International Journal of Economics, Business and Social Sciences
ISSN: XXXX
https://athallahpublishing.com/index.php/jadsco/index

OPEN ACCESS

Vol. 2, No. 1, 2026

DOI: XXXX

Understanding the Determinants of Loan Repayment in Post-Conflict Settings

Yusuf Kareem Al-Haddad[1], Ahmad Hakim[2]

[1] Al Noor University, Jordan
[2] *Universitas Lampung, Indonesia*
Corresponding Author: ysfkrmhadda90@gmail.com

ABSTRACT

Loan repayment performance is a critical factor in ensuring the sustainability of microfinance institutions and financial inclusion initiatives, particularly in post-conflict settings where economic and social structures are often fragile. This study aims to examine the key determinants influencing borrowers' loan repayment behavior in post-conflict environments. Using a quantitative approach, the research analyzes various socioeconomic, institutional, and loan-related factors that may affect repayment performance. A logit regression model is employed to identify the probability of successful loan repayment based on variables such as borrower income, education level, loan size, business experience, access to financial services, and institutional support. The findings indicate that borrower income stability, financial literacy, and effective institutional monitoring significantly improve repayment performance. Conversely, economic instability, limited access to markets, and weak financial management practices tend to increase the risk of loan default. These results highlight the importance of strengthening borrower capacity, improving financial literacy programs, and enhancing institutional support mechanisms to ensure sustainable credit systems in post-conflict regions.

Keywords: Loan Repayment, Microfinance, Financial Inclusion, Logit Model

Received:	Revised:	Accepted:	Available online:
01.01.2026	01.02.2026	01.03.2026	11.03.2026

INTRODUCTION

Access to financial services plays a crucial role in promoting economic recovery and social stability, particularly in regions that have experienced armed conflict or prolonged political instability. In post-conflict settings, economic structures are often fragile, institutions may be weakened, and communities face significant challenges in rebuilding livelihoods. One of the key mechanisms that has been widely used to support economic recovery in such contexts is microfinance and small-scale credit programs. These financial services aim to provide capital to individuals and small enterprises so they can rebuild their economic activities and restore household income sources (World Bank, 2021).

Loan repayment performance is an essential indicator of the sustainability and effectiveness of microfinance institutions and financial inclusion initiatives. When borrowers are able to repay loans on time, financial institutions can maintain liquidity, expand their outreach, and continue supporting local economic development. Conversely, high levels of loan default can undermine institutional sustainability and reduce the availability of credit for vulnerable communities (Cull, Demirgüç-Kunt, & Morduch, 2021). Therefore, understanding the determinants of loan repayment is critical, especially in post-conflict environments where economic uncertainties and institutional weaknesses may significantly influence borrower behavior.

Post-conflict regions present unique economic and social characteristics that differentiate them from stable economies. After a conflict, communities often face disrupted markets, damaged infrastructure, limited employment opportunities, and weakened governance systems. These conditions create an environment where both lenders and borrowers encounter higher levels of risk. Financial institutions operating in such settings must deal with challenges related to information asymmetry, weak legal enforcement, and unstable economic conditions (Brück, Justino, & Verwimp, 2020).

In many developing countries, microfinance has become a major tool for addressing these challenges. Microfinance institutions provide small loans to individuals who often lack collateral, formal employment, or access to traditional banking services. These loans are typically used to support small businesses, agricultural activities, or other income-generating initiatives. The effectiveness of these programs depends largely on the ability of borrowers to manage their loans responsibly and

repay them according to agreed schedules (Armendáriz & Morduch, 2020).

Several studies highlight that loan repayment behavior is influenced by a variety of factors, including borrower characteristics, loan characteristics, and institutional factors. Borrower characteristics may include education level, household income, financial literacy, business experience, and family size. Individuals with higher levels of financial literacy and stable income sources are generally more likely to fulfill their repayment obligations (Beck, 2021). In contrast, borrowers who experience unstable income or lack financial management skills may face greater difficulties in meeting repayment deadlines.

