Financial Insights and Risk Attitudes: Driving Firm Performance in Malang's Food and Beverage SMEs

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ABSTRACT

This study aims to analyze and understand the relationship between financial knowledge, financial behavior, and firm performance. The study was conducted on 120 food and beverage SMEs in Malang. The sampling technique used was purposive sampling with several criteria. The sample size was determined by multiplying 12 research indicators by 10, following the approach of JR. et al. (2022). The data analysis in this study used SEM-PLS, assisted by the SmartPLS 3.3.3 software. The results indicate that financial behavior and financial risk attitude significantly affect firm performance, while the relationship between financial knowledge and firm performance yielded different results. The testing shows that financial knowledge does not significantly affect firm performance. Furthermore, these findings suggest that the level of financial knowledge among SME actors in Malang does not sufficiently support the improvement of SME firm performance. The low level of financial knowledge also leads SME actors to be more cautious in making financial and business decisions, as they can better assess the extent of business and financial risks they may face. Therefore, further training is needed to enhance the financial knowledge and capabilities of SME actors, particularly in the field of finance.

Keywords — financial knowledge, financial behavior, financial risk attitude, firm performance

1. Introduction

Micro, Small, and Medium Enterprises (MSMEs) have great potential to positively impact the local economy. With a significant contribution to Indonesia's GDP of 61.07% in 2018 [1], as well as absorbing 97% of the national workforce (Depkop, 2018), MSMEs are expected to drive economic growth in the regions, including in Malang City. Although MSMEs in Malang City have shown rapid growth, they still face classical issues such as capital constraints and a lack of financial knowledge. Furthermore, many MSME actors are not yet aware of the importance of proper financial record-keeping, resulting in a lack of understanding of their business conditions [2].

The low level of financial literacy among MSME actors in Malang City is a significant hindrance to their business growth. Additionally, issues related to financial literacy include MSME actors' consideration of the risks inherent in business decision-making. Decision-making regarding these risks can either weaken or strengthen the financial decisions of managers, ultimately impacting the company's growth. Essentially, risk, in a broad definition, describes uncertain future events, which can be negative or positive [3]. According to [3], risk acceptance is a part of every entrepreneurial activity and is therefore closely related to decision-making. In the context of decision-making under risk, it refers to a situation occurring with known probabilities as a result of choosing alternatives that involve risk [4]. [4] states that outcome-dependent probabilities, which are non-additive, are introduced in measurable value functions

under risk, where the probabilities of each event are assumed to be known.

In line with financial knowledge and financial risk attitude, financial behavior refers to the behavior of managers or business actors in managing finances or business operations. A financial behavior that leads to positive behavior from managers or business actors suggests that they may also exhibit positive behavior in their financial risk attitude. This can be seen in how managers or business actors respond to problems or handle financial and business risks. Moreover, managers or business actors with a financial risk attitude can evaluate business conditions before making decisions, unlike ordinary individuals, who often focus more on opportunities than the challenges they face. Individuals will not display positive financial behavior unless the value of that behavior has been endorsed by the individual, who is subject to their attitude and has control over it. In other words, a person with financial knowledge will exhibit financial behavior that is ultimately determined by their attitude. [5] also stated that if an individual behaves positively, it will significantly impact the financial well-being of each individual. Therefore, understanding contributing factors such as MSME financial behavior will support the success of SMEs, thereby enhancing the sustainability of MSMEs [6]. Conversely, research by [7] revealed a negative impact of technical (financial) skills on the business success of micro enterprises in India.

Considering these issues, this study aims to explore the relationship between financial literacy, financial behavior, financial risk attitude, and the performance of food and beverage sector MSMEs in Malang City. It is hoped that the results of this research can provide new insights and recommendations for the sustainable and efficient development of MSMEs in the future. Referring to the introduction of this study, the research concepts and hypotheses are as follows:
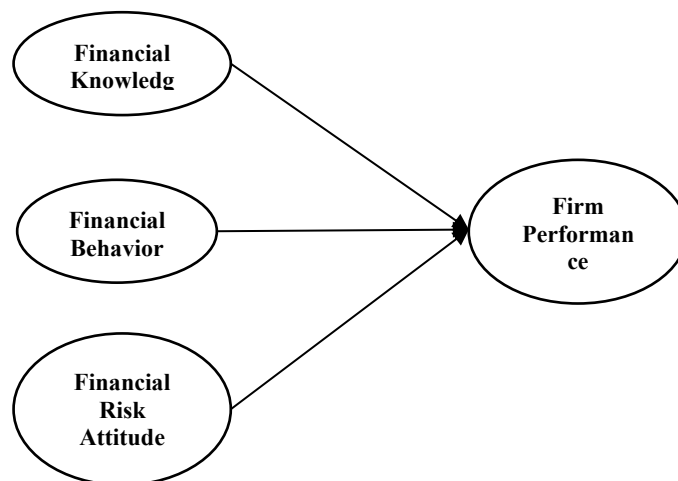

