# RISK MANAGEMENT OF NON-BANKING FINANCIAL COMPANIES: A CASE OF INDIA

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## ABSTRACT

The non-banking financial companies of India are devoted to the mobilizing of financial assets in the Indian economy. It holds these assets, invest them as leverage to create more wealth. In order to show that these financial companies are reliable the information about the risk in this industry and how it is mitigated are important to consider. Amongst the financial risk's, liquidity risk, operational risk and credit risk of non-banking financial companies are most important to consider. The study considers 8 non-banking financial companies listed on NSE among the top NBFCs in India. The variables used in this study are ROI, Current Ratio (CR), Quick Ratio (QR), Operating Profit Ratio (OPR), Interest Coverage Ratio (ICR), Fixed Charges Coverage Ratio (FCCR), Debt-equity Ratio (DER) and Asset turnover Ratio (ATR). The data collection was based on secondary data and the period of the study is 2008-2018.The results clearly indicate that Financial Charges Coverage Ratio (FCCR) has a negative impact on Return on Investment of Non-Banking Financial Companies. Further, the results found that Interest Coverage Ratio (ICR) and Asset Turnover Ratio (ATR) has positive impact on Return on Investment (ROI) of Non- Banking Financial Companies. Overall the study found that there is no impact of Current Ratio (CR), Debt- Equity Ratio (DER), Operating Profit Ratio (OPR) and Quick Ratio (QR) on Return on Investment (ROI) of Non- Banking Financial Companies. The understanding of the relationship between liquidity, operational and credit risk and the returns of a non-banking financial company will help investors, fund managers, securities traders,etc. make a sound and informed decision about investments in the non-banking financial sector.

**Key words:**Non-Banking industry, Financial risk, Liquidity Risk and Credit Risk

## 1.   INTRODUCTION

With globalization and dynamic changes in business condition, the volume and complexities of risks influencing organizations are on persistent ascent. A Non-Banking Financial Company (NBFC) is an organization enlisted under the Companies Act, 1956 occupied with the matter of credits and advances, procurement of offers/stocks/securities/debentures/securities issued by Government or nearby specialist or other attractive securities of a like sort, renting, enlist buy, protection business, chit business yet does exclude any foundation whose primary business is that of agribusiness action, modern action, buy or closeout of any

merchandise (other than securities) or giving any administrations and deal/buy/development of resolute property.

NBFCs can be ordered into Asset Finance Company (AFC), Investment Company (IC), Loan NBFCs raise reserves basically by issuing debentures and business papers and get from banks. All things considered, their expense of financing has really been falling, in spite of a spike in fundamental rates, as business papers were moderately less expensive. Many home finance organizations moved towards shorter-residency borrowings as of late, as the shorter-residency getting wound up less expensive by around 100 premise focuses that more extended residency ones, said JM Financial.

In any case, there untruths the issue, as it has now made a benefit risk the executives (ALM) confuse in the shorter residency basin of as long as one year, the business said.Financier Emkay Global says 12 percent DHFL's liabilities (about 17 percent of market borrowings) are developing in three months against 9 percent of absolute resources (almost 3 percent advances).Among resource fund organizations (AFCs), Cholamandalam Finance has 15 percent of liabilities (14 percent of market borrowings) developing in 3 months against 7 percent of absolute resources (7 percent advances). Shriram Transport likewise has an unfriendly ALM jumble with quicker obligation development.

Around 50 percent (NCDs-CPs) of NBFC borrowings were to a great extent at a settled rate, while 35-37 percent of bank borrowings get repriced on a quarterly or yearly premise. As the offer of bank borrowings starts to increment from Q2 FY2018 and borrowings with yearly reset dates are required to get repriced from August-September, retail NBFCs are relied upon to confront expanded estimating weight in the second 50% of FY2019. Each third multibagger of most recent five years would be a NBFC. India has been seeing a gigantic flood in purchaser use as of late and these non-bank mediators have been developing this loaning quicker than banks.

At the point when IL&FS first defaulted on its commitments, it made a few examiners sit up and observe. The organization has defaulted on more than five of its commitments since August, put its central station on the square, and its MD and CEO of the money related administrations arm has since resigne. There were rumours about a fundamental liquidity issue in the NBFC space, while a few examiners burrowed further to guarantee resource risk confound among generally players. From that point on, NBFC stocks have been on a free fall. A sort of infection at that point spread to other monetary stocks, and the benchmark records smashed, making bearishness all around.

