

A Study of Bank Statutory Liquidity Ratio and its Impact on Housing Loan Leading Rate in India

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[Abstract] Liquidity, being one of the cardinal principles of bank lending, acts as a game changer for the survival and success of banks. However, considering the changing nature of lending in India in recent times and the complex nature of loan requirements, keeping up with the changing pace seems like a tough pathway for most of the banks to adapt to. Moreover, with the help of the PMAY scheme, an opportunity for every individual to buy his own house appears as icing on the cake. The crucial factor is the rate at which home loans are made available by commercial banks in India. Considering the RBI norms, it is mandatory for banks to maintain the requisite norms on SLR and CRR while maintaining the quantum of profitability and still keeping the steep competition in view. This research studies the trend of the statutory liquidity ratio of commercial banks in India and its proportionate impact on the bank's lending capacity of housing loans. For this purpose, data from the last 5 years has been collected and analyzed for the leading private sector banks currently operational in India, namely HDFC Bank, ICICI Bank, AXIS Bank, Kotak Mahindra Bank, and YES Bank. The data collected is analyzed using correlation analysis (Pearson's Correlation Coefficient). For testing the hypothesis, an ANOVA test has been used for deriving further results. This research paper uses applicable research tools in order to achieve the desired results while maintaining the required quantum of accuracy. The reduction in the SLR ratio by RBI and its subsequent impact in reduction of home loan interest rates are analyzed to provide a tabular presentation, describing the proportionate change in the latter. The results derived from the data collected and analyzed aim to provide a scope for further study on the subject matter. It also aims to understand the proportionate impact of changes in SLR to a bank's lending capacity, which also may be adopted as a suggested measure for banks to develop a reliable framework for sound lending and increasing overall efficiency.

[Keywords] SLR ratio, housing Loans, PMAY scheme, private sector banks, profitability

Introduction

In our country, the statutory liquidity ratio (SLR) is the rate decided upon by the Government for the reserve requirement, which is required to be maintained by commercial banks in several forms, such as cash, gold reserves, PSU, bonds and RBI-approved securities before giving any credit to banking customers. This rate is determined by the Reserve Bank of India to control the unnecessary expansion of credit. The SLR declared by the RBI is to be considered as a reference rate by every bank as a base rate, which is also considered as the minimum rate for maintaining liquidity. SLR is equally important to ensure adequate transparency in the borrowing and lendings of credit in the market. Bank credit is controlled by the SLR, as it is on the basis of SLR that the solvency of commercial banks is to be judged. SLR ensures that there is solvency in commercial banks and also assures the investment in government securities. In addition to SLR, other rates, like the repo rate and the reverse repo rate are also used by RBI to regulate the economy. Some sectors have gains, and some sectors suffers losses, but that is the bitter truth to live with. This paper is a study of bank statutory liquidity ratio and its impact on housing loan lendings rates in India. The crucial factor is the rate at which home loans are made available by commercial banks in India. Considering the

RBI norms, it is mandatory for banks to maintain the requisite norms on SLR and CRR while maintaining profitability and still keeping the steep competition in view.

Housing is the most essential human need apart from food and clothing. Now-a-days, first priority is given by the young millennials to purchase their own new house. One can give preference for purchasing a home rather than spending money on other wants. However, buying a home requires a huge investment, which is not possible for every individual. Hence, people approach banks or financial institutions to borrow money as a loan, and this loan is known as housing loan. The loan is granted by the bank to the person on the grounds of the applicant's eligibility. For this, the applicant needs to prove his/her eligibility after providing the eligibility documents to the banks. The prospective homeowner must seek a loan as per his or her eligibility and can repay in the longer period. In India, which is a developing country, a new house is a dream for every person living on a rental basis. A housing loan from a bank and financial institutions is a golden opportunity for these people. A housing loan is the best opportunity to bring their dreams of owning a house into reality. Because of urbanization, there is a big demand for housing in urban areas. Before the New Economic Policy of 1991, banks were not willing to give loans to people, but, after liberalization, a visible change came into the picture and made a policy of housing finance easy for people. The housing loan is an important issue in a country like India in which thousands of people are struggling for a decent place to live, especially in urban areas. The banks and financial institutions can play an important and supporting role in this direction by providing housing finance to as many people as possible who are eligible for assistance. There definitely is a price to be paid in return, in the form of interest, which sounds fair. On the basis of their requirement and eligibility, people usually search for banks that are willing to offer easy financial aid with interest rates as low as possible. This, in turn reduces the burden while repaying the loan.

