

*Revised*

**PERFORMANCE EVALUATION OF  
NON BANKING FINANCE COMPANIES  
(NBFCs) IN KERALA**

Thesis submitted to  
**UNIVERSITY OF CALICUT**

For the award of the Degree of

**Doctor of Philosophy**

Under the Faculty of Commerce and Management Studies

By

**HAREESH KUMAR A G**

Under the supervision of

**DR. THOMAS PAUL KATTOOKARAN**

Associate Professor and Head  
Research Department of Commerce  
St Thomas' College (Autonomous)  
Thrissur-680001

**September 2018**

## DECLARATION

I hereby declare that the Thesis entitled *Performance Evaluation of Non Banking Finance Companies (NBFCs) in Kerala* is a record of bonafide research work done by me, under the supervision of Dr. Thomas Paul Kattookaran. I further declare that no part of the thesis has been presented before fully or partially for any degree, diploma or other similar title of the University.

Thrissur

03/03/2018

**Hareesh Kumar A G**

(Research Scholar)

## **CERTIFICATE**

Certified that the Thesis entitled “**Performance Evaluation of Non Banking Finance Companies (NBFCs) in Kerala**” is the record of bonafide research carried out by Sri. Hareesh Kumar A G. under my guidance and supervision. The thesis is worth submitting for the degree of Doctor of Philosophy under the Faculty of Commerce and Management Studies. No part of the thesis has been submitted for any degree, diploma, title or recognition before.

He is permitted to submit the thesis.

**Dr. Thomas Paul Kattookaran**

(Supervising Guide)

## **CERTIFICATE**

I hereby certify that, this is the revised version of the thesis entitled “Performance Evaluation of Non Banking Finance Companies (NBFCs) in Kerala” submitted by Mr. Hareesh Kumar A G, under my guidance after incorporating the necessary corrections/suggestions made by the Adjudicators.

05/09/2018

**Dr. Thomas Paul Kattookaran**

(Supervising Guide)

## **ACKNOWLEDGEMENT**

*I express heartfelt gratitude to Dr. Thomas Paul Kattookaran, Research Guide and Head of the Research Department of Commerce, St Thomas' College (Autonomous), Thrissur for his unparalleled caring, right guidance, constructive criticisms, and selfless commitment throughout the research work.*

*I am indebted to the University Grants Commission for granting me fellowship under JRF scheme.*

*I express my sincere gratitude to the Management, Principal Dr. Jenson P O, Associate Bursar Rev. Dr. Martin Kolombrath, Research Council Coordinator Dr. Joby Thomas Kakkassery and Doctoral Committee members of St Thomas' College (Autonomous), Thrissur for the assistance, support and facilities given during my research work.*

*I express my sincere gratitude to Prof. Dr. K P Mani, former Head of the Department of Economics, University of Calicut for his valuable advice and suggestions throughout the work.*

*I am deeply indebted to Prof. Dr. M A Joseph, University of Calicut, Expert Member of the Doctoral Committee for the valuable directions and comments given during my research work. I am immensely grateful to Prof. Dr. E K Satheesh, Prof. Dr. B Johnson, Prof. Dr. B Vijayachandran Pillai and other faculty members of Department of Commerce and Management Studies, University of Calicut for their valuable comments and suggestions. I express my gratitude to the Director of Research and team for the assistance given for my research.*

*I am grateful to Prof. Dr. Moli.P.Koshy, Prof. Dr.Sam Thomas and Dr. Muhammed Aslam of Cochin University of Science and Technology, for the encouragement and support given during my research.*

*It is my pleasure to acknowledge all the Faculty members in the Research Department of Commerce, St Thomas' College (Autonomous), Thissur for their encouragements and motivation. I thankfully memorise the moments I spent with my respected retired professors and present teachers Associate Prof. Paul Jose P, Dr. Biju John M, my*

*fellow research scholars Asst Prof. Divya George, Asst Prof. Sijo Jacob and other faculty members of the department for the fruitful interactions and discussions.*

*I record my sincere thanks to the Librarian Mr. Sanjo Jose and ministerial staff of St Thomas' College (Autonomous), Thrissur for the support given for my research.*

*During the research period, I visited premier institutes such as IIM Ahmedabad, IIM Shillong, IIM Indore, IIT Madras and IIT Kharghpur. I got opportunity to present research papers in these prominent institutions. I hereby record my indebtedness to the coordinators and reviewers of Pan World Management Conference- 2016, SUSCON International Conference-2017, NASMEI Marketing Conference-2017, ICFMCF-2016, ICFMCF-2017 and International Symposium on Frontiers of Infrastructure Finance-2017.*

