Evaluation of Factors Affecting Profitability – A Study on Listed NBFC-Ds in India

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Abstract

Globally, the shadow banking sector has been expanding, and NBFCs play a significant part in the sector's activities. The intervention of regulatory authorities, prudential norms, and timely reforms made NBFCs par with traditional banks in the financial sector. The study aims to understand the non-banking financial system in India in the context of existing regulations and sector performance. The current research paper focuses mainly on the profitability of Listed NBFC-Ds in India and examines their financial conduct from 2012 to 2022 by analyzing certain company-specific and macroeconomic factors. Six listed NBFC-Ds' financial data for an 11-year study period, making a panel of 66 observations, were considered for the study. Panel data regression was conducted employing the fixed effects estimation model to observe the impact of the selected variables on the NBFC-Ds profitability. The estimation results confirm that among the NBFC and macroeconomic variables studied, operating revenue, cash flow from financing activities, debt-equity ratio, and lending rates significantly impact the profits of the listed NBFC-Ds in India. Notably, the study observed a negative impact of the debt-equity ratio on profitability. We suggest increasing operating income and restructuring liabilities to help these companies increase their profits. By providing insights, the current study allows NBFCs to analyze the profitability determinants and frame strategies to enhance business performance. Therefore, this study's focus on NBFC-Ds is not just academically relevant but also of practical interest to financial professionals and analysts.

Keywords: Shadow Banking, Deposit-taking NBFC, Financial performance, Panel-data regression, Profitability, Fixed effects model.

Introduction

India's financial system comprises significant market players like capital markets, investment companies, pension/insurance companies, banks, private financial institutions, non-banking financial companies

(NBFCs), and other intermediaries (Rokade et al., 2020). However, the majority of financial assets in India are owned by the banking industry, controlling the country's financial system. (McCulley, 2009) devised the term "Shadow Banking System" as an umbrella term for financial entities operating outside the banking authorities' supervision. (Nandini & Samy N, 2018) NBFCs yield higher profits than commercial banks due to their diversified investment sources, improved infrastructure sector lending, ease of overseas bond norms, commercial papers, and external borrowings. NBFCs positioned themselves in the priority-sector lending and remote areas with a broader customer base. Despite their relatively smaller size, shadow banks gained a decent share in niche markets through primary lending to those unattended by banks (Kumar, 2019). By expanding access to financial services for individuals and businesses, such intermediaries boosted competition and diversified financial sources in the monetary sector. Lower transaction costs, swift service delivery, a lesser degree of regulations, custom-made services, favorable interest rates, and quick decision-making made NBFCs grab the public's and businesses' attention.

(Rokade et al., 2020) To maintain financial stability, the economy's transparency, liquidity, and credibility concerns must be answered through efficient management and supervision of the NBFC sector. (S. Kumar Das, 2016) and (K. Kumar Das and Ranjan Palai, 2019) highlighted the liquidity and leverage concerns, the arbitrary advantage NBFCs have from regulatory gaps post-2008 crisis period, and the need for a similar treatment of the NBFC sector as banks. Considering the changing risk profile of NBFCs in the Indian economy, many committees were formed to regulate, monitor, and review the degree and depth of their operations. In 1964, for the first time, through the Reserve Bank of India (RBI) Act of 1934, RBI was given the authority to regulate and supervise NBFCs in India. In 1974, through an amendment, RBI further inspected the NBFC activities and fixed penalties for non- compliance with the rules, improper audit procedures, and other obligations. Regulatory committees formed during the 1970s and 1980s mandated licensing and statutory disclosures of NBFCs, while those during the 1990s

worked on structural supervision, operations, credit ratings, Net Owned Fund (NOF) requirements, and other prudential norms. The committees formed in 2014 and 2018 proposed capital adequacy guidelines, NBFC categorization, exposure norms, asset classifications, ceiling on deposit holdings, and other statutory provisions.

