

# 'The Impact of Shadow Banks on the Commercial Bank Lending in India with Reference to the Housing Finance Sector."

## Sreelakshmi P, Nidhiparpiani

Abstract: Significant variations of bank profitability in Indian commercial banks during the period 2009-2018 motivated the critical need to study the impact of shadow banking on the profitability of commercial banks in India. Shadow banking is defined as any institution that offer bank like activities but not regulated as banks. These institutions seem to be on the rise in India thus this research considered to investigate their implications to traditional banks' profitability. The secondary data in this analysis covered a period of 10years from 2009 to 2018. The multiple linear panel regression model for the bank profitability measures; Return on Asset (ROA), was used as a dependent variable to analyze the data. Shadow banking ratios, variables were used as independent variables in the model. To measure if the loans given by banks to housing sector decreased as a result of housing finance companies, the net aggregate of loans disbursed by banks to housing sector and net aggregate of loans disbursed by housing finance companies were recorded for the past 5 years and significant analysis was made accordingly looking at the data .Shadow banking ratios were derived from monetary aggregates data that is M3, total bank loans and total bank deposits. Regression results indicated that Shadow banking only completes the banking system and has no significant impact on loans of the commercial banks in the Housing Finance sector.

Key words: Shadow Banking, Monetary policy, Money aggregates

#### I. INTRODUCTION

Shadow banking is a catchall title representing all the financial services that occur outside the regulated financial system. It constitutes all the institutions that perform bank like

activities but not regulated as banks. The shadow banking sy stem has grown rapidly across the globe over the past decades. Shadow banks include, online mortgage lenders, security lenders, hedge funds, private equity firms, money market funds, insurance companies, payday lenders, investment banks, mobile money transfer companies, etc. The shadow banking sector has fast become an integral part of the global financial system and is fast-growing in certain forms.

Manuscript received on February 10, 2020. Revised Manuscript received on February 20, 2020. Manuscript published on March 30, 2020.

\* Correspondence Author

**Dr Sreelakshmi P,** Assistant Professor - Finance in Institute of Management, CHRIST (Deemed to be University),

Ms.NidhiParpiani, Ms.Nidhi is an MBA in Finance and is a research scholar at Christ University.

© The Authors. Published by Blue Eyes Intelligence Engineering and Sciences Publication (BEIESP). This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/)

Properly understood, shadow banking is a powerful tool for good but, if carelessly managed, potentially an explosive. Studies in other countries show that shadow banking has impacted greatly in their countries' financial system. The activities of shadow banking system in India are at its peak. We have Non banking financial companies which are approximately 10,190 in number in which we again have NBFC- D that means NBFC Which are authorized to accept and take public deposits and those which can't take deposits from public that are non deposits taking NBFCs and the third category is of primary dealers which again have Bank Primary Dealers and standalone Primary dealers .It is well known by the fact that any crisis in NBFC spread to other sectors infecting the economy of the country, recent debt default by Infrastructure Leasing and Financial services (IL&FS) has affected sectors such as real estate which in turn declined the real estate stock index. No doubt that the NBFC's are playing important role in the credit disbursement to the economy because there are more regulations for commercial banks when compared to NBFCs and banks are more stricter in providing loans.

Lending by such NBFC is often termed to be as 'Shadow Banking' in other countries. In global financial stability report, the international monetary fund has warned India of such systematic risks connected with the practices of shadow banking which can be spilled to banks because the size of shadow banking sector in India is on a higher side when we compare it with other economies. According to Indian financial stability report, India's shadow banking size is on the higher side when compared to most other G-20 economies.

#### Advantages of NBFC'Sover banks:

- 1. People prefer NBFC because of flexibility in rules and less time to get the loan sanctioned.
- Loan amount is disbursed within few days unlike commercial banks.
- 3. NBFC's are lately concentrating on their interest rates. They are reducing their interest rates for the loans and advances which motivatepeople prefer taking loan from these institutions.
- 4. The main reason for survival of NBFC in today's era is it gives loans to people who do not have a strong background or people with poor credit rating. These types of individuals generally prefer shadow banks because they cannot get loan from banks.



## "The Impact of Shadow Banks on the Commercial Bank Lending in India with Reference to the Housing Finance Sector."

So with these few USP'S i.e less rules and regulations, Quick processing, Loan availability for individual with poor credit rating and competitive interest rates gives NBFC 's an edge over the commercial banks.

