Loan Characteristics & Loan Credit Terms: Does it Matter in a Microfinance Contract?

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A R T I C L E I N F O

A B S T R A C T

This study examined the relationship between loan characteristics and loan credit conditions on loan repayment issues in order to assist Microfinance Institutions (MFIs) in Pakistan in improving their loan payback performance. The study also examines the link between loan credit terms and problems with loan repayment as well as the mediating function of client-business performance in the relationship between loan characteristics and loan repayment concerns. A measurement model and a structural model were both used in this investigation, which used a two-stage structural equation modelling methodology. The measurement model, also known as the outer model, was employed to evaluate the reliability and validity of the data collection technology. PLS-SEM bootstrapping was performed to test the hypothesis using the structural model (inner model). The results are consistent with the assumption that loan terms and conditions have a positive impact on microenterprise loan repayment concerns. The findings of this study also lend credence to the idea that client-business performance functions as a mediator in the relationships between loan characteristics and problems with loan repayment as well as between loan credit terms and problems with loan repayment. There hasn't been much research done in Pakistan to date on how loan characteristics and loan credit terms directly affect the challenges microenterprises face in repaying loans. The business performance of microenterprises is also investigated in relation to loan features, loan credit terms, and loan repayment issues.

Introduction

Microenterprises in developing countries perform excruciatingly poorly as a result of a lack of timely financing options. Apart from a lack of financial options, microbusinesses also had additional problems. These problems primarily relate to the small size of the business, the inappropriate business location, the owner's lack of preparation, the lack of business education, the lack of business skills, and another technical knowledge (Abgissa, 2021). In addition, low-value-added goods and services and investments were the main causes of failure for most microenterprises (Berns, Shahriar, & Unda, 2021). Additionally, due to the requirement of collateral or security made by traditional financial institutions, lending facilities for previously closed micro-enterprises opened up with the development of microfinance. In this sense, MFIs have arisen as vehicles for economic growth against the quickly escalating poverty. Because MFIs offer collateral-free credit facilities to micro-enterprises, their development helps to reduce poverty, empower women, create jobs, and stimulate economic activity (Kumari, 2021).

Then the MFIs in Pakistan entered a period of fierce competition. As consequently, a number of financial authorities and researchers are paying attention to the issue of loan repayment performance. The State Bank of Pakistan's (SBP) report for the fiscal year 2020–21 states that the problem of loan default and delinquency is one that MFIs continually struggle with. According to this report, non-performing loans (NPL) in the MFI sector have surged over the past five years, rising from 0.895 billion rupees to 13.169 billion rupees (2016-2021). Additionally, this analysis showed that over the past five years, all indicators relating to NPL had steadily climbed. For instance, the ratio of non-performing loans to gross advances increased by a net 4.51% over the previous five years. Similarly, over the previous five years, the ratio of provision against non-performing loans to gross advance climbed 4.24%. In the meantime, the NPL to shareholder equity ratio showed a net increase of 22.63% during the previous five years. The write-off of the non-performing loan to non-performing loans provision ratio also showed a net rise of 29.47%. Lastly, during the past five years, provisions against NPL have increased by 15.57%. (State Bank of Pakistan, 2021).

This study adds to the body of literature by proposing that loan credit terms (LCT) (described in the contractual agreement, including loan size, interest rate, repayment schedule, and loan duration) and loan characteristics (other conditions not described in the contractual agreement, such as lead time, grace period provision, difference between period applied and period approved, complex lending procedure, and general requirement) affect the loan outcome. Additionally, recent study revealed that the loan credit terms and loan features of MFIs lending products had a significant impact on the long-term loan payback performance (Ssekiziyivu et al., 2018; Nanayakkara & Stewart, 2015; Shah et al., 2021).

This study's main contribution is its assessment of the mediating roles played by client firm performance in the relationship between loan characteristics and repayment issues, as well as the direct effects of loan features on loan repayment issues. Other significant contribution to the study is the inclusion of the direct impacts of LCT on loan repayment problems (LRP) as well as the recognition of the mediating role of client company performance in the relationship between loan credit terms and loan repayment difficulties. However, in this study, we'll concentrate on the four main issues: (1) Are concerns with loan repayment directly correlated with loan characteristics? (2) Does the success of the client company affect the relationship between loan characteristics and problems with loan repayment? (3) Are loan credit terms a direct cause of problems with loan repayment? (4) Is it possible for the client's business success to serve as a buffer between the LCT and repayment problems?