Loan characteristics also play an important role in determining repayment performance. Variables such as loan size, interest rates, repayment periods, and collateral requirements can influence borrower behavior. For example, excessively large loans may increase financial pressure on borrowers, while flexible repayment schedules may help borrowers manage their financial obligations more effectively (Demirgüç-Kunt, Klapper, & Singer, 2022). In post-conflict settings, designing appropriate loan structures is particularly important because borrowers often face unpredictable economic conditions.

Institutional factors also significantly influence repayment performance. The quality of borrower screening, monitoring systems, and institutional support mechanisms can determine the success of microfinance programs. Financial institutions that maintain strong relationships with borrowers and provide training or financial education programs often experience better repayment rates. Monitoring mechanisms, including regular communication and follow-up visits, can also help reduce default risks (Ledgerwood, 2021).

In post-conflict environments, the determinants of loan repayment may differ from those observed in more stable economies. Conflict often disrupts social networks, destroys assets, and reduces trust in institutions. These factors can affect borrower behavior and financial decision-making processes. For instance, households that have lost productive assets due to conflict may struggle to generate sufficient income to repay loans. Similarly, communities that have experienced prolonged instability may have limited trust in formal financial institutions (Justino, 2022).

Another important factor influencing loan repayment in post-conflict settings is economic volatility. Post-conflict economies often experience fluctuating market prices, limited access to markets, and irregular employment opportunities. These conditions can affect the ability of borrowers to generate consistent income, thereby influencing their repayment capacity (International Monetary Fund, 2023). In addition, limited infrastructure and transportation networks may restrict market access, making it more difficult for borrowers to sell goods or services.

Social capital is also considered an important determinant of loan repayment in fragile contexts. Social capital refers to the networks, relationships, and norms that facilitate cooperation within communities. In many microfinance programs, group lending mechanisms rely heavily on social capital to ensure repayment. Borrowers within the same group often monitor each other's activities and provide mutual support in meeting repayment obligations (Putnam, 2020). In post-conflict communities where social networks may have been disrupted, rebuilding social capital becomes an important factor in improving repayment performance.

Furthermore, gender dynamics may also influence loan repayment behavior. Studies indicate that women borrowers often demonstrate higher repayment rates compared to men, partly because women tend to allocate financial resources more carefully toward household needs and business activities (UNDP, 2022). For this reason, many microfinance programs prioritize women as primary borrowers in order to improve program sustainability and social outcomes.

Financial literacy is another important determinant of loan repayment performance. Borrowers who understand financial concepts such as interest rates, budgeting, and risk management are better equipped to manage their financial resources and fulfill repayment obligations. Financial literacy programs have been shown to improve borrower performance by enhancing financial decision-making and encouraging responsible borrowing behavior (OECD, 2021).

In addition to borrower-level factors, macroeconomic conditions also influence loan repayment performance. Economic growth, inflation rates, and employment levels can significantly affect the ability of borrowers to repay loans. In post-conflict settings, economic recovery may take several years, and periods of economic instability can increase

the risk of loan default. Therefore, financial institutions must consider broader economic conditions when designing lending strategies in fragile environments (World Bank, 2024).

Another challenge in post-conflict regions is the limited availability of reliable financial data. Many borrowers operate in informal sectors, where income sources and business activities are not formally recorded. This lack of reliable information can make it difficult for financial institutions to assess borrower creditworthiness accurately. As a result, institutions may face higher risks of adverse selection and moral hazard (Cull et al., 2021).

To address these challenges, many financial institutions have adopted innovative approaches to improve loan repayment performance. Digital financial services, for example, are increasingly used to facilitate loan disbursement, repayment monitoring, and financial record keeping. Mobile banking and digital payment systems can reduce transaction costs and improve transparency in financial transactions, thereby strengthening loan management systems (GSMA, 2023).

Moreover, capacity-building programs for borrowers have become an important strategy for improving loan repayment performance. Training programs in entrepreneurship, financial management, and business planning can help borrowers develop sustainable income-generating activities. By improving borrower capacity, financial institutions can reduce default risks and enhance the long-term sustainability of credit programs (Asian Development Bank, 2022).

