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GLOBAL JOURNAL OF ENGINEERING SCIENCE AND RESEARCHES RISK MANAGEMENT ISSUES IN NBFC'S IN INDIA

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ABSTRACT

In recent times NBFCs have gone through many downfalls and have faced huge losses because of which Reserve Bank of India has to issue certain rules so that NBFCs loss can be neutralized.

The main challenge of NBFCs is to provide loans to low households without any proper collateral and also to benefits society. Because of this risk management in NBFCs become a very important topic. The research used in this is descriptive research with the main objective to study Risk Management in NBFCs and different Risk Management Methods use by them in India. The Study examines the relationship between risk management methods and risk variables. In this research, 14 NBFCs from various categories were selected randomly as a sample. The hypothesis was tested by using statistical tools, and technique such as T-Test and CAMEL Model. It is observed that there is a significant relationship between Risk Management Methods and Risk Variables.

Keywords: Non-Banking Finance Company, Risk management, Risk Management Methods, Risk variables.

I. INTRODUCTION

NBFC's are microfinance institutions that use to provide low loans to the customers without any collateral, Because of this concept of NBFC country look towards it with a hope that it will help them as a means to reduce poverty. The main challenge of NBFC's is to create social benefits and promoting low-income households by providing them loans without any collateral. Because of this the need for risk management arises in NBFC's. The NBFCs sector in India today is growing steadily and is undergoing several important changes in this sector after IL&FS crisis like only those NBFCs having minimum capital base of 2crore will get licenses from RBI and can easily run their business, NBFCs have to take permission from RBI before acquire/merge, RBI also said that NBFCs has to give 30 days' public notice before effecting sales/transfer of ownership. During the year 2014-2015 NBFC's industry has shown strong growth and strengthens its network by providing loans to those people to who banks don't lend their money. The financial year 2016-2017, was remembered as a year of 'coming of age' for NBFIs. According to a report, companies that were not in banking activities have given tough competition to commercial banks. NBFC's were playing an important role in the finance sector. In the Financial Year, March 2017 the shares of NBFC are increased from 9.5% to 15.5%. After the past and the recent crisis in the NBFCs sector, it becomes necessary for the NBFCs sector to improve Risk management. Risk management is identifying, evaluating, analyzing, monitoring and controlling risk within a company so that company objectives can be accomplished

II. LITERATURE REVIEW

Devi Suganda Pagadala (2017) has proposed a research study on, "Risk Management Practices of Selected Microfinance Institution in Telangana, India," the main objectives after this research is to study the risk management methods of microfinance in India. It usually studies the relationship between risk management methods and risk variables and he founds that MFIs in Telangana state are in the process of establishing sound risk management. This study concludes that there is a positive relationship between risk management methods of MFIs and risk variables. Harelimana JB (2017) has proposed research on, "The Role of Risk Management on Financial Performance of Banking Institutions in Rwanda". The main objective of this research is to judge the role of risk management on financial performance in Rwanda. It was found that there is a very strong relationship between financial performance and risk management. It was found that banks in Rwanda are having





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profit because of good risk management because the main role of risk management is to improve profitability. Akwasi A Boateng & Gilbert O. Boateng (2014) another researcher carried out the study on "An Appraisal of Risk Management Practices of Microfinance Institutions". It was discovered that microfinance institutions have to face numerous obstacles in their way to success. Studies tell us that institutions managements are ignorant about the risks their organizations face with risk management techniques arrange reactively. By embedding a structured approach to enterprise risk management within MFI's potential benefits such as reducing the over-management of risks towards MFI's can be realized. Ramesh Subramanian (2014) has proposed research on "Financial Inclusion-Microcredit-Risk Management" the main objective of this research is to provide credit finance to the public without any collateral. It was found that MFIs use to adopt proper risk management methods so that they can secure themselves against various risks. Seyram Pearl Kumar Yakubu Awudu Sare (2013) has purposed a study on "Risk Management Practices among Commercial Banks in Ghana"; the main objective of this study is to compare the risk management methods among the various commercial banks in Ghana. It was found that there is a negative relationship between risk management methods and its determinants and it was also found that banks in Ghana are efficient in managing risk. Yvonne Mawuko(2013) has purposed a study on "Banking and unbankable: an empirical study of risk and risk management of micro financial institutions in Ghana" its main objective is to explore the risks that microfinance institutions (MFIs) face in their operations and the risk management strategies they adopt to mitigate their risks. It was found that MFIs in Ghana are well known about the risk associated with their process and had designed proper risk management to manage risks. Melkamu, T.(2012) has a purpose a study on Determinants of operational and financial self-sufficiency: An Empirical Evidence of Ethiopian Microfinance Institutions. The overall objective of the study was to study the relationship between microfinance outreach and financial sustainability in Ethiopia. The study specifically aimed at establishing an environment where microfinance institutions' can carry on its operations easily and smoothly in Ethiopia. It was found that the average loan balance per borrowers and profit on gross loan portfolio affects the operational sustainability of Ethiopian MFIs significantly. SSn Gumparthi Sriniv. (June 2010) has proposed a research study on, "Risk Assessment Model for Assessing NBFC's (Asset Financing) Customers "the main objective of this study is to build a Risk Assessment Model for NBFC's. This report consists of the study of the whole industry. Most of NBFC's are operating at high risk because they use to lend money on credit to small and medium enterprises, which is called as high risk. It was found that customers with high credit score use to repay the loan amount on time whereas customers with a low score were found, defaulters. Rosman(2009) has proposed a research framework on RMPs and aspects of risk management Processes. This usually focuses on four aspects of the risk management process. i.e a) Understanding Risk and Risk Management. b) Risk identification c) Risk analysis d) Risk Monitoring.