*I am especially thankful to all ministerial and police personnel of District Police Office, Thrissur Rural for the encouragements and support given during my research work.*

*I owe a special sense of gratitude to my dearest friend and colleague Mrs. Febina K for her assistance and support. I acknowledge my thanks to FDP Scholar Asst Prof. Tom Jacob (Christ College, Irinjalakuda), Miss. Nishija Unnikrishnan and other Research Scholars for their cooperation and support.*

*I gratefully remember my parents and all other members of my family and my friends who encouraged me in accomplishing my dream. Last but not least, I bow my head before the Lord, without whom I am nothing at all.*

**Hareesh Kumar A G**

## **CONTENTS**

<b>CHAPTER</b>	<b>TITLE</b>	<b>P No</b>
<b>CHAPTER I</b>	<b>INTRODUCTION</b>	1-20
	<b>1.1 Introduction</b>	1
	<b>1.2 Statement of the Problem</b>	4
	<b>1.3 Significance of the Study</b>	5
	<b>1.4 Objectives of the Study</b>	6
	<b>1.5 Scope of the Study</b>	7
	<b>1.6 Hypotheses of the Study</b>	7
	<b>1.7 Methodology</b>	8
	<b>1.7.1 Frame</b>	8
	<b>1.7.2 Data</b>	9
	<b>1.7.3 Sampling</b>	9
	<b>1.7.4 Data Sources</b>	11
	<b>1.7.5 Tools</b>	11
	<b>1.8 Period</b>	12
	<b>1.9 Different Types/ Categories of NBFCs Registered with RBI</b>	13
	<b>1.10 Operational Definitions</b>	17
	<b>1.10.1 Non-Banking Financial Company (NBFC)</b>	17
	<b>1.10.2 Shadow Banks</b>	17
	<b>1.10.3 Maturity Transformation</b>	18
	<b>1.11 Limitations of the Study</b>	18
	<b>1.12 The Scheme of the Report</b>	18
	<b>References</b>	20

<b>CHAPTER II</b>	<b>LITERATURE REVIEW</b>	21-56
	<b>2.1 Introduction</b>	21
	<b>2.2 Literature Review</b>	21
	<b>2.3 Major Findings from Literature Survey</b>	43
	<b>2.4 Research Gap and Conclusion</b>	46
	<b>References</b>	48
<b>CHAPTER III</b>	<b>POLICY FRAMEWORK OF NBFCs IN INDIA: AN OVERVIEW</b>	57-98
	<b>3.1 Introduction</b>	57
	<b>3.2 An Overview of Past Efforts</b>	58
	<b>3.3 Data and Methods</b>	61
	<b>3.4 Policy Framework of NBFCs in India</b>	61
	<b>3.4.1 Reserve Bank of India (RBI) Act 1934</b>	62
	<b>3.4.2 Narasimham Committee II (1998)</b>	64
	<b>3.4.3 Shah Committee (1992)</b>	65
	<b>3.4.4 Department of Non-Banking Supervision, RBI</b>	66
	<b>3.5 Regulation of NBFCs by Different Authorities in India</b>	74
	<b>3.6 An Evaluation of Measures Taken by the Reserve Bank in View of the Financial Stress Faced by NBFCs</b>	74
	<b>3.7 Salient Features of Revised Regulatory Framework for NBFCs in India</b>	78
	<b>3.8 Systemic Significance</b>	82
	<b>3.9 Banking Practices and Growth of NBFCs</b>	88
	<b>3.10 Impact of Policies on NBFCs-ND-SI</b>	92
	<b>3.11 Credit Rating of NBFCs</b>	94
	<b>3.12 Recent Initiatives</b>	94
	<b>3.13 Conclusion</b>	95
	<b>References</b>	96