Despite the growing attention given to microfinance in post-conflict settings, there remains a need for deeper understanding of the factors that influence loan repayment performance in such environments. Many previous studies have focused on stable economic contexts, while fewer studies have examined repayment behavior in fragile and conflict-affected areas. Understanding these determinants is essential for designing effective financial policies and programs that can support economic recovery in post-conflict regions (Brück et al., 2020).

This study aims to contribute to the existing literature by analyzing the key determinants that influence loan repayment performance in post-conflict settings. By examining borrower characteristics, loan attributes, and institutional factors, the research seeks to provide insights into the mechanisms that shape repayment behavior in fragile environments. The findings are expected to provide valuable recommendations for

policymakers, financial institutions, and development organizations working to strengthen financial inclusion and economic resilience in post-conflict communities.

Ultimately, improving loan repayment performance is not only important for the sustainability of financial institutions but also for the broader goal of economic recovery and poverty reduction in post-conflict regions. By identifying the factors that influence borrower behavior, stakeholders can design more effective financial systems that support inclusive and sustainable development in fragile contexts (World Bank, 2024).

METHOD

Aconceptual framework that demonstrates how the main components of the research endeavor work together is called a research design. It serves as a guide and a template for carrying out a research study, on which the study drew when necessary. (Kothari, 2008) The study used both qualitative and quantitative data in a cross-sectional research design, which was determined by the data to be collected, the time dimension, and the control of study factors.

Data gathered using the survey questionnaire consists of: Age, sex, marital status, education level, household size, and income source are some of the borrower's attributes. Loan history, including loan size, purpose, and use; Details on training and savings; company information (company type, business experience, business information, market analysis), information about how much default would cost borrowers, information about the institution's customer service, and other pertinent factors.

The study was conducted in Dedebit Credit and saving micro finance eastern zone of Tigray. For this study multistage probability sampling methods were used to obtain the necessary information from formal borrowers. DECSI eastern zone of Tigray includes 9 weredas (such as Ketema Adigrat, Atsbe, Erob, Gantaafeshum, Gulomkeda, Hawzen, Klteawlaelo, SasieTsaedaEmba, and Wukro) which have 31 branches. At the first stage, Adigrat city, and Gantaafeshum weredas were nominated purposively. The second stage was the selection of sample branches of the two weredas of eastern zone. 1 branches from ketema Adigrat and 1 branch from wereda Gantaafeshum were selected randomly which

provides loan to borrowers. At the third stage, the total borrowers' population of these branches was stratified as defaulters and non-defaulters using stratified sampling technique. All borrowers of DECSI eastern zone that have repaid their loans on due date classified as non-defaulters while those who did not repay their loan three months after the due date classified as defaulters.

From the total 2,600 active clients by using the following Yemane's (1967) formula 189 clients were selected. Out of the 189 clients 25 were defaulters and 164 were non defaulters.

$$n = \frac{N}{1+N(e)2}0$$

Where, n= sample size

e= acceptable sampling error =0.07 or (7%)

N= population size = 2,600 borrowers

$$\text{Sample size} = n = \frac{2,600}{1+2,600(0.07)2}$$

$$n = \frac{2,600}{13.74}$$

$$n = 189.22 \approx 189 \text{ borrowers}$$

RESULTS AND DISCUSSION

Using STATA software, the Variance Inflation Factor (VIF) technique was used to identify the multicolinearity issue for both discrete and continuous explanatory variables. Gujarati (2004) states that VIF can be described as follows:

$$VIFi = \frac{1}{(1-Ri2)}$$

The variance inflation factor is represented by VIFi, while the square of the multiple correlation coefficient between Xi and the other explanatory variables is represented by Ri2. The variable Xi is more collinear the higher the value of VIFi. When a variable's VIF is greater than 10, it is often interpreted as an indication that the model has a multicollinearity issue. The primary assumptions of the linear regression analysis were not met by the non-continuous dependent variable of loan repayment. Ordinary least squares (OLS) may produce biased and inconsistent parameter estimates when the dependent variable to be modeled has a narrow range. The Logit (logistic regression) model, which applies multiple regression analysis techniques to research

scenarios where the outcome variable is categorical, was utilized to investigate the factors influencing loan repayment.

