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FINANCIAL LITERACY MODEL FOR MSMES AS A FINANCIAL PERFORMANCE MEASUREMENT TOOL (CASE STUDY OF MSMES IN BOGOR, DEPOK, AND KUNINGAN)

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ABSTRACT
Micro, Small, and Medium Enterprises (MSMEs) play a crucial role in the Indonesian economy; however, they encounter various challenges in effectively managing their finances. Financial literacy serves as a pivotal factor influencing the financial performance of MSMEs. This study seeks to analyze the correlation between financial literacy and the financial performance of MSMEs across three regions: Bogor, Depok, and Kuningan. A quantitative study methodology was employed, utilizing a survey of MSME owners as respondents. Data were gathered through a questionnaire to assess financial literacy and financial performance, measured by profitability, operational efficiency, and business sustainability indicators. The findings indicate a significant relationship between the financial literacy level and MSMEs' financial performance. MSMEs exhibiting higher levels of financial literacy tend to demonstrate superior financial performance compared to those with lower levels of financial literacy. The implications of this study emphasize the necessity of enhancing financial education programs for MSME stakeholders to improve their capabilities in efficiently managing business finances.

Keywords: business sustainability; financial education; financial literacy models; financial performance metrics; MSMEs; profitability

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs), including Indonesia, play a strategic role in global economic growth (Ayu Kusumawardani et al., 2024; Maksum et al., 2020). According to data from World Bank (2019), MSMEs contribute around 90% of the total number of businesses and absorb more than 50% of the workforce worldwide (Chen et al., 2024; Kumar et al., 2024; Pozzo et al., 2023; Yang et al., 2023). In Indonesia, MSMEs contribute around 60% to the Gross Domestic Product (GDP) and employ more than 97% of the national workforce (World Bank SME Finance, 2022). However, in recent decades, a significant challenge faced by MSMEs is the inability to manage their finances effectively, which hinders the growth and sustainability of their businesses. One of the factors influencing this condition is the low level of financial literacy among MSME players, which ultimately impacts their economic performance (Dzikriansyah et al., 2023; Hadi Putra & Santoso, 2020; Hizam et al., 2024; Mayasari, 2022; Srimulyani et al., 2023).

The main factors influencing low financial literacy among MSMEs include lack of access to financial education, limited human resources who understand financial management, and low use of financial technology in business operations (Ciza et al., 2025; Guo & Yao, 2024; Igwe et al., 2024; Lin & Xu, 2024; Widita et al., 2024). In addition, external factors such as global economic instability, changes in government policies, and limited access to formal financial services also influence this condition. For example, a survey conducted by the OJK in 2021 showed that the level of financial literacy among Indonesians only reached 38.03%, while the level of financial inclusion reached 76.19% (Addo et al., 2023; OECD, 2020; Yoyok Prasetiyo Heru Laksono Lubis et al., 2023). This gap shows that while more MSMEs have access to financial services, they still face obstacles in understanding and managing their finances well.

The *novelty of* this study is in the approach used to measure the level of financial literacy of MSMEs and how such literacy contributes to their financial performance. While most previous studies by Hakam & Hakam (2024) have focused on the impact of access to finance or capital on MSME sustainability, this study seeks to understand more deeply how MSMEs' internal financial management capabilities can determine their business sustainability. In addition, this study also provides a broader perspective by taking case studies of MSMEs in three different regions, namely Bogor, Depok, and Kuningan, which have unique economic characteristics and challenges.

This study is urgently needed to improve financial literacy among MSMEs to support more inclusive and sustainable economic growth. With the development of financial technology and digitalization in various business sectors, MSMEs must be better equipped to understand and utilize modern financial instruments to improve their competitiveness (OECD, 2020). In addition, this study is relevant to the economic recovery after the COVID-19 pandemic, where many MSMEs are experiencing financial difficulties due to decreased market demand and limited access to business capital.

This study aims to analyze the relationship between the financial literacy and financial performance of MSMEs in Bogor, Depok, and Kuningan. More specifically, this study aims to (1) measure the level of financial literacy of MSMEs in the three regions, (2) assess the impact of financial literacy on the profitability and operational efficiency of MSMEs, and (3) provide policy recommendations that can be implemented to improve the financial literacy of MSMEs to support their business sustainability. The benefits of this study are expected to contribute both academically and practically. From the academic side, this study is expected to add insight into the relationship between financial literacy and the financial performance of MSMEs and enrich the literature related to this topic. From the practical side, this study can serve as a basis for policymakers and financial institutions to design more effective financial education programs for MSMEs. In addition, the results of this study are also expected to assist MSME owners in improving their understanding of financial management so that they can better manage their businesses and achieve long-term business sustainability.

