



Research Article

The Effect of Financial Literacy on Loan Repayment Performance of MSMEs: A Literature Review

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Abstract.

Credit loans among MSMEs are beneficial for business sustainability. The quality of a credit loan is a concern to avoid default, so the topic of loan repayment performance is interesting to explore. This study summarizes and analyzes several previous studies related to the topic of the influence of financial literacy on business performance among MSMEs, as well as the influence of financial literacy on loan repayment performance. Based on a literature study conducted, financial literacy was found to have a significant influence on business performance and loan repayment performance among MSMEs. This study found gaps in previous research, there are still limited studies that provide a comprehensive framework explaining how financial literacy influences loan repayment performance directly or through business performance variables. Therefore, it is important to research further, how an MSME manager who accesses credit to run his business can achieve optimal business performance, where the results will be used for loan repayment. This research proposes business performance as a mediating variable that could be considered in future research.

Keywords: financial literacy, business performance, loan repayment performance

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1. Introduction

Micro, Small, and Medium Enterprises (MSMEs) are a leading sector plays an important role. Empirical evidence shows MSMEs provide economic benefits at the global level, such as the majority of companies active in the European Union are MSMEs which contribute to realizing the main goals of the Europe 2020 strategy by accounting for 66% of total employment [1]. In developing countries such as Malaysia, economic growth is associated with the large contribution made by MSMEs, such as the high availability of employment opportunities and contributions to the development of large and multinational companies [2]. In Indonesia, The MSMEs sector makes a significant contribution to exports, employment, and the GDP. Using information from the Republic of Indonesia's Coordinating Ministry for Economic Affairs, it was recorded in 2019, the contribution of the MSME sector to GDP was 60.51%, 96.92% of total employment, and

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15.70% of total exports. The number of MSMEs has continued to increase in recent years. data from the Ministry of Cooperatives and MSMEs, in 2022 it will reach 8.71 million units, an increase of 21.64 million units from the previous year. The growth in the number of MSMEs is considered rapid. Still, but MSMEs sector have to face challenges such as inadequate knowledge about business, lack of managerial skills, incompetence in financial literacy and management, and lack of access to finance as external capital [3, 4]. A study conducted by Pricewaterhouse Coopers (PwC) in a report on the demand and supply gap assessment of MSME financing by Bappenas in 2020, shows the main obstacle experienced by MSMEs in developing is limited capital. In 2019, it was recorded at least 74% of MSMEs in Indonesia had not received access to credit or financing from formal financial institutions. This data aligns with the realization of MSME credit distribution by banks in 2018 which has not yet reached 20% of the total credit disbursed [5].

Access to and utilization of a range of financial services, including credit, is referred to as financial access [6]. At the national and regional levels, MSMEs' performance and sustainable economic growth are greatly aided by their access to strategic resources [7]. In order to combat income inequality and achieve economic growth, financial access is crucial, according to the Development Theory [8]. Financial intermediation and economic growth are positively correlated, according to the economic models put out by Bencivenga and Smith [9] and Greenwood and Jovanovic [10]. MSMEs in developing nations may become more competitive by adopting the newest technology and making profitable investments to build their businesses. This also fosters innovation, macroeconomic resilience, and GDP development. [11]. The success of small businesses is directly related to their ability and availability to receive financial capital [12]. This shows access to formal finance is a vital aspect in supporting MSMEs to successfully manage their business. Financial establishments like commercial and rural banks are the conduits for formal funding sources. As a component of the financial sector, commercial banks are crucial in supplying money and other financial services to assist the economy through lending or financing programs [13]. A key component of commercial banking activities is credit lending [14], and rural banks, like microfinance organizations, support the expansion of businesses by giving credit access to underserved markets. [15]. Commercial Banks and RURAL BANKS have segmented credit loan products for MSME Managers with the Business Capital Credit loan scheme. Distribution of business capital credit is an effort to expand access to formal financing for MSMEs to strengthen business capital structures. Business Capital Credit in general is a form of loan aimed at business



development. Apart from the benefits can be obtained, banks as financial intermediation institutions have challenges must be considered in distributing credit.

