

Financial Risk, Managerial Capability, and MSME Business Resilience in an Era of Economic Uncertainty

Irwan Moridu*, Nurcahya Hartaty Posumah, and Fitriani
Universitas Muhammadiyah Luwuk, Banggai, 94715, Indonesia

ABSTRACT

Purpose – This study examines how perceived financial risk and managerial capability are associated with MSME business resilience under economic uncertainty. Business resilience is defined as the capacity to anticipate, absorb, adapt to, and recover from disruption.

Methodology – A quantitative nationwide online survey was conducted in Indonesia. Google Forms questionnaires were distributed through a third-party respondent panel platform to eligible MSME owners and managers. The final sample comprised 200 valid responses and was analyzed using Structural Equation Modeling–Partial Least Squares (SEM-PLS).

Finding/Results – Perceived financial risk was negatively associated with business resilience, whereas managerial capability was positively associated with it. Managerial capability showed the stronger standardized association within the specified model, which explained 86.2% of the variance in business resilience. These results are interpreted cautiously because the data are cross-sectional and self-reported.

Originality/Value – Rather than claiming new direct relationships, this study offers an integrated dual-mechanism explanation of MSME resilience: financial vulnerability constrains the resources available for responding to disruption, while managerial capability supports the sensing, coordination, and reconfiguration of those resources. Its contribution is the joint assessment of these mechanisms and their relative statistical associations within one model.

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*Corresponding Author at: Irwan Moridu

Department Of Management, Economic and Business, Muhammadiyah University of Luwuk, Banggai, 94715, Indonesia.

Email address: irwanmoridu@gmail.com(author#1), nurcahyahartatyp@gmail.com(author#2), nengfitry6@gmail.com(author #3)

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1. Introduction

Micro, Small, and Medium Enterprises (MSMEs) contribute to employment, income generation, and local economic activity, yet their limited financial and organizational buffers make them especially exposed to disruption. Their resilience therefore depends not only on whether they encounter pressure, but also on how effectively they interpret and respond to it (Eggers, 2020; Kotsios, 2023; Linnenluecke, 2017; Saad et al., 2021; Sullivan-Taylor & Branicki, 2011).

Economic uncertainty intensifies this challenge through shifts in demand, input costs, inflation, supply-chain conditions, and access to finance. For MSMEs, even a temporary disturbance can quickly affect working capital and essential operations because resources are often concentrated in a small number of customers, suppliers, and financing sources (Battisti et al., 2019; Eggers, 2020; Herbane, 2018; Pal et al., 2014)

Perceived financial risk captures the extent to which owners or managers experience unstable cash flow, liquidity pressure, difficulty meeting financial obligations, and revenue uncertainty. When these pressures rise, firms have less room to absorb shocks, maintain operations, or finance adaptive responses (Bugarová et al., 2023).

Managerial capability represents a different side of the resilience problem. It concerns the capacity to plan, make timely decisions, allocate resources, coordinate operations, and solve problems under changing conditions. These capabilities help MSMEs recognize emerging threats and opportunities and reorganize scarce resources when routine responses are no longer sufficient (Kotsios, 2023; Martinelli et al., 2018; Matarazzo et al., 2021; Ozanne et al., 2022; Teece, 2007).

Previous research has established that financial constraints can weaken small-firm resilience and that managerial capabilities can strengthen adaptation. The remaining issue is therefore not whether either relationship exists in isolation, but how a vulnerability mechanism and a response-capability mechanism operate together within the same MSME resilience model (Branicki et al., 2018; Duchek, 2020; Eggers, 2020; Herbane, 2018; Korber & McNaughton, 2018). This distinction matters because businesses facing comparable financial pressure may respond differently. Some firms experience operational decline, whereas others preserve essential activities by changing priorities, reallocating resources, or finding alternative markets. Such variation suggests that resilience cannot be understood only from the level of exposure; the organizational capacity to act on that exposure must also be considered.

The study is positioned at the intersection of risk management theory, the Resource-Based View, and dynamic capability theory. Risk management theory explains how financial exposure depletes liquidity and strategic flexibility. The Resource-Based View identifies managerial capability as an internally controlled and difficult-to-imitate resource, while dynamic capability theory explains how that resource supports sensing, seizing, and reconfiguring responses (Barney, 1991; Teece, 2007; Teece et al., 1997).

The theoretical contribution is framed as a dual-mechanism explanation rather than the discovery of two new direct relationships. The vulnerability mechanism describes how financial pressure restricts the response options available to an MSME, whereas the capability mechanism describes how owners and managers mobilize and reorganize the resources that remain. Their integration provides a more complete explanation of resilience than either perspective offers alone.