<b>CHAPTER IV</b>	<b>SHADOW BANKING IN INDIA</b>	99-130
	<b>4.1 Introduction</b>	99
	<b>4.1.1 Non-Deposit Taking Systemically Important NBFCs (NBFCs-ND-SI)</b>	101
	<b>4.2 Growth of NBFCs-ND-SI in India</b>	103
	<b>4.2.1 Major Financial Items of NBFCs-ND-SI in India</b>	104
	<b>4.2.2 Shadow Banking in India: Major Determinants</b>	108
	<b>4.2.3 Determinants of Financial Development</b>	109
	<b>4.2.4 Growth of Small and Medium Enterprises (SMEs) and Micro Finance</b>	110
	<b>4.2.5 Agricultural Credit and Co operatives in India</b>	113
	<b>4.2.6 Model</b>	114
	<b>4.3 Leverage and Growth of NBFCs-ND-SI in India</b>	120
	<b>4.3.1 Model</b>	123
	<b>4.4 Conclusion</b>	125
	<b>References</b>	127
<b>CHAPTER V</b>	<b>FINANCIAL PERFORMANCE OF NBFCs IN KERALA</b>	131-170
	<b>5.1 Introduction</b>	131
	<b>5.2 Theoretical Framework</b>	134
	<b>5.3 An Overview of Models</b>	136
	<b>5.4 Advances to Weaker Sections by Banks</b>	140
	<b>5.5 Major NBFCs-ND-SI in Kerala</b>	141
	<b>5.5.1 Kerala State Industrial Development Corporation (KSIDC)</b>	142
	<b>5.5.2 Kerala State Backward Classes Development Corporation (KSBCDC)</b>	143
	<b>5.5.3 Kerala State Financial Enterprises Limited (KSFE)</b>	143
	<b>5.5.4 Muthoot Finance Ltd</b>	144
	<b>5.5.5 Manappuram Finance Ltd</b>	145
	<b>5.5.6 Fedbank Financial Services Limited (Fedfina)</b>	146
	<b>5.5.7 Muthoot Fincorp Ltd</b>	146
	<b>5.5.8 Kosamattam Finance Ltd</b>	147
	<b>5.5.9 Muthoot Mini Financiers Limited</b>	147
	<b>5.6 Shadow Banking in Kerala</b>	148
	<b>5.7 NBFCs-ND-SI and Shadow Banking Characteristics</b>	156

	<b>5.8 Major Findings, Implications</b>	164
	<b>References</b>	167
<b>CHAPTER VI</b>	<b>BANKING AND NBFCs IN KERALA</b>	171-196
	<b>6.1 Introduction</b>	171
	<b>6.2 Literature</b>	174
	<b>6.3 Model</b>	181
	<b>6.4 Results</b>	183
	<b>6.5 Major Findings</b>	187
	<b>6.6 Suggestions</b>	191
	<b>6.7 Conclusion</b>	192
	<b>6.8 Limitations</b>	192
	<b>References</b>	193
<b>CHAPTER VII</b>	<b>MATURITY TRANSFORMATION PRACTICES BY NBFCs IN KERALA</b>	197-220
	<b>7.1 Introduction</b>	197
	<b>7.2 Foundations</b>	199
	<b>7.3 Research Problem</b>	204
	<b>7.4 Empirical Strategy</b>	206
	<b>7.5 Measurement of Maturity Transformation</b>	207
	<b>7.5.1 Past Efforts</b>	207
	<b>7.5.2 Findings</b>	208
	<b>7.5.3 Sub Sample Analysis</b>	213
	<b>7.5.4 Major Findings and Implications</b>	215
	<b>References</b>	218
<b>CHAPTER VIII</b>	<b>SUMMARY, CONCLUSIONS AND POLICY IMPLICATIONS</b>	221-230
	<b>8.1 Introduction</b>	221
	<b>8.2 Growth of Shadow Banking in India</b>	223
	<b>8.3 Financial Performance of NBFCs-ND-SI in Kerala</b>	224
	<b>8.4 Contributions made by Banking Sector towards the NBFCs</b>	225
	<b>8.5 Maturity Transformation by NBFCs-ND-SI in Kerala</b>	226
	<b>8.6 Policy Implications</b>	227
	<b>8.7 Scope for Further Research</b>	229
	<b>8.8 Conclusion</b>	229
<b>BIBLIOGRAPHY</b>		
<b>APPENDIX</b>		



