

## CHAPTER 4

### **Repo Rate Adjustments and Retail Credit Behavior: An Empirical Study of India's Private Banking Landscape**

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#### **ABSTRACT**

The Indian banking sector has evolved into technologically advanced system, driven by strong regulatory support and innovations such as digital payments and AI-based services. It plays a crucial role in promoting financial inclusion and supporting economic growth, particularly through the rising demand for personal and vehicle loans. This study examines the impact of repo rate changes on personal loan demand, focusing on monetary policy transmission. Primary data was collected through questionnaires from 250 respondents, supported by secondary data from the RBI and selected private banks. Regression analysis was conducted on loan data from major private banks to evaluate the relationship between repo rate changes and personal loan trends. The findings reveal that over 75% of borrowers are aware of repo rate changes and their influence on borrowing costs. Interest rate fluctuations significantly affect loan demand, with private banks responding quickly through competitive interest rates and promotional strategies. The study concludes that repo rate changes strongly influence consumer borrowing behavior. It recommends improved communication, better digital facilities, and enhanced financial awareness among customers. While limited to private banks and a specific dataset, the research provides valuable insights into the linkage between monetary policy and lending patterns in India's evolving financial landscape.

**Keywords:** Repo rate; Loan demand and affordability; Personal loan interest rates; Monetary policy transmission; Regression and correlation analysis.

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#### **1.0 Introduction**

The repo rate, set by the Reserve Bank of India, is a key tool for conducting monetary policy to control inflation, encourage growth, and manage liquidity in the financial system.

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The repo rate is the interest rate at which the Reserve Bank of India lends money to banks for a short period against government securities. Changes in the repo rate directly affect the interest rates banks charge for various types of loans, including personal loans. The Indian personal loan market has shown a strong growth trend over recent years, supported by rising consumer demand, credit access, and active retail banking strategies adopted by private-sector banks. Personal loans are more responsive to changes in interest rates compared to other types of loans.

Hence, changes in the repo rate are expected to significantly impact the rates at which banks charge for loans as well as the willingness to borrow for consumers. Private sector banks, with their dynamic pricing models and the rapid transmission of monetary policy changes, are more likely to react to changes in the repo rate in comparison to public sector banks. As such, they form a key area of study with regard to the relationship between monetary policy changes and the demand for personal loans. The key to comprehending this relationship lies in the ability of policymakers, bankers, and borrowers to assess the effectiveness of monetary policy transmission in the context of retail credit.

### **1.1 Problem statement**

The impact of the changes in the repo rate by the Reserve Bank of India on the lending rates and the availability of credit in the economy are considerable. However, the impact of the RBI's changes in the repo rate on the interest rates of personal loans and the borrowing behavior of private sector banks may be uncertain.

## **2.0 Literature Review**

Kumar, (2024) the impact of repo rate changes on the Indian banking sector has been extensively studied. Research indicates that repo rate adjustments significantly influence bank performance, asset quality, and stock returns. A consistent decrease in Gross Non-Performing Asset (GNPA) ratios from 11.2% in 2018 to 3.7% in 2023 was observed alongside phased repo rate adjustments, reflecting improved monetary transmission mechanisms. (Kumar, 2013) Increases in interest rates adversely affect bank stock returns.

Nivithra & Ushapriya (2023) During the COVID-19 pandemic, repo rate changes affected people's income sources and made loan acquisition more difficult. (Aditya Banerjee & Samit Paul, 2022) Panel data analysis reveals that monetary policy decisions have a highly significant and positive impact on banks' annual borrowings and loans, while breakpoint studies show that policy announcements have more sustained effects on bank credit than on interbank liabilities

These findings underscore the critical role of repo rates in shaping India's banking landscape and overall economic stability. Chandran Lakayil, Manju Shree, (2024) Recent

studies have examined the impact of monetary policy and interest rate changes on lending practices and consumer behavior in India. The Reserve Bank of India's post-pandemic repo rate increases to 6.50% has led to higher lending rates, particularly affecting the MSME. (Pandit, Pankaj Vashisht, 2012) Policy rate changes significantly influence firms' demand for bank credit across emerging market economies.

