

An Empirical Study of Financial Leverage and Financial Sustainability of Selected NBFC-MFIs in India

Mr. Rehman¹, Dr. Noorul Hasan²

¹Research Scholar, University of Lucknow, Lucknow

²Professor, Shia P.G. College, University of Lucknow, Lucknow

Abstract:

Financial leverage is central to NBFC-MFIs because borrowings finance portfolio growth while equity absorbs losses. Excessive debt can amplify funding costs and asset-quality shocks. This study examines four listed Indian NBFC-MFIs: CreditAccess Grameen, Fusion Finance, Satin Creditcare Network, and Spandana Sphoorty Financial. A balanced panel of 16 firm-year observations from FY2021-22 to FY2024-25 was compiled from official reports. Debt-to-equity ratio represents financial leverage, while return on assets (ROA) is used as a performance-based proxy for financial sustainability. Descriptive statistics, Pearson and Spearman correlations, and pooled ordinary least squares regression with heteroscedasticity-robust standard errors were applied. The average debt-to-equity ratio was 2.90 times and the average ROA was 1.17%, with considerable dispersion caused by losses in FY2024-25. Pearson correlation was negative but negligible ($r = -.065$, $p = .810$), while Spearman correlation was near zero ($\rho = .031$, $p = .910$). The regression coefficient of leverage was also negative and statistically insignificant ($\beta = -0.445$, $p = .832$; $R\text{-squared} = .004$). Thus, the proposed negative relationship was not statistically supported. The results indicate that leverage alone does not explain sustainability across the selected firms; credit cost, borrower over-indebtedness, collection efficiency, governance, operating efficiency, and capital buffers appear more decisive. The paper recommends prudent leverage bands, stronger early-warning systems, diversified liabilities, and sustainability assessment based on combined profitability, asset-quality, liquidity, and capital indicators.

Keywords: NBFC-MFI, financial leverage, financial sustainability, debt-to-equity ratio, return on assets, microfinance, India.

JEL Classification: G21, G32, O16

1. Introduction

Microfinance occupies a distinctive position in India's financial architecture. It extends small, collateral-free loans to households that are frequently excluded from formal bank credit, and it supports consumption smoothing, livelihood activity, women's economic participation, and local enterprise. Under the Reserve Bank of India's framework applicable during the closing date of the study, an NBFC-MFI was a non-deposit-taking NBFC with at least 75% of its total assets deployed in microfinance loans, while a microfinance loan was defined as a collateral-free loan to a household with annual income

up to Rs. 300,000 (Reserve Bank of India [RBI], 2025). The sector therefore combines an explicit inclusion mandate with the prudential obligations of a regulated financial intermediary.

The scale of the sector makes its financial resilience a matter of public as well as corporate concern. As of March 31, 2025, regulated lenders reported a microfinance portfolio of approximately Rs. 375,030 crore, spread across 36 states and union territories and 718 districts, serving about 7.8 crore unique clients. The portfolio contracted by 13.5% year-on-year, and the NBFC-MFI segment also recorded a substantial decline (Microfinance Industry Network [MFIN], 2025). This reversal followed rapid expansion and exposed vulnerabilities linked to multiple lending, borrower indebtedness, election-related disruptions, adverse weather, field-level operating stress, and rising credit costs. These developments make it important to distinguish growth financed by debt from growth that is financially sustainable.

The NBFC-MFI model is inherently leveraged because equity alone cannot support a large, dispersed loan book. Borrowings enable scale and can increase returns when portfolio yield exceeds funding cost, but they also create fixed obligations. When collections weaken or expected credit losses rise, debt compresses margins and reduces flexibility. The central issue is therefore whether leverage is compatible with portfolio quality, liquidity, capital adequacy, and earnings capacity.

Financial sustainability in microfinance is broader than short-run profit. It refers to an institution's capacity to cover operating, financing, and risk costs from recurring revenue while preserving capital and continuing its outreach without repeated extraordinary support (Ledgerwood, 1999). Because consistently comparable operational self-sufficiency data are not published by all listed Indian NBFC-MFIs, the present study uses return on assets (ROA) as a performance-based proxy. ROA relates profit after tax to the asset base used to produce it and is less mechanically inflated by leverage than return on equity. Capital adequacy and reported operating conditions are used as supporting interpretive indicators.

