

## **Smart money moves: The role of financial literacy & inclusion in boosting SME performance in Indonesia**

MUHAMMAD YUSFI FIRDAUS  
Postgraduate Program,  
Warmadewa University, Bali, Indonesia  
[kingyusfi12@gmail.com](mailto:kingyusfi12@gmail.com)

I MADE WIAN TO PUTRA  
Postgraduate Program,  
Warmadewa University, Bali, Indonesia  
ORCID ID: <https://orcid.org/0000-0003-4992-2076>

NI LUH ANIK PUSPA NINGSIH\*  
Postgraduate Program,  
Warmadewa University, Bali, Indonesia  
[anikniluh8@gmail.com](mailto:anikniluh8@gmail.com)  
ORCID ID: <https://orcid.org/0009-0002-1920-8883>

IDA BAGUS UDAYANA PUTRA  
Postgraduate Program,  
Warmadewa University, Bali, Indonesia  
ORCID ID: <https://orcid.org/0000-0001-5104-0510>

IDA AYU SURASMI  
Postgraduate Program,  
Warmadewa University, Bali, Indonesia  
ORCID ID: <https://orcid.org/0009-0009-5560-0912>

NI NENGAH SERI EKAYANI  
Postgraduate Program,  
Warmadewa University, Bali, Indonesia  
ORCID ID: <https://orcid.org/0009-0006-9057-2302>

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**Abstract:** More than 60% of Indonesia's GDP comes from Micro, Small, and Medium-Sized Enterprises (MSMEs), which also employ a sizable percentage of the labor force across a range of industries. But even with their significant contribution, a lot of MSMEs struggle with access to formal

financial services and financial management. The primary barriers to their expansion and sustainability are low financial literacy and restricted financial inclusion. The management and financial performance of MSMEs are hampered by low financial inclusion and financial literacy. Through financial management practices, this study seeks to examine how financial inclusion and financial literacy affect the financial performance of MSMEs in province West Nusa Tenggara (NTB) in Indonesia. A quantitative approach using the Partial Least Square-Structural Equation Modeling (PLS-SEM) technique is the study methodology employed. A survey of 100 MSMEs in NTB was used to gather data. The findings demonstrated that financial management behavior is positively and significantly impacted by financial inclusion and financial literacy. Financial performance is positively and significantly impacted by financial management practices and financial inclusion. However, financial performance is significantly and negatively impacted by financial literacy. Furthermore, the relationship is mediated by financial management practices.

**Keywords:** Financial literacy, financial inclusion, financial management behavior, financial performance, MSMEs

**JEL classification:** G50, G51, G53

## **1. Introduction**

In the current era of globalization, one of the steps that a country must take to improve its economy is trade, both micro and macro (Ojeleye & OJELEYE, 2024). Indonesia's economic growth rate in 2023 grew by 5.05 percent, lower than the achievement in 2022, which experienced growth of 5.31 percent according to the Central Bureau of Statistics. Micro, Small, and Medium Enterprises, or MSMEs, are an important component of the Indonesian economy that has the ability to increase the rate of economic growth.

Behind the contribution of MSMEs to the Indonesian economy, MSMEs also have many weaknesses. Not many have succeeded and grown bigger because of these weaknesses. These weaknesses include weaknesses in managing finances, financial knowledge, access to capital, market access, and access to technology (Ningsih et al., 2022a). Therefore, efforts must be made to improve the financial performance of small and medium enterprises. In Indonesia, most have difficulties in managing and obtaining financing, leaving MSMEs unable to maximize their financial performance.

According to the Financial Services around 70% of MSMEs do not have access to formal banking, which hinders their business growth (Maya Sari, Irfan, Jufrizen, 2020). MSMEs also tend to have low profit margins and are highly vulnerable to economic turmoil. Financial performance is a one of the factor that drives business growth and development. Lack of optimal financial performance is one of the obstacles in the development of MSMEs that must be solved (Supriyadi et al., 2022). To achieve good performance, good financial management behavior is needed because it has an important position in maximizing performance.