Gaps between Research Papers

After going through many research papers it makes us know that there are many researchers who had all conducted several studies in banking and other financial areas on Risk Management topics. Few studies on risk management in Microfinance institutions were conducted by few researchers like **Akwasi et.al(2014)**, **Seyram Pearl (2014)**, **Hussien & Faris (2007)** these studies mainly give main priority to what kind of risk management of MFIs. There are few studies that were conducted on MFIs that help them in exploring the performance of MFIs and whose main priority is profitability, these studies were usually conducted by researchers like **Birhanu (2007)**, **Alemayehu (2008)**, **Gashaw Ayele (2014)**, **and Borchgrevink (2005)**. There are some more studies that were conducted to find out the risk management process of banks, by some researchers like **Rosman(2009)**, but none about risk management methods of NBFC's. Out of the total studies, none of the researchers had conducted a proper study on the risk management methods in NBFC's. Having identified this major gap in studies and realized the importance of risk management methods, this research is conducted.

III. OBJECTIVES

- To identify and understand various types of risks faced by NBFCs in India.
- To understand the need for "Risk Management in NBFC's.
- To find out different types of Risk Management techniques adopted by selected NBFC's in India.





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The scope of the study:-

The study usually focuses on the relevance of risk management in NBFC's. It also focuses on various risks that NBFCs faces. The scope is limited to make a small level comparison of the selected Non-Banking Finance Companies relating risk management methods and their impact on the financial performance of the companies. Data will mainly be taken from annual reports and the company's websites.

Research Hypothesis:-

After an examination of the research objectives, the following hypothesis is developed.

 H_0 : There is no significant relationship between risk management methods and risk variables among selected NBFC's in India.

 H_1 : There is a significant relationship between risk management methods and risk variables among selected NBFC's in India.

IV. RESEARCH & METHODOLOGY

Research Design

This study will use a descriptive research design as it will help in finding out the risk management methods of selected NBFCs in India. Mainly quantitative research will be used in this research. A quantitative study consists of variables. In a quantitative study the variables used are generally of two types i) dependent variables ii) independent variables. Risk management methods come under dependent variables. The secondary data will be analyzed by using statistical tools, and technique such as T-Test and CAMEL Model.

Independent Variables

There are four risk variables:-

• Operational risk

It occurs due to the insufficient internal process, people and external events. It involves many risks like fraud risks, communication risks, cultural risks, etc.

• Credit risk.

It usually occurs when the customers who have taken the loan from the lender does not able to fulfill his obligations and become a defaulter. Then the risk which occurs in front of lender or bank is credit risk i.e. NPAs.

• Market risk

It occurs due to risk arising out of uncertainty from the future market. It usually affects banks and financial institutions financial conditions because of fluctuations in market prices of interest rate, currencies, commodities, shares, etc.

Dependent Variables

Risk management Methods / Methods Risk Management Methods are the methods which company's risk management department uses after analyzing both systematic as well as an unsystematic risk so that they can reduce the impact caused by the risk events. Hence it helps us in analyzing where the risk magnitude is very high, high, low or very low. So it can be said that risk management is a dependent variable.