This paper empirically evaluates whether financial leverage is associated with financial sustainability among selected listed NBFC-MFIs in India during FY2021-22 to FY2024-25. The period captures post-pandemic normalization, strong sector growth in FY2023-24, and renewed stress in FY2024-25. By combining firm-year data with a transparent small-sample statistical design, the study contributes evidence on a current Indian setting in which the consequences of leverage cannot be separated from credit-cycle and governance shocks.

2. Review of Literature and Theoretical Framework

Capital structure theory offers competing explanations for leverage and performance. In the Modigliani and Miller (1958) benchmark, financing choice is irrelevant under perfect-market assumptions. Once taxes, monitoring benefits, and distress costs are recognized, the trade-off view implies an optimal rather than maximal level of debt. For an MFI, that optimum depends on funding cost, portfolio volatility, unsecured exposure, regulatory capital, and collection resilience.

Agency theory proposes that debt can discipline managers through lender monitoring (Jensen & Meckling, 1976). Excessive leverage may also encourage risk shifting, rapid disbursement, or weak investment in field controls. These conflicts are important in microfinance because portfolios contain many small unsecured loans, information is decentralized, and repayment is sensitive to local social and political conditions.

Pecking-order theory predicts a preference for internal funds, then debt, and finally new equity because information asymmetry makes external equity costly (Myers, 1984; Myers & Majluf, 1984). Profitable MFIs can build capital through retained earnings, while fast-growing institutions depend more on debt. During losses, however, internal funds and debt access may decline together. Observed leverage can therefore reflect both strategy and financing constraints.

Microfinance research has consistently treated sustainability as a central institutional objective. Cull et al. (2007) showed that financial performance and outreach vary across lending methodologies and organizational forms, implying that profitability cannot be interpreted independently of mission and operating design. Mersland and Strøm (2009) linked performance to governance characteristics, while Hermes et al. (2011) documented a possible tension between deeper outreach and efficiency. These studies suggest that financial structure operates within a wider system of governance, client selection, operating productivity, and social reach.

Evidence specifically addressing capital structure is mixed. Bogan (2012), using a broad international sample, found that the funding structure of MFIs was relevant to financial sustainability and emphasized the role of commercial funding as institutions matured. Kar (2012) examined whether capital and financing structure explained MFI performance and found that the relationship was not uniform across performance measures. Tchuigoua (2015) showed that profitability, size, asset structure, regulation, and institutional characteristics influence MFI capital structure. Collectively, these studies reject a simple assumption that more debt necessarily creates either better or worse performance. The effect depends on cost, maturity, lender concentration, risk management, and the quality of assets financed.

In India, NBFC-MFIs fund revolving microloan portfolios through term loans, securitization, debentures, external borrowings, and equity. Borrowing enables outreach, but maturity mismatch and lender concentration become material during stress. Regulatory capital may remain adequate even when profitability falls sharply, showing that solvency, liquidity, and earnings are distinct dimensions of sustainability.

The selected firms illustrate this heterogeneity. CreditAccess Grameen and Satin Creditcare remained profitable in FY2024-25, whereas Fusion Finance and Spandana Sphoorty recorded large losses despite capital adequacy above regulatory thresholds. Leverage must therefore be examined with credit costs and institutional resilience.

Accordingly, this study adopts a conditional trade-off perspective. Moderate debt can support scale and efficiency, but the marginal benefit of leverage declines when portfolio quality deteriorates or the cost of funds rises. A negative average association with ROA is theoretically plausible, especially in a stressed period, but statistical significance is an empirical question.

3. Research Gap, Objectives, and Hypothesis

Most empirical studies on MFI capital structure use cross-country databases or samples that combine different legal forms, regulatory systems, and accounting conventions. Such evidence is valuable, but it may not capture the funding structure and recent credit-cycle experience of listed Indian NBFC-MFIs. Indian studies also frequently examine profitability for a single year or include conventional NBFCs whose asset composition differs from microfinance specialists. Recent firm-level evidence covering the post-pandemic recovery and FY2024-25 stress remains limited.

3.1 Objectives of the Study

The present study aims to examine the relationship between financial leverage and financial sustainability among selected listed NBFC-MFIs in India. The specific objectives are:

1. To measure and compare the financial leverage of selected listed NBFC-MFIs in India during the period from FY2021-22 to FY2024-25.
2. To assess the financial sustainability of selected listed NBFC-MFIs using Return on Assets (ROA) during the study period.
3. To examine the direction and strength of the relationship between the debt-to-equity ratio and ROA of selected NBFC-MFIs.
4. To determine whether financial leverage has a statistically significant effect on the financial sustainability of selected NBFC-MFIs in India.
5. To suggest managerial and policy measures for maintaining an appropriate funding structure, controlling financial risk, and improving the long-term sustainability of NBFC-MFIs.