The financial management behavior is a combination of psychological and sociological theories about economics. It includes how individuals or groups interact with economic elements, manage assets, and make financial decisions (Asmin et al., 2021). Financial management behavior must be paired with good financial literacy and financial inclusion. Financial literacy is a combination of individual

abilities, knowledge, attitudes, and ultimately individual behaviors related to money (Puspa Ningsih et al., 2024)

Financial literacy is the basis that must be understood by every individual and business actor because it affects a person's financial condition and has an impact on good and appropriate economic decision-making, as well as its application in the business field (Alamsyah, 2020). Another factor that must also be considered is financial inclusion because financial literacy is closely related to financial inclusion in order to improve financial management behavior so that it can maximize financial performance. Financial inclusion is that individual access to financial services institutions must be provided to support people who already know financial service institutions, are able to take advantage of their products and services, and believe in them (Menike, 2019) Financial inclusion has an influence on the financial performance of a company or MSMEs.

The general objective of this study is to assess the role of financial literacy and financial inclusion in improving the performance of Micro, Small, and Medium Enterprises (MSMEs) in Indonesia, as well as provide insights into how improved literacy and access to financial services can support the growth and sustainability of MSMEs in the country.

The specific objectives of this research 1) Analyze the level of financial literacy and financial behavior among MSME players in Indonesia and its impact on business financial management 2) Explore the relationship between financial literacy and financial decisions made by MSMEs, such as budget planning, debt management, and investment.

## **2. Literature review**

### **2.1 Theory resource based view (RBV)**

Resource-Based View (RBV) (Barney, 1991) focusing on the role of internal resources in achieving sustainable competitive advantage. Barney stated that the resources owned by an organization can be the key to achieving competitive advantage if the resources meet several important criteria, namely: valuable, rare, inimitable, and non-substitutable. The RBV theory in this study is the basis for explaining financial literacy, financial inclusion, and financial management behavior, which can be the main key in achieving superior financial performance

### **2.2 Behavioral finance theory**

Behavioral finance develops from a conventional view that assumes rational investors in financial decision-making (Barberis, 2018). This theory revealed cognitive biases, psychology, and sociology in finance. Behavioral finance categorizes bias into cognitive and emotional, which leads to irrational judgments. This theory explains that individuals or business actors must have good financial knowledge to help them identify and overcome cognitive biases that can influence their decisions. Individuals who are educated in financial literacy can be better at assessing risks and rewards, as well as avoiding decisions driven by emotions or social pressures. Thus, increasing financial literacy can help reduce decision-making errors caused by biases such as overconfidence or herding (Covin, Jeffrey & Slevin, Dennis, 1991)

### **2.3 Financial literacy**

Financial literacy is a combination of individual abilities, knowledge, attitudes, and ultimately individual behaviors related to money (Ni et al., 2024). Meanwhile, according to Rusnawati, Rusdi. R, (2022) revealed that financial literacy is the level of knowledge and ability of a person to manage finances for decision-making related to finance. According to (Servon & Kaestner, 2008) (Agyei, 2018) and Ni et al., (2024), there are several indicators that can be used to measure financial literacy, namely general knowledge of basic financial concepts, savings and loans, insurance, investment, knowledge of financing alternatives, and knowledge of risk management will minimize financing losses.

### **2.4 Financial inclusion**

Financial inclusion is the ability of individuals or groups in an effort to reduce and even eliminate barriers that exist in formal financial services so that access to formal financial services or banking is easier, more convenient, and flexible for people through the creation of loans, savings, and other product (Saha & Qin, 2023). The Center for Financial Inclusion defines financial inclusion as the ability to gain access to a variety of financial products, such as credit, savings, asuranis, and payments. The indicators used to measure financial inclusion in namely access and welfare (Saputri, 2023) (Agyei, 2018)

### **2.5 Financial management behavior**

Financial management behavior is how a person manages, treats, and uses their financial resources to avoid financial problems (Sari et al., 2020). All actions related to funds acquired, how funds are used, and how assets are managed in a manner consistent with business objectives are known as financial management behaviors (Whella Hertadiani & Lestari, 2021) (Puspa Ningsih et al., 2024). Simply put, financial behavior is a person's ability to manage planning, budgeting, checking, managing, disbursing, controlling, and disbursing funds daily. Some indicators that can be used to determine the level of financial management behavior are paying obligations on time, making a budget, recording financial transactions and preparing funds for unexpected needs.

