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The Mediating Effect of Business Performance on the Relationship between Financial Literacy and MSMEs' Loan Repayment Performance

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Abstract: This study aims to analyze the effect of financial literacy on business performance and its impact on MSMEs' loan repayment performance in Buleleng Regency. This research employs a quantitative approach with MSMEs in Buleleng Regency as the population, totaling 66,368 business units. The sample was determined using the Slovin formula with a 10% margin of error, resulting in a minimum sample size of 100 MSMEs in Buleleng Regency. The sample was selected using a purposive sampling technique. Data were collected through questionnaires distributed directly to MSME owners. The data collection method utilized a questionnaire measured on a 1-4 Likert scale. Data analysis was conducted using Structural Equation Modeling Partial Least Squares (SEM-PLS) with the assistance of SmartPLS version 3 software. The results indicate that financial literacy has a positive effect on business performance and loan repayment performance, business performance has a positive effect on loan repayment performance, and financial literacy influences loan repayment performance through business performance.

Keywords: financial literacy, business performance, loan repayment performance, MSMEs.

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) contribute significantly to the Indonesian economy, accounting for more than 60% of the national Gross Domestic Product (GDP) and absorbing nearly 97% of the total workforce. To date, the total number of MSMEs has reached more than 64 million business units. MSMEs contribute approximately 15.7% to Indonesia's total national exports (Coordinating Ministry for Economic Affairs of the Republic of Indonesia, 2025). MSMEs play a vital role in the Indonesian economy, both as providers of employment opportunities and as key drivers of national economic growth (Dharmawan et al., 2025). In addition to their substantial contribution to Indonesia's economy, MSMEs also face a number of challenges. MSMEs play an important role in promoting economic equity by reaching various regions, including remote areas, to meet the needs of local communities (Purnamawati & Yuniarta, 2021). The utilization of information and communication

technology is also one of the strategies adopted by MSMEs to maintain business sustainability (Yuniarta et al., 2023). However, MSMEs are experiencing challenges in the form of declining market demand, which has implications for their revenue levels and their capacity to meet credit obligations (Kontan, 2025).

This condition directly affects the ability of MSMEs to fulfill their loan repayment obligations to financial institutions. In Buleleng Regency, this issue is reflected in the high level of Non-Performing Loans (NPL) among MSMEs, which has consistently been the highest in Bali Province over the past four years. The high NPL rate indicates that some MSMEs have not been able to maintain stable business performance and cash flow to meet their loan repayment obligations on a sustainable basis. Data on MSME NPLs in Buleleng Regency over the past four years are presented in Table 1 below.

Table 1. Average NPL of MSMEs in Bali Province 2021-2024

| Regency/ City | Quarterly Average I-IV (%) | | | | Average of the last four years (%) |
|---------------|----------------------------|------|------|------|------------------------------------|
| | 2021 | 2022 | 2023 | 2024 | |
| Buleleng | 4.14 | 4.44 | 3.19 | 2.79 | 3.64 |
| Klungkung | 4.76 | 4.29 | 3.35 | 1.35 | 3.44 |
| Karangasem | 3.86 | 3.10 | 3.67 | 2.22 | 3.21 |
| Denpasar | 3.20 | 3.48 | 2.87 | 2.25 | 2.95 |
| Badung | 3.52 | 4.37 | 1.88 | 0.98 | 2.69 |
| Jembrana | 2.09 | 3.28 | 1.23 | 2.41 | 2.25 |
| Tabanan | 1.66 | 1.84 | 1.77 | 1.44 | 1.68 |
| Gianyar | 1.21 | 0.95 | 1.28 | 0.71 | 1.04 |
| Bangli | 1.29 | 1.17 | 1.13 | 0.46 | 1.01 |

Source: Bank Indonesia (2025)

Table 1 shows that the average MSME NPL in Buleleng Regency over the past four years has been the highest in Bali Province, at 3.64%. A high NPL ratio indicates the inability of MSMEs in Buleleng Regency to fulfill their credit obligations, or in other words, reflects low loan repayment performance. The high level of MSME NPLs in Buleleng Regency suggests fundamental problems in the business and financial management of MSME actors. This condition indicates that MSME business performance has not been optimal in supporting their loan repayment capacity. If this situation continues, it will not only affect the sustainability of MSMEs but also potentially increase credit risk for financial institutions and hinder the effectiveness of productive credit distribution in the region. This condition implies that the problem of MSME loan repayment performance is closely related to the ability of business actors to manage their enterprises and make financial decisions.

