014), Edirisuriya et al. (2015), Vidyarthi (2020), and Githaiga (2022).

$$HHI = \left\{ \frac{INTI}{TI} \right\}^2 + \left\{ \frac{NINTI}{TI} \right\}^2$$

Income Diversification (IDIV) = 1 – HHI

where HHI indicates Herfindahl-Hirschman Index, INTI stands for interest income, NINTI is for non-interest

income, and TI is for a total income of i^{th} MFI in the t^{th} year. A higher IDIV value implies a more diverse income mix; however, 0 denotes that all income originates from one source, meaning the MFI is more focused, and 0.5 represents an even split of the income mix (Doan et al., 2018).

Control Variables

To isolate the impact of IDIV on the financial sustainability of MFIS, the study considers several relevant factors as control variables. Research shows that MFI financial performance positively correlates with their debt-to-equity ratio; less leveraged MFIs have better operational self-sufficiency. Hence, the debt-to-equity ratio measures leverage (Quayes, 2012; Bayai & Ikhide, 2018). The firm's size affects sustainability since large MFIs possess economies of scope. The natural logarithm of total assets is the MFI size (Lensink et al., 2018). Studies have shown that well-established MFIs are more likely to outperform less experienced MFIs since they already have developed relationships with customers, suppliers, and other stakeholders. Hence, MFIs' experience is taken as a control variable (Pascal et al., 2017; Zamore, 2018). The equity to total assets ratio assesses the institutions' ability to absorb shocks. The likelihood of an institution failing is proportional to its degree of capitalisation; greater capitalisations are safer (Lehar, 2005; Zamore, 2018). MFI liquidity is included in the model, measured as the ratio of cash in hand and bank balances, balance with Reserve Bank of India, Money at call, and Short Notice to total assets. Non-performing assets (NPAs) have a detrimental influence on Indian banks' financial performances (Sahoo & Majhi, 2020), and banks must lower their NPAs and operational costs to increase their profitability (Das & Uppal, 2021). Therefore, it is also taken as a control variable in the model.

Empirical Specifications

The Hausman test is used to decide the appropriate model for the analysis. The results suggested that the error correction model or random effect model (REM) is appropriate for our study. Thus, our basic model would be:

$$y_{it} = \beta_{1i} + \beta_2 X_{it} + \gamma X_{it} + u_{it}$$

Instead of considering β_{1i} to be fixed, we consider it a random variable with a mean value of β_1 . And an individual company's intercept value may be stated as follows:

$$\beta_{1i} = \beta_1 + \varepsilon_i \quad i = 1, 2, \dots, N$$

Where ε_i is the random error term with a mean zero, and σ_ε^2 is variance. We mean that the ten MFIs in our sample are drawn from a much larger universe of such institutions and have a standard mean value for the intercept (mean = β_1), with individual differences in intercept values reflected in the error term ε_i .

$$y_{it} = \beta_1 + \beta_2 X_{it} + \gamma X_{it} + \varepsilon_i + u_{it}$$

$$y_{it} = \beta_1 + \beta_2 X_{it} + \gamma X_{it} + w_{it} \quad w_{it} = \varepsilon_i + u_{it}$$

Where y_{it} is the vector of dependent variables (ROE, ROA, FSS), β_2 and γ are coefficients, and X_{it} is the constitutes of control variables (MFI size, experience, equity to total assets, leverage, liquidity and NPA). w_{it} is the composite error term that consists of two components i.e., $\varepsilon_i =$ cross-section or individual specific error component, $u_{it} =$ combined error component of time series and cross-section.

Results and Discussions

Descriptive Statistics

Table 1 demonstrates the descriptive statistics of the research variables from 2016 to 2023 taken for the analysis. The first two variables, ROE and ROA represent the entities' financial performance. On average, ROE stands at 14.54, indicating that the institutions generate a positive return on shareholders' equity. ROA, with an average of 2.46, suggests a positive return on their assets, slightly less than the African MFIs of 3.1% (Abebe, 2022) but higher than the global MFIs of 2.1% (Githaiga, 2022). The mean FSS value is 1.03 and ranges from 1.03 to 5.51, indicating that Indian MFIs can be said to be financially sustainable. Comparing the mean of FSS with the other findings, it is lesser than 1.13 reported by Marwa et al. (2015) in Tanzania and 1.15 by Githaiga (2022) in global MFIs. IDIV has a mean value of 0.20, higher than the 0.132 reported in global MFIs (Githaiga, 2022) but lower than the 0.3 reported in the banking sector (Sharma &