The study also examines the relative statistical pattern of these mechanisms. A stronger standardized association for managerial capability would indicate that response capacity

accounts for more variance in resilience within the specified model, not that managerial capability is universally or causally more important than financial risk. This boundary is important because the two constructs represent conceptually different phenomena.

Accordingly, the study aims to examine the association between perceived financial risk and MSME business resilience, examine the association between managerial capability and business resilience, and compare the relative standardized associations of the two predictors within the proposed model.

Based on the vulnerability perspective, higher perceived financial risk should correspond with lower resilience because it restricts liquidity, working-capital flexibility, and shock-absorption capacity. Based on the Resource-Based View and dynamic capability perspective, stronger managerial capability should correspond with higher resilience because it supports sensing, timely decision-making, stakeholder coordination, and resource reconfiguration.

2. Literature Review & Hypothesis Development

2.1 Business Resilience

Business resilience refers to an organization's process-oriented capacity to anticipate disruption, absorb its immediate effects, adapt its activities, and recover or renew after adversity. In this study, the construct is reflected in market adaptability, operational flexibility, continuity of essential activities during disruption, speed of response, and recovery capacity (Burnard & Bhamra, 2011; Conz & Magnani, 2019; Duchek, 2020; Linnenluecke, 2017; Saad et al., 2021).

Business resilience is related to, but distinct from, business continuity and business sustainability. Business continuity focuses more narrowly on maintaining or restoring critical operations, whereas sustainability concerns the long-term maintenance of economic, social, and environmental performance. Continuity may be one observable expression of resilience, and resilience may support longer-term sustainability, but the concepts should not be used interchangeably (Marchese et al., 2018; Ortiz-de-Mandojana & Bansal, 2016).

Business resilience is the appropriate dependent variable because the research question concerns how MSMEs respond to economic disruption, rather than whether they achieve long-term triple-bottom-line outcomes. The indicators therefore capture anticipation, coping, adaptation, and recovery. Sustainability is not measured in this study, and references to it are limited to possible longer-term implications rather than treated as an equivalent outcome (Conz & Magnani, 2019; Duchek, 2020).

A capability-based view treats resilience as a dynamic process. Anticipation involves recognizing and preparing for threats, coping involves preserving essential functions during disruption, and adaptation involves learning and reconfiguring resources after conditions change. For MSMEs, these stages depend on both the financial room to respond and the managerial capacity to coordinate a response with limited resources (Ates & Bititci, 2011; Pal et al., 2014).

2.2 Financial Risk

In this study, perceived financial risk refers to the owner or manager's assessment of exposure to cash-flow instability, liquidity pressure, difficulty meeting financial obligations, and revenue uncertainty. These conditions indicate reduced financial room for maintaining operations and responding to unexpected change.

Financial risk is especially consequential for MSMEs because their financing sources, working-capital reserves, and revenue streams are often limited. A shortfall that might be temporary

for a larger firm can quickly restrict purchasing, staffing, debt service, or other essential activities in a smaller business (Buganová et al., 2023; Eggers, 2020).

Risk management theory explains the relationship through a resource-depletion mechanism. Cash-flow volatility reduces immediately available funds, liquidity shortages constrain working capital, debt-service pressure narrows strategic choices, and unstable revenue discourages investment in adaptation. Higher perceived financial risk is therefore expected to be associated with a weaker capacity to absorb and recover from disruption (Ambulkar et al., 2015; Buganová et al., 2023; Pal et al., 2014).

2.3 Managerial Capability

Managerial capability is conceptually multidimensional, encompassing strategic planning, environmental interpretation, decision-making, resource allocation, operational coordination, and problem solving. These activities collectively shape how owners and managers translate information into organized action under uncertain conditions (Kotsios, 2023; Teece, 2007).

From the Resource-Based View, managerial capability is an intangible internal resource whose value lies in improving the use of other resources. Dynamic capability theory clarifies its process: planning and environmental interpretation support sensing, timely decisions and resource allocation support seizing, and coordination and problem solving support reconfiguring. These dimensions help MSMEs adjust more deliberately rather than merely react to disruption (Barney, 1991; Martinelli et al., 2018; Matarazzo et al., 2021; Ozanne et al., 2022; Teece, 2007; Teece et al., 1997).

The present study treats these activities as manifestations of an overall managerial capability because the research question concerns the owner-manager's general capacity to direct the business under uncertainty. This approach is parsimonious, but it does not imply that sensing, seizing, and reconfiguring are identical. A hierarchical specification would require several indicators for each lower-order dimension and is recommended for future research.