#### Significance of the study:

The importance of this research comes from the fact that there has been increase in the shadow banks in India from past many years and it has been affecting traditional banks because people prefer going to the Non banking financial entities because of the less regulations these entities follow and also because they serve people who do not have a good credit check or a strong financial background.

Also if we look at the fact, if these shadow banks continue to increase in operations, there will be failure of commercial banks and also there will be a spillover of systematic risk like investors losing confidence in the economy which in turn will adversely affect the GDP and the growth rate of the economy. This study will help the investors to maintain confidence in our country as there is a high need to know if there has been any relation between the banks and the shadow banks. To make the study more specific the housing finance segment of both the commercial banks and the shadow banks is looked at to find if there is a correlation between them at the sectoral level or not .

#### II. REVIEW OF LITERATURE

Shadow banking symbolizes one of the many failings of the financial system leading up to the global crisis. The shadow banking intermediation process involves huge networks of investment banks, finance companies, money market funds, hedge funds, credit rating agencies, pawnbrokers and microcredit just to mention a few. Unlike commercial banks which use deposits which are normally short term to fund loans that are longer term, Shadow banks raise short-term funds in the money markets and use those funds to buy assets with longer-term maturities. But because they are not subject to traditional bank regulation, they cannot borrow in an emergency from the central bank and do not have traditional depositors whose funds are covered by insurance, they are in the shadows (Paul McCulley 2013). The Financial Stability Board, (2013) also added that like traditional banking, shadow banking is also mainly characterised by credit intermediation that is, taking money from savers and lending it to borrowers.

These highly risk activities are mainly done by hedge funds, private equity firms, special purpose vehicles, insurance companies, crowd-funding organizations, broker dealers, micro credit, credit rating and money market funds. All these institutions qualify to be shadow banks as they perform traditional banks like functions without facing the same regulation (Tucker 2010). Pozsar (2010) also defined shadow banking system as a web of specialized unregulated institutions that channel funding from savers to investors through a range of securitization and unsecured funding techniques without the direct and explicit public sources of liquidity and risk insurance available through the central bank.

Goodenough (2012) was of the view that shadow banks are regarded as non-depository institutions they have been

subject to less prudential regulation than traditional banks. The shadow banking system has been widely abused in India with the recent examples of Sahara and Saradha scam substantiating the fact. India has a large low-income rural population with low access to formal banking facilities. This has resulted in the rise of an informal banking system to fill the gap. To curb this practice several 'Moneylenders Acts' were enforced by the state government (CBI, 2010).

Dr N .Nandini , Dr. M Jeyanthi(2014) explained the concept of shadow banking in India where shadow banking has been quoted different and is still under the regulation of RBI and there has been a possibility of systematic risk as they are interconnected with the commercial banks . Tang, J., & Wang, Y. (2015) showed their empirical evidence is broadly consistent with the notion that shadow banking is associated with higher return and risk of commercial banks.Dr H.R Kaushal(2016) opined Shadow banks or NBFC are the perfect or better alternative to the conventional banks for meeting various financial requirement of a financial enterprise.

#### III. DRIVERS OF SHADOW BANKING

SungJunKim(2016) explored what drives shadow banking to come up using correlation matrix and static panel model and found that pension funds, insurance companies and banks are positively correlated with broad measures of shadow banking and also it indicates that the long term interest rates, the bank capital ratio, and the bank net interest margin are negatively correlated with the shadow banking system .

#### 3.2.1 Regulatory arbitrage:

One clear motivation for intermediation outside of the traditional banking system is for private actors to evade regulation and taxes. Acharya, Schnabl, and Suarez (2011) stated that the incomplete nature of regulatory reforms leaves banks much more constrained and creates many favourable opportunities for non-bank channels to compete with banks through regulatory arbitrage. FSB (2014), also added that due to lack of regulations on shadow banking activities including simpler on-boarding procedures and favourable capital requirements, an increasing number of customers are finding value in this alternate banking system.

#### **Specialization:**

The shadow banking system decomposes the credit intermediation into a chain of wholesale-funded, securitization-based lending (Pozsar 2010). Through securitization, more financial institutions are given roles to play thereby forming the shadow banking system (Pozsar, Adrian, Ashcraft, and Boesky 2010).

Bonner, Streitz and Wedow (2016) carried a research about the impact of securitization to traditional banks in the Eurozone from (2001-2013). They concluded that in as much as securitization; promote the shadow banking system that rivalry the traditional banking system in the credit intermediation process, it also increases lending for formal banks in many ways.