The government also tries to lower the lendings rate by reducing its Special Rates on the basis of which banks give loans to needy persons. However, it is not easy to find a bank that immediately passes on the benefit of an interest rate cut, and, even if one does, there is no guarantee that the lender will continue to do so in the future. If the bank reduces the interest rate, there is a hike in the processing fee and penalties associated with the loan. Some banks reduce the interest rate, but, at the same time, increase the processing fees, which creates no effects of the rate cuts. The government has expressed its dissatisfaction in the last few months because of the banks' attitude not to give equal benefit to the customer. However, intervention is required by the RBI to seed the equal satisfaction of banks and customer. If the government reduces the special rates to the banks, the same reduction will be given to customers from these banks. Almost all the types of commercial banks, as well as development banks, provide a wide range of funds to the needy by analyzing and estimating their repayment capacity. India has witnessed spectacular growth in the banking sector with the development of technology, which acts as a catalyst in the growth and development of the economy. Housing financing has become a powerful mechanism of economic development. This paper indicated the rate of SLR and the lendings facility given by 5 selected banks for the purpose of this study, namely HDFC Bank, ICICI Bank, AXIS Bank, Kotak Mahindra Bank, and YES Bank. The positioning of the statutory liquid rate, along with the lendings rate of interest of these banks, followed by a subsequent impact on the loans by this rate has been considered in this paper.

Review of Literature

The housing finance business in India has been under rapid reform since the inception of the National Housing Board. The essential areas of the housing business are rapidly observing quickly changing, rapid reforms. The structural reforms that the system initiated have been giving slow but steady results. However, the market demand and supply still have considerable gaps.

Prof. Rekha, D. M and Gangamma, S. E (2019) in their paper stated that depending upon the lendings rates as determined by the central bank, low-loan interest rates have a direct, as well as disproportional, effect on housing affordability for households. For instance, monthly payments can decline by five to seven per cent (for 18- to 20-year loans) where interest rates drop by only one per cent. In 1994, according to another study, the purchasing power of Thai home buyers increased immensely as interest rates dropped to

10 per cent per annum. Many new housing projects were launched, and the market began recovering. However, this was considered a brief recovery as interest rates began rising again in 1995 and 1996, leading to a temporary relief (Xing Quan Zang, 2011).

N. Kumar, and Dr. V. K. Gangal, (2011) in “Customer Satisfaction in new generation banks in case study of HDFC Bank” say that, for a bank to survive and perform in this competitive world, customer satisfaction with speedy and efficient quality service happens to be the most essential factor to take gain confidence of buyers. The authors also said that the products and services offered by Indian banks are not much diversified, which creates the need for adopting the customer retention strategies to enhance customer satisfaction and retain them with banks.

Ashwani Bhalla and Parvinder Arora (2008) say that housing finance is a very unique form of finance. They also stated that the efficiency of the housing finance system in any country tends to be one of the basic yet crucial indicators that reflect the growth of its economy. Therefore, understanding the efficiency and effectiveness of the housing finance system in India is essential and relevant to understanding the role of Indian banking better.

Dr. S. J. Manjunath and Aluregowda in their paper “Impact of Service Quality on Customer Satisfaction at AXIS Bank” (2013) carried out a study that basically intended to identify the factors that affect services provided to customers. It also emphasized customer loyalty and customer satisfaction and its effects on service quality in general. In terms of customer loyalty, it was found that customer loyalty has a relationship with service quality, and it did affect consumer satisfaction in services. The more involvement of services is essentially important for improved service quality for any bank.

Problems Faced by the Housing Finance Borrowers: A study conducted in Punjab, by Manureet Riar* and Dr. G.S. Bhalla (2016) concluded that the various borrowers of housing finance face several problems in the process of procurement of a loan. According to their study, these factors are rate of interest, low service quality, initial loan processing problem, lack of knowledge among banking staff, poor or weak communication skills, inflexible provisions, stringent and rigid conditions, bureaucracy, insecurity of transactions, and several hidden costs.

Home Loan: A comparative analysis of SBI and HDFC banks, by Ms. Prabha Garg and Dr. Ramphool Sharma, (2014) concluded that the public sector banks in India are very popular among the customers because the interest rate is lower in the State Bank of India than any private sector bank (e.g. HDFC Bank), whereas the trust level that customers have with these banks is very high in comparison to other private players in the Indian banking industry. Special cases can be observed with older persons who, in general, are more dependent on public banks for their basic regular banking needs. It is true that the preference of the younger population is changing in line with the advancement of technology, resulting in their preferences for private banks, thanks to the services and facilities provided. The appearance of banks also becomes very important for the present generation, as it holds the key to the future of banking in India. However, in recent times, it has also been observed that the public sector banks have started providing better facilities and services to customers. They have started giving all the information to the customer’s time to time through SMS and internet banking; the information given by the public banks is, also, up to the mark. There is a vague possibility that the information provided by the private banks can sometimes be fake, and there have been attempts made to cheat the customers for the banks’ own benefits. In all, the author clarified that the public sector banks are still a better option.

