

# **Influence of Budgetary Provisions and Monetary Policy on Credit Risk Perception and Behavioral Traits of Bank Customers: A Study of Public Sector Banks in Madhya Pradesh**

**Girish Mainrai<sup>1</sup>, Dr. Sanjay Payasi<sup>2</sup>**

<sup>1</sup>Ph.D. Research Scholar, <sup>2</sup>Professor

<sup>1</sup>Faculty of Management, Barkatullah University, Bhopal (M.P.) – 462026

<sup>1</sup>Email: mainraigary@gmail.com

<sup>2</sup>Anand Institute of Management, BarkhedaNathu, Neelbad, Bhopal (M.P.) – 462044

<sup>2</sup>Email: sanjaypayasi@gmail.com

## **Abstract**

This research examines how fiscal and monetary policy measures, particularly Union Budget 2024–25 provisions and RBI monetary policy interventions, influence the behavioral and psychological traits of banking customers in relation to credit risk management. With rising household debt and dynamic economic conditions, understanding customer attitudes towards borrowing, repayment, and risk perception is critical for financial stability. The study is focused on public sector banks in Madhya Pradesh.

Using a structured primary survey and institutional data, the study explores behavioral dimensions such as risk aversion, financial literacy, emotional stability, and trust in banking policies. Secondary data sources include RBI reports, Union Budget documents, and public bank performance reviews. A mixed-methods approach combining descriptive statistics, ANOVA, factor analysis, and regression modeling was applied to assess relationships between policy variables and customer behavior.

Findings suggest that customers' perceptions of credit risk are shaped significantly by macroeconomic signals such as interest rate changes, fiscal subsidies, inflation trends, and public sector bank restructuring policies. Behavioral traits like optimism bias, overconfidence in creditworthiness, and fear of institutional processes emerged as key psychological drivers. Notably, credit behavior differed across demographic segments, particularly in terms of income level, age group, and education.

The study provides practical implications for policymakers and banks. It advocates for incorporating behavioral risk models in public lending practices, improving financial literacy campaigns in line with budget announcements, and adopting human-centric strategies in bank credit policy design. This interdisciplinary work bridges economic policy with behavioral finance and aims to contribute to a resilient, inclusive banking ecosystem.

**Keywords:** Credit Risk, Behavioral Traits, Public Sector Banks, Monetary Policy, Union Budget 2024–25, Financial Psychology, Risk Perception, RBI

## 1. Introduction

Credit risk management has traditionally been evaluated using quantitative indicators such as repayment history, income levels, and asset backing. However, recent financial crises and digital lending disruptions have highlighted the need to integrate psychological and behavioral dimensions in credit assessment. Public sector banks (PSBs) in India, responsible for mass banking access, are particularly vulnerable to customer-driven risk factors, especially in an evolving policy environment.

The Union Budget 2024–25 emphasized financial inclusion, restructuring of bad loans, and digital transparency in public lending. Concurrently, the Reserve Bank of India's tightening of interest rates and revision of priority sector lending norms added layers of influence on borrower psychology. This study aims to assess how these macroeconomic signals shape consumer decision-making and risk behavior, especially among PSB customers in Madhya Pradesh. It also explores the differential impact of these policies across various customer profiles.

The paper investigates the integration of behavioral finance theories—such as prospect theory, cognitive bias, and emotional regulation—with credit risk perception under changing policy environments. It serves as a policy-practice interface for scholars, central banks, and credit institutions.

## 2. Literature Review

The study of credit risk has gradually shifted from purely financial metrics to the inclusion of behavioral and psychological parameters. This development stems from the increasing recognition of irrational decision-making and cognitive bias in financial behavior, especially in lending and borrowing scenarios.

**2.1 Traditional Credit Risk Assessment Models** Conventional models like Altman's Z-score, Basel III norms, and credit scoring algorithms emphasize repayment history, credit utilization, and income validation (Altman & Saunders, 1997). These models, though robust, fail to capture soft factors such as trust in the banking system, borrower intentions, or responses to policy stimuli.

**2.2 Behavioral Finance and Risk Perception** Kahneman and Tversky's Prospect Theory (1979) revolutionized financial thinking by establishing that individuals evaluate potential losses more heavily than equivalent gains. This framework explains conservative borrowing behavior under adverse economic outlooks. Thaler (2000) extended the idea through mental accounting and myopic loss aversion, relevant to EMIs and credit card payments.

