

# PROBLEMS IN ASSETS AND LIABILITIES MANAGEMENT PRACTICES FINANCIAL SECTOR IN INDIA- WITH SPECIAL REFERENCE TO SELECTED DEPOSIT TAKING NBFCS

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## ABSTRACT

*Assets and liabilities management is an effective tool for identification, measurement and management of financial risks associated with balance sheet items of financial sector companies both in banking and non-banking companies. In India both banks and NBFCS were following ALM practices to management of various risks as per RBI guidelines. However, deposit taking NBFCS are exposed some problems in effective implementation of ALM practices in India. Therefore, present study addressed this issue through collecting data from 80 respondents working in five deposits taking NBFCS in India (Tamilnadu). The study observed that, majority of respondents expressed difficulties ALM practices in aspects of operational, MIS, fund mixing, liquidity and market risk management. The study also applied ANOVA test and revealed significant difference in responses on problems in ALM practices within and between selected NBFCS in India (Tamilnadu).*

**Keywords:** NBFCS-D, Problems of NBFCS, ALM practices in NBFCS.

## INTRODUCTION

Assets and liabilities management refers to a set of policies and procedures framed to minimize the financial risks (liquidity, credit and interest rate risks) arise due to mismatch between assets and liabilities, to the minimum acceptable levels both in financial and corporate sectors. Financial institutions such as banks, insurance and pension organizations are pioneered of the ALM technique since 1970 (due to high interest rate volatility) through which they can effectively manage various financial risks but now practicing by corporate too. However, financial institutions are usually exposed to various risks such as credit risk, interest risk, liquidity risk and exchange rate risk. ALM technique is a strategic financial tool particularly focused on management of financial risks such as liquidity and interest rate risks only. In general, mismatch between assets and liabilities poses high risk (financial or non-financial risk) to the company's capital. Therefore, companies can protect their capital from various risks through proper management of assets and liabilities. At the beginning ALM technique (traditionally) aimed at stabilization of short term profits, mitigation of liquidity and interest rates risk of home currency particularly in static portfolio analysis, but, focus extended to long term earnings, economic value, exchange rate risk, capital management and risks associated with all financial instruments in dynamic portfolio scenario. As result, ALM technique gains dynamism in risk management practices. In simple words, we can define that ALM refers to management of all types of risks associated with balance sheet items of a particular company or industry. Earlier to ALM, treasury department looked at short term funding and cash clearance and management

aspects rather than long term aspects. Imprudent management of position statement may cause firms earnings and reputation at greater risk. Therefore, present study focused on the problems associated with implementation of ALM practices in NBFCs in India.

## REVIEW OF LITERATURE

Lavanya & Maheswari (2018) have examined the effectiveness of credit risk management practices of selected two non-banking financial companies namely Muthoot and Bajaj financials during 2013-2017. The study has examined the probability of borrower default of companies by using Merton model and tested soundness of credit risk management practices with financial ratios such as current ratio, quick ratio, D/E ratio, interest coverage ratio, ROA, ROE, P/B ratio and NPA ratio. The study observed that both companies have problem with high Non-performing assets which calls for immediate action for risk mitigation strategies. However, Muthoot company is financially sound than Bajaj companies in terms of ROE and liquidity ratios. Suresh & Deepak (2017) has made a comprehensive discussion on the growth of non-banking sector in India in terms of number of operating firms, nature of NBFCs business, size of assets, regional distribution, regulations, problems and prospects of NBFCs. The study pointed out that growth of NBFCs also leads to speed up the growth and profitability of banking business. The study also identified challenges of NBFCs such as difficulty to accept open assets, client communication, and management of NBFCs and poor clarity in control directives and regulation of RBI. The study suggested expansion of tax subsidies to NBFCs which are enjoying of banks sector. Devendra (2017) has done an empirical research work on asset and liability management practices in two public sector banks namely Andhra bank and Bank of India and two private banks (HDFC and AXIS) during 2007-16 which indicates study at regional level. The study has focused on measurement of interest rate risk analysis through GAP analysis and finding association between NPA and asset liability structure. In addition, he also examined the impact of ALM practices on performance of banking sector. The study observed that to avoid cash crunch problems private banks kept large cash reserves than public sector banks. Private sector banks reported good returns from operations than public sector banks during the entire study period. The study also observed that profitability position of private sector is much higher than public sector banks due to high employee's proficiency. Sathyakala (2017) has examined the relationship between asset liability management practices and financial position of the seven new generation private sector banks in India during 2006-15. For the purpose of study he used many financial and statistical techniques such as ratios (spread, burden and coverage ratios), growth rates, t-test, mean, standard deviation, co-efficient of variance and Structural Equation Modeling. The study observed that HDFC and Kotak Mahendra banks reported good financial position than other new generation banks during the study period. Similarly, ICICI banks asset and liability management practices are line with standards compared to other banks. The study recognized for reduction of maturity gap between assets and liability to avoid liquidity exposure in new generation banks. Veerappa (2017) has analyzed asset and liability management practices in regional rural banks during 2011-2015 with special reference to Karnataka Vikas Grameena Bank. In the study he examined the risk management practices of Karnataka bank in aspects of liquidity risk, interest rate risk and credit risk. The study observed unsatisfactory level of capital adequacy ratio Tier II compared to Tier I of KVGB. The study also found that significant variation between interest gap and asset- liability gap during the study period.

