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Emerging Risks for the NBFC Sector in India[1]

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6.1. Introduction

Indian Non-Banking Financial Companies (NBFCs) have shown remarkable agility despite many challenges. Total credit disbursed by them grew from Rs 24 trillion in 2021 (post-Covid) to Rs 48 trillion in March, 2025 – doubling in four years (FIDC, 2025). They registered more than 20% credit growth in 2024-25 when bank credit growth was on the wane (FSR 2025). The NBFCs have witnessed remarkable transformation since their emergence. In recent years, the MSME portfolio along with retail credit segments like consumer durables, microfinance, vehicle loans and affordable housing have led the growth trajectory for this sector. NBFCs support financial intermediation by commercial banks, and facilitate financial inclusion, through loans to retail and small business customers. They serve last mile clients through innovative pricing strategies and faster product delivery (IFR 2023). In the first-ever NBFC symposium hosted by the Ministry of Finance on July 9, 2025, India's Finance Minister – Nirmala Sitharaman acknowledged their pivotal role in financial inclusion, especially for the excluded segment of borrowers. She urged public sector banks (PSBs) to appreciate and emulate the ground-level outreach and credit expansion strategies of NBFCs.

Banks and NBFCs exhibit a high degree of interconnectedness in India (IMF 2025). The failure of NBFCs can have significant repercussions on the balance sheets of commercial banks. Hence, the RBI has introduced a series of regulations to harmonize the risk management systems and processes of NBFCs with banks. One of the most important, in this regard, is the framework on scale-based regulation (RBI 2021). It classifies NBFCs into four layers, based on size, complexity and interconnectedness. These are known as Base Layer (BL) NBFCs, Middle Layer (ML) NBFCs, Upper Layer (UL) NBFCs and Top Layer (TL) NBFCs. At present, there are no firms in the TL category. The RBI uses the same tools to analyze the risks of ML and UL NBFCs, on a regular basis, as it employs for the banking sector (FSR 2025). The adoption of a common and consistent measurement methodology for both banks and NBFCs makes their risk profiles comparable and amenable to aggregation, for the financial sector as a whole.

The common refrain is to study NBFC risk profiles along any one of two dimensions. First, estimation of NBFC risks in silos, as done by periodic regulatory assessment programmes (IMF 2025, FSR 2025). These reports focus on the prediction of the standard menu of credit, market, operational and ALM risks of the sector. The other avenue is to focus on the interlinkages between banks and NBFCs and elicit the systemic risk contributions of NBFCs (Basu 2023, BIS 2025). This chapter makes a third contribution to the literature – it explains *risk*

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transformation within NBFCs. It shows how liquidity risk can aggravate interest rate risk problems and culminate in credit risk concerns, for both UL and ML firms. The implication is that, though NPA levels may be under control at present, they may spike in future when funding markets tighten.

The chapter is organized as follows. Section 6.2 presents a brief literature review, to set the context. Section 6.3 describes the data sources and methodology. Section 6.4 explains the main results and their implications. Section 6.5 discusses the operational constraints faced by NBFCs, which pose challenges for liquidity risk management. Section 6.6 concludes, with a few directions for future research.

6.2. Literature Review

At the end of March 2024, credit extended by NBFCs was almost 25% of the total credit disbursed by banks. It also stood at around 14% of GDP. NBFCs provide around 12% of the total credit (banks and NBFCs) to MSMEs. They use digital technologies for accelerated credit outreach to MSMEs (RBI 2024). Together with Fintech lenders, NBFCs account for more than 70% of the loans to the under-35 age group. They also have the potential to bridge the rural-urban credit gap, with the depth and breadth in their rural network (IFR 2023).

Given their importance to the Indian economy, it is necessary to assess the risk profiles and risk contribution of the NBFC sector. There are two avenues through which NBFC risk management has been studied. First, financial stability exercises (IMF 2025, FSR 2025) have conducted stress tests for individual categories like credit risk and liquidity risk, in addition to an evaluation of the impact of such losses on capital buffers of Indian NBFCs. The general inference is that the sector is resilient, with a few outliers vulnerable to medium and severe shocks. In related work, Chherawala and Krishnakumar (2024) find that the forward-looking Expected Credit Loss (ECL) provisions of Indian NBFCs depend on their borrower quality, as measured by Probability of Default (PD) and Loss Given Default (LGD). In short, one strand of literature concentrates on microprudential facets of NBFC risk management.

