

Risk Management: Key to Financial Management and Inclusion to SME Performance in the Digital Era

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Abstract

This study examines the mediating role of risk management in the relationship between financial management, financial inclusion, and the performance of Small and Medium Enterprises (SMEs) in the digital era. Despite the increasing adoption of financial technologies and financial inclusion initiatives, many SMEs continue to face performance challenges due to unstructured financial management and exposure to business risks. Using data from 96 culinary SMEs in Makassar, Indonesia, and employing Partial Least Squares-Structural Equation Modeling (PLS-SEM), this study finds that financial management and financial inclusion alone do not directly enhance SME performance. However, when mediated by effective risk management, these factors significantly contribute to SME growth and sustainability. The findings highlight the critical role of risk management in mitigating financial and operational uncertainties, ensuring resilience, and enhancing overall SME competitiveness in the digital economy. This study contributes to the Resource-Based View (RBV) theory by demonstrating how risk management serves as a strategic resource that strengthens SME financial strategies. Policymakers, financial institutions, and SME owners should prioritize risk management frameworks to maximize the benefits of financial inclusion and improve SME financial sustainability. Future research should explore longitudinal studies and cross-industry comparisons to validate these findings across different business sectors..

Keywords: Risk Management, Financial Management, Financial Inclusion, SME Performance, Makassar

INTRODUCTION

Small and Medium Enterprises (SMEs) play a strategic role in supporting economic growth, employment generation, and community welfare, particularly in developing countries such as Indonesia. In recent years, the rapid advancement of digital technology has accelerated the transformation of SME business models through the adoption of digital marketing, electronic payment systems, and online-based financial services. The emergence of digital platforms has enabled SMEs to expand market access, improve operational efficiency, and strengthen customer engagement in increasingly competitive business environments (Halik & Halik, 2024). In Indonesia, SMEs contribute significantly to national economic development, accounting for more than 60% of Gross Domestic Product (GDP) and absorbing a substantial proportion of the workforce (Halik et al., 2026; Roreng et al., 2024). This condition demonstrates that SMEs are not only economic actors but also key drivers of economic resilience and sustainable development.

Despite the growing opportunities offered by digital transformation, SMEs continue to encounter substantial challenges related to financial management, financial inclusion, and business sustainability. Many SMEs still experience difficulties in managing cash flow, preparing financial reports, allocating budgets, and making strategic financial decisions effectively (Meenakshi & Ranjan, 2024). Weak financial management practices may increase business vulnerability to operational disruptions, financial instability, and market uncertainty. Moreover, the digital business environment introduces additional risks associated with technology adoption, changing consumer behavior, cybersecurity threats, and fluctuations in online market demand (Dafri & Al-Qaruty, 2023). Consequently, SMEs require stronger managerial capabilities to survive and remain competitive in the digital era.

Financial inclusion has also become an important issue in supporting SME development. Financial inclusion refers to the accessibility and utilization of formal financial services, including savings, loans, insurance, and digital payment systems, by individuals and business entities (Kass-Hanna et al., 2022). Improved access to financial services allows SMEs to obtain additional capital, enhance operational flexibility, and support business expansion. The development of financial technology (fintech) and digital banking services has increased opportunities for SMEs to access financial resources more efficiently. However, empirical evidence indicates that the availability of financial services does not always directly improve SME performance, particularly when business owners lack adequate financial literacy and risk management capabilities (Damane & Ho, 2024). In many cases, SMEs rely heavily on informal financing sources and operate without structured financial planning, making them more vulnerable to liquidity problems and business uncertainty.

The increasing complexity of the digital business environment highlights the importance of risk management in improving SME resilience and performance. Risk management enables SMEs to identify, evaluate, and mitigate potential risks that may affect financial stability and operational continuity (Ferreira de Araújo Lima et al., 2020). Effective risk management practices assist SMEs in responding to financial uncertainty, maintaining business sustainability, and improving organizational adaptability in rapidly changing markets. Previous studies have demonstrated that SMEs with better risk management capabilities tend to achieve stronger operational performance and long-term competitiveness (Virglerova et al., 2022). Nevertheless, many SMEs still consider risk management as a secondary managerial activity and have not integrated risk mitigation strategies into their financial decision-making processes.

Several previous studies have examined the relationship between financial management, financial inclusion, and SME performance. Research conducted by Otoo (2024) found that effective financial management significantly improves SME profitability and operational efficiency. Similarly, Suárez Mayorga et al. (2024) reported that financial inclusion contributes positively to SME growth and business expansion. However, other studies revealed inconsistent findings regarding the direct influence of financial management and financial inclusion on SME performance, especially in developing countries and digital business environments (Anthanasius Fomum & Opperman, 2023). These inconsistencies indicate the possibility that other strategic capabilities, such as risk management, may play an important mediating role in strengthening the relationship between financial practices and SME performance.

The following table presents several empirical findings related to financial management, financial inclusion, risk management, and SME performance.

