

## Evaluating the Influence of Lending Procedures on Credit Risk Assessment in Private Sector Banks

Gnanzou, D

V. N. Karazin Kharkiv National University, Kharkiv, Ukraine

### ARTICLE INFO

#### Article History:

Received November 15, 2024

Revised November 30, 2024

Accepted December 12, 2024

Available online December 25, 2024

#### Keywords:

Credit Risk Management,

Firm Loan Risk,

Default Loan,

Credit Score,

Insurance Charges,

Interest Rates.

#### Correspondence:

E-mail: [dgnanzou21@gmail.com](mailto:dgnanzou21@gmail.com)

### ABSTRACT

This study examines strategies to minimize credit risk associated with firm loans, focusing on effective risk management techniques. The research incorporates credit risk management theories and involves a sample of 265 bank loan customers in Bangalore, who provided insights through a structured questionnaire. Key factors analysed include loan defaults, credit risk, insurance charges, interest rates, credit scores, and documentation. Descriptive and correlation analyses were used to interpret the results. Findings reveal significant relationships between credit score, insurance charges, loan defaults, and interest rates when obtaining business loans. In addition, qualitative data from email conversations with customers offer deeper insights into their perspectives. Based on these findings, the study suggests that private sector banks enhance their credit risk management practices to mitigate the risks of defaults, which can negatively impact profitability. The research highlights key challenges within the case bank's current risk management strategies and offers recommendations for addressing these issues. Further research is recommended to explore the broader implications for credit risk management in private sector banks.

## 1. Introduction

This section introduces the importance of minimizing firm loan credit risk, emphasizing the practical significance for banks in maintaining profitability and the theoretical significance in understanding credit risk management. The main research question reiterates efforts to reduce loan credit risk through basic techniques and focuses on five aspects, including how credit scores define the level of risk involved, how insurance charges have an impact on loan securities, how interest rates can influence borrower behavior, how loan defaults play a vital role in reducing the level of risk, and how documents define or affect credit evaluation. This study adopts a quantitative approach to analyzing relationships between the key independent variables, including credit scores, insurance charges, interest rates, loan default, and documentation, and their implications for credit risk. In brief, literature progresses to methodology explaining, findings and finally a general discussion on both theoretical and practical implications of discussing how different approaches can reduce risk that is credit type and the important significance of it in the current banking sector context.

## 2. Literature Review

This section reviews existing studies on credit risk management, structured around five core areas derived from our introductory sub-questions: the role of credit scores, the impact of insurance charges, the influence of interest rates, the significance of loan default, and the effectiveness of documentation in credit evaluation. These questions raise concrete conclusions: "The Impact of Credit Scores on Loan Risk Rating," "Insurance Premiums as a Collateral," "Interest Rate and Borrower Behavior," "Loan Default and Risk Management," and "Documentation in Credit

Rating." Although there are improvements, research still shows where it lacks such as the information on the effects of credit scores in the long run, no strong analysis in the impact of insurance premiums, few studies concerning the interest rates and borrower's behavior, inadequate strategies for the management of loan defaults, and not enough examination of documentation's role. Each chapter will also present a hypothesis grounded on the relationship between variables..

### **2.1 Credit Scores and Loan Risk Evaluation**

Initial studies focused on the predictive ability of credit scores regarding loan default risk. Such studies concentrated on short-term effects but rarely gave a complete view of long-term consequences. Later studies enhanced their methodology to follow credit score reliability for longer periods but still could not establish a connection between scores and continued risk reduction. Recent studies try to bridge these gaps yet still provide insufficient evidence of long-term impacts on credit scores. Hypothesis 1: Higher credit scores are linked with lower default rates on loans, which decreases the credit risk.

### **2.2 Insurance Charges as a Safety Measure**

Initial studies on insurance charges focused on their role in mitigating loan risk, emphasizing short-term security. These lacked broader analyses of long-term impacts. Mid-term research examined how insurance charges affect loan security over time, yet comprehensive data and robust analysis remained scarce. Recent efforts expanded the temporal scope but struggled to link insurance charges directly to risk mitigation. Hypothesis 2: Higher insurance charges enhance loan security, reducing credit risk.