Firstly through risk diversification, securitization can allow banks to charge lower interest rates, which in turn spurs demand (Nadauld and Weisbach 2012), also, if certain criterias are met including significant risk transfers securitization reduces capital requirements (EBA (2014)) giving banks more leeway to issue loans (Norden et al.

(2014) and finally, securitization turns illiquid assets into liquid securities allowing them to be marketable again thereby increasing lending to formal banks.

#### IV. INNOVATION IN COMPOSITION OF MONEY

Gorton and Metrick (2011) portray shadow credit intermediation as financial innovation in the composition of aggregate money supply. The rise of shadow banking in India, Russia, Argentina and South Africa was mainly attributed to innovation in composition of these economies' money supply, FSB (2014). The rapid loss of confidence in the value of money has been a root cause of financial panics across countries and over time Reinhart and Rogoff,(2008). Despite the effectiveness of policy interventions in creating financial stability for decades following the Great Depression, significant innovations in the composition of the aggregate money supply have made the financial system more vulnerable to a loss of confidence by the holders of money and this has resulted in the development of shadow banking system, (Gorton and Metrick 2011)

Sunderam (2012) stated that shadow banking liabilities constitute substitutes for high-powered money. He also confirms that regulatory changes played a significant role in the growth of the shadow banking system. Moreira and Savov (2014) also studied the impact of shadow money creation on macroeconomic fluctuations. The collapse of shadow banking liquidity has real effects via the pricing of credit and generates prolonged slumps after adverse shocks. Virimai Mugobo , Misheck Mutize (2015) used money supply as the variables to find the results in china as the shadow banking is at the growing stage and a proper check is needed on the shadow banks.

#### **Shadow Banking Implications to Traditional Banking**

The products and services offered by the shadow financial system were mainly appreciated by households who are deprived of creditworthiness because they offer them an opportunity to access credit (Pozsar, 2010). Ricks (2010) indicated that these individuals who are perceived to be unbankable by the commercial banks are forced by their situations to take high-interest loans from shadow banks. The FSB (2011) also argued that participation of shadow banking entities in liquidity and credit transformation can significantly reduce the cost of lending. In the case of Zimbabwe, the lending gap between formal banks lending rates and shadow banks lending rates has been widening which cited a slowdown in broad money supply growth and growth in the unbanked bracket of the economy.

Federal Reserve (2013) indicated that shadow banks pose a huge challenge to the world economy.

Barua (2008) agreed with Endut and Toh (2009) on that shadow banks offer numerous advantages to individuals affected by the exclusion from formal banking system.

The public view shadow banking as an opportunistic advantage because they are able to take out loans from these

alternative financial intermediaries, either formal or informal (Białowolski, 2012). As the result the problem of financial exclusion becomes even stronger, thereby justifying traditional banks' strict vetting system.

Kappel (2010) also submitted how excess liquidity available in the shadow banking system has driven households to high debt incurring because of less stringent conditions for loans. Banks who fundamentally rethink their mobile strategy towards an emerging business model will stand to reap the rewards of increasing revenue, customer acquisition and loyalty (Lee, 2012). While some shadow banking may be the product of regulatory gaps and arbitrage, it is widely recognised that much of this activity is driven by efficiency gains from specialisation and comparative advantage over commercial banks, and is therefore desirable Pozsaretalz (2012). Schwarcz (2012), was of the view that shadow banks tend to be less regulated than traditional banks and regulatory arbitrage drives the demand for shadow banking to some extent. This was witnessed in Russia and India where the increase in formal banks regulation resulted in increase in demand for shadow banking.

TG Moe (2014) Central banks extended liquidity support during the financial crisis to nonbanks which would provide a liquidity backstop for systemically important markets and the shadow banking system that is deeply integrated with these markets.

VV Mugobo, M Mutize -2015 conducted a statistical analysis of the country's monetary aggregates and the total formal bank loan-to-deposits balances. The findings of this analysis show that the shadow banking system has always been a critical element of the formal banking sector and does not pose direct threat to the formal banking. In summary shadow banks were a result of money supply growth and total liquidity held by formal banks .