Loan repayment performance refers to borrowers' behavior in repaying loans to banks in accordance with the time period and other terms specified in the credit contract (Supriyadi et al., 2024). It measures the extent to which micro-entrepreneurs repay their loans regularly and whether their repayment capacity improves over time. Loan repayment performance is influenced by various factors, one of which is business performance. One theory that explains the factors affecting loan repayment performance is Agency Theory. Based on Agency Theory, loan repayment performance is influenced by business performance (Iqbal & Rao, 2023). Business performance reflects the level of success in implementing programs, activities, or policies aimed at achieving the organization's goals, vision, and mission as outlined in strategic planning (Zibrán et al., 2024). Good business performance indicates the borrower's ability to manage the business effectively and generate sufficient income, thereby enhancing the capacity to meet credit obligations. Strong loan repayment performance often signals solid business performance among micro-enterprises, as shown in various studies reporting a positive relationship between debtors' business performance and loan repayment performance (Abeysekera, 2020). Previous research findings regarding the impact of business performance

on loan repayment performance remain inconsistent. Studies by Mehale (2020), Iqbal & Rao (2023), and Supriyadi (2024) indicate that business performance has a positive effect on loan repayment performance. In contrast, Saputri & Erdkhadifa (2021) find that operating income, which represents the core component of business performance, does not significantly affect loan repayment performance.

Loan repayment performance and business performance are also influenced by various factors. Based on the Resource-Based View (RBV) Theory and the Theory of Planned Behavior (TPB), financial literacy is considered a variable that affects both loan repayment performance and business performance. Rudin & Baresi (2025) employ RBV Theory to explain the influence of financial literacy on business performance and use TPB to explain its influence on loan repayment performance. The Association of Chartered Certified Accountants (ACCA) defines financial literacy as the understanding of financial concepts, the ability to interpret financial information, the capability to manage both business and personal finances, and the ability to make appropriate financial decisions under various circumstances (Anis et al., 2024). RBV Theory states that organizational resources, including financial resources and knowledge, are essential for achieving competitive advantage and superior performance (Barney, 1991). Human resources represent a critical organizational element that must be properly managed to contribute optimally to the achievement of organizational goals (Atmadja et al., 2021). While some resources may positively influence the implementation of valuable strategies, others may not provide a positive impact (Werastuti et al., 2023). Firms compete by conducting knowledge-based business activities in order to utilize available resources efficiently and economically (Purnamawati et al., 2022).

For a business to succeed, it must be able to adapt to its surrounding environment, organizational size, and business plans when managed properly (Adiputra et al., 2021). Financial literacy can be considered a valuable resource that enhances MSME performance by enabling effective resource allocation and sound financial decision-making (Rudin & Baresi, 2025). Financial literacy improves business performance by allowing entrepreneurs to manage finances effectively, make appropriate decisions, and plan and control business activities more wisely. With a solid understanding of budgeting, cash management, debt, and investment, business owners are better able to minimize risks, maximize profits, and maintain long-term sustainability. However, previous studies on the effect of financial literacy on business performance have yielded inconsistent results. Research by Dewi et al. (2022), Widyastuti et al. (2023), Shanshabilla et al. (2023), Supriyadi (2024), Supriyadi et al. (2024), and Rudin & Baresi (2025) shows that financial literacy has a positive impact on business performance. In contrast, Lubis & Irawati (2022) and Anis et al. (2024) find that financial literacy does not significantly affect business performance.

The Theory of Planned Behavior (TPB) states that individual behavior is influenced by attitudes, subjective norms, and perceived behavioral control (Ajzen, 1991). In this study, financial literacy may shape attitudes and perceptions toward loan repayment, thereby influencing repayment behavior (Rudin & Baresi, 2025). Financial literacy is crucial for successful loan repayment because it enables borrowers to apply bookkeeping, credit management, and budgeting skills to repay loans on time. Moreover, financial literacy has been shown to improve performance in cash flow management, interest rate selection, loan tenure decisions, loan size determination, planning, and operational cost control (Lakmal & Mendis, 2021). Financial literacy also enables SMEs to access more funding from financial institutions, and there is a positive relationship between budgeting skills and financial statement analysis, which in turn enhances MSME loan repayment performance (Lakmal & Mendis, 2021).