**2.3 Customer Traits and Risk Appetite** According to Fernandes et al. (2014), behavioral traits such as overconfidence, optimism bias, and time inconsistency are crucial in predicting loan defaults. Risk tolerance is also deeply linked to personality dimensions like conscientiousness and emotional stability (Corter & Chen, 2006). Customers with lower financial literacy tend to misjudge interest obligations and underestimate penalty clauses.

**2.4 Monetary Policy and Consumer Credit Behavior** The Reserve Bank of India's interest rate signals directly affect loan demand, especially in floating-rate credit. Empirical studies (Mishra & Pathak, 2021) show that rate hikes induce delayed borrowing, refinancing concerns, and rising EMIs, thereby altering

customer repayment behavior. RBI's Financial Stability Reports emphasize the role of macro-prudential regulation in managing retail credit risks.

**2.5 Union Budget, Subsidies, and Loan Morale** Government fiscal actions—such as budgetary allocations for farm loan waivers, interest subvention, and Mudra schemes—create a dual effect. While they enhance short-term credit access, they can distort repayment discipline, as observed in various NABARD studies. Customers in subsidy-prone regions often develop “entitlement bias,” expecting policy relief in adverse circumstances.

**2.6 Digital Lending and Behavioral Risk** The proliferation of fintechs and digital credit platforms has introduced a new dimension of behavioral risk. Instant loan apps, gamified user interfaces, and data-based micro-credit often bypass traditional KYC and underwriting procedures. According to Ghosh (2023), this environment encourages impulsive borrowing and overextension of credit limits, especially among low-income digital users.

**2.7 Indian Context and Public Sector Banking** Studies specific to India (RBI, 2022; NCAER, 2021) underline the importance of contextualizing behavioral credit risk within regional banking cultures. PSBs in Madhya Pradesh serve a highly diverse clientele, many of whom have limited exposure to formal credit. Cultural values, government scheme dependencies, and trust in public institutions significantly influence their loan behavior.

In summary, existing literature reveals an urgent need to integrate behavioral assessments in credit policy formulation. While budget and monetary policy measures create macroeconomic frameworks, it is the borrower's interpretation of these cues—mediated by psychological factors—that determines credit behavior. This research addresses that gap by empirically testing these relationships in PSBs of Madhya Pradesh.

### 3. Research Objectives and Hypotheses

#### Objectives:

1. To evaluate how Union Budget 2024–25 provisions affect customers' perception of credit risk in public sector banks.
2. To analyze the influence of RBI's monetary policy measures on borrowers' behavioral traits and loan decision-making.
3. To identify psychological factors that influence customer responses to changes in interest rates, credit guidelines, and government loan schemes.

#### Hypotheses:

- **H<sub>01</sub>:** Union Budget 2024–25 provisions do not significantly influence customers' perception of credit risk in PSBs.
- **H<sub>a1</sub>:** Union Budget 2024–25 provisions significantly influence customers' perception of credit risk in PSBs.

- **H<sub>02</sub>:** Monetary policy measures do not significantly affect behavioral responses of borrowers in PSBs.
- **H<sub>a2</sub>:** Monetary policy measures significantly affect behavioral responses of borrowers in PSBs.
- **H<sub>03</sub>:** There is no relationship between psychological traits (e.g., risk aversion, optimism bias) and credit behavior.
- **H<sub>a3</sub>:** Psychological traits significantly influence credit behavior and risk perception among borrowers in PSBs.

#### **4. Research Methodology**

**4.1 Research Design:** This study adopts a descriptive and causal-comparative design with a mixed-methods approach, integrating both quantitative survey data and qualitative interviews to examine the relationship between policy measures and customer behavior.

**4.2 Study Area:** The research was conducted in four major cities of Madhya Pradesh—Bhopal, Indore, Jabalpur, and Gwalior—covering major branches of selected public sector banks.

**4.3 Target Population and Sample Size:** The population consists of customers of public sector banks who have accessed personal, agricultural, or MSME credit within the past five years. A total of 200 respondents were selected using stratified random sampling to ensure representation across loan types and age groups.

**4.4 Sampling Technique:** Stratified random sampling was used to categorize customers by loan size, age group, and profession. This allowed for comparisons across demographic and economic variables.