However, maturity gaps for very short and short period reported negative in first three years and positive in next two years, in contrast, long maturity gaps found positive gap during

entire study period. This indicates that firm has good liquidity position during the study period. Jayanthi (2016) has analyzed the asset liability management effectiveness in selected commercial banks during 2003-12 through using CAMEL technique. The study also examined the impact of ALM management on bank's profitability through using Statistical cost accounting and multiple regression techniques. The study found that ALM practices by banking sector are significantly different one another. Some Indian banks risk management capacity is very lower than foreign banks during the study period. However, the study found that banking sector is moving towards effective implementation of ALM through sophisticated innovative techniques such as duration gap, simulation and Value at Risk. Ogbuagu et al. (2016) have evaluated the risk management practices (loan risk) and their impact on the profitability of banking sector in Nigeria during 2009-2012. For the purpose of study they selected fifteen banks as sample size and measured risk management practices effect on profitability through technique of balance panel regression. The study particularly focused on loan risk management practices in selected banks. The study revealed that uptrend in default rate, capital adequacy ratio and cost per loan asset led to rise in loan risk which has causality and significant relationship with profitability of selected banks in Nigeria during the study period. The study also observed that lack of comprehensive risk management framework and no separate risk management departments cause for poor risk management practices in Nigerian banking sector. Dhananjay (2015) has done a comprehensive study on co-operative banks performance of Kolhapur during 2009-2013. His study is aimed at analyzing many aspects of co-operative banks in the Kolhapur such as interest rate spread, profitability and long term viability, risk and return perspective, cost of banks funds and particularly with asset and liability management problems and practices during the study period. The study has done through using questionnaire and financial techniques. The study found that failure rate in co-operative banks during post implementation period of ALM has declined. This is mainly due to recognition and effective implementation of ALM by both small and large co-operative banks in the region. As result, liquidity position of the banks also improved and became strong in short period. Deepa (2015) has studied the risk management practices of five selected NBFCs such as Manapuram General financing & leasing, Shriram City union finance, Sundaram, Muthoot and Bajaj Financial services limited selected through purpose or judgment sampling technique. The study observed that each NBFC is exposed to operational, collateral, credit, market, liquidity and business cycle risks. The study also observed financial strength of selected NBFCs in parameters of ploughing back of profits, current ratio, Debt/equity ratio, Debt to total assets ratio, interest coverage ratio, long term debt to total capital ratio, ROE and ROI. The study also studied RBI framework to regulate NBFCs and made suitable suggestions. For the purpose of study he collected required primary data from interview of 100 executives (20 from each NBFC). In the study he found sources of various risks to examine the asset and liability management practices. Sandeep et al. (2010) have focused on the risks and challenges facing by micro finance institutions in individual lending portfolios in India. The study found that many micro financial institutions in India lending credit to individuals not on the basis of cash flow, but on collateral security basis which stands for problems in valuation, monitoring, recovery and liquidation, quality and storing. The study noticed that poor product design another risk facing by MFIs in India are (fixed loan amounts rather than customer's business need) which leads to over and under lending problem to people. The study also found that weak underwriting capability, limited risk assessment staff, pressure to growth, lending to individuals who have poor credit history and single person dependency (branch managers) are major risk facing in individual lending operation by micro financial institutions in India (Panikkar et al., 2010).

## RESEARCH PROBLEM

It is revealed from the above literature that, many studies have focused on the growth, credit risk management in NBFCs, ALM practices in commercial banks, co-operative banks and regional rural banks but no study focused on the problems in ALM practices in NBFC sector particularly with deposit taking NBFCs. Therefore, present study fulfills this gap.

## OBJECTIES OF THE STUDY

Present study is aimed at:

1. To find the operational problems in ALM practices of selected NBFCs-D in Tamilnadu
2. To find the problems in Management information system in ALM practices of selected NBFCs-D in Tamilnadu
3. To find the risk management problems in ALM practices of selected NBFCs-D in Tamilnadu
4. To examine the study in disclosing fund mixing structure of NBFCs-D in tamilnadu
5. To study problems in liquidity risk, interest rate risk and market risk management in selected NBFCs-D in Tamilnadu.

## RESEARCH METHODOLOGY

Present study is purely based on the primary data collected from five deposit taking NBFCs in Tamilnadu in the year of 2021. The sample size of the present study is 80 members working in selected NBFCs- D in Tamilnadu. In total 80 respondents 45 respondents are members in different risk management committees in NBFCs-D and rest of 35 respondents are executive level employees participated in preparation of ALM reports in selected NBFCs-D Tamilnadu during the study period. The data is collected through well-structured questionnaire sent to targeted respondents through e-mail. The statistical tools used in the study are sums, percentages, reliability test and ANOVA test. The selected NBFCs in Tamilnadu are top four deposit taking NBFCs in terms of total deposits namely, Sri Ram Transport finance (SRTFL), Sri Ram City Union finance limited (SRCUFL), Sundaram Finance limited (SFL) Shakthi Finance Limited (SKFL) and New link Overseas finance limited (NLOFL).