Previous studies examining the effect of financial literacy on loan repayment performance have produced inconsistent findings. Research by Baidoo et al. (2020), Wanjiku & Muturi (2020), Lakmal & Mendis (2021), Balami (2022), Endris (2022), Msomi & Nzama

(2022), Tarus & Tarus (2023), Supriyadi et al. (2024), and Supriyadi (2024) indicates that financial literacy has a positive effect on loan repayment performance. In contrast, Lu et al. (2024) find that one component of financial literacy risk preference does not significantly affect loan repayment performance, while Rahman et al. (2025) report that financial literacy does not influence loan repayment commitment. This study is based on Baidoo et al. (2020), which investigates the effect of financial literacy on loan repayment performance. To introduce novelty, the present research adds business performance as a mediating variable. Furthermore, this study differs from previous research in terms of research setting. While prior studies were conducted among the population of Ghana, this research focuses on MSMEs in Buleleng Regency. The objective of this study is to analyze the effect of financial literacy on business performance and its impact on MSME loan repayment performance in Buleleng Regency.

The effect of financial literacy on business performance is grounded in the Resource-Based View (RBV) Theory (Rudin & Baresi, 2025). RBV Theory states that organizational resources, including financial resources and knowledge, are crucial for achieving competitive advantage and superior performance (Barney, 1991). Financial literacy can be considered a valuable resource that enhances MSME performance by enabling effective resource allocation and sound financial decision-making (Rudin & Baresi, 2025). Financial literacy improves business performance by allowing entrepreneurs to manage finances effectively, make appropriate decisions, and plan and control business activities more wisely. With a solid understanding of budgeting, cash management, debt, and investment, business owners are better able to minimize risks, maximize profits, and maintain long-term sustainability. Business activities carried out by small and medium enterprises play a significant role in supporting economic growth (Kurniawan, 2020). Empirical studies by Dewi et al. (2022), Widyastuti et al. (2023), Shanshabilla et al. (2023), Supriyadi (2024), Supriyadi et al. (2024), and Rudin & Baresi (2025) demonstrate that financial literacy positively affects business performance. Therefore, the first hypothesis proposed is:

H₁: Financial literacy has a positive effect on business performance.

The effect of financial literacy on loan repayment performance is grounded in the Theory of Planned Behavior (TPB) (Rudin & Baresi, 2025). TPB provides a framework for understanding loan repayment behavior by explaining that individual behavior is influenced by attitudes, subjective norms, and perceived behavioral control (Ajzen, 1991). In this study, financial literacy is expected to shape borrowers' attitudes and perceptions toward loan repayment, thereby influencing their repayment behavior (Rudin & Baresi, 2025). Financial literacy is crucial for successful loan repayment because it enables borrowers to apply bookkeeping, credit management, and budgeting skills to repay loans on time.

Moreover, financial literacy has been shown to improve performance in cash flow management, interest rate selection, loan tenure decisions, loan size determination, planning, and operational cost control (Lakmal & Mendis, 2021). Financial literacy also facilitates SMEs' access to greater funding from financial institutions. There is a positive relationship between budgeting skills and financial statement analysis, which in turn enhances MSME loan repayment performance (Lakmal & Mendis, 2021). Empirical evidence from Baidoo et al. (2020), Wanjiku & Muturi (2020), Lakmal & Mendis (2021), Balami (2022), Endris (2022), Msomi & Nzama (2022), Tarus & Tarus (2023), Supriyadi et al. (2024), and Supriyadi (2024) indicates that financial literacy positively affects loan repayment performance. Therefore, the second hypothesis proposed is:

H₂: Financial literacy has a positive effect on loan repayment performance.