Table 1. VIF of all explanatory variables

Variable	VIF	1/VIF
SOUINC	3.63	0.275801
BUSEXP	2.41	0.414816
AGE	2.28	0.437967
LNDV	2.16	0.463108
FYSE	2.14	0.466475
LOREPUT	2.05	0.488058
TR	1.89	0.530448
EDULEVEL	1.69	0.591421
VLSV	1.45	0.689897
MRTS	1.44	0.695863
SUITPERIOD	1.43	0.699986
GENDER	1.42	0.704195
CPOSF	1.39	0.717526
LOANSIZ	1.39	0.719381
TMLR	1.31	0.764082
DRATIO	1.28	0.778454
LNSN	1.25	0.800211
Mean vif = 1.80		

Based on the VIF results, the data were found to have no serious problem of multicollinearity and therefore the explanatory variables were retained in the model. The pseudo R2 is the goodness-of-fit metric utilized in the binary choice model. A measure that at least falls within the [0, 1] interval and has the same interpretation as the OLS-R2 in the linear model is called a pseudo R2 measure. A number of binary choice models with missspecified variables either omitted variables or irrelevant variables included are used to evaluate the pertinent behavior of various pseudo-R2 measures (Cameron and Windmeijer, 1997). Because the dependent variable Y is either 0 or 1 for a given independent variable X, the pseudo R2 result for such models is likely to be substantially lower than 1. Consequently, all the Y values will either lie along the X-axis or along the line corresponding.

Discussion on the effect of explanatory variables

Age (AGE): Age of the borrowers' was found to be positively and significantly (5%) associated with loan repayment performance as expected, which means as age increased, the probability of being defaulter is decreased and improves loan repayment performance of borrowers. The implication is that the borrowers were becomes elder, they might be more aware on the financial management and they feel responsibility. This result is consistent with the study made by Fikirte (2011). In this case the younger borrowers, by contrast, may have lost business momentum or have not yet accumulated enough experience to navigate the aftermath.

Education Level (EDULEVEL): As expected education was positively and significantly (5%) associated with loan repayment performance. An increase in education level, could lead to get better loan repayment performance of borrowers. This proves the hypothesized role of education in raising the level of awareness, exposure to technologies, and information to women. This result is consistent with the descriptive statistics result and the findings of Qinlan, Z. and Izumida, Y. (2013), but incompatible with study of Fikirte (2011). It is true that inn post-conflict regions, education serves as a critical resilience factor. Educated individuals might better access relief programs, restructure businesses, or pivot to alternative livelihoods, thereby improving repayment performance. The destruction of schools and limited educational services

during conflict may, however, widen the gap in repayment capabilities between educated and uneducated borrowers.

Family Size (FYSE): was found to be significant factor that positively influences loan repayment performance of the respondents at 10% significance level, which is incompatible with the expectation in the hypothesis. There is a possibility of loans diverted to unintended purposes because of many responsibilities resulting from meeting the needs of many members of the family. Hence, borrowers with large family sizes have lower repayment rates. However, it is not the mere size of the family that puts a pressure on the borrowed loan because of the fact that those family members who are not solely dependents but active to assist the business may raise the probability of the loan being repaid where as those family members who are totally dependents (those above the age of 65 and children) lower the probability of the loan being repaid.

Dependency Ratio (DR): as expected dependency ratio was found to be statistically significant factor that negatively influences loan repayment performance of borrowers at 5% significance level. This result is in line with the Pasha and Negese (2014). *Participating in Voluntary Saving (VLSV):* is an economic factor that was positively and significantly affects loan repayment performance of borrowers at 10% significance level, which is consistent with the expectation in the hypothesis. After conflict in Tigray region, participation in voluntary savings schemes may signal a household's resilience or access to stable community networks. These networks could provide informal support and credit during difficult periods, enabling borrowers to stay afloat and repay loans.