Methodological Tools Administered

Statement of the Problem

There is a great amount of literature available on bank loans and ratios decided by the authorities. However, there is an acute gap with regards to the study on the SLR ratio’s impact on home loan lendings rates in India. The purpose of carrying out this research is to acknowledge how changes in the statutory liquidity ratio announced by the Indian government affects the interest rates of home loans; this study attempts to analyze the co-relationship between SLR and home loan interest rates. The study is conducted from 1 April 2015, to 31 March 2020. Here, the SLR declared by the Central Bank of India and home loans given by

five banks (HDFC Bank, ICICI Bank, Axis Bank, Kotak Mahindra Bank, and Yes Bank) is used for the study.

Objectives of the study

1. To identify the SLR ratios and home loan lendings rates of the selected banks
2. To examine the changes in SLR ratios and home loan lendings rates
3. To analyze the relation between the SLR ratio and the home loan interest rates
4. To assess the contribution of the SLR ratio to the banks' home loan leadings

Variables for the study

This research paper involves a study of two variables selected as follows:

- a. SLR (Statutory Liquidity Ratio)
- b. Home Loan Interest Rate

Need for Study

There is no lack of available literature when it comes to studying a bank's profitability, home loan lendings, or measuring a bank's overall performance. However, there is a great lack when it comes to the study of the impact of the changing statutory liquidity ratio on the home loan interest rates of the bank. This research will study the impact of the same. It also aims to study the impact of change in the total home loans by the bank with every change in the SLR ratio. This study also aims to reveal the proportion of home loans out of the total loans done by the bank to understand the real impact of the SLR on home loans.

Data Source

This research is purely analytical research based on secondary data collected from the list of sources, which are mentioned in data ANNEX. For the purpose of verifying the quantum of the data collected, additional sources were referred to for support, which are mentioned under the latter heading.

Data Collection

The data related to the SLR ratio and home loan interest rates for the last 5 years were collected from various sources, some of which are government databases and are reliable for our study, like RBI, moneycontrol.com, bseindia.com, business-standard.com, Economics times; the official websites of the five banks, and annual reports of these five banks. Additional sources were used.

Scope for Study

This study is designed to understand the impact of change of a bank's statutory liquidity ratio on home loan interest rates. While the various factors contributing to the bank's lendings principles have been studied earlier, the impact of change in the SLR ratio on the home loan interest rates and overall home loans of private sector banks is poorly understood. The scope of the study is limited to the 5 private sector banks selected for the time period specified above.

Limitations to the Study

The study here is performed for the period of five years; a short-term the study can take place for the long term. Also, this study analyzed only the selected private sector banks in India and did not cover the entire banking sector in India.

Research Design

The research design selected for the purpose of this study was the longitudinal correlation design. The study intends to observe the collected data without trying to influence any of the variables involved. The design was selected to establish a real sequence of the events and to derive the results while maintaining accuracy. To identify the relation between the two variables, Pearson's Correlation has been used. The study intends to observe the collected data without trying to influence any of the variables involved. The following charts

and diagrams signify the bank wise and overall bank statistics with regards to statutory liquidity ratios, gross total advances, home loan advances, home loan interest rates, and change in home loans to overall loans. The effort taken in the process is to identify the behavior of the year-by-year changes of the SLR ratio towards the home loan interest rates and overall home loans of the selected banks. All information needed for the purpose of the study was collected from reliable government sources and official bank websites; irrelevant information for the purpose of this study hitherto has been discarded. Hypothesis testing has been performed to test the derived results of this study. The results were tested under the One Null Hypothesis (H₀) and One Alternate Hypothesis (H₁) as follows:

H₀: There is no significant relation between SLR and bank housing loan interest rates

H₁: There is a significant relation between SLR and bank housing loan interest rates

Table 1
Overall bank Data for 5 Financial Years (Source – Annexure 1)

