FINANCE INDIA
© Indian Institute of Finance
Vol. XXXVI No. 1, March 2022
Pages – 439 - 454

Determinants of Loan Repayment Behaviour of Bank Borrowers - A Relative Study with evidence from Bengaluru¹

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Abstract

The present study aimed to review the various factorsthat influence the credit score and find the effect of credit score and other financial aspects of an individual's loan repayment and whether they had ever defaulted. Primary data was collected through a questionnaire from 516 customers of twelve different banks in Bengaluru city during July-August 2019 using a stratified sampling method. The results revealed that credit score, loan amount, and loan repayment amount did not affect the loan repayment behaviour of individuals. However, 'the type of loan obtained' and 'the kind of bank the loan is received' significantly influence individuals' loan repayment behaviour. Home loans, education loans, other loans and the loan obtained from a foreign bank were particularly significant in affecting the loan repayment of individuals. The high beta value for other loans indicates that most individuals who have no other loans have defaulted in repaying their dues.

JEL Code: D31, E44, G23, G24, G51

Keywords: Bank, Borrowers, Behaviour, Bengaluru, Credit, Rating, Credit

Score, Loan, Repayment Karnataka, India

I. Introduction

CREDIT SCORE MEASUREMENT plays a vital role in the borrower's credit history, and it is the prerequisite for increasing mobility and attaining financial goals (Hurley and Adebayo, 2017). It is a statistical tool used to assess a loan applicant's risk or a current borrower being default or delinquent (Mester, 1997). The credit score method, initiated in the 1950s, is

¹ Presented at FI International Research Conference (August, 2020)

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individual before granting a loan. It also helps the bank avoid default in loan repayment by its customers and reduces the NPA of banks. The study also suggests that the regulatory bodies of financial institutions and governments should give awareness on knowledge of credit scores among individuals through media. This may result in the effective implementation of loans and a better economy of the state. The study has several limitations. The current research is entirely empirical research based on the data collected from customers of 12 different banks. The study mainly focused on the respondents' credit score and other variables' impact on loan repayment behaviour. Hence, this study can be extended to fill up the other gaps by examining the impact of credit score and credit defaults on the NPAs of the company. The simulation and other suitable predictive analyses can be made to make optimal decisions by the banks.

Further research studies are required to know the impact of low credit scores on applicants' lives and their effects on societal development. How does the credit score system affect socially-oriented projects? And what are the measures being taken by the regulatory bodies for overcoming these problems? Also, the present study can be enlarged in other regions in India, and the study can be conducted to analyse the effectiveness of different credit bureaus functioning in India.

References

Berger, A.N., A.M. Cowan and W.S. Frame, (2011), "The Surprising Use of Credit Scoring in Small Business Lending by Community Banks and the Attendant Effects on Credit Availability, Risk, and Profitability," *Journal of Financial Services Research*, Vol. 39, No.1, pp.1–17

Berger, A.N., W.S. Frame and N.H. Miller, (2005), "Credit Scoring and the Availability, Price, and Risk of Small Business Credit," *Journal of Money, Credit, and Banking*, Vol.37, No.2, pp. 191-222

Berg, T., V. Burg, A. Gombovie and M. Puri, (2018), *On the Rise of the FinTechs – Credit Scoring using Digital Footprints*, Working Paper Series, Federal Deposit Insurance Corporation, Centre for Financial Research, pp. 1-51

Chatterjee, S., D. Corbae, K. Dempsey and J.V. Ríos-Rull, (2020), "A Quantitative Theory of the Credit Score" Working Papers 770, Federal Reserve Bank of Minneapolis, pp. 1–23

Crone, S. F., and S. Finlay, (2012), "Instance sampling in credit scoring: An empirical study of sample size and balancing" *International Journal of Forecasting*, Vol.28, No.1, pp. 224-238

Crook, J. N., D.E. Edelman and L.C. Thomas, (2005), "Credit Scoring", *Journal of the Operational Research Society*, Vol.56, No.9, pp. 1003-1005