Anand, 2018). The mean value of MFI size is 9.57, which is the natural logarithm value of total assets, if transformed into their absolute values, would be Rs. 20388.06 cr., Rs. 612.03 cr. and Rs. 96216.55 cr. for the mean, minimum and maximum values respectively. While most of the MFIs exhibit high leverage, exemplified by a mean debt-to-equity ratio of 2.34, the standard deviation of 1.53, along with the minimum value of 0.00 and the maximum

value of 9.50, validates a prevalent reliance on debt financing over equity among the chosen MFIs. Liquidity, with an average of 0.16, implies moderate liquidity, with values ranging from 0.008 to 0.62. From an MFIs' perspective, the performance of loans is generally sound, as the average non-performing assets stand at 1.37%, with minimal cases of 0% and the highest at 9.68%, showing reasonable stability (standard deviation of 1.45%).

Table 1: Descriptive Statistics

Variables	Observations	Mean	Std. Deviation	Min	Max
ROE (%)	80	14.54	20.53	-15.92	169.41
ROA (%)	80	2.46	3.03	-1.75	22.99
FSS	80	2.20	0.97	1.03	5.51
IDIV	80	0.20	0.15	0.0003	0.499
MFI size	80	9.57	1.21	6.42	11.96
Experience	80	22.80	6.07	9.00	32
Equity/TA	80	0.03	0.04	0.002	0.19
Leverage	80	2.34	1.53	0.00	9.50
Liquidity	80	0.16	0.09	0.008	0.62
NPA (%)	80	1.37	1.45	0.00	9.68

Selection among POLS, FEM, or REM

Lagrange multiplier tests (Breusch-Pagan) are applied to select the appropriate model for the analysis among POLS, Fixed Effect Model (FEM) or REM. Table 2 presents the results of the Lagrange multiplier tests (Breusch-Pagan), which indicate a probability of less than 5% for all three models, leading us to reject the null hypothesis. The results show no cross-section effect but a time effect in the data. Hence, POLS is inappropriate for the data, and we must go for a FEM or REM.

Table 2: Lagrange Multiplier Tests for Random Effects

Null hypotheses: POLS is appropriate
 Alternative hypotheses: POLS is not appropriate (Go for FEM/REM)

Model 1 Return on Equity (ROE)			
	Cross Section	Time	Both
Breusch-Pagan Prob.	3.178411 (0.0746) *	0.966582 (0.3255)	4.144993 (0.0418) **

Model 1 Return on Equity (ROE)			
	Cross Section	Time	Both
Honda	1.782810 (0.0373) **	-0.983149 (0.8372)	0.565445 (0.2859)
King-Wu	1.782810 (0.0373) **	-0.983149 (0.8372)	0.441856 (0.3293)
Model 2 Return on Assets (ROA)			
Breusch-Pagan	16.67914 (0.0000) **	1.013109 (0.3142)	17.69225 (0.0000) **
Honda	4.084011 (0.0000) **	-1.006533 (0.8429)	2.176105 (0.0148) **
King-Wu	4.084011 (0.0000) **	-1.006533 (0.8429)	1.946419 (0.0258) **
Model 3 Financial Self-Sufficiency (FSS)			
Breusch-Pagan	10.35542 (0.0013) **	0.009254 (0.9234)	10.36467 (0.0013) **
Honda	3.317983 (0.0006) **	0.096196 (0.4617)	2.343479 (0.0096) **
King-Wu	3.317983 (0.0006) **	0.096196 (0.4617)	2.200643 (0.0139) **

Note: ** represents significance at 0.05 and * represents significance at 0.10 levels.

Selection between Fixed Effect Model (FEM) and Random Effect Model (REM)

After rejecting the POLS model, we have two options to select either FEM or REM. We have used Hausman's

(1978) specification test to find the appropriate model between these two. The test suggests that a less than 5% probability value resembles FEM, and more than 5% indicates that REM is appropriate. Thus, Table 3 shows a more than 5% probability value for all three models, leading us to go for the REM.

Table 3: Correlated Random Effects – Hausman Test

Test cross-section random effects.

