

THE MEDIATING ROLE OF FINANCIAL LITERACY IN THE CHARACTERISTICS OF MSMES AND FINANCIAL TECHNOLOGY ON MSME SUSTAINABILITY

ABSTRACT

Objective: To determine the influence of MSME and Fintech Characteristics on MSME Sustainability with Financial Literacy as mediation, by developing mathematical models and hypotheses related to phenomena.

Research design: The research I use is quantitative, which is systematic research of parts and phenomena and the causality of their relationships.

Place and Duration of Study: Banyumas Regency from October 2023 to February 2024.

Methodology: In this study I used a sample of 141 MSME actors in Banyumas Regency, the sampling technique used was non-probability sampling in the form of accidental sampling. The analysis tool used is SmartPLS.

Results: This study shows that the characteristics of MSMEs, Fintech, and Financial Literacy have a positive and significant effect on the sustainability of MSMEs in Banyumas Regency. Furthermore, the characteristics of MSMEs and Fintechs affect financial literacy. Financial literacy is able to mediate the relationship between the characteristics of MSMEs to the sustainability of MSMEs. Meanwhile, financial literacy cannot mediate the relationship between Fintech and MSME sustainability.

Conclusion: The sustainability of MSMEs can be improved by the characteristics of MSMEs through financial literacy. Meanwhile, Fintech can directly affect the sustainability of MSMEs without going through financial literacy.

Keywords: *{Characteristics of MSMEs, Fintech, financial literacy, sustainability of MSMEs }*

1. INTRODUCTION

Sustaining Micro, Small, and Medium Enterprises (MSMEs) is crucial in fostering inclusive and enduring economic advancement. Additionally, the MSME sector is pivotal in bolstering a nation's economic progress by promoting the economic expansion of Indonesia. The presence of the MSME sector enables the unemployed workforce to initiate businesses, thereby generating new employment opportunities for the population of Indonesia (Rumini & Martadiani, 2020). A multitude of obstacles impedes the sustainability of MSMEs. These include restricted availability of fiscal resources, insufficient infrastructure support, deficient marketing amenities, and economic difficulties. This myriad of challenges hinders MSMEs' operational efficiency and growth prospects, underscoring the critical need for enhanced financial literacy and integration with Fintech solutions (Agarwal et al., 2023). To survive and thrive, MSMEs must meet competitive quality, technology, and price standards (Afdal et al., 2021). It is broadly recognized and applied that the function of MSMEs significantly influences a nation's economic expansion, enhancing the national financial framework across multiple nations, such as Indonesia. In the Indonesian economic landscape, the contribution of MSMEs is crucial, accounting for over 60% of Indonesia's Gross Domestic Product (GDP), approximately Rp8,573 trillion annually. Furthermore, representing about 97% of the total employment in Indonesia, MSMEs employ around 116 million individuals (Anastasya, 2023).

Several factors can affect the sustainability of an MSME, one of which is the characteristics of the MSME itself. Of course, MSMEs and their development cannot be separated from the characteristics of MSMEs and MSME actors. Often, the success rate of an MSME is influenced by several things from these characteristics. For the characteristics of MSME actors, it is necessary to define what characteristics or characters mean (Iskandar et al., 2020). Inherent in MSME operators is a disposition marked by autonomy and a propensity to embrace risk. This trait aligns with the broader entrepreneurial characteristics that encapsulate an individual's unique psychological or personal profile, which includes their values, attitudes, and necessities. Such entrepreneurial traits are pivotal in influencing the outcome of a business venture (Dwiastanti & Mustapa, 2020).

Furthermore, in addition to the characteristics of MSMEs, there are other factors, such as financial technology (Fintech). To capture opportunities for competitiveness and business development, MSME players need to equip themselves with digital knowledge related to Fintech (Tan & Syahwildan, 2022). Internal knowledge owned by companies or organizations is a strategic resource for MSMEs. According to the Resource-Based View, which highlights the significance of a company's or organization's internal resources, management expertise is a pertinent illustration. It is anticipated that inherent capacities will formulate tactics to secure a sustainable competitive edge and adapt to fluctuations in the commercial landscape and the external milieu (Madhani in Tan & Syahwildan, 2022). Fintech can be interpreted as IT applications in finance, financial innovation and digital innovation. Fintech is an innovative idea that is a combination of finance, technology management, and innovation management.

In addition to the characteristics of MSMEs and Fintech, of course, understanding how to manage finances is good. This can certainly be achieved with Financial Literacy for MSME actors. Research has pinpointed financial literacy as crucial in acquiring the knowledge necessary for making financial decisions (Ye & Kulathunga, 2019). Additionally, it is acknowledged that financial literacy is vital in supporting the financial stability of individuals, households, corporations, and entire economic systems (Swiecka et al., 2020). (Prasetya et al., 2021) suggest that financial literacy enables business stakeholders to gain the necessary knowledge, skills, and competencies to formulate financial strategies for business development. As a result, these stakeholders are required to be more efficient and effective in the execution and oversight of their business's financial operations (Prasetya et al., 2021).

This research aims to examine the impact of the Characteristics of MSMEs and Fintech on the sustainability of MSMEs, utilizing financial literacy as a mediating factor in a case study conducted within Banyumas Regency. Furthermore, this investigation seeks to assess the degree of sustainability among MSMEs in the Banyumas Regency. This research is expected to help MSMEs identify best practices for maintaining MSME Sustainability and develop strategies and policy recommendations to improve MSME Sustainability.

