



International Journal of Multidisciplinary Research in Science, Engineering and Technology

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)



Impact Factor: 8.206

Volume 9, Issue 4, April 2026



International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

An Empirical Study on the Impact of Credit Risk on the Profitability of Selected Housing Finance Companies in India

Lakshmi Salikumar¹, Dr. Anoop Jagetia²

Student, Dept. of MBA Finance, Faculty of Management Studies, CMS Business School, Jain (Deemed to be University), Bangalore, India¹

Assistant Professor, Dept. of Finance, Faculty of Management Studies, CMS Business School, Jain (Deemed to be University), Bangalore, India²

ABSTRACT: This study examines the impact of credit risk on the profitability of selected housing finance companies in India over the period FY2016–FY2025. Credit risk is measured using Gross Non-Performing Assets (GNPA) and Net Non-Performing Assets (NNPA), while profitability is evaluated through Return on Assets (ROA) and Return on Equity (ROE). The study relies on secondary data collected from annual reports, company websites, and regulatory sources. To analyze the relationship, various techniques such as trend analysis, correlation, comparative analysis, and panel data regression are used.

The findings reveal a generally inverse relationship between credit risk and profitability. Companies with lower NPAs demonstrate more stable and consistent financial performance, whereas higher NPAs lead to fluctuations in earnings. The study also finds that credit risk has a more significant impact on ROE than ROA, indicating that shareholder returns are more sensitive to asset quality. Additionally, external shocks, particularly during the COVID-19 period, contributed to rising NPAs and affected overall performance.

The study emphasizes the importance of strong credit risk management practices, including effective credit appraisal, monitoring, and recovery mechanisms, to ensure long-term profitability and financial stability.

KEYWORDS: Credit Risk, Profitability, NPAs

I. INTRODUCTION

The study examined the relationship between credit risk and profitability using correlation and panel regression analysis. The null hypothesis stated that credit risk (GNPA and NNPA) has no significant impact on profitability (ROA and ROE), while the alternative hypothesis suggested otherwise. The results revealed that credit risk variables did not significantly affect Return on Assets (ROA), indicating that asset-based profitability remains largely unaffected by changes in NPAs. Therefore, the null hypothesis cannot be rejected for ROA.

However, when Return on Equity (ROE) was considered, the findings showed that Net Non-Performing Assets (NNPA) have a significant negative impact on shareholder returns. This leads to a partial rejection of the null hypothesis, as credit risk does influence equity profitability. The results suggest that while firms may sustain overall operational performance despite rising NPAs, the burden of impaired assets becomes more visible in returns to shareholders. This outcome aligns with financial theory, as ROA is based on total assets and may dilute the impact of NPAs, whereas ROE is more sensitive due to a smaller equity base. Hence, higher NNPA levels directly reduce profitability for shareholders, emphasizing the importance of effective credit risk management.



International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

Research Objectives:

- To analyze the trends in credit risk and profitability indicators (GNPA, NNPA, ROA, and ROE) of selected housing finance companies during the period FY2016–FY2025.
- To examine the relationship between credit risk and profitability of the selected companies using correlation analysis.
- To compare the asset quality and financial performance across the selected housing finance companies.
- To assess the overall impact of credit risk on profitability using panel data regression analysis.

II. RESEARCH METHODOLOGY

Statement of Problem:

Credit risk is a major challenge for housing finance companies, as rising NPAs (GNPA and NNPA) negatively impact profitability by reducing income and increasing provisions. With recent economic disruptions like COVID-19, credit risk has further intensified. Hence, there is a need to examine how credit risk affects profitability (ROA and ROE) of selected housing finance companies during FY2016–FY2025.