Sijia Wen et.al; (2017) discussed the influence of business in shadow banking on credit risk of commercial banks and concluded The credit risk of commercial banks is related to the shadow banking business. S Gebauer, F Mazelis – 2018 study the effects of tightening commercial bank regulation on the shadow banking sectorestimating the model using euro area data from 1999 – 2014 including information on shadow banks, found that tighter capital requirements on commercial banks increase shadow bank lending.

AWA Boot, AV Thakor (2018) examined the ongoing integration of banks and markets through the blurring of boundaries between them.T Gabrieli, et.al;(2018) empirically analysed the relationship between the shadow banking system and implementation of monetary ,showed that an increase in the size of shadow banking sector increases the independence of bank lending.

#### V. RESEARCH DESIGN

Quantitative analysis of research design was used in this research to fulfil the objectives of the research as well as to able the answers of the research questions. Quantitative data is chosen because it is more reliable and valid and is not subjected to the biasness of the individual and it is always

more easy to interpret quantitative data rather than interpreting qualitative data.



Journal Website: www.ijrte.org

### "The Impact of Shadow Banks on the Commercial Bank Lending in India with Reference to the Housing Finance Sector."

Correlation has been used to identify the relation between the commercial banks and the shadow banks and also interpretation has been made by the use of graphs and charts to estimate the results and the dependency on the variables. Also, linear regression has been used in the research to know on what factors the profitability of the commercial banks is dependent on.

**Research Questions** 

- What is the impact of shadow banking on commercial banks profitability?
- Have loan portfolios in commercial banks for financing housing decreased as a result of shadow banking?

#### **Assumptions of the study:**

To carry out the research, the following assumptions were made

- To measure shadow Banking, Monetary aggregates have been thought to be the perfect measure.
- The data collected from the banks is reliable and
- The sample of banks collected truly represent the banks in India.

#### Hypothesis of the Study.

The Null Hypothesis for the same will be

Shadow banking greatly affects profitability of the Indian Commercial banks /loans for financing house

HA: Shadow banks doesn't affect the profitability of the Indian Commercial Banks /Loans for Financing house.

#### **Objectives of study:**

- To assess the impact of shadow banking on profitability of commercial banks.
- To evaluate whether the loans given by commercial banks to Finance home loans decreased as the result of Housing Finance companies.

#### Scope of the Study

The research focuses primarily on the impact of shadow banking on traditional banks' profitability ie, commercial banks in India. It goes also to check the impact of shadow banks on loan portfolio of commercial banks in the housing Finance sector. The research utilized early information from 2009 to 2018submitted by banking institutions to the Reserve Bank of India.

#### Sample Design

There were 10 commercial banks whose profitability has been evaluated between the period 2009- 2018 and the shadow banks which operated in India during the period 2009-2018 . therefore a sample of 10 commercial banks and also the sample of 10 shadow banks were chosen based on the operations and popularity in India.

#### Data collection:

The data for the 10 selected commercial banks was mainly derived from the published financial reports, Securities Exchange Board of India, Money control and the Reserve Bank Of India The financial reports had most of all the internal determinants as well as the dependant variables like ROA, ROE and NIM. Shadow banking data was mainly obtained from RBI annual reports and economic data from the World Bank . Other secondary data was obtained from published printed sources like books, research articles, magazines and newspapers.

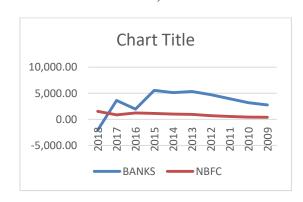
#### **Limitations** of the study:

The data is only based on the information gathered from the authentic publications and trust that the information is reliable and valid.

#### **Data Analysis:**

The study used both the descriptive and inferential statistics in analysing the data. Regression analysis and correlation is used to test the relationship between the variables and the analysis was conducted using SPSS tool. The data is presented by the use of tables, graphs and pie charts; which aids the understanding and summarizing of the findings. Commercial bank profitability ratios were used as measures of commercial bank profitability since they are inflation invariant which means that they are not affected by changes in general price level. On the other hand, Pie charts, Bar graphs as well as ratios were used to analyse gathered qualitative data.