2. LITERATUR REVIEW

2.1 Theory RBV (Resource-Based View)

(Barney in Hilmawati & Kusumaningtias, 2021) articulated that the Resource-Based View (RBV) theory proposes that a firm's sustained and competitive advantage hinges on acquiring resources of significant value and possessing unique capabilities that are intangible and not easily replicated. Moreover, the firm should be able to assimilate and utilize these resources effectively (Hilmawati & Kusumaningtias, 2021). According to the Resource View Theory, tangible and intangible assets within enterprises and institutions are pivotal in formulating strategies that propel these entities towards gaining a competitive edge (Sari, 2020). This research utilizes the Resource-Based View (RBV) theory to elucidate how the Characteristics of MSMEs, Fintech, and financial literacy constitute firms' intrinsic resources, competencies, and values. These elements are essential for enterprises to secure a competitive edge and ensure the sustainability of MSMEs through consistent business development.

2.2 Hypothesis Development

2.2.1 The Influence of MSME Characteristics on MSME Sustainability

Characteristics of MSMEs that serve as intrinsic determinants can significantly influence the outcome of business ventures. These traits include possessing a high level of enthusiasm, a strong inclination towards innovation, consistently embracing responsibility to the fullest extent, an aspiration for achievement, and the courage to embrace risks (Ezzel in Dwiastanti & Mustapa, 2020). In the highly dynamic business arena, entrepreneurs must exhibit creativity when managing various situations. The success of MSME businesses is significantly influenced by the characteristics of entrepreneurs (Islam et al., in Dwiastanti & Mustapa, 2020). (Kent Baker et al., 2020) supports this opinion, suggests that entrepreneurship emphasizes the soul and spirit more than applied in all aspects of life (Ardiyansah in Dwiastanti & Mustapa, 2020). The characteristics of entrepreneurship encompass a broad understanding of business, innovative thinking, applied knowledge, inventiveness, predictive skill, numerical proficiency, and communicative ability (Dwiastanti & Mustapa, 2020). The study by (Dari et al., 2022) reveals that the Characteristics of MSMEs have no impact on their sustainability. Contrarily, (Maulana et al., 2022) identified a connection where the Characteristics of MSMEs influence their sustainability. Furthermore, the investigations by (Dwiastanti & Mustapa, 2020) and (Prasetya et al., 2021) demonstrate a strong positive correlation between the Characteristics of MSMEs and their sustainability.

H1: Characteristics of MSMEs have a significant positive effect on the sustainability of MSMEs.

2.2.2 The Influence of Fintech on MSME Sustainability

It is anticipated that the involvement of Fintech will significantly influence the sustainability of MSMEs, particularly for those enterprises utilizing Fintech services. Likewise, the synergy of using Fintech, in this case, MSME owners, will be interested in using Fintech because it provides economic benefits for businesses (Wiyono & Kirana, 2020). Fintech offers cheaper

financial services, cheaper financial transactions, more accessible and faster financial transactions, and reduces financial services information inequality. Of course, the convenience of financial services will help MSMEs develop their business to be sustainable. Studies undertaken by (Tan & Syahwildan, 2022) and (Yuningsih et al., 2022) reveal that Fintech impacts the sustainability of MSMEs. Conversely, investigations by (Budyastuti, 2021) and (Maulana et al., 2022) conclude that Fintech does not influence the sustainability of MSMEs.

H2: Fintech have a significant positive effect on the sustainability of MSMEs..

2.2.3 The Effect of Financial Literacy on MSME Sustainability

The enduring operation of MSMEs is observed through the firm's ability to innovate, handle workforce and client relationships, and recover its startup investment. This indicates that the enterprise is committed to continuous development and pursuing innovative opportunities (Ambarwati & Zuraida, 2020). Murata John asserts that financial literacy benefits entrepreneurs who effectively apply it within appropriate financial sectors for their businesses, as reported (Ambarwati & Zuraida, 2020). According to studies by (Ambarwati & Zuraida, 2020) and (Maulana et al., 2022), financial literacy influences the sustainability of MSMEs. Conversely, research by Budyastuti (2021) indicates that financial literacy does not impact the sustainability of MSMEs.

H3: Financial literacy have a significant positive effect on the sustainability of MSMEs..

2.2.4 The Influence of MSME Characteristics on Financial Literacy

The attributes, known as "Characteristics of MSMEs", encompass an individual's traits, tendencies, practices, mentalities, and behaviours that are pivotal for transforming novel concepts into entrepreneurial ventures. Additionally, these characteristics significantly influence business leaders' daily decisions and practices within Fintech and financial literacy, which are crucial for the sustainability of MSMEs. This comprehensive profile includes their innovative engagements and the consistent application of such qualities in routine business activities (Titin & Satono, 2022). It has been posited that the degree to which an entrepreneur comprehends financial literacy can influence their financial conduct. The question arises as to whether enhanced knowledge of financial literacy substantially impacts the attributes of entrepreneurs or remains unrelated to the triumphs of business leaders (Titin & Satono, 2022). Some previous research from (Prasetya et al., 2021) and (Titin & Satono, 2022) showed that characteristics positively affect financial literacy. This shows that good MSME characteristics will support good literacy as well. Meanwhile, the research conducted by Anwar et al., (2020) stated that the characteristics of MSMEs have no effect on financial literacy.

H4: The characteristics of MSMEs have a significant positive effect on financial literacy.

2.2.5 The Influence of Fintech on Financial Literacy

Margaretha & Pambudhi, (2015) in (Prasetya et al., 2021) assert that financial literacy should be viewed as an individual's ability to utilize their expertise and skills to make informed financial choices effectively. This encompasses recognizing various financial alternatives such as savings, investments, debts, insurances, assets, accruals, loans, and pensions. Furthermore, individuals must leverage fundamental financial understanding and extensive communication and networking abilities to attain their objectives proficiently. The research carried out by (Aliyah & Nurdin, 2019), (Marpaung, 2021), and (Mustikasari & Noviardy, 2020) shows that Fintech affects financial literacy. However, research conducted by (Aqualdo et al., 2023) states

that there is still a lack of understanding of financial literacy due to the lack of information obtained by the public.