The remainder of the essay is organized as follows: The various ideas put up to support this study are discussed in Section 2, along with a thorough analysis of earlier works on the subject and the possibilities that were looked at. The research technique is explained in Section 3 after that, and Section 4 discusses the findings in light of the pertinent research and hypotheses. The conclusion, restrictions, ramifications, and direction of the research moving forward are all included in Section 5.

Literature Review & Hypothesis

The agency theory, the asymmetric information theory, the moral hazard theory, their connections to the constructs examined in this research, and a thorough review of previous research on the subject are all covered in detail in this part.

Theoretical Background of the Study

The agency theory is the first hypothesis that is applied in this investigation. According to the agency hypothesis, neither the principal (MFIs) nor the agent (Borrowers/Clients) adheres to the contractual commitment strictly since their aims are out of alignment. Because the principal and agent in the contract are not on the same page and acting in their own best interests, loan repayment performance suffers (Odera, 2012; Mitnick, 2015; Duvendack et al., 2011). The asymmetric information theory, which was also used in this study, outlines situations where one person has access to knowledge that the other actors do not. Asymmetric information situation occurs when the debtor knows more about his financial status than the creditor does. Furthermore, underling theory contends that the debtor and creditor have different understandings of the information available, which causes problems with loan repayment (Kwambi & Wandera, 2013). The third view that has been used to support this study is the moral hazard theory. According to this model, the Moral Hazard Theory holds clients accountable for non-performing loans. According to this theory, borrowers of loans for business purposes should pay for their urgent requirements before making capital expenditures (Gachora, 2015; Bofondi and Gobbi, 2003).

Impact of Loan Characteristics on LRP

This study looked into the variables influencing loan repayment efficiency. In this work, descriptive statistics and a structural equation modelling (SEM) model were both used for data analysis. The lending approach, lengthier lead time, grace period provision, and difference between the loan terms applied and approved were all regarded as independent variables, whilst loan repayment performance was the dependent

variable. Each of the independent variables in the study that were related to how well borrowers repaid their loans was statistically significant (Osman and Ramakrishna, 2017). Few studies have looked at whether the time it takes MFIs to approve and disburse loans, despite the time it takes for the loan to be sanctioned and issued, has an effect on loan repayments. This is a significant component, according to discussions and interviews with several MFI executives. They argue that the chances of business success for microloan borrowers are sporadic and that the time it takes to disperse a credit has a big impact on whether a project succeeds or fails. Researchers discovered that the time it takes to issue a loan has a considerable impact on loan repayments in a study of small-scale agricultural farm loans (Oke et al., 2022; Nanayakkara & Stewart, 2015). Loan characteristics (complicated lending process, longer lead time, lack of grace period, delay between period applied and accepted, and provision of general terms) as well as the loan's length and amount, however, are also factors that affect loan repayment. The company's performance is a significant factor that also has an impact on loan repayment. Businesses that are profitable are more likely to make timely loan repayments than those that are unsuccessful. The relationship between loan characteristics and loan repayment has thus been the subject of extensive theoretical and empirical research. In addition, Osman and Ramakrishna (2017) found a link between loan features and loan repayment efficiency. The following hypothesis are put out in light of these justifications and earlier empirical data.

Hypothesis 1: Loan characteristics enhances LRP

Loans Credit Terms and LRP

Given the concerns with knowledge asymmetry and moral hazard, MFIs provided loans to the borrower under strict terms and conditions. In order to lessen the risk of default, banks typically cut the loan size. Charge a high interest rate in a similar manner to offset the expense of default. While this was going on, MFIs designed rigid loan schedules, enforced fees for late payments, and did not give borrowers a grace period (Aslam, Kumar, & Sorooshian, 2020). As a result, the amount of loans and interest charged by MFIs in the context of microenterprises has come up for debate. It is believed that granting microbusinesses larger loans will decrease the likelihood of loan default and delinquency (Parvin, Birner, & Mila, 2020). In addition, MFI lending products have some distinctive characteristics that address the issues of information asymmetry and moral hazard and then address the problem of loan payback. The difficult loan disbursement process is one of these particular features. Before certifying clients' loans, MFIs take more time to approve loans and conduct accurate credit assessments. Additionally, MFIs require additional security or collateral in the form of customer personal guarantees, advance cheques, and physical property (Aslam, Kumar, & Sorooshian, 2020). Repayment rates are influenced by the loan's size and term, the lender's interest rate, and the moment the loan is disbursed. From the perspective of the borrower, socioeconomic factors in group-based schemes including as gender, educational attainment, marital status, household income level, and peer pressure are the most significant drivers. To better understand the common justifications for appropriate loan repayment, it is crucial to investigate and provide empirical information on the drivers of loan payback in banks, particularly commercial banks (Oke et al., 2022). Therefore, the loan amount might not be predetermined and might be granted based on the financial needs of the company. The loan amount should not be overstated or understated for the firm's smooth operation. Customers were misusing overestimated and underestimated amounts, which led to the failure of businesses (Iqbal et al., 2020). Additionally, MFIs approved loans to the borrower under rigorous terms and conditions because of the issues with knowledge asymmetry and moral hazard. In order to lessen the risk of default, banks typically cut the loan size. Charge a high interest rate in a similar manner to offset the expense of default. While this was going on, MFIs designed rigid loan schedules, enforced fees for late payments, and did not give borrowers a grace period (Aslam, Kumar, & Sorooshian, 2020).