Extant RBI's Scale-Based Regulatory (SBR) Framework 2021

Given the progress and interconnectedness of NBFCs in the economy, RBI aimed to tighten the governing structures and align all regulatory guidelines for better monitoring, administration, and financial stability. The supervisory framework of NBFCs (Reserve Bank of India, 2021), designed as a hierarchal pyramid structure, has four layers of regulatory governance. The base layer has NBFCs with nominal risk perception and no public funds, thus requiring minimal regulatory interventions. The middle layer comprises companies involving public money, and larger undertakings, like NBFC-Ds, have a firmer regime. The upper-layer NBFCs undergo sturdy regulatory supervision as they have greater potential for systemic risk and large-scale economic disruption. The top layer remains empty unless the controllers see a need for robust monitoring of specific NBFCs. NBFCs fall into the mentioned layers per size, activity, and systemic risk spillover. These NBFCs, through RBI's weighted /credit point-based parametric analysis, tend to upgrade or degrade to other layers depending on their impact on changing business challenges and economic conditions (Mishra & RBI, 2021).

Literature Review

Literature on the Indian Banking Sector

Various authors have assessed the profitability and efficiency determinants of Indian banks and NBFCs, considering financial performance indicators and macroeconomic conditions. (Sinha & Sharma, 2016) Confirmed a positive impact of capital ratio, GDP growth, and operating efficiency and a negative effect of credit risk and inflation rate on returns of Indian Scheduled Commercial Banks (SCBs). (Jain et al., 2019) further found that management efficiency, asset quality, earnings quality, GDP, inflation, industrial production index, and liquidity

significantly affect commercial banks' return on equity, while the capital adequacy ratio does not significantly impact returns. Similarly, (Dsouza et al., 2022) observed 33 Indian banks and found that liquidity ratio and GDP have a significant negative influence on the return on assets (ROA) and net interest margin (NIM). There is a positive impact of staff expenses and a negative impact of the cost-to-income ratio on ROA and NIM. (Barman, 42023) assessing the impact of bank-specific, industry-specific, and macroeconomic variables on the ROA of Indian commercial banks concluded that capital adequacy, net interest income, diversification, and employee productivity positively affect profitability, while operating efficiency, asset quality, market competition, inflation, economic growth, and exchange rates negatively impact profitability. The stated studies represented the profitability/efficiency in terms of bank returns.

Literature on the Indian NBFC Sector

NBFCs, by lending at a small scale with easy process requirements, are better equipped to target the public than banks. In these studies, the profitability/efficiency of the sector was assessed in terms of NBFC earnings and net profit. (Kalra, 2016) showed a significant impact of loans and advances, total income, and expenses on the net profits of the NBFCs, while the total assets, deposits, and equity show a nominal effect. (Biswas, 2019) analyzed the relationship among earnings, profitability, and liquidity of top NBFCs in India. The results displayed diverse correlations among EPS, profit, returns on assets and capital, cash retention, and liquidity ratios. (Selvaraj & Devi A, 2021) The NBFC performance during the pre-and post-crisis period was analyzed using the CAMEL model. The regression results show that the CAMEL variables and the financial crisis significantly affect the net profit margin. (Ghosh et al., 2021) on the profitability of NBFCs determined that GDP and inflation negatively influence the profits, while net sales, EPS, finance cost, and share capital positively impact profits.

Literature on Foreign Economies' Banking Sector

Studies using various company, industry, and economic factors were conducted to assess the performance and efficiency of banking and the shadow banking sector of many countries. A study of 74 Islamic banks determined a significant impact of capital, asset quality, and liquidity and an insignificant effect of GDP, inflation, interest rates, and tax policies on bank profits (Sanwari & Zakaria, 2013). The study on factors impacting banks' profit in Indonesia (Pamuji Gesang et al., 2014) and (Yudaruddin, 2017) confirmed that bank-specific factors like profitability, efficiency, risk, growth, capital, etc., and external market factors significantly affect profits and net interest margin of commercial banks in Indonesia. Further, GDP growth and inflation rate affect NIM, ROA, and ROE. (Klein & Weill, 2022), Using data from 132 countries confirmed that bank profitability positively affects economic growth and financial stability in the short and long run. Meanwhile, money supply and monetary policy cyclically influence banks' profits. The study (Fabian & Ko išová, 2023) stated that the EU's banking sector's net interest rate (NII) is positively influenced by short-term interest rates while negatively by long-term rates and the total assets do not impact the NII rate.