Sarat Dhal, Jugnu Ansari, (2013) Banks consider multiple factors in loan pricing decisions, including policy rates, bank-specific factors, and macroeconomic indicators. (Shiji Prasannan, Shruti Vyas, Sohail Ahmed, 2025) The personal loan landscape in India is evolving, with a shift towards digital financial services and fintech platforms. Consumers are increasingly concerned about interest rates, lender trustworthiness, loan duration, and repayment terms, while also navigating the challenges of India's volatile economic environment.

Belavadi Nikhil, Shivakumar Deene (2021) This collection of papers examines the impact of monetary policy on banking sector performance and lending in India. Research indicates that changes in the bank rate significantly affect deposits and total asset values of public sector banks, though loans and advances are less impacted.

Kasana, (2023) Monetary policy instruments like repo rate, cash reserve ratio, and weighted average call rate play crucial roles in transmission, with smaller banks being more sensitive to policy changes. (Amreen Khan, 2023) the studies also highlight differences between public and private sector banks, noting that while State Bank of India (SBI) is often the first choice for personal loans due to lower interest rates, HDFC Bank offers quicker loan processing at higher rates. Ansari (2013) Additionally, regulatory requirements can influence banks' optimal loan pricing responses to policy rates, suggesting a need for a calibrated approach to achieve desired changes in lending rates.

Moid U. Ahmad, Nasrin, (2017) This summary synthesizes research on monetary policy and banking in India. Changes in monetary policy rates can impact macroeconomic factors, though their effectiveness needs verification. (Barik, Nishita Raje, 2019) Net interest margin (NIM), a key measure of banking efficacy, is influenced by bank-specific factors like capital adequacy and deposit composition, as well as macroeconomic variables such as GDP growth and policy rates.

Hingu Hitenkumar Dineshbhai, (2022) Interest rate changes significantly affect bank profitability metrics like ROA and net profit margin. (Soundariya, Treasa Aleena David, 2021) The relationship between interest rate risk (IRR) and economic value of equity (EVE) in banks has been examined using simulation approaches and econometric techniques. Shocks in interest rates can cause EVE movements, potentially leading to losses. These studies contribute to understanding the complex interactions between monetary policy, interest rates, and banking sector performance in India.

Subbarao (2009) these papers examine the impact of monetary policy instruments on stock markets in India. The Reserve Bank of India uses tools like the repo rate, reverse repo rate, and cash reserve ratio (CRR) to control money supply. (Vanitha, Nageswari, Srinivasan, 2013) Changes in these rates can affect stock prices, particularly in the banking sector. Dinabandhu Bag (2021) However, banks may not always immediately pass on rate cuts to customers, leading to dissatisfaction.

Muddasir Khan, Madhu Druva Kumar, (2024) The relationship between interest rates and stock market performance is complex, with studies analyzing long-term associations between various interest rates and stock indices like BSE Bank and NSE Bank. Understanding these dynamics is crucial for investors, financial managers, and policymakers in assessing the broader economic impact of monetary policy decisions on financial markets.

These three studies examine distinct aspects of interest rate impacts on financial systems and markets. (Yuvaan Jhunjhunwala, 2024) investigated how interest rate fluctuations affect corporate financial decisions in the Indian economy, finding that large manufacturing firms with significant long-term debt experienced reduced profitability and delayed expansion plans when rates rose, while tech startups-maintained growth despite higher borrowing costs due to innovation-driven rapid expansion.

The study also noted inconsistencies in data that weakened the application of the Fisher Effect. (Fadiran, Edun) analyzed South Africa's monetary policy effectiveness, comparing pre-repo (1990-1998) and repo system periods (1998-2010) using structural vector autoregressive methods, finding improved monetary efficiency during the repo period attributed to inflation-targeting frameworks.

Ogundipe, Akintola, Olaoye, (2020) examined Nigerian deposit money banks, establishing a significant relationship between interest rates and loan performance, demonstrating that increases in lending rates correspond to changes in credit quality and higher non-performing loan ratios.