Figure 1. Research Concept

Research Hypothesis:
a. H1: Financial knowledge has a significant influence on the firm performance.
b. H2: Financial behavior has a significant influence on the firm performance.
c. H3: Financial risk attitude has a significant influence on the firm performance

2. Method

This research is quantitative with an explanatory research approach. The population used in this study consists of food and beverage SMEs in Malang. The sampling technique applied in this research is purposive sampling, with several criteria, including:

a. SMEs engaged in the food and beverage sector in Malang.
b. SMEs that have been operating for at least 3 years (Companies aged 3 years are categorized as being in the early stage of a startup [7].
c. SMEs that have received financial training or education, either formally or informally.
d. SMEs with an annual sales turnover ranging from IDR 10,000,000 to IDR 2,500,000,000. (Criteria for micro and small enterprises based on company assets and turnover) [8].

The sample size determination for this research adopts the approach of [9], by multiplying the number of research indicators by 10 based on the direction of arrows on the latent variables. Referring to the research sample criteria and the sample approach used, this study involves 120 SME actors as the research sample.

The data analysis method used in this research is SEM-PLS, assisted by the SmartPLS 3.3.3 software. The operational definitions and variable indicators used in this research include:

- Financial knowledge refers to the financial knowledge possessed by individuals, which influences the accuracy in making financial decisions or managing financial management. Referring to the research conducted by [10] and adapted to the current research context, the indicators used to measure the financial knowledge variable include knowledge of basic financial calculation concepts, knowledge of loan interest rate concepts, and knowledge of cash management concepts.
- Financial behavior refers to the conscious behavior of business owners related to financial decision-making. Adapting from the study by [5] and tailored to the research conditions, the indicators of the financial behavior variable used in this study include financial record-keeping, payment management, credit management, and daily behavior related to cash management.
- Financial risk attitude refers to the tendency of individuals' attitudes in making risky decisions in uncertain situations. The indicators used in the financial risk attitude variable adopt the research by [11], namely the financial risk attitude scale.
- Firm performance refers to the evaluation of management decision-making and actions by integrating various organizational resources to achieve the company's goals. Referring to the research by [12], the indicators for the firm performance variable include sales growth, profit, market share, and product quality.

3. Discussion

The data analysis conducted in this study includes three stages: the outer model, the inner model, and hypothesis testing.

a. Outer Model

The outer analysis is conducted to test the validity and reliability of this study through the examination of loading factors, Average Variance Extracted (AVE), and composite reliability. Below is an explanation of the validity and reliability tests in this research:

Table 1. Validity, outer loadings

Variable	Items	Outer Loading
Financial Knowledge	X1.2	0.671
	X1.4	0.766
	X1.5	0.629
	X1.6	0.776
	X1.7	0.695
Financial Behavior	Z1	0.813
	Z2	0.752
	Z3	0.810
	Z5	0.679
Financial Risk Attitude	M.2	0.827
	M.4	0.814
Firm Performance	Y.1	0.740
	Y.2	0.693
	Y.5	0.788
	Y.6	0.731

Source: Primary Data, 2024

The validity test is assessed based on the loading factor values. Outer loading values can still be considered valid if the loading factor coefficient is between 0.60 – 0.70, provided that there are other indicators with a minimum value of 0.70 [13]. According to the test results shown in Table 1, several outer loading values below 0.6 will be eliminated to allow the model to proceed to the next stage of analysis. This is in line with the recommendations from [4], who explain that questionnaire items with values below the rule of thumb for outer loadings should be eliminated or removed, after which the items will undergo another validity and reliability test. Table 1 shows that 12 out of 27 questionnaire items were eliminated during the data analysis process. These validity test results are further supported by the AVE (Average Variance Extracted) test results. The AVE test indicates that AVE is considered valid when the value is greater than 0.50 (>0.50).

Table 2. AVE Results

Variabel	AVE	Intepretation
Financial Knowledge	0.503	Valid
Financial Behavior	0.586	Valid
Financial Risk Attitude	0.673	Valid
Firm Performance	0.546	Valid

Source: Primary Data, 2024

The AVE test results in Table 2 show that all variables in this study, namely financial knowledge, financial behavior, financial risk attitude, and firm performance, have an Average Variance Extracted (AVE) value above 0.50, indicating that these variables are valid. The reliability test was conducted using the composite reliability and Cronbach's alpha values. This research measurement is considered reliable if the composite reliability value is > 0.70, with the Cronbach's alpha threshold used in this study being > 0.50.