The other research agenda is macroprudential – the systemic risks posed by NBFCs and the drivers of such risks. Factors like asset size and Market -to-Book-Value Ratio have been identified as the major determinants of systemic risk created by NBFCs. The impact of policy rate movements on NBFC assets and liabilities also influence the extent of systemic risks (IFR 2023). In a recent study, Basu (2023) finds that the drivers of systemic risk were different before and during the pandemic. Under normal conditions, NBFC systemic risk is governed by balance sheet variables and short-term market rates. During the pandemic, the important sources of systemic risk from NBFCs were macroeconomic – the spread of Covid and the size of public expenditure. Hence, it was clear that the pandemic was an extreme real sector shock which had spilled over to the financial sector.

In contrast, this chapter highlights the evolution of risks in UL and ML NBFC balance sheets. It portrays how liquidity and interest rate risk management strategies can ignite acute credit risk problems at Indian NBFCs. The implication is that high credit risk may be managed not through higher provisions, capital buffers or hedges but through effective treatment of the root causes like liquidity risk and interest rate risk.

6.3. Data and Methodology

The first step is to create the NBFC sample. It comprises 11 UL NBFCs and 95 ML NBFCs, for which continuous data was available on Ace Equity. The Upper Layer consists of those NBFCs which are specifically identified by the Reserve Bank as warranting enhanced regulatory requirement based on a set of parameters and scoring methodology (RBI 2021) given by the RBI. The top ten eligible NBFCs in terms of their asset size shall always reside in the upper layer, irrespective of any other factor (RBI 2021). The middle layer includes (a) all deposit taking NBFCs (NBFC-Ds), irrespective of asset size, (b) non-deposit taking NBFCs with asset size of ₹1000 crore and above and (c) NBFCs undertaking the following activities (i) Standalone Primary Dealers (SPDs), (ii) Infrastructure Debt Fund - Non-Banking Financial Companies (IDF-NBFCs), (iii) Core Investment

Companies (CICs), (iv) Housing Finance Companies (HFCs) and (v) Infrastructure Finance Companies (NBFC-IFCs) (RBI 2021). The reason for focusing on UL NBFCs and ML NBFCs is their systemic importance, since they cover almost 95% of the total assets of the sector.

The eleven UL NBFCs chosen for the analysis are: Bajaj Housing Finance., Bajaj Finance, Cholamandalam Investment and Finance, HDB Financial Services, Samman Capital., L&T Finance, LIC Housing Finance, Mahindra and Mahindra Finance, Muthoot Finance, Shriram Finance and PNB Housing Finance.

Next, the aggregated Structural Liquidity Statement (SLS) is extracted from the annual report of each of the sample NBFCs, available on Ace Equity. It is a schedule of expected cash inflows and outflows, over different horizons. The ratio of cumulative gap to cumulative outflow is computed, over one month and one year. This is an estimate of the mismatch between gross inflows and outflows, as a proportion of total outflows, over the given intervals. The regulatory limits on cumulative negative mismatches are 10% (1 day – 7 day), 10% (2 day – 14 day) and 20% (15 day – 30 day) (RBI 2019). These limits ensure that NBFCs do not accumulate high levels of short-term liabilities, which will be difficult to redeem, over the next 30 days.

Third, average interest rates on Loans and Advances and NIMs are calculated for both NBFC categories, from Ace Equity data. The final step is to compute the ratio of incremental NPAs to Gross NPAs, for each NBFC, from the same database. The ratio of incremental NPAs during a year, to the opening balance of Loans and Advances – better known as Slippage Ratio – is also presented. These number portray the possible surge in NPAs during a year, though the year-end numbers may be small due to recovery or write-off. Point-in-time comparisons may mask the intermediate spike in potential credit-related losses.

The study is focused on the three-year period, viz. FY 2021-22, FY 2022-23 and FY 2023-24. The goal is to analyze the risk profiles of NBFCs as they made a gradual recovery from the pandemic.

6.4. Results

This section underscores the possibility that the strategies to manage both liquidity risk and interest rate risk, by UL and ML NBFCs, may aggravate credit risk at these institutions. The reason is that these NBFCs are found to depend on short-term loans to manage their liquidity gaps, instead of investments, up to one year. At the same time, they exhibit high Interest income and Net Interest Margins (NIM). In general, short-term loans earn high interest rates if the borrower quality is poor. We provide supportive evidence, in this context. The analysis is based on data from eleven upper layer and ninety-five middle layer NBFCs, extracted from Ace Equity, for three financial years.