Literature on Foreign Economies' Non-Banking Sector

(Hodula et al., 2017) From Spain estimated the factors affecting the shadow banking system by analyzing the financial sector's assets, interest rates, GDP, and term spread and found that low-interest rates and more term spread are responsible for the sector's growth. A study on EU member states (Kjosevski et al., 2020) showed that all the financial sector participants, like banks, pension/insurance companies, NBFCs, and other shadow banks, complement each other. They concluded that GDP and interest rates positively affect the sector's growth, and the M2/GDP ratio negatively impacts it. The financial determinants like the shadow bank's size, insurance, and pension funds positively impact the sector's growth. A study of Non- banking Credit Organizations and Azerbaijan's economic growth (Alirzayev et al., 2020) concluded that increasing non-bank credit and capital investments increases the non-oil GDP. (Gabrieli et al., 2018) The Granger causality test showed the effect of GDP,

CPI, M1, size of the shadow banking system, and base interest rate on Chinese monetary and lending policies. The rise in the shadow banking sector's size increases the money supply but weakens the interest rate. (Khowaja et al., 2021) NBFCs' contribution towards the progress of MSME and agricultural sectors in Pakistan shows a significant positive relation between the economy's total lease financing, NBFIs lease financing, and SME sector contribution to GDP. The study suggested extending the asset-based and lease financing services to the semi-urban and rural markets.

Research Gap

From the existing literature, it is evident that several studies have been conducted in India and other countries to assess the profitability and growth determinants of a business/sector. Various methodologies were used to understand the micro and macroeconomic determinants and the quantitative dynamics of those variables. However, few studies show contradicting results on the determinant or country-wise scope. Moreover, no study has explicitly worked on NBFC-Ds in India. Hence, to add value to the extant literature, the current study was framed considering only the listed NBFC-Ds and empirically testing the factors influencing profitability in the Indian context, as no such research has been done so far.

Objectives of the study

1. To analyze the financial performance of the Indian NBFC sector and Listed NBFC-Ds

2. To assess the effect of company-specific and macroeconomic variables on the profitability of listed NBFC-Ds in India

Hypothesis

H01: The selected company-specific variables do not have a significant impact on the profitability of listed NBFC-Ds

H02: The selected macroeconomic variables do not have a significant impact on the profitability of listed NBFC-Ds

Scope and Limitations of the Study

The study includes only a few selected company-specific and macroeconomic factors to estimate profitability determinants. A key limitation is that only the listed NBFC-Ds were studied in the financial performance analysis. Moreover, the study only considered the Indian NBFC sector. The sample studied does not include other categories of NBFCs operating in India, such as the unlisted NBFC-Ds, NBFC-NDs, systemically important companies, etc.

Research Methodology

Data sources: The study includes only secondary data collected from journal articles, reports, publications from the Reserve Bank of India (RBI), annual reports and other disclosures on respective company portals, and other reliable databases like CMIE ProwessIQ, Statista, money control, World bank, and IMF.

Period of the study: The study was conducted over 11 years, from 2012 to 2022.

Sample selection: For the financial performance analysis, only the listed NBFC-Ds were taken as the study sample from the list of NBFC-Ds registered with RBI. Annual data on the six companies' financials was collected, and a panel data set of 66 observations was made for the study period. As per their business activity, all the companies selected are Investment and credit companies (NBFC-ICC) and fall under the upper and middle layers of the regulatory regime.

Statistical tools and techniques: The methodologies and variables in the study were used based on previous works and literature. The data collected on the performance and growth of the NBFC sector and Listed NBFC-Ds was analyzed based on certain company-specific, sector-specific, and macroeconomic variables. Regarding assessing profitability determinants, the stationarity of the panel data was tested using the Augmented Dickey-Fuller (ADF) test. The estimated model was tested for multicollinearity, heteroskedasticity, cross-sectional dependence, and autocorrelation. The study employs the fixed effects model as the predictor variables' parameters under the study are constant/non-random. For the panel data regression on NBFC-Ds' profitability determinants, the fixed effects-least squares model estimation was carried out using statistical tools like SPSS and EViews 12.