### **2.6 Financial performance**

Financial performance is the ability of an organization to achieve pre-set targets. Measures of financial performance, such as the level of success or the results of achievement needed (Septiani & Wuryani, 2020). Meanwhile, Idawati & Pratama, (2020) define financial performance as the result or level of success of a person as a whole during a certain time in completing a task compared to various possibilities, such as work results, targets, goals, or criteria that have been set and agreed upon beforehand. There are several indicators used to measure financial performance, such ad sales growth, profit growth, and asset growth (Ningsih et al., 2022b).

## **2.7 The effect of financial literacy on the financial management behavior**

Financial literacy and financial inclusion are two interrelated concepts that play an important role in improving the economic welfare of individuals and the development of the MSME sector. Previous research has shown that financial literacy has a significant effect on financial management behavior. There are (Syaliha et al., 2022) (Baptista, 2021) (Adiputra & Patricia, 2020) which emphasizes that financial literacy is closely related to the ability to understand and manage financial aspects.

H<sub>1</sub> : The financial literacy has a significant effect on financial management behavior

## **2.8 The effect of financial inclusion on the financial management behavior**

The relationship between financial inclusion and financial management behavior is very close because financial inclusion allows individuals or businesses to access various financial services that can help them manage their finances more effectively and efficiently (Saha & Qin, 2023) (Pranisya et al., 2024) (Sharma et al., 2023) (Maya Sari, Irfan, Jufrizen, 2020). Based on theoretical and empirical support, it can be outlined:

H<sub>2</sub> : The financial inclusion has a significant effect on the financial management behavior

## **2.9 The influence of financial literacy on the financial performance**

High financial literacy directly leads to better financial performance. Through improved financial management, smarter decision-making, more informed planning, and the ability to manage risks and costs, individuals or businesses can improve their financial stability and profitability. Conversely, a lack of financial literacy can lead to poor financial management, poor decision-making, and financial problems that will ultimately lower financial performance. Therefore, improving financial literacy is an important step towards achieving optimal financial performance in the long run (Yakob et al., 2021) (Agyei, 2018) (Menike, 2019) (Agyapong & Attram, 2019) (Ni et al., 2024). Based on theoretical and empirical support, it can be outlined:

H<sub>3</sub> : The financial literacy has a significant effect on the financial performance

## **2.10 The effect of financial inclusion on the financial performance**

Financial inclusion plays a critical role in improving financial performance. By providing greater access to formal financial services, individuals and businesses can take advantage of products and services that support better financial management, smarter decision-making, and more effective risk management. All these contribute to better financial performance, which not only improves profitability and liquidity, but also ensures sustainable business growth and economic resilience in the long run (Menne et al., 2022) (Pranisya et al., 2024) (Sharma et al., 2023).

Based on theoretical and empirical support, it can be outlined:

H<sub>4</sub> : The financial inclusion has a significant effect on the financial performance

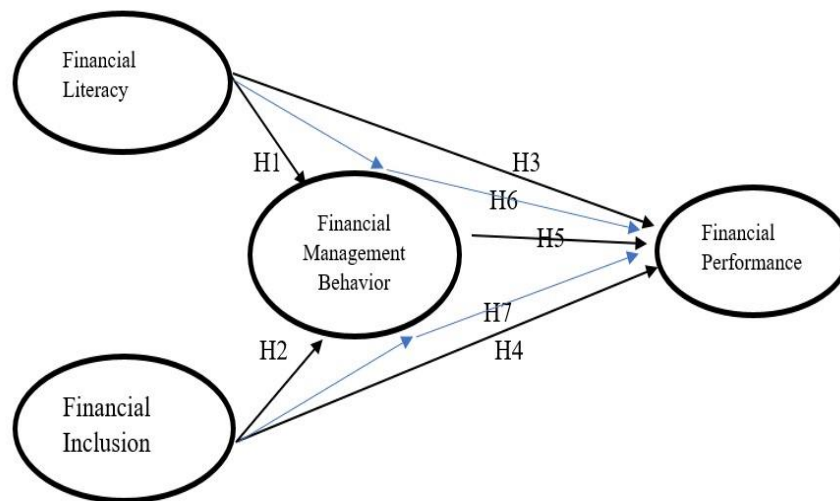
**2.11 The influence of financial management behavior on the financial performance**

Good financial management behaviors have a significant impact on financial performance. With effective budget management, prudent debt management, careful investment planning, proactive risk management, technology utilization, and regulatory compliance, individuals or businesses can improve their financial stability, profitability, and operational efficiency. Conversely, poor financial management behaviors can lead to financial imbalances, reduced financial performance, and increased risk of loss. Therefore, having prudent and planned financial management behaviors is key to achieving optimal financial performance and ensuring long-term business sustainability (Servon & Kaestner, 2008) (Sesa et al., 2024) (Asmin et al., 2021) (Baptista, 2021).