H5: Fintech have a significant positive effect on financial literacy.

2.2.6 The Role of Financial Literacy Mediation between MSME Characteristics on MSME Sustainability

Some previous research from (Prasetya et al., 2021) and (Titin & Satono, 2022) showed that characteristics positively affect financial literacy. The result was that these characteristics positively affect financial literacy. This shows that good MSME characteristics will also support good literacy. With literacy, the characteristics of MSMEs will develop even better and encourage sustainability in MSMEs themselves. Studies by (Prasetya et al., 2021), (Jaluanto et al., 2021), and (Purbadharmaja & Widanta, 2023) have demonstrated that the Characteristics of MSMEs can influence the sustainability of MSMEs through the mediating role of financial literacy. This mediation effect of financial literacy facilitates a connection between MSME characteristics and their sustainability.

H6: Financial literacy mediates the characteristics of MSMEs on MSME sustainability.

2.2.7 The Role of Financial Literacy Mediation Between Fintech on MSME Sustainability

The financial literacy of MSME owners encourages performance and business sustainability. The small organizational structure of MSMEs causes the role of MSME owners quite dominant in making financial decisions. Situational factors in influencing funding source priorities and decision-making are often dependent or centred on the perspective of MSMEs (Kent Baker et al., 2020). Studies focusing on the Characteristics of MSMEs within emerging economies highlight the critical role of financial literacy as a vital educational tool for making informed financial choices (Kulathunga et al., 2020). Studies indicate that financial literacy mediates Fintech and the sustainability of MSMEs (Tan & Syahwildan, 2022). Furthermore, the work of (Papulasih et al., 2023) corroborates that financial literacy effectively bridges the gap between Fintech and enhancing the sustainability of MSMEs.

H7: Financial literacy mediates Fintech towards the sustainability of MSMEs.

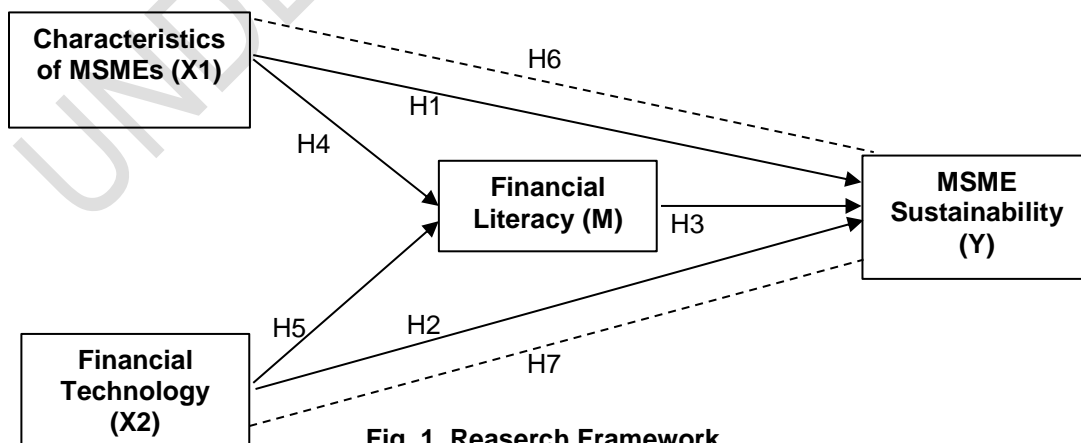


Fig. 1. Reaserch Framework

3. Method

This quantitative research explains the causal relationship between variables through hypothesis testing on the same data. Data collection is carried out by distributing questionnaires to the sample to be addressed. The research population is MSMEs in Banyumas Regency with a total of 84,445 units (Andini et al., 2024). In this study, the sample selection method utilized was non-probability sampling that is accidental sampling. This approach involves selecting coincidentally available participants at a specific location that aligns with the research framework. The determination of the number of samples according to (Hair et.al, 1998) quoted from (Kurniawan & Kunto, 2013) depends on the number of indicators multiplied by 5 to 10. The minimum sample size for this study is as follows: Minimum sample size = $20 \times 5 = 120$. Maximum sample size = $20 \times 10 = 200$. In this study, the number of samples collected through Google Form was 141 respondents. The chosen criteria for the sample selection required the MSMEs to employ at least one worker. The method selected for hypothesis testing in this research utilized structural equation modelling executed through SmartPLS. This examination consisted of evaluating both the outer and inner models. In this framework, the outer model elucidates the relationship between each block of indicators and its corresponding latent variables (Irianto, 2020). Here is the operational description table:

Table 1. Variable Indicators

Variable	Operational Definition	Indicator
Characteristics of MSMEs (X1)	According to (Islam et al., in Indarto & Santoso, 2020), Entrepreneurial characteristics refer to demographic, individual, personal, and entrepreneurial orientation characteristics. Specifically, the entrepreneurial disposition is defined as possessing a long-term focus, generating numerous innovative ideas, displaying confidence, demonstrating resilience, maintaining independence, engaging in risk-taking, and exhibiting acute environmental awareness.	<ol style="list-style-type: none"> 1. Have high discipline. 2. Always be aware of the goals to be achieved. 3. Be polite to others. Willing to learn anything to achieve goals. 4. I am always looking for new opportunities. (Dwiastanti & Mustapa, 2020)
Financial Technology (X2)	(Tan & Syahwildan, 2022), interprets Fintech as an IT application in the field of finance, financial innovation and digital innovation. Fintech is defined as an innovative idea from the combination of Finance, technology management and innovation management that improves financial services operations	<ol style="list-style-type: none"> 1. P2P Lending. 2. Digital payment services. 3. I am using a marketplace or e-commerce to sell business products. 4. Digital management application.