Performance of the NBFC sector in India
Table 1: Yearly trend in overall NBFC sector's flow of funds (YOY growth %)

Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
No. of NBFCs	12385	12225	12029	11842	11682	11522	11423	9738	9556	9567	9500
Total Borrowing	16.0	14.2	9.8	9.7	8.7	-7.2	28.9	50.3	13.8	11.8	16.7
Total Lending	16.4	16.0	11.2	11.3	11.0	12.8	19.2	17.8	7.2	9.7	7.6

Source: Author's compilation from banking trends and progress reports, RBI

Table 1 shows the yearly trend of NBFC number, total NBFC lendings (outflow), and the total borrowings (inflow) growth over the study period. The number of NBFCs has declined significantly over the years. Though the borrowings started to decrease in the initial study years, there was an extreme rise during 2018 and 2019 during the credit-default crisis period, followed by a sharp fall. On the other hand, total lending had a diminishing trend for a major period except during 2017-2019. NBFC lendings were exempted from taxable income under GST. The sharp rise in currency conversions due to demonetization in 2016 and GST implementation in 2017 potentially increased their borrowing and lending capacities.

Figure 1: Trend of NBFC sector-specific and Macroeconomic indicators (percentage)
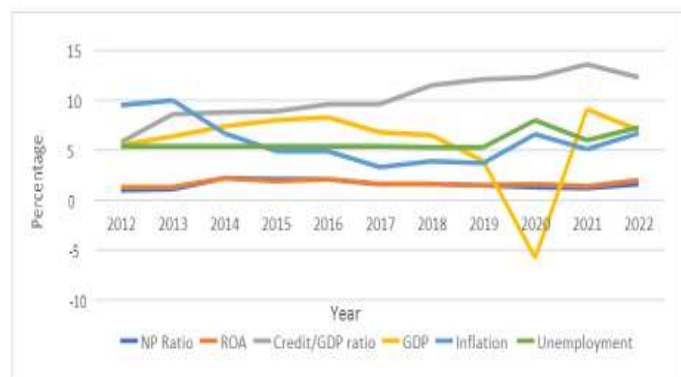
Source: Authors compilation from RBI reports, World Bank data

Figure 1 shows the year-wise trend of the NBFC profitability and efficiency indicators, viz., net profit ratio (NP), return on assets (ROA) and NBFC's total credit to GDP ratio, and the macroeconomic indicators GDP, inflation, and unemployment rates during the study period. The NP ratio and ROA of the NBFC sector have shown stable performance over the study period. The NBFC's credit-to-GDP ratio has shown firm growth over the years, signifying the sector's progress despite the decline in its number, as shown in Table 1.

Regarding the macroeconomic indicators, GDP increased till 2016 but declined during the demonetization and GST periods and had a negative rate during the pandemic. However, there has been a tremendous rise in GDP post-pandemic. The inflation rates have decreased in the past decade, increasing individuals' purchasing power. On the other hand, the unemployment rate was steady till 2019 and shot up later due to the raised financial burden, adverse business conditions, and uncertainty in livelihood during the global pandemic.

Deposit-Taking NBFCS (NBFC-Ds)

In 1998, RBI categorized those NBFCs, having the Reserve Bank's authorization to accept/hold public deposits, as NBFC-Ds. An NBFC-D can accept public deposits if it maintains the minimum NOF specified, Capital-Risk Assets Ratio (CRAR), and other prudential norms specified. Moreover, these companies should comply with

the RBI's credit rating procedure to accept public deposits. They can only issue term deposits at a maximum interest rate of 12.5% p.a., renewable for a minimum period of 12 months and a maximum of 60 months (RBI, 1998). Due to the non-applicability of deposit insurance, RBI does not guarantee repayment of deposits by NBFCs.