Based on theoretical and empirical support, it can be outlined

H<sub>5</sub> : The financial management behavior has a significant effect on the financial performance

**2.12 Conceptual framework**



**Figure 1.** Conceptual Framework  
Authors' Conceptualisation (2024)

The conceptual framework depicts the two predictors (financial literacy and financial inclusion) and the intervening (financial management behavior) variables predicting the criterion variable (financial performance).

**3. Research methodology**

This research was conducted on Micro, Small and Medium Enterprises (MSMEs) operating in West Nusa Tenggara (NTB) Province. The population in this study were all micro businesses registered at the NTB Province MSME Office totaling 38,999 businesses. Sampling is done by stratified random

sampling where the population is divided into several subgroups or strata (based on region). Each stratum was then randomly selected to form the sample. This technique is used to ensure that all subgroups in the population get sufficient representation in the sample. through this technique a total of 100 MSMEs were sampled. This research uses SEM PLS, which is very relevant because of its ability to handle complex relationships, latent variables, as well as data with smaller sample sizes. This technique provides flexibility in analysis and allows researchers to gain deeper insights into how these financial factors affect MSME performance, while addressing the challenges of non-normalized data and variation between individuals or groups within the population.

### 3.1 Instruments

Instruments from previous studies were adapted and used to assess the study’s constructs. The Constructs of this research were measure by indicators (see table 1):

Table 1. Constructs and Indicators

| <b>Construct</b>              | <b>Indicators</b>                              | <b>Sources</b>                                       |
|-------------------------------|--|--|
| Financial Literacy            | Financial knowledge                            | Ningsih et al., (2024),<br>Herti (2023), Sari (2024) |
|                               | Savings and loans                              |  |
|                               | Insurance                                      |  |
|                               | Investment                                     |  |
|                               | Understanding Financing Sources                |  |
| Financial Inclusion           | Understanding Risk Management to Reduce Losses | Saputri (2023 )                                      |
|                               | Ease of financial Access                       |  |
| Financial Management behavior | Financial Welfare                              | Asmin et al (2021)                                   |
|                               | Settling obligation                            |  |
|                               | budget management                              |  |
|                               | Maintaining financial records                  |  |
| Financial Performance         | Emergency fund and reserve fun                 | Ningsih et al., (2015),<br>Asmin et al (2021)        |
|                               | Revenue Growth                                 |  |
|                               | Profitability Growth                           |  |
|                               | Increase in Assets                             |  |

Source: Previous researches, literature (2024)

This research instruments are used to obtain and collect research data as a step towards finding the results or conclusions of the research, while paying attention to the standards of instrument making. the constructs were assessed using 5-point Likert scale (5-strongly agree to 1-strongly disagree). Research has two types of instructions: tests (psychological and non-psychological) and non-tests (observation or observation, graded scales, documentation, and questionnaires).

## 4. Results

Data were analysed using Structural Equation Model (SEM) specifically Smart-PLS version 3.3.8. This method is suitable for analyzing complex relationships between variables without strict assumptions about data distribution. This analysis includes Outer Model: Assessed through convergent validity, discriminant validity, and composite reliability. Inner Model: Evaluated based on R-Square values for prediction strength and hypothesis testing using t-tests and SmartPLS software.

### 4.1 Measurement model

First, in evaluating the measurement model, the item loading was first analysed. Hair *et al.* (2022) recommended the retention of loading of 0.70 and above while deletion of any loading below this threshold. Based on the test results on the measurement model, all variables are declared valid and reliable. (See: Table 2 and Figure 2 ).