### **3.0 Objective**

- To study the trend of repo rate changes over the past 3–5 years.
- To analyse the change in personal loan interest rates of different banks in response to repo rate changes.
- To assess whether repo rate changes affect demand for personal loans.
- To evaluate the impact of repo rate changes on personal loan affordability for borrowers.
- To investigate the strategies adopted by different banks in setting personal loan interest rates during repo rate fluctuations.

### 3.1 Research question

- How have repo rates changed over the past 1–2 years, and what patterns or trends can be identified?
- To what extent do repo rate changes influence personal loan interest rates in selected private sector banks?
- Do changes in repo rates significantly affect the demand and affordability of personal loans among borrowers?

**Table 1: Research Hypothesis**

| Null Hypothesis (H <sub>0</sub> )                                                                                                        | Alternative Hypothesis (H <sub>1</sub> )                                                                                                | Dependent Variable(s)                                                                                                                       | Independent Variable | Test Used   |
|------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-------------|
| There is no significant relationship between changes in the repo rate and personal loan interest rates in selected private sector banks. | There is a significant relationship between changes in the repo rate and personal loan interest rates in selected private sector banks. | Rate of interest on personal loan in different private sector bank.                                                                         | Repo rate changes.   | Correlation |
| Changes in the repo rate do not significantly affect the demand for personal loans.                                                      | Changes in the repo rate significantly affect the demand for personal loans.                                                            | As the data of Demant on different point of time cannot be made available; Sales data of HDFC Bank, ICICI Bank and AXIS Bank is used.       | Repo rate changes.   | Regression  |
| Repo rate changes have no significant impact on the affordability of personal loans for borrowers.                                       | Repo rate changes have a significant impact on the affordability of personal loans for borrowers.                                       | Sales data of HDFC Bank, ICICI Bank and AXIS Bank is used. (Assumption: If the retail credits are more Affordable there will be more sales) | Repo rate changes.   | Regression  |

### 3.2 Sampling

- Total sample size: 249
- Sampling Method: Random Sampling
- Primary Data Collection: Primary data is collected through a detailed questionnaire.
- Secondary Data Collection: Secondary data is collected through official websites of RBI, and Banks.

### 3.3 Research gap

The available research has primarily focused on the effect of repo rates on floating rate loans, which include housing loans and corporate credit. The Personal Loans segment, which includes fixed rate unsecured loans, has received less research interest.

### 4.0 Data Analysis

- Survey Analysis (interpretations)
  - Demographic wise distribution of respondents
    - 31–40 is the largest age group (33.73%), followed closely by 18–30 (32.13%).
    - The sample is almost balanced, with males (52.61%) slightly higher than females (47.39%)
    - The sample is well spread across income groups.
    - The largest share is in the Below 30,000 category (29.72%), followed by 100,000 and above (25.30%).
    - Mid-income groups (30,000–50,000 and 50,000–100,000) together make up ~45% of the respondents.
  - Awareness and understanding about repo rates.
    - Awareness: Majority agree/strongly agree (186 out of 249; 75%) that they are aware RBI changes repo rate frequently.
    - Understanding: Even stronger agreement 199 (80%) understand repo rate changes affect borrowing cost.
    - Belief on banks revising rates: 192 (77%) agree/strongly agree that banks revise loan rates after repo rate change.
    - Private banks' pass-through: Highest agreement 200 (80%) agree/strongly agree that private banks pass on repo rate cuts.
  - Impact on Demand: Overall, responses clearly show interest rate sensitivity among borrowers — most adjust their borrowing decisions (timing or amount) based on repo-linked rate changes.
    - 190 respondents (~76%) agree/strongly agree that they are more likely to take a loan when interest rates drop.
    - 195 (~78%) agree/strongly agree they have postponed borrowing when rates were high.
    - 194 (~78%) agree/strongly agree that repo rate cuts motivate them to borrow more/increase the loan amount.
  - Customer's perception of affordability of personal loans with respect to Repo rate changes: The results clearly demonstrate that repo rate changes have a significant influence on the affordability and attractiveness of personal loans.