Sample Plan:

- Sample Size: 5 Housing Finance Companies
- Companies Selected:
 - LIC Housing Finance Ltd
 - PNB Housing Finance Ltd
 - Can Fin Homes Ltd
 - Aavas Financiers Ltd
 - Repco Home Finance Ltd
- Sampling Technique: Purposive sampling
- Time Period: FY2016–FY2025
- Data Type: Secondary data from annual reports, company websites, RBI & NHB

Plan of Analysis:

- Variables:
 - Independent: GNPA, NNPA (Credit Risk)
 - Dependent: ROA, ROE (Profitability)
- Analytical Methods:
 - Comparative Analysis (company-wise comparison)
 - Panel Data Regression (overall impact assessment)
- Tools Used: Microsoft Excel

III. DATA ANALYSIS

This section presents a comparative analysis of the selected housing finance companies to evaluate differences in credit risk and profitability during the period FY2016–FY2025. Average values of GNPA, NNPA, ROA, and ROE are used to compare asset quality and financial performance across firms.



International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

a) Credit Risk Comparison

Table 3.1: Comparative Credit Risk Indicators of Selected HFCs (FY2016–FY2025)

HFC	Avg GNPA (%)	Avg NNPA (%)
LIC Housing	2.493	1.458
PNB Housing	2.297	1.456
Can Fin Homes	0.603	0.323
Aavas Financiers	0.722	0.534
Repc Home Finance	3.788	2.012

Source: Compiled from Annual Reports of Selected HFCs

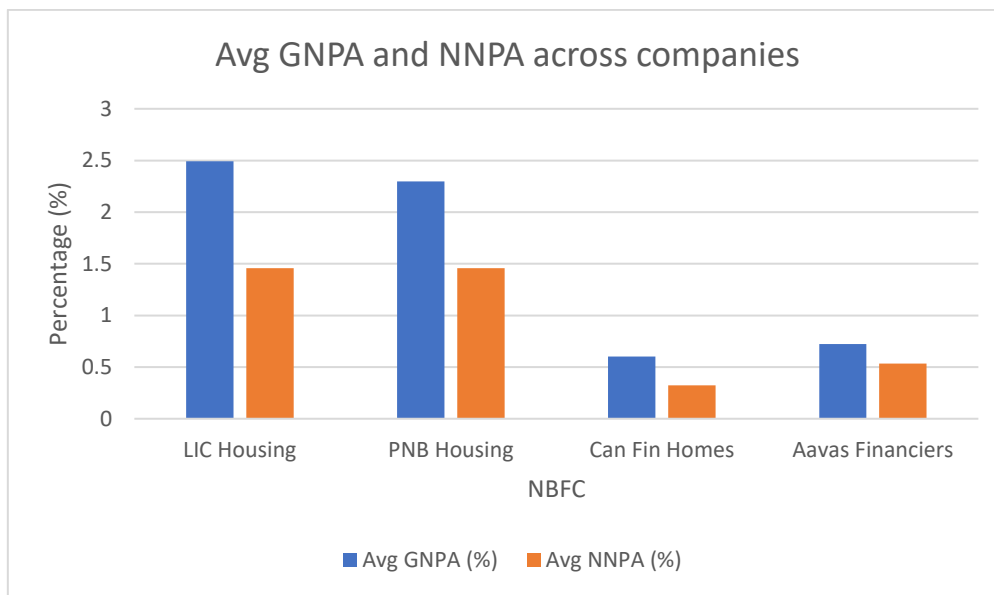


Figure 4.1: Average GNPA and NNPA of Selected Housing Finance Companies (FY2016–FY2025)

Source: Compiled from Annual Reports of Selected HFCs

Interpretation:

The comparative analysis shows clear differences in asset quality among the selected housing finance companies. Repco Home Finance Ltd had the highest GNPA and NNPA, indicating the weakest asset quality and highest credit risk. In contrast, Can Fin Homes Ltd recorded the lowest NPA levels, reflecting strong credit risk management. Aavas Financiers Ltd also maintained low NPAs, while LIC Housing Finance Ltd and PNB Housing Finance Ltd showed moderate risk. Overall, Can Fin and Aavas performed best, whereas Repco faced the highest credit stress.