		by providing solutions with the help of suitable technology based on business scenarios	(Tan & Syahwildan, 2022)
Financial (M)	Literacy	Financial Services Authority Regulation Number 76 of 2016, defines financial literacy embodies the understanding, competencies, and assurance that collectively impact one's perceptions and actions, thereby enhancing the effectiveness of decision-making processes and fiscal governance to attain financial well-being (Titin & Satono, 2022).	<ol style="list-style-type: none"> 1. Can do the proper budgeting when running a business. 2. Have financial knowledge from training government agencies or private institutions. 3. Have financial statements in business. 4. There is a separation of business finance and personal finance. There are records of cash receipts and expenditures. (Prasetya et al., 2021)
MSME Sustainability (Y)		Sustainability is defined as a form of verb that describes a state or condition that is ongoing continuously and continuously, is a process that occurs and later leads to the existence or resilience of a state (Dwiastanti & Mustapa, 2020).	<ol style="list-style-type: none"> 1. Able to manage finances appropriately and adequately. 2. Can accept orders in large quantities. 3. Can design and develop new products using the latest technology. 4. Have a definite policy for maintaining and improving the quality of products or services. 5. Always pay attention to the welfare of employees. 6. Always comply with applicable government regulations. (Prasetya et al., 2021)

4. RESULTS AND DISCUSSION

4.1 Result

From the results of the distribution of questionnaires with Google Forms, 141 samples of respondents were collected. The data criteria have been met and are available for further research. Here are the demographics of respondents that I got during the research:

Table 2. Respondent Demographics

Characteristics	Criteria	Amount	Percentage (%)
Gender	Man	53	37,6%
	Women	88	62,4%
	Total	141	100%
Age	<25 Years	44	31,2%
	>25 Years	97	68,8%
	Total	141	100%
Civil Status	Married	75	53,2%
	Not married yet	66	46,8%
	Total	141	100%
Long time in business	<1 Years	21	14,9%
	1-5 Years	68	48,2%
	6-10 Years	36	25,5%
	>10 Years	16	11,3%
	Total	141	100%
Number of employees	1-5	97	68,8%
	6-49	44	31,2%
	Total	141	100%

Source: Data Obtained, 2024

4.1.1 Outer Model

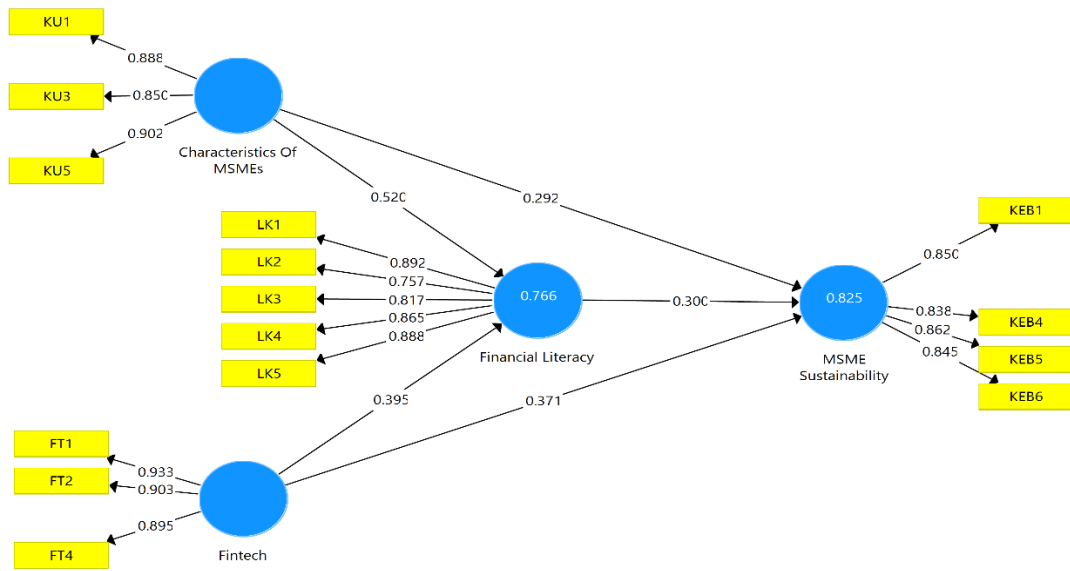


Fig. 2. Outer Loading

Referring to Figure 2, the removal of several question indicators, such as **KU2 (0.493)**, **KU4 (0.569)**, **FT3 (0.338)**, **KEB2 (0.675)** and **KEB3 (0.673)**, is evident due to their loading values falling short of the 0.7 threshold. The reliability test indicates that the variables and indicators used are considered valid with an outer loading value of > 0.7 , according to (Hair et al., 2010) in (Stefanie et al., 2020) If the indicator is valid, the data can be processed further, and several tests will be carried out to determine the results of this study.

Table 3. Cross Loading

	X1	X2	M	Y
KU1	0,888			
KU3	0,850			
KU5	0,902			
FT1		0,933		
FT2		0,903		
FT4		0,895		
LK1			0,892	
LK2			0,757	
LK3			0,817	
LK4			0,865	
LK5			0,888	
KEB1				0,850
KEB4				0,838
KEB5				0,862
KEB6				0,845

Source: Data Obtained, 2024

Table 3 this suggests convergent solid validity within the structure. Additionally, cross-loading values demonstrate robust discriminant validity, confirming that the correlations among these indicators are more significant than with other constructs.