• Various Risk Management Methods:-

a) Avoidance of the Risk: - Under this strategy, measures are taken in such a way that either the risk does not take place or the impact due to risk event should be less. This is the most expensive strategy to apply. Hence it is applied where the risk magnitude is very high.

b)Reduction / Mitigation: -Under this strategy, efforts are made to reduce the impact caused by the risk event. It usually uses when the occurrence of risk is unavoidable.





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c)Acceptance: -This strategy is used for the risks where either the probability of occurrence is low or the monetary loss caused due to risk event is very low then the project manager may accept the risk in most of the cases the project manager may not take any measure.

d)Transfer of Risk: -In this strategy, the impact of risk is transfer to the third party. In this company have to pay a premium to insurance companies for future financial losses that they will go to the face.

Sample Size

There are a total of 11402 NBFCs which are divided into various categories and are registered under RBI. So the population size of this study is 11402. NBFCs are divided into two categories 1) on activity basis 2) on liability structure basis, further NBFCs on an activity basis are further classified into different types of NBFCs. There are total 7 types of NBFCs and out of those 14 NBFCs were randomly selected 2 NBFCs each as a sample size.

Data Collection

The study mainly used secondary data sources. Secondary sources mainly include Financial Statements, Annual Report, and reports from various reputed agencies, Reserve Bank of India and other documents. The period taken is the year 2011 to 2018.

• Credit Risk

Paired Samples Statistics

		in ea bampre			
		Mean	N	Std. Deviation	Std. Error Mean
NBFCs	Performance Before IL&FS Crisis (2011) [Numeric] Performance After IL&FS Crisis (2018) [Numeric]	2.58	12	2.109	.609
		1.67	12	1.231	.355

Paired Samples Correlations

	N	Correlation	Sig.
NBFCs Performance Before IL&FS Crisis (2011) [Numeric]&Performance After IL&FS Crisis (2018) [Numeric]	12	.852	.000

Paired Samples Test

		Pair	red Difference	ces				
		Std.	Std. Error	Interva	nfidence al of the erence			Sig.
	Mean	Deviation	Mean	Lower	Upper	t	Df	(2-tailed)
NBFCs Performance Before IL&FS Crisis (2011) [Numeric] - Performance After IL&FS Crisis (2018) [Numeric]	.917	1.240	.358	.129	1.705	2.561	11	.026





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Paired Sampled T-Test helps in finding the performance of NBFCs before the IL&FS Crisis and performance of NBFCs after the IL&FS Crisis were both highly positively correlated to each other i.e. (correlation value= 0.852). Whereas the Standard Deviation of NBFCs performance before IL&FS Crisis is 2.109 and Standard Deviation of NBFCs performance after IL&FS Crisis is 1.231 which shows that after the crisis there is an increase in NPAs because after the crisis banks and mutual funds were not ready to lend their money to NBFCs sector in form of loans. Whereas the Mean of NBFCs performance before the IL&FS Crisis is 2.58 and the Mean of NBFCs performance after IL&FS Crisis is 1.67. Since the calculated value of \mathbf{p} is 0.026 which is lower than 0.05 and \mathbf{t} is 2.561, therefore it lies in the rejected region. Hence \mathbf{H}_1 is accepted.

• Market Risk Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
NBFCs Performance Before IL&FS Crisis (2011) [Numeric] Performance After IL&FS	5.25	12	2.379	.687
Crisis (2018) [Numeric]	3.33	12	1.875	.541

Paired Samples Correlations

		N	Correlation	Sig.
NBFCs	Performance Before IL&FS Crisis (2011) [Numeric]& Performance After IL&FS Crisis (2018) [Numeric]	12	.122	.705

Paired Samples Test

			Pair	ed Differ	ences				
			Std.	Std. Error	Interv	onfidence al of the erence			Sig. (2-
		Mean	Deviation	Mean	Lower	Upper	T	Df	tailed)
Pair 1	Past Years performance in 2011 [Numeric] - Past Years performance in 2018[Numeric]	1.917	2.843	.821	.110	3.723	2.335	11	.039

After analyzing the data we came to know that NBFCs performance before IL&FS Crisis and NBFCs performance after the IL&FS Crisis were both perfectly correlated to each other i.e. (correlation value=0.122). Whereas Standard Deviation of NBFCs performance before IL&FS Crisis is 2.379 and Standard Deviation of NBFCs performance after IL&FS Crisis is 1.875 which shows that after crisis nbfc sector saw a decrease in their shares prices as compared to the period before IL&FS Crisis (2011)because IL&FS is one of the biggest money providers in nbfc industry and at that time it had taken a huge amount of loan from various government banks and other places, because of which a crisis inside it affects whole industry. Whereas the Mean of NBFCs performance before the IL&FS Crisis is 5.25 and the Mean of NBFCs performance after IL&FS Crisis is 3.33. Since the calculated value of $\bf p$ is 0.039 which is lower than 0.05 and $\bf t$ is 2.335, therefore it lies in the rejected region. So $\bf H_0$ is rejected.