International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

b) Profitability Comparison

Table 4.2: Comparative Profitability Indicators of Selected HFCs (FY2016–FY2025)

HFC	Avg ROA (%)	Avg ROE (%)
LIC Housing	1.247	14.083
PNB Housing	1.438	11.078
Can Fin Homes	1.812	17.717
Aavas Financiers	2.861	11.931
Repc Home Finance	2.261	13.93

Source: Compiled from Annual Reports of Selected HFCs

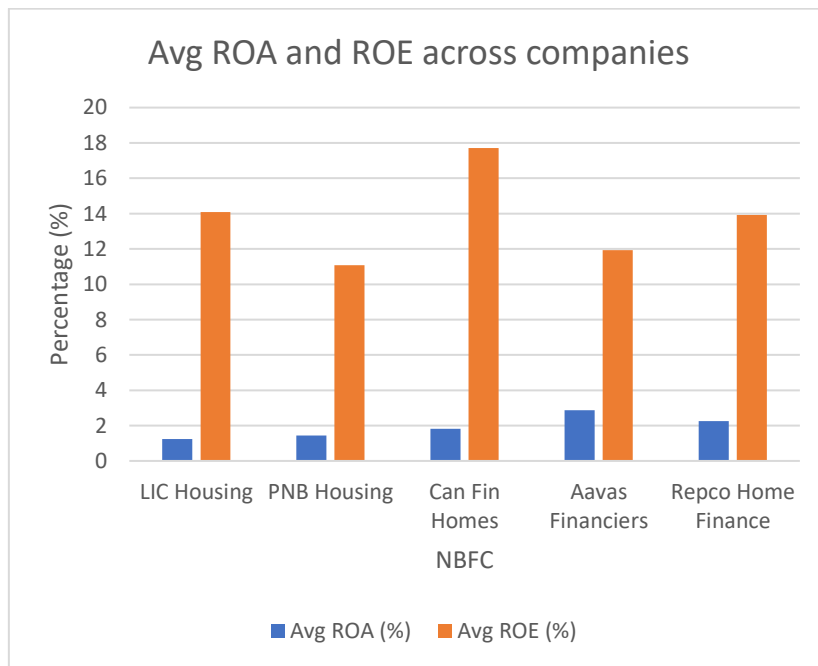


Figure 4.2: Average ROA and ROE of Selected Housing Finance Companies (FY2016–FY2025)

Source: Compiled from Annual Reports of Selected HFCs

Interpretation:

The comparative analysis of profitability shows notable differences among the companies. Aavas Financiers Ltd recorded the highest ROA, indicating strong operational efficiency, while Can Fin Homes Ltd achieved the highest ROE, reflecting effective use of equity. Repco Home Finance Ltd also showed good profitability, whereas LIC Housing Finance Ltd and PNB Housing Finance Ltd had moderate performance. Overall, Aavas and Can Fin outperformed others in profitability.

Relationship Between Credit Risk & Profitability:

The comparison indicates an inverse relationship between credit risk and profitability. Firms with low NPAs, like Can Fin Homes Ltd and Aavas Financiers Ltd, showed strong profitability, while Repco Home Finance Ltd, with high NPAs, had lower and more volatile returns. LIC Housing Finance Ltd and PNB Housing Finance Ltd maintained moderate risk and profitability. Overall, better asset quality is associated with higher financial performance.



International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

c) Panel Regression Analysis — ROA Model

Dependent Variable: ROA

Independent Variables: GNPA, NNPA

Table 4.3: Panel Regression Results for ROA Model

Variable	Coefficient	Std. Error	t-Statistic	p-value
Intercept	2.072	0.143	14.534	0.000
GNPA	0.225	0.227	0.993	0.326
NNPA	-0.500	0.375	-1.334	0.189

Statistic	Value
R-squared	0.072
Adjusted R-squared	0.032
F-statistic	1.797
Significance F	0.177
Observations	49

Source: Computed by the researcher using Excel

Interpretation:

The panel regression results show that credit risk has a weak and statistically insignificant impact on ROA. The low R-squared (7.2%) indicates that GNPA and NNPA explain very little variation in profitability. While GNPA shows a positive and NNPA a negative relationship with ROA, both are insignificant. Overall, the model is not statistically significant, suggesting that factors other than NPAs play a larger role in determining profitability.

d) Panel Regression Analysis — ROE Model

Dependent Variable: ROE

Independent Variables: GNPA, NNPA

Table 4.4: Panel Regression Results for ROE Model

Variable	Coefficient	Std. Error	t-Statistic	p-value
Intercept	15.064	0.568	26.529	0.000
GNPA	1.583	0.902	1.754	0.086
NNPA	-3.903	1.493	-2.615	0.012

Statistic	Value
R-squared	0.292
Adjusted R-squared	0.261
F-statistic	9.494
Significance F	0.000
Observations	49

Source: Computed by the researcher using Excel



International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

Interpretation:

The panel regression results show a moderate impact of credit risk on ROE, with 29.2% of variation explained by GNPA and NNPA. While GNPA has a positive but insignificant effect, NNPA has a significant negative impact on ROE, reducing shareholder returns. The overall model is statistically significant, indicating that credit risk meaningfully affects profitability, especially through net NPAs.

e) Hypotheses Testing Results

Based on the statistical analysis conducted in this study, the relationship between credit risk The hypothesis testing shows that credit risk has no significant impact on ROA, so the null hypothesis cannot be rejected for asset-based profitability. However, NNPA has a significant negative effect on ROE, leading to a partial rejection of the null hypothesis. This indicates that credit risk, especially net NPAs, affects shareholder returns more strongly than overall operational profitability.

IV. FINDINGS

- Credit risk significantly affects financial performance of housing finance companies.
- Lower NPAs are associated with higher and more stable profitability.
- Increase in NPAs leads to higher provisions and decline in earnings.
- Economic shocks (like COVID-19) increase credit risk and defaults.
- Profitability depends on multiple factors, not just credit risk.
- ROE is more sensitive to credit risk than ROA.

V. RECOMMENDATIONS

Housing finance companies should focus on strong credit appraisal, continuous loan monitoring, and early risk detection to control NPAs. Improving provisioning and recovery mechanisms, along with enhancing operational efficiency, is essential for maintaining profitability. Firms should also maintain adequate capital, diversify loan portfolios, and prioritize quality lending over rapid growth to ensure long-term stability.

VI. CONCLUSION

The study concludes that credit risk plays a crucial role in determining the profitability and stability of housing finance companies. Firms with lower NPAs achieve better and more consistent performance, while higher NPAs lead to earnings pressure and financial instability. The impact of credit risk is more significant on shareholder returns (ROE) than on asset-based profitability (ROA). Overall, effective credit risk management, strong asset quality, and prudent lending practices are essential for ensuring long-term sustainability and growth in the housing finance sector.

REFERENCES

1. Anya, R., & Maheshwari, S. (2018). Credit risk management practices in Indian NBFCs: A comparative study of Muthoot Finance and Bajaj Finance. *Journal of Emerging Technologies and Innovative Research (JETIR)*, 5(6). <https://www.jetir.org/papers/JETIRC006084.pdf>
2. S. AM, Joel, A. K., Dominic, M. N. A., Nishanth, S., & Prasanna Kumar, S. (2025). Financial performance of select non-banking finance companies in India. *SSRN Electronic Journal*. <https://papers.ssrn.com>
3. Lam, H. (2023). Impact of credit risk on profitability of financial corporations. *International Journal of Research in Vocational Studies*, 3(1). <https://journal.gpp.or.id/index.php/ijrvocas/article/view/193>



INTERNATIONAL
STANDARD
SERIAL
NUMBER
INDIA



INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH IN SCIENCE, ENGINEERING AND TECHNOLOGY

| Mobile No: +91-6381907438 | Whatsapp: +91-6381907438 | ijmrset@gmail.com |

www.ijmrset.com