## HYPOTHESIS

$H_0$ : *There is no significant difference in responses on problems in ALM practices within and between the selected NBFCs-D in Tamilnadu*

$H_1$ : *There is significant difference in responses on problems in ALM practices within and between the selected NBFCs-D in Tamilnadu*

## DATA ANALYSIS

### Operational Problems

Assets and liabilities management practices in non-banking financial company D starts with formulation of ALCO with experts from different functions in organization, along with assigning role and responsibilities of ALCO and continued with arranging regular ALCO meetings. Every NBFC-D has to formulate Assets and liabilities committees with Chief Executive Officer (Senior Manager) and other staff specialized in different fields such as finance,

investment and risk management. The responsibilities assign to them are determination of ceiling limits of risk, business strategy to mitigate the risk, deciding budget and risk management objectives. Moreover, to review the execution and impact of earlier decision ALCO committee has to arrange regular meetings. Therefore, in the present study responses on degree of problematic in performing above functions are collected and presented in below Table 1.

Table 1 OPERATIONAL PROBLEMS OF NBFCs-D IN TAMILNADU							
Problematic Aspect		Absolutely No problem	Insignificant problem	Problematic	Significantly problem	Absolutely problem	Total
1.1	Formulation of ALCO with experts in different functions	42 (53)	19 (24)	11 (14)	3 (04)	5 (06)	80 (100)
1.2	Assigning the role and responsibilities to ALCO	46 (58)	18 (23)	07 (09)	05 (06)	04 (05)	80 (100)
1.3	Conducting regular ALCO meetings	52 (65)	18 (23)	04 (05)	02 (02)	04 (05)	80 (100)
	Total Responses to all questions	14 (58)	55 (23)	22 (10)	10 (4)	12 (5)	240 (100)
Source: Field Study							

Table 1 exhibits the degree of problematic in operational aspects of assets and liabilities management practices of selected NBFCs-D (Borri, 2019).

The study revealed that, 53 percent of respondents expressed “*absolutely no problem*” for formulation of ALCO with experts from different functions, while 24 percent expressed “*Insignificant problem*” due to availability of professionals in risk management aspects in company and industry. On the other hand, 14 percent is with opinion of “*problematic*” six percent expressed “*absolutely problematic*”, and four percent expressed “*significantly problematic*”. Similarly, the study found that, 58 percent of respondents expressed “*absolutely no problem*” in assigning role and responsibilities to ALCO, while 23 percent expressed “*Insignificant problem*” due to clear role definition and good experience in understanding and functioning of responsibilities. In contrast, nine percent are with opinion of “*problematic*” five percent are expressed “*absolutely problematic*” and six percent expressed “*significantly problematic*”. Similarly, the analysis revealed that, 65 percent of respondents expressed “*absolutely no problem*” for conducting regular ALCO meeting while 23 percent expressed “*Insignificant problem*”, On the other hand, five percent with opinion of “*problematic*”, five percent expressed “*absolutely problematic*” and two percent expressed “*significantly problematic*” to conduct regular ALCO meeting due to heavy work pressure in office and lack of effective management information system. In overall, 81 percent of (more than three fourth) of respondents expresses that, there is no operational problems in ALM practices, which implies that, 19 percent of employees expressed difficulty in ALM practices by particularly new aged companies such as New link overseas companies (Conlon et al., 2020).

## MANAGEMENT INFORMATION SYSTEM PROBLEMS

The success of assets and liabilities management process depends on the effective management of information system which is entrusted the jobs of risk identification, formulation

of counter policies and tolerance limits. The study observed that, management information system adopted by non-banking information system is different across the industry. The generation of adequate, accurate and timely data is major challenge in risk management system to non-banking financial companies due to complex economic and financial environment. Therefore, present study collected respondents opinions on problems facing in management of information in the below Table 2.

<b>Table 2</b> <b>MIS PROBLEMS OF NBFCs-D IN TAMILNADU</b>							
<b>Problematic Aspect</b>		<b>Absolutely No problem</b>	<b>Insignificant problem</b>	<b>Problematic</b>	<b>Significant problem</b>	<b>Absolutely problem</b>	<b>Total</b>
2.1	Collecting adequate and accurate information	08 (10)	12 (15)	08 (10)	20 (25)	32 (40)	80 (100)
2.2	Formation of collected data in required format	06 (8)	06 (8)	16 (20)	28 (35)	24 (30)	80 (100)
2.3	Collection of data on timely manner	4 (5)	8 (10)	12 (15)	16 (20)	40 (50)	80 (100)
	Total Responses to all questions	18 (7)	26 (11)	36 (15)	64 (27)	96 (40)	240 (100)
<b>Source:</b> Field Study							

Table 2 exhibits the degree of problematic in management information system in assets and liabilities management practices of selected NBFCs-D.