Hypothesis 2: Loans credit terms have a positive influence on LRP.

Mediating Effect of Client Business Performance

Although prior studies suggested that loan credit terms (loan size, interest rate, rigid repayment schedule, and loan duration) and loan characteristics (complex lending process, prolonged wait between loan application and approval, presence of general requirement, and presence of grace period) have a significant impact on the loan repayment performance of MFIs as well as on the client business performance in terms of sales, profits, and savings (Hameed, Mohammad, & Shahar, 2004), the current study examines the impact of these factors on loan repayment. Because they don't offer credit facilities, lending products with longer lead times, more demanding requirements, and a lack of grace periods have been found to negatively affect business performance. This in turn exacerbates the issue of loan delinquency and default. In a similar vein, a counterargument argues that difficult processes and protracted lead times contribute to improved credit assessments and lending decisions, enabling MFIs to bind borrowers to unfavorable loan terms and assure early loan repayment from borrowers (Dar & Mishra, 2020). The time it takes to approve and disburse a loan, on the other hand, has a significant impact on how quickly a loan must be returned. Although other research

has demonstrated the importance of this factor, the source and the way in which it influences repayments are different from what this study found. Because agriculture is so reliant on seasonal factors like weather, previous study focused on small-scale agricultural loans. Any lengthening of the time it takes to accept and disburse a loan has a negative effect. The coefficient's negative value illustrates that as loan approval and distribution delays increase, so do the chances of default. The loans in this study are used for a variety of purposes, including agriculture. This could be the case due to the drawn-out loan acceptance and payout procedure, which suggests a higher-quality appraisal process that more precisely identifies successful projects (Oke et al., 2022). However, the following hypothesis was established based on earlier study and literature.

Hypothesis 3: The relationship of loan characteristics and loan repayment problems is mediated by client business performance

The Mediating Role of CBP between the LCT and LRP

However, because of knowledge asymmetry and moral hazard issues, MFIs did not trust their clients. When the workers of MFIs examine their clients' credit histories and company success, the clients also conceal important information. MFIs therefore give loans to such consumers on unfavorable terms and circumstances as a result of this mistrust. For instance, MFIs offer small-scale lending products for a brief period of time and charge high interest rates and processing fees. Although most MFIs borrowers were unable to earn enough income from their business operations as a result of these unfavorable terms and conditions, which led to issues with loan delinquency and loan default (Love, Pera, & Singh, 2016; Iqbal et al., 2020). However, the imbalance between the size of the loan and the size of the security or collateral is essential for loan default and delinquency in microenterprises. Additionally, stringent or unfavorable repayment schedules have a negative effect on clients' capacity to pay loans and the profitability of their businesses (Worokinasih & Potipiroon, 2019; Iqbal et al., 2020). Due to their smaller size, lower profitability ratio, high interest rates, and rigid loan repayment schedules, most microenterprises are also unable to make payments on their outstanding loans by the due dates for the loan maturity period. However, if they are successful in getting the loan for a longer period of time with a lower interest rate, those with good financial standing and significant profits frequently have no problems meeting the contractual loan agreement's deadlines (Khan, Hossain, Jahed, & Rowe, 2021). In addition, Iqbal et al. (2020) found that when loans are supplied insufficiently, the funds are diverted to other goals, such as personal expenses. Similar arguments might be made with regard to the loan period. Compared to borrowers who receive loans in cash, those who receive loans in kind (such as seeds, fertilizer, equipment, etc.) are better able to repay their debt. This is so that borrowers won't use cash loans for personal or non-business purposes. Whereas A borrower's anticipated profit is increased by a greater loan quantity. This happens because borrowers always favour larger loans and the net return rises as loan size grows (Oke et al., 2022). These justifications and earlier empirical data lead to the following hypothesis, which is put forth:

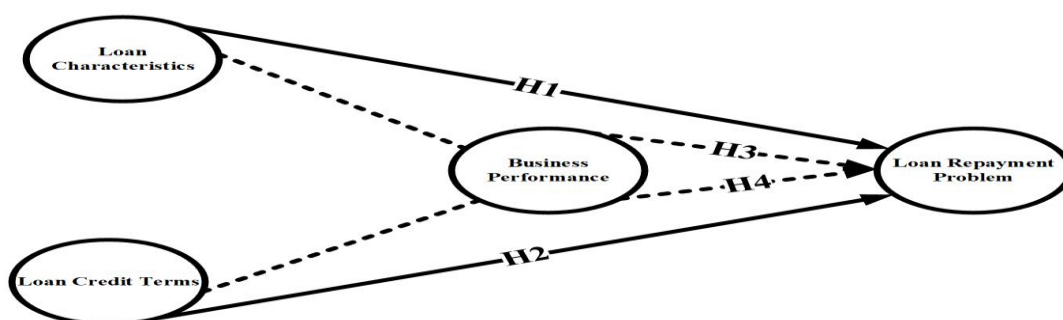**Hypothesis 4:** The relationship of loan credit terms and loan repayment problems is mediated by CBP

Figure 1: - Hypothesized Conceptual Framework: -

Methodology

The measurement model (outer model) and the structure model (inner model) would be applied in the study's two-stage methodology, respectively (Joseph F. Hair, Hult, Ringle, Sarstedt, & Thiele, 2017). Because it is well-known (Joseph F Hair, Risher, Sarstedt, & Ringle, 2019; Henseler et al., 2014) and because it lessens the interactional effects of measurement and structure models (Joe F Hair et al., 2011), the two-stage methodology was used in this study to provide the clearest picture of the reliability of each construct. The first stage of the two-stage structural equation modelling method is the measurement model (outer model). The measurement model (outer model) guaranteed the multicollinearity issue as well as the validity and reliability of the instrument. Factor loading, Cronbach's Alpha, Composite Reliability, Average Variance Extracted (AVE), Variance Inflation Factors (VIF), Fornell-Larcker Criterion, and HTMT Ratio were used to evaluate

the questionnaire's reliability and validity (Hair et al., 2017). The structural model, which is also referred to as the inner model, would also build the anticipated pattern interaction between different study variables or study components (Joseph F Hair et al., 2017; Joseph F Hair et al., 2019).

Results and Discussions

Measurement Model (Outer Model)

The PLS-SEM measurement model can be used to assess the validity and dependability of data collection methods (Hair Jr, Sarstedt, Ringle, & Gudergan, 2017). Bonds-Raacke and Raacke (2012) and Holt (2002) defined reliability as the consistency of a data collecting tool's (questionnaire) outcomes over time, while they also discussed validity as the degree to which measures accurately reflect the phenomenon being researched. Since they are necessary for reliable results, external source measurements are subjected to validity and reliability testing (Holt, 2002). Factor loading determines the dependability of indicators, and Hair Jr. et al., 2021; Oke et al., 2022 advocate a threshold of (>0.6). Effective indicator use is confirmed by factor loading above 0.60 (Hair, Sarstedt, Ringle, & Mena, 2012). Factor loadings above 0.60 in Table I and Figure 6 demonstrate the validity of the construct assessment. Cronbach's alpha and composite reliability can be used to assess internal consistency, which is important for instrument dependability (Oke et al., 2022; Hair Jr et al., 2021). Cronbach's alpha is not as good a predictor of data collection consistency as composite reliability (Park, 2021). Reliable data is indicated by a CR value greater than 0.70 (Burns & Bursn, 2000; Lai, 2021). Cronbach's Alpha and CR values above 0.70 for the constructs in Table I indicate good internal consistency. Average Variance Extracted (AVE) (>0.50) is a need for convergent validity (dos Santos & Cirillo, 2021). Convergent validity is met by an AVE exceeding 0.50, as shown in Table I. The Fornell-Larcker Criterion and the Heterotrait-Monotrait Ratio are used to evaluate the discriminant validity, and the HTMT ratio's cutoff value is 0.85 (Hair Jr et al., 2021; Roemer et al., 2021). All constructs meet the HTMT 0.85 criterion in Table III, and Fornell-Larcker-Criterion supports discriminant validity in Table II. Multicollinearity is found using the Variance Inflation Factor (VIF) (Hair, Jr., et al., 2021). All of the VIF values in Table I are less than 3.30, which exclude the issue of multicollinearity.