### Netprofit of Banks V/S NBFCs duringpast 10 years (Fig. 1)



we can see in 2018 when the profitability of commercial banks went negative, the profitability of shadow banks touched itsall time high of 1518 crores from where we can sense that there is some relationship between these both and also we look at the year 2016-2017 when the graph of NBFC went downward , the graph of commercial banks

actually went up suggesting the possible correlation between these two

Blue Eyes Intelligence Engineering

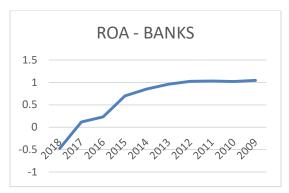
Published By:

& Sciences Publication



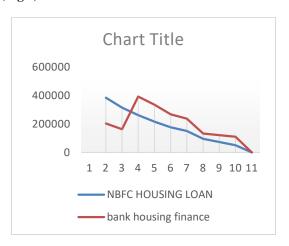


#### ROA of banks (Fig 2)



To get a more accurate view , we also decided to take the ratio of profitability i.e ROA because net profit can be subject to inflation and other variations too, so we took one of the profitability measures to look at the profit of the commercial banks and the results being the same as of net profit of the commercial banks i.e the ROA of commercial banks went negative in 2018.

## Loans given by NBFC vs loans given by banks to housing sector (Fig 3)



From the above graph, if we try to connect the relation between the two, From 2010 to 2012, the loans given by both the banks as well as housing finance company had a narrow steep of growth, from 2012 to 2013 also the loan increased at a parallel pace though the difference was more than the previous one, from 2013-2016 the loans increased at a stable pace from both the side reflecting the demand from the banks as well as from the the HFCs and only after 2016 they exhibited a opposite relationship with each other. Money Supply (M3): Money supply includes currency, deposits with an agreed maturity of up to two years, deposits redeemable at notice of up to three months and repurchase agreements, money market fund shares/units and debt securities up to two years. Money supply was used as a measure of shadow banking activities, the money supply has been constantly increasing in our country, it was around 57890 in 2010 and went upto 139625 in 2018 which signifies the money in circulation increased.

#### **Correlation Matrix**

out outside							
		Bank_profit	Nbfc_profit	Nbfc_loan	ROA	loan_ratio	deposit_ratio
Bank_profit	Pearson Correlation	1	360	520	.702	424	.410
	Sig. (2-tailed)		.307	.151	.035	.255	.273
	N	10	10	9	9	9	9
Nbfc_profit	Pearson Correlation	360	1	.823**	624	.796	758
	Sig. (2-tailed)	.307		.006	.072	.010	.018
	N	10	10	9	9	9	9
Nbfc_loan	Pearson Correlation	520	.823**	1	859"	.980"	966
	Sig. (2-tailed)	.151	.006		.003	.000	.000
	N	9	9	9	9	9	g
ROA	Pearson Correlation	.702	624	859**	1	759	.726
	Sig. (2-tailed)	.035	.072	.003		.018	.027
	N	9	9	9	9	9	9
loan_ratio	Pearson Correlation	424	.796	.980***	759	1	989
	Sig. (2-tailed)	.255	.010	.000	.018		.000
	N	9	9	9	9	9	g
deposit ratio	Pearson Correlation	.410	- 758	966"	.726	- 989"	1

Correlations

#### (Table 6.0)

Sig. (2-tailed)

Other than analysing the data through Graphs and charts, a correlation matrix has been prepared to know if the variables taking in this study is related or not. Correlation matrix was chosen so as to know the variables taken to fulfil our objectives have been related or not.

.018

.000 .027

.000

.273

By looking at the correlation matrix in Table 6.0 , we can interpret that ,

- Banks profit is not a significant variables when it comes to check if shadow banking is affecting the profitability of the banks because net profit is not a perfect measure of profitability because it is influenced by the economy inflation, interest margin of banks,
  - And as we can see banks net profit doesn't have any significance with any other variables as the value lies above 0.05 which defines it is not significant much.
- The profits of the NBFC are also not the measure of shadow banking activity and it shows significance with the NBFC loans which is a obvious thing because as the loans and advances given by NBFCs increase the profits of the NBFCs increases justifying the significance value below 0.05.
- As Suggested earlier, rather than going with the net profits of the banks, going for a profitability ratio i.e ROA would be more reliable and valid and the results also suggests that the ROA is correlated with the loans of NBFCs because it has a significance value less than 0.05, and a person correlation of negative value shows that both the variables are negatively correlated, so if one variable increases other will decrease and vice versa.
- Looking at the ROA variable, we can see that ROA is correlated with the NBFC loan with a significance of 0.03 and also ROA is correlated with the NBFC loan ratio i.e Total Loans given by NBFC/Money Supply and also Correlated with the NBFC deposit ratio i.e Total Deposits given by NBFC/Money supply(M3)
- So, ROA is directly proportional to NBFC Deposit Ratio and inversely proportional to NBFC loan ratio

## "The Impact of Shadow Banks on the Commercial Bank Lending in India with Reference to the Housing Finance Sector."

So the results suggests that yes, ROA of the banks is affected by the loans by the NBFCs to the customers the and the deposits taken by the NBFCs by the customer.