The study found that, 40% of respondents are with opinion that, collecting adequate and accurate information is “*absolute problematic*” where 25% are with opinion of significant problematic. On the other hand, 15 percent are with opinion that collecting adequate and accurate information is “*insignificant problematic*”, ten percent expressed only “*problematic*” opinion and ten percent are with opinion of “*absolutely no problem*”. Similarly, 30 percent of respondents are with opinion that, formation of collected data in required format is “*absolute problematic*” where 35 percent are with opinion of “*significant problematic*”. On the other hand, 20 percent expressed only “*problematic*” opinion that formation of collected data in required format, eight percent are with opinion if “*insignificant problematic*” and another eight percent are with opinion of “*absolutely no problem*”. In the same line, 50 percent of respondents are with opinion that, collection of data on timely manner is “*absolute problematic*” where 20 percent are with opinion of “*significant problematic*”. On the other hand, 15 percent expressed only “*problematic*” opinion, ten percent are with opinion that collection of data on timely manner in required format is “*insignificant problematic*” and only five percent are with opinion of “*absolutely no problem*”. In overall the study observed that, around 82 percent of respondents are with opinion that, collection of data adequately, accurately and timely and formulation of availability data is problematic in MIS system. This is mainly attributable to the reasons such as inefficient employees, high market volatility, lack of proper training, methodology and technology. Only 18 percent expressed data management is not difficult in MIS system (Kumar & Suresh, 2017).

## RISK MANAGEMENT RELATED PROBLEMS

Risk management process consists of identification of risks to which NBFC-D is exposed, formulation of risk policies and tolerance limits, measurement of risk, risk monitoring, forecasting market risks and developing future interest rate movement. In general, deposit taking non-banking financial companies face difficulty in each aspect of risk management. NBFCs are exposed to the risks such as liquidity risk, interest rate risk, operational risk, market risk, currency risk, credit risk etc. Risk measurement methods consist of gap analysis, duration analysis and simulation methods and risk adjusted profitability methods. Risk monitoring system is concerned with conducting regular meetings regarding risk management policies and tolerance limits. In the present study, information is collected from the respondents on difficulty in discharging above functions in below Table 3.

<b>Table 3</b> <b>RISK MANAGEMENT RELATED PROBLEMS OF NBFCs-D IN TAMILNADU</b>							
Problematic Aspect		Absolutely No problem	Insignificant problem	Problematic	Significant problem	Absolutely problem	Total
3.1	Identification of Risk exposure	18 (22)	24 (30)	11 (14)	16 (20)	11 (14)	80 (100)
3.2	Formulation risk policies and tolerance limits	12 (15)	16 (20)	08 (10)	20 (25)	24 (30)	80 (100)
3.3	Risk measurement tools	10 (12)	14 (18)	06 (8)	22 (27)	28 (35)	80 (100)
3.4	Risk monitoring	20 (25)	13 (16)	09 (12)	18 (22)	20 (25)	80 (100)
3.5	Forecasting market risks	8 (10)	12 (15)	6 (08)	28 (35)	26 (32)	80 (100)
3.6	Developing future interest rate movement forecasting system	10 (13)	8 (10)	12 (15)	26 (32)	24 (30)	80 (100)
Total Responses to all questions		78 (16)	87 (18)	54 (11)	130 (27)	133 (28)	480 (100)
<b>Source:</b> Field Study							

Table 3 exhibits the degree of risk management problems in assets and liabilities management practices of selected NBFCs-D. The study observed that, 22 percent of respondents expressed “*absolutely no problematic*” in identification of risk exposure, 30 percent expressed “*insignificant problematic*” due to implementation of modern technology in capturing market changes. On the other hand, 20 percent of respondents are with opinion that, identification of risk exposure is “*significantly problematic*”, 14 percent is with opinion of problematic and another 14 percent expressed absolutely problematic opinion due to ever changing financial and regulatory environment causing difficulty in capturing risk exposure. Similarly, 30 percent of respondents expressed “*Absolutely problem*” in formulation risk policies and tolerance limits, 25 percent expressed “*significant problematic*” and 10 percent expressed absolutely problematic opinion due absence of global standards for fixing risk tolerance limits. On the other hand, 20 percent of respondents are with opinion that, formulation risk policies and tolerance limits is “*insignificantly problematic*” and another 15 percent expressed “*absolutely no problematic*” opinion due freedom to fix tolerance limits or standard by companies themselves. Similarly, the

study found that, 35 percent of respondents are with opinion that existing risk measurement tools are “*absolutely problem*”, 27 percent expressed “*significant problematic*” and eight percent are with opinion of “*problematic*” due to difficulty in forecasting variety of risks and their impact on the income and economy of firm accurately. On the other hand, 18 percent expressed “*insignificant problematic*” and 12 percent expressed “*absolutely no problematic*” of present available risk measurement tools due to simplicity in understanding and application. Similarly, 25 percent of respondents are with opinion that existing risk monitoring is “*absolutely problem*”, 22 percent are expressed “*significant problematic*” and 12 percent are with opinion of “*problematic*” due to work stress in office, lack of data timely and adequately. On the other hand, 16 percent expressed “*insignificant problematic*” and 25 percent expressed “*absolutely no problematic*” of risk monitoring frequently (Basappa, 2017).

