

THE INFLUENCE OF FINANCIAL LITERACY AND SOCIAL CAPITAL ON THE SUSTAINABILITY OF MSMEs WITH GREEN INNOVATION AS A MODERATING VARIABLE**Yesi Alfia Efendi¹⁾, Anggita Langgeng Wijaya²⁾, Moh. Ubaidillah³⁾**¹Faculty of Economics and Business, Universitas PGRI Madiun
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e-mail:mohubaidillah@unipma.ac.id**Abstract**

This study examines the influence of financial literacy and social capital on the sustainability of micro, small, and medium enterprises (MSMEs), with green innovation as a moderating factor. This study uses quantitative methods and analyzes data with Partial Least Square Structural Equation Modeling (PLS-SEM). The research findings indicate that financial literacy and social capital have a significant positive impact on the survival of MSMEs. Furthermore, green innovation has been shown to be unable to strengthen this relationship, indicating that green innovation is still not a primary focus in MSME practices and is still relatively low and has not become an integral part in building MSME sustainability through their social networks.

Keywords: Financial literacy, social capital, MSME sustainability, green innovation, PLS-SEM

Abstract

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INTRODUCTION

Micro, Small and Medium Enterprises (MSMEs) have an important role in the Indonesian economy, especially in the sector trade and employment. In Indonesia, MSMEs contribute more than 60% to Gross Domestic Product (GDP) and absorb nearly 97% of the national workforce (Ministry of Cooperatives and SMEs, 2022). Despite their significant role, MSMEs still face various obstacles in maintaining their business sustainability, both economically, socially, and environmentally. One of the real phenomena that emerged during the COVID-19 pandemic was the disruption to the business continuity of 30 million MSMEs in Indonesia, with many experiencing a drastic decline in income and being forced to cease operations. MSMEs' lack of preparedness in managing funds, coupled with limited emergency savings and access to financial knowledge, made it difficult for them to survive this crisis. Furthermore, weak social networks and limited collaboration among business actors further exacerbated the situation of MSMEs when faced with economic pressures and market changes. This demonstrates the importance of understanding financial literacy and social capital as the primary foundation for MSME sustainability, not only in facing difficult times but also in creating long-term resilience. In addition to the challenges faced by the pandemic, they are also currently affected by other external factors such as climate change, evolving government policies, and the rapidly evolving digital era.

Resource Based View (RBV) Theory

The Resource-Based View theory was first introduced by Wernerfelt in 1984. This concept explains that a company's competitive advantage stems from its resources and internal strengths. A business can compete effectively and achieve its goals if it is able to improve the performance of its resources and business. The Resource-Based View emphasizes the importance of analyzing and understanding a company's resources to

create a sustainable competitive advantage (Aisyah et al., 2022). This advantage can be achieved by possessing valuable, unique, and difficult-to-imitate resources, as well as by managing resources effectively to support the right strategy to create a competitive advantage (Huang et al., 2023). To maximize resource utilization, MSMEs need to have the ability to manage their resources. In this study, the RBV theory is used to explain that financial literacy, financial inclusion, and financial technology (fintech) play a crucial role in supporting MSME business continuity and achieving competitive advantage and sustainability.

Sustainability of MSMEs

MSME sustainability is a form of business consistency and condition, which refers to the ongoing processes within a business that lead to its existence (resilience) and includes methods for maintaining, developing, and protecting resources to meet industry needs (Destrin et al., 2022). MSME sustainability is reflected in its success in innovation, managing employees and customers, and returning the initial investment. In this study, MSME sustainability is measured through indicators of improved business performance, resource development, and improved financial management.

Financial Literacy

Financial literacy is a combination of knowledge, skills, and beliefs that shape how a person thinks and acts, making decisions and managing money better, thus achieving a better financial situation (Financial Services Authority, 2021). In the context of MSMEs, understanding of finance is crucial because it supports business actors in managing and designing funds more effectively, which has a positive impact on the sustainability of small and medium enterprises (Tandigau et al, 2024).