Table 1. Previous Empirical Findings Related to SME Performance

Author(s)	Research Findings	Implications
(Otoo, 2024)	Financial management positively influences SME profitability and operational performance	Effective financial planning strengthens business sustainability
(Suárez Mayorga et al., 2024)	Financial inclusion contributes significantly to SME business growth	Access to financial services supports business expansion
(Ferreira de Araújo Lima et al., 2020)	Risk management improves SME resilience and competitiveness	Risk mitigation capability is essential in uncertain environments
(Virglerova et al., 2022)	Business risk management significantly affects SME operational performance	SMEs require adaptive risk management strategies
(Damane & Ho, 2024)	Financial inclusion may not directly improve business performance without managerial capability	Financial access alone is insufficient to guarantee SME success

Source: Compile from previous literature (2026)

Based on the empirical findings presented above, it can be observed that prior studies have primarily focused on the direct relationship between financial management, financial inclusion, and SME performance. However, limited attention has been given to the mediating role of risk management in explaining how financial capabilities and access to financial services can effectively enhance SME performance in the digital era. This gap becomes increasingly relevant because SMEs currently operate in highly uncertain environments characterized by technological disruption, digital competition, and financial vulnerability. Therefore, understanding the strategic role of risk management is essential for strengthening SME sustainability and competitiveness.

This study is important because many SMEs in Indonesia continue to experience difficulties in maximizing the benefits of financial management and financial inclusion due to weak risk management capabilities. Although access to digital financial services has expanded significantly, many SMEs remain vulnerable to financial instability, operational uncertainty, and changing market conditions. Without effective risk management practices, financial resources and financial access may not translate into improved business performance. Consequently, this research is expected to provide both theoretical and practical contributions by explaining the strategic role of risk management in strengthening SME performance in the digital era. The findings of this study may also serve as a reference for policymakers, financial institutions, and SME practitioners in developing sustainable business strategies and improving financial resilience among SMEs.

Based on the background and empirical issues discussed above, this study aims to examine the influence of financial management and financial inclusion on SME performance, as well as to analyze the mediating role of risk management in strengthening the relationship between financial capabilities and business performance among culinary SMEs in Makassar City, Indonesia, in the digital era.

METHODS

Research Design

This study employed a quantitative research approach using an explanatory and causal research design (Sugiyono, 2020). Quantitative research is considered appropriate because this study aims to examine the causal relationships between financial management, financial inclusion, risk management, and SME performance in the digital era through hypothesis testing. The explanatory approach was utilized to explain the influence among variables and to analyze the mediating role of risk management in strengthening SME performance. Furthermore, this study adopted a cross-sectional design, in which data were collected at a single point in time from SME owners and managers operating in the culinary sector.

The analytical method used in this study was Partial Least Squares–Structural Equation Modeling (PLS-SEM). PLS-SEM was selected because it is suitable for exploratory and predictive research models involving complex relationships among latent variables and relatively small sample sizes (Hair et al., 2021). In addition, PLS-SEM is capable of handling non-normal data distributions and measuring mediation effects simultaneously.

Population, Sample, and Sampling Technique

The population of this study consisted of Small and Medium Enterprises (SMEs) operating in the culinary sector in Makassar that had adopted digital platforms such as GoFood and GrabFood in conducting their business activities. Culinary SMEs were selected because this sector has experienced rapid digital transformation and increasing market competition in recent years.

Since the exact number of culinary SMEs actively utilizing digital platforms was not accurately identified, this study employed the Lemeshow formula to determine the minimum sample size for an unknown population (Lemeshow et al., 1990).

$$n = \frac{z^2 \times P(1-P)}{d^2} \dots\dots\dots 1$$

To determine the required sample size (n) for a study with a 95 percent confidence level, a prevalence of 50 percent (P 0.500), and a desired sampling error (d) of 10 percent (d 0.100), the equation above is used (**Equation 1**). So, the sample size obtained is as follows:

$$n = \frac{(1,96)^2 \times 0,5(1-0,5)}{(0,10)^2} = 96,04 \dots\dots\dots 2$$

Based on the sample calculation, a total of 96 SME owners and managers participated as respondents in this study. The sampling technique applied was purposive sampling (Memon et al., 2025), which is categorized as a non-probability sampling method. Respondents were selected based on several criteria: (1) SMEs operating in the culinary sector, (2) SMEs utilizing digital platforms or digital payment systems, and (3) SME owners or managers directly involved in financial and operational decision-making processes.

Research Location and Period

This research was conducted in Makassar, South Sulawesi Province, Indonesia. Makassar was selected because it is one of the major urban economic centers in Eastern Indonesia with significant growth in digital-based culinary SMEs. Data collection was conducted over a four-month period from January to April 2026 through questionnaire distribution to SME owners and managers.

Hypothesis Development

Financial management is considered an essential managerial capability that enables SMEs to manage cash flow, budgeting, and financial planning effectively. Previous studies demonstrated that effective financial management contributes positively to business sustainability and operational performance (Otoo, 2024; Suriani et al., 2024). Therefore, the following hypothesis is proposed:

H1: Financial management has a positive and significant effect on SME performance.

Financial inclusion provides SMEs with access to formal financial services such as loans, savings, insurance, and digital payment systems. Access to financial services may enhance operational efficiency and support business growth (Suárez Mayorga et al., 2024). Accordingly, the following hypothesis is formulated:

H2: Financial inclusion has a positive and significant effect on SME performance.

Risk management is a strategic capability that enables SMEs to identify, evaluate, and mitigate business uncertainty and operational threats. Effective risk management practices may improve organizational resilience and competitiveness (Virglerova et al., 2022). Thus, the following hypothesis is proposed:

H3: Risk management has a positive and significant effect on SME performance.