### **2.3 Interest Rates and Borrowing Behavior**

Early work explored the impact of interest rates on borrower behavior through mostly quantitative data. These studies were foundational but not robust in terms of quantification of interest rate impacts on borrower behavior. The subsequent work built upon these approaches and identified patterns linking interest rates to borrower actions but failed to provide definitive correlations. The most recent work further advanced these methodologies but did not exhaustively explore the broader behavioral impacts of interest rates. Hypothesis 3: Lower interest rates encourage positive borrower behavior, reducing credit risk..

### **2.4 Loan Default and Risk Management**

Early studies on loan default were mainly based on short-term risk management techniques, without proper long-term considerations. Medium-term studies covered sustained default management but without a lifecycle approach. Recent studies tried to cover wider aspects of default management, but lifecycle coverage was still limited. Hypothesis 4: Loan defaults are effectively managed, which reduces overall credit risk.

### **2.5 Documentation in Credit Evaluation**

Early literature reviewed documentation's role in credit evaluation, focusing on isolated case studies. These provided initial insights but lacked broader applicability. Mid-term research expanded to diverse environments, showing documentation's influence on credit evaluation success. However, these studies fell short of capturing documentation's comprehensive role. Recent research aims to address this but often fails to fully represent diverse documentation practices. Hypothesis 5: Comprehensive documentation enhances credit evaluation, reducing credit risk.

## **3. Method**

This section is a quantitative methodology that describes the procedure used to carry out the hypothesis proposed in the literature review. This section includes how data were gathered, the variables involved, and the statistical techniques applied. This research approach ensures that the findings are reliable and accurate as it relates to minimization of credit risk through appropriate techniques.

### **3.1 Data**

Data for this study were collected through a structured questionnaire from a sample of 265 people who had borrowed loans and were customers of banks in Bangalore. The data were collected from primary sources, such as survey responses and email conversations with bank consumers. Stratified sampling was applied to ensure a diversified representation of different customer types, but the focus was on those who already had loans to assess the risk factors. Some examples of screening criteria used were people with different types of loans, credit scores, and documentation. This systematic method guarantees a dataset that can be used to analyse the determinants of credit risk, such as credit scores, insurance charges, interest rates, loan defaults, and documentation.

### **3.2 Variables**

The independent variables used in this research are credit scores, insurance charges, interest rates, loan defaults, and documentation. The dependent variables focus on the credit risk levels measured by the default rates and loan security metrics. The control variables consist of economic conditions, banking policies, and customer demographics, which are crucial in controlling the analysis so that the impact of each specific factor on credit risk is properly isolated. Some classic control variables, like economic stability and regulatory conditions, are applied to refine the analysis. The Reserve Bank of India and international financial institutions' literature sources are used to authenticate variable measurement techniques. Correlation analysis will try to explore these variables to look for relationships where causality can be established to test the hypotheses of the study.

## **4. Results**

A descriptive statistical analysis of the loan credit risk factors of 265 bank customers from Bangalore will set off the results. This analysis establishes distributions for independent variables-credit scores, insurance charges, interest rates, loan defaults, and documentation-and dependent variables-credit risk levels-establishing a baseline for understanding impacts and correlations. Five hypotheses were validated through correlation analyses. Hypothesis 1 illustrates that higher credit scores are significantly inversely related to the rate of loan defaults, meaning the credit risk is lower. Hypothesis 2 confirms that higher insurance charges increase the security of loans, thereby reducing the credit risk. Hypothesis 3 suggests that lower interest rates stimulate positive borrower behavior, which means lower credit risk. Hypothesis 4 suggests that efficient management of loan defaults leads to reduced overall credit risk. Hypothesis 5 suggests that full documentation increases the creditworthiness of customers and reduces credit risk. The results show how strategic management of these factors can reduce credit risk, filling the gap in existing research by linking these findings to the data and variables described in the Method section.

### **4.1 Higher Credit Scores and Reduced Loan Default Rates**

This finding confirms Hypothesis 1, which stated that there is a significant negative relationship between higher credit scores and loan default rates, meaning lower credit risk. Utilizing a sample of 265 bank customers, the results indicate that clients with higher credit scores have significantly lower default rates. Credit scores appear to be positively correlated with loan performance. Major independent variables comprise credit scores. Dependent variables center on default rates as risk measures. The positive relationship indicates that greater credit scores tend to represent higher reliability by the borrower, which implies less risk to the lender. The empirical significance is in

line with credit risk management theories, which focus on the role of credit scores in assessing borrower risk. This finding addresses gaps in linking credit scores with sustained risk reduction and highlights the importance of credit score evaluation in minimizing credit risk.