SR NO.	BANK NAME	YEAR	STATUTORY LIQUIDITY RATIO	GROSS ADVANCES	Home Loan Lending Rates	Advances towards Housing loans	Housing Loans to total ADVANCES RATIO (%)	Percentage change in housing loans
1	YES BANK	2015-16	21.5	98209.90	10.4	26514.35	27.00	0.00
		2016-17	20.83	132262.68	9.75	29172.77	22.06	10.03
		2017-18	19.9	189127.30	9.15	44647.21	23.61	53.04
		2018-19	19.5	222629.78	8.65	53933.81	24.23	20.80
		2019-20	18.96	157355.18	8.15	47097.40	29.93	-12.68
2	AXIS BANK	2015-16	21.5	291565.81	10.4	81601.24	27.99	0.00
		2016-17	20.83	329114.22	9.7	93873.80	28.52	15.04
		2017-18	19.9	385884.94	9.05	98608.11	25.55	5.04
		2018-19	19.5	456682.74	8.55	118893.04	26.03	20.57
		2019-20	18.96	571424.00	8.25	133421.19	23.35	12.22
3	HDFC BANK	2015-16	21.5	858318.00	10.215	117165.00	13.65	0.00
		2016-17	20.83	1030219.00	9.4	140922.00	13.68	20.28
		2017-18	19.9	1329028.00	9	153184.00	11.53	8.70
		2018-19	19.5	1634232.00	8.5	195027.00	11.93	27.32
		2019-20	18.96	1878334.00	8	240960.00	12.83	23.55
4	KOTAK BANK	2015-16	21.5	66160.70	10.25	14708.70	22.23	0.00
		2016-17	20.83	118665.30	9.75	23009.40	19.39	56.43
		2017-18	19.9	136082.10	9.15	26120.90	19.19	13.52
		2018-19	19.5	169717.90	8.75	32429.40	19.11	24.15
		2019-20	18.96	219748.20	8.2	46880.70	21.33	44.56
5	ICICI BANK	2015-16	21.5	411047.00	10.15	109899.00	26.74	0.00
		2016-17	20.83	445984.00	9.45	128190.00	28.74	16.64
		2017-18	19.9	473693.00	8.97	150543.00	31.78	17.44
		2018-19	19.5	535193.00	8.55	178411.00	33.34	18.51
		2019-20	18.96	608732.00	8.05	201134.00	33.04	12.74

Table 1 depicts the overall bank data for the last three financial years (2015-16 to 2019-20) for the five selected banks, extracted from the data sources mentioned in Annex 1. As per the annual reports, the SLR ratio as released by the RBI has been implemented by the selected banks in complete adherence. Each bank has shown a varied change in the home loan interest rate. The yearly average home loan interest rate for the specific financial year has been considered for the purpose of this study. HDFC Bank has reported a decline in the overall home loan interest rate, falling from 10.21% in 2016 to 8% in 2020. On the other hand, ICICI bank has seen a dip in its home loan interest rates from 10.15% in 2016 to 8.05% in 2020. Considering the major NPA is being handled by Kotak Bank, it has shown a dip in home loans from 10.25% in 2016 to 8.2% in 2020. In the case of YES bank, considering the scam that was revealed two years ago, the bank has still observed a decline in the home loans from 10.4% in 2016 to 8.15% in 2020. The trend with Axis Bank seems to be stable as far as a dip in home loan interest rate is concerned, from 10.4% in 2016 to 8.15% in 2020.