## *LIST OF TABLES*

<i>Sl No</i>	<i>Table No</i>	<i>Title</i>	<i>Page No</i>
1	Table 2.1	Major Findings from Literature Survey	43
2	Table 3.1	Number of NBFCs Registered with Reserve Bank of India	70
3	Table 3.2	Growth in Total Assets and Net Worth of NBFCs-ND-SI in India	71
4	Table 3.3	Network of Financial System in India	83
5	Table 3.4	Net Lending (+ve)/ Borrowing (-ve) by the Institutions	83
6	Table 3.5	Bank Exposure of NBFCs-ND-SI (As on March 2010)	84
7	Table 3.6	Percentage Contribution to Total Assets/Liabilities of NBFCs-ND-SI	85
8	Table 3.7	Growth of Major Items of NBFCs-ND-SI	86
9	Table 3.8	Growth in Aggregate Public Deposits of NBFCs-D and Banks	87
10	Table 3.9	Regression Results: Impact of Time Deposits and Investments of Banks on NBFC Deposits	91
11	Table 4.1	Gross Domestic Savings in India	100
12	Table 4.2	Major Financial Items of NBFCs-ND-SI in India	104
13	Table 4.3	Financial Ratios of NBFCs-ND-SI in India	106
14	Table 4.4	Concentration of NBFCs-ND-SI and SME Clusters in India	112
15	Table 4.5	Sample Size Recommendations	116
16	Table 4.6	Explanation to Variables	117
17	Table 4.7	Regression Results: Determinants of Shadow Banking	117
18	Table 4.8	Data	119
19	Table 4.9	Regression Results: Leverage and Asset Growth	123
20	Table 4.10	Data	126
21	Table 5.1	Priority Sector Loans to Weaker Sections	141
22	Table 5.2	Summary of Operating and Position Statements of Select NBFCs-ND-SI in Kerala	150
23	Table 5.3	Items and Acronyms	151
24	Table 5.4	Correlation Matrix of Financial Items	152
25	Table 5.5	Major Financial Ratios of Select NBFCs-ND-SI	152
26	Table 5.6	Description about Variables used for Regression Analysis	155
27	Table 5.7	Descriptive Statistics	155
28	Table 5.8	Correlation Matrix	156

29	Table 5.9	<b>Shadow Banking and Finance Costs of Select NBFCs</b>	157
30	Table 5.10	<b>Owned Funds and PAT of Select NBFCs</b>	158
31	Table 5.11	<b>Owned and Debt Funds of Select NBFCs</b>	159
32	Table 5.12	<b>Trend in Debt and ROE of Select NBFCs</b>	160
33	Table 5.13	<b>Income and Management Efficiency of Select NBFCs</b>	161
34	Table 5.14	<b>Banking Access in Kerala</b>	163
35	Table 5.15	<b>Regression Results: Determinants of ROE</b>	164
36	Table 6.1	<b>Financial Services Access: Major Variables</b>	180
37	Table 6.2	<b>Variables Used and Explanation</b>	183
38	Table 6.3	<b>Regression Results: Banking on Total Income</b>	184
39	Table 6.4	<b>Regression Results: Bank Credit on Total Income</b>	184
40	Table 6.5	<b>Ranking of Districts in Terms of CD Ratio and Value of Goods and Services Produced</b>	189
41	Table 7.1	<b>Framework of Risk Metrics for The Shadow Banking System</b>	203
42	Table 7.2	<b>Calculation of Average Maturity of Liabilities and Assets of Select NBFCs-ND-SI</b>	210
43	Table 7.3	<b>Average Maturity of Advance/Average Maturity of External Liability of Select NBFCs-ND-SI</b>	211
44	Table 7.4	<b>Average Maturity of Assets and Liabilities and MTR of Individual NBFCs-ND-SI</b>	213
45	Table 7.5	<b>Relative Magnitude of Liability and Advance of Select NBFCs-ND-SI</b>	214

## *LIST OF FIGURES*

<b><i>SL NO</i></b>	<b><i>FIGURE NO</i></b>	<b><i>TITLE</i></b>	<b><i>PAGE NO</i></b>
1	Figure 3.1	Bank Credit to NBFCs	88
2	Figure 3.2	Percentage Growth in Total Bank Borrowings of NBFC-ND-SI	89
3	Figure 4.1	Number of NBFCs-ND-SI Registered with RBI	102
4	Figure 4.2	Asset Growth of NBFCs-ND-SI	114
5	Figure 4.3	Growth of Shadow Banking	119
6	Figure 5.1	Shadow Banking in Kerala	149
7	Figure 5.2	ROE of Select NBFC-ND-SI in Kerala	149
8	Figure 5.3	Trend of Financial Expenses and Income from Services/Operations of Select NBFCs-ND-SI	154
9	Figure 5.4	Growth in Shareholders' Fund of Select NBFCs	159
10	Figure 5.5	Finance Expense of Select NBFCs-ND-SI in Kerala	161
11	Figure 5.6	Management Efficiency of Select NBFCs- ND-SI in Kerala	162
12	Figure 6.1	Combined Share Capital of Select NBFCs-ND-SI in Kerala	173
13	Figure 7.1	Maturities of Liabilities of Select NBFCs-ND-SI	209
14	Figure 7.2	Maturities of Assets of Select NBFCs-ND-SI	209
15	Figure 7.3	Shareholders' Funds/Total Assets of Select NBFCs-ND-SI	212