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• Operational Risk

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
NBFCs	Performance Before IL&FS Crisis (2011) [Numeric] Performance After IL&FS	4.58	12	3.088	.892
	Crisis (2018) [Numeric]	n 92	12	027	271
		2.83	12	.937	.27

Paired Samples Correlations

	N	Correlation	Sig.
NBFCs Performance Before IL&FS			
Crisis (2011) [Numeric]&	12	.696	012
Performance After IL&FS	12	.090	.012
Crisis (2018) [Numeric]			

Paired Samples Test

		Pai	red Differenc	es				
		Std.	Std. Error	Interva	nfidence al of the erence			Sig.
	Mean	Deviation	Mean	Lower	Upper	T	Df	(2-tailed)
NBFCs Performance Before IL&FS Crisis (2011) [Numeric] - Performance After IL&FS Crisis (2018) [Numeric]	1.750	2.527	.730	.144	3.356	2.399	11	.035

After analyzing the data we came to know that NBFCs performance before IL&FS Crisis and NBFCs performance after the IL&FS Crisis were both highly positively correlated to each other i.e. (correlation value= 0.696). Whereas Standard Deviation of NBFCs performance before IL&FS Crisis is 3.088 and Standard Deviation of NBFCs performance after IL&FS Crisis is 0.937 which shows that after the crisis there is an increase in an interest coverage ratio of NBFCs because at that time NBFCs had a low amount of profit with them so that they can meet their expenses easily. Whereas the Mean of NBFCs performance before the IL&FS Crisis is 4.58and The mean of NBFCs performance after IL&FS Crisis is 2.83. Since the calculated value of p is 0.035 which is lower than 0.05 and p is 2.399, therefore it lies in the rejected region, p is rejected. Hence p is accepted.

Thus after analyzing all independent variables, it can be said that there is a significant relationship between risk management methods and risk variables. After analyzing these independent risk variables companies use to choose different risk management methods to control future risks.





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	Capital Adequacy	Asset Quality	Management Quality	Earnings	Liquidity	Total
1.L&T Infrastructure Finance Company ltd.	0	96	90	65	100	351
	54	70	84	65	82	355
2. Indian Railway Finance Corporation	100	97	100	55	50	402
ltd.	100	99	84	59	54	396
3. Nabard Financial ServicesItd.	54	95	90	55	52	346
Ser vicesium	52	95	84	53	55	339
4. Capital TrustMicroFi nanceltd.	0	75	84	70	0	229
nanceitu.	64	90	84	70	60	368
5. India Bulls Housing Finance ltd.	53	92	100	55	60	360
	54	94	84	68	0	300
6. Shriram Transport FinanceComp	55	92	90	68	53	358
anyltd.	54	70	84	58	0	266
7.L&T Infrastructure	57	97	80	58	52	344





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DOI 10.520.	1/Zenouo.20/2	1707			impact ractor	
Debt Fund ltd.	56	90	84	60	54	344
8. Kotak Infrastructure Debt Fund ltd.	54	94	80	62	70	360
itu.	53	90	100	66	90	399
9. YES Capital Pvt	53	95	84	60	90	382
ltd.	53	92	84	62	92	383
10. India Infoline Fin ltd.	54	94	84	55	0	287
	55	98	84	65	54	356
11. Fullerton IndiaCredit Company ltd.	56	85	84	53	69	347
	54	80	84	65	0	283
12.Muthoot Finance	0	95	90	78	51	314
	56	0	84	80	54	274
13.Bajaj Finance	53	95	84	62	0	294
	55	90	84	65	54	346

This is how year 2011 and 2018 are shown in the above table.