Figure 1
ICICI Bank

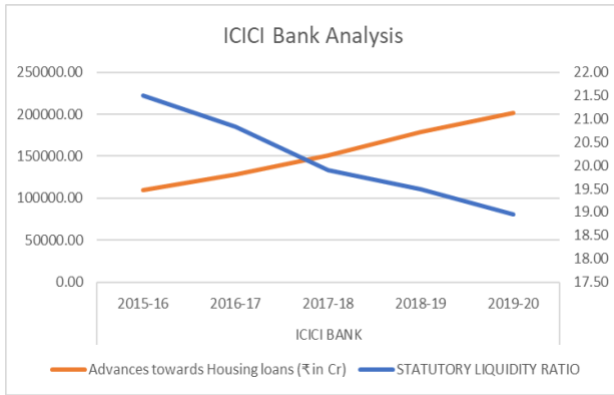


Figure 2
YES Bank

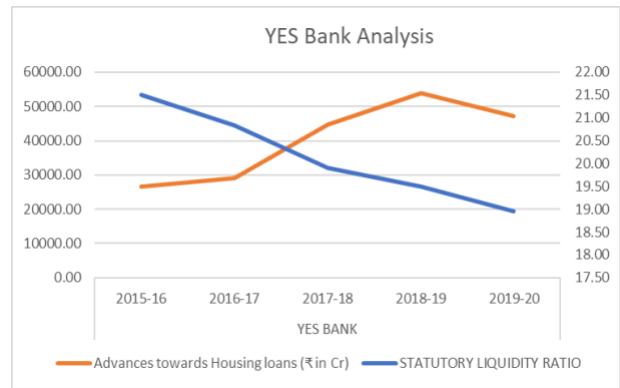


Figure 3
YES Bank

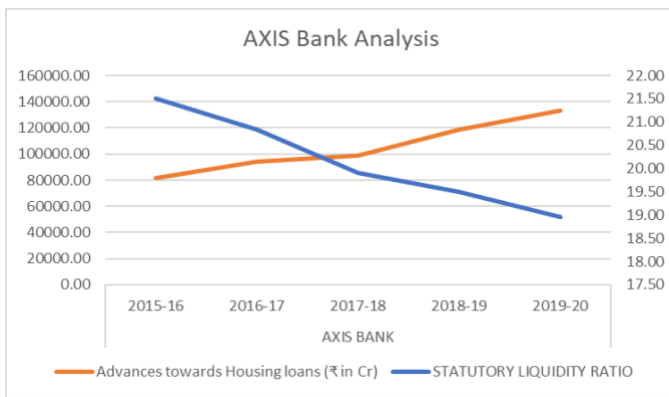


Figure 4
Kotak Bank

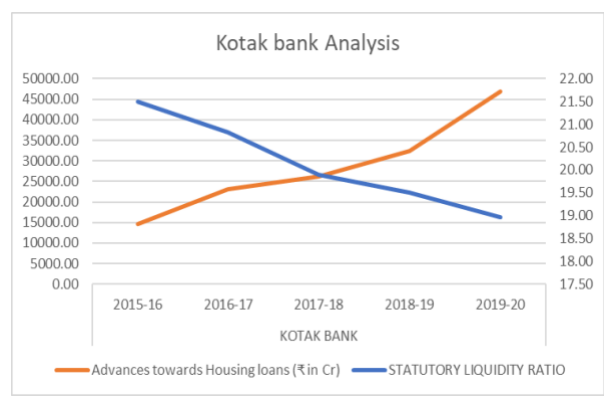
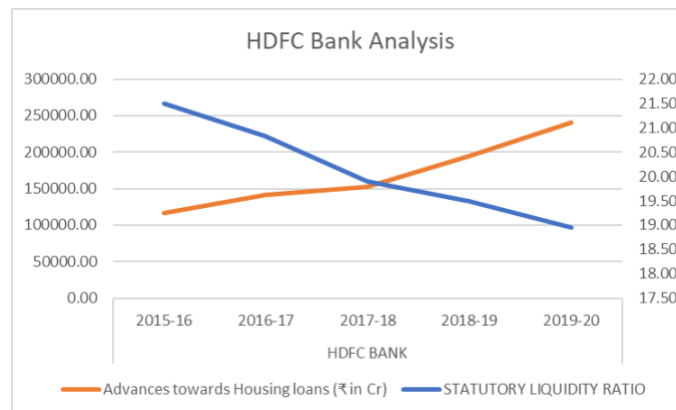


Figure 5
HDFC Bank



As seen in Figures 1, 2, 3, 4 and above, the graph depicts the double axis data presentation with the SLR Ratio on the right vertical axis and the overall bank home loan lendings on the left vertical axis. Each bank selected for the purpose of this study reveals a similar pattern of lendings in response to the declining SLR ratio year after year. The bank-wise data clearly depicts a similar pattern of home loan lendings achieved by the selected banks. The study reveals that as the SLR has dropped each year, the overall bank lendings for home loans has increased. We can establish a conclusion on this aspect that the SLR and overall bank lendings towards home loans (amount disbursed) have observed an inverse relationship for the time period considered. Graph 1.2 (YES Bank Analysis) reflects a declining home loan lendings curve in 2019-20 due to the financial hardships and a scam revealed in 2019. To understand the relation between the two variables selected for this study, bank-wise analysis has been initially performed. The results derived from the study reveal the following:

Table 2
YES Bank Home Loan Analysis

SR NO.	BANK NAME	YEAR	STATUTORY LIQUIDITY RATIO	GROSS ADVANCES	Home Loan Lending Rates	Advances towards Housing loans	Housing Loans to total ADVANCES RATIO (%)	Percentage change in housing loans
1	YES BANK	2015-16	▲ 21.50	98209.90	▲ 10.40	▼ 26514.35	▬ 27.00	▼ 0.00
		2016-17	▲ 20.83	132262.68	▲ 9.75	▼ 29172.77	▼ 22.06	▬ 10.03
		2017-18	▬ 19.90	189127.30	▬ 9.15	▬ 44647.21	▼ 23.61	▲ 53.04
		2018-19	▼ 19.50	222629.78	▼ 8.65	▲ 53933.81	▼ 24.23	▬ 20.80
		2019-20	▼ 18.96	157355.18	▼ 8.15	▲ 47097.40	▲ 29.93	▼ -12.68
	Mean		20.14	159916.97	9.22	40273.11	25.36	14.24
	Std Deviation		0.91	43278.69	0.79	10628.64	2.79	22.33
	Co-Variance		0.72					
	Correlation		0.995847043					

Table 2 reveals the 5-year analysis for YES Bank, identifying a strong positive correlation between the SLR ratio and the home loan interest rate (**0.9958**), signifying that every decrease in the SLR ratio has seen a subsequent fall in the home loan interest rates. The bank has seen considerable increase in the home loan lendings; however, a gap analyzed through the data analysis hints towards the ratio of housing loans to total advances, as this ratio is not consistent with the behavior of the variables.