<i>Model 1 Return on Equity (ROE)</i>			
Test Summary	Chi-sq. statistics	Chi-sq. d. f.	Prob.
Cross-section random	7.882260	7	0.3431
<i>Model 2 Return on Assets (ROA)</i>			
Cross-section random	7.574080	7	0.3716
<i>Model 3 Financial Self-Sufficiency (FSS)</i>			
Cross-section random	5.745364	7	0.5698

Random Effect Model (REM) Regression Results

Table 4 displays the outcomes concerning the relationship between the predictor and dependent variables. In Model 1, the regression outcomes depict the association between ROE and Income diversification (IDIV). Meanwhile, Model 2 demonstrates the regression analysis of ROA on IDIV, and in Model 3, the regression output reveals the association of FSS with IDIV. The models' findings reveal no significant impact of IDIV on ROE, ROA, or FSS at both the 5% and 10% levels, as indicated by their probability values being above 5%. This underscores the lack of importance of income diversification and suggests that MFIs are not experiencing benefits from employing a diversified investment strategy. Instead, they should focus on their traditional income-generating activities, such as interest-bearing loans, rather than exploring non-interest income sources like a broader range of financial products, which may reduce their financial

performance. These findings align with the results of Duho et al. (2020) in their study on Universal banks but contradict the findings of Githaiga (2021) on global MFIs. Income diversification might not be benefiting MFIs for several reasons. Firstly, expanding into new business areas can increase complexity and operational costs, reducing overall efficiency. Secondly, if MFIs venture into unfamiliar sectors, they might need more expertise and risk management skills, leading to potential losses. Moreover, regulatory compliance becomes more challenging with diverse revenue streams. Additionally, economic downturns like COVID-19 can affect multiple sectors simultaneously, increasing vulnerability. To ensure that income diversification benefits MFIs, institutions must conduct thorough risk assessments, carefully allocate resources and have a robust risk management framework. Additionally, staying attuned to changing market conditions and economic trends can help institutions adapt their diversified strategies to remain sustainable and profitable in the long run.

Table 4: Dependents Variables: Model 1 ROE, Model 2 ROA, Model 3 FSS

Method: Panel EGLS (Cross-section random effects)

<i>Variables</i>	<i>Model 1 ROE</i>		<i>Model 2 ROA</i>		<i>Model 3 FSS</i>	
	<i>Coefficients</i>	<i>Prob.</i>	<i>Coefficients</i>	<i>Prob.</i>	<i>Coefficients</i>	<i>Prob.</i>
Constant	46.4578	0.1903	9.701245**	0.0492	1.571927	0.2020
IDIV	24.1624	0.2557	0.916263	0.7803	0.538792	0.4787
MFI size	-1.86496	0.5095	-0.485126	0.2473	0.170560*	0.0906

Variables	Model 1 ROE		Model 2 ROA		Model 3 FSS	
	Coefficients	Prob.	Coefficients	Prob.	Coefficients	Prob.
Experience	-1.17575*	0.0576	-0.148816	0.1237	-0.04435**	0.0465
Equity/TA	-257.844**	0.0020	-40.8130**	0.0007	-4.537401	0.1133
Leverage	7.621400**	0.0000	1.071868**	0.0000	-0.057971	0.2349
Liquidity	13.11827	0.6275	0.319822	0.9324	2.627916**	0.0065
NPA	-1.809331	0.1955	-0.355991*	0.0599	-0.076842*	0.1002
R-squared	0.382325		0.402847		0.157315	
Sum squared resid	17457.92		304.2720		28.63242	
Mean dep. Var	7.931305		1.029693		1.117932	
F-statistics	6.366597		6.938887		1.920166	
Prob (F-statistics)	0.000008**		0.000003**		0.078672*	
Durbin-Watson stat	1.344478		1.393563		0.872896	

Note: ** represents significance at 0.05 and * represents significance at 0.10 levels.

For the control variables (Table 4), the results show significant empirical evidence supporting a positive correlation between MFI size and FSS, Similar to the findings of Bogan (2012) and Githaiga (2022). Larger institutions benefit from economies of scale, experience, brand recognition and market power and are more financially sustainable. Additionally, their size grants them better access to commercial funding and other financial resources, further enhancing their sustainability. The negative and significant coefficients of MFIs' experience indicate a negative association with the ROE and FSS. It means MFIs' experience reduces financial performance and self-sufficiency. Probably, younger MFIs outperform older ones in current efficiency (Hermes et al., 2011; Zamore, 2018), requiring the latter to embrace new practices through trial and error. Excessive experience can hinder adaptation, leading to resistance to change and losing competitive advantage.