**Table 2: Total Public Deposits of NBFC sector in India (Amount in Crores)**

Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
No. of companies	273	256	242	222	203	179	169	82	70	114	84
Total Deposits	10000	10902	14390	32124	28627	32176	31989	41605	50044	124534	141508

Source: Aggregate deposits of NBFC sector, Database of Indian economy, RBI

Table 2 displays the growth of deposit-accepting non-banking companies in India and the value of public deposits held over the study period. The table shows that though the number of companies has declined significantly, the total public deposits have followed an increasing trend. This portrays the significant performance of those reporting companies despite the economic challenges and tightening of deposit acceptance regulations by RBI.
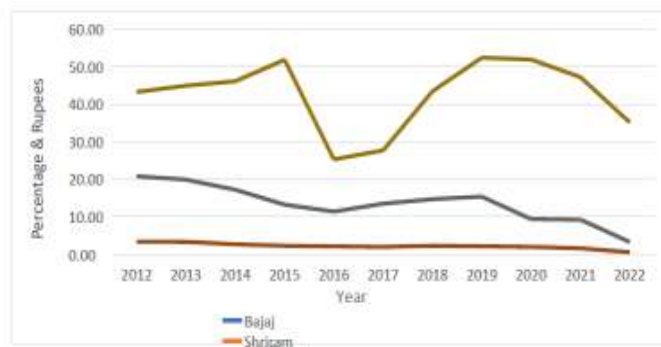
Performance of Listed NBFC-Ds

Figure 2: Trend of average operating income of listed NBFC-Ds
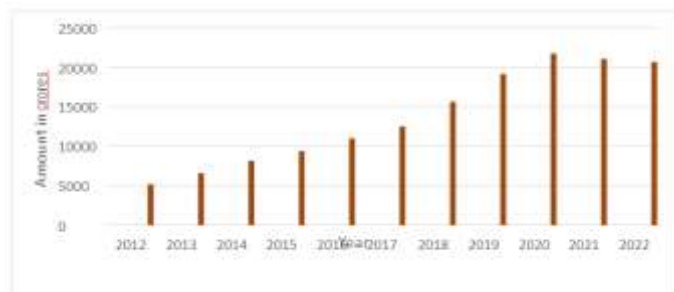
Source: Authors compilation from company annual reports and CMIE database

Figure 2 displays the movement of the average operating income of the Indian-listed NBFC- Ds. The chart shows an increasing trend depicting the sound performance of the listed NBFC- Ds over the study period. However, the average operating income has slightly declined during the post-pandemic years, indicating a drop in overall business activities.

Source: Authors compilation from company annual reports and CMIE database

Figure 3 presents the trend of listed NBFC-Ds' averages of return on assets (ROA), return on equity (ROE) expressed in percentage, and earnings per share (EPS) expressed in rupees. The graph shows that over the study period, the ROA decreased while the ROE fluctuated yet drastically declined despite the rise in their operational efficiency. The EPS trend was highly volatile as broader outliers potentially affected the average. The movement in net profits of the listed NBFC-Ds can be attributed to the instability observed.

Fixed Effects Estimation Model

Inferring from the book 'Statistical Thinking of the 21st Century,' (Poldrack, 2019) by Stanford University, a basic linear regression model of statistics is a function of the model variables and the error, and such model with a single explanatory variable is expressed as $y = \beta_0 + x * \beta_x + e$.

Where β_0 is the constant term of the model, βx represents the coefficient impact/expected change by one unit shift in x, and e is the unexplained variance or error.

The Fixed effects estimate is a statistical OLS model where the variables' limits are non-random/fixed quantities. It assumes only one definite effect size in the study and that any differences observed are due to chance, i.e., unexplained error. This model avoids omitted variable bias (chance/error) and is more appropriate for a small number of cross-sectional studies of the average effect of variables due to better generalization of inferences. Few studies (Sanwari & Zakaria, 2013), (Yudaruddin, 2017), (Ghosh et al., 2021) carried out considering time and other model-specific parameters and variables to determine the factors affecting a company's or sector's profitability. The equation estimate is constructed as follows for our current study on assessing the profitability determinants of listed NBFC-Ds.

$$PAT_{it} = \beta_{0i} + \beta_1 * OP_{it} + \beta_2 * + CFFA_{it} + \beta_3 * NNPA_{it} + \beta_4 * DER_{it} + \beta_5 * GDP_t + \beta_6 * CPI_t + \beta_7 * M1_t + \beta_8 * CBLR_t + u_{it}$$