METHOD

This study is qualitative with a descriptive approach. This approach is used to understand the phenomena in the field, primarily related to the financial literacy and financial performance of MSMEs in Bogor, Depok, and Kuningan. With this approach, the study focuses not only on measuring numbers but also on a deeper understanding of the factors that influence financial literacy and its impact on the financial performance of MSMEs. This study was conducted in three regions, namely Bogor, Depok, and Kuningan. These three regions were chosen because they have different economic characteristics so that they can provide a more comprehensive picture of the condition of MSME financial literacy in various business environments. This study was conducted over six months, from the planning stage, data collection, and analysis to the preparation of the study report. This study concerns several main aspects, namely the level of financial literacy of MSMEs, the financial performance of MSMEs, and the factors that influence these two variables. The financial literacy aspect includes MSMEs' understanding of financial recording, cash management, credit utilization, investment, and financial planning strategies.

This study examines the financial performance of Micro, Small, and Medium Enterprises (MSMEs), focusing on profitability, operational efficiency, and sustainability. It targets MSMEs in Bogor, Depok, and Kuningan using purposive sampling of owners with two years of operation and accessible financial records. A sample size of 150 MSMEs was calculated with a 95% confidence level and a 5% margin of error, deemed adequate for meaningful insights. The sample ensures balanced representation across diverse business sectors, enabling an understanding of the relationship between financial literacy and performance. The two-year operation and accessible records criteria ensure sufficient financial history for analysis.

Interviews were conducted to explore respondents' understanding of the financial management of their businesses. At the same time, observation was used to directly observe how each MSME's financial management process was carried out. Semi-structured questionnaires were used to obtain more systematic data on respondents' financial literacy and financial performance. Data from interviews, observations, and questionnaires were analyzed using a thematic approach by identifying patterns that emerged from respondents' answers and linking them to relevant theories. The analysis process was carried out in several stages: data reduction, presentation, and conclusion drawing. The results of the analysis are compared with those of previous studies to see if new findings can contribute to understanding MSMEs' financial literacy and financial performance. To ensure the validity and reliability of the data, this study used triangulation techniques, namely by comparing the results of interviews, observations, and questionnaires. In addition, validation was conducted with financial experts and academics in the field of MSMEs to ensure that the data collected was by the conditions in the field.

RESULTS AND DISCUSSION

Study Study Profile

This study was conducted in three central regions, namely Bogor, Depok, and Kuningan, which have diverse MSME characteristics regarding business sector, business scale, and level of financial technology adoption. From the survey of 150 MSMEs sampled, it was found that the majority of businesses operate in the trade (40%), service (35%), and production (25%) sectors. Most of the respondents' MSMEs have been operating with a traditional management structure for more than five years, where financial management is still done manually without modern financial technology.

Specific Description of the Variables Studied

The main variables studied in this study are financial literacy as the independent variable and the financial performance of MSMEs as the dependent variable. The level of financial literacy is measured through respondents' understanding of financial recording, cash flow management, business credit utilization, investment strategies, and the use of financial technology. Meanwhile, the financial performance of MSMEs is evaluated based on profitability, operational efficiency, and business sustainability.

The results show that the level of financial literacy among MSMEs in the three regions is still relatively low. Only around 35% of the respondents have a good understanding of financial record keeping, 50% have a moderate understanding, and the other 15% are classified as low. This low understanding of financial aspects contributes to the low financial performance of MSMEs, especially in cash flow management and investment decision-making.

Number of Data Used

This study sampled 150 MSMEs across three regions. Data was collected through in-depth interviews, observations, and questionnaires covering 20 financial literacy and financial performance indicators. In addition, data validation was conducted with financial experts, and a comparative analysis was performed using secondary data from official reports issued by OJK and the Ministry of Cooperatives and SMEs.

Some Findings in Answering Study Questions

1. Relationship between Financial Literacy and Financial Performance.
   This study found a significant relationship between financial literacy and the financial performance of MSMEs. MSMEs with a good understanding of financial recording and cash flow management are more profitable than those with a low level of financial literacy. In addition, MSMEs that actively use financial technology tend to have better operational efficiency.
2. Factors Hindering Financial Literacy among MSMEs.
   Some main factors hindering financial literacy among MSMEs include lack of access to financial training, low use of financial technology, and conventional financial management habits. Many MSME owners do not understand the importance of systematically recording financial transactions, which results in difficulties in long-term financial planning.
3. Impact of Low Financial Literacy on MSME Performance.
   Micro, Small, and Medium Enterprises (MSMEs) with low financial literacy frequently encounter challenges in securing formal financing from financial institutions. Many of these enterprises rely predominantly on personal capital or informal loans, which are

often associated with elevated interest rates and heightened risks. Furthermore, a typical struggle to manage operational costs culminates in diminished profitability.

4. The Role of Financial Technology in Improving MSME Performance.
   The results show that MSMEs that have adopted financial technology, such as digital financial recording applications and digital payment services, tend to have better financial performance than those that still use manual systems. Financial technology helps improve transparency in financial management and facilitates access to formal funding sources.
5. Strategies to Improve the Financial Literacy of MSMEs.
   Based on the study findings, strategies to improve MSMEs' financial literacy include increasing access to digital-based financial training, integrating financial technology in business management, and collaborating with financial institutions and academics to provide more comprehensive financial education.

