

Impact of Rbi Repo Rate Changes on Banks Lending Behaviour: A Comparative Study on Public and Private Sector Banks

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ABSTRACT

The aim of this study is to explore the impact of the change in the Reserve Bank of India's (RBI) repo rate on the public and private sector banks on their lending practices in India from 2016 to 2025. In this study, the secondary method of data collection is used by collecting the required information from the Reserve Bank of India publications and the Database on Indian Economy (DBIE). In this study, statistical tools such as regression analysis, correlation, chi-square tests, t-test, Mann-Whitney U tests, and descriptive statistics are applied. The findings show that public sector banks have more total advances and NPA's compared to private sector banks. This shows the greater involvement of public sector banks compared to their counterparts. Moreover, the findings show a considerable difference between the practices of public and private sector banks. Regression analysis shows that the change in the repo rate does not influence the bank advances. This study concludes that the impact of internal and institutional factors is more compared to the impact of the change in the repo rate.

Keywords: Repo rate, public sector banks, Private sector banks, non-performing asset, Monetary policies.

INTRODUCTION

Reserve Bank of India is responsible for maintaining the repo rate, which is an essential factor for the Central Bank to manage inflation or economic liquidity through the regulation of bank borrowability. Any variation in the repo rate will, in turn, act the lending rate of banks, which will, in turn, act the demand for credit for consumers or businesses. Previous studies have shown that the pattern of bank lending is highly influenced by an executive variation in the repo rate. Further, studies have also shown that structural reforms such as the Marginal Cost of Funds Based Lending Rate System are making the bank lending rate highly sensitive to any variation in the repo rate. It is very essential to understand the effectiveness of a variation in the repo rate due to the changing monetary policy environment and the evolving reforms in the banking sector. The main aim of this paper is to assess the impact of the variation in the repo rate of the Reserve Bank of India on bank lending and compare the impact on public and private sector banks.

REVIEW OF LITERATURE

1. Srivastava, A. (n.d.). (2026) Assessing the dual facets of financial policy: Prot ability and liquidity in Indian public and private zone banks. The consolidated bank shall decide the policy repo rate and shall meet as a minimum four times each yr to scrutinise and amend the repo charge to stability each

financial boom and inflation. The MPC establishes the repo rate (the primary hobby charge at which lenders make loans to banks), therefore. thru an boom in transparency, duty, and control of liquidity, the MPC's function in placing the repo price maintains to reinforce.

2. Tatkar et al. (2025) examine whether public-quarter banks showcase special performance from personal-sector banks within the adjustment of lending quotes due to the MCLR (Marginal price of budget primarily based Lending fee). The MCLR represents a brand-new approach to enhancing the transparency of lending fees and improving the transmission of economic policy.
3. Marisetty & Bindu (2025) have accomplished a case observe on the effect of bulletins concerning interest rate on banking and non-banking stocks in India. The study found out that monetary markets react strongly to bulletins associated with financial coverage. The RBI's repo price (modifications in repo price - both high quality and terrible) causes a non-linear reaction a number of the diverse entities of the non-public region
4. S. k. Venugopal (2024) did research on loan portfolio control and financial institution efficiency among public, antique non-public, and new personal sector banks in India. The have a look at underscored enormous variations in asset quality and operational performance amongst diverse financial institution sorts.
5. Belavadi and Shivakumar (2023) studied how economic policy influences the banking sector's overall performance in India. observed that adjustments in coverage charges appreciably influence bank profitability, lending practices, and universal financial performance. A coverage issued by using the principal financial institution of a state to control the supply of money for reaching the macroeconomic dreams of the state.
6. Banerjee, A., & Paul, S. (2022). This examine examines the effect of the RBI repo charge adjustments on banks' borrowing, lending, funding, and deposits. It explains the connection among the alternate in repo rate on bank borrowings and lending at the individual financial institution stage.

OBJECTIVES OF THE STUDY

1. To analyse the impact on repo rate adjustments on the lending behaviour of bank.
2. To correlate the lending behaviour of private and public sector banks in the terms of different categories of advances
3. To analyses the difference in standard advances, sub- standard advance, doubtful advance, loss advances and NPAs between public and private sector banks
4. To compare the lending behaviour of public and private sector banks during periods of repo rate hikes or tightening.
5. To examine the association between the banking sector (public and private) and the NPAs.

RESERCH METHODOLOGY

The research is of both descriptive and analytical nature, as it describes and analyses the impact of changes in RBI's repo rate on bank lending behaviour. Descriptively, the study is concerned with describing and explaining how changes in repo rate affect bank lending behaviour, while analytically, the study is concerned with analysing these changes to understand their impact on bank lending behaviour. The study uses a comparative approach to analyse differences between bank lending behaviour between public sector banks and private sector banks. This approach is used to compare differences between bank lending

behaviour between these two categories of banks. Moreover, the study is of empirical nature, as it is backed by quantitative data from RBI (DBIE).

SOURCE OF SAMPLE

The sample data for the present study has been collected from the official publications and statistical databases of the Reserve Bank of India. The secondary data on advances, different kinds of Non-Performing Assets, and repo rate has been collected from the RBI website, especially from publications like Statistical Tables Relating to Banks in India, Annual Reports, and Database on Indian Economy (DBIE).

SAMPLE TIME FRAME

The data consists of advance and repo rate details of public sector banks and private sector banks for the period of 2015-2025. The data was utilized to analyse the behaviour of banks regarding lending. The impact of repo rate changes on advances and NPAs was also analysed using the data. The sample of the study consists of aggregated banking sector data, which was derived from RBI sources. This ensures the reliability and authenticity of the data used for the analysis.