(Where, PAT = Profit after taxes, β_{0i} = constant term, OP = Operating Revenue, CFFA = Cash flow from financing activities, NNPA = Net Non-performing assets ratio, DER = Debt- Equity ratio, GDP = Gross Domestic Product, CPI = Consumer Price Index, M1 = Narrow money supply, CBLR = Lending rate, i = company, t = time, and u it = idiosyncratic error term)

Data Analysis and Interpretation

Table 3: Correlation results of selected NBFC and macro-economic variables

3. a. Descriptive Statistics

Variable	PAT	OP	CFFA	NNPA	DE R	GD P	CPI	M1	CBL R
Mean	2210.81	16381.39	4139.75	1.97	4.79	5.75	5.93	11.51	9.61
Median	721.47	3908.7	1789.50	1.04	4.87	6.8	5.1	10.49	9.51
Std Dev	3297.97	27403.3	5875.59	1.72	0.96	3.92	2.14	4.68	0.62

Source: Author's calculations

Table 3. a displays the selected variables' central tendency, showing that most variables' means are greater than the medians. All variable distributions except DER and GDP are positively skewed, depicting that most of the values are less than the variable's average. The dispersion (Std Dev) of the variables shows that except for NNPA, DER, and CBLR, all other variables have widely scattered deviations, indicating volatility. The standard deviation (SD) of PAT, OP, and CFFA is extremely higher from +/- 2 SD, indicating broader outliers, as the study sample includes companies of two layers of the regime with diverse asset sizes and market capital.

3. b. Correlation Matrix

Variable	LogPAT	LogCFFA	LogOP	NNPA	DER	GDP	CPI	M1	CBLR
LogPAT	1.000								
LogCFFA	.660	1.000							
LogOP	.966	.599	1.000						
NNPA	-.076	-.152	.054	1.000					
DER	-.346	-.067	-.329	.113	1.000				
GDP	-.064	-.184	-.060	-.149	-.009	1.000			
CPI	-.073	-.004	-.122	-.397	-.148	-.126	1.000		
M1	.079	.008	.090	.218	-.084	-.281	-.134	1.000	
CBLR	-.070	.265	-.191	-.498	.221	.102	.476	-.300	1.000

Source: Author's calculations from company annual reports and CMIE database

Note: The absolute values of PAT, CFFA, and OP were converted to Log values using natural log (Ln) for data harmonization.

In Table 3. b of Pearson's correlation, GDP and CPI have an inverse relation with the NBFC variables. An increase in GDP and CPI generally drives the public to banks and NBFCs for more financial aid. However, the current study contradicts this by negatively impacting the profits and efficiency of the listed NBFC-Ds. The increased money supply (M1) has a positive correlation with NBFC profits and NNPAs but a negative correlation with DER. A decline in a company's outside debt/liability payments causes a decrease in DER. The CBLR has a negative association with OP, PAT, and NNPA, as the increased lending rates discourage NBFCs from borrowing from RBI, leading to lesser fund availability. CBLR positively correlates with CFFA and DER due to the company's other borrowings and interest income from lending. Among the predictor variables, PAT has a positive correlation with OP, CFFA, and M1 and a negative correlation with NNPA, DER, GDP, CPI, and CBLR.

Augmented Dickey-Fuller Unit root test of Stationarity

The ADF stationarity test was calculated using Fisher's asymptotic Chi-square distribution. All the variables at both level I (0) and first difference I (1) with one lag period confirmed that the panel data set is stationary, i.e., the variables in the current model estimate do not follow trend.

Multicollinearity of the independent variables

The tolerance (TOL) values closer to 1, and VIF values below 10 indicate no multicollinearity (Gujarati & Porter, 2020). From the results of the multicollinearity test, all the variables' VIF is below the limits, ranging from 1.191 to 2.392. TOL values are closer to 1, concluding that there is no multicollinearity among the variables, thus having a reliable statistical inference.

Heteroskedasticity Test and Cross-Section Dependence Test

The probability value of the heteroskedasticity test, which checks the variance of errors in the current regression model being < 0.05, rejects the supposed H0, proving that residuals are heteroscedastic. Thus, the variance of errors across the cross-sectional observations is not constant but random.