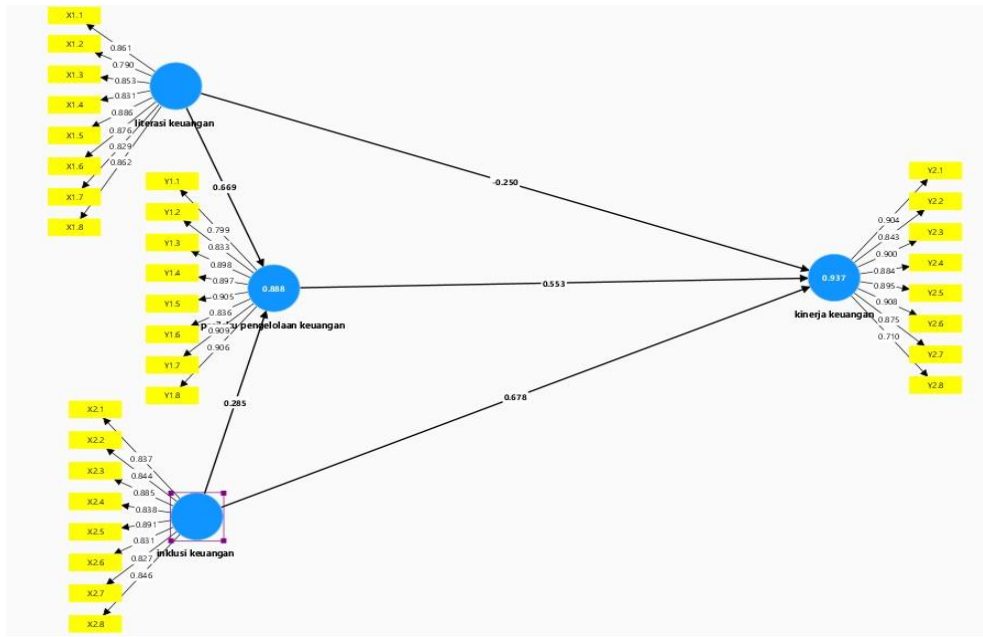
**Table 2.** Item Reliability and Convergent Validity

| <b>Construct</b>              | <b>Composite Reliability</b> | <b>Cronbachs Alpha</b> | <b>AVE</b> | <b>Decision</b> |
|-------------------------------|------------------------------|------------------------|------------|-----------------|
| Financial Literacy            | 0.954                        | 0.944                  | 0,721      | Accepted        |
| Financial Inclusion           | 0.954                        | 0.945                  | 0,723      | Accepted        |
| Financial Management behavior | 0.963                        | 0.955                  | 0,763      | Accepted        |
| Financial Performance         | 0.960                        | 0.952                  | 0,752      | Accepted        |

Source: Authors' systemization of SmartPLS output (2024)

Based on Figure 2, financial management has a very large influence on financial performance, with a relationship coefficient of 0.917, while the relationship between financial literacy and financial management is also quite strong (0.669). In addition, financial inclusion also has a significant influence on financial management with a coefficient of 0.553.

With this model, it can be concluded that financial literacy and financial inclusion play a role in improving financial management, which in turn can contribute to improving financial performance in the context of MSMEs.



**Figure 2.** Measurement Model  
 Authors' systemization of SmartPLS output (2024)

**Table 3.** Path Coefficient Result

|                                     |                        |    |           | Original<br>Sample<br>(O) | Sample<br>Mean<br>(M) | Standard<br>Deviation<br>(STDEV) | T<br>Statistics<br>( O/STDEV ) | P<br>Value<br>s |
|-------------------------------------|------------------------|----|-----------|---------------------------|-----------------------|----------------------------------|--------------------------------|-----------------|
| Financial<br>Performance            | Inclusion              | -> | Financial | 0,678                     | 0,681                 | 0,117                            | 5,773                          | 0,000           |
| Financial<br>Management<br>Behavior | Inclusion              | -> | Financial | 0,285                     | 0,283                 | 0,131                            | 2,176                          | 0,030           |
| Financial<br>Performance            | Literacy               | -> | Financial | -0,250                    | -0,250                | 0,122                            | 2,053                          | 0,041           |
| Financial<br>Management<br>Behavior | Literacy               | -> | Financial | 0,669                     | 0,672                 | 0,127                            | 5,277                          | 0,000           |
| Financial<br>Performance            | Management<br>Behavior | -> | Financial | 0,553                     | 0,550                 | 0,104                            | 5,317                          | 0,000           |

|   |                          |                          |        |       |       |       |       |
|---|--------------------------|--------------------------|--------|-------|-------|-------|-------|
| Financial<br>Management<br>Performance. | literacy<br>Behavior->   | ->Financial<br>Financial | 0,370  | 0,369 | 0,094 | 3,915 | 0,000 |
| Financial<br>Management<br>Performance. | inclusion<br>Behavior -> | ->Financial<br>Financial | 0,3157 | 0,156 | 0,078 | 2,029 | 0,043 |

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Source: Authors' systemization of SmartPLS output (2024)

Based on Table 3, the relationship between variables has a p-value <0.05 which means that the hypothesis is accepted. there is 1 rejected hypothesis related to the relationship between financial literacy and financial performance because it has a negative original sample value of - 0.250 and P-Values 0.041, and 6 hypotheses are accepted because they have positive original sample values and P-Values <0.05.