#### Coefficients<sup>a</sup>

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	1.706	.992		1.720	.146
	loan_ratio	10.809	9.837	1.213	1.099	.322
	deposit_ratio	-42.929	46.224	801	929	.396
	Nbfc_loan	.000	.000	-2.822	-4.536	.006

(Table 6.1)

#### **Analysis of Regression Model Results:**

The data was regressed for the past 10 years . Regression was taken to know the relationship between between the explanatory and the variables which are dependent and then further using to fulfil the research objectives. Along with correlation matrix , linear regression has also been applied to know on what variables ROA, being the dependent variables is dependent upon . So ROA  $\alpha$  1.706  $\pm$  1.213 loan ratio -.801deposit ratio -2.822 Nbfc Loan

By looking at their significance we can see that only the loan Given by NBFCs play a important role in determining the ROA of a bank and that too it has a negative relationship with the ROA and rest other variables are not much significant as the value is above .05.

Model Summary<sup>b</sup>

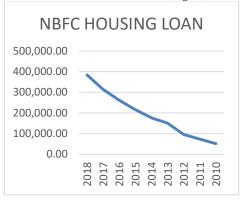
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.961ª	.923	.877	.12664

- a. Predictors: (Constant), Nbfc\_loan, deposit\_ratio, loan\_ratio
- b. Dependent Variable: ROA

( Table 6.2)An adjusted R square of .877 suggests that the results found are significant to the level of 87%.

**5.**4Have loan portfolios in commercial Banks for the housing finance decreased as the result of /.the shadow banks. Some of the indicators of trend performance of loans of commercial banks to housing finance and housing finance companies

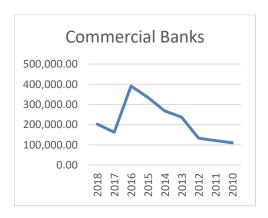
LOANS GIVEN BY NBFCs (Fig. 4)



**NBFC Housing loan: (Fig. 5)** 

Retrieval Number: F7133038620/2020©BEIESP

DOI:10.35940/ijrte.F7133.038620 Journal Website: <u>www.ijrte.org</u> we can see from the above graph that companies that are into housingfinance, their loans and advances are on a exponential curve signifyingthat the demand for the housing finance companies is on an increasing trend. In 2010 where the loans given by these companies was close to about 50,942 lakhs have gone upto 383,732.85 in 2018 signfiying people are preferring loans from housing companies with each passing year because of less regulations and timely disbursement of loans.



Loans by commercial banks for financing house :Commercial banks being the lender of all types of loans , was Preferred in initial years and if we look at the stability of loans by commercial banks, they are not very stable and their demand keeps on fluctuating with time . It had a heavy drop in 2016- 2017 , the factors which can be attributed to macro economic conditions of our country or can be also due to the demonetization which took place in 2016 .

# Loans given by NBFC vs loans given by banks to housing sector( Fig 6)



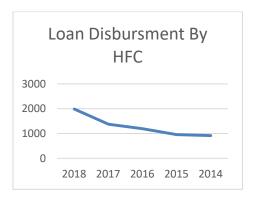
From the above graph, if we try to connect the relation between the two , From 2010 to 2012, the loans given by both the banks as well as housing finance company had a narrow steep of growth , from 2012 to 2013 also the loan increased at a parallel pace though the difference was more than the previous one,





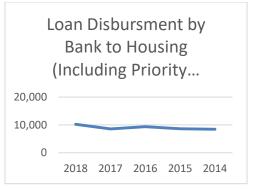
from 2013- 2016 the loans increased at a stable pace from both the side reflecting the demand from the banks as well as from the the HFCs and only after 2016 they exhibited a opposite relationship with each other.

#### Net of loans disbursed by HFC past 5 years(Fig 7)



We can infer from the graph that loan disbursement by the housing finance companies is on the growing path from 2014 to 2018, it rose from 912 billion to rs 1986 billion. The demand for the housing finance company has been on a steady path. This suggests that people do prefer housing finance companies over commercial banks.