Table 4. Reliability Test

Construct	Composite Reliability	Cronbach's Alpha
Characteristics UMKM (X1)	0,912	0,899
Fintech (X2)	0,936	0,897
Financial Literacy (M)	0,926	0,904
MSME Sustainability (Y)	0,912	0,871

Source: Data obtained, 2024

Table 4 indicates that each construct meets the reliability criteria, as all values exceed the threshold of 0.6. Therefore, this research concept is reliable.

4.1.2 Inner Model

The R-square value can be seen in Table 5 below:

Table 5. R-square
R Square Adjusted

Financial Literacy MSME Sustainability	0,762
	0,822

Source: Data obtained, 2024

Table 5 reveals that the R-square value for the sustainability of MSMEs stands at 0.822, exceeding the threshold of 0.75. This indicates that 82.2% of the sustainability of MSMEs is influenced by variables such as the Characteristics of MSMEs, Fintech, and financial literacy. Conversely, external variables not included in this analysis account for the remaining 17.8%. The R-square statistic for financial literacy stands at 0.762, exceeding 0.75, which indicates a robust relationship. This suggests that the characteristics of MSMEs and Fintech account for 76.2% of the variance in financial literacy. Conversely, factors not included in this analysis explain the remaining 23.8% of the variance.

In testing the hypothesis, the basis used is the following output for inner weight:

Table 6. Path Coefficient

	Original Sample (O)	T Statistics (O/STDEV)	P Values
X1 -> Y	0,292	2,024	0,045
X2 -> Y	0,371	3,544	0,001
M -> Y	0,300	2,064	0,041
X1 -> M	0,520	4,668	0,000
X2 -> M	0,395	3,405	0,001

Source: Data obtained, 2024

From Table 6, it can be seen that the coefficient value of variable parameters characteristic of MSMEs (X1), Fintech (X2) and Financial Literacy (M) is 0.292, 0.371, and 0.300, which shows a positive influence between the characteristics of MSMEs (X1), Fintech (X2), and financial literacy (M) on MSME Sustainability (Y). Judging from the results of the t-test showing the t-statistical values of MSME (X1), Fintech (X2), and financial literacy (M) variables of 2.024, 3.544, and 2.064 > t-table 1.98 with significance values of 0.045, 0.001, and 0.041 < 0.05, it

can be concluded that the characteristics of MSMEs (X1), Fintech (X2), and financial literacy (M) have a significant positive effect on the sustainability of MSMEs (Y). Furthermore, the coefficient value of the parameters of the characteristic variables of MSMEs (X1) and Fintech (X2) is 0.520 and 0.395, which shows a positive influence between the characteristic variables of MSMEs (X1) and Fintech (X2) on Financial Literacy (M). Judging from the t-test results showing the t-statistic values of variables X1 and X2 of 4.668 and 3.405 with significance values of 0.000 and 0.001 < 0.05, it can be concluded that variables X1 and X2 have a positive effect on the M variable.

Table 7. Specific Indirect Effects

	Original Sample (O)	T Statistics (O/STDEV)	P Values
X1 -> M -> Y	0,156	2,095	0,036
X2 -> M -> Y	0,118	1,380	0,170

Source: Data obtained, 2024

From Table 7, it can be seen that the characteristic construct of MSMEs (X1) has an influence on the sustainability of MSMEs (Y) through the construction of financial literacy (M), as evidenced by a value of 0.156. The statistical T value of 2.095 > from t-table 1.98 at a 5% significance level of 0.036 < 0.05 so that financial literacy can mediate the relationship between the characteristics of MSMEs and MSME Sustainability. Meanwhile, the Fintech construct (X2) does not influence the MSME sustainability construct (Y) through the financial literacy construct (M), as evidenced by a sample value of 0.118. At a significance threshold of 5%, the calculated T statistic of 1.380 does not surpass the critical t-table value of 1.98, indicating a p-value of 0.170, which exceeds 0.05. Consequently, it is demonstrated that financial literacy (M) does not mediate the impact of Fintech (X2) on the sustainability of MSMEs (Y).

4.2 Discussion

4.2.1 Characteristics of MSMEs on MSME Sustainability

Examining the first hypothesis reveals that the characteristics of MSMEs influence their sustainability. This study contributes to the body of empirical knowledge by demonstrating how the characteristics of MSMEs impact the endurance of these enterprises. It has been observed that a robust entrepreneurial spirit in managing these ventures ensures excellent business continuity. In this analysis, the Characteristics of MSMEs are defined by several critical indicators, including stringent discipline, consistent awareness of objectives, decisions influenced by instinct, courteous behaviour, an openness to learning from various sources, a readiness to derive lessons from past errors, a proactive approach towards discovering novel opportunities, and an affinity for undertaking risks. This investigation corroborates findings from (Prasetya et al., 2021) and (Ambarwati & Zuraida, 2020), demonstrating that the Characteristics of MSMEs significantly influence the sustainability of MSMEs. It establishes that the foundation of business achievement largely relies on the attributes of its human resources. Sharpness in how to read, utilization of the power of existing resources, courage to accept challenges and the ability to see obstacles can lead a person to success in the business he undertakes.

4.2.2 Fintech Towards MSME Sustainability

Hypothesis 2's analysis confirms a notably positive impact of Fintech on the sustainability of MSMEs. Enhanced comprehension of MSMEs' tension and application of Fintech by MSMEs correlates with sustainability improvements. It aligns with the Resource-Based View (RBV) theory, which posits that superior resources bolster business progression. The results of this

study are in line with previous research by (Yang & Zhang, 2020), (Najib et al., 2021) and (Tan & Syahwildan, 2022). If the understanding and use of Fintech can be improved again appropriately, the impact will be better on company performance and MSME sustainability.