## 5. Discussion

### **The effect of financial literacy on the financial management behavior of MSMEs**

Hypothesis testing shows that financial literacy has a positive and significant effect on the financial management behavior of MSMEs in NTB. These findings are in line with previous research (Adiputra & Patricia, 2020) (Baptista, 2021) (Syalih et al., 2022), which emphasizes that financial literacy is closely related to the ability to understand and manage financial aspects. Business actors with a "well literate" literacy level are able to choose financial products according to their needs and consider the benefits and risks. Financial literacy plays an important role in determining how MSME actors in NTB manage their finances.

The financial literacy, if applied effectively, can improve more efficient financial management behavior, thereby helping MSMEs in NTB increase their competitiveness. Therefore, increasing financial literacy is the key to encouraging the improvement of overall financial management behavior (Hutauruk et al., 2024).

### **The effect of financial inclusion on the financial management behavior of MSMEs**

It was found that financial inclusion has a positive and significant influence on the financial management behavior of MSMEs in NTB. This is in line with research conducted by (Maya Sari, Irfan, Jufrizen, 2020) (Sharma et al., 2023) (Saha & Qin, 2023) (Pranisya et al., 2024) found that financial inclusion affects financial management behavior. Financial inclusion makes it easy for MSMEs to access financial products such as business capital loans.

The financial inclusion acts as an important gateway that allows MSMEs to access various products and services from financial institutions. However, banks still need good financial statements as the basis for evaluating lending. Therefore, financial literacy and the ability to prepare good financial statements are essential to support the effectiveness of financial inclusion for MSMEs (Hutauruk et al., 2024).

### **The influence of financial literacy on the financial performance of MSMEs**

The results of the study show that financial literacy has a negative and significant effect on the financial performance of MSMEs in NTB. These findings contradict the common assumption that higher financial literacy will improve financial performance. However, the results of this study are still in line with research conducted by (Agyei, 2018) (Menike, 2019) (Agyapong & Attram, 2019) (Yakob et al., 2021) (Ni et al., 2024) financial literacy has a negative influence but has a significant influence on financial performance. The main factor that affects this result is prudence, MSME actors with higher financial understanding tend to be more selective in managing finances, where in the use of funds they are more likely to prioritize savings, as well as allocate capital for asset protection such as insurance rather than business expansion.

### **The effect of financial inclusion on the financial performance of MSMEs**

The results of the study show that financial inclusion has a positive and significant effect on the financial performance of MSMEs in NTB. This means that increasing financial inclusion will encourage an improvement in the financial performance of MSMEs in NTB. The results of this study are in line with the research of (Menne et al., 2022) (Menne et al., 2022) (Sharma et al., 2023) shown that financial inclusion includes easy access to formal financial services such as banking, business credit, savings, and digital payments. With wider access, MSME actors in NTB have the opportunity to obtain business capital, financial inclusion allows MSMEs in NTB to get financing for business expansion and meet operational needs. And with this access, it helps MSME actors in NTB to be able to insure their businesses and get credit facilities, so that MSMEs in NTB can protect their businesses from unexpected risks. This positive relationship between financial inclusion and financial performance underscores that access to formal financial services plays an important role in improving the growth of their sales, profits and business assets.

### **The influence of financial management behavior on the financial performance of MSMEs**

The results of this positive and significant study indicate that rational and structured decisions in managing finances will contribute to improving operational efficiency and financial stability of MSMEs in NTB. The results of this study are in line with (Servon & Kaestner, 2008) (Baptista, 2021) (Asmin et al., 2021) (Sesa et al., 2024) found that financial management behavior has a positive and significant effect on financial performance. This emphasizes the importance of good financial management as a key factor in improving the financial performance of MSMEs in NTB. Therefore, MSME actors in NTB need to improve financial literacy, improve financial management behavior, and avoid impulsive decisions that can harm business financial stability.