Financial management practices are closely associated with the ability of SMEs to manage financial and operational risks effectively. SMEs with better financial planning and financial control tend to have stronger risk mitigation capabilities (Megeid, 2024). Therefore, the following hypothesis is developed:

H4: Financial management has a positive and significant effect on risk management.

Financial inclusion may strengthen SME risk management capabilities through improved access to financial resources and financial protection instruments (Kass-Hanna et al., 2022). Hence, the following hypothesis is proposed:

H5: Financial inclusion has a positive and significant effect on risk management.

The implementation of effective risk management may strengthen the relationship between financial management and SME performance because risk mitigation enables businesses to utilize financial resources more efficiently (Yakob et al., 2019). Therefore, the following hypothesis is formulated:

H6: Risk management mediates the relationship between financial management and SME performance.

Access to financial services may improve SME performance when supported by effective risk management practices that reduce business uncertainty and financial vulnerability (Tandigau et al., 2024). Thus, the following hypothesis is proposed:

H7: Risk management mediates the relationship between financial inclusion and SME performance.

Based on the explanation given above, the researcher tried to describe this research model as in **Figure 1**.

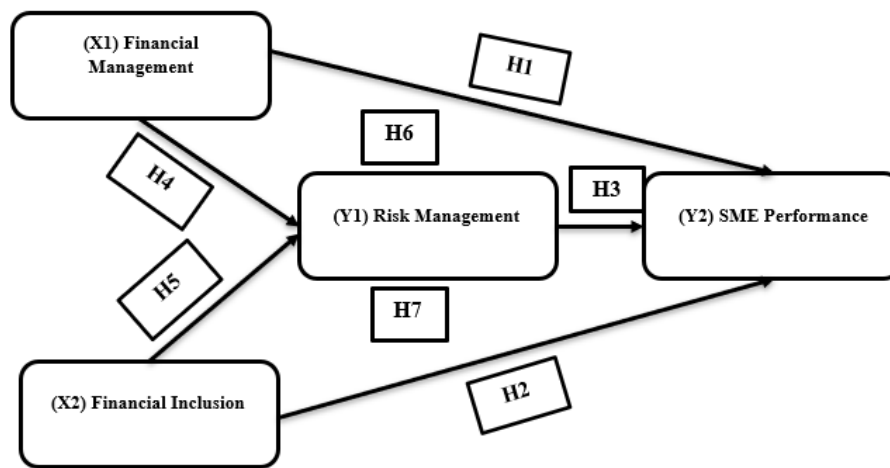


Figure 1. Conceptual Framework

Data Analysis Technique

The data collected from respondents were analyzed using Partial Least Squares–Structural Equation Modeling (PLS-SEM) with SmartPLS version 4 software. The analysis procedure consisted of two stages, namely the evaluation of the measurement model (outer model) and the structural model (inner model).

The measurement model evaluation included convergent validity, discriminant validity, composite reliability, Cronbach's alpha, and Average Variance Extracted (AVE). Indicator loading values above 0.70 and AVE values above 0.50 were considered acceptable indicators of validity and reliability (Ghozali, 2021; Hair et al., 2019; Henseler et al., 2015).

The structural model evaluation included the assessment of path coefficients, coefficient of determination (R^2), effect size (f^2), predictive relevance (Q^2), and hypothesis testing through bootstrapping procedures. Hypotheses were accepted when the T-statistic value exceeded 1.96 and the p-value was lower than 0.05 at the 95% confidence level (Hair et al., 2019).

Measurement Items

Table 2. Measurement Items

Construct	Item Code	Items	References
Financial Management (X1)	X1.1	My business has fairly easy access to additional sources of funding if needed.	(Atmaja & Sinabutar, 2022; Suriani et al., 2024)
	X1.2	My business routinely prepares financial reports that include business income and expenses.	
	X1.3	My business has effective cash management to maintain a balance between income and expenses.	
	X1.4	I create a detailed budget to help manage business finances.	
Financial	X2.1	I feel like I have fairly easy access to the financial	(Anthanasius Fomum &

Inclusion (X2)		services available.	Opperman, 2023; Mishra et al., 2024)
	X2.2	My business has good relationships with financial institutions to support financial needs.	
	X2.3	The financial products and services offered to me are in accordance with my business needs	
	X2.4	The existence of financial services also improves the welfare of the community around my business.	
Risk Management (Y1)	Y1.1	My business has the ability to manage financial risks, such as revenue fluctuations or liquidity issues.	(Huang, 2024; Wiratama & NG, 2021)
	Y1.2	I can ensure the availability of resources needed for smooth business operations.	
	Y1.3	I have taken steps to reduce the risks associated with the quality of the products produced by the business.	
	Y1.4	I have an effective marketing strategy to deal with changing customer needs or preferences.	
SMEs Performance (Y2)	Y2.1	Sales of products offered by SMEs have increased from year to year	(Halik et al., 2026; HALIK et al., 2023; Halik & Halik, 2024)
	Y2.2	SME business capital has increased since the business was founded	
	Y2.3	The number of employees working in my business increases every year	
	Y2.4	There has been a growth in the number of consumers purchasing SME products	

Source: Adapted from previous literature (2026)

RESULTS AND DISCUSSION

Characteristics of participants. This study involved 96 respondents who met the following criteria. The respondents were owners or managers of SMEs engaged in the culinary sector in the city of Makassar. Based on the research results obtained the following results: As many as 58.3% or as many as 56 respondents were female. The remaining 41.7% or as many as 40 respondents were male. Based on the **length of time the business has been running**, of the 96 sample business units, 47.9% or 46 business units have been running their business for more than 10 years. 25% or 24 business units are between 6-10 years old. 20.8% or 20 business units are between 1-5 years old. The remaining 6.25% or 6 business units are under 1 year old.