TABLE 6.1

Average Cumulative Gap-to-Cumulative Outflow Ratios for UL NBFCs

	Up to 1 month	*Up to 1 year*
2022	131.47%	23.97%
2023	232.57%	26.83%
2024	273.19%	34.78%

Source: Authors' Calculation based on Ace Equity Data.

These numbers depict large liquidity surpluses till one year for UL NBFCs (Table 6.1). In other words, the difference between expected inflows and outflows as a ratio of total outflows, up to 1 month and one year, is a large positive one. This is a counterintuitive result, since substantial liquidity surpluses denote an abundance of short-term assets relative to liabilities, for banks and NBFCs. It leads to a squeeze in margins, because short-term assets are assumed to earn lower yields, while the cost of longer-term liabilities should be higher. While the introduction of cumulative gap limits by RBI up to 1 month, as well as the implementation of LCR guidelines, has resulted in smaller liquidity deficits for banks, such surpluses are unusual by all standards.

A similar pattern is observed for middle layer NBFCs (Table 6.2).

In general, when large liquidity surpluses are observed, financial institutions depend on short-term investments, which can be sold

TABLE 6.2

Average Cumulative Gap-to-Cumulative Outflow Ratios for ML NBFCs

	Up to 1 month	*Up to 1 year*
2022	145.29%	101.85%
2023	202.71%	123.53%
2024	363.89%	178.84%

Source: Authors' Calculation based on Ace Equity Data.

with ease. However, NBFCs are characterized by a paucity of investible assets, despite the introduction of the LCR guidelines in November 2019[2]. These standards specify that NBFCs should build up a stock of high-quality liquid assets (which comprise securities like bonds, debentures and shares) to meet stressed net cash outflows, over a 30-day horizon. The minimum LCR threshold was 100%, by December 1, 2024. However, the share of liquid assets (to total assets of NBFCs) is still meagre – it stands at a shade over 5%, at present (IMF 2025).

Therefore, they redeem short-term liabilities with short-term loans, as shown in Tables 6.3 and 6.4.

TABLE 6.3

Average Share of Key Assets and Liabilities up to 1 Year – UL NBFCs

	Loans and advances (%)	*Investment (%)*	*Deposit (%)*	*Borrowing (%)*
2022	42.89	40.02	47.23	42.83
2023	42.30	43.03	47.34	33.75
2024	37.07	45.33	45.92	36.35

Source: Authors' Calculation based on Ace Equity Data.

TABLE 6.4

Average Share of Key Assets and Liabilities up to 1 Year – ML NBFCs

	Loans and advances (%)	*Investment (%)*	*Deposit (%)*	*Borrowing (%)*
2022	55.15	42.10	76.77	54.47
2023	53.21	41.02	75.12	52.26
2024	52.90	43.22	61.64	54.81

Source: Authors' Calculation based on Ace Equity Data.

2. RBI/2019-20/217 DOR.BP.BC.No.65/21.04.098/2019-20

The share of short-term loans is higher for ML NBFCs than UL NBFCs. Moreover, the ratio of short-term loans and borrowings is similar for both groups. This is an expected result, because NBFCs depend more on non-deposit liabilities. Hence, the inflow profile of loans has to match the outflow pattern of market borrowings.

As discussed, it is expected that short-term loans will earn low yields. Furthermore, since the liquidity profiles of loans and borrowings are similar, the margins for UL and ML NBFCs should be low. However, tables 6.5 and 6.6 present counterintuitive results.

TABLE 6.5

Average Interest Rates on Loans and NIM for UL NBFCs

	Int. on L&A (%)	*NIM (%)*
2022	13.53	6.55
2023	13.56	6.74
2024	13.55	6.42

Source: Authors' Calculation based on Ace Equity Data.

TABLE 6.6

Average Interest Rates on Loans and NIM for ML NBFCs

	Int. on L&A (%)	*NIM (%)*
2022	10.35	4.88
2023	15.08	6.68
2024	19.80	7.90

Source: Authors' Calculation based on Ace Equity Data.

The data in table 6.6 ignores outlier rates, which are even higher. It is clear that lending rates and NIM have increased over time in ML NBFCs, from a high base. Such exorbitant rates, on short-term loans, can arise from two sources: (a) high credit risk premiums and/ or (b) usurious interest rates to captive borrowers. The second option was flagged off by the former governor of RBI, Mr. Shaktikanta Das, and several NBFCs faced punitive action in due course. The possibility of greater NBFC exposure to high-risk loans over time, is apparent from tables 6.7 and 6.8. The figures portray the spikes in NPA, as a ratio of average NPA and opening loans and advances, for a given year.