Table I: Reliability and Validity

Table II: - Farnell-larker Criterion: -

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	(1)	(2)	(3)	(4)
(1) Business Performance	0.798			
(2) Loan Characteristics	0.667	0.772		
(3) Loan Credit Terms	0.521	0.654	0.810	
(4) Loan Repayment	0.617	0.579	0.534	0.807

Table III: - HTMT Ratio:

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	(1)	(2)	(3)	(4)
(1) Business Performance				
(2) Loan Characteristics	0.801			
(3) Loan Credit Terms	0.635	0.796		
(4) Loan Repayment	0.755	0.688	0.649	

Hypothesis Testing

After establishing the measuring instrument's validity and reliability using the outer measurement model, the next phase entails using PLS-SEM to investigate the relationships between different constructs or the study's hypotheses (Joseph F. Hair et al., 2019). The importance of various path coefficients (β) was then

examined by including the p-value and t-value into the bootstrapping technique (Joseph F. Hair et al., 2017). In this study, a nonparametric method called bootstrapping was used to confirm the validity of the structural equation modelling approach that was previously mentioned. According to Joseph F. Hair et al. (2017), bootstrapping randomly chooses subsets from the initial sample and calculates bootstrap standard errors using replacement and randomization. This technique generated T-Statistics (t-values) and p-values, enabling researchers to determine the significance level of path coefficient (β). The study used a 5000 person subsample and a standardised bootstrapping methodology. The t-value threshold for significance was set at 1.96, and the p-value threshold was maintained at ($p < 0.01$) with a significance level of (α)= 10% (Henseler, Ringle, & Sarstedt, 2015). In addition to identifying the mediating role of business performance in the relationships between loan characteristics and repayment performance, as well as between credit terms and repayment performance for microenterprises, this study aims to quantify the direct impacts of loan characteristics and credit terms on loan repayment performance. The results of the structural model were obtained using PLS-SEM from a sample of 296 active microenterprises in Pakistan.

Table IV shows the model's capacity to calculate coefficients. We can determine how changes in the independent variables affect changes in the dependent variable by looking at the coefficient of determination (R^2). The coefficient of determination (R^2) also acts as a measure of the predictability of a construct or variable. Additionally, the coefficients of determination (R^2) values for the endogenous constructs were examined in order to assess the study model's predictive power. Furthermore, (R^2) reflected the total variance of all independent variables and evaluated the model's expected efficacy (Hair et al., 2019; Joseph F. Hair et al., 2021).

This study reveals an R2 value of 0.458 when considering the mediating function of client company success between the independent variables (loan features and loan credit conditions) and the dependent variable (loan repayment concerns). This number indicates that the independent factors (loan attributes and loan credit conditions) account for 45.8% of the variance in the mediating variable (client business success). Similarly, the direct impact value of R2 at 0.457 shows that the independent variables (loan characteristics and loan credit conditions) explain for a 45.7% variance in the dependent variable (loan repayment concerns).

Table V and Figure 7 show the results of the hypothesis testing and the importance of the path coefficients (-values), t-values, and p-values. Affirmation of the first hypothesis H1 (= 0.183; t = 1.982; p 0.089). This outcome suggests that the intricate and convoluted lending procedure, extended time between loan application and approval, absence of grace period, discrepancies between application and approval periods, unsatisfactory repayment history, irregular debt payments, inability to generate business income for loan repayment, and failure to achieve loan objectives have collectively led to significant loan repayment difficulties for microenterprises in Pakistan. This finding aligns with various prior studies (Osman and Ramakrishna, 2017; Kakuru, 2008; Worokinasih & Potipiroon, 2019; Dixon et al., 2007; Oke et al., 2022; Nanayakkara & Stewart, 2015; Mokhtar et al., 2012; Woolcock, 2008; Addae-Korankye, 2014).