Based on the amount of turnover per month. Of the 96 sample business units, 4.2% or 4 business units generated a monthly turnover that was classified as small, 16.7% or 16 business units generated a monthly turnover that was classified as medium. The remaining 79.1% or 76 business units generated a monthly turnover that was classified as large. **Based on the total assets owned.** As many as 6.25% or 6 business units have total assets classified as small, 48.95% or 47 business units have assets classified as medium, and 44.79% or 43 business units have assets classified as large. For further clarity, the author presents respondent characteristics data in **Table 3** below.

Table 3. Participant Characteristics (N = 96)

Variable	Frequency	Percentage
Gender		
Male	40	41.70
Female	56	58.30
Length of Business		
More than 10 years	46	47.92
Between 6 – 10 years	24	25.00
Between 1 - 5 years	20	20.83
Under 1 year	6	6.25
Amount turnover / month		
Small	4	4.17
Medium	16	16.67
Large	76	79.16
Total Assets owned		
Small	6	6.25
Medium	47	48.95
Large	43	44.80

Source: Primary Data Processed (2026)

Validity and Reliability Test of each indicator. In this study, the validity concept of each indicator was evaluated using two approaches. The factor loading value for each questionnaire item was tested using the convergent validity test, which is the first technique. The validity of a construct is assessed using the convergent validity value. The general rule (rule of thumb) states that an indicator factor loading value of 0.700 or higher is considered valid (Hair et al., 2019). Factor loading values in the range of 0.500 to 0.600 can still be used when creating new models or indicators (Hair et al., 2021). It can be assumed that all validity indicator items used are valid because all statement items in **Table 4** have factor loading values greater than 0.700.

Table 4. Evaluation of Measurement Models

Construct	Code	Loading Factor	Cronbach's Alpha	CR	AVE
(X1) Financial Management	X1.1	0.889	0.906	0.912	0.780
	X1.2	0.886			
	X1.3	0.927			
	X1.4	0.829			
(X2) Financial Inclusion	X2.1	0.908	0.916	0.925	0.801
	X2.2	0.929			
	X2.3	0.911			
	X2.4	0.828			
(Y1) Risk Management	Y1.1	0.842	0.903	0.908	0.776
	Y1.2	0.855			
	Y1.3	0.930			
	Y1.4	0.894			
(Y2) SMEs Performance	Y2.1	0.863	0.905	0.912	0.778
	Y2.2	0.911			
	Y2.3	0.885			
	Y2.4	0.869			

Source: Primary Data Processed (2026)

The second approach determines the average variance extracted (AVE) value for each variable with the objective to measure discriminant validity. Discriminant validity is said to be good if the AVE value of a variable is equal to or greater than 0.500, in accordance with established criteria (Hair et al., 2019). In **Table 4** it can be seen that the AVE value for all variables includes Financial Management with a value of 0.780, Financial Inclusion shows a value of 0.801, the AVE value for Risk Management is 0.776, and the SMEs Performance variable is 0.778. This confirms that each variable shows good discriminant validity, indicating that they are distinct constructs that effectively measure different aspects of this research.

Table 5. Discriminant Validity with the Fornell and Larcker Approach

Variable	Financial Management	Financial Inclusion	Risk Management	SMEs Performance
(X1) Financial Management	0.883			
(X2) Financial Inclusion	0.361	0.895		
(Y1) Risk Management	0.418	0.606	0.881	
(Y2) SMEs Performance	0.426	0.518	0.720	0.882

Source: Primary Data Processed (2026)

By comparing the correlation value between latent variables with the Average Variance Extracted Square Root (AVE), the discriminant validity can also be verified. The square root value of AVE must be higher than the correlation between latent variables, using the Fornell-Larcker Criterion (Ghozali, 2021). This is shown in **Table 5**, where the square root of AVE is greater than the correlation coefficient between latent variables. As a result, each statement item in the research instrument is reliable and suitable for use as a measuring tool.

After that, we calculated the Cronbach's alpha value for all variables and conducted a composite reliability test to evaluate the credibility of our research instrument. When the Cronbach's alpha value and the composite reliability of the instrument are equal to or higher than 0.700, the instrument is considered reliable (Hair et al., 2019). All research variables—including the composite reliability and Cronbach's alpha value—exceeded this threshold, as shown in **Table 4**. The results presented confirm that each variable used in this study is reliable.

Structural model test. Next, the internal model of this study is measured and its value is indicated by R-square. Initially, we evaluate the R-square value corresponding to each latent endogenous variable. We can better understand how some exogenous latent variables affect endogenous variables and whether this influence is statistically significant by looking at the R-square value of the structural model (Hair et al., 2021). If the value is more than 0.670, then the influence can be said to be very strong/large; if the value is greater than 0.330 but less than 0.670, the influence is moderate; and if the value is above 0.190 but less than 0.330, the influence is weak/small (Hair et al., 2019).