Loan repayment performance refers to the borrower's behavior in repaying the loan to the Bank by the period and other provisions stated in the credit contract. Loan repayment performance is the backbone of the banking sector [16]. Borrowers who do not pay their loans on time continuously will have the potential for default. Default is represented by the Non-Performing Loan (NPL) [17]. Credit risk is represented by the NPL index, a larger NPL indicates a higher potential risk assumed by the bank. Credit risk has an impact on financial stability. [18]. Defaults also have the potential to harm lending institutions through high loan collection costs, limiting access to credit, and hindering financial sector development [19, 20].

Banks realize do not know the future for certain credit loans are ex-post. The bank can only make predictions by relying on certain assumptions in credit assessment and then forming an opinion about the predicted results of repayment [21]. Based on the Information Asymmetry Theory expressed by Akerlof [22], Asymmetric information arises when one party to a transaction has more or better information than the other party. Information asymmetry in the credit context arises between the Bank as the lender and the MSME Manager as the borrower. Usually, Accurate credit loan judgments are challenging for banks to make lack sufficient information and understanding about other parties involved in lending transactions. When sufficient financial information is unavailable or scarce, debt providers are unable to evaluate risk appropriately[22].

Several studies have attempted to explore the factors drive loan repayment performance by MSME managers. Endris [23] states factors such as the financial condition of borrowers who make contradictory decisions for delay payments until the maximum tolerable time limit are usually at high risk of experiencing financial constraints [24], then Nawai and Shariff [25] found the failure of micro businesses to repay loans on time due to customer behavior factors, loan design, specific factors related to the business, as well as factors originating from the lending institution. Credit design factors such as loan size, high interest rates, and inadequate collateral, there is a positive effect to increasing NPL index. [26, 27], then there is a lack of monitoring by bank officers [27], powered by Idris and Nayan [28] contend in order to keep non-performing loans (NPLs) within acceptable bounds and to preserve the quality of loan portfolios and hazardous assets against impairment, banks' loan monitoring functions are crucial. The bond between the borrower and the lender, which is a measure of social capital, is another factor is linked to loan repayment performance [29, 30]. Conversely, Louzis et al. [31] contend



low-income bank borrowers have a higher default rate are more likely to experience unemployment and thus be unable to fulfill their obligations.

Several studies have used various variables to determine the factors encourage loan repayment credit performance by MSME managers, but few have examined the potential influence of financial literacy as a predictor and MSME business performance as a mediating variable. The essential information characterize an individual's capacity for financial decision-making are known as financial literacy [32]. One of the key components of financial literacy explanation is cognitive capacity. [33]. Financial literacy consists of financial awareness, knowledge, and attitudes [34], which are aspects of human capital [35] and are developed through learning and practice [36]. The capacity of MSME performance to endure, expand, and aid in the creation of jobs and the reduction of poverty is characterized as [37]. Numerous studies demonstrate the close connection between financial literacy and business success. Lusardi and Tufano [38] and Moore [39] found financial literacy aids MSME managers in developing nations in gaining the knowledge, skills, and abilities to strategically manage their finances. Simeyo et al. [40] also found a positive correlation between financial literacy training and MSMEs' performance. This study contends MSME managers' capacity to effectively use credit loans to boost company performance comes before loan repayment performance. By putting out the theory financial literacy can both directly and indirectly affect loan repayment performance by enhancing firm success, this study adds to the body of existing work.

2. Literature Review

Dual Process Theory expressed by Evans [41] has the idea a decision can be driven by two perspectives, namely intuition and cognition. The capacity to learn without deduction or the use of reason is referred to as intuition. Perceptions, comprehensions, assessments, or convictions derived from intuition cannot be objectively confirmed or logically supported. Taylor [42] highlights whereas cognition is the process by which sensory input is altered, reduced, characterized, stored, retrieved, and used, intuition-based decision-makers typically have considerable emotional influences. Understanding, math, logic, problem-solving, and decision-making are all parts of the brain process known as cognition [43]. This article employs a cognitive viewpoint, suggesting financial literacy might be a predictive variable. One of the key components in the explanation of financial literacy is cognitive capacity. [33]. Financial literacy consists of financial



awareness, knowledge, and attitudes [34], which are aspects of human capital [35] and are developed through learning and practice [36].