The effect of business performance on loan repayment performance is grounded in Agency Theory (Iqbal & Rao, 2023). Agency Theory explains that the relationship between

lenders (principals) and borrowers (agents) is vulnerable to conflicts of interest due to information asymmetry. In the relationship between banks as lenders and MSME actors as borrowers, asymmetric information may arise, potentially leading to adverse selection and moral hazard problems (Supriyadi, 2024). Objective measurement of business performance relies on quantifiable indicators such as sales, profit, and cash flow. This approach provides a more accurate assessment because it is based on financial and operational data (Sinarwati & Prayudi, 2021). Strong business performance reflects the borrower's ability to manage the enterprise effectively, generate sufficient income, and maintain smooth loan repayments.

Good business performance reduces the risk of moral hazard and adverse selection, as borrowers with stable and profitable businesses are more likely to fulfill their loan obligations. Therefore, improved business performance is expected to enhance loan repayment performance (Iqbal & Rao, 2023). Strong loan repayment performance often signals solid business performance among micro-enterprises, as evidenced by studies reporting a positive relationship between debtors' business performance and loan repayment performance (Abeysekera, 2020). Empirical studies by Mehale (2020), Iqbal & Rao (2023), and Supriyadi (2024) show that business performance positively affects loan repayment performance. Thus, the third hypothesis proposed is:

H₃: Business performance has a positive effect on loan repayment performance.

The effect of financial literacy on loan repayment performance through business performance is grounded in both the Resource-Based View (RBV) Theory and Agency Theory. RBV Theory states that organizational resources, including financial resources and knowledge, are essential for achieving competitive advantage and superior performance (Barney, 1991). Financial literacy is defined as an individual's ability to obtain, understand, and evaluate relevant information to make financial decisions and comprehend their financial consequences (Herawati & Sinarwati, 2023). Financial literacy can therefore be considered a valuable resource that enhances MSME performance by enabling effective resource allocation and sound financial decision-making (Rudin & Baresi, 2025).

Agency Theory explains that the relationship between lenders (principals) and borrowers (agents) is vulnerable to conflicts of interest due to information asymmetry. In the relationship between banks as lenders and MSME actors as borrowers, asymmetric information may give rise to adverse selection and moral hazard problems (Supriyadi, 2024). Strong business performance reflects the borrower's ability to manage the business effectively and generate sufficient income. This condition reduces the risk of moral hazard and adverse selection, as borrowers are more likely to fulfill their loan obligations. Consequently, improved business performance enhances loan repayment performance (Iqbal & Rao, 2023). Thus, financial literacy improves business performance, and improved business performance subsequently enhances loan repayment performance. Empirical studies by Dewi et al. (2022), Widyastuti et al. (2023), Shanshabilla et al. (2023), Supriyadi (2024), Supriyadi et al. (2024), and Rudin & Baresi (2025) demonstrate that financial literacy positively affects business performance. Furthermore, studies by Mehale (2020), Iqbal & Rao (2023), and Supriyadi (2024) show that business performance positively affects loan repayment performance. Therefore, the fourth hypothesis proposed is:

H₄: Financial literacy has a positive effect on loan repayment performance through business performance as a mediating variable.

METHOD

This study adopts a quantitative research design. The population comprises Micro, Small, and Medium Enterprises (MSMEs) in Buleleng Regency, totaling 66,368 business units (Satu Data Buleleng, 2022). The sample size was determined using the Slovin formula with a margin

of error of 10%, resulting in a minimum sample of 100 MSMEs. The sample was selected using a purposive sampling technique, with the criterion that MSMEs utilize loan (credit) funds from financial institutions as business capital. The respondents in this study were MSME owners operating in Buleleng Regency. This study employs primary data collected through structured questionnaires distributed directly to MSME owners.

The research instruments were adapted from prior studies to ensure content validity. Loan repayment performance was measured using indicators of improved repayment behavior, regular debt payments, and sufficient business income to meet loan obligations in accordance with loan agreements (Iqbal & Rao, 2023). Business performance was measured using indicators of profit growth, sales growth, and asset growth (Dewi et al., 2022). Financial literacy was measured using indicators of bookkeeping skills, budgeting skills, and credit management skills (Lakmal & Mendis, 2021). The questionnaire items were measured using a four-point Likert scale ranging from 1 to 4, representing strongly disagree, disagree, agree, and strongly agree. Data analysis was conducted using Structural Equation Modeling–Partial Least Squares (SEM-PLS) with the assistance of SmartPLS version 3 software.