Table 3. Reability Results

Variabel Laten	CR	CA	Intepretation
Financial Knowledge	0.834	0.756	Valid
Financial Behavior	0.849	0.764	Valid
Financial Risk Attitude	0.805	0.515	Valid
Firm Performance	0.827	0.729	Valid

Source: Primary Data, 2024

The composite reliability test results for each latent variable show values above 0.7, and the Cronbach's alpha values for each variable are also above 0.5. Thus, all indicators measuring the variables of financial knowledge, financial behavior, financial risk attitude, and firm performance can be considered reliable.

b. Inner Model

The inner model test is conducted to predict the causal relationships between latent variables. The evaluation of the inner model test is carried out through the parameters of the coefficient of determination (R^2) and Predictive Relevance (Q^2).

Table 4. R Square Results

	R Square Adjusted
Firm Performance	0.336

Source: Primary Data, 2024

Based on the coefficient of determination test, the R^2 value of the firm performance variable is 0.336 (Table 4), indicating that 33.6% of the contribution to firm performance comes from financial knowledge, financial behavior, and financial risk attitude, while the remaining 66.4% comes from other variables not explained in this study. The Q-Square predictive relevance (Q^2) test was conducted using the blindfolding method. A research model is considered relevant or good when the Q-Square predictive relevance (Q^2) value is greater than zero ($Q^2 > 0$). Conversely, if the Q-Square predictive relevance (Q^2) value is less than zero ($Q^2 < 0$), the model and parameters are considered less relevant (Chin, 1998; JR. et al., 2022). Based on these calculations, the Q-Square predictive relevance (Q^2) value is 0.656, which is above zero, indicating that this research model has relevant or good observation values (Table 5).

Table 5. Q-Square predictive relevance (Q^2)

	SSO	SSE	Q^2 (=1-SSE/SSO)
Financial Behavior	600.000	600.000	
Financial Knowledge	750.000	750.000	
Financial Risk Attitude	300.000	300.000	
Firm Performance	600.000	501.390	0.164

Source: Primary Data, 2024

c. Hypothesis Testing

The hypotheses in this study use a significance level of 5% (α = 5%). The test results show that financial knowledge has a significant effect on firm performance (p = 0.117; β = 0.171). Further testing results explain that financial behavior and financial risk attitude both have significant effects on firm performance (FB: p = 0.000; β = 0.326; FRA: p = 0.008; β = 0.267).

Table 6. Hypothesis Testing

	Coefficient	ST.DEV	P-Values
Financial Behavior -> Firm Performance	0.326	0.083	0.000
Financial Knowledge -> Firm Performance	0.171	0.109	0.117
Financial Risk Attitude -> Firm Performance	0.267	0.099	0.008

Source: Primary Data, 2024

Financial behavior and financial knowledge are essential forms of intangible assets that MSMEs must possess as they serve as intangible resources that enhance firm performance, especially in a dynamic economic environment. Financial knowledge and financial behavior, as part of these resources, play a crucial role in helping MSMEs maintain their competitiveness. The results of this study explain that business owners with good financial knowledge are more confident in making important financial decisions, which directly impacts the improvement of company performance. This is evidenced by the highest contribution of the indicators that form financial knowledge, where the cash management knowledge indicator provides the highest contribution. Good cash management knowledge from business owners can positively impact sales growth and business profits. Furthermore, this high level of knowledge is also supported by good financial behavior, which significantly influences company performance. Business owners are likely aware that holding large amounts of cash may affect security and lead to inefficient and unproductive cash as it remains unused. In addition, business owners also realize that separating personal cash use from operational business needs is essential to maintaining healthy cash flow and supporting the smooth running of daily business operations. Therefore, this study also explains why financial behavior can significantly affect firm performance.

Previous studies have also shown a strong relationship between a company's knowledge base and its business growth. Business owners and employees with good financial knowledge and behavior are capable of integrating various aspects within the company to achieve desired goals. Thus, the results of this study align with previous research, showing that financial knowledge and financial behavior have a significant impact on firm performance [5], [12], [14], [15].

In addition to financial knowledge and financial behavior, financial risk attitude is also an important factor that influences financial decision-making in business. This attitude enables managers or business owners to be more thorough in analyzing opportunities and risks before making decisions. Research shows that a positive attitude toward risk can support better financial performance and allow companies to face business uncertainties more effectively [10], [11]. With adequate financial literacy and a positive attitude toward risk, MSME owners and managers are better able to face challenges and steer their businesses toward sustainable success.

4. Conclusion

The results of this study indicate that financial behavior, financial knowledge, and financial risk attitude significantly influence firm performance. Firm performance can improve significantly when the financial knowledge of business actors is applied to the management of their finances. Furthermore, business owners and managers who understand financial statements and engage in better financial management will lead to more efficient business operations, thereby impacting firm performance.

Good financial knowledge, supported by positive financial behavior, can guide business owners and financial managers to behave in a positive manner, which will subsequently enhance company performance. The behavior of business owners and financial managers with good financial behavior will be cautious in financial management and decision-making. Additionally, the results of this study also show that financial risk attitude has a significantly positive effect on company performance, leading business owners to better analyze risks.

Moreover, business owners and financial managers can estimate the extent of financial and business risks they can bear, enabling them to make more logical business decisions.

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