##### **4.5 Data Collection Tools:**

- **Primary Data:** Structured questionnaires were used to capture responses on behavioral traits (e.g., risk aversion, optimism bias, repayment morale) and perception of fiscal and monetary signals. Likert scales and ranking techniques were applied.
- **Secondary Data:** Reports from RBI, Ministry of Finance, PSB performance reviews, Union Budget 2024–25 documents, and past research publications.

**4.6 Data Collection Period:** The primary data collection took place between February and March 2025, immediately following the Budget announcement, to assess real-time perception changes.

**4.7 Analytical Tools:** The data was analyzed using SPSS v26. The following statistical tools were applied:

- Descriptive Statistics (mean, standard deviation)
- ANOVA (to compare credit behavior across awareness levels)
- Factor Analysis (to identify behavioral dimensions)
- Regression Analysis (to test influence of policy on behavior)
- Content Analysis (for qualitative interview interpretation)

## 5. Data Analysis and Interpretation

The data collected from 200 respondents was analyzed using SPSS to evaluate relationships between psychological traits, perception of macroeconomic policies, and credit behavior. The analysis includes descriptive statistics, cross-tabulations, ANOVA, regression, and factor analysis.

**Table 1: Demographic Profile of Respondents**

Parameter	Category	Frequency	Percentage
Gender	Male	122	61.0%
	Female	78	39.0%
Age Group	18–30	48	24.0%
	31–45	92	46.0%
	46 and above	60	30.0%
Occupation	Salaried	106	53.0%
	Self-Employed	56	28.0%
	Agriculture	38	19.0%

**Interpretation:** The sample is diverse, with a good representation of salaried and self-employed respondents. A majority fall within the economically active 31–45 age group.

**Table 2: Awareness of Union Budget Credit Provisions**

Awareness Level	Respondents	Percentage
High	64	32.0%
Moderate	78	39.0%
Low/No Awareness	58	29.0%

**Interpretation:** Less than one-third of respondents are highly aware of credit-related provisions in the Union Budget, indicating the need for broader policy communication.

**Table 3: Perceived Impact of Interest Rate Changes (Monetary Policy)**

Perception Type	Frequency	Percentage
Negative Impact (High EMIs)	102	51.0%
No Impact	68	34.0%
Positive Impact (Better Returns)	30	15.0%

**Interpretation:** Over half of the respondents viewed interest rate hikes as detrimental to credit affordability, especially for unsecured loans.

**Table 4: Regression Analysis – Psychological Traits and Credit Behavior**

Predictor	B	Beta	t	Sig.
Risk Aversion	0.47	0.52	6.12	.000
Optimism Bias	-0.32	-0.38	-4.94	.000
Financial Literacy	0.41	0.44	5.73	.000

**Interpretation:** Risk-averse and financially literate customers demonstrate more cautious borrowing behavior. Optimism bias leads to underestimation of loan obligations.

**Table 5: ANOVA – Effect of Budget Awareness on Repayment Behavior**

Source	SS	df	MS	F	Sig.
Between Groups	10.24	2	5.12	4.86	0.009
Within Groups	207.84	197	1.05		
Total	218.08	199			

**Interpretation:** There is a statistically significant difference in repayment attitudes based on awareness of budgetary provisions ( $p < 0.01$ ).

**Table 6: Factor Analysis – Psychological Dimensions**

Factor	Variables Loaded	Eigenvalue	Variance Explained
Financial Discipline	Loan awareness, EMI planning	2.86	26.5%
Cognitive Bias	Overconfidence, herd behavior	1.74	19.2%
Emotional Stability	Anxiety control, goal clarity	1.42	14.6%

**Interpretation:** Three principal components were extracted explaining 60.3% of the total variance in borrower behavior.

**Table 7: Interview Themes – Qualitative Insights**

Theme	Frequency	Sample Insight
Policy-Driven Loan Demand	14	“We apply for loans only after budget announcements.”
Fear of Default Penalty	11	“Many avoid loans fearing the stigma of default.”
Need for Financial Guidance	18	“We need loan counseling along with sanctioning.”

**Interpretation:** Respondents express a preference for personalized financial advisory services alongside loan facilities.