Similarly, the study found that, 32 percent of respondents are with opinion that forecasting market risk is “*absolutely problem*”, 32 percent expressed “*significant problematic*” and eight percent are with opinion of “*problematic*”. On the other hand, 15 percent expressed “*insignificant problematic*” and 10 percent expressed “*absolutely no problematic*” of forecasting market risks in present business environment. Similarly, 30 percent of respondents are with opinion that e developing future interest rate movement forecasting system is “*absolutely problem*”, 32 percent are expressed “*significant problematic*” and 15 percent are with opinion of “*problematic*” due to lack of appropriate customized forecasting modern techniques in uncertain market environment. On the other hand, 10 percent expressed “*insignificant problematic*” and 13 percent expressed “*absolutely no problematic*” of developing future interest rate movement forecasting system particularly by giant NBFCs. In overall, the study observed that, 28 percent is with opinion that risk management is “*absolutely problematic*”, 27 percent expresses significant problematic and 11 percent expressed problematic. In contrast, 19 percent expressed insignificantly problematic and 16 percent expressed “*absolutely no problematic*” of risk management process (Wajdi et al., 2020).

### FUND MIXING RELATED PROBLEMS

In financial management aspect of mixing the fund with debt and equity is challenging tasks. This difficulty is little higher in case of NBFCs-D due to involvement of public deposits. In general, required fund can be mixed with different debt and equity components on basis of purpose, cost, risk and investment objectives. As per RBI, as part of ALM practices, every NBFC-D has to disclose their fund mixing under the headings of fixed vs. floating interest rate funds, wholesale vs. retail funds, money market vs. capital market funds and domestic vs. foreign funds. Fixed rate funds carries fixed interest rate payable on due date irrespective of fluctuations in market interest rates which is subject to no market risk. On the contrary, if funds rose from floating interest rate funds are subjective to market fluctuations. Retail funds refers to money market funds limited to some natural person, in contrast, whole sale funds refers to investments made by HNI investors for long period. Money market funds comprises of certificate deposits, money at notice, commercial papers which are subjective to short period, low cost, default risk and regulations of RBI. On the other hand, funds rose through capital market subjective to high cost, long period and subject to regulations of SEBI. Fund mix comprises of funds from domestic and foreign where former subject to domestic regulations and latter is foreign market and regulations. Therefore, in the present study, information regarding problems in classifying and disclosing of funds mix are asked from respondents Table 4.



<p style="text-align: center;"><b>Table 4</b>  <b>PROBLEMS IN DISLOSING FUND MIXING STRUCTURE OF NBFCs-D IN TAMILNADU</b></p>							
<b>Problematic Aspect</b>		<b>Absolutely No problem</b>	<b>Insignificant problem</b>	<b>Problematic</b>	<b>Significant problem</b>	<b>Absolutely problem</b>	<b>Total</b>
4.1	Fixed vs floating rate funds,	42 (52)	22 (28)	08 (10)	02 (3)	06 (7)	80 (100)
4.2	Wholesale vs retail deposits	38 (48)	26 (32)	04 (5)	10 (12)	02 (3)	80 (100)
4.3	Money market vs capital market	46 (58)	18 (22)	06 (8)	04 (5)	06 (7)	80 (100)
4.4	Domestic vs Foreign	52 (60)	20 (25)	04 (5)	05 (6)	03 (4)	80 (100)
	Total Responses to all questions	178 (54)	87 (27)	22 (7)	17 (7)	16 (5)	320 (100)
<b>Source:</b> Field Study							

Table 4 shows the degree of problematic in disclosure of fund mixing in assets and liabilities management practices of selected NBFCs-D. The analysis revealed that, 52 percent of respondents expressed that disclosing of fixed and floating funds structure is “*absolutely no problem*” while 28 percent expressed “*insignificant problem*”. In contrast, 10 percent expressed “*problematic*” seven percent are with opinion of “*absolutely problematic*” and just a meager of three percent expressed significant problem. Similarly, 48 percent of respondents expressed that disclosing of wholesale and retail funds structure is “*absolutely no problem*” while 32 percent expressed “*insignificant problem*”. In contrast, five percent expressed “*problematic*”, 12 percent are with opinion of “*significant problematic*” and just a meager of three percent expressed “*absolutely problem*”. The study also revealed that, 58 percent of respondents expressed that disclosing of money market and capital market funds structure is “*absolutely no problem*” while 22 percent expressed “*insignificant problem*”. In contrast, eight percent expressed “*problematic*”, seven percent are with opinion of “*absolutely problematic*” and just a meager of five percent expressed significant problem. Similarly, 60 percent of respondents expressed that disclosing of domestic and foreign funds structure is “*absolutely no problem*” while 25 percent expressed “*insignificant problem*”. In contrast, five percent expressed “*problematic*”, six percent are with opinion of “*significant problematic*” and just a meager of four percent expressed “*absolutely problem*” due to foreign financial regulations. In overall, the study observed that, majority of respondents i.e. 82 percent is with opinion that disclosing of fund mix in different structure is not problematic on account of availability of data and well defined financial instruments. On the contrary, on 18 percent expressed some difficulty in disclosing of fund mixing structure in case of domestic and foreign funds (Kaufman & Scott, 2003).