2011	
2018	

0 to 250=HighRisk 333 to 416= VeryLowRisk 250 to 333= Low Risk 416 to 500=Minor Risk

After analyzing we find that in the year 2011 NBFCs like **Capital Trust Micro Finance ltd., IndiaInfoline Fin Ltd., Muthoot Finance and Bajaj Finance** were facing low risk because they all were not following the guidelines published by the Reserve Bank of India properly. They all were having risks because they were not able to execute their risk management methods properly. They are unable to maintain capital adequacy ratio up





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to 15% as prescribed in Reserve Bank of India guidelines. They were very less growth in their capital funds. They were also unable to restrict their NPAs which had a great effect on their net profit and on their credit ratings which results in a fall in reputations of those NBFCs. Whereas this analysis shows that NBFCs like L&T Infrastructure Finance Company Ltd., Indian Railway Finance Corporation Ltd., Nabard Financial Services Ltd., India Bulls Housing Finance Ltd., Shriram Transport Finance Company Ltd., L&T Infrastructure Debt Fund ltd., Kotak Infrastructure Debt Fund ltd., YES Capital Pvt Ltd. and Fullerton India Credit Company Ltd. had very low risk in year 2011because they were following all guidelines published by Reserve Bank of India and they were able to maintain a huge amount of adequate capital with them so that in future if any risks occur or if any need of money occurs in future they were able to fulfill it easily without any problem. Secondly, they were also able to restrict their NPAs because of which their credit rating increases and which affect them in creating a good image in front of the world and in getting credit from various institutions easily. After analyzing we find that in the year 2018 NBFCs like **India Bulls Housing Finance ltd.**, Shriram Transport Finance Company Ltd., Fullerton India Credit Company Ltd., and Muthoot Finance were facing low risk because they all were not following the guidelines published by the Reserve Bank of India properly. They all were having risks because they were not able to execute their risk management methods properly. They are unable to maintain capital adequacy ratio up to 15% as prescribed in Reserve Bank of India guidelines. They were very less growth in their capital funds. They were also unable to restrict their NPAs which had a great affection their net profit and on their credit ratings which results in a fall in reputations of those NBFCs. Whereas this analysis shows that NBFCs like L&T Infrastructure Finance Company Ltd., Indian Railway Finance Corporation ltd., Nabard Financial Services Ltd., Capital Trust Micro Finance ltd., L&T Infrastructure Debt Fund ltd., Kotak Infrastructure Debt Fund ltd., YES Capital Pvt ltd., India Infoline Fin Ltd. and Bajaj Finance. Had very low risk in year 2018 because they were following all guidelines published by Reserve Bank of India and they were able to maintain a huge amount of adequate capital with them so that in future if any risks occur or if any need of money occurs in future they were able to fulfill it easily without any problem. Secondly, they were also able to restrict their NPAs because of which their credit rating increases and which affect them in creating a good image in front of the world and in getting credit from various institutions easily.

V. FINDINGS

- Through this research, we came to know about various types of risk management strategies used by NBFCs in India. They use strategies like avoidance of risk, mitigation of risk, transfer of risk and acceptance of risk. Generally, NBFCs with good financial back support goes for risk acceptance strategies or mitigation of risk strategies. Whereas NBFCs who doesn't have any back support go for risk avoidance method. These two strategies were mostly used by NBFCs in India.
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VI. RECOMMENDATIONS

Currently, Banking and NBFC Sectors in India are just now following guidelines of Basel II Norms. The study is done on the basis of Basel II Norms guidelines. This study is relevant till the time Basel III Rules and Regulations are not implemented on these sectors after Basel III Norms were implemented the study should be done once more by someone so that a correct and clear understanding can be made between risk management methods and risk variables. There are many more topics on which more investigations need to be done like, How did the performance of NBFCs employees affect risk and risk management of this sector? How did the experience and training of NBFCs employees affect risk and risk management of this sector? Among NBFCs or Banking sector that has really helped the public most in increasing their standard of livings?





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By doing an overall analysis of the data we came to know that all Non-Banking Finance companies are well known about all kinds of risks which they have to face in the future. For minimizing risks they have designed various effective methods. For an effective risk management system, NBFC's use various kinds of risk management strategies so that they can have managed the risk easily. The above findings were relevant because the factors used for analyzing the relationship between risk management methods and risk variables were a Credit risk, market risk. In today world companies are adopting different risk management strategies and methods like risk mitigation, risk avoidance, risk elimination, and risk reduction. While after IF&LS Crisis certain attempts were made by the Indian government and many more need to be implemented if the government really wants to see NBFCs sector earning profits because it is an integral part of the financial system.

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