3.2 Hypotheses of the Study

Null Hypothesis (H_0):

Financial leverage has no statistically significant relationship with the financial sustainability of selected NBFC-MFIs in India.

Alternative Hypothesis (H_1):

Financial leverage has a statistically significant negative relationship with the financial sustainability of selected NBFC-MFIs in India.

For empirical testing, financial leverage is measured through the **debt-to-equity ratio**, while financial sustainability is measured through **Return on Assets (ROA)**. A negative relationship implies that an increase in the debt-to-equity ratio is associated with a decline in ROA.

4. Research Methodology

The study follows a quantitative, explanatory, and longitudinal research design based on secondary data. The population consists of Indian NBFC-MFIs for which reliable public financial statements are available. Four listed institutions were selected purposively: CreditAccess Grameen Limited, Fusion Finance Limited, Satin Creditcare Network Limited, and Spandana Sphoorty Financial Limited. Selection was based on continuity of operations, public disclosure, significance within the sector, and availability of comparable leverage and profitability information for four financial years.

The period FY2021-22 to FY2024-25 produced 16 firm-year observations. Data came from official annual reports, audited statements, and investor presentations. Consistent company-reported historical series were retained. For Fusion Finance, ROA was calculated as profit after tax divided by average total assets, and debt-to-equity was derived from gross borrowings and equity where necessary. Values were rounded to two decimals.

Financial leverage is the independent variable and is measured by the debt-to-equity ratio. A value of 3.00 indicates Rs. 3 of debt for every rupee of equity. ROA is the dependent variable and serves as the study's proxy for financial sustainability. It is measured as profit after tax divided by average total assets, expressed as a percentage. Positive and stable ROA indicates that the asset base generates earnings after financing, operating, and credit costs; negative ROA signals erosion of earnings capacity.

Because sustainability is multidimensional, the interpretation also considers capital adequacy, reported asset-quality pressure, and the exceptional nature of FY2024-25 losses.

Table 1. Operational Definition of Variables

Variable	Measurement	Role and interpretation
Financial leverage	Debt-to-equity ratio (times)	Independent variable; higher values indicate greater use of borrowings relative to equity.
Financial sustainability	Return on assets (%)	Dependent variable and performance-based proxy; profit after tax divided by average total assets.
Supporting indicators	CRAR and reported asset-quality conditions	Interpretive only; excluded from regression owing to the small sample.

Analysis proceeded through trend assessment, descriptive statistics, Pearson correlation, Spearman rank correlation, and pooled ordinary least squares follows:

$$ROA_{it} = \alpha + \beta_1 \text{Leverage}_{it} + \varepsilon_{it}.$$

HC1 heteroscedasticity-robust standard errors were used because the sample is small and ROA variance is uneven. Significance was assessed at 5%, and a sensitivity test excluded FY2024-25.

The design is deliberately parsimonious. With only 16 observations, a regression containing many controls or fixed effects would consume degrees of freedom and produce unstable coefficients. The estimates should therefore be read as exploratory association rather than causal inference. Data processing and calculations were undertaken using standard statistical procedures, and each derived figure was cross-checked against the source statements.

Table 2. Firm-Year Financial Leverage and Return on Assets

Company	Financial year	Debt-to-equity (times)	ROA (%)
CreditAccess Grameen	FY2021-22	3.10	2.20
CreditAccess Grameen	FY2022-23	3.20	4.20
CreditAccess Grameen	FY2023-24	3.30	5.60
CreditAccess Grameen	FY2024-25	2.90	1.90
Fusion Finance	FY2021-22	4.32	0.33
Fusion Finance	FY2022-23	2.92	4.65
Fusion Finance	FY2023-24	3.03	4.78
Fusion Finance	FY2024-25	3.90	-12.20
Satin Creditcare	FY2021-22	3.40	0.53
Satin Creditcare	FY2022-23	2.90	3.52
Satin Creditcare	FY2023-24	2.70	4.77
Satin Creditcare	FY2024-25	2.80	2.07
Spandana Sphoorty	FY2021-22	1.22	0.90
Spandana Sphoorty	FY2022-23	1.95	0.20
Spandana Sphoorty	FY2023-24	2.60	4.50
Spandana Sphoorty	FY2024-25	2.10	-9.20

Note. ROA values are percentages. Fusion Finance ROA was calculated using profit after tax divided by average total assets; other values follow consistent company-reported historical series. Source: Compiled from official company annual reports and investor presentations.