RESULTS AND DISCUSSION

The data analysis employed Structural Equation Modeling–Partial Least Squares (SEM-PLS), which consists of the evaluation of the outer model, inner model, and hypothesis testing. The outer model was used to assess the reliability and validity of the measurement model, including tests of convergent validity, discriminant validity, and composite reliability. Convergent validity indicates that an indicator is considered valid when it adequately represents the construct, as reflected by satisfactory outer loadings and Average Variance Extracted (AVE) values (Abdillah & Hartono, 2015). For each construct, an outer loading value greater than 0.70 is required to meet the criteria for convergent validity (Hair et al., 2013). Accordingly, this study adopted an outer loading threshold of 0.70. The results of the convergent validity assessment are presented in Table 2 below.

Table 2. Outer loading indicator of research variables

| | Business Performance (Y₁) | Loan Repayment Performance (Y₂) | Financial Literacy (X) |
|------|---|---|-----------------------------------|
| X.1 | | | 0.872 |
| X.2 | | | 0.902 |
| X.3 | | | 0.882 |
| Y1.1 | 0.916 | | |
| Y1.2 | 0.911 | | |
| Y1.3 | 0.901 | | |
| Y2.1 | | 0.923 | |
| Y2.2 | | 0.924 | |
| Y2.3 | | 0.890 | |

Source: Output SmartPLS (2025)

Table 2 shows that all variable indicators have outer loading values greater than 0.70, indicating that convergent validity has been satisfied for all indicators. This finding implies that the measurement instruments used are capable of accurately measuring the constructs they are intended to measure. Discriminant validity is assessed by examining the cross-loadings of indicators on their respective constructs. To ensure that latent constructs have stronger predictive power for indicators within their own blocks, the correlation between a construct and its indicators should be higher than the correlation between the indicators and other constructs. An indicator is also considered valid when it has a cross-loading value greater than

0.70 (Ghozali & Latan, 2020). The results of the discriminant validity test are presented in Table 3 below.

Table 3. Cross loading indicator of research variables

| | Business Performance (Y₁) | Loan Repayment Performance (Y₂) | Financial Literacy (X) |
|------|---|---|---------------------------------------|
| X.1 | 0.407 | 0.438 | 0.872 |
| X.2 | 0.465 | 0.532 | 0.902 |
| X.3 | 0.462 | 0.546 | 0.882 |
| Y1.1 | 0.916 | 0.668 | 0.507 |
| Y1.2 | 0.911 | 0.650 | 0.446 |
| Y1.3 | 0.901 | 0.667 | 0.419 |
| Y2.1 | 0.663 | 0.923 | 0.510 |
| Y2.2 | 0.687 | 0.924 | 0.544 |
| Y2.3 | 0.642 | 0.890 | 0.518 |

Source: Output SmartPLS (2025)

Table 3 shows that the correlations between each construct and its indicators are higher than the correlations between the indicators and other constructs. In addition, all indicators in the research variables have cross-loading values above 0.70, indicating that all indicators meet the criteria for discriminant validity. This finding suggests that the measurement instruments used are capable of accurately measuring the constructs they are intended to measure. Reliability is assessed using composite reliability values. The threshold value for composite reliability is set at greater than 0.70 (Abdillah & Hartono, 2015). The results of the composite reliability test are presented in Table 4 below.

Table 4. Composite reliability test results

| Variables | Composite Reliability |
|--|------------------------------|
| Business Performance (Y ₁) | 0.935 |
| Loan Repayment Performance (Y ₂) | 0.937 |
| Financial Literacy (X) | 0.916 |

Source: Output SmartPLS (2025)

Table 4 shows that all variables have composite reliability values greater than 0.70, indicating that all constructs are reliable. This result suggests that the indicators are capable of producing stable and consistent measurements when repeated. Subsequently, the inner model was evaluated. The structural model was assessed using the coefficient of determination (R-square), Stone–Geisser’s Q-square, and goodness-of-fit measures. R-square values of 0.75, 0.50, and 0.25 indicate strong, moderate, and weak models, respectively (Ghozali & Latan, 2020). Higher R-square values indicate better predictive accuracy, suggesting that the research model is appropriate for explaining the endogenous constructs. The results of the R-square (R²) assessment are presented in Table 5 below.