- 208 respondents (83.5%) agree that lower repo rates make personal loans more affordable for first-time borrowers.
- 193 respondents (77.5%) believe higher repo rates reduce affordability for new borrowers.
- 198 respondents (79.5%) feel repo rate cuts make personal loans more attractive.
- 195 respondents (78.3%) agree that higher personal loan rates discourage middle-income borrowers.
- 194 respondents (77.9%) state that repo rate changes strongly influence loan affordability.
- *Bank strategies during repo rate changes:* A strong majority of respondents recognize that banks actively use repo rate changes in their marketing, pricing strategies, and competitive positioning, with private banks perceived as faster in passing on revisions than public banks.
  - 206 respondents (82.7%) agree/strongly agree that banks use repo rate cuts in ads to attract new loan customers.
  - 198 respondents (79.5%) believe banks adopt varied pricing strategies after repo rate changes.
  - 196 respondents (78.7%) feel private banks are quicker than public sector banks in revising rates after repo changes.
  - 187 respondents (75.1%) agree that banks launch promotions like fee waivers or discounts during repo-linked revisions.
  - 197 respondents (79.1%) agree that banks strategically use repo rate movements to compete for new personal loan customers.
- Correlation

**Table 2: HDFC Bank and ICICI Bank Personal Loan Interest Rate of Last 5 Years**

| Year | Quarter |        | Repo rate | HDFC Bank PI Interest Rate |         | ICICI Bank PI Interest Rate |         |
|------|---------|--------|-----------|----------------------------|---------|-----------------------------|---------|
|      |         |        |           | Minimum                    | Maximum | Minimum                     | Maximum |
| 2026 | Q1      | Jun-25 | 5.50%     | 9.99%                      | 24.00%  | 10.60%                      | 16.50%  |
| 2025 | Q4      | Mar-25 | 6.25%     | 9.99%                      | 24.00%  | 10.85%                      | 16.65%  |
|      | Q3      | Dec-24 | 6.50%     | 9.99%                      | 24.00%  | 10.85%                      | 16.65%  |
|      | Q2      | Sep-24 | 6.50%     | 9.99%                      | 24.00%  | 10.85%                      | 16.65%  |
|      | Q1      | Jun-24 | 6.50%     | 9.99%                      | 24.00%  | 10.85%                      | 16.65%  |
|      | Q4      | Mar-24 | 6.50%     | 10.50%                     | 22.50%  | 10.75%                      | 19.00%  |
| 2024 | Q3      | Dec-23 | 6.50%     | 10.50%                     | 22.50%  | 10.75%                      | 19.00%  |
|      | Q2      | Sep-23 | 6.50%     | 10.50%                     | 22.50%  | 10.75%                      | 19.00%  |

|      |    |        |       |        |        |        |        |
|------|----|--------|-------|--------|--------|--------|--------|
|      | Q1 | Jun-23 | 6.50% | 10.50% | 22.50% | 10.75% | 19.00% |
| 2023 | Q4 | Mar-23 | 6.50% | 10.75% | 22.50% | 11.25% | 17.99% |
|      | Q3 | Dec-22 | 6.25% | 10.75% | 22.50% | 11.25% | 17.99% |
|      | Q2 | Sep-22 | 5.90% | 10.75% | 22.50% | 11.25% | 17.99% |
|      | Q1 | Jun-22 | 4.90% | 10.75% | 22.50% | 11.25% | 17.99% |
|      | Q4 | Mar-22 | 4.40% | 10.75% | 22.50% | 10.75% | 19.00% |
| 2022 | Q3 | Dec-21 | 4.40% | 10.75% | 22.50% | 10.75% | 19.00% |
|      | Q2 | Sep-21 | 4.40% | 10.75% | 22.50% | 10.75% | 19.00% |
|      | Q1 | Jun-21 | 4.40% | 10.75% | 22.50% | 10.75% | 19.00% |
|      | Q4 | Mar-21 | 4.40% | 10.75% | 22.50% | 10.75% | 19.00% |
| 2021 | Q3 | Dec-20 | 4.40% | 10.75% | 22.50% | 10.75% | 19.00% |
|      | Q2 | Sep-20 | 4.40% | 10.75% | 22.50% | 10.75% | 19.00% |
|      | Q1 | Jun-20 | 4.40% | 10.75% | 22.50% | 10.75% | 19.00% |
|      | Q4 | Mar-20 | 4.40% | 10.75% | 22.50% | 10.75% | 19.00% |