Table 3
AXIS Bank Home Loan Analysis

SR NO.	BANK NAME	YEAR	STATUTORY LIQUIDITY RATIO	GROSS ADVANCES	Home Loan Lending Rates	Advances towards Housing loans	Housing Loans to total ADVANCES RATIO (%)	Percentage change in housing loans
2	AXIS BANK	2015-16	▲ 21.50	291565.81	▲ 10.40	▼ 81601.24	▲ 27.99	▼ 0.00
		2016-17	▲ 20.83	329114.22	▲ 9.70	▼ 93873.80	▲ 28.52	▲ 15.04
		2017-18	▲ 19.90	385884.94	▬ 9.05	▼ 98608.11	▬ 25.55	▼ 5.04
		2018-19	→ 19.50	456682.74	▼ 8.55	▲ 118893.04	▬ 26.03	▲ 20.57
		2019-20	▼ 18.96	571424.00	▼ 8.25	▲ 133421.19	▼ 23.35	▬ 12.22
	Mean		20.14	406934.34	9.19	105279.48	26.29	10.57
	Std Deviation		1.02	111063.83	0.87	20691.43	2.07	8.14
	Co-Variance		0.71					
	Correlation		0.99570678					

Table 3 presents a 5-year analysis for AXIS Bank, identifying a strong positive correlation between the SLR ratio and the home loan interest rate (**0.9957**), signifying that every decrease in the SLR ratio has seen a subsequent fall in the home loan interest rates. The bank has seen a considerable increase in the home loan lendings; however, a similar gap analyzed through the data analysis hints towards the ratio of housing loans to total advances, again denoting a similar trend.

Table 4
HDFC Bank Home Loan Analysis

SR NO.	BANK NAME	YEAR	STATUTORY LIQUIDITY RATIO	GROSS ADVANCES	Home Loan Lending Rates	Advances towards Housing loans	Housing Loans to total ADVANCES RATIO (%)	Percentage change in housing loans
3	HDFC BANK	2015-16	▲ 21.50	858318.00	▲ 10.22	▼ 117165.00	▲ 13.65	▼ 0.00
		2016-17	▲ 20.83	1030219.00	■ 9.40	▼ 140922.00	▲ 13.68	▲ 20.28
		2017-18	■ 19.90	1329028.00	■ 9.00	▼ 153184.00	▼ 11.53	▼ 8.70
		2018-19	▼ 19.50	1634232.00	▼ 8.50	■ 195027.00	▼ 11.93	▲ 27.32
		2019-20	▼ 18.96	1878334.00	▼ 8.00	▲ 240960.00	■ 12.83	▲ 23.55
	Mean		20.14	1346026.20	9.02	169451.60	12.72	15.97
	Std Deviation		1.02	419611.90	0.85	48938.77	0.98	11.32
	Co-Variance		0.69					
	Correlation		0.986943655					

Table 4 reveals a similar correlation of **0.98** between the two variables; however, the housing loan to total advances is seen to increase in the last year, which appears as a different pattern compared to the earlier bank data analysis conducted.

Table 5
KOTAK Bank Home Loan Analysis

SR NO.	BANK NAME	YEAR	STATUTORY LIQUIDITY RATIO	GROSS ADVANCES	Home Loan Lending Rates	Advances towards Housing loans	Housing Loans to total ADVANCES RATIO (%)	Percentage change in housing loans
4	KOTAK BANK	2015-16	▲ 21.50	66160.70	▲ 10.25	▼ 14708.70	▲ 22.23	▼ 0.00
		2016-17	▲ 20.83	118665.30	▲ 9.75	▼ 23009.40	▼ 19.39	▲ 56.43
		2017-18	■ 19.90	136082.10	■ 9.15	■ 26120.90	▼ 19.19	▼ 13.52
		2018-19	▼ 19.50	169717.90	▼ 8.75	■ 32429.40	▼ 19.11	■ 24.15
		2019-20	▼ 18.96	219748.20	▼ 8.20	▲ 46880.70	▲ 21.33	▲ 44.56
	Mean		20.14	142074.84	9.22	28629.82	20.25	27.73
	Std Deviation		1.02	57324.00	0.81	12033.42	1.44	22.86
	Co-Variance		0.66					
	Correlation		0.995121545					

Table 5 shows a similar trend to that of Table 4, achieving a strong positive correlation between the selected variables.

Table 6
ICICI Bank Home Loan Analysis

SR NO.	BANK NAME	YEAR	STATUTORY LIQUIDITY RATIO	GROSS ADVANCES	Home Loan Lending Rates	Advances towards Housing loans	Housing Loans to total ADVANCES RATIO (%)	Percentage change in housing loans
5	ICICI BANK	2015-16	▲ 21.50	411047.00	▲ 10.15	▼ 109899.00	▼ 26.74	▼ 0.00
		2016-17	▲ 20.83	445984.00	■ 9.45	▼ 128190.00	▼ 28.74	▲ 16.64
		2017-18	■ 19.90	473693.00	■ 8.97	■ 150543.00	▲ 31.78	▲ 17.44
		2018-19	▼ 19.50	535193.00	▼ 8.55	▲ 178411.00	▲ 33.34	▲ 18.51
		2019-20	▼ 18.96	608732.00	▼ 8.05	▲ 201134.00	▲ 33.04	▲ 12.74
	Mean		20.14	494929.80	9.03	153635.40	30.73	13.07
	Std Deviation		1.02	78190.61	0.81	36877.67	2.88	7.62
	Co-Variance		0.66					
	Correlation		0.992878991					