Table 5. R Square test results

| Variables | R Square |
|--|-----------------|
| Business Performance (Y ₁) | 0.254 |
| Loan Repayment Performance (Y ₂) | 0.588 |

Source: Output SmartPLS (2025)

Table 5 shows that the R-square value for business performance (Y₁) is 0.254, indicating a weak model, as the value is above 0.25 but below 0.50. This result suggests that business performance is explained by financial literacy by 25.4%, while the remaining 74.6% is

influenced by other factors outside this study, such as working capital management, access to financing, and financial recording and reporting practices.

The R-square value for loan repayment performance (Y₂) is 0.588, indicating a moderate model, as the value is above 0.50 but below 0.75. This finding indicates that loan repayment performance is explained by financial literacy and business performance by 58.8%, while the remaining 41.2% is influenced by other factors beyond this study, including economic conditions, inflation, loan size, interest rates, loan maturity, and business cash flow. Although the R-square value for business performance (Y₁) is classified as weak and that for loan repayment performance (Y₂) is moderate, these results collectively indicate that the research model meets the goodness-of-fit criteria.

In addition to evaluating R-square values, the PLS model can also be assessed using the Q-square (Stone–Geisser) statistic. Q-square evaluates the model’s predictive relevance by assessing the accuracy of observed values and the precision of parameter estimates. A Q-square value greater than zero indicates that the model has predictive relevance, whereas a value below zero indicates reduced predictive relevance. Specifically, Q-square values of 0.02, 0.15, and 0.35 correspond to weak, moderate, and strong predictive relevance, respectively (Ghozali & Latan, 2020). The Q-square values obtained in this study are presented in Table 6 below.

Table 6. Q square test results

| Variables | SSO | SSE | Q ² (=1-SSE/SSO) |
|--|---------|---------|-----------------------------|
| Business Performance (Y ₁) | 300.000 | 239.789 | 0.201 |
| Loan Repayment Performance (Y ₂) | 300.000 | 156.717 | 0.478 |
| Financial Literacy (X) | 300.000 | 300.000 | |

Source: Output SmartPLS (2025)

Table 6 shows that business performance (Y₁) has a Q-square (Q²) value greater than zero, namely 0.201, indicating that the model has good predictive relevance with a moderate level, as the value is above 0.15 but below 0.35. Loan repayment performance (Y₂) has a Q-square (Q²) value greater than zero, namely 0.478, indicating strong predictive relevance, as the value exceeds 0.35. The goodness of fit (GoF) assessment was conducted by examining the Standardized Root Mean Square Residual (SRMR) value. A research model is considered fit if the SRMR value is below 0.08 (Ghozali & Latan, 2020). The goodness-of-fit results for this study are presented in Table 7 below.

Table 7. Goodness of fit

| | Estimated Model |
|------|-----------------|
| SRMR | 0.056 |

Source: Output SmartPLS (2025)

Table 7 shows that the SRMR value of the research model is below 0.08, specifically 0.056, indicating that the model is considered a good fit. The final step of the analysis is hypothesis testing, the results of which are presented in Table 8 below.

Table 8. Hypothesis test

| | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics ((O/STDEV)) | P Values |
|--|---------------------|-----------------|----------------------------|--------------------------|----------|
| Financial Literacy (X) -> Business Performance (Y ₁) | 0.504 | 0.503 | 0.079 | 6.339 | 0.000 |
| Financial Literacy (X) -> Loan Repayment Performance (Y ₂) | 0.278 | 0.285 | 0.080 | 3.491 | 0.001 |

| | | | | | |
|--|-------|-------|-------|-------|-------|
| Business Performance (Y ₁) -> Loan Repayment Performance (Y ₂) | 0.588 | 0.585 | 0.073 | 8.008 | 0.000 |
| Financial Literacy (X) -> Business Performance (Y ₁) -> Loan Repayment Performance (Y ₂) | 0.296 | 0.293 | 0.053 | 5.572 | 0.000 |

Source: Output SmartPLS (2025)

Based on the data presented in Table 8, it can be explained that the first three hypotheses have p-values below 0.05 and positive path coefficients; therefore, Hypotheses H₁, H₂, and H₃ are accepted. Financial literacy has a positive effect on business performance and loan repayment performance, and business performance has a positive effect on loan repayment performance. Furthermore, the fourth hypothesis also has a p-value below 0.05, indicating that Hypothesis H₄ is accepted. This result confirms that business performance mediates the effect of financial literacy on loan repayment performance.