Table 6. R-Square Value

	R-Square	R-Square Adjusted
(Y1) Risk Management	0.413	0.400
(Y2) SMEs Performance	0.545	0.530

Source: Primary Data Processed (2026)

The Risk Management variable has an R-square value of 0.413. According to this R-square value, 41.3 percent of the variability of the Risk Management construct can be determined by the variability of the financial management and financial inclusion constructs, with the remaining variables being explained by factors external to those beneath research. According to (Hair et al., 2021), the model's R-square values are 0.670, 0.330, and 0.190, meaning that it is strong, moderate, and weak. As a result, we can conclude that the influence is **moderate**.

The R-square value of the SME Performance variable is 0.545. With this R-square value, it can be inferred that 54.5 percent of the variation in SME performance can be accounted for by variations in the financial management, financial inclusion, and risk management constructs; the remaining variation is due to factors not included in the analysis. According to (Hair et al., 2019), the R-Square values are 0.670, 0.330, and 0.190, it can be concluded that the model is strong, moderate, and weak. Thus, we can conclude that the influence is **moderate**.

The next step, we calculated the effect size (F-Square). This test determines if the external latent variable has a significant impact on the endogenous latent variable. According to (Ghozali, 2021; Hair et al., 2019; Haryono, 2017), the exogenous latent variable's influence is classified as small if the F-square value is 0.020; moderate if it is 0.150; and large if it is 0.350. The output results are displayed as follows in **Table 7**

Table 7. F-Square Value

Variable	(X1) Financial Management	(X2) Financial Inclusion	(Y1) Risk Management	(Y2) SMEs Performance
(X1) Financial Management			0.078	0.034
(X2) Financial Inclusion			0.406	0.015
(Y1) Risk Management				0.463
(Y2) SMEs Performance				

Source: Primary Data Processed (2026)

From the results above, the following results can be described: The Financial Management variable on Risk Management has an F-square value of 0.078, so its influence is classified as **small/weak**. The Financial Inclusion variable on Risk Management shows an F-square value of 0.406, so its influence is classified as **large/strong**. The risk management variable on SME performance has an F-square value of 0.463, so its influence is classified as **large/strong**. The F-Square value of the financial management variable on SME performance is 0.034, so its influence is classified as **small/weak**. And finally, the financial inclusion variable on SME performance shows an F-square value of 0.015, so its influence is classified as **small/weak**.

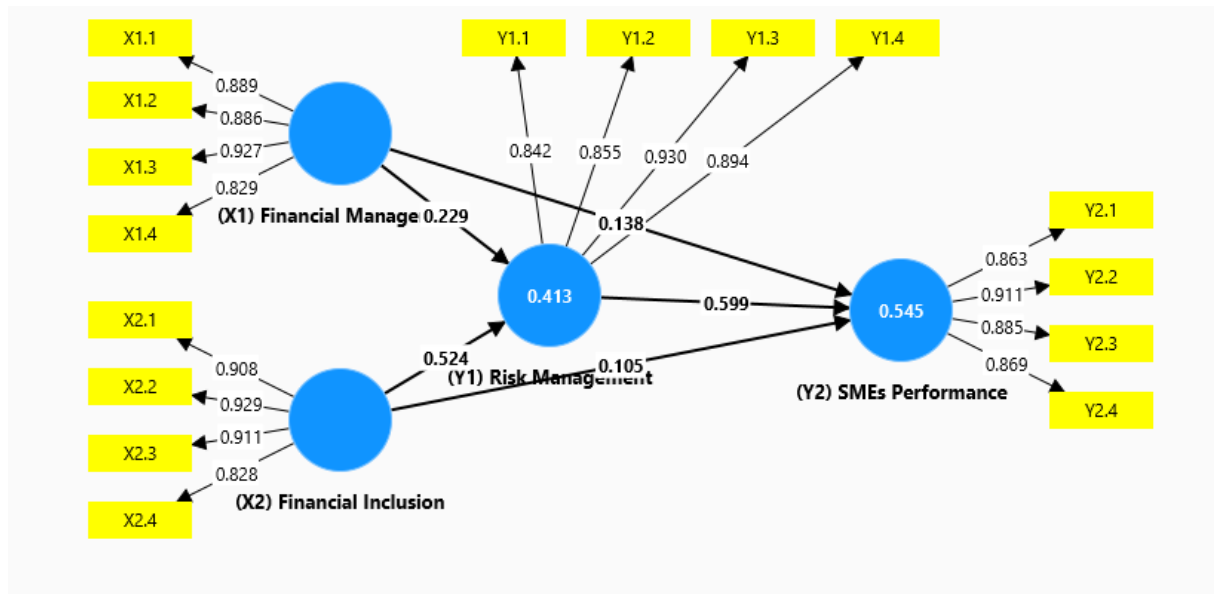
The research model also demonstrates good relevance. The Standardized Root Mean Square Residual (SRMR) value, as seen in Table 7, is 0.052, which is less than the recommended threshold of 0.080 (Hair et al., 2019).

Table 8. Model Fit Result

	Saturated Model	Estimated Model
SRMR	0.052	0.052
d_ULS	0.370	0.370
d_G	0.319	0.319
Chi-square	177.749	177.749
NFI	0.863	0.863

Source: Primary Data Processed (2026)

Figure 2 below shows the path coefficients for the structural equation model.