### **The effect of financial literacy with mediation of financial management behavior on the financial performance of MSMEs**

The results of this study show that financial management behavior is a significant mediator in bridging the relationship between financial literacy and the financial performance of MSMEs in NTB. Financial literacy not only has a direct influence on the management behavior of NTB MSMEs, but also

indirectly has a significant impact on improving the performance of MSMEs in NTB. This is in line with the research of (Ningsih et al., 2022b) (Putra & Utama, 2022) (Mukarromah et al., 2020) (Alshebami & Al Marri, 2022) (Chen et al., 2023) who said that financial management behavior mediates the influence of financial literacy on the financial performance of MSMEs. Financial literacy plays an important role as an important asset for business actors in making strategic decisions related to capital, investment, and asset management. MSME actors with good financial literacy are able to analyze the benefits and financial impact of each decision, so that the results are more optimal and the risk is lower. Additionally, financial literacy helps avoid mistakes in decision-making, which can ultimately minimize the risk of business losses.

### **The effect of financial inclusion with mediation of financial management behavior on the financial performance of MSMEs**

The results of the study show that financial management behavior can mediate the influence of financial inclusion on the financial performance of MSME actors in NTB. This is in line with research conducted by (Sharma et al., 2023) (Maya Sari, Irfan, Jufrizen, 2020) (Saha & Qin, 2023) (Nassim & Benraïss, 2024) (Ghanbarpour & Gustafsson, 2022) (Antonczyk & Salzmann, 2014) These results show that financial inclusion alone is not enough to improve financial performance if it is not accompanied by optimal financial management behavior. Therefore, to maximize the benefits of financial inclusion for MSME actors in NTB, it is necessary to increase financial literacy and good financial management practices. Financial management behavior plays an important role in helping MSME actors take advantage of access to financial services more effectively, such as regulating cash flow, controlling expenses, and allocating funds for productive purposes. With good management, MSME actors in NTB can maximize the benefits of financial inclusion, so that it has a positive impact on business performance.

#### **5.1 Implications**

The practical implications of the direct effects described in the research are SME owners should actively seek out financial education programs to enhance their understanding of budgeting, cash flow management, investment, and debt management. This can lead to better financial decision-making and long-term business sustainability. Entrepreneurs should leverage digital financial tools (e.g., mobile banking, e-payment systems, and accounting software) to streamline operations, reduce costs, and improve access to financial services.

The study's theoretical implications are considerable provide empirical evidence supporting the theoretical link between financial literacy and SME performance. It could validate existing theories that suggest financial literacy improves decision-making, risk management, and access to financial resources.

The research adds to a better knowledge of how to explore the impact of financial literacy and inclusion on specific sectors (e.g., agriculture, retail, or manufacturing) to provide more targeted recommendations. Academics can conduct longitudinal studies to assess the long-term effects of financial literacy and inclusion programs on SME performance and economic development.

## **6. Limitations and suggestions for further study**

Based on the research results, the study's limitations are focus on specific regions or cities in Indonesia, which may not represent the diversity of SMEs across the entire country (e.g., urban vs. rural SMEs). The study might use cross-sectional data, which limits the ability to assess causality or long-term impacts of financial literacy and inclusion on SME performance. There might be no universally accepted definition or metric for financial literacy, making it difficult to compare findings with other studies. SME performance might be measured using limited indicators (e.g., revenue or profit), ignoring other important aspects like innovation, job creation, or sustainability. The study might focus on access to formal financial services, overlooking informal financial systems (e.g., community savings groups) that are prevalent in Indonesia.

For further study, there are some recommendations for future studies, 1) Investigate how financial literacy programs impact SME performance over an extended period, 2) Study the long-term effects of financial inclusion initiatives on SME growth, survival rates, and economic contribution, 3) Explore the role of financial literacy and inclusion in tech-based SMEs, which may have unique financial needs and growth trajectories 4) Investigate how financial literacy and inclusion specifically impact women entrepreneurs. Are there unique barriers or opportunities for this demographic?