## 2. REVIEW OF LITERATURE

Many authors and writers have been working on different areas and dimensions of Risk Management. According to (Spric, 2013)Risk management can enhance company's value by decreasing costs related to financial difficulties, agency cost of debt, taxes, and costs of external financing. Companies that are more

leveraged and have more investment opportunities have more incentives to manage corporate risk. By using Risk adjusted value approach, paper has shown that efficient risk management can influence company value drivers and positively affect overall enterprise value.

According to (Switzer, Tu, & Wang, 2017)Governance has a high impact on default risk in Asian counties compared to European countries. For tier 1 banks governance mechanism reduce default risk. There is a positive relationship between risk management practices and risk variables and no association between the number of years in operation and active borrowers and gross loan portfolio of microfinance institution. (Devi & Shaikh, 2017)**.**

The real estate and banks usually act as net senders of extreme risk spillovers, and insurance and diversified financials as net recipients, which is consistent with the evidence from the recent global financial crisis(Wang, Xie, He, & Stanley, 2017). Detailed analyses of the significant internationally relevant crises within large financial institutions over recent years have identified the internal risk environment as a key explanatory factor.(Sheedy, Griffin, & Barbour, 2017)

Financial constraints impede both financing and hedging. There is no evidence that risk shifting, changes in interest rate risk exposures, or regulatory capital explain hedging behavior. (Rampini, Viswanathan, & Vuillemey, 2017)

Most of the MFIs have not adopted risk management tools and techniques so far in their institutions to minimize risks. The study also found that the small MFIs are lacking qualified and professional persons in management and hence facing more strategic and governance risks. (Sana & Biswas, 2018). According to (Kumar, Sanoj;, 2016)NBFCs are criticized about the high interest rates and non availability of credit due to guidelines and providing credit to only specific business.

According to (Lin, Sun, & Yu, 2016), Systemic risk contributions are closely related to certain institution characteristic factors. A systemic risk measure is a great alternative tool for monitoring early warning signals of distress in the real economy.According to (Khan M. I., 2015), Financial institutions suffer with more losses due to operational risk rather than market or credit risk.After a long list of failures of financial institutions of developed countries they understand the reasons behind their failures and that were their ignorance towards the operational risk management.

### 3. OBJECTIVES OF THE STUDY

1) To measure the liquidity, operational, credit risk and Return on Investment (ROI) of the selected listed Non-Banking Financial Companies of NSE.
2) To analyze the impact of liquidity, operational and credit risk on financial performance (ROI) of Non-Banking Financial Companies.

## 4. HYPOTHESIS

$H_0$– There is no significant impact of Current Ratio (CR), Quick Ratio (QR), Operating Profit Ratio (OPR), Interest Coverage Ratio (ICR), Fixed Charges Coverage Ratio (FCCR), Debt-equity Ratio (DER) and Asset turnover Ratio (ATR) on ROI (Return on Investment) of Non-Banking Financial Companies.

$H_1$ – There is a significant impact of Current Ratio (CR), Quick Ratio (QR), Operating Profit Ratio (OPR), Interest Coverage Ratio (ICR), Fixed Charges Coverage Ratio (FCCR), Debt-equity Ratio (DER) and Asset turnover Ratio (ATR) on ROI (Return on Investment) of Non-Banking Financial Companies.

## 5. METHODOLOGY

5.1 Period of study: The data is collected for the period of last 10 years (2008-2018).

5.2 Type of data: Dependent Variable: ROI (Return on Investment) Independent Variables: Current Ratio (CR), Quick Ratio (QR), Operating Profit Ratio (OPR), Interest Coverage Ratio (ICR), Fixed Charges Coverage Ratio (FCCR), Debt-equity Ratio (DER) and Asset turnover Ratio(ATR)

5.3 Source of data: For the purpose of this study the data collection was based on secondary data and major source of date is the annual report of the non-banking financial companies.

5.4 Tools for analysis of data: Several statistical tools like Descriptive Statisticsand Regression are used for the analysis of the data and its interpretation.

For the purpose of regression analysis ROI (Return on Investment) is used as the dependent variables and Current Ratio (CR), Quick Ratio (QR), Operating Profit Ratio (OPR), Interest Coverage Ratio (ICR), Fixed Charges Coverage Ratio (FCCR), Debt-equity Ratio (DER) and Asset turnover Ratio(ATR)are used as independent variables.