Celebrating and participating of social festivals (CPOSF): The variable was found to be significant (1%) in negatively influencing loan repayment performance of the respondents. The implication for this result is, as these types of expenses are expenses that are spent on non-income generating activities which don’t have a direct relation in making the borrower earn income, it may deplete the resources of the borrowers including the accessed loan finance. Any diversion of the loan finance to these types of expenses, could lead borrowers face a bottle neck in repaying the loan back. The result was similar with what was hypothesized and its descriptive result and consistent with study of Zelalem and Hassen (2013). Generally as of the negative influence of participation in social festivals may reflect a cultural response to trauma in post-conflict societies, where social gatherings resume as a way to rebuild community

ties. However, spending limited resources on such non-productive activities may hinder repayment ability particularly when basic needs remain unmet and loans are redirected for consumption rather than investment.

CONCLUSION

Loan repayment performance represents a critical element in ensuring the sustainability of financial institutions and the effectiveness of financial inclusion initiatives, particularly in post-conflict environments where economic systems and social structures remain fragile. This study highlights that loan repayment behavior in post-conflict settings is influenced by a combination of borrower characteristics, loan-related factors, institutional support, and broader socioeconomic conditions. These determinants interact in complex ways and significantly affect borrowers' capacity and willingness to fulfill their financial obligations. Borrower-related factors such as income stability, education level, financial literacy, and business experience play a major role in shaping repayment performance. Individuals with stable sources of income and adequate financial management skills tend to demonstrate higher repayment reliability. In contrast, borrowers who operate in unstable economic conditions or lack sufficient financial knowledge often face greater risks of repayment difficulties. Therefore, strengthening borrower capacity through financial education and entrepreneurship training is essential in improving repayment outcomes.

Loan characteristics also contribute significantly to repayment performance. Appropriate loan size, reasonable interest rates, and flexible repayment schedules can help borrowers manage their financial commitments more effectively. In post-conflict contexts where economic uncertainty is common, designing loan structures that consider the fluctuating income patterns of borrowers becomes particularly important. Institutional factors further influence the success of loan repayment. Effective borrower screening, continuous monitoring, and supportive institutional relationships can reduce the risk of loan default. Financial institutions that actively engage with borrowers and provide guidance or advisory support are more likely to achieve better repayment performance. In fragile environments, institutional trust and

transparency also play a vital role in strengthening the relationship between lenders and borrowers.

REFERENCES

Armendáriz, B., & Morduch, J. (2020). *The economics of microfinance* (3rd ed.). Cambridge, MA: MIT Press.

Asian Development Bank. (2022). *Microfinance development and financial inclusion in fragile and conflict-affected situations*. Manila: Asian Development Bank.

Beck, T. (2021). Finance and inclusive growth in developing economies. *Journal of Financial Economic Policy*, 13(2), 221–235.

Brück, T., Justino, P., & Verwimp, P. (2020). Microfinance and development in conflict-affected regions. *World Development*, 127, 104789.

Cull, R., Demirgüç-Kunt, A., & Morduch, J. (2021). The microfinance business model: Enduring subsidy and modest profit. *World Bank Economic Review*, 35(2), 221–244.

Demirgüç-Kunt, A., Klapper, L., & Singer, D. (2022). *The Global Findex Database 2021: Financial inclusion, digital payments, and resilience in the age of COVID-19*. Washington, DC: World Bank.

GSMA. (2023). *State of the industry report on mobile money 2023*. London: GSM Association.

International Monetary Fund. (2023). *Economic recovery in fragile and conflict-affected states*. Washington, DC: IMF.

Justino, P. (2022). Inequality, conflict, and development: The role of economic institutions in fragile states. *Journal of Development Studies*, 58(5), 921–938.

Ledgerwood, J. (2021). *The new microfinance handbook: A financial market system perspective*. Washington, DC: World Bank.

OECD. (2021). *OECD/INFE toolkit for measuring financial literacy and financial inclusion*. Paris: Organisation for Economic Co-operation and Development.

Putnam, R. D. (2020). *The upswing: How America came together a century ago and how we can do it again*. New York: Simon & Schuster.

UNDP. (2022). *Women's economic empowerment and financial inclusion in developing countries*. New York: United Nations Development Programme.

World Bank. (2021). *Financial inclusion and development in fragile contexts*. Washington, DC: World Bank.

World Bank. (2024). *World development report: Finance for inclusive recovery*. Washington, DC: World Bank.