### LIQUIDITY RISK MANAGEMENT RELATED PROBLEMS

Liquidity refers to ability of non-banking financial companies to fund the increase in asset and to meet both expected and unexpected cash outflows and obligations timely at reasonable cost and without incurring unacceptable losses. Liquidity risk refers to inability of non-banking financial companies to meet their obligation on due date and not in a position to avoid adverse impact of poor liquidity. Liquidity risks management concerned with identification

of sources of liquidity risk, measuring the liquidity risk level and finding the impact of liquidity risk on the cash and financial position of the company Table 5.

<b>Table 5</b> <b>LIQUIDITY RISK MANAGEMENT RELATED PROBLEMS OF NBFCS-D IN TAMILNADU</b>							
Problematic Aspect		Absolutely No problem	Insignificant problem	Problematic	Significant problem	Absolutely problematic	Total
6.1	finding sources of Liquidity risk	52 (65)	12 (15)	08 (10)	3 (4)	5 (6)	80 (100)
6.2	measurement of liquidity risk	12 (15)	10 (12)	11 (14)	27 (34)	20 (25)	80 (100)
6.3	finding effect of liquidity risk	08 (10)	11 (14)	16 (20)	20 (25)	25 (31)	80 (100)
	Total Responses to all questions	72 (30)	33 (13)	35 (15)	50 (21)	50 (21)	240 (100)
<b>Source:</b> Field Study							

Table 5 exhibits the Liquidity Risk Management Related Problems of NBFCS-D in Tamilnadu: The study found that, 65 percent of respondents expressed that finding sources of liquidity risk is “*absolutely no problem*” while 15 percent expressed “*insignificant problem*”. In contrast, 10 percent of respondents are with opinion that finding sources of liquidity risk is “*problematic*” followed by four percent “*significant problem*” and six percent “*absolutely problematic*”. Similarly, 15 percent of respondents are with opinion that measuring the liquidity risk is “*absolutely no problem*” while 12 percent expressed “*insignificant problem*”. In contrast, 14 percent of respondents are with opinion that measurement of liquidity risk is “*problematic*” followed by 34 percent “*significant problem*” and 25 percent “*absolutely problematic*”. Similarly, 10 percent of respondents are with opinion that finding effect of liquidity risk is “*absolutely no problem*” while 14 percent expressed “*insignificant problem*”. In contrast, 20 percent of respondents are with opinion that finding effect of liquidity risk is “*problematic*”, followed by 25 percent “*significant problem*” and 31 percent “*absolutely problematic*”. In overall the study found that, 30 percent of respondents expressed liquidity risks management is “*absolutely no problem*”, in supporting to this 14 percent expressed insignificant problematic. This is attributable to the reason of clear definition of time buckets of assets sensitivity by RBI. In contrast, 15 percent expressed “*problematic*” opinion followed by 21 percent significant problematic and 21 percent as “*absolutely problematic*” on account of poor data availability, unavailability of modern risk measurement tools and its impact on NII and economic value. Particularly the study observed problematic responses in measurement of risk and its impact.

### INTEREST RATE RISK RELATED PROBLEMS

Interest rate risk is the risk arises due to unwanted changes in the market interest rates. Interest rate risk is measured for both short period and long period though using of both traditional and modern techniques such as Gap analysis, Duration Gap Analysis, Simulation and Risk over time (Reboredo et al., 2016). Present study solicits the responses on identification, measurement of interest rate risk and its impact on the net interest income and economic value Table 6.

Table 6 INTEREST RATE RISK RELATED PROBLEMS OF NBFCS-D IN TAMILNADU							
Problematic Aspect		Absolutely No problem	Insignifican t problem	Problem atic	Significan t problem	Absolutely problem	Total
7.1	Finding sources of interest rate risk	18 (23)	14 (18)	12 (15)	20 (25)	16 (19)	80
7.2	Measurement of interest rate risk	21 (26)	12 (15)	15 (19)	22 (28)	10 (12)	80
7.3	Finding impact of interest rate risk	12 (15)	20 (25)	14 (18)	18 (22)	16 (20)	80
	Total Responses to all questions	51 (21)	46 (19)	42 (17)	60 (26)	41 (17)	240
Source: Field Study							