MSME managers make various financial decisions in running their business. Making decisions is logical and dependent on the facts at hand. In order to make wise judgments, MSME managers must quickly acquire a decent degree of expertise about the facts at their disposal [34]. Financial considerations, such as assessing affordability and contrasting the related expenses of various solutions, are necessary for the decisions made [44]. When making financial decisions, financial literacy can help people make more confident financial decisions by reducing negative thoughts and feelings. Growth, organizational development, and personal financial stability have all been found to benefit from financial knowledge [45, 46]. Financially sound MSME managers often avoid taking on more debt than can afford to repay, save, invest, and handle their money. a mediator is provided, where business performance is defined as a condition demonstrating company growth, as measured by growth in labor, capital, sales, market expansion, and profits [47–49]. A mapping of study findings demonstrating the impact of financial literacy on company success is presented in Table 1.

A number of journal articles have been compiled show the connection between financial literacy and business performance. One such study is of Widyastuti et al. [50], which confirms formal credit access and MSME performance are directly and significantly influenced by financial literacy and credit requirements. In a similar vein, MSME performance is indirectly influenced by financial literacy and credit requirements. The link between SMEs' growth and access to credit in emerging nations is the subject of research by Bongomin et al. [51]. As a moderator, having financial literacy." In Uganda, a developing country, his study attempted to ascertain financial literacy influences the link between SME growth and financing availability, data from 169 SMEs in the central marketplaces of Jinja and Iganga were gathered using a cross-sectional research approach. In developing nations, the moderating role of financial literacy in the link between financial access and SME growth is examined using the Excel application ModGraph. The results show financial literacy significantly and favorably modifies the link between SME development and access to financing in emerging nations. the expansion of SMEs is significantly and favorably impacted by financial access and literacy. According to this study, financial literacy which promotes the responsible and efficient use of loans and credit is necessary for SMEs to be able to acquire funding and expand. Financial literacy is essential for small and medium-sized enterprises (SMEs) in developing nations so can make informed financial decisions before obtaining financial services like loans. Then, the study was carried out which helps them make wise financial



TABLE 1: The effect of financial literacy on business performance.

Author	Title	Variables	Data Analysis	Finding
Widyastuti et al. [50]	Access and Performance through Financial	Access, MSME Performance, Financial Literacy, Credit Requirements	PLS analysis	financial literacy and credit requirements directly and significantly influence formal credit access and MSME performance, then formal credit access directly and significantly influences MSME performance, likewise financial literacy and credit requirements indirectly influence MSME performance
Bongomin et al. [51]	The relationship between access to finance and growth of SMEs in developing economies Financial literacy as a moderator	economics, Access to finance,	ModGraph	Financial literacy has a positive and significant moderating effect on the relationship between access to finance and SME growth in developing countries. In addition, financial literacy and access to finance also have an important and positive impact on the growth of SMEs in developing countries. Studies show that SMEs are growing with access to finance. Financial literacy is needed which encourages the use of loans/credit effectively and efficiently.
Sanistasya et al. [52]	inclusion on the performance	Perfor- mance,Financia	Least Square)	financial literacy (behavior, skills, knowledge, attitude) and financial inclusion (access, quality, usage, welfare) have a significant effect on small business performance (profitability, productivity, market).
Tuffour et al. [53]		financial literacy	structural equa- tion models	The results show that financial literacy has a significant effect on firm performance (both financial and non-financial performance). In addition, the three dimensions of financial literacy (awareness, behavior and knowledge) have a significant impact on financial and non-financial performance.
Eniola and Entebang [34]	SME Managers and Financial Literacy		random samples and structural equation modeling (SEM)	It reflects the overall impact of business owners - financial knowledge of the manager, financial knowledge and financial attitudes in the transfer of financial literacy to increase firm performance. Furthermore, the emphasis on SME business owners' financial literacy and management awareness is clearly not a prerequisite for SME performance, but the relationship between entrepreneurs' decision-making characteristics and financial attitudes is comparable to that of financial literacy.