ANALYSIS AND INTERPRETATION

Table:1.1 Table of total advances and bank sectors

Descriptive Statistics		
	Total Advances	
	Private Sector Banks	Public Sector Banks
Mode	3.473×10^6	6.402×10^6
Median	3.937×10^6	6.693×10^6
Mean	4.297×10^6	7.440×10^6
Skewness	0.611	1.150
Std. Error of Skewness	0.687	0.687

This shows that public sector banks have higher total advances compared to private sector banks, which in turn indicates a stronger role for public sector banks in the distribution of credit. The results also confirm that the level of lending in both public and private sector banks is normally distributed.

INDEPENDENT SAMPLE T- TEST

Table:1.2 Student 's T-test

Advances	t	df	p
Standard Advances (Amount)	-3.168	18	.005
Total Advances	-3.825	18	.001

The t-test results show that there is a big difference between public and private sector banks in Standard Advances and Total Advances at a 5% level of significance ($p < 0.05$). Public sector banks have lent more money than private sector banks, which shows that lending behaviour is different between sectors.

Table: 1.3 Mann- Whitney U test

Advances	U	p
Sub-Standard Advances	5.000	< .001
Doubtful Advances	0.000	< .001
Loss Advances	13.00	.004
Gross NPAs	0.000	< .001

The results of the Mann-Whitney U test indicate a significant difference in sub-standard advances, doubtful advances, loss advances, and gross NPAs between public and private sector banks, where public sector banks have higher NPAs compared to private sector banks, thereby rejecting the null hypothesis.

Table:1.4 Mean Difference of Independent sample T-test

Variable	Mean Difference
Sub-Standard Advances	80,487.52
Doubtful Advances	2,89,824.76
Loss Advances	61,373.04
Gross NPAs	4,31,684.52

CORRELATION

Table: 1.5 Spearman's correlations

Variables	Spearman's rho	p
Sub-Standard Advances & Doubtful Advances	0.878	< .001
Sub-Standard Advances & Loss Advances	0.466	.040
Sub-Standard Advances & Gross NPAs	0.938	< .001
Doubtful Advances & Loss Advances	0.549	.014
Doubtful Advances & Gross NPAs	0.971	< .001
Loss Advances & Gross NPAs	0.602	.006

The results indicate a strong positive association between sub-standard advances, doubtful advances, loss advances, and gross NPAs, which in turn indicates that an increase in one type of NPA results in a corresponding increase in other NPAs as well.

Table: 1.6 Pearson's Correlations

Variables		Variables	Pearson's r	p	Effect size (Fisher's z)	SE Effect size
Standard Advances (Amount)	-	Total Advances	0.995	< .001	2.960	0.243

There is a very strong positive relationship between Standard Advances and Total Advances as their correlation coefficient is 0.995 with a significant p-value less than 0.001. This shows that changes in standard advances have a significant impact on total advances.

LINER REGRESSION

Table: 1.7 Analysis of banks advances and repo rate

Model Summary - ADVANCES								
Model	R	R ²	Adjusted R ²	RMSE	R ² Change	df1	df2	p
M ₀	0.000	0.000	0.000	$2.327 \times 10^{+6}$	0.000	0	19	
M ₁	0.079	0.006	-0.049	$2.383 \times 10^{+6}$	0.006	1	18	.742
<i>Note.</i> M ₁ includes repo rate								

ANOVA						
Model		Sum of Squares	df	Mean Square	F	p
M ₁	Regression	$6.367 \times 10^{+11}$	1	$6.367 \times 10^{+11}$	0.112	.742
	Residual	$1.022 \times 10^{+14}$	18	$5.680 \times 10^{+12}$		
	Total	$1.029 \times 10^{+14}$	19			

Coefficients						
Model		Unstandardized	Standard Error	Standardized	t	p
M ₀	(Intercept)	$5.635 \times 10^{+6}$	520300		10.83	< .001
M ₁	(Intercept)	$4.497 \times 10^{+6}$	$3.442 \times 10^{+6}$		1.306	.208
	repo rate	196500	586800	0.079	0.335	.742

Regression results show a very weak relationship between repo rate and bank advances as its p-value is greater than 0.05. This suggests that repo rate alone does not significantly influence lending behaviour, and other factors may affect bank advances.

SUGGESTIONS OF THE STUDY

- Public sector banks should enhance their credit monitoring to reduce the NPAs, as the study reveals that NPAs in public sector banks are much higher than in private sector banks.
- Banks should enhance their risk assessment mechanisms to reduce the growth of bad, doubtful, and loss advances.
- Private sector banks, as well as public sector banks, should enhance their recovery mechanisms to reduce the growth of NPAs.
- Banking institutions should diversify their lending to reduce the concentration of risk, as well as to maintain a healthy balance between advances and asset quality.
- Policy makers as well as bank management should not focus on changes in the repo rate to influence bank lending behavior, as the study reveals that changes in the repo rate have a very weak influence on bank advances.
- Bank management should focus on internal management policies as well as economic factors, which may have a greater influence on bank lending behavior than changes in the repo rate.

CONCLUSION

The study examines the effect of changes in the repo rate on the lending behaviour of public and private sector banks in India along with the changes in advances and NPAs from the year 2016 to 2025. The findings of the study show that the total advances and NPAs of public sector banks were always higher compared to those of private sector banks. This shows the better participation of public sector banks in the Indian economy but at the same time exposes them to more risks of NPAs. Statistical tests were used in the study, which show that there is a difference in the lending behaviour of public and private sector banks. The results of the regression test show that there is a weak effect of changes in the repo rate on the advances of the banks. It is concluded from the findings of the study that the changes in the repo rate affect the lending behaviour of the banks but at the same time show the effect of the internal policies of the banks and the overall economy of the country.

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