**Table 3: Correlation Between Repo rates and HDFC bank's Interest rates**

| Source                                             | DF | Sum of Square | Mean Square | F Statistic (df1,df2) | P-value  |
|----------------------------------------------------|----|---------------|-------------|-----------------------|----------|
| Regression<br>(between $\hat{y}_i$ and $\bar{y}$ ) | 1  | 0.00007184    | 0.00007184  | 10.3203 (1,19)        | 0.004584 |
| Residual<br>(between $y_i$ and $\hat{y}_i$ )       | 19 | 0.0001323     | 0.000006961 |                       |          |
| Total (between $y_i$ and $\bar{y}$ )               | 20 | 0.0002041     | 0.0000102   |                       |          |

- $H_0$  is Rejected as P Value < 0.05.

*Interpretation:* There is a significant relationship between changes in the repo rate and personal loan interest rates in HDFC Bank

**Table 4: Correlation Between Repo rates and ICICI bank's Interest rates**

| Source                                             | DF | Sum of Square | Mean Square | F Statistic (df1,df2) | P-value |
|----------------------------------------------------|----|---------------|-------------|-----------------------|---------|
| Regression<br>(between $\hat{y}_i$ and $\bar{y}$ ) | 1  | 0.000004228   | 0.000004228 | 1.031 (1,19)          | 0.3227  |
| Residual<br>(between $y_i$ and $\hat{y}_i$ )       | 19 | 0.00007791    | 0.000004101 |                       |         |
| Total (between $y_i$ and $\bar{y}$ )               | 20 | 0.00008214    | 0.000004107 |                       |         |

- Failed to Reject  $H_0$ , P Value > 0.05.

*Interpretation:* There is no significant relationship between changes in the repo rate and personal loan interest rates in ICICI BANK.