Source: Smart-PLS 4 output (2026)

Figure 2. Struture Equation Model

Hypothesis testing. The Bootstrapping capability of SmartPLS 4 software is used to conduct hypothesis testing. It is generally recognized in economic and management studies that research should have a significance level of between 5 and 10 percent. If the T-statistic value is more than the minimum requirement of 1.960 and the significance level, represented by the P value, is equal to or less than 0.050, the hypothesis can be considered accepted. This indicates that the exogenous and endogenous variables have a significant impact. Conversely, the influence is considered not significant enough if the P value is more than 0.050 and the T-statistic value is less than 1.960, indicating that the relationship between the exogenous and endogenous variables does not affect each other. (Ghozali, 2021; Hair et al., 2019; Haryono, 2017). Table 9 below shows the results of hypothesis testing from this study.

Table 9. Path Coefficient and Hypotheses Testing

Hypothesis	Relation	Original Sample	Mean	SD	T-Statistics	P-Values	Description
H1	FM → SP	0.138	0.142	0.084	1.634	0.102	Not Supported
H2	FI → SP	0.105	0.103	0.114	0.924	0.355	Not Supported
H3	RM → SP	0.599	0.598	0.110	5.430	0.000	Supported
H4	FM → RM	0.229	0.232	0.100	2.298	0.022	Supported
H5	FI → RM	0.524	0.527	0.089	5.858	0.000	Supported
H6	FM → RM → SP	0.137	0.139	0.067	2.043	0.041	Supported
H7	FI → RM → SP	0.314	0.315	0.078	4.008	0.000	Supported

Note: FM = Financial Management, FI = Financial Inclusion, RM = Risk Management, SP = SMEs Performance.

Source: Primary Data Processed (2026)

The following conclusions can be drawn based on the research findings shown in Table 9: The initial sample value is 0.138, which indicates a positive influence, the P-value is 0.102, greater than 0.050, and the T-statistic value is 1.634, which is below the T threshold. -table of 1,960. This does not support the relationship between Financial Management and SME performance. Therefore, **hypothesis 1** which states that financial management influences SME performance, is **not supported or rejected**.

The results of the second hypothesis that tests the possible relationship between financial inclusion and SME performance are as follows: the initial sample value is 0.105 which indicates a weak influence; the P value of 0.355 is higher than 0.050; and the T-statistic value of 0.924 is lower than the T-table threshold value of 1.960. Thus, it can be concluded that financial inclusion has an insignificant influence on SME performance in Makassar City, which further **refutes Hypothesis 2**.

The initial sample value of 0.599, indicating a positive effect, the P value of 0.000 (less than 0.050), and the T-statistic value of 5.430 (above the T-table threshold of 1.960) all support the relationship between risk management and the success and improvement of SME performance. Thus, **Hypothesis 3** which states that risk management has a significant and positive impact on SME performance is **supported** by the results of the study. It is important to point out that the Risk Management variable has the highest initial sample value of the three independent variables analyzed in this study, at 0.599, or 59.90 percent. According to these results, good risk management will have a significant impact on improving the performance of SMEs in Makassar.

For the fourth hypothesis, a statistical study of the relationship between Financial Management and risk management in hypothesis 4 found that the T-statistic value was 2.298 (exceeding the T-table threshold of 1.960), the P-value was 0.022 (lower than 0.050), and the initial sample value was 0.229 (indicating a positive effect). This shows that Financial Management **supports Hypothesis 4** by providing a positive and significant effect on risk management carried out by SMEs in Makassar City.

Based on statistical analysis, hypothesis 5, which seeks the relationship between financial inclusion and risk management shows a positive influence, as indicated by the original sample value of 0.524. It was found that the T-statistic value was 5.858 (exceeding the T-table threshold of 1.960) and the P-Value value was 0.000 (less than 0.050). This **supports Hypothesis 5** and shows how financial inclusion has a positive and significant impact on the risk management process.

Moderation analysis. This study uses a specific indirect impact method conducted with SmartPLS moderation strategy to examine the moderating role of risk management. The findings of our study are described in the following section.

Based on the results of the analysis of Hypothesis 6, the P value is obtained at 0.041 which is smaller than the significance level of 0.050 and the T-statistic value of the influence of risk management that moderates the influence of Financial Management on the performance of SMEs in Makassar City is 2.043 which is greater than the critical T-table value of 1.960. Based on the results obtained, **Hypothesis 6 is supported** which shows that risk management moderates the relationship between financial management and SME performance.

The results of the study for Hypothesis 7 show that the P-Value produced is 0.000, which is smaller than 0.050, and the T-statistic value of the influence of risk management that moderates the impact of financial inclusion on SME performance is 4.008, exceeding the T-table value of 1.960. This finding confirms **support for Hypothesis 7** by showing that the relationship between financial inclusion and SME performance will be strengthened by the existence of a good risk management process.