### Net of loans disbursed by banks to housing sector(Fig. 8)



In case of loan disbursement by banks to housing sector, it has been on a constant path, if we can see its value stands at 8437 billion in 2014 and rose to only 10,230 billion in 2018 which signifies there has not been much growth in the lending to housing finance sector when compared to the lending by Housing Finance companies

#### Net loans disbursed by hfcvs banks to housing sector:(Fig .9)



If we look at the above comparison graph, we can see that they both follow the same direction and only in between 2016-17 there has been drop in lending by banks because of the new openings of housing finance companies whereas it got back to the value and thereafter has been growing because RBI cancelled registration of many NBFCs because of which demand of commercial banks increased again.

So as such no significance of housing finance company has on the commercial banks giving loans to finance home loans, the instability of commercial banks can be attributed to macroeconomic conditions of the country and and the rules and regulation followed by RBI.

#### VI. FINDINGS:

- Regression model results suggest that the profitability of banks is not significantly dependent on the variables of shadow banking and only the loan disbursed by the NBFCs have a significant relationship with the ROA of Banks.
- Indeed, Banks profitability is much dependent on the macro economic conditions of the country and on the bank soundness indicators like capital to asset ratio, Non performing loans by banks and on the asset liability management. For this reason, the banking sector in recent years has been facing significant losses

NBFCs is one such segment of Indian Financial system that has been growing robustly in spite of the adverse macro financial segment with a consolidated balance sheet expansion of over 17 percent in the first half of 2018-19 whereas if we talk about the banking sector the graph for banking sector went down because of the provisioning against the overload of deterioration in asset quality .

- ROA Of banks which was 0.95 % in 2008 reached to -0.09 % because of the macro backdrop i.e due to global growth, inflation, current account balance and general government gross debt.
- There was an increase in the credit disbursement by non deposit taking systematically important NBFCs and housing finance companies in 2017-18
  - There were major factors which contributed to NBFCs credit Growth, few of them are NBFCs Operate passive strategy for managing asset liability mismatches by covering gaps in the wholesale funding markets, and also due to the sharper decline in their interest rates as compared to the scheduled commercial banks.

The credit needs of the housing finance market are met mainly by scheduled commercial banks (SCBs) and housing finance companies (HFCs) and If we talk about the housing finance, there is no such significant relation between the Housing Finance companies and the commercial banks giving loans to finance home loans.

#### VII. CONCLUSION

The shadow banking system has always been an element of the banking sector intermediation. The systematic shadow banking structures outside the formal banking system may not have been entirely designed to circumvent regulations, but was a result of market needs to complete the banking system.



## "The Impact of Shadow Banks on the Commercial Bank Lending in India with Reference to the Housing Finance Sector."

The analysed results showed no significant influence of shadow banks on the banking system in terms of profitability Shadow banks threats could be measured in terms of the products and services offered by the traditional financial system. As a marketing tool, the results aligned with Pozsar (2010)'s conclusion that shadow banking products are mainly appreciated by households who are deprived of creditworthiness. So the view that shadow banks as being a threat to the mainstream banks was not justifiable. Rather than treating shadow banking acts a threat, was not supported from the conclusive findings and rather saw it as a complementary element to the formal banking system. In as much as it exerts competitive pleasures on the formal banking system, it was an awakening call and necessary signal to the formal banks to improve service delivery and to be innovative.

#### SCOPE FOR FURTHER RESEARCH:

- The research only concentrated on the 10 commercial banks in India, considering the impact of shadow banks to the whole financial sector can be of much significance in the future.
- In addition further research may also evaluate the impact of shadow banking to traditional banks' Non-performing loans.
- Along with ROA, other profitability ratios such as ROE, NIM can also be considered as the dependent variable