- Regression

**Table 5: Personal Loan Sales of HDFC, ICICI and Axis Bank (Quarter-wise)**

| Year | Quarter |        | Repo rate | HDFC Bank<br>₹ In Billion |                     | ICICI Bank<br>₹ In Billion |                     | AXIS Bank<br>₹ In Billion |                     |
|------|---------|--------|-----------|---------------------------|---------------------|----------------------------|---------------------|---------------------------|---------------------|
|      |         |        |           | Sales Pl                  | Trend<br>Percentage | Sales Pl                   | Trend<br>Percentage | Sales Pl                  | Trend<br>Percentage |
| 2026 | Q1      | Jun-25 | 5.50%     | 2016                      | 1.15%               | 1200                       | -1.27%              | 771                       | -0.30%              |
| 2025 | Q4      | Mar-25 | 6.25%     | 1993                      | 2.52%               | 1216                       | 0.57%               | 773                       | 1.79%               |
|      | Q3      | Dec-24 | 6.50%     | 1944                      | 2.53%               | 1209                       | -1.34%              | 760                       | 0.70%               |
|      | Q2      | Sep-24 | 6.50%     | 1896                      | 1.99%               | 1225                       | 3.48%               | 754                       | 2.48%               |
|      | Q1      | Jun-24 | 6.50%     | 1859                      | 0.70%               | 1184                       | 1.46%               | 736                       | 2.83%               |
| 2024 | Q4      | Mar-24 | 6.50%     | 1846                      | 1.71%               | 1167                       | 5.02%               | 716                       | 10.00%              |
|      | Q3      | Dec-23 | 6.50%     | 1815                      | 1.57%               | 1111                       | 6.39%               | 651                       | 6.40%               |
|      | Q2      | Sep-23 | 6.50%     | 1787                      | 1.13%               | 1044                       | 10.16%              | 612                       | 8.02%               |
|      | Q1      | Jun-23 | 6.50%     | 1767                      | 2.91%               | 948                        | 7.65%               | 566                       | 3.78%               |
| 2023 | Q4      | Mar-23 | 6.50%     | 1717                      | 4.29%               | 881                        | 8.80%               | 546                       | 7.64%               |
|      | Q3      | Dec-22 | 6.25%     | 1646                      | 6.34%               | 809                        | 8.85%               | 507                       | 3.31%               |
|      | Q2      | Sep-22 | 5.90%     | 1548                      | 4.66%               | 744                        | 8.75%               | 491                       | 4.33%               |
|      | Q1      | Jun-22 | 4.90%     | 1479                      | 5.57%               | 684                        | 8.75%               | 470                       | 3.95%               |
| 2022 | Q4      | Mar-22 | 4.40%     | 1401                      | 5.04%               | 629                        | 10.38%              | 452                       | 7.87%               |
|      | Q3      | Dec-21 | 4.40%     | 1334                      | 5.57%               | 570                        | 8.35%               | 419                       | 4.40%               |
|      | Q2      | Sep-21 | 4.40%     | 1264                      | 4.89%               | 526                        | 6.27%               | 402                       | 1.08%               |
|      | Q1      | Jun-21 | 4.40%     | 1205                      | 1.55%               | 495                        | 0.25%               | 397                       | -0.03%              |
| 2021 | Q4      | Mar-21 | 4.40%     | 1186                      | 2.91%               | 493                        | 6.36%               | 398                       | 6.80%               |
|      | Q3      | Dec-20 | 4.40%     | 1153                      | 1.86%               | 464                        | 4.28%               | 372                       | 3.71%               |
|      | Q2      | Sep-20 | 4.40%     | 1132                      | 1.44%               | 445                        | 1.16%               | 359                       | 3.07%               |
|      | Q1      | Jun-20 | 4.40%     | 1116                      | -                   | 440                        | -                   | 348                       | -                   |

| SUMMARY OUTPUT        |                     | HDFC BANK      |             |             |                |             |              |             |
|-----------------------|---------------------|----------------|-------------|-------------|----------------|-------------|--------------|-------------|
|                       |                     |                |             |             |                |             |              |             |
| Regression Statistics |                     |                |             |             |                |             |              |             |
| Multiple R            | 0.881503771         |                |             |             |                |             |              |             |
| R Square              | 0.777048898         |                |             |             |                |             |              |             |
| Adjusted R Square     | 0.76531463          |                |             |             |                |             |              |             |
| Standard Error        | 153.0542574         |                |             |             |                |             |              |             |
| Observations          | 21                  |                |             |             |                |             |              |             |
| ANOVA                 |                     |                |             |             |                |             |              |             |
|                       | df                  | SS             | MS          | F           | Significance F |             |              |             |
| Regression            | 1                   | 1551254.863    | 1551254.863 | 66.22048039 | 1.29974E-07    |             |              |             |
| Residual              | 19                  | 445086.5082    | 23425.60569 |             |                |             |              |             |
| Total                 | 20                  | 1996341.371    |             |             |                |             |              |             |
|                       |                     |                |             |             |                |             |              |             |
|                       | Coefficients        | Standard Error | t Stat      | P-value     | Lower 95%      | Upper 95%   | Lower 95.0%  | Upper 95.0% |
| Intercept             | 17.81321378         | 194.4157311    | 0.091624344 | 0.927955639 | -389.1035879   | 424.7300155 | -389.1035879 | 424.7300155 |
| X Variable 1          | 283.9885684         | 34.89833401    | 8.137596721 | 1.29974E-07 | 210.9455159    | 357.031621  | 210.9455159  | 357.031621  |
| Equation              | Y = 17.813+283.988X |                |             |             |                |             |              |             |
| If X is 6.5, then Y=  | 1863.738909         |                |             |             |                |             |              |             |
| P Value               | 0.00000012997       |                |             |             |                |             |              |             |
| Interpretation        | P Value < 0.05      |                |             |             |                |             |              |             |