Social Capital

Social capital can be defined as a collection of informal values and rules shared by members of a community group. These values and rules help group members coordinate and maintain relationships with one another (Astriwati et al., 2025). To achieve organizational goals, employees need to interact and influence one another. Windari et al. (2021) state that in the marketing world, more socially oriented management instruments are needed. In this context, social capital becomes crucial as a strategic tool for achieving competitive advantage. Ajijah et al. (2023) explain that social capital encompasses social networks, established reciprocal relationships, and shared values for achieving common goals.

Green Innovation

Green innovation means creating products, work methods, or systems that aim to reduce environmental impact and improve the sustainability of MSME businesses. Furthermore, green innovation theory demonstrates a relationship between sustainability and MSME competitiveness. Suryahanjaya, Putra, & Nugroho (2024) state that strategies that integrate environmental aspects into green innovation can generate cost efficiencies and open up new market opportunities. Green innovation focuses not only on reducing negative environmental impacts but also on creating economic value through the development of more efficient and environmentally friendly products. Therefore, companies that implement green innovation not only fulfill their social responsibilities but also strengthen their competitive position in international markets that increasingly emphasize the importance of sustainability, especially for MSMEs.

A. METHOD [Times New Roman 12, Bold]

This study employed quantitative methods. The population and sample were 100 MSMEs in the Madiun Residency area. Purposive sampling was used for sampling. Data collection was conducted using a questionnaire using a 5-level Likert scale. This scale ranges from 1 to 5, where 1 means strongly disagree, 2 means disagree, 3 means neutral, 4 means agree, and 5 means strongly agree. The following are the sampling criteria used in this study:

1. MSMEs that have been running for at least 2 years and implement environmentally friendly innovations.
2. MSMEs that are involved in aspects of financial literacy and social capital.

B. RESULTS AND DISCUSSIONS [Times New Roman 12, Bold]

Descriptive Statistical Test

Table 1. Results of Descriptive Statistical Tests

Statistics		Financial Literacy	Social Capital	Green Innovation	Sustainability
N	Valid	100	100	100	100
	Missing	0	0	0	0
Mean		30.0300	23.9600	14,9000	32.7300
Standard Error of Mean		.58092	.39821	.22630	.49683
Median		30,0000	24,0000	15,0000	33,0000
Mode		30.00	24.00	15.00	33.00
Standard Deviation		5.80918	3.98208	2.26301	4.96829
Variance		33,747	15,857	5.121	24,684
Range		27.00	24.00	9.00	22.00
Minimum		15.00	11.00	10.00	22.00
Maximum		42.00	35.00	19.00	44.00
Sum		3003.00	2396.00	1490.00	3273.00

Source: Data processed by IBM Statistics 24

Table 1 shows that all variables, namely Financial Literacy, Social Capital, MSME Sustainability, and Green Innovation, have a total of 100 valid respondents and no missing data (missing = 0). The average value for Financial Literacy is 30.03, with a median of 30.00 and the most frequently occurring value (mode) also being 30.00. The smallest value for this variable is 15.00 and the largest value is 42.00, with a total value (sum) of 3003.00. The standard deviation reaches 5.80918 and the variance is 33.747, with a range of values of 27.00.