Discussion

The Influence of Financial Literacy on the Business Performance of MSMEs in Buleleng Regency

The results of this study indicate that financial literacy has a positive effect on the business performance of MSMEs in Buleleng Regency. The effect of financial literacy on business performance is grounded in the Resource-Based View (RBV) Theory (Rudin & Baresi, 2025). RBV Theory posits that organizational resources, including financial resources and knowledge, are essential for achieving competitive advantage and superior performance (Barney, 1991). Financial literacy can be regarded as a valuable resource that enhances MSME performance by enabling effective resource allocation and informed financial decision-making (Rudin & Baresi, 2025). The Association of Chartered Certified Accountants (ACCA) defines financial literacy as an understanding of financial concepts, the ability to interpret financial information, the capability to manage both business and personal finances, and the capacity to make appropriate financial decisions under various conditions (Anis et al., 2024).

Financial literacy can enhance business performance by enabling entrepreneurs to manage finances effectively, make sound decisions, and plan and control business activities more prudently. Corporate activities are generally profit-oriented and emphasize profitability, effectiveness, and efficiency in their operations (Musmini et al., 2021). With a solid understanding of financial recordkeeping, budgeting, and credit management, business owners are better able to minimize risks and increase profits, sales, and assets. Empirical findings supporting the positive effect of financial literacy on business performance are documented in studies by Dewi et al. (2022), Widyastuti et al. (2023), Shanshabilla et al. (2023), Supriyadi (2024), Supriyadi et al. (2024), and Rudin & Baresi (2025).

The Influence of Financial Literacy on MSME Loan Repayment Performance in Buleleng Regency

The results of the study indicate that financial literacy has a positive effect on the loan repayment performance of MSMEs in Buleleng Regency. The effect of financial literacy on loan repayment performance is grounded in the Theory of Planned Behavior (TPB) (Rudin & Baresi, 2025). TPB provides a framework for understanding loan repayment behavior, stating that individual behavior is influenced by attitudes, subjective norms, and perceived behavioral control (Ajzen, 1991). In this study, financial literacy is able to shape attitudes and perceptions toward loan repayment, thereby influencing repayment behavior (Rudin & Baresi, 2025).

Financial literacy plays a crucial role in successful loan repayment, as it enables debtors to apply bookkeeping skills, credit management, and budgeting practices to ensure timely loan payments. Moreover, financial literacy has been shown to improve performance in cash flow management, interest rate selection, loan maturity decisions, loan size determination, planning, and operational cost management (Lakmal & Mendis, 2021). Financial literacy also enables MSMEs to access greater funding from financial institutions. Additionally, there is a positive relationship between budgeting skills and financial statement analysis, which in turn enhances MSMEs' loan repayment performance (Lakmal & Mendis, 2021).

Adequate financial literacy allows individuals to understand how to manage finances effectively, including managing income, expenses, and debt obligations. With this understanding, debtors are able to develop sound financial planning, enabling them to make regular loan repayments and avoid payment delays or defaults. The finding that financial literacy has a positive effect on loan repayment performance is supported by previous studies conducted by Baidoo et al. (2020), Wanjiku and Muturi (2020), Lakmal and Mendis (2021), Balami (2022), Endris (2022), Msomi and Nzama (2022), Tarus and Tarus (2023), Supriyadi et al. (2024), and Supriyadi (2024).

The Influence of Business Performance on MSME Loan Repayment Performance in Buleleng Regency

The results of the study indicate that business performance has a positive effect on the loan repayment performance of MSMEs in Buleleng Regency. The effect of business performance on loan repayment performance is grounded in Agency Theory (Iqbal & Rao, 2023). Agency Theory explains the relationship between two parties involved in conflicting interests, namely owners (principals) and managers (agents) within an entity (Jensen & Meckling, 1976). However, the relationship between principals and agents is often not harmonious, giving rise to agency conflicts. These conflicts result in agents engaging in activities that are inconsistent with the information required by principals, leading to information asymmetry. Information asymmetry occurs when agents possess more information than principals. Agents may exploit this informational advantage to pursue their personal interests at the expense of principals' welfare, thereby creating conflicts of interest (Biswas et al., 2022). Business performance reflects the level of success achieved in the implementation of programs, activities, or policies aimed at fulfilling the organization's predetermined goals, vision, and mission as outlined in strategic planning (Zibran et al., 2024).