| SUMMARY OUTPUT        |                     | ICICI BANK     |              |             |                |              |              |              |
|-----------------------|---------------------|----------------|--------------|-------------|----------------|--------------|--------------|--------------|
|                       |                     |                |              |             |                |              |              |              |
| Regression Statistics |                     |                |              |             |                |              |              |              |
| Multiple R            | 0.879565066         |                |              |             |                |              |              |              |
| R Square              | 0.773634706         |                |              |             |                |              |              |              |
| Adjusted R Square     | 0.761720743         |                |              |             |                |              |              |              |
| Standard Error        | 148.6706215         |                |              |             |                |              |              |              |
| Observations          | 21                  |                |              |             |                |              |              |              |
| ANOVA                 |                     |                |              |             |                |              |              |              |
|                       | df                  | SS             | MS           | F           | Significance F |              |              |              |
| Regression            | 1                   | 1435258.137    | 1435258.137  | 64.93512838 | 1.50454E-07    |              |              |              |
| Residual              | 19                  | 419956.1205    | 22102.95371  |             |                |              |              |              |
| Total                 | 20                  | 1855214.257    |              |             |                |              |              |              |
|                       |                     |                |              |             |                |              |              |              |
|                       | Coefficients        | Standard Error | t Stat       | P-value     | Lower 95%      | Upper 95%    | Lower 95.0%  | Upper 95.0%  |
| Intercept             | -666.7190886        | 188.8474589    | -3.530463648 | 0.002235279 | -1061.981363   | -271.4568145 | -1061.981363 | -271.4568145 |
| X Variable 1          | 273.1645194         | 33.89880882    | 8.058233577  | 1.50454E-07 | 202.2134971    | 344.1155417  | 202.2134971  | 344.1155417  |
| Equation              | Y=-666.719+273.164X |                |              |             |                |              |              |              |
| If X is 6.5, then Y=  | 1108.850287         |                |              |             |                |              |              |              |
| P Value               | 0.00000015045       |                |              |             |                |              |              |              |
| Interpretation        | P Value < 0.05      |                |              |             |                |              |              |              |

| SUMMARY OUTPUT        |                     | AXIS BANK      |              |             |                |             |              |             |
|-----------------------|---------------------|----------------|--------------|-------------|----------------|-------------|--------------|-------------|
|                       |                     |                |              |             |                |             |              |             |
| Regression Statistics |                     |                |              |             |                |             |              |             |
| Multiple R            | 0.811125645         |                |              |             |                |             |              |             |
| R Square              | 0.657924812         |                |              |             |                |             |              |             |
| Adjusted R Square     | 0.639920855         |                |              |             |                |             |              |             |
| Standard Error        | 92.61578776         |                |              |             |                |             |              |             |
| Observations          | 21                  |                |              |             |                |             |              |             |
| ANOVA                 |                     |                |              |             |                |             |              |             |
|                       | df                  | SS             | MS           | F           | Significance F |             |              |             |
| Regression            | 1                   | 313457.2668    | 313457.2668  | 36.54334452 | 8.16035E-06    |             |              |             |
| Residual              | 19                  | 162975.9987    | 8577.684143  |             |                |             |              |             |
| Total                 | 20                  | 476433.2655    |              |             |                |             |              |             |
|                       |                     |                |              |             |                |             |              |             |
|                       | Coefficients        | Standard Error | t Stat       | P-value     | Lower 95%      | Upper 95%   | Lower 95.0%  | Upper 95.0% |
| Intercept             | -152.9451705        | 117.6443334    | -1.300064066 | 0.209129984 | -399.1775903   | 93.28724925 | -399.1775903 | 93.28724925 |
| X Variable 1          | 127.6581222         | 21.11758766    | 6.04510914   | 8.16035E-06 | 83.45850324    | 171.8577411 | 83.45850324  | 171.8577411 |
| Equation              | Y=-152.945+127.658X |                |              |             |                |             |              |             |
| If X is 6.5, then Y=  | 676.8326236         |                |              |             |                |             |              |             |
| P Value               | 0.00000816035       |                |              |             |                |             |              |             |
| Interpretation        | P Value < 0.05      |                |              |             |                |             |              |             |

*Interpretation:* Changes in the repo rate significantly affect the demand for personal loans and have a significant impact on the affordability of personal loans for borrowers of all the selected banks i.e. HDFC Bank, ICICI Bank & Axis Bank.