Table 6 exhibits the Interest Rate Risk Management Related Problems of NBFCS-D in Tamilnadu: The study found that, 23 percent of respondents expressed that finding sources of interest rate risk is “*absolutely no problem*” while 18 percent expressed “*insignificant problem*”. In contrast, 15 percent of respondents are with opinion that finding sources of interest rate risk is “*problematic*” followed by 25 percent “*significant problem*” and 19 percent “*absolutely problematic*”. Similarly, 26.5 percent of respondents are with opinion that measuring the interest rate risk is “*absolutely no problem*” while 15 percent expressed “*insignificant problem*”. In contrast, 19 percent of respondents are with opinion that measurement of interest rate risk is “*problematic*” followed by 28 percent “*significant problem*” and 12 percent “*absolutely problematic*”. Similarly, 15 percent of respondents are with opinion that finding effect of interest rate risk is “*absolutely no problem*” while 25 percent expressed “*insignificant problem*”. In contrast, 18 percent of respondents are with opinion that finding effect of interest rate risk is problematic, followed by 22 percent “*significant problem*” and 20 percent “*absolutely problematic*”. In overall the study found that, 21 percent of respondents expressed interest rate risk management is “*absolutely no problem*”, in supporting to this 19 percent expressed insignificant problematic. This is attributable to the reason of clear definition of time buckets of assets and liabilities sensitivity by RBI. In contrast, 17 percent expressed “*problematic*” opinion followed by 25 percent significant problematic and 17 percent as “*absolutely problematic*” on account of unavailability of modern risk measurement tools and its impact on NII and economic value.

## MARKET RISK RELATED PROBLEMS

Non-banking financial companies are exposed to market risk in the form of fall in share prices, unfavorable fluctuations in market interest rates, commodity prices, exchange rates and credit spreads. NBFCS manage market risk through regulatory supervision of market trends by ALCO, stress testing techniques and sound market risk management system. Present study collected the required information from the respondents regarding difficulty in management of market risk management Table 7.

<p style="text-align: center;"><b>Table 7</b> <b>MARKET RISK RELATED PROBLEMS OF NBFCs-D IN TAMILNADU</b></p>							
<b>Problematic Aspect</b>		<b>Absolutely No problem</b>	<b>Insignificant problem</b>	<b>Problematic</b>	<b>Significant problem</b>	<b>Absolutely problem</b>	<b>Total</b>
8.1	Finding sources of market risk	20 (25)	14 (18)	10 (12)	20 (25)	16 (20)	80 (100)
8.2	Measurement of market risk	16 (20)	16 (20)	14 (18)	24 (30)	10 (12)	80 (100)
8.3	Finding Impact of market risk	10 (12)	13 (16)	16 (20)	25 (32)	16 (20)	80 (100)
	Total Responses to all questions	46 (19)	43 (18)	40 (17)	69 (29)	42 (18)	240 (100)
<b>Source:</b> Field Study							

Table 7 exhibits the Market Risk Management Related Problems of NBFCs-D in Tamilnadu: The study revealed that, 25 percent of respondents expressed that finding sources of market risk is “*absolutely no problem*” while 18 percent expressed “*insignificant problem*”. In contrast, 12 percent of respondents are with opinion that finding sources of market risk is “*problematic*”, followed by 25 percent “*significant problem*” and 20 percent “*absolutely problematic*”. Similarly, 10 percent of respondents are with opinion that measuring the market risk is “*absolutely no problem*” while 20 percent expressed “*insignificant problem*”. In contrast, 14 percent of respondents are with opinion that measurement of market risk is “*problematic*”, followed by 30 percent “*significant problem*” and 22 percent “*absolutely problematic*”. Similarly, 12 percent of respondents are with opinion that finding effect of market risk is “*absolutely no problem*” while 16 percent expressed “*insignificant problem*”. In contrast, 20 percent of respondents are with opinion that finding effect of market risk is problematic, followed by 32 percent “*significant problem*” and 20 percent “*absolutely problematic*”. In overall the study found that, 19 percent of respondents expressed market risk management is “*absolutely no problem*”, in supporting to this 18 percent expressed insignificant problematic. In contrast, 18 percent expressed “*problematic*” opinion followed by 29 percent significant problematic and 18 percent as “*absolutely problematic*” on account uncertain domestic and globally market environment.

### DATA RELIABILITY TEST

In the present study, reliability of the data is examined through Cronbach’s alpha test. This test assesses the reliability or internal consistency of a set of test items. The resulting  $\alpha$  coefficient of reliability ranges from 0 to 1 in providing this overall assessment of reliability. If all of the scale items are entirely independent from one another than  $\alpha=0$ , in contrast if all of the items have high covariance’s, then  $\alpha$  will approach 1. The higher the score, the more reliable the generated scale is. The acceptable Cronbach alpha reliability coefficient level is 0.70. In the present chapter, reliability of 28 items/variables (questions) is examined as below Table 8.

<b>Table 8</b> <b>RELIABILITY STATISTICS</b>		
<b>Cronbach's Alpha</b>	<b>Cronbach's Alpha Based on Standardized Items</b>	<b>N of Items</b>
0.72	0.723	28

The statistical results revealed that, the Cronbach's value is .720 which is higher than the suggested level. This indicates that the data is reliable and fit for statistical analysis.