2.4 Hypothesis Development

The proposed model combines two complementary explanations of resilience. Financial risk represents a constraining condition that reduces the resources and discretion available for coping with disruption, while managerial capability represents the capacity to interpret change and organize a response. The model does not assume that one mechanism replaces the other.

Based on the vulnerability perspective, higher perceived financial risk is expected to be associated with lower resilience because it reduces liquidity, working-capital flexibility, and the capacity to absorb shocks. Based on the Resource-Based View and dynamic capability perspective, stronger managerial capability is expected to be associated with higher resilience because it supports opportunity recognition, crisis decision-making, stakeholder coordination, and resource reconfiguration.

H1: Financial Risk is negatively associated with MSME Business Resilience.

H2: Managerial Capability is positively associated with MSME Business Resilience.

3. Methodology

This study used a quantitative, explanatory, cross-sectional design to examine the associations of perceived financial risk and managerial capability with MSME business resilience. The structural model was estimated with Structural Equation Modeling–Partial Least Squares (SEM-PLS) in SmartPLS because the study emphasized prediction and the simultaneous assessment of latent constructs measured by multiple indicators (Hair et al., 2019)

The target population comprised owners and managers of active MSMEs across Indonesia. Because a complete national sampling frame was unavailable, the operational sampling pool consisted of eligible members registered with a third-party respondent panel platform. Respondents had to be directly involved in business management, have operated the business for at least two years, and have experienced economic changes affecting business operations. Data were collected nationally over a six-month period using a Google Forms questionnaire. The respondent platform randomly distributed survey invitations among panel members who met the screening criteria; however, the overall design remains purposive non-probability sampling because selection occurred within a self-enrolled online panel rather than from the full population of Indonesian MSMEs. After eligibility and completeness checks, 200 responses were retained. The platform records available to the authors did not preserve the total number of invitations, a province-level sampling frame, or sector classifications, so a conventional response rate and proportional representation by region or industry could not be established. The research instrument used a structured five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Perceived Financial Risk was measured through cash-flow instability, liquidity pressure, difficulty meeting financial obligations, and revenue instability. Managerial Capability covered planning, timely decision-making, resource allocation, operational coordination, and problem solving. Business Resilience covered adaptability, flexibility, continuity of essential operations during disruption, speed of response, and recovery.

The items were developed from the conceptual dimensions in the cited literature and reviewed for content relevance by academics and MSME practitioners; they were not copied verbatim from one published scale. The complete item content and conceptual basis are presented in Table 1 to improve transparency and replicability.

Perceptual measures were selected for Financial Risk because the national sample included heterogeneous MSMEs with uneven bookkeeping practices, and comparable audited ratios were not consistently available. Perceptions are also relevant because owners act on the financial constraints they recognize when making operating decisions. Nevertheless, these measures represent experienced financial vulnerability rather than verified leverage, liquidity, or profitability ratios and may be influenced by managerial optimism, pessimism, or recall bias. This limitation is considered when interpreting the results.

Table 1. Construct Operationalization and Indicator Content

Code	Indicator content	Construct	Conceptual basis
FR1	The business experiences unstable cash inflows and outflows.	Financial Risk	Buganová et al. (2023)
FR2	The business experiences pressure in maintaining adequate liquidity.	Financial Risk	Buganová et al. (2023)
FR3	The business faces difficulty in meeting financial obligations when due.	Financial Risk	Buganová et al. (2023)

Code	Indicator content	Construct	Conceptual basis
FR4	The business experiences instability in sales or operating revenue.	Financial Risk	Eggers (2020); Buganová et al. (2023)
MC1	The owner or manager prepares clear strategic and operational plans.	Managerial Capability	Teece (2007); Kotsios (2023)
MC2	The owner or manager makes timely and appropriate business decisions.	Managerial Capability	Teece (2007); Kotsios (2023)
MC3	The owner or manager allocates financial, human, and operational resources effectively.	Managerial Capability	Barney (1991); Teece (2007)
MC4	The owner or manager coordinates daily business activities effectively.	Managerial Capability	Kotsios (2023)
MC5	The owner or manager solves business problems effectively under changing conditions.	Managerial Capability	Teece (2007); Kotsios (2023)
BR1	The business can adapt to changes in the market and economic environment.	Business Resilience	Duchek (2020)
BR2	The business can adjust its operations flexibly when disruption occurs.	Business Resilience	Conz and Magnani (2020)
BR3	The business can maintain essential operations during difficult conditions.	Business Resilience	Williams et al. (2017)
BR4	The business can respond rapidly to important environmental changes.	Business Resilience	Duchek (2020)