4.2.3 Financial Literacy on MSME Sustainability

Hypothesis 3's analysis reveals that the level of financial literacy among MSME operators significantly influences the sustainability of MSMEs. This finding aligns with the Resource-Based View (RBV) theory, which suggests that resources are crucial for sustained performance. Consequently, this research underscores the impact of financial literacy on the enduring success of MSMEs. The capacity and expertise in managing finances significantly enhance the persistence of businesses by providing them with the tools to navigate through fluctuating economic challenges. This perspective aligns with the findings of (Ambarwati & Zuraida, 2020) and (Maulana et al., 2022), who have noted that financial literacy plays a crucial role in the sustainability of MSMEs.

4.2.4 Characteristics of MSMEs on Financial Literacy

The outcomes derived from testing Hypothesis 4 indicate that the Characteristics of MSMEs influence financial literacy. Indeed, maintaining and expanding financial knowledge is essential for managing an MSME, which in turn facilitates its sustainability. MSMEs undertake this process to ensure the development and preservation of financial acumen. These results support the research carried out by (Prasetya et al., 2021) and (Titin & Satono, 2022), which state that the characteristics of MSMEs affect financial literacy. Understanding these characteristics can help design appropriate financial knowledge programs to improve financial literacy among MSMEs.

4.2.5 Fintech Positively Affects Financial Literacy

Hypothesis 5 analysis indicates that Fintech influences financial literacy. This outcome aligns with the Resource-Based View (RBV) theory, which suggests that resources are critical for achieving enduring performance. A thorough and profound comprehension of individual and collective financial management, embodied by financial literacy, enhances one's ability to manage finances effectively. The findings presented by (Aliyah & Nurdin, 2019), (Marpaung, 2021), and (Mustikasari & Noviardy, 2020) support the notion that enhancing financial literacy in MSMEs contributes significantly to their ability to efficiently administer financial resources, make informed decisions, and foster opportunities for both growth and sustainability.

4.2.6 Financial Literacy Mediates the Influence of MSME Characteristics on MSME Sustainability

The findings from the analysis of hypothesis six indicate that financial literacy acts as a mediator between the characteristics of MSMEs and the sustainability of MSMEs. It is evident that the enhanced characteristics of an individual, combined with robust financial literacy, contribute to heightened sustainability within MSMEs. (Prasetya et al., 2021), (Jaluanto et al., 2021), and (Purbadharmaja & Widanta, 2023) have demonstrated through their studies that financial literacy serves as a mediator that enhances the sustainability of MSMEs by equipping owners or managers of these enterprises with the necessary skills to utilize resources and opportunities optimally. This facilitation aligns with the tenets of RBV (Resource-Based View) theory, highlighting its impact on the characteristics of MSMEs.

4.2.7 Financial Literacy Does Not Mediate Fintech and MSME Sustainability

Hypothesis analysis 7 reveals that financial literacy does not function as a mediator for Fintech. These results are contrary to previous hypotheses and research, which show that financial literacy can facilitate the influence of Fintech on the sustainability of MSMEs. The role of Fintech is very important for the sustainability of MSMEs, this can be seen from the

testing of hypothesis 2 in table 6 which means that fintech is able to increase the sustainability of an MSME without the existence of other variables as mediators or connectors. Overall, Fintech plays an important role in supporting and improving the sustainability of MSMEs through innovations and technology solutions that can be accessed and used by small businesses. With this finding, it is the first research that financial literacy does not mediate the relationship between Fintech and the sustainability of MSMEs. 7

4. CONCLUSION

This study shows that the characteristics of MSMEs, Fintech, and financial literacy simultaneously affect the sustainability of MSMEs. Variables Characteristic of MSMEs and Fintech have a significant effect on financial literacy. In this reaserch, financial literacy is able to mediate the relationship between the characteristics of MSMEs and the sustainability of MSMEs. However, in the next findings, financial literacy cannot mediate between Fintech and the Sustainability of MSMEs. With these results, it means that Fintech directly affects the sustainability of MSMEs without a mediation role. This means that the good use of Fintech will increase the level of sustainability in their business.

This research is expected to add new references and insights for readers and future research. As well as being able to provide information to business actors so that they can improve the sustainability of their business. The limitation of this study is that the number of samples studied may still not reflect the actual condition because the number of MSME populations in Banyumas Regency is so large. Therefore, it is hoped that further research will increase the number of samples or add variables to better describe the actual condition.