5. Results and Discussion

Table 2 shows substantial variation across institutions and years. CreditAccess Grameen's leverage remained within a narrow range of 2.90 to 3.30 times, while its ROA increased from 2.20% in FY2021-22 to 5.60% in FY2023-24 before declining to 1.90% in FY2024-25. This pattern suggests that a stable debt-equity structure can coexist with changing profitability; the reduction in ROA occurred without a major rise in leverage. Satin Creditcare displayed a gradual reduction in leverage from 3.40 to 2.70 times through FY2023-24 and a small increase to 2.80 times in FY2024-25. Its ROA improved strongly to 4.77% and then moderated to 2.07%. Both institutions remained profitable in the stress year.

Fusion Finance had the highest single leverage observation, 4.32 times in FY2021-22. Leverage declined after an equity increase, then rose to 3.90 times in FY2024-25. Its ROA moved from 0.33% to above 4.6% in FY2022-23 and FY2023-24, but fell to -12.20% in FY2024-25. Spandana Sphoorty operated with comparatively lower leverage, between 1.22 and 2.60 times, yet its ROA declined to -9.20% in FY2024-25. The Spandana result is especially important because it demonstrates that low or moderate leverage does not protect an institution from severe profitability deterioration when credit and operating shocks are large.

Across all observations, mean leverage was 2.90 times with a standard deviation of 0.73. Mean ROA was 1.17%, but the standard deviation was 5.00 percentage points, more than four times the mean. The median ROA of 2.14% exceeded the mean because the two large negative FY2024-25 observations pulled the average downward. Year-wise mean ROA rose from 0.99% in FY2021-22 to 3.14% in FY2022-23 and 4.91% in FY2023-24, before falling to -4.36% in FY2024-25. Average leverage, in contrast, remained close to 2.9 times across the final two years. This divergence indicates that the sector-wide earnings reversal was not accompanied by a comparable aggregate increase in leverage.

Table 3. Descriptive Statistics

Variable	N	Mean	SD	Minimum	Median	Maximum
Debt-to-equity (times)	16	2.896	0.734	1.220	2.910	4.320
ROA (%)	16	1.172	4.996	-12.200	2.135	5.600

Note. SD = standard deviation.

Pearson's correlation between debt-to-equity and ROA was -.065 with $p = .810$. The sign is consistent with the proposed hypothesis, but the magnitude is economically negligible and statistically insignificant. Spearman's rho was .031 with $p = .910$, confirming that the ranks of leverage and profitability had virtually no monotonic association. The change from a slightly negative Pearson coefficient to a slightly positive rank coefficient reflects the influence of extreme negative ROA observations, but neither measure supports a systematic relationship.

Table 4. Correlation between Financial Leverage and ROA

Test	Coefficient	p-value	Inference
Pearson correlation	-0.065	.810	Negligible, not significant

Spearman rank correlation	0.031	.910	Negligible, not significant
---------------------------	-------	------	-----------------------------

Note. Two-tailed tests; significance level = .05.

The pooled regression produced an estimated leverage coefficient of -0.445. Interpreted mechanically, a one-time increase in debt-to-equity was associated with a 0.445 percentage-point reduction in ROA. However, the robust standard error was 2.101, the 95% confidence interval ranged from -4.563 to 3.673, and $p = .832$. The model explained only 0.4% of the variation in ROA ($R\text{-squared} = .004$). The null hypothesis cannot therefore be rejected, and H1 is not supported. A sensitivity test using only FY2021-22 to FY2023-24 also produced a small, insignificant positive coefficient ($\beta = 0.290$, $p = .777$; $R\text{-squared} = .012$). The principal finding is not that leverage is harmless, but that leverage by itself has almost no explanatory power in this small sample.

Table 5. Pooled OLS Regression Results

Term / statistic	Estimate	Robust SE	Test statistic	p-value	95% CI
Constant	2.461	5.877	0.419	.675	[-9.059, 13.980]
Debt-to-equity	-0.445	2.101	-0.212	.832	[-4.563, 3.673]
Model summary	$R\text{-squared} = .004$	$\text{Adj. } R\text{-squared} = -.067$	$F = 0.045$	.835	$N = 16$

Note. Dependent variable: ROA (%). HC1 heteroscedasticity-robust standard errors. The coefficient test is reported as a z statistic by the robust covariance estimator.