decisions and choices before accessing financial services such as loans. Next, the study



was carried out which helps them make wise financial decisions. Then, the study was carried out [52] entitled "The influence of financial Literacy and financial inclusion on the Performance of small businesses in East Kalimantan", seeks to ascertain the impact of financial inclusion and financial literacy on the performance of small enterprises. This type of research is explanatory research with a sample of 100 small businesses in East Kalimantan. This research is quantitative and uses the PLS (Partial Least Square) analysis tool. According to the research findings, small company performance (profitability, productivity, market) is significantly impacted by financial inclusion (access, quality, usage, welfare) and financial literacy (behavior, skills, knowledge, and attitude). Financial literacy significantly affects a company's success, both financially and nonfinancially, according to a different research by Tuffour et al. [53]. Moreover, there is a noteworthy positive correlation between financial and non-financial performance and the dimensions of financial literacy, namely knowledge, attitude, and awareness. While taxes can be helpful as a regulatory tool for small enterprises, individual attributes such as age, education, and experience do not significantly impact financial success. In order to improve small business managers' and owners' financial literacy, a capacitybuilding program is advised. Additional research by Eniola and Entebang [34] used structural equation modeling (SEM) and a random sample technique to assess the financial literacy of small and medium business owners (SMEs) and its effect on business performance. The findings demonstrated the overall impact of financial knowledge, awareness, and attitudes held by business owners and managers on their ability to change their financial literacy and enhance their companies' performance. Furthermore, underlined SME owners' and managers' financial awareness and knowledge is not a need for SME success; rather, the decision-making traits of entrepreneurs and their association with financial attitudes are comparable to financial literacy. Rahim and Balan [54] carried out additional study with the goal of identifying small and medium-sized business (SMEs) in Kuching had financial knowledge, financial behavior, and attitudes about finance. Particularly, how these potent elements affect the financial success of companies have expanded quickly in the past ten years in the biggest city on the island of Kalimantan. With a response rate of over 75 percent, this study employs a descriptive methodology in line with its primary goals and comes to some intriguing findings. An analysis of the data shows general financial knowledge, as opposed to owners' financial attitudes and actions about financial decision-making, has a far stronger association with the profitability of corporate organizations, it is highly recommended small and medium-sized business owners take part in regular financial education programs in order to stay up to date on the latest financial management techniques and to ensure



better financial planning, execution, and monitoring of their enterprises, all of which will improve revenue and sustainability. The mapping of study findings shows how financial literacy affects loan repayment performance is then presented (Table 2).

Furthermore, several journal articles have been collected, determining the connection between loan repayment performance and financial literacy, as demonstrated by the research done by Endris [23], who examined the variables influencing the loan repayment performance of MSE in the North Wollo Zone. The results demonstrate loan repayment performance is positively and significantly impacted by financial literacy. Moreover, Endris [23] suggests lending institutions and other associated organizations give businesses introductory financial and business training. In keeping with research by Baidoo et al. [26], which shows effective loan repayment and financial literacy have a favorable and substantial association. Then, age, marital status, education level, and income all have a significant impact on how well repayment goes. Moreover, Hussain et al. [55] investigated if knowledge is indeed so potent. The goal of "Financial literacy and access to finance (an analysis of UK enterprises)" is to investigate the connection between these three factors and the expansion of small and medium-sized businesses (SMEs) in the Midlands area of England. The purpose of this study is to determine if financial literacy aids SMEs in overcoming information asymmetry, lowering collateral needs, improving capital structure, and expanding their financing options. Using a purposive sample approach, 37 businesses, mostly from the Birmingham and Conurbation areas, were chosen for the study based on factors such as size, location, and attributes. The findings of the study show when assessing loan applications, financial literacy is a source of connectivity lessens information asymmetry and collateral deficiencies; for this reason, financial literacy has to be taught in schools. According to the research, improving the company's capital structure, lowering monitoring expenses, and raising financial literacy all contribute to the expansion of SMEs. It is well acknowledged having a solid understanding of financial management is essential to helping SME owners make wise decisions. Wanjiku and Muturi [56] also reported the likelihood of respondents postponing repayment was negatively correlated with the financial literacy variable. The study's findings indicate the financial literacy variable only accounts for 45.5% of the variation in the dependent variable; this suggests other factors account for 54.5% of the variation. He indicated more investigation may be done to examine additional elements could lead to nonpayment or late repayment. According to a research by Mutegi et al. [58], owners of SMEs participated in a financial literacy training program with indications of accounting abilities, credit management knowledge, budgeting abilities, and financial analysis abilities performed better when it came to loan payback. He went on to say



TABLE 2: The effect of financial literacy on loan repayment performance.