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REFERENCE

- Afdal, Z., Siwi, M. K., Kurniawati, T., & Marwan. (2021). MSMEs Business Sustainability: A Literature Review. *Proceedings of the Seventh Padang International Conference On Economics Education, Economics, Business and Management, Accounting and Entrepreneurship*, 192(Piceeba), 317–322. <https://www.atlantispress.com/proceedings/piceeba-21/125964006>
- Agarwal, V., Mathiyazhagan, K., Malhotra, S., & Pimpunchat, B. (2023). Building resilience for sustainability of MSMEs post COVID-19 outbreak: An Indian handicraft industry outlook. *Socio-Economic Planning Sciences*, 85(February 2022), 101443. <https://doi.org/10.1016/j.seps.2022.101443>
- Aliyah, L. M., & Nurdin. (2019). Pengaruh Layanan Keuangan Berbasis Teknologi (Fintech) terhadap Literasi Keuangan Masyarakat Dago Atas, Bandung. *Prosiding Manajemen*, 5(1), 649–656.
- Ambarwati, L., & Zuraida, L. (2020). Pengaruh Financial Literacy Terhadap Business Sustainability Pada Umkm Desa Panggungharjo. *Kajian Bisnis STIE Widya Wiwaha*, 28(1), 1–12. <https://doi.org/10.32477/jkb.v28i1.374>
- Anastasya, A. (2023). *Data UMKM, Jumlah dan Pertumbuhan Usaha Mikro, Kecil, dan Menengah di Indonesia*. UKMINDONESIA.ID. <https://ukmindonesia.id/baca-deskripsi-posts/data-umkm-jumlah-dan-pertumbuhan-usaha-mikro-kecil-dan-menengah-di-indonesia>
- Andini, U. S., Farida, Y. N., & Rokhayati, H. (2024). PENGARUH LITERASI KEUANGAN, KARAKTERISTIK KEWIRAUSAHAAN, MODAL USAHA, DAN PENGGUNAAN TEKNOLOGI INFORMASI TERHADAP PERKEMBANGAN UMKM DI KABUPATEN BANYUMAS. *Ekonomix : Jurnal Akuntansi Modern*, 6(1), 47–60.
- Aqualdo, N., Kurniasih, C. E., & Zuryani, H. (2023). Analisis Tingkat Literasi Dan Minat Masyarakat Desa Logas Dalam Penggunaan Financial Technology (Fintech). *Jurnal Ekobis : Ekonomi Bisnis & Manajemen*, 13(1), 1–14. <https://doi.org/10.37932/j.e.v13i1.504>
- Barney. (1991). *Firm Resources an Sustained Competitive Advantages*.
- Budyastuti, T. (2021). Pengaruh financial technology dan literasi keuangan terhadap keberlangsungan usaha. *Jurnal Online Insan Akuntan*, 6(Desember), 169–170. <https://www.neliti.com/publications/431668/pengaruh-financial-technology-dan-literasi-keuangan-terhadap-keberlangsungan-usa>
- Dari, S. W., Inapty, B. A., & Mariadi, Y. (2022). Pengaruh Karakteristik Wirausaha, Lingkungan Eksternal, Kecanggihan Teknologi dan Strategi Bertahan Terhadap Keberlangsungan UMKM di Kecamatan Gerung, Kabupaten Lombok Barat Selama Pandemi Covid-19. *E-Journal Ekonomi Bisnis Dan Akuntansi*, 9(2), 94. <https://doi.org/10.19184/ejeba.v9i2.30676>
- Dwiastanti, A., & Mustapa, G. (2020). Pengaruh Karakteristik Wirausaha, Lingkungan Eksternal dan Strategi Bertahan Umkm. *Business and Accounting Education Journal*, 1(3), 228–240. <https://journal.unnes.ac.id/sju/index.php/baej/article/view/42740/18157>
- Hilmawati, M. R. N., & Kusumaningtias, R. (2021). Inklusi Keuangan Dan Literasi Keuangan Terhadap Kinerja Dan Keberlangsungan Sektor Usaha Mikro Kecil Menengah. *Nominal: Barometer Riset Akuntansi Dan Manajemen*, 10(1), 135–152. <https://doi.org/10.21831/nominal.v10i1.33881>
- Indarto, & Santoso, D. (2020). Jurnal Riset Ekonomi dan Bisnis. *Jurnal Riset Ekonomi Dan Bisnis*, 13(1), 54–69.
- Irianto, B. S. (2020). MEDIASI SIKAP PADA PENGARUH KEMUDAHAN TERHADAP MINAT PENGGUNAAN INFORMASI AKUNTANSI PADA UKM DI PURWOKERTO Bambang Setyobudi Irianto 1* 1. *Jurnal Ekonomi, Bisnis Dan Akuntansi (JEBA)*, 22(1), 1–13.
- Iskandar, Y., Zulbainarni, N., & Jahroh, S. (2020). Pengaruh Karakteristik Usaha dan Wirausaha Terhadap Kinerja UMKM Industri Pengolahan Perikanan di Kabupaten Sukabumi. *Jurnal Riset Ekonomi Manajemen (REKOMEN)*, 4(1), 1–12.