Code	Indicator content	Construct	Conceptual basis
BR5	The business can recover after operational or economic disruption.	Business Resilience	Duchek (2020); Conz and Magnani (2020)

Perceived Financial Risk and Business Resilience were specified as reflective constructs because their indicators were treated as correlated manifestations of an underlying condition. Managerial Capability was also modeled as a first-order reflective construct because the five items were intended to reflect the owner-manager's overall capacity to direct the business. A higher-order model was not estimated because each sensing, seizing, and reconfiguring dimension was represented by only one or two items rather than a complete multi-item lower-order scale. The specification is therefore a parsimonious operational choice, not a claim that the dimensions are conceptually indistinguishable (Diamantopoulos & Siguaw, 2006; Shmueli et al., 2019).

Because all constructs were reported by the same respondent at one point in time, common method variance was assessed with several diagnostics. Harman's unrotated single-factor analysis showed that the first factor explained 52.901% of total indicator variance, while a one-factor maximum-likelihood model produced an SRMR of 0.259. A supplementary full-collinearity assessment, calculated by regressing each SmartPLS latent-variable score on the remaining latent variables, produced VIF values of 3.498 for Financial Risk, 4.648 for Managerial Capability, and 7.254 for Business Resilience. Because these values exceed the conservative 3.3 reference, method variance and conceptual overlap cannot be dismissed (Kock, 2015). A measured marker-variable test or common latent factor model could not be added retrospectively because the questionnaire did not include a theoretically unrelated marker or a pre-specified method factor. These diagnostics are treated as sensitivity evidence, and the high R^2 and path estimates are interpreted cautiously rather than as proof of model superiority.

Data collection began with indicator development and content review, followed by online distribution to eligible panel members. Responses were screened, coded, and cleaned before analysis. The measurement model assessment included outer loadings, internal consistency, AVE, Fornell-Larcker, HTMT, and cross-loadings. The structural assessment included R^2 , f^2 , predictor VIF, bootstrapped confidence intervals with 5,000 subsamples, Q^2 using an omission distance of seven, and a repeated 10-fold predictive assessment comparing PLS-SEM prediction errors with a linear-model benchmark.

HTMT values below 0.90 were used as evidence of discriminant validity, predictor VIF values below 3 or 5 indicated that vertical collinearity was not critical, and Q^2 values above zero indicated predictive relevance. PLSpredict performance was evaluated by comparing indicator-level PLS-SEM RMSE values with the linear-model benchmark. Full-collinearity VIF was used only as a supplementary common-method and conceptual-overlap diagnostic, for which values above 3.3 warrant caution rather than constituting definitive proof of bias (Hair et al., 2019; Henseler et al., 2015; Kock, 2015; Shmueli et al., 2019).

4. Results and Discussion

4.1 Result

Table 2. Respondent Characteristics

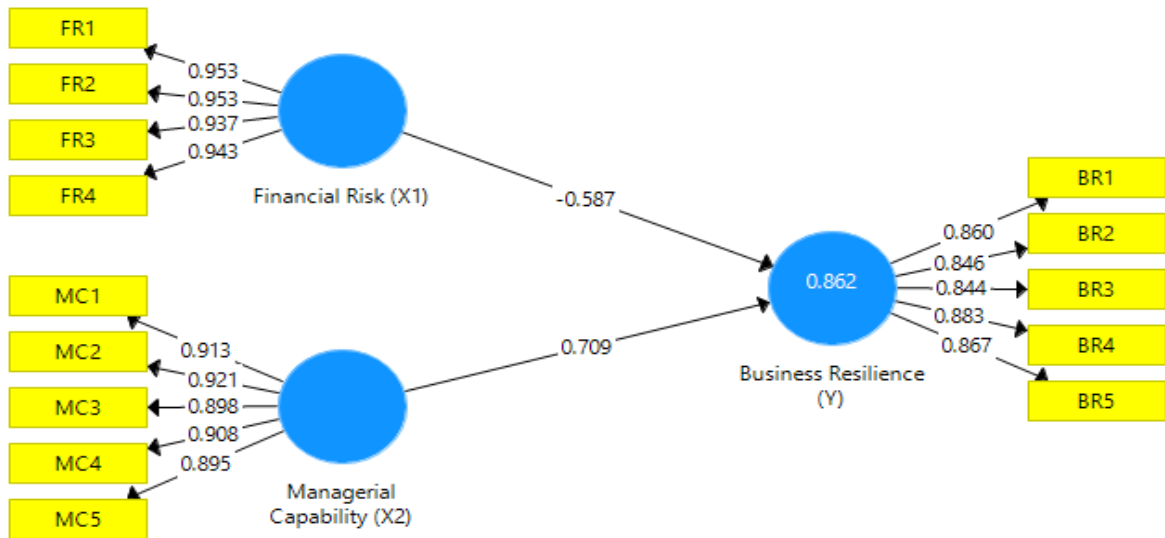
Characteristics	Category	Frequency	Percentage (%)
Gender	Man	105	52.5
	Woman	95	47.5
Age	23–30 Years	56	28.0
	31–40 Years	43	21.5
	41–50 Years	48	24.0
	>50 Years	53	26.5
Education	High School/Equivalent	45	22.5
	Diploma	49	24.5
	Bachelor	60	30.0
	Postgraduate	46	23.0
Length of Business	2–5 Years	63	31.5
	6–10 Years	68	34.0
	>10 Years	69	34.5
Employment-size band	1–4 employees	75	37.5
	5–19 employees	58	29.0
	20–99 employees	67	33.5
Monthly Turnover	< Rp. 25 million	46	23.0
	Rp. 25–100 million	51	25.5
	Rp. 101–500 million	54	27.0
	> Rp. 500 million	49	24.5