Author	Title	Variables	Data Analysis	Finding
Endris [23]		performance,	The Logit Regression	Logit regression estimates show the manager's education level, collateral security, and financial literacy have a positive and sig- nificant effect on loan repayment performance while distance to the lending institution, repay- ment period, and loan diversion have a negative effect on loan repayment performance.
Baidoo et al. [26]	Ghana: Does	Loan repayment performance, Financial literacy, Income, household size, age, education, marital status, employment status, gender and mode of repayment	regression	Confirming the positive and significant relationship between financial literacy and successful loan repayment. A shorter repayment schedule (part of the credit characteristics) also increases the success of loan repayment.
Hussain et al. [55]	powerful? Financial	Turn Over (a proxy for firm's growth), financial literacy & access to finance	Mixed methods	Confirming whether financial literacy is a relevant factor when evaluating loan applications reduces information asymmetry and bias. This analysis shows that increasing financial literacy is serving to reduce monitoring costs and improve capital structure which has a positive impact on SME growth.
Wanjiku and Muturi [56]		financial literacy, loan repayment performance	aprobabilistic model	There is a negative relationship between the financial literacy variable and the probability of respondents delaying repayment. The research results show only 45.5% of the variation in the dependent variable is explained by the financial literacy variable, which means 54.5% of the variation is explained by factors other than financial literacy. He said further research could be carried out to look at other factors might cause non-payment or late repayment
Msomi and Nzama [57]		financial literacy, loan repayment	Regression analysis	Regression analysis shows there is a significant linear relationship between financial literacy and SME credit repayment, These results imply if SME owners are experienced in finance, will be able to repay their loans and advances on time.

establishing SMEs and helping SME stakeholders become financially literate were both fraught with difficulties. Moreover, Msomi and Nzama's research [57] seeks to ascertain the connection between SMEs' repayment and financial literacy. Financial literacy and SME credit repayment have a strong linear association, according to regression analysis (F (1,152) = 17.806; P < 0.0005). The independent variable (repayment of SME credit), B = 0.324, P < 0.0005, is greater than P < 0.0005. These findings suggest SME owners who possess financial expertise would be able to make timely loan and advance repayments. Next, Table 3 presents a mapping of research results identifies the influence of business performance as a mediator on loan repayment performance.

TABLE 3: The mediating role of business performance.

Author	Title	Variables	Data Analysis	Finding
Worokinasih and Potipiroon [30]	Microfinance Repayment Performance of SMEs in Indonesia: Examining the Roles of Social Capital and Loan Credit Terms	business	Structural Equation Modeling (SEM)	These findings suggest that social capital can work to build trust between lenders and borrowers, so it can help lower loan costs. Furthermore, instability in access to financial capital may indirectly affect loan repayment by improving the borrower's financial performance.
Iqbal and Rao [59]			Structure Equation Model-PLS	Directly examine the impact of social financing and credit requirements on micro-enterprise performance and loan repayment performance.

Research related to loan repayment performance using predictor variables other than financial was carried out by Worokinasih and Potipiroon [30] in his study "Microfinance Repayment Performance of SMEs in Indonesia: Examining the Roles of Social Capital and Loan Credit Terms". The goal of the study is to investigate how loan credit requirements such as interest rate, loan amount, and payback duration and social capital the relationship between lender and borrower affect the loan repayment performance of microfinance small and medium-sized companies (SMEs) in Indonesia. this study investigates the potential mediating role of company success in the link between social capital, loan credit length, and loan repayment performance. The results show while loan credit conditions have a beneficial effect on loan payback by enhancing business performance, social capital has a direct affect on loan repayment. It's noteworthy to observe the only factor positively correlates with business performance is loan credit



requirements not social capital. This demonstrates how crucial interest rates and loan amounts are in assisting companies in producing enough cash flow to pay back their debts [60]. research by Iqbal and Rao [59], stronger company success in terms of raising sales and profits might help MSME managers perform better when it comes to loan payback. However, Louzis et al. [31] contend bank borrowers with lower income levels have a greater default rate run a higher chance of being unemployed and hence failing to make their payments. Someone who is financially competent is associated with successfully running a business and generating sufficient cash flow to pay off loans, so it makes sense the business performance variable is proposed as a mediating variable between financial literacy and loan repayment performance.