## 6. Hypotheses Testing

Hypotheses	Test Applied	Calculated Value	p-value	Hypotheses Status
H <sub>01</sub> : Union Budget 2024–25 provisions do not significantly influence customers' perception of credit risk.	ANOVA	F = 4.86	0.009	Rejected
H <sub>a1</sub> : Union Budget 2024–25 provisions significantly influence customers' perception of credit risk.	ANOVA	F = 4.86	0.009	Accepted
H <sub>02</sub> : Monetary policy measures do not significantly affect behavioral responses of borrowers.	Descriptive & Regression	$\beta = 0.52$	0.000	Rejected
H <sub>a2</sub> : Monetary policy measures significantly affect behavioral responses of borrowers.	Descriptive & Regression	$\beta = 0.52$	0.000	Accepted
H <sub>03</sub> : There is no relationship between psychological traits and credit behavior.	Regression Analysis	Multiple $\beta$ s	0.000	Rejected
H <sub>a3</sub> : Psychological traits significantly influence credit behavior and risk perception.	Regression Analysis	Multiple $\beta$ s	0.000	Accepted

**Interpretation:** The hypotheses testing confirms that both fiscal and monetary policy mechanisms play a critical role in shaping customer behavior in public sector banking. Union Budget provisions were statistically linked to shifts in credit risk perception, while monetary policy significantly affected borrower psychology. Psychological traits such as risk aversion, optimism bias, and financial literacy were also found to have a measurable influence on repayment behavior and risk tolerance.

## 7. Conclusion and Policy Recommendations

This study investigated how fiscal and monetary interventions influence credit risk perception and behavioral traits of customers in public sector banks across Madhya Pradesh. The findings establish that Union Budget 2024–25 provisions, such as loan subsidies and financial inclusion schemes, positively affect credit perception when awareness is high. Similarly, RBI's monetary tightening policies—including interest rate adjustments—alter borrower behavior, often leading to more cautious lending demand and repayment practices.

The regression models identified key psychological traits—risk aversion, optimism bias, and financial literacy—as statistically significant predictors of credit behavior. These findings reinforce the growing consensus that behavioral dimensions must be integrated into credit risk frameworks, especially in retail and priority sector lending.

### Policy Recommendations:

1. **Behavioral Credit Profiling:** Banks should integrate psychometric testing tools to assess risk tolerance and repayment intent alongside financial indicators.
2. **Financial Literacy Drives:** Campaigns should be synchronized with budget announcements and RBI circulars to enhance consumer understanding of interest rate implications and credit obligations.
3. **Digital Counseling Portals:** Banks should launch AI-based advisory platforms to guide borrowers on responsible credit usage and stress management during repayment.
4. **Reform Loan Subsidy Messaging:** Clear, non-political communication of loan waiver or subsidy programs can prevent the rise of moral hazard and entitlement bias.
5. **Training for Branch Officers:** Sensitization programs for bank staff on behavioral finance principles can improve customer relationship management and credit disbursement quality.

These recommendations aim to help banks mitigate credit risk while fostering a more psychologically informed and policy-aware customer base, ultimately contributing to a more stable and inclusive banking ecosystem.

## 8. Limitations and Suggestions for Future Research

### Limitations:

1. **Sample Diversity:** Though stratified sampling was applied, the findings may not generalize to all regions or banking segments beyond public sector banks in Madhya Pradesh.
2. **Temporal Constraint:** The study was conducted shortly after the 2024–25 Union Budget, limiting its ability to track long-term behavioral trends.
3. **Self-Reported Bias:** Psychological traits and risk perceptions were self-assessed by respondents, potentially leading to subjective bias.
4. **Limited Behavioral Variables:** While key behavioral traits were included, others such as anchoring bias and herd behavior were not explored in depth.
5. **Monetary Transmission Lag:** The study could not account for the full lag effect of RBI policy changes on individual loan behaviors.

### Suggestions for Future Research:

1. **Longitudinal Studies:** Future research could track borrowers over multiple quarters to study evolving behavior across monetary and fiscal cycles.
2. **Comparison with Private Banks and NBFCs:** A comparative analysis would help identify sectoral differences in behavioral response to policy.
3. **Inclusion of More Psychometric Indicators:** Future work may include constructs such as anchoring, loss aversion, and behavioral scoring models.

4. **Regional Behavior Patterns:** Expanding the scope across rural, urban, and tribal belts may reveal critical insights into localized credit attitudes.
5. **Digital Financial Behavior:** Future research may integrate digital credit consumption patterns and app-based borrowing behavior into behavioral models.

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