DISCUSSION

From the results of direct relationship testing, all previously formulated research hypotheses can be answered well. In addition, this research model effectively explains the important role of several variables on the performance of SMEs in Makassar City, especially those engaged in the culinary sector. Hypothesis analysis shows that financial management does not have a positive and significant effect on the performance of culinary SMEs in Makassar City. Although good financial management can provide various benefits, such as ensuring financial stability through planned cash flow arrangements, so that businesses can meet operational obligations and avoid liquidity problems. In addition, efficient management allows funds to be allocated to priority areas, reduces waste, and supports growth opportunities, such as business expansion or investment in innovation. With organized finances, businesses are also better prepared to face unexpected risks, increasing credibility in the eyes of customers, partners, and investors. In addition, organized financial data facilitates strategic decision-making, making financial management the key to business sustainability and success, but based on the results of this study, this does not necessarily improve the performance of SMEs in the Digital Era. The insignificant influence of Financial Management on SME Performance in the Digital Era in this study may be due to several things. First, many SMEs do not yet have adequate understanding or skills in managing finances, so that the financial management practices carried out are not optimal and do not have a significant impact on business performance. Second, SME performance in the digital era may be more influenced by other factors, such as technology adoption, marketing strategies, or product innovation, which have a more dominant role than financial management. In addition, the limited availability of accurate and complete financial data can also reduce the effectiveness of financial management. Some SMEs have also not maximized the use of digital financial technology (fintech) to support their financial efficiency. In addition, the impact of financial management is often only seen in the long term, while this study may focus on short-

term results. These factors may be the main reasons why the influence of financial management on SME performance is not significant in this study.

Financial inclusion was also found not to have a positive and significant impact on improving the performance of culinary SMEs in Makassar city. Although Financial Inclusion can have a positive impact on the wider community such as easy access to financial services, such as savings, loans, or digital payments, SMEs can manage their finances more efficiently, support operations, and accelerate business growth. In addition, financial inclusion allows SMEs to obtain capital more easily, so they can innovate, expand their business, or improve the quality of products and services. For the community, financial inclusion helps improve welfare by providing access to financial instruments that enable better financial planning, including investment or insurance. Overall, financial inclusion strengthens the economy by encouraging inclusivity, increasing purchasing power, and opening up opportunities to improve living standards, but based on the results of this study, this does not necessarily improve the performance of SMEs in the Digital Era. The insignificant effect of Financial Management on SME Performance in the Digital Era in this study can be caused by several factors. First, although SMEs have access to financial services, such as loans or digital payments, not all business actors use them optimally to increase productivity or operational efficiency. Second, financial inclusion may not yet be a primary need for some SMEs, especially for small-scale businesses or those that still rely on traditional methods in managing their businesses. In addition, the lack of understanding of the benefits of modern financial services, such as financial technology (fintech), can hinder SMEs from maximizing the potential offered by financial inclusion. On the other hand, SME performance may be more influenced by other factors, such as product innovation, marketing strategy, or technology adoption, so that the influence of financial inclusion becomes less visible. These factors may be the main reasons why the influence of Financial Inclusion on SME performance is not significant in this study.

From this study, it was found that the Risk Management process has a positive and significant impact on improving the performance of SMEs in the city of Makassar. The results of the direct influence study indicate that Risk Management is a variable that has a major influence on the development of SMEs in the future. The coefficient value found is positive, meaning that the influence is positive, namely that the increase in the Risk Management process will go hand in hand with the increase in the performance of culinary SMEs in Makassar City. We summarize some of the important reasons for risk management for the future development of SMEs. SMEs often face risks such as income fluctuations, liquidity problems, and financial instability. With risk management, it helps identify and anticipate these threats so that SMEs can be better prepared to face them. Through a structured approach, SMEs can manage operational risks associated with product quality, changing market preferences, or supply chain disruptions. Furthermore, with the implementation of good risk management, SMEs demonstrate professionalism that can increase trust from investors, partners, and customers. Thus, SMEs that have a mature risk management system can be more flexible in dealing with regulatory changes, digitalization trends, and market dynamics. Amidst digital transformation, technology-related risks, such as cyberattacks or system failures, become more relevant. Risk management helps SMEs adopt technology with a safer and more efficient approach.

Financial management shows a positive and significant influence on the risk management process carried out by SMEs. The risk management process carried out by SMEs in Makassar city needs to be started by knowing good financial management for their business. This can mean that the better the financial management, such as cash flow management, regular financial records, and effective budget planning, the ability of SMEs to identify, analyze, and manage risks will also increase. This relationship is statistically proven and can be trusted as one of the important factors that influence risk management. With good financial management, SMEs can create a budget that supports the identification and mitigation of financial risks. This planning includes a reserve fund to deal with emergencies such as income fluctuations or market changes. In addition, a structured budget helps SMEs allocate resources to strategic needs, including risk management training. In relation to accurate financial recording and monitoring, a good financial recording system provides the data needed to identify risk patterns or trends, such as overspending or cash flow discrepancies. With clear data obtained, SMEs can analyze potential threats and take corrective action early. It is important to note that efficient cash management also ensures that funds are available to finance risk mitigation measures, such as purchasing insurance or training staff. Also, well-structured financial data helps in assessing the potential impact of risks on the business, so that risk management can be more focused. With a budget based on valid financial data, SMEs can prioritize the most pressing risks to address. For example, risks related to product quality or changing customer preferences can be addressed by investing in technology or training.