Return on investment (ROI) = (Gain from Investment - Cost of Investment)/Cost of Investment

Current Ratio = Current Assets/Current Liabilities

Quick Ratio = Liquid Assets/Current Liabilities

Operating Profit Ratio = Operating Profit/Revenue From Operations

Asset Turnover Ratio = Total Sales/Average Total Assets

Debt Equity Ratio = Total Liabilities/Total Shareholders Equity

Interest Coverage Ratio = EBIT/Interest Expenses

FCCR= EBIT + Fixed Charges Before Taxes/ Fixed Charges Before Taxes + Interest

$$ROI_{All(t)} = \alpha + \beta_1\,CR_{(i)(t)} + \beta_2\,QR_{(i)(t)} + \beta_3\,OPR_{(i)(t)} + \beta_4\,ICR_{(i)(t)} + \beta_5\,FCCR_{(i)(t)} + \beta_6\,DER_{(i)(t)} + \beta_7\,ATR_{(i)(t)} + \varepsilon i$$

## 6. DATA ANALYSIS AND INTERPRETATION

**Table:1 shows the descriptive statistics results of ROI:**

| DESCRIPTIVE STATISTICS | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **ROI** | **QR** | **OPR** | **ICR** | **FCCR** | **DER** | **CR** | **ATR** |
| **Mean** | 12.912 | 934.4 | 149.088 | 146.425 | 147.287 | 407.881 | 264.625 | 17.012 |
| **Median** | 12.26 | 446.5 | 83.636 | 148.5 | 150.5 | 385.5 | 218 | 17 |
| **Maximum** | 21.952 | 5933 | 2289.309 | 357 | 357 | 980 | 1101 | 32 |
| **Minimum** | -2.4 | -508 | -1768.07 | -135 | -131 | 22 | -498 | 0 |
| **Std. Dev** | 4.183 | 1240.069 | 438.773 | 54.382 | 54.119 | 247.402 | 274.874 | 6.803 |
| **Skewness** | -0.733 | 2.156 | 1.869 | -0.88 | -0.844 | 0.3 | 0.615 | -0.2 |
| **Kurtosis** | 5.31 | 7.668 | 17.105 | 14.173 | 13.965 | 2.549 | 4.823 | 2.743 |
| **Jarque-Bera** | 24.967 | 134.66 | 709.843 | 426.469 | 410.297 | 1.879 | 16.126 | 0.755 |
| **Probability** | 0 | 0 | 0 | 0 | 0 | 0.03 | 0.003 | 0.006 |

The results from table 1 indicates the differences in mean of all the variables, both dependent variable (ROI) and independent variable (Current Ratio (CR), Quick Ratio (QR), Operating Profit Ratio (OPR), Interest Coverage Ratio (ICR), Financial Charges Coverage Ratio (FCCR), Debt Equity Ratio (DER) and Asset Turnover Ratio (ATR)) used in the econometric model considered for the study. Viewing the table, it is seen that the mean estimation of all factors ranges from minimum -1768.07 and maximum of 2289.309 for QR. There is existing moderate differences in the values of all variables as the standard deviation and mean has slight differences.

**Table: 2 shows the correlation results on ROI:**

| CORRELATION ANALYSIS | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **ROI** | **ATR** | **CR** | **DER** | **FCCR** | **ICR** | **OPR** | **QR** |
| **ROI** | 1 | 0.7983 | 0.0299 | 0.1325 | 0.5248 | 0.5248 | 0.1759 | -0.1342 |

The table 2 of Correlation grid estimates how much these factors are associated. It extends in an incentive from 0 to 1. Higher the esteem, more noteworthy will be the correlation. As esteem is under 0.5, it portrays that needy variable has no noteworthy correlation with autonomous variables.The table of correlation network demonstrates that factors have low and negative correlation with one another aside from ATR, FCCR and ICR which are emphatically associated.