Based on the results of this study, more significant efforts are expected to improve financial literacy among MSMEs so that they can better prepare to face business challenges in the digital era and improve their businesses' sustainability.

Discussion

The results of this study show that the low level of financial literacy is still the main problem MSMEs face in Bogor, Depok, and Kuningan. The data collected shows that most MSMEs still rely on manual record-keeping and have limitations in understanding basic financial statements. This leads to an inability to plan their finances well, access formal financing, and manage cash flow effectively. This low financial literacy aligns with previous findings by Lusardi and Mitchell (2017), which stated that low financial literacy contributes to businesses' difficulties in strategically managing finances.

Causes of Low Financial Literacy among MSMEs. Several factors contribute to the low financial literacy of MSMEs in the three regions studied, among others:

1. Lack of Access to Financial Training—Most respondents stated that they had not received any financial management training since starting their businesses. The available training is often not suited to their specific needs.
2. Traditional Financial Management: Many MSMEs still use manual financial recording methods or do not have a systematic financial recording system, impacting financial decision-mak.
3. Limited Access to Financial Technology—A study shows that only 30% of MSMEs utilize digital financial recording applications or technology-based financial services. Their lack of knowledge about the benefits of financial technology hinders the efficiency of their financial management.
4. Lack of Understanding of Debt Management and Investment—Many MSMEs do not understand their debt structure well or have a clear investment strategy, making it challenging to grow their businesses sustainably.

Solutions to Improve MSME Financial Literacy. For MSMEs to improve their financial performance, several strategic steps are required:

1. Improved Access to Financial Education Programs - The government and financial institutions need to be more active in providing digital-based training programs that are more accessible to MSMEs. This training should cover financial recording, debt management, and investment strategies.
2. Financial Technology Adoption—Encouraging MSMEs to utilize digital financial recording applications can improve the transparency and efficiency of financial management. A study by OECD (2020) showed that MSMEs using financial technology have more stable business growth than those using manual methods.
3. Collaboration with Financial Institutions—Partnerships between MSMEs and financial institutions can help provide greater access to formal funding and education on financial management.
4. Simplification of Financial Access Regulations - The government can simplify the requirements for MSMEs' access to finance and provide incentives for those who have implemented digital financial recording systems.

Impact of Improved Financial Literacy on MSME Performance. Improved financial literacy will have a positive impact on MSMEs, including:

1. Improve Profitability—By better understanding cash flow and investment strategies, MSMEs can optimize their capital usage and profit margins.
2. Improved Business Sustainability - MSMEs with better financial strategies will be better able to withstand economic fluctuations and market competition.
3. Improving Access to Capital—With better financial records, MSMEs will find it easier to obtain loans from formal financial institutions at more competitive interest rates.
4. Improve Operational Efficiency—Adopting financial technology will help MSMEs reduce unnecessary operational costs and improve the accuracy of their financial records.

Comparison with Previous Study

This study's findings align with a previous study conducted by Gao & Ren (2023), which shows that access to finance and financial literacy are key factors in improving MSME business performance. However, this study is novel regarding its specific analysis across three regions with different economic characteristics. In addition, it highlights financial technology's role in improving financial management's effectiveness, which has not been widely discussed in previous studies.

Compared to the study conducted by Guo & Yao (2024), which examined the impact of financial literacy on small businesses in Africa, this study adds a new dimension related to integrating financial technology as a supporting factor in improving financial literacy. In addition, it emphasizes the importance of financial institutions in providing access and support for MSMEs to improve their understanding of financial management.

Thus, this study contributes a new understanding of how financial literacy can be an effective measurement tool for improving the financial performance of MSMEs. The results suggest increasing access to financial education, adopting financial technology, and developing more supportive regulations for MSMEs to become more developed and competitive.

CONCLUSION

In conclusion, this study provides compelling evidence of a significant relationship between financial literacy and the financial performance of MSMEs in Bogor, Depok, and Kuningan. The findings definitively demonstrate that MSMEs possessing higher levels of financial literacy exhibit superior profitability, operational efficiency, and enhanced business sustainability. These results underscore the critical importance of financial literacy as a driver of MSME success and have broader implications for the Indonesian economy.

These findings suggest that investing in comprehensive financial literacy programs for MSMEs can increase business viability, job creation, and contribution to the national GDP. Moreover, improved financial literacy can empower MSMEs to navigate economic challenges better, access formal financing, and adopt innovative financial technologies, fostering greater resilience and competitiveness. These results suggest the importance of government policies in the financial inclusion of MSMEs. For instance, this study can allow the government to improve financial literacy through socialization or government training, especially for MSMEs.

Several recommendations have been proposed to improve financial literacy. These include developing tailored financial literacy programs, promoting the adoption of financial technology, fostering collaboration among financial institutions and educational entities, integrating financial literacy into broader business development services, and raising awareness through digital platforms. Implementing these strategies can empower MSMEs to unlock their full potential and thrive in a competitive economic environment.

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