- <https://doi.org/10.31002/rn.v4i1.2205>
- Jaluanto, T., Sukardi, S., & Devita, E. (2021). Interdependence of Influence between Risk Management Behavior, MSME Characteristics, and Overconfidence on Business Sustainability (A case study in Indonesia). *Journal of World Economy: Transformations & Transitions*, 1(03), 1–14. <https://doi.org/10.52459/jowett1391221>
- Kent Baker, H., Kumar, S., & Rao, P. (2020). Financing preferences and practices of Indian SMEs. *Global Finance Journal*, 43. <https://doi.org/10.1016/j.gfj.2017.10.003>
- Kulathunga, K. M. M. C. B., Ye, J., Sharma, S., & Weerathunga, P. R. (2020). How does technological and financial literacy influence SME performance: Mediating role of ERM practices. *Information (Switzerland)*, 11(6). <https://doi.org/10.3390/INFO11060297>
- Kurniawan, D., & Kunto, Y. S. (2013). Pengaruh Promosi Dan Store Atmosphere Terhadap Impulse Buying Dengan Shopping Emotion Sebagai Variabel Intervening Studi Kasus Di Matahari Departement Store Cabang Supermall Surabaya. *Jurnal Manajemen Pemasaran Petra*, 1(2), 1–8.
- Madhani, P. (2010). Resource Based View (RBV) of Competitive Advantage RESOURCE BASED VIEW: CONCEPTS AND PRACTICES. *Icfai University Press*, 3–22. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1578704
- Margaretha, F., & Pambudhi, R. A. (2015). TINGKAT LITERASI KEUANGAN PADA MAHASISWA S-1 FAKULTAS EKONOMI. *Al-Ulum*, 17(1), 44–64. <https://doi.org/10.9744/jmk.17.1.76>
- Marpaung, O. (2021). Pengaruh Pengetahuan Penggunaan Fintech (Ovo Dan Gopay) Terhadap Literasi Keuangan. *Jurnal Akuntansi Dan Perpajakan Jayakarta*, 2(2), 77–85. <https://doi.org/10.53825/japjayakarta.v2i2.57>
- Maulana, R., Murniningsih, R., & Prasetya, W. A. (2022). Pengaruh Literasi Keuangan, Inklusi Keuangan, Dan Fintech Terhadap Keberlangsungan Bisnis Umkm. *Procuratio : Jurnal Ilmiah Manajemen*, 10(4), 440–452. <https://doi.org/10.35145/procuratio.v10i4.2700>
- Mustikasari, Y., & Noviardy, A. (2020). Pengaruh Financial Technology Dalam Meningkatkan Literasi Keuangan Usaha Mikro Kecil dan Menengah Kota Palembang (Studi Kasus Usaha Mikro Kecil Dan Menengah Kota Palembang Tahun 2020). *Jurnal Ilmiah Bina Manajemen*, 03(2), 147–155.
- Najib, M., Ermawati, W. J., Fahma, F., Endri, E., & Suhartanto, D. (2021). Fintech in the small food business and its relation with open innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(1), 88. <https://doi.org/10.3390/joitmc7010088>
- Papulasih, D., Purwidiyanti, W., Tubastuvi, N., & Utami, R. F. (2023). Peran Literasi Keuangan Sebagai Mediasi Pada Variabel Financial Technology Dan Karakteristik UMKM Terhadap Keberlanjutan UMKM. *Jurnal Administrasi Dan Manajemen*, 25–35.
- Prasetya, A., Rahardjo, K., Mawardi, M. K., Rustam Hidayat, R., & Prakasa, Y. (2021). The mediation role of financial literation in ensuring MSMEs sustainability: An organizational characteristics perspective. *JEMA: Jurnal Ilmiah Bidang Akuntansi Dan Manajemen*, 18(1), 61. <https://doi.org/10.31106/jema.v18i1.10356>
- Purbadharmaja, I. B. P., & Widanta, A. A. B. P. (2023). Keberlanjutan dan Inklusi Keuangan pada Pelaku UMKM Penerima BPUM di Provinsi Bali. *Jurnal Ilmu Sosial Dan Humaniora*, 12(1), 108–119. <https://doi.org/10.23887/jish.v12i1.56242>
- Rumini, D. A., & Martadiani, A. A. M. (2020). Peran Literasi Keuangan Sebagai Prediktor Kinerja Dan Keberlanjutan Umkm Di Kabupaten Badung. *Inventory: Jurnal Akuntansi*, 4(1), 53. <https://doi.org/10.25273/inventory.v4i1.6300>
- Sari, N. P. (2020). PENGARUH MODAL INTELEKTUAL TERHADAP KINERJA BISNIS PADA UKM DI KABUPATEN SIDOARJO (Studi Empiris pada UKM di Bidang Industri)
Nurul Puspita Sari Jurusan Akuntansi , Fakultas Ekonomi , Universitas Negeri Surabaya , Indonesia. *Jurnal Akuntansi Unesa*, 8(3), 1–8. <https://core.ac.uk/download/pdf/288283217.pdf>
- Stefanie, K., Suryani, E., & Maharani, A. (2020). Flexible Work Arrangement, Work Life

- Balance, Kepuasan Kerja, dan Loyalitas Karyawan pada situasi Covid-19. *Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA)*, 4(3), 1725–1750.
- Swiecka, B., Yeşildağ, E., Özen, E., & Grima, S. (2020). Financial literacy: The case of Poland. *Sustainability (Switzerland)*, 12(2), 1–17. <https://doi.org/10.3390/su12020700>
- Tan, E., & Syahwildan, M. (2022). Financial Technology dan Kinerja Berkelanjutan Usaha Mikro Kecil : Mediasi Literasi Keuangan dan Inklusi Keuangan. *Jurnal Ilmiah Manajemen Dan Bisnis*, 23(1), 1–22.
- Titin, R., & Satono, S. (2022). Pengaruh Karakter Wirausaha Terhadap Keberhasilan Usaha Melalui Literasi Keuangan. *Jurnal Ekonomi & Bisnis*, 7(2), 1–14.
- Wiyono, G., & Kirana, K. C. (2020). Efek Impresi Fintech Terhadap Perilaku Keuangan Usaha Kecil Menengah (UKM). *Jurnal Ilmiah Manajemen Dan Bisnis*, 21(1), 69–81. <https://doi.org/10.30596/jimb.v21i1.3889>
- Yang, L., & Zhang, Y. (2020). Digital financial inclusion and sustainable growth of small and micro enterprises-evidence based on China's new third board market listed companies. *Sustainability (Switzerland)*, 12(9). <https://doi.org/10.3390/su12093733>
- Ye, J., & Kulathunga, K. M. M. C. B. (2019). How does financial literacy promote sustainability in SMEs? A developing country perspective. *Sustainability (Switzerland)*, 11(10), 1–21. <https://doi.org/10.3390/su11102990>
- Yuningsih, Y. Y., Raspati, G., & Riyanto, A. (2022). Pengaruh literasi keuangan dan financial technology terhadap keberlangsungan usaha pelaku UMKM. *Mirai Management*, 7(2), 531–540.