## GLOSSARY

AAs	Account Aggregators
ADB	Asian Development Bank
AFC	Asset Finance Company
AIFIs	All India Financial Institutions
ASSOCHAM	The Associated Chambers of Commerce of India
BCG	Boston Consulting Group
BEEPS	Business Environment and Enterprise Performance Survey
BFRS	Board for Financial Regulation and Supervision
BFS	Board for Financial Supervision
BSC	Balanced Score Card
CBB	Cash and bank balances
CBN	Central Bank of Nigeria
CDR	Credit Deposit Ratio
CIC	Core Investment Company
CL	Current Liabilities
CLP	Current Liabilities and Provisions
CP	Commercial Paper
CRAR	Capital to Risk (Weighted) Assets Ratio
DCBs	District Co-operative Banks
DEA	Data Envelopment Analysis
DRI	Differential Rate of Interest
DSGE	Dynamic Stochastic General Equilibrium Model
EMEs	Emerging Market Economies
EPS	Earnings Per Share
FBs	Foreign Banks
FGLS	Feasible Generalized Least Square Regression
FI	Financial Institution
FINE	Financial expenses
FSB	Financial Stability Board
GDP	Gross Domestic Product
GLS	Generalised Least Squares
GMM	Generalised Method of Moments
GNP	Gross National Product
GNPA	Gross Non Performing Assets
GNPA	Gross Non Performing Assets
IC	Investment Company
IDF-NBFC	Infrastructure Debt Fund Non- Banking Financial Company
IFC	Infrastructure Finance Company
IMF	International Monetary Fund
INV	Total Investments
IRDA	Insurance Regulatory and Development Authority of India
KSBCDC Ltd	Kerala State Backward Classes Development Corporation Ltd

KSFE Ltd	Kerala State Financial Enterprises Limited
KSIDC	Kerala State Industrial Development Corporation
KYC	Know Your Customer
LC	Loan Company
LDCs	Less Developed Countries
LPC	Loan Pricing Corporation
MGC	Mortgage Guarantee Companies
MLR	Multiple Linear Regression
MMFs	Money Market Funds
NBFC	Non-Banking Finance Company
NBFC-D	Deposit-taking Non-Banking Finance Companies
NBFC-MFI	Non-Banking Financial Company - Micro Finance Institution
NBFC-ND	Non-deposit taking Non-Banking Finance Companies
NBFC-ND-SI	Systemically Important Non-Deposit Taking Non-Banking Finance Company
NBFIs	Non-Bank Financial Institutions
NCBFIs	Non-Commercial Bank Financial Institutions
NCDs	Non Convertible Debentures
NCL	Non Current Liabilities
NHB	National Housing Bank
NOF	Net Owned Fund
NOFHC	Non-Operative Financial Holding Company
NPA	Non Performing Assets
NPLs	Non-performing Loans
NRLM	National Rural Livelihoods Mission
NULM	National Urban Livelihood Mission
OI	Other income
OLS	Ordinary Least Square Regression
OPIN	Income from services/operations
PACS	Primary Agricultural Cooperative Societies
PAT	Profit after Tax
PBT	Profit before Tax
PDIs	Perpetual Debt Instruments
PFs	Pension Funds
PMJDY	Pradhan Mantri Jan-DhanYojana
PRO	Provisions
PSBs	Public Sector Banks
PVBs	Private Sector Banks
RBI	Reserve Bank of India
RCs	Reconstruction Companies
ROA	Return on Assets
ROE	Return on Equity
RRBs	Regional Rural Banks
RS	Reserves and surplus



SARFAESI	The Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act
SC	Share Capital
SCB	Scheduled Commercial Banks
SCs	Securitisation Companies
SD	Standard Deviation
SEACEN	The South East Asian Central Banks
SEBI	Securities and Exchange Board of India
SEE	South Eastern European
SF	Share holders' fund
SHGs	Self Help Groups
SLR	Statutory Liquidity Ratio
SMEs	Amall and Medium size Enterprises
SMLE	Simulated Maximum Likelihood Estimation
SPVs	Special Purpose Vehicles
SRMS	Self Employment Scheme for Rehabilitation of Manual Scavengers
STLA	Short-term Loans and advances
TA	Total Assets
TI	Total Income
UCBs	Urban Cooperative Banks
UK	United Kingdom
USD	U S Dollar
VAR	Vector Autoregression