The result is recommended that the NTB Provincial Government improve financial literacy by providing business risk management training, expanding access to financial services for MSMEs, and increasing awareness of financial obligations such as taxes and debts. In addition, the government needs to encourage MSME investment through training and mentoring programs. For MSME actors, it is recommended to increase their understanding of finance, financial inclusion, and financial management behavior to support business growth. They are also expected to actively participate in training programs and seminars organized by the government to improve business skills and insights. Meanwhile, for further researchers, it is recommended to expand the scope of research on small and macro MSMEs and consider other variables such as financial technology, social capital, and business sustainability.

## **7. Conclusion**

The results of the study show that financial literacy and inclusion have a positive and significant effect on the financial management behavior of MSMEs in NTB, where increasing understanding and access to financial services encourages wiser financial management. However, financial literacy has a negative impact on financial performance, because MSME actors with higher financial understanding tend to be cautious in managing funds, so they are less aggressive in business expansion. In contrast, financial inclusion has a positive effect on financial performance, as access to formal financial services increases sales, profits, and asset growth. In addition, good financial behavior has proven to be an important factor in improving the performance of MSMEs. Financial management behavior also acts as a mediator in the relationship between financial literacy and inclusion to financial performance, showing that good financial management can maximize the benefits of financial understanding and access, thus having a positive impact on the growth and sustainability of MSMEs in NTB.

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## **Pametni finansijski potezi: Uloga finansijske pismenosti i uključenosti u poboljšanju uspješnosti malih i srednjih poduzeća u Indoneziji**

MUHAMMAD YUSFI FIRDAUS

Poslijediplomski program  
Warmadewa University, Bali, Indonezija  
[kingyusfi12@gmail.com](mailto:kingyusfi12@gmail.com)

I MADE WIAN TO PUTRA

Poslijediplomski program  
Warmadewa University, Bali, Indonezija  
ORCID ID: <https://orcid.org/0000-0003-4992-2076>

NI LUH ANIK PUSPA NINGSIH

Poslijediplomski program  
Warmadewa University, Bali, Indonezija  
[anikniluh8@gmail.com](mailto:anikniluh8@gmail.com)  
ORCID ID: <https://orcid.org/0009-0002-1920-8883>

IDA BAGUS UDAYANA PUTRA

Poslijediplomski program  
Warmadewa University, Bali, Indonezija  
ORCID ID: <https://orcid.org/0000-0001-5104-0510>

IDA AYU SURASMI

Poslijediplomski program  
Warmadewa University, Bali, Indonezija  
ORCID ID: <https://orcid.org/0009-0009-5560-0912>

NI NENGAH SERI EKAYANI

Poslijediplomski program  
Warmadewa University, Bali, Indonezija  
ORCID ID: <https://orcid.org/0009-0006-9057-2302>

**Sažetak:** Više od 60 % BDP-a Indonezije dolazi od mikro, malih i srednjih poduzeća (MSME-a), koja zapošljavaju značajan postotak radne snage u različitim industrijama. No, unatoč njihovom značajnom doprinosu, mnoga MSME-a suočavaju se s poteškoćama u pristupu formalnim finansijskim uslugama i upravljanju finansijskim. Glavne prepreke njihovom rastu i održivosti su niska finansijska pismenost i ograničena finansijska uključenost. Niska finansijska uključenost i finansijska pismenost ometaju

upravljanje i financijske rezultate MSME-a. Ovim se istraživanjem nastoji ispitati kako financijska uključenost i financijska pismenost utječu na financijske rezultate MSME-a u regiji Zapadnoj Nusa Tenggara (NTB) kroz prakse financijskog upravljanja. Korištena je kvantitativna metodologija istraživanja uz primjenu tehnike modeliranja strukturnih jednadžbi metodom najmanjih kvadrata (PLS-SEM). Podaci su prikupljeni anketiranjem 100 MSME-a u NTB-u. Rezultati su pokazali da financijska uključenost i financijska pismenost pozitivno i značajno utječu na ponašanje u financijskom upravljanju. Financijsko upravljanje i financijska uključenost pozitivno i značajno utječu na financijske rezultate. Međutim, financijska pismenost ima značajan negativan utjecaj na financijske rezultate. Ovaj je odnos posredovan praksama financijskog upravljanja.

***Ključne riječi:*** Financijska pismenost, financijska uključenost, ponašanje u financijskom upravljanju, financijski rezultati, mikro, mala i srednja poduzeća (MSME-i)

***JEL klasifikacije:*** G50, G51, G52