## HYPOTHESIS TEST

In the present study, hypothesis regarding the variance in responses is examined through ANOVA test Table 9.

<b>Table 9</b> <b>ANOVA RESULTS</b>					
	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Between Groups	343.079	79	4.343	15.014	.000
Within Groups	756.811	27	28.030		
Total	5081.936	106			

**Source:** Compiled from primary data.

The study revealed that, Sign value is .000 which is lower than 0.05. This indicates reject null hypothesis "*There is no significant difference in responses on problems in ALM practices within and between the selected NBFCs-D in Tamilnadu*" and accept alternative hypothesis. There is a significant difference in responses on problems in ALM practices within and between the selected NBFCs-D in Tamilnadu.

## FINDINGS AND SUGGESTIONS

1. The study revealed that, majority of responses i.e. 81 percent expressed that problems are existed in operational aspects of ALM practices due to availability of well knowledge and experienced risk management professionals in company and industry and clear role definition and good experience in understanding and functioning of responsibilities. In contrast, 19 percent expressed problematic opinion due to insufficient time and material and inadequate training. This is particularly observed in new low aged companies such as new link overseas finance company. Therefore, the study suggests the companies to provide sufficient training to the concerned employees as per dynamic changes in the industry and risk environment.
2. The second problem is concerned with management information systems (MIS). The study reported that, 82 percent of respondents are with opinion that, collection of data adequately, accurately and timely and formulation of availability data is problematic in MIS system. This is mainly attributable to the reasons of absence of well trained employees, high market volatility, lack of proper training, methodology and technology. In contrast, 18 percent expressed that data management is not difficult in MIS system. Therefore, the study suggests the up gradation of existing technology and management system in line with changes in financial market environment and economic changes.
3. The third problem is concerned with risk management related. The study found that, one third of ( an average 66 percent) respondents expressed that, risk management practices is problematic particularly higher in the aspects of forecasting market risks and developing future interest rate movement and forecasting system. This is attributable to the reasons such as ever changing financial and regulatory environment, absence of global standards for fixing risk tolerance limits, freedom to fix tolerance limits or standard by companies themselves, difficulty in forecasting variety of risks and their impact on the income and economy of firm accurately, simplicity in understanding and application and work stress in office, lack

of data timely and adequately. In contrast, one third with opinion of no and insignificant problematic of risk management practices.

4. The fourth problem is concerned with disclosing of fund mixing related problems. The study revealed that, majority of respondents i.e. an average of 82 percent is with opinion that disclosing of fund mix in different structure is not problematic on account of availability of data and well defined financial instruments. On the contrary, on 18 percent expressed some difficulty in disclosing of fund mixing structure particularly in case of domestic and foreign funds on account of foreign financial regulations.
5. The sixth problem is concerned with liquidity risk management related problems. The study found that, majority of respondents i.e. an average of 57 percent of respondents expressed that, liquidity risk management is problematic on account of having large portion of assets and liabilities carrying fixed coupon rates and maturity period. In contrast, 43 percent expressed no problematic and insignificant problematic opinion particularly in finding the impact of liquidity risk on the NII and economic value. Therefore, the study point out the need of sophisticated modern techniques to deal with impact of liquidity risk on the NII and economic value.
6. The seventh problem with interest rate risk management related problem. An average of 21 percent of respondents expressed liquidity risks management is *"absolutely no problem"*, in supporting to this 14 percent expressed insignificant problematic. This is attributable to the reason of clear definition of time buckets of assets sensitivity by RBI. In contrast, 17 percent expressed *"problematic"* opinion followed by 26 percent significant problematic and 17 percent as *"absolutely problematic"* on account of poor data availability, unavailability of modern risk measurement tools and its impact on NII and economic value. Particularly the study observed problematic responses in measurement of risk and its impact. Therefore, the study suggests implementation of sophisticated modern techniques to deal with impact of liquidity risk on the NII and economic value.
7. Finally, the study found that, In overall the study found that, an average of 19 percent of respondents expressed market risk management is *"absolutely no problem"*, in supporting to this 18 percent expressed insignificant problematic. In contrast, 18 percent expressed *"problematic"* opinion followed by 29 percent significant problematic and 18 percent as *"absolutely problematic"* on account uncertain market environment domestic and globally. Therefore, the study suggests the need of research on the analyzing the changes global market conditions and their impact on domestic financial institutions.

## CONCLUSION

The study concludes that, around 80 percent of respondents expressed problematic in ALM practices in the areas of operations, management information system and difficulty in disclosing in mix of fund structure. Similarly, 66 percent expressed difficulty in forecasting of market risk, whereas 57 percent expressed problematic in liquidity risk management. In overall, employees expressed difficulties in ALM practices due to poor knowledge, lack of risk management professionals, absence of well trained employees, market volatility, and dynamic financial environment. However, the study suggests the deposit taking NBFCs to take necessary reforms for effective implementation of ALM practices for meeting global risk management standards. However, the study found significant variation on responses between and within the companies in ALM practices.

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