At the same time, the probability value of the cross-sectional dependence of the panel data using the Pesaran CD test is 0.144, viz., > 0.05. Hence, we failed to reject the presumed H0. There is no cross-sectional dependence among the variables; thus, the series is unbiased.

Table 4: Results of fixed effects estimation using least squares regression

Variable	Coefficient	Probability
Log OP	1.151	0.000
Log CFFA	0.128	0.017
NNPA	0.054	0.253
DER	-0.143	0.030
GDP	0.008	0.426
CPI	0.023	0.319
M1	0.001	0.889
CBLR	0.451	0.001
C	-8.076	0.000
Model Summary		
R-squared	0.959	F-statistic	167.2
Adjusted R^2	0.953	Prob. (F-statistic)	0.000
S.E. of Reg	0.529	D-W stat	1.159

Source: Author's calculations

Table 4 considers the Log (PAT) as the dependent variable and Log (OP), Log (CFFA), NNPA, DER, GDP, CPI, M1, and CBLR as independent variables/predictors. The results show that all variables except DER positively impact profitability at a 5% significance level. Among the studied variables, OP, CFFA, DER, and CBLR significantly affect PAT. From the model summary calculated using SPSS, the R2 value indicates that the panel of selected explanatory variables can explain 95.9% of the variability in profitability. The Durbin- Watson value of 1.159 indicates that the data set suffers from slight positive autocorrelation.

Findings and Conclusion NBFCs have become an integral part of our complex financial system and play an essential role in accessing financial services, enhancing competition, and diversifying financial sources. The RBI and Financial Stability Board reports show that India's NBFC sector has grown well in the past decade. The scale-based regulatory system considered many governing aspects and reforms to improve the sector's transparency, integrity, and inclusive functioning. Though the sector's lending decreased and borrowing was unstable during the study period, the steady rise in the net profit, ROA, and total credit-to-GDP ratios shows the non-banking sector's progress.

The performance analysis shows that the non-banking sector's total public deposit holdings and the listed NBFC-Ds' operational income have improved significantly during the past decade. The performance efficiency parameters, average ROA and ROE, have declined while the average EPS of the listed NBFC-Ds was unstable. The correlation coefficients show that the selected NBFC variables have a low and majorly negative correlation with the selected macroeconomic variables. The probability values in the panel regression results under the supposed model show that the profitability of the listed NBFC-Ds is significantly impacted by the OP, CFFA, DER, and CBLR variables. Comparing the studies (Sinha & Sharma, 2016), (Kjosevski et al., 2020), (Ghosh et al., 2021), the current study confirms the positive effect of GDP and operating income on profitability. On the other hand, our results contradict (Sinha & Sharma, 2016) on the impact of DER and CPI on Indian SCBs and NBFC-Ds profitability, displaying a difference in the functioning of the banking and non-banking sectors and their macroeconomic bearings. The null hypothesis, H01, is rejected for OP, CFFA, and DER, proving a significant impact of the variables on the profitability of listed NBFC-Ds, but accepted for NNPA as its effect is not significant. In the case of H02, the null hypothesis stands valid for GDP, CPI, and M1 and is rejected for CBLR, showing a significant effect of lending rate on listed NBFC-Ds profitability.

Suggestions and Future Scope

The results indicate that the set of selected variables has a diverse effect on the profitability of the listed NBFC-Ds. To mitigate the negative effect of the debt-equity ratio, companies can restructure their capital and liabilities to increase their financial coverage and improve credit controls to manage NNPAs better. Moreover, the operating revenue significantly influences the profits more than other variables. Hence, companies can increase their operating income with more production/sales and other direct income-generating operating activities to enhancetheir profitability. Companies might design business strategies according to the changing economic conditions, monetary policies, and lending rates.

For more generalizations, further research can be conducted considering more company or industry variables and micro/macro-economic factors, using other statistical methods, tools, techniques, and larger samples. Authors can also examine the same study by considering different categories of NBFCs in India and making a sectoral or country-wise comparison.

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