#### **4.2 Insurance Charges and Loan Security**

This finding supports Hypothesis 2, which states that higher insurance charges enhance loan security, reducing credit risk. Analyzing data of bank customers, the results reflect that loans having higher insurance charges show better security and lower levels of risk. Key independent variables are insurance charges, while the dependent variables focus on loan security metrics. This correlation infers that the insurance charges have an additional layer of security, which is reducing the level of risk. The empirical significance strengthens the theory regarding risk management, and this reflects that suitable insurance measures keep the loans secure. This finding, therefore, highlights the significance of insurance charges in the proper management of credit risk.

#### **4.3 Holistic Documentation and Credit Analysis**

This finding confirms Hypothesis 5: holistic documentation positively impacts credit analysis, which leads to reduced credit risk. Customer data analysis shows that loans with good documentation practices have lower risk levels and higher evaluation accuracy. Documentation practices are independent variables, and dependent variables relate to success metrics in evaluation. This relationship underscores the role of documentation in proper credit assessment, reducing risk. Empirical significance is indicated by the fact that complete documentation aligns with evaluation theories, which improve the accuracy of risk assessment. By addressing the gaps in understanding the role of documentation, this finding highlights the critical importance of documentation in credit risk management.

#### **4.4 Practical Loan Default Management**

This result confirms Hypothesis 4, as proper management of loan defaults lowers credit risk. Through data analysis, bank customers can find that the effective default management strategy results in less risk level. Default management strategy is one of the key independent variables, whereas the dependent variable includes credit risk metrics. The essence of this relationship is that active default management has the effect of reducing the risk exposure. The empirical implication is that efficient strategies are aligned with the risk management theories, ensuring loan portfolio stability. The gap in lifecycle management as identified here stresses the need for holistic default management to minimize credit risk.

#### **4.5 Interest Rates and Positive Borrower Behavior**

This finding supports Hypothesis 3, which states that low interest rates promote positive borrower behavior, thus reducing credit risk. An analysis of customer data indicates that loans with lower interest rates have higher repayment rates and better borrower compliance. Some independent variables are interest rates, and dependent variables have to do with borrower behavior metrics, such as repayment rates. This relationship is that favorable interest rates encourage borrowers to repay, which means the default risk is lowered. The empirical implications are aligned with behavioral finance theories, which conclude that interest rates influence borrower behavior. This discovery fills gaps on how interest rates impact borrowers to be responsible in their borrowing.

## 5. Conclusion

This study synthesizes findings on techniques to minimize firm loan credit risk, emphasizing the roles of credit scores, insurance charges, interest rates, loan default management, and documentation practices. These insights highlight effective risk management strategies for banks. However, there are limitations: it is based on a small sample size and is regionally specific, which might not reflect broader trends. Further research should diversify the sample and explore more factors that impact credit risk under changing economic conditions. This will fill gaps and help to fine-tune strategies in order to enhance credit risk management and provide a better understanding of how to minimize credit risk in banking. These areas, once addressed by future studies, would lead to effective risk management practice in the face of varied contexts.

## References

- [1] Olokoyo, Felicia Omowunmi. "Determinants of Commercial Banks' Lending Behavior in Nigeria." 2 (2011): 61-72.
- [2] Udell, Gregory F. "What's in a Relationship? The Case of Commercial Lending." *Business Horizon* 51 (2008): 93-103.
- [3] Besis, J. (2015). *Risk Management in Banking* (4th ed.). Wiley.
- [4] Federal Reserve System. (2005). *Credit risk: Implications of regulatory changes and the role of credit scores*. Federal Reserve Bulletin, 91(10), 398-408.
- [5] Frye, J. (2000). *Credit risk models and the Basel capital accord*. *Risk*, 13(7), 87-92.
- [6] Gärtner, M., & Krahnert, J. P. (2007). *The role of credit scoring in loan risk assessment: A critical review*. *Journal of Financial Services Research*, 32(3), 199-222.
- [7] Jorion, P. (2007). *Financial Risk Manager Handbook* (5th ed.). Wiley.