3. Research Methodology

The influence of financial literacy on mSMEs' loan repayment performance is the title of this literature review study, which is being raised: a literature review. The author chose three keywords to search for literature already exists on several journal portals. The three keywords are financial literacy, loan repayment performance, and business performance. Some of the journals in question are the Emerald Insight Journal, Science Direct or Elsevier Journal and Google Scholar. Table 4 presents the number of articles Journal Database.

TABLE 4: Number of searches for related journal articles.

Keyword/Journal Database	Emerald Insight	Science Direct	Google Scholar
Financial Literacy	5,702	20,547	493,000
Loan Repayment Performance	1,368	4,254	17,900
Business Performance	77,000	241,272	31,800
Financial Literacy, Business Performance, Loan Repayment Performance	384	258	17,500

Source: Author's own work

Following is a search for journals are relevant to this title. When you enter the key word "financial literacy" into the Emerald Insight Journal portal, 5,702 articles are found. Thus, only when entering the key word "financial literacy" into the science direct journal portal, 20,547 articles were found. When the same key word, namely "financial literacy" was entered into the Google Schoolar portal, 493,000 articles were found. It's not just financial literacy will have a large number of articles. when used as a keyword in the three journal portals but also business performance. There were 241,272 articles found on the Science Direct Journal portal, and 77,000 articles found on the Emerald Insight



Journal portal, as well as 31,800 articles on the Google Schooler portal. The number is relatively the same when Loan Repayment Performance is used as a keyword in the Emerald Insight Journal portal, namely 1,368 articles and 4,254 in the Science Direct portal, as well as 17,900 articles in the Google Scholer Journal portal. Likewise, when financial literacy and business performance were jointly used as keywords, 3,723 articles were obtained on the Emerald Insight Journal portal, and 5,057 articles on the Science Direct Journal portal, as well as 155,000 articles on the Google Schoolar portal. However, when connecting financial literacy and business performance as well as loan repayment performance as a keyword on the three emerald insight journal portals there are 384, sciencedirect has 258, and google scholar has 17,500. Then the article is considered suitable to be used as a basic reference for building the model structure and hypotheses in this paper.

4. Results and Discussion

Financial literacy has a significant impact on both loan repayment performance and business profitability, according to the results of various earlier research. Financial literacy is needed among MSME managers in business sustainability, such as in resolving ongoing difficulties and future challenges [61]. MSME managers make various financial decisions in running their business. Reliability and the availability of information inform decision-making. It affects how businesses choose, use, and manage their financial assets. [62]. Financial literacy can enable MSME players to be more creative in using credit, monitoring budgets, obtaining raw materials, production, costs, and using stock in a timely manner [6]. Therefore, MSME managers have an urgency to be able to have a level of knowledge related to the information available in making good decisions [34]. A financial analysis, which includes comparing the prices of various solutions and assessing affordability. [44]. In addition to boosting personal financial confidence, financial literacy may lessen unfavorable thoughts and feelings when making financial decisions. Based on the results of the study, financial literacy is a fundamental instrument for personal, professional, and organizational development. [45, 46].

Financially sound MSME managers budget more effectively, save, invest, and often don't take on more debt. By paying their loans and obligations on schedule rather than just the minimal amount due on high-interest debts, these customers are better able to manage their finances. [38, 63].

Several studies have used various variables to determine the factors drive business performance and credit loan repayment performance among MSME managers, but there



are still limited studies provide a comprehensive framework explains how financial literacy influences loan repayment performance directly or through business performance variables.

5. Conclusion

The literature study's findings demonstrate financial literacy significantly affects both loan repayment performance and business performance. From the articles have been reviewed, a gap was found, namely there are still limited studies provide a comprehensive framework explains how financial literacy influences loan repayment performance directly or through business performance variables. Therefore, future research could consider potential business performance variables as mediating variables.

5.1. Suggestion

The study's findings and analysis can aid readers in comprehending the variables may affect loan repayment performance on the degree to which these variables affect loan repayment performance. Research regarding loan repayment performance is a very important thing to discuss. Financial literacy is one of the predictor variables. Based on the review of research literature regarding financial literacy and loan repayment performance, it is necessary to consider business performance as a very strategic variable for determining repayment rates. Future research can explain how an MSME manager who accesses credit to run his business can achieve optimal business performance, where the proceeds will be used for loan repayment. It is recommended for further research to analyze business performance as a mediating variable.

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