The result is consistent with earlier conditional evidence. Bogan (2012) found that financing composition matters, but its effect varies with institutional development. Kar (2012) reported no uniform effect across performance measures, and Tchuigoua (2015) showed that profitability, size, regulation, and institutional characteristics shape leverage. Debt must therefore be interpreted through the quality and cost of the assets financed.

FY2024-25 illustrates the mechanism. MFIN (2025) reported portfolio contraction and repayment stress as over-indebtedness, multiple lending, weather events, and political disruptions weakened collections. Expected-credit-loss provisions reduce profit immediately, while debt and equity adjust more slowly. A contemporaneous leverage ratio may therefore miss risks accumulated during earlier growth.

Capital adequacy further clarifies the distinction between solvency and earnings sustainability. At the end of FY2024-25, the selected companies continued to report capital adequacy ratios above applicable minimum requirements, including approximately 25.4% for CreditAccess Grameen, 25.85% for Satin Creditcare, 22.42% for Fusion Finance, and 36.31% for Spandana Sphoorty (CreditAccess Grameen Limited, 2025; Fusion Finance Limited, 2025; Satin Creditcare Network Limited, 2025; Spandana Sphoorty Financial Limited, 2025). Yet two firms recorded substantial losses. Strong capital buffers can absorb shocks and preserve regulatory solvency, but they do not ensure operating profitability.

Return on equity alone can be misleading because debt magnifies both positive and negative outcomes. ROA is more comparable across different leverage levels, although it cannot separate credit cost, margin, efficiency, and exceptional provisions. Sustainability assessment should therefore combine

leverage with portfolio-at-risk, NPA ratios, collection efficiency, credit cost, liquidity, borrowing concentration, cost-to-income ratio, and capital adequacy.

The evidence does not identify a universal leverage threshold. CreditAccess and Satin remained profitable near three times leverage, while Spandana suffered a large loss at lower leverage. Fusion's stress coincided with higher leverage, but causation is not established. Leverage appears to amplify underlying portfolio and governance quality: it supports scale when controls are strong and reduces recovery space when they weaken.

6. Managerial and Policy Implications

The first implication is that boards should set leverage appetite in relation to stressed earnings and liquidity, not merely to regulatory capital. Internal limits should be linked to portfolio-at-risk, credit-cost forecasts, lender concentration, and the proportion of liabilities maturing within the next twelve months. A leverage ratio that is comfortable under normal collections may become excessive when delinquency and provisioning rise simultaneously.

Second, funding diversification should be treated as a resilience objective. Dependence on a small group of bank lenders or short-tenor instruments can transmit a credit shock into a liquidity shock. A balanced mix of term loans, market borrowings, securitization, co-lending, and equity, with staggered maturities, can reduce refinancing pressure. Liability pricing should also be evaluated against risk-adjusted portfolio yield rather than headline yield.

Third, early-warning systems should integrate credit-bureau data, borrower-level indebtedness, geographic concentration, staff attrition, center-meeting disruption, and collection behavior. Rapid disbursement growth should trigger stronger underwriting and field audits. The empirical results indicate that asset quality and governance can dominate the effect of leverage, so debt policy must be embedded in enterprise risk management.

For regulators and lenders, sustainability assessment should avoid one-ratio dependence. Capital adequacy remains essential, but persistent negative ROA, rising credit cost, covenant breaches, or rapid portfolio contraction may signal vulnerability even when CRAR is high. Supervisory review and lender due diligence should therefore combine solvency, profitability, liquidity, conduct, and borrower-protection indicators.

7. Conclusion, Limitations, and Scope for Future Research

This study examined whether financial leverage affects the financial sustainability of four selected listed Indian NBFC-MFIs over FY2021-22 to FY2024-25. The sample covered 16 firm-year observations and used debt-to-equity as the leverage measure and ROA as a performance-based sustainability proxy. The descriptive evidence revealed relatively stable average leverage but highly volatile profitability, particularly in FY2024-25. Pearson and Spearman correlations were near zero, and pooled OLS produced a negative but statistically insignificant leverage coefficient. H1 was therefore not supported.