#### **REFERENCES**:

- Acharya, V. V., Gale, D., & Yorulmazer, T. (2011). Rollover risk and market freezes. The Journal of Finance, 66(4), 1177-1209.
- Białowolski, P. (2012). Applicability of the Multi-Group Confirmatory Factor Analysis to Construction of Business Sentiment Indicators.
- 3. Bonner, C., Streitz, D., &Wedow, M. (2016). On the differential impact of securitization on bank lending during the financial crisis
- Boot, A. W., &Thakor, A. V. (2014).Commercial banking and shadow banking. The Oxford Handbook of Banking, 47.Business School Working Paper
- FSB (2013) Global shadow banking monitoring report 2013, November
- FSB (2014) Global shadow banking monitoring report 2014, November
- Gabrieli, T., Pilbeam, K., & Shi, B. (2018). The impact of shadow banking on the implementation of Chinese monetary policy. International Economics and Economic Policy, 15(2), 429-447.
- 8. Gebauer, S., &Mazelis, F. (2018).The Role of Shadow Banking for Financial Regulation.
- Goodenough, A (2012) "Regulating Systemic Risk in the Offshore Shadow Banking Industry", George Mason Journal of International Commercial Law, 31.pp142-44.
- Gorton, G., &Metrick, A. (2012).Getting up to speed on the financial crisis: a one-weekend-reader's guide. Journal of Economic Literature, 50(1), 128-50..
- Gorton, G., &Metrick, A. (2012).Getting up to speed on the financial crisis: a one-weekend-reader's guide. Journal of Economic Literature, 50(1), 128-50.
- Huh, S. (2018). Three Essays on Macro-Finance (Doctoral dissertation, UC Riverside).
- Dr. H.R Kaushal (2016) 'Impact of NBCF in Indian Economy Growth', ERPA International Journal of Economic And business review ,
- Lee, S. (2016). Applications of Graphene-based Nano Electro Mechanical Systems. Columbia University. Reports, no 458, February
- McCulley, P., &Pozsar, Z. (2013). Helicopter money: or how I stopped worrying and love fiscal-monetary cooperation. Global Society of Fellows. 7
- Moe, T. G. (2014). Shadow banking: Policy challenges for central banks. Levy Economics Institute of Bard College Working Paper, (802).
- 17. Moreira, A., &Savov, A. (2014). Shadow banking and the economy.

- Mugobo, V. V., &Mutize, M. (2015). The effects of shadow banking on the traditional banking system in Zimbabwe.
- N. Nandani and M. Jeyanthi, "Concept of shadow banking in India," Global Journal for Research Analysis, vol. 3, no. 11, pp. 60-62, November Special Issue 2014
- Nadauld, T. D., & Weisbach, M. S. (2012). Did securitization affect the cost of corporate debt?. Journal of financial economics, 105(2), 332-352
- Pozsar Z, Adrian T, Ashcraft A, Boesky H (2012) Shadow Banking.
  Federal Reserve Bank of New York, Staff
- Pozsar, Z., Adrian, T., Ashcraft, A., & Boesky, H. (2010). Shadow banking. New York, 458(458), 3-9.
- Rasiah, D. (2010). Theoretical framework of profitability as applied to commercial banks in Malaysia. European Journal of Economics, Issue, 19, 74-97
- Reinhart, C. M., &Rogoff, K. S. (2008). Is the 2007 US sub-prime financial crisis so different? An international historical comparison. American Economic Review, 98(2), 339-44.
- Shleifer, A and Vishny, R (2013) "A Model of Shadow Banking", Journal of Finance, 68 4, pp22-50.
- Schwarcz, S (2012) "Regulating Shadow Banking", Review of Banking and Financial Law, 31 1, pp30-40.
- Sunderam A. (2012). Money Creation and the Shadow Banking System. Harvard
- Tang, J., & Wang, Y. (2015). Effects of shadow banking on return— Empirical study based on Chinese commercial banks. International Journal of Financial Research, 7(1), 207.
- 29. Wen, S., Ma, J., Pan, Y., Qi, Y., &Xiong, R. (2017). The impact of business scale of "shadow banking" on credit risk of commercial banks-take ten domestic listed commercial banks as examples. International Journal of Economics and Finance, 9(5), 94.
- 30. Zhang, K. (2012). Shadow Banking: Opportunity and Challenge to Commercial Banks. Journal of New Finance, (4), 35-39.
- 31. Reserve Bank of India "Monthly Economic Reports", available on <a href="https://www.rbi.org.in">www.rbi.org.in</a>

#### **AUTHORS PROFILE**



**Dr Sreelakshmi P,** Sreelakshmi P is working as Assistant Professor - Finance in Institute of Management, CHRIST (Deemed to be University), she is afaculty in Finance with sixteen years of teaching and research experience. She holds Doctoral degree from Dravidian University. She published several papers in peer reviewed refereed journals. Published several articles in dailies



**Ms.NidhiParpiani,** Ms.Nidhi is an MBA in Finance and is a research scholar at Christ University.