Equity in proportion to total assets negatively impacts both ROE and ROA, implying that it reflects lower financial leverage, which may limit profitability potential. However, excessive equity may signal underutilisation of assets, reducing returns. Finding an optimal balance is crucial for banks to ensure sustainable financial performance. As expected, the results suggest that leverage positively influences the financial performance of MFIs. This implies that higher borrowing and debt levels can lead to increased profitability and ROE. However, banks need to manage leverage carefully to avoid excessive risk and potential financial instability. The findings indicate that liquidity positively affects the FSS of MFIs. Having sufficient liquidity enables MFIs to

meet their financial obligations, support their operations and effectively respond to unexpected challenges or demands. This contributes to their overall stability and ability to serve their clients in the long term. The results indicate that NPA have a detrimental effect on the ROE, ROA, and overall financial sustainability of MFIs. NPAs represent unpaid or defaulted loans, leading to reduced profitability, asset quality and overall financial health of the MFIs. Managing and minimising NPAs is crucial for sustaining MFIs' long-term success.

Income diversification is based on Markowitz's (1952) Modern Portfolio Theory. Moreover, the basic principle of the theory is that by combining the appropriate assets in a portfolio, investors may maximise anticipated return while minimising risk. Firms prevent unanticipated downturns in primary revenue by diversifying income streams. However, our study shows that income diversification has no impact on the ROA, ROE and FSS of MFIs, indicating that MFIs should rely on their traditional source of income, interest income, to attain financial sustainability. This is also one of the reasons why MFIs retain a significant percentage of interest income compared to non-interest income. Microfinance should pursue a focused profits strategy, targeting maximising income from a single product or service, interest income, rather than diversifying income streams. However, is interest income enough to achieve the financial performance of the MFIs? In such a scenario, MFIs attempt to increase their financial sustainability by charging higher interest rates and targeting well-to-do clients to lessen repayment arrears. In order to make sure that their operations can be supported to guarantee that interest income generates

enough money, however, this is undesirable for the MFIs because they have a social objective affecting society. After all, increased interest rates and ignoring the underprivileged client leads to 'Mission Drift in Microfinance.' Mission drift happens when an MFI shifts from its initial goals and puts its financial well-being ahead of its primary goal of helping the economically disadvantaged. While a focused income strategy and higher interest rates may momentarily improve financial viability, they can cause difficulties and ethical issues for MFIs. Balancing financial viability and social effect is an on-going problem for microfinance organisations, and rigorous monitoring and oversight are required to ensure that the mission and social objectives are not jeopardised in the pursuit of financial sustainability.

Conclusion

Over the last two decades, there has been a tremendous drive to scale up microfinance companies to increase the number of borrowers and institutions to combat poverty and financial exclusion of the underprivileged segment of society. Although the primary goal of MFIs is to achieve social performance, such performance will be hindered in the absence of financial performance. Hence financial sustainability research in MFIs remains critical. With risk reduction in mind, managers should consider other revenue streams by adopting a larger income model. This has sparked several talks on income diversification in the microfinance sectors. The purpose of this article was to investigate the impact of income diversification on the financial performance and financial sustainability of the top 10 Indian MFIs over a period of 8 years from 2016 to 2023.

The findings demonstrated that IDIV has no meaningful influence on ROE, ROA, or FSS. This stresses the need for income diversification and implies that MFIs are not benefiting from a diversified income strategy. This is another factor contributing to the MFIs' retention of a higher proportion of interest income than non-interest income. Therefore, MFIs should adopt a focused profit strategy rather than diversifying income sources, like commercial banks. However, is interest income sufficient to accomplish the financial success of MFIs? Hence, to ensure that their operations can be sustained and that interest income provides adequate revenue, MFIs try to

strengthen their financial sustainability by levying higher interest rates and focusing on well-off consumers to reduce payback arrears. However, this is undesirable for MFIs because they have a social aim, as higher interest rates and disregarding poor customers leads to 'Mission Drift in Microfinance.'

Income diversification might not help MFIs for a variety of reasons. First off, expanding into new business areas may raise complexity and operational costs, lowering overall efficiency. Second, when MFIs grow into new sectors, they may need additional expertise and risk management skills, which might generate bank losses. Third, when revenue streams vary, regulatory compliance becomes more challenging. Moreover, economic downturns such as COVID-19 may affect many industries simultaneously, increasing vulnerability. To ensure that income diversification benefits MFIs, institutions must conduct thorough risk assessments, allocate resources wisely, and have a sound risk management framework in place. Furthermore, staying tuned to changing market conditions and economic trends may help institutions modify their different tactics to remain sustainable and profitable in the long run.

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