TABLE 6.7

Average Ratios of Incremental to Gross NPAs for UL NBFCs (in %)

Year	*Incremental NPA/ Gross NPA (%)*	*Incremental NPA/ Loans and Advances* (%)*
202203	116.65	4.77
202303	86.86	3.57
202403	98.89	2.83

Source: Authors' Calculation based on Ace Equity Data.

Note: * Opening Balance of Loans and Advances.

TABLE 6.8

Average Ratios of Incremental to Gross NPAs for ML NBFCs (in %)

Year	*Incremental NPA/ Gross NPA (%)*	*Incremental NPA/ Loans and Advances* (%)*
202203	113.7961	2.99
202303	127.9306	4.25
202403	222.9405	5.97

Source: Authors' Calculation based on Ace Equity Data.

Note: * Opening Balance of Loans and Advances.

One reason why the ratios appear to be large is that the year-end Gross NPAs are small. The other is that there is a spurt in NPAs, during the year. The argument is that the surge in NPAs captures the deterioration in credit quality over time, which UL and ML NBFCs may be able to manage through recoveries or write-offs by the year-end. But, in case loan recovery is not as effective in future, these institutions will experience a sharp rise in NPAs and an erosion in capital adequacy.

The ratio of incremental NPAs to Loans and Advances is called the slippage ratio. It indicates the extent to which standard assets deteriorate to NPAs, during a year. As the ratio increases, the credit quality of the loan portfolio worsens. A few pertinent observations are warranted here. First, the ratios for both UL and ML NBFCs are much higher than those of banks (around 1%). It implies that the NBFC sector, as a whole, is exposed to much riskier loan portfolios compared to banks. Second, since we track average ratios, we assume a diversified portfolio for the NBFC sector as a whole. The elevated levels of slippage ratios could also connote inadequate credit portfolio diversification, for the sector. In other words, from the high slippage ratios, we may also infer that NBFCs are exposed to *credit concentration risk*. There is indeed some evidence that NBFC assets are concentrated in infrastructure financing companies (IMF 2025). Third, while slippage ratios at ULs have continued to decline over time, the corresponding numbers at ML NBFCs have risen during the period under study. It means that default risk is higher at the ninety-five ML firms, on an average, than the ten or eleven UL NBFCs. The impact on the financial sector may be greater and widespread if more NBFCs are hit by adverse credit events.

In sum, the channel from liquidity risk to credit risk is clear for NBFCs. The management of *liquidity risk*, i.e., the need to balance volatile liabilities with short-term assets, should be entrusted to the trading book. However, given the scarcity of high-quality liquid assets, NBFCs depend on short-term loans to redeem short-term liabilities, up to one year. This exposes the credit portfolios to *interest rate risk* – given their high cost of funds, NBFCs need to earn much more interest income than banks, in order to generate comparable NIMs. In fact, since they are not protected by deposit insurance or lender of last resort facilities, the margins should be greater, for them to create bigger capital buffers. Higher interest rates on short-term loans can only arise from portfolios that carry more default risk. Hence, interest rate risk aggravates *credit risk* of NBFCs.

The mechanism for propagation of stress in NBFCs also follows from the preceding discussion. In case of a liquidity crunch at these firms, their cost of funds may spike, as witnessed during the ILFS-DHFL crisis and the pandemic. The hike in borrowing cost may force NBFCs to choose credit riskier assets. This is why it is essential that NBFCs maintain healthy reserves of liquid assets. Abnormal cash outflows can be redeemed with such assets, without the urgent need to borrow from the market at exorbitant rates. Hence, liquidity risk management also mitigates interest rate risk and reduces the incentives to assume unacceptable credit risks.

6.5. NBFC Constraints

The previous section shows that liquidity risk is the main problem for Indian NBFCs. It is the root of both interest rate risk and credit risk for the sector. While efficient liquidity management is essential for any financial institution to meet short-term repayment obligations and ensure financial stability, the challenges for NBFCs are amplified due to limited funding avenues and the lack of regulatory support. They are at a serious cost disadvantage compared to banks, as they do not have access to low-cost deposits (current and savings) and few NBFCs have fixed (term) deposit licences, though fixed deposits provide the most stable source of funds.

NBFCs receive majority of their funds from banks as debt (Nitsure and Samanta 2025). This could be in terms of direct borrowing or through commercial papers or corporate bonds purchased by banks. The higher cost of funds (as compared to banks) combined with higher operating cost to income ratio (~70% plus for NBFCs versus ~48.0% for banks) directly impact the profitability of NBFCs. In order to protect business viability, NBFCs need to charge higher lending rates, which makes them less competitive than banks.