## 5.0 Hypothesis Testing: Results Summary

**Table 6: Result Summary**

| N Null Hypothesis ( $H_0$ )                                                                                                              | Alternative Hypothesis ( $H_1$ )                                                                                                        | D Test Used | I Data Analysed                                                                                                             | Result                                                                                                                                                              |
|------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| There is no significant relationship between changes in the repo rate and personal loan interest rates in selected private sector banks. | There is a significant relationship between changes in the repo rate and personal loan interest rates in selected private sector banks. | Correlation | <ul style="list-style-type: none"> <li>Repo Rates</li> <li>Interest Rates of HDFC and ICICI Bank</li> </ul>                 | <ul style="list-style-type: none"> <li><math>H_0</math>, Rejected for HDFC Bank's Data.</li> <li>Failed to Reject <math>H_0</math> For ICICI Bank's Data</li> </ul> |
| Changes in the repo rate do not significantly affect the demand for personal loans.                                                      | Changes in the repo rate significantly affect the demand for personal loans.                                                            | Regression  | <ul style="list-style-type: none"> <li>Repo rates</li> <li>Personal Loan Sales Data of HDFC, ICICI and Axis Bank</li> </ul> | $H_0$ , Rejected for HDFC Bank, ICICI Bank and Axis Bank's Data as the P Value < 0.05 for all three.<br>Hence, $H_1$ is True.                                       |
| Repo rate changes have no significant impact on the affordability of personal loans for borrowers.                                       | Repo rate changes have a significant impact on the affordability of personal loans for borrowers.                                       |             |                                                                                                                             |                                                                                                                                                                     |

## 6.0 Key Findings

- Awareness and understanding
  - Around 75–80% of respondents are aware that repo rate changes affect borrowing costs and personal loan interest rates.
  - A majority also believe that private banks quickly pass repo rate changes to customers.
- Impact on loan demand
  - 76% of respondents are more likely to apply for personal loans when interest rates are lower.
  - 78% admitted to delaying or reducing loan amounts when rates were high.
  - Repo rate cuts clearly encourage higher borrowing.

- Affordability perception
  - 83.5% feel lower repo rates improve affordability for first-time borrowers.
  - 78% said high rates discourage middle-income borrowers.
  - Overall, affordability is strongly linked to repo rate changes.
- Bank strategies
  - Over 80% of respondents noticed that banks advertise repo rate cuts to attract borrowers.
  - Private banks are seen as quicker than public banks in revising interest rates.
  - Banks use repo-linked promotions like fee waivers and discounts to remain competitive.

## 7.0 Limitations

Existing research mostly focused on impact of repo rates on floating rate loans such as housing loans, corporate credit. The Personal Loan segment, especially fixed rate unsecured loan has received comparatively little attention in Academic research.

- The study is limited to selected private sector banks and does not include public sector banks or NBFCs, which may show different patterns.
- Data is collected from a specific sample and may not represent the entire country's borrower population.
- Responses to survey questions are based on perceptions and may be influenced by personal experience, awareness level, or bias.
- Repo rate changes occur frequently, and the impact on loan demand may vary over time, which limits the generalizability of results.
- Other macroeconomic variables (inflation, income levels, employment, fiscal policies) also affect loan demand, but this study focuses mainly on repo rate changes.
- The sample size may not be large enough to capture the diversity of all borrower segments in India.

## 8.0 Conclusion

- Repo rate changes directly influence personal loan interest rates, demand, and affordability in private sector banks.
- Borrowers are highly sensitive to interest rate fluctuations and adjust their loan-taking decisions accordingly.
- Banks strategically use repo rate announcements to gain a competitive edge in attracting new customers.

- The study confirms a statistically significant relationship between repo rate movements and personal loan growth in the selected private sector banks.
- Thus, monetary policy through repo rate serves as an effective transmission channel for influencing retail credit demand.

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