The conclusion does not imply that leverage is unimportant. Debt determines financing commitments and refinancing exposure. Rather, leverage alone did not explain ROA differences. Outcomes were more consistent with interactions among portfolio quality, collections, credit cost, governance, controls, and capital buffers. Sustainability requires coordinated balance-sheet and operating discipline.

The study has several limitations. The purposive sample includes only four listed NBFC-MFIs, and the short period restricts statistical power. ROA is an observable and comparable proxy, but it is not

identical to operational self-sufficiency or long-term social sustainability. Company disclosures are not perfectly uniform, and the pooled model omits potentially important controls such as size, yield, cost of funds, credit cost, GNPA, operating expense, geographic concentration, and governance events. Reverse causality is also possible because weak profitability can itself increase leverage by eroding equity.

Future research should construct a larger panel including unlisted NBFC-MFIs and extend the period across multiple credit cycles. Dynamic panel methods could test lagged effects of leverage and loan growth, while threshold or nonlinear models could identify whether debt becomes harmful beyond institution-specific levels. A composite sustainability index combining ROA, operational self-sufficiency, CRAR, liquidity, portfolio quality, and outreach would provide a richer dependent variable. Qualitative case studies of underwriting, lender behavior, and governance during FY2024-25 would also help explain why institutions with similar leverage experienced sharply different outcomes.

For practice, the central message is straightforward: sustainable microfinance requires enough leverage to finance outreach, but not so much that an asset-quality shock removes strategic flexibility. The appropriate level must be determined jointly with risk-adjusted profitability, liquidity planning, and borrower protection.

REFERENCES:

1. Bogan, V. L. (2012). Capital structure and sustainability: An empirical study of microfinance institutions. *The Review of Economics and Statistics*, 94(4), 1045-1058.
https://doi.org/10.1162/REST_a_00223
2. CreditAccess Grameen Limited. (2025). *Q4 and FY25 investor presentation*.
<https://www.creditaccessgrameen.in/>
3. Cull, R., Demirgüç-Kunt, A., & Morduch, J. (2007). Financial performance and outreach: A global analysis of leading microbanks. *The Economic Journal*, 117(517), F107-F133.
<https://doi.org/10.1111/j.1468-0297.2007.02017.x>
4. Fusion Finance Limited. (2025). *Annual report 2024-25*. <https://fusionfin.com/investor-relations/>
5. Hermes, N., Lensink, R., & Meesters, A. (2011). Outreach and efficiency of microfinance institutions. *World Development*, 39(6), 938-948. <https://doi.org/10.1016/j.worlddev.2009.10.018>
6. Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360.
[https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
7. Kar, A. K. (2012). Does capital and financing structure have any relevance to the performance of microfinance institutions? *International Review of Applied Economics*, 26(3), 329-348.
<https://doi.org/10.1080/02692171.2011.580267>
8. Ledgerwood, J. (1999). *Microfinance handbook: An institutional and financial perspective*. World Bank.
9. Mersland, R., & Strøm, R. O. (2009). Performance and governance in microfinance institutions. *Journal of Banking & Finance*, 33(4), 662-669. <https://doi.org/10.1016/j.jbankfin.2008.11.009>
10. Microfinance Industry Network. (2025). *Micrometer Q4 FY 2024-25: Synopsis*.
<https://mfinindia.org/>
11. Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investment. *American Economic Review*, 48(3), 261-297.

12. Myers, S. C. (1984). The capital structure puzzle. *The Journal of Finance*, 39(3), 575-592. <https://doi.org/10.1111/j.1540-6261.1984.tb03646.x>
13. Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13(2), 187-221. [https://doi.org/10.1016/0304-405X\(84\)90023-0](https://doi.org/10.1016/0304-405X(84)90023-0)
14. Reserve Bank of India. (2025). *All you wanted to know about NBFCs*. <https://www.rbi.org.in/>
15. Satin Creditcare Network Limited. (2025). *Corporate presentation, August 2025*. <https://satincreditcare.com/>
16. Spandana Sphoorty Financial Limited. (2024). *Annual report 2023-24*. <https://spandanasphoorty.com/>
17. Spandana Sphoorty Financial Limited. (2025). *Annual report 2024-25*. <https://spandanasphoorty.com/>
18. Tchuigoua, H. T. (2015). Capital structure of microfinance institutions. *Journal of Financial Services Research*, 47(3), 313-340. <https://doi.org/10.1007/s10693-013-0190-2>