Table 6 has similarity from the correlation point of view (**0.9928**); however, the housing loans to total advances ratio is increasing steadily, further providing a different analytical view for ICICI bank. As each bank individually reflects a similar trend between the two variables, an overall analysis reveals the following statistics:

Table 7
Overall Bank Data Analysis

SR NO.	BANK NAME	YEAR	STATUTORY LIQUIDITY RATIO	GROSS ADVANCES	Home Loan Lending Rates	Advances towards Housing loans	Housing Loans to total ADVANCES RATIO (%)	Percentage change in housing loans
1	YES BANK	2015-16	▲ 21.5	98209.9	▲ 10.4	▼ 26514.35	■ 26.99763466	▼ 0
		2016-17	▲ 20.83	132262.68	▲ 9.75	▼ 29172.77	▼ 22.05669052	■ 10.02634422
		2017-18	■ 19.9	189127.3	■ 9.15	■ 44647.21	▼ 23.60696208	▲ 53.044123
		2018-19	▼ 19.5	222629.78	▼ 8.65	▲ 53933.81	▼ 24.22578417	■ 20.79995592
		2019-20	▼ 18.96	157355.18	▼ 8.15	▲ 47097.4	▲ 29.93063209	▼ -12.67555546
2	AXIS BANK	2015-16	▲ 21.5	291565.8075	▲ 10.4	▼ 81601.2439	▲ 27.98724741	▼ 0
		2016-17	▲ 20.83	329114.2208	▲ 9.7	▼ 93873.7979	▲ 28.52316672	▲ 15.03966535
		2017-18	▲ 19.9	385884.9386	■ 9.05	▼ 98608.1073	■ 25.55375902	▼ 5.043270333
		2018-19	■ 19.5	456682.7355	▼ 8.55	▲ 118893.0411	■ 26.03405644	▲ 20.57126372
		2019-20	▼ 18.96	571424	▼ 8.25	▲ 133421.19	▼ 23.34889504	▲ 12.21951156
3	HDFC BANK	2015-16	▲ 21.5	858318	▲ 10.215	▼ 117165	▲ 13.65053512	▼ 0
		2016-17	▲ 20.83	1030219	■ 9.4	▼ 140922	▲ 13.67883916	▲ 20.27653309
		2017-18	■ 19.9	1329028	■ 9	▼ 153184	▼ 11.52601751	▼ 8.701267368
		2018-19	▼ 19.5	1634232	▼ 8.5	■ 195027	▼ 11.93386251	▲ 27.31551598
		2019-20	▼ 18.96	1878334	▼ 8	▲ 240960	■ 12.82838941	▲ 23.55212355
4	KOTAK BANK	2015-16	▲ 21.5	66160.7	▲ 10.25	▼ 14708.7	▲ 22.23177808	▼ 0
		2016-17	▲ 20.83	118665.3	▲ 9.75	▼ 23009.4	▼ 19.39016713	▲ 56.43394726
		2017-18	■ 19.9	136082.1	■ 9.15	■ 26120.9	▼ 19.19495657	▼ 13.52273419
		2018-19	▼ 19.5	169717.9	▼ 8.75	■ 32429.4	▼ 19.1078254	■ 24.15115865
		2019-20	▼ 18.96	219748.2	▼ 8.2	▲ 46880.7	▲ 21.33382663	▲ 44.56234158
5	ICICI BANK	2015-16	▲ 21.5	411047	▲ 10.15	▼ 109899	▼ 26.73635862	▼ 0
		2016-17	▲ 20.83	445984	■ 9.45	▼ 128190	▼ 28.74318361	▲ 16.64346354
		2017-18	■ 19.9	473693	■ 8.97	■ 150543	▲ 31.78071029	▲ 17.43739761
		2018-19	▼ 19.5	535193	▼ 8.55	▲ 178411	▲ 33.33582465	▲ 18.51165448
		2019-20	▼ 18.96	608732	▼ 8.05	▲ 201134	▲ 33.04146981	▲ 12.73632231
Overall Statistics of the banks selected								
	Mean		14.5057416					
	Std. Deviation		7.55259443					
	Co-Variance		17.4659531					
	Correlation		0.99314094					

The overall analysis performed by applying Pearson's Correlation Co-efficient reveals a positive correlation of **0.9931** between the selected variables, further proving the Null Hypothesis (H0) to be VOID. Hence, as the correlation achieved is not equal to zero, the alternate hypothesis (H1) proves to be correct for the purpose of this study.