Based on the research results, it is known that Financial Inclusion also has a positive and significant influence on Risk Management. This can be interpreted that the better access SMEs have to financial services,

such as banking, loans, digital payments, or financial technology (fintech), the better their ability to manage risk. With adequate financial inclusion, SMEs can more easily obtain the financial resources needed to face uncertainty, reduce vulnerability to liquidity risk, and plan risk mitigation strategies more effectively. This significant relationship shows that financial inclusion is an important factor in strengthening risk management in today's digital business environment. Financial inclusion enables SMEs to gain access to a range of formal financial products and services, such as credit, savings, insurance, and digital payments. This access helps SMEs reduce financial risk by providing a stable source of funds, especially when facing a crisis or urgent capital needs. In addition, financial services available today such as digital payments and business accounts help SMEs manage cash flow more transparently and efficiently. This transparency allows SMEs to detect potential financial risks early and take mitigation measures. With access to formal loans, SMEs can reduce their dependence on informal sources of financing that tend to be high-risk, such as high-interest loans from loan sharks. Better financial stability enables SMEs to face risks such as fluctuating income or increasing operational costs.

The sixth hypothesis which seeks the relationship between financial management and SME performance through the risk management process is also answered in this study. Based on the research results, it was found that financial management has a positive and significant effect on SME Performance in the Digital Era through the mediating role of risk management. Good financial management can improve the performance of SMEs in the digital era, but the effect occurs through the role of risk management as a mediator. In other words, financial management does not directly improve the performance of SMEs, but rather through improving risk management capabilities first. Based on empirical facts that the author found in the field, financial management helps SMEs manage risks better, such as dealing with income fluctuations or liquidity problems, and this risk management capability directly contributes to improving business performance. Facts on the ground, many SMEs that record and manage finances well can be better prepared to face challenges, such as digital market competition or changes in customer demand. With effective risk management, they can maintain operational stability, avoid major losses, and take advantage of business opportunities optimally, so that their business performance increases. Risk management is a critical link between financial management and SME performance by minimizing risks such as revenue fluctuations or unexpected expenses through financial data-driven mitigation strategies. Risk management can help SMEs avoid operational disruptions that could impact revenue.

Finally, to answer hypothesis 7, based on the research results, it was found that financial management has a positive and significant effect on SME Performance in the Digital Era through the risk management mediation process. This means that financial inclusion that provides easy access for SMEs to financial services such as loans, digital payments, or savings, can improve SME performance in the digital era, but its influence occurs through the role of risk management. In other words, access to financial services helps SMEs manage business risks, such as liquidity risk or income fluctuations, and success in risk management is what then has an impact on improving business performance. Based on empirical facts that the author found in the field, SMEs that have good access to financial services are better able to secure working capital, utilize digital payment technology for efficiency, and build reserves to deal with unexpected conditions. With this ability, they are better prepared to manage risks, for example maintaining stable cash flow despite changes in the market. Ultimately, with controlled risks, SMEs can operate more efficiently, maintain service quality, and seize opportunities in the digital era, all of which contribute to improving business performance.

CONCLUSION

This study reveals the complex relationship between financial management, financial inclusion, management risk, and the performance of SMEs in Makassar, especially in the culinary sector, in facing the digital era. Although financial management plays an important role in maintaining the stability and efficiency of SME finances, the results of the study show that financial management does not have a significant direct effect on SME performance. However, its impact becomes significant when mediated by risk management. This indicates that good financial management needs to be combined with risk mitigation processes to support business growth effectively. Access to formal financial services, such as credit, insurance, and digital payments, does not directly contribute significantly to SME performance. Many SMEs have not fully utilized these financial facilities to improve their productivity or operational efficiency. However, like financial management, financial inclusion contributes positively to SME performance through its mediating role in risk management. Risk management is proven to be the most significant variable in improving SME performance, with an influence coefficient of 0.599. The risk management process helps SMEs identify, evaluate, and manage various types of risks, such as financial, operational, product, and marketing risks. With a structured approach, risk management increases SMEs' resilience to uncertainty and strengthens their competitiveness in

the market. This study provides theoretical contributions by explaining the mediating role of risk management in the relationship between financial management, financial inclusion, and SME performance. Practically, this study provides strategic guidance for SME actors, government, and financial institutions to create more resilient, competitive, and innovative SMEs in the digital era. In conclusion, this study highlights the importance of risk management as a key element in supporting the success of SMEs, especially in the culinary sector in Makassar. With good financial management and adequate access to formal financial services, SMEs can optimize their performance through the implementation of effective risk mitigation strategies.

Limitations and Suggestions for Further Research. Despite the results obtained, we realize that this study still has several limitations that pave the way for future research. **First**, this study is limited to Makassar and focuses on SMEs in the culinary sector. This means that more in-depth research is needed on SMEs in general that are relevant to this topic. **Second**, this study uses a cross-sectional approach, which captures data at a single point in time. This limits the ability to infer causal relationships or observe the long-term impact of financial management, financial inclusion, and risk management on SME performance. Longitudinal research is needed to better understand the causal relationships and long-term effects of financial management, financial inclusion, and risk management on SME performance. **Third**, reliance on self-reported data by SME owners/managers introduces potential bias, such as over- or underestimation of risk management practices and performance outcomes. **Fourth**, there are still many other influential factors such as technology adoption, government policies, or competitive dynamics that are not included in the model, which can provide a more comprehensive understanding of SME performance in the digital era. Further research could explore the role of technology adoption, innovation, and regulatory framework as moderating or mediating variables in the relationship between financial practices and SME performance. **Finally**, further research could investigate the role of government support and financial literacy programs in enhancing the adoption of risk management practices and improving SME outcomes in the digital era.

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