Meanwhile, the second hypothesis H2 garnered validation from results (β = 0.215; t = 3.320; p < 0.001). This outcome illustrates that loan credit terms (characterized by loan size misalignment with borrower requirements, elevated interest rates, inflexible and stringent repayment schedules, and abbreviated loan durations) established by MFIs significantly contribute to loan repayment complications. These complications encompass inadequate repayment history, punctual debt settlement hindrance, incapacity to generate business proceeds for loan settlement, and non-achievement of loan objectives. This conclusion is bolstered by numerous empirical investigations that corroborate analogous findings (Aslam, Kumar, & Sorooshian, 2020; Jote, 2018; Maiti, Esson, & Vukovi, 2020; Ngonyani & Mapesa, 2018; Parvin, Birner, & Mila, 2020; Ojiako, Idowu, & Ogbukwa, 2014; Obokoh, Monday, & Ojiako, 2016; Ishfaq and Chaudhary, 2003; Nanayakkara & Stewart, 2015; Iqbal et al., 2020; Amoako, 2016; Lassoued, 2017; Ranjani & Kumar, 2018).

The third hypothesis (H3), corroborated by the bootstrapping results of the structural model (β = 0.219; t = 3.096; p < 0.002), affirms that loan characteristics (encompassing intricate and cumbersome lending procedures, protracted interval between loan application and approval, absence of a grace period, discrepancies between application and approval periods, and a mismatch between lending products and borrower needs) engender unfavorable business performance outcomes. This suboptimal business performance encompasses aspects such as diminished sales growth, profit expansion, competitive standing, and overall business performance. This progression is substantiated by earlier research (Hameed, Mohammad, & Shahar, 2020; Love, Pería, & Singh, 2016; Dar & Mishra, 2020; Oke et al., 2022; Addae-Korankye, 2014; Nanayakkara & Stewart, 2015; Papias & Ganesan, 2009).

Similarly, the fourth hypothesis (H4) is also upheld (β = 0.057; t = 1.966; p < 0.077). As per this assertion, loans characterized by unfavorable credit terms (including inadequate loan sizes for borrower needs, high interest rates, inflexible repayment schedules, and abbreviated loan durations) result in subpar

business performance. This lackluster business performance pertains to inadequate sales and profit growth, diminished competitive performance, and overall business underperformance. These outcomes further culminate in loan repayment difficulties, spanning issues like poor repayment performance and non-compliance with debt regulations. This observation aligns with a multitude of prior studies yielding parallel (Love, Pería, & Singh, 2016; Iqbal et al., 2020; Worokinasih & Potipiroon, 2019; Wire, 2015; Khan, Hossain, Jahed, & Rowe, 2021; Ranjani & Kumar, 2018; Norell, 2001; Karim, 2009; Iqbal et al., 2020; Roslan and Karim, 2009; Ranjani & Kumar, 2018; Oke et al., 2022; Addae-Korankye, 2014).

Table IV: Coefficient of Determination (R^2)

Table IV: - Coefficient of Determination(R2): -

	R Square	R Square Adjusted
Business Performance	0.458	0.454
Loan Repayment	0.457	0.452

Table V: Hypothesis Testing (Bootstrapping @5000 subsample)

Table V: - Hypothesis Testing (Bootstrapping @5000 subsample): -

Hypothesized Relationships	Coefficients	SD	T Statistics	P Values	Decision
H1: Loan Characteristics -> Loan Repayment	0.183	0.107	1.982	0.089*	Accepted
H2: Loan Credit Terms -> Loan Repayment	0.215	0.065	3.320	0.001***	Accepted
H3: Loan Characteristics -> Business Performance -> Loan Repayment	0.219	0.071	3.096	0.002***	Accepted
H4: Loan Credit Terms -> Business Performance -> Loan Repayment	0.057	0.031	1.966	0.077*	Accepted

Avenues for Further Studies

This study significantly advances our knowledge of the client-specific factors (moral hazard, loan characteristics, client-personal capacity, and client characteristics), as well as loan repayment performance in MFBs in Pakistan. However, it could be expanded to examine more specifics in this area. First, the informal sector, including MFIs, Non-Profit Organizations, and credit organizations, may be included in the study's scope. Second, future studies may widen the scope of this research and consider additional variables, such as macroeconomic variables, uncontrolled variables, country-specific variables, and bank-related variables. This study recommends more investigation on borrowers' fixed assets, child education costs, and family food expenses both before and after obtaining a loan from numerous lenders. Finally, longitudinal research ought to be a part of future studies. The longitudinal study allows for the evaluation of changes in the borrower's business, household, and personal life following receipt of a microcredit loan from several lenders. Finally, future study should incorporate longitudinal data. After receiving a microcredit loan from many lenders, the borrower's business, home, and personal lives can all be examined as part of the longitudinal study.

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