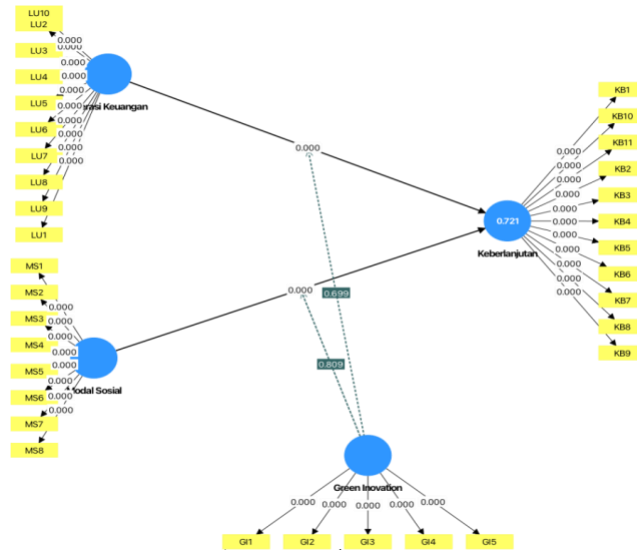
For the Social Capital variable, the mean was 23.96, with a median and mode of 24.00. The smallest value for this variable was 11.00, and the largest value was 35.00. The total value was 2396.00, with a standard deviation of 3.98208 and a variance of 15.857. The range of values for Social Capital was 24.00.

For the Green Innovation variable, the average value is 14.90, with a median and mode of 15.00. The minimum value obtained is 10.00 and the maximum is 19.00, resulting in a total value of 1490.00. The standard deviation of this variable is 2.26301 and its variance is 5.121.

Meanwhile, for the MSME Sustainability variable, the average value is 32.73, with a median and mode of 33.00. The range of values reaches 9.00, with the lowest value being 22.00 and the highest value being 44.00. The total value for this variable is 3273.00, with a standard deviation of 4.96829 and a variance of 24.684. The range of values for the Sustainability variable is 22.00.

Hypothesis Testing

Figure 1. SEM Diagram of Bootstrapping Process Results



Source: SmartPLS 4 Processed Data

Table 2. Hypothesis Test Results

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Social Capital -> Sustainability of MSMEs	0.397	0.397	0.079	5,038	0.000
Financial Literacy -> Sustainability of MSMEs	0.441	0.443	0.077	5,703	0.000
Green Innovation-> Social Capital -> Sustainability of MSMEs	0.014	0.010	0.057	0.242	0.809

<i>Green Innovation-></i>					
Financial Literacy	-0.022	-0.027	0.058	0.387	0.699
-> Sustainability of MSMEs					
<i>Green Innovation-></i>					
Sustainability of MSMEs	0.319	0.322	0.078	4.117	0.000

Based on Table 2, it can be concluded that financial literacy has a positive effect on the sustainability of MSMEs. This is evident from the P-value of 0.000, which is less than 0.05, and the t-statistic of 5.703, which is higher than 1.96. Furthermore, social capital also has a significant impact on the sustainability of MSMEs. The hypothesis test results showed a p-value of 0.000 and a t-statistic of 5.038, both of which met the significance criteria.

Green innovation failed to strengthen the relationship between financial literacy and MSME sustainability. Financial literacy and MSME sustainability have a significant influence. This is evident from the p-value of 0.699, which is greater than 0.05, and the t-statistic of 0.387, which is less than 1.96.

Green innovation failed to strengthen the relationship between social capital and MSME sustainability. The p-value of 0.809 is greater than 0.05, and the t-statistic of 0.242 is less than 1.96, indicating insignificant results.

C. CONCLUSIONS

The results of the study indicate that financial literacy has a positive effect on the sustainability of MSMEs. The ability of business actors to manage finances, such as recording, budgeting, and cash flow control, contributes significantly to business continuity. Furthermore, social capital has also been shown to have a significant

influence, where strong relationships of trust, networks, and social norms can support the sustainability of MSMEs through access to information and collaboration. However, green innovation does not moderate the relationship between financial literacy and social capital on MSME sustainability. This means that environmentally friendly innovation has not been a determining factor in strengthening these two relationships, reflecting the low awareness and application of environmentally sustainable business principles among MSMEs.

D. SUGGESTIONS

MSMEs are advised to improve their financial literacy through training or digital platforms to better manage their business finances effectively. The government needs to encourage the strengthening of social capital through community programs, group training, or the formation of cooperatives. For future researchers, it is recommended to examine other external factors such as policy support and digital technology, and consider qualitative or mixed methods approaches for more in-depth results.

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