- Dudhe, C., (2017), "Impact of Non-Performing Assets on the Profitability of Banks A selective study," *Conference: The Annals of the University Oradea Economic Sciences*, July 2017, Vol.TOM XXVI, No.1, p. 9.
- Einav L., M. Jenkins and J. Levin, (2013), "The impact of credit scoring on consumer lending," *RAND Journal of Economics*, Vol. 44, No. 2, Summer 2013, pp. 249–274.
- Gadre, G., A. Bhargava and L. Mehta, (2019), "How to improved credit scores", *The Economic Times*, Times Internet Limited, NewDelhi
- Gerstner, L., (2019), "8 Ways to Boost Your Credit Score", *Kiplinger's Personal Finance*, Vol.73, No.8, pp. 64–65.
- Gutiérrez-Nieto, B., C. Serrano-Cinca and J. Camón-Cala, (2016), "A Credit Score System for Socially Responsible Lending", *Journal of Business Ethics*, Vol.133, pp.691–701
- Hurley, M., and J. Adebayo, (2017), "Credit Scoring in the era of big data," *Yale Journal of Law and Technology*, Vol. 18, No. 1, pp. 148-246.
- Jayadev, M., (2006), "Internal Credit Rating Practices of Indian Banks," *Economic and Political Weekly*, Vol. 41, No.11, pp.1069 1078.
- Knapp, E. A., and L.T. Dean, (2018). "Consumer credit scores as a novel tool for identifying health in urban U.S. neighborhoods," *Annals of Epidemiology*, Vol. 28, No.10, pp. 724–729
- Kulkarni, S. V., S.N. Dhage, S.M. Thampi and E.S.M. El-Alfy, (2019), "Advanced credit score calculation using social media and machine learning," *Journal of Intelligent & Fuzzy Systems*, Vol.36, No.3, pp. 2373–2380.
 - Lawson, J., C., (1995), "Knowing the Score," US Banker, September, pp. 61-65.
- Libby, D., (2019), "How important is it to improve my credit score?", *National Debt Relief*, New York
- Mayer, B., (2018), "3 Studies show the average credit score by age and generation (2021)", *BadCredit.org*, Gainesville.
- Mester, L., (1997),"What is the point of Credit Scoring?", Business Review, Federal Reserve Bank of Philadelphia, Issue September 1997, pp. 3-16.
- O'Shea, Bev, (2021), "What Is a Credit Score, and What Are the Credit Score Ranges?", NerdWallet, Inc., USA
- OECD, (2014), "Distribution of credit scores for approved high-ratio CMHC-insured mortgages", Thematic chapters, OECD Publishing, Paris
- Onay, C., and E. Öztürk (2018), "A review of credit scoring research in the age of Big Data," *Journal of Financial Regulation and Compliance*, Vol. 26, No. 3, pp. 382-405
- Rona-Tas, A., (2017), "The Off-Label Use of Consumer Credit Ratings," *Historical Social Research / Historische Sozialforschung*, Vol.42, No.1, pp. 52-76
- Sadatrasoul, S. M., M.R. Gholamian, M. Siami and Z. Hajimohammadi,(2013), "Credit scoring in banks and financial institutions via data mining techniques: A literature review," *Journal of AI and Data Mining*. Vol.1, pp.119-129.

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Senthil K. A., S. Ramesh and S. Rahul, (2019), "A Technology on Credit Score System – Assessing Public Perception in Bengaluru City," *International Journal of Innovative Technology and Exploring Engineering*, Vol.8, No.12, pp. 1929-1934.

Vojtek, M., and E. Kocenda, (2006), "Credit scoring methods. Finance a Uver – Czech, *Journal of Economics and Finance*. Vol. 56, pp. 152-167.

Zordkoohi, A., and J. Kolari, (2001), "The effect of bank mergers and acquisitions on the credit Decision process in small business lending", *Finance India*, Vol. XV, No.1, pp.119-142

Zhu, H., P.A. Beling and G.A. Overstreet, (2001), "A study in the combination of two consumer credit scores, *Journal of the Operational Research Society*, Vol.52, No.9, pp. 974-980