Agency Theory further explains that the relationship between lenders (principals) and borrowers (agents) is vulnerable to conflicts of interest due to information asymmetry. In the context of banking relationships, asymmetric information exists between banks as lenders and MSME owners as borrowers, potentially giving rise to adverse selection and moral hazard problems (Supriyadi, 2024). Strong business performance indicates the borrower's ability to manage the business effectively and generate sufficient income. This condition reduces the risks of moral hazard and adverse selection, as borrowers are more likely to fulfill their loan obligations. Consequently, better business performance leads to improved loan repayment performance (Iqbal & Rao, 2023). Good loan repayment performance often reflects sound business performance among microenterprises, as evidenced by numerous studies reporting a positive relationship between debtors' business performance and loan repayment performance (Abeysekera, 2020). The finding that business performance has a positive effect on loan repayment performance is supported by prior studies conducted by Mehale (2020), Iqbal and Rao (2023), and Supriyadi (2024).

The Influence of Financial Literacy on MSME Loan Repayment Performance in Buleleng Regency through Business Performance

The results of this study indicate that financial literacy influences the loan repayment performance of MSMEs in Buleleng Regency through business performance. The effect of financial literacy on loan repayment performance mediated by business performance is grounded in Resource-Based View (RBV) Theory and Agency Theory. RBV Theory posits that organizational resources, including financial resources and knowledge, are critical for achieving competitive advantage and superior performance (Barney, 1991). Financial literacy can be regarded as a valuable resource that enhances MSME performance by enabling effective resource allocation and sound financial decision-making (Rudin & Baresi, 2025).

Furthermore, Agency Theory explains that the relationship between lenders (principals) and borrowers (agents) is vulnerable to conflicts of interest arising from information asymmetry. In the context of lending relationships, asymmetric information exists between banks as lenders and MSME owners as borrowers, which may lead to adverse selection and moral hazard problems (Supriyadi, 2024). Strong business performance reflects the borrower's ability to manage the business effectively and generate sufficient income. This condition reduces the risks of moral hazard and adverse selection, as borrowers are more likely to fulfill their loan obligations. Consequently, better business performance leads to improved loan repayment performance (Iqbal & Rao, 2023).

Accordingly, financial literacy enhances business performance, which in turn improves loan repayment performance. The finding that financial literacy affects loan repayment performance through business performance is supported by prior studies. Dewi et al. (2022), Widyastuti et al. (2023), Shanshabilla et al. (2023), Supriyadi (2024), Supriyadi et al. (2024), and Rudin and Baresi (2025) documented a positive effect of financial literacy on business performance. Additionally, Mehale (2020), Iqbal and Rao (2023), and Supriyadi (2024) found that business performance has a positive effect on loan repayment performance.

CONCLUSION

The findings of this study indicate that, in the context of MSMEs in Buleleng Regency, financial literacy has a positive effect on business performance and loan repayment performance. In addition, business performance positively affects loan repayment performance, and financial literacy influences loan repayment performance indirectly through business performance. These results highlight the strategic role of financial literacy in improving both operational outcomes and financial obligations among MSMEs.

Based on these findings, MSMEs in Buleleng Regency are encouraged to enhance their level of financial literacy, particularly by strengthening bookkeeping skills, budgeting skills, and credit management skills. Improved competencies in these areas will enable MSME owners to manage financial resources more effectively, plan cash flows accurately, and fulfill loan repayment obligations in a timely manner. Furthermore, the Department of Trade, Industry, and Cooperatives and Small and Medium Enterprises of Buleleng Regency is recommended to implement MSME empowerment programs that focus on improving bookkeeping, budgeting, and credit management skills. Such programs are expected to strengthen MSME business performance and, ultimately, improve loan repayment performance, thereby supporting sustainable MSME development and financial stability.

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