Table 8
Overall Descriptive Statistics

Overall Bank Descriptive Statistics (CONsolidated for all years)			
<i>Particulars</i>	<i>RY LIQUIDITY RATIO</i>	<i>Home Loan Lending Rates</i>	<i>towards Housing loans</i>
Mean	20.138	9.968333333	99453.88081
Standard Error	0.1867547	0.132140498	12897.9838
Median	19.9	10.15	98608.1073
Mode	21.5	10.4	
Standard Deviation	0.9337737	0.396421493	64489.91898
Sample Variance	0.8719333	0.15715	4158949650
Kurtosis	-1.385661	-1.702644843	-0.73329209
Skewness	0.2642437	-0.3826895	0.446985582

Considering the risk-to-return ratio, the standard deviation is derived at **0.93** and **0.39** for each variable individually. The negative kurtosis signifies a platykurtic curve, further revealing a spread-out distribution, resulting in flattening of the trend line, signaling that the peak of the curve is very flat when viewed through a graphical presentation. Also, the negative skew for home loan lendings rates reveals the reactivity of the home loan interest rates following the changing SLR ratios. A further testing of the hypothesis was attempted for the purpose of this study on the selected variables:

Table 9
F-Test (Two Sample Variance)

F-Test Two-Sample for Variances		
	<i>STATUTORY LIQUIDITY RATIO</i>	<i>Home Loan Lending Rates</i>
Mean	20.138	9.1374
Variance	0.871933333	0.604277333
Observations	25	25
df	24	24
F	1.442935694	
P(F<=f) one-tail	0.187693344	
F Critical one-tail	1.983759568	

For the purpose of testing the null hypothesis, an F-test was performed between the two variables, keeping the Alpha at 0.05. The results received were a P-Value of **0.18**, which is greater than the alpha considered for running the F-test. Furthermore, as the F-value is lower than the F-Critical one-tail value, the null hypothesis does not stand to be true, and hence is rejected.

Results and Findings

On the basis of application of the research tools and methods, the findings from the tests performed are as follows: Application of Pearson's Correlation on a year-wise basis derived similar results for all the selected private sector banks, except for the total amount of home loan lendings for YES bank in 2019-20, where the actual lendings decreased (for the same reason mentioned above). Each bank significantly reveals a strong positive correlation between the variables chosen for this study. As RBI norms on SLR are on a relaxing front over the last 5 years, banks have responded appropriately to the decreasing SLR by reducing home loan interest rates, apparently increasing fund flow in the market for housing loans. The overall results, again, derived a strong positive correlation between the variables, further cements the fact that the relationship between the two variables is positive. To further elaborate the studied data and results, the year-wise percentage of housing loans to total advances for a few banks seem to differ from the expected pattern. This is an important indication, as it is revealed that no banks have shown an increasing ratio of housing loans to total advances each year. From the analysis of the study, it is clear that the bank-home-loans-to-advances ratio has not increased, as banks have mobilized lendings towards more profitable lendings than home loans. Hence, although the direction of change is the same, the velocity differs. As per our analysis, it is understood that the statutory liquidity ratio is one of the important and contributing factors towards deciding the home loan interest rates for commercial banks in India. However, we are depicting the possibility that the SLR not the only contributing factor to increasing home loan lendings.

Conclusion and Suggestions

As RBI norms on the SLR are on a relaxing front over the last 5 years, banks have responded appropriately to the decreasing SLR by reducing home loan interest rates, apparently increasing fund flow in the market for housing loans. This study evaluated the changing trend of the SLR ratio for the last 5 financial years and its subsequent impact on changes in home loan interest rates. It is true that the overall bank lendings towards home loans have increased for most of the banks selected for the purpose of this study. However, as a measure of recommendation, banks should also focus on maintaining the home loan-lendings-to-total-lendings ratio, as every individual deserves a home of his/her own. As private sector banks thrive on profitability, it should also aim for a stable growth in overall lendings, as home loan lendings are secured as compared to other unsecured loans. Private sector banks have proved to be an important constituent towards adding strength to the Indian banking sector. Effective internal policies for the banks will surely act as a helping hand to the government initiatives and will lead to overall development of India.

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Annex: Data Sources

Particulars

HDFC Bank Annual Report 2015-16, 2016-17, 2017-18, 2018-19, 2019-20

AXIS Bank Annual Report 2015-16, 2016-17, 2017-18, 2018-19, 2019-20

YES BANK Annual Report 2015-16, 2016-17, 2017-18, 2018-19, 2019-20

KOTAK Bank Annual Report 2015-16, 2016-17, 2017-18, 2018-19, 2019-20

ICICI Bank Annual Report 2015-16, 2016-17, 2017-18, 2018-19, 2019-20

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www.icicibank.com

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www.Kotakmahindrabank.com

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