Even though NBFCs contributed 21% - 25% of total credit disbursed for the past several years, there is absence of a permanent refinance window for the sector. Unlike banks, there is no institutionalized mechanism that allows NBFCs short-term access to liquidity. As NBFCs depend on wholesale funds, they are vulnerable to 'liquidity shocks' when those markets freeze. During such episodes, even the well-governed, solvent NBFCs find it difficult to get funds. In the absence of lender of last resort facilities for NBFCs, they are forced to live with huge 'negative carry' (hoarding) to manage liquidity.

Given the high degree of interconnectedness and increase in risk weights on bank loans to NBFCs from November 2023 (RBI 2024), banks have discouraged products like committed LOC (lines of credit) to NBFCs, in the recent past. This has forced NBFCs to increase their reliance on the 'funded lines' from banks, which are more expensive. Moreover, unlike banks, NBFCs cannot engage in active currency management. Whenever they undertake 'external commercial borrowing' (ECBs), to diversify their sources of funds, they are required to hedge at least 75% of the borrowed amount. This also makes ECBs costly option for them.

Banks keep higher share of G-Sec (government securities) investments due to the mandatory SLR (statutory liquidity ratio) requirements. This allows them to manage both interest rate risk and liquidity risk. Banks also have access to call money markets, where they can pledge these securities and borrow funds. Access to repo and reverse repo operations via the RBI liquidity window allows banks to manage short-term as well as intra-day liquidity needs. This option is not available to NBFCs. Instead, they have to depend on bilateral bank relationships for repo borrowings under GMRA arrangement with each of the banks.

The Finance Industry Development Council (FIDC) – a representative body of NBFCs in India - has been demanding a permanent refinance window for NBFCs for many years. There is also a demand from NBFCs to make the National Housing Bank (NHB) the apex refinancing body for the entire NBFC sector, rather than only for Housing Finance Companies (HFCs), as the regulatory function of NHB has been transferred to RBI. Also, MUDRA (which has the mandate) can play an important role in refinancing large number of small and medium NBFCs. Past episodes have shown that the negative liquidity shocks to NBFCs had a multiplier effect on important sectors like automobiles, MSMEs and consumer goods.

6.6. Conclusion

The macroeconomic significance of the NBFC sector has grown manifold, over the last decade, in India. It not only complements banks in credit allocation, but has also become an important instrument of financial inclusion in the country. It has employed the latest technology to enhance credit penetration. As a result, the share of NBFC Credit to GDP and as a proportion of bank credit has exhibited a steady increase over time. In such a milieu, it is natural that the risk profiles of these institutions will be studied threadbare. The extant literature examines NBFC risks from institutional

solvency and systemic stability perspectives. In contrast, this chapter underlines the risk transformation at NBFCs. It traces the transition from ALM risks to credit risks, for a set of UL and ML firms.

One of the solutions to reduce liquidity and ALM risks for NBFCs is the creation of adequate and diverse funding sources. In addition to providing a refinance window for the NBFC sector, the RBI may like to consider giving a fixed deposit licence at least to a few select systemically important UL NBFCs. It will improve their efficiency in liquidity risk management. This is because the deposit accepting NBFCs are required to keep 15% of their outstanding public deposits in unencumbered approved securities. These NBFCs can reckon up to 80% of this as HQLA (High Quality Liquid Assets). Thus, it helps deposit accepting NBFCs to meet two regulatory requirements with the same unencumbered approved securities. The non-deposit taking NBFCs, on the other hand, are required to maintain Liquidity Coverage Ratio (LCR) as a ratio of HQLA to total net cash outflows over the next 30 calendar days. It entails higher opportunity cost in terms of negative carry for the non-deposit taking NBFCs.

The scope of future research is substantial. For instance, the impact of LCR guidelines on the portfolio composition and risk profiles of NBFCs may be explored. The idea is to examine how the portfolio credit risk profile changes as the NBFC sector augments its stocks of liquid assets. Secondly, standard scenario analysis of NBFCs stops with a discussion on the standalone impact on individual risks. Based on this chapter, the thought experiment can be extended from one risk to another. The impact of a (mild, moderate or severe) liquidity shock on the NBFC margin and the consequent changes in the portfolio credit risk profile may be considered. Finally, innovative recovery mechanisms may be conceived, to ensure that intermediate spikes in NPA do not damage year-end loan books.

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