**Table: 3 shows the regression results of ROI:**

| REGRESSION ANALYSIS | | | | |
|---|---|---|---|---|
| Dependent Variable: ROI | | | | |
| Method: Least Squares | | | | |
| Sample: 80 | | | | |
| **Variable** | **Coefficient** | **Std. Error** | **t-Statistic** | **Prob.** |
| **C** | 1.9425 | 1.02714 | 1.8912 | 0.0626 |
| **ATR** | 0.4368 | 0.0494 | 8.8348 | 0 |
| **CR** | -0.0006 | 0.0011 | -0.5766 | 0.5659 |
| **DER** | -0.0021 | 0.0012 | -1.7764 | 0.0799 |
| **FCCR** | -0.9556 | 0.2405 | -3.9726 | 0.0002 |
| **ICR** | 0.9952 | 0.2398 | 4.1487 | 0.0001 |

| | | | | |
|---|---|---|---|---|
| OPR | -0.0023 | 0.0014 | -1.62 | 0.1096 |
| QR | -3.4 | 0.0002 | -0.1289 | 0.8978 |
| R-Sq | 0.8084 | | Mean D. Var | 12.9126 |
| Adj. R-Sq | 0.7898 | | S.D. Dep. Var | 4.1833 |
| S.E. Regr | 1.9178 | | Akaike | 4.2349 |
| S. Sq. Resid | 264.8353 | | Schwarz | 4.4731 |
| Log | -161.3983 | | H. Quinn | 4.3304 |
| F-Stat. | 43.4085 | | D/W Stat | 0.5315 |
| Prob(F-Stat) | 0 | | | |

The overall summary of the table 3 shows that the regression analysis shows the probability value (F-Stat) is 0.000000 (p<0.05) which identifies there is a significant relationship between the dependent variable (ROI) of all the companies and independent variable of all at 1% significant suggests a linear relationship among the variables. Where here we tend to reject the null hypothesis $H_0$ as the model is significant.

The estimates of Adjusted R-square is 78% and the R-square gives 80%, which means that there is 80% change in the dependent variable. Results shows that the values of variables (CR, DER, OPR, QR) are not statistically significant, shows there is no significant relationship between the ROI and the variable. Whereas, variables (ICR, FCCR, ATR) shows that they are statistically significant at 1%, shows there is a significant relationship of probability with these companies. And the Durbin-Watson has taken which shows that the statistic of it is 0.531 which means there is no auto correlation.

The tables even give the estimations of relapse coefficients and the steady, which is the normal estimation of the reliant variable when the estimation of autonomous variable is equivalent to zero. Where it very well may be shown that according to the relapse coefficient demonstrate that when there is increment in ATR by 1% there will be increment in ROI by 43.68%. Relapse coefficient of CR show that estimate increments by 1% the ROI will diminish by 0.06%. Relapse Coefficient of DER show the expansion by 1% the ROI will diminish by 0.21%. Relapse Coefficient of FCCR demonstrate the expansion by 1% the ROI will diminish by 95.56%. Relapse Coefficient of ICR demonstrate the expansion by 1% the ROI will diminish by 99.52%. Relapse Coefficient of OPR demonstrate the expansion by 1% the ROI will diminish by 0.23%. Relapse Coefficient of QR demonstrate the expansion by 1% the ROI will diminish by 340%.

## 7. CONCLUSION

The study pertains to analyze the impact of liquidity, credit and operational risk of Non-Banking Financial Companies on Return on Investment (ROI) of Non-Banking Financial Companies. The regression results clearly indicate that Financial Charges Coverage Ratio (FCCR) has a negative impact on Return on Investment of Non-Banking Financial Companies. Further, the results found that Interest Coverage Ratio (ICR) and Asset Turnover Ratio (ATR) has positive impact on Return on Investment (ROI) of Non- Banking Financial Companies. Overall the study found that there is no impact of Current Ratio (CR), Debt- Equity Ratio (DER), Operating Profit Ratio (OPR) and Quick Ratio (QR) on Return on Investment (ROI) of Non-Banking Financial Companies.The understanding of the relationship between liquidity, operational and credit

risk and the returns of a non banking financial company will help investors, fund managers, securities traders,etc. make a sound and informed decision about investments in the non-banking financial sector as when the Earnings before Interest and Tax (EBIT) increases and the interest charges decrease the Interest Coverage Ratio (ICR) increases making a positive impact on ROI. Similarly, if total sales increase and total average assets decrease, there is an increase in the Asset Turnover Ratio (ATR) which positively effects the ROI. Therefore an investor should consider factors like EBIT, Interest Charges, total sales, total average assets before making investment decisions to make sure his investment is a profitable one.

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