Source: Processed item-level dataset supplied by the authors (2026)

The respondent dataset contains 105 men (52.5%) and 95 women (47.5%). The largest age category is 23–30 years with 56 respondents (28.0%), followed by respondents older than 50 years with 53 (26.5%), those aged 41–50 years with 48 (24.0%), and those aged 31–40 years with 43 (21.5%). The distribution indicates that the sample covers both younger and more experienced MSME owners and managers.

Bachelor's degree holders account for 60 respondents (30.0%), diploma graduates for 49 (24.5%), postgraduate graduates for 46 (23.0%), and high-school graduates for 45 (22.5%). Business duration is relatively balanced: 63 firms (31.5%) had operated for 2–5 years, 68 (34.0%) for 6–10 years, and 69 (34.5%) for more than 10 years. The workforce-size bands contain 75 firms (37.5%) with 1–4 employees, 58 (29.0%) with 5–19 employees, and 67 (33.5%) with 20–99 employees.

Figure 1. Research Model Results of PLS Algorithm



The PLS algorithm produced a path coefficient of -0.587 for Perceived Financial Risk and 0.709 for Managerial Capability in relation to Business Resilience. The R^2 value of 0.862 indicates that the two predictors jointly account for 86.2% of the observed variance in the endogenous construct within this sample. The coefficients describe model-based associations and should not be interpreted as temporal causal effects.

Table 3. Outer Loading Results

Indicator	Loading Factor
FR1	0.953
FR2	0.953
FR3	0.937
FR4	0.943
MC1	0.913
MC2	0.921
MC3	0.898
MC4	0.908
MC5	0.895
BR1	0.860
BR2	0.846
BR3	0.844
BR4	0.883
BR5	0.867

Source: SmartPLS Output (2026)

The outer loadings for Financial Risk range from 0.937 to 0.953. FR1 has the highest loading (0.953), closely followed by FR2 (0.953), while FR3 has the lowest (0.937). Managerial Capability loadings range from 0.895 to 0.921. MC2 has the highest loading (0.921), whereas MC5 has the lowest (0.895). All values exceed the recommended threshold, indicating strong indicator reliability.

The Business Resilience construct has an outer loading value between 0.844 and 0.883. Indicator BR4 shows the largest contribution with a loading value of 0.883, while BR3 has the lowest loading value of 0.844. All indicators in the three variables obtained values above the minimum required limit, so no indicators were eliminated from the research model. This condition indicates that each indicator is able to adequately explain the latent variables.

Table 4. Construct Reliability and Validity

Variables	Cronbach's Alpha	Composite Reliability	AVE
Financial Risk	0.961	0.972	0.896
Managerial Capability	0.946	0.959	0.823
Business Resilience	0.912	0.934	0.740

Source: SmartPLS Output (2026)

Reliability testing showed that all constructs had excellent internal consistency. Financial Risk obtained a Cronbach's Alpha value of 0.961 and a Composite Reliability of 0.972. Managerial Capability obtained a Cronbach's Alpha value of 0.946 and a Composite Reliability of 0.959. Business Resilience obtained a Cronbach's Alpha value of 0.912 and a Composite Reliability of 0.934. These values indicate a high level of instrument reliability in measuring each research construct.

The convergent validity test results show that all constructs have high Average Variance Extracted (AVE) values. Financial Risk obtained an AVE value of 0.896, Managerial Capability 0.823, and Business Resilience 0.740. The high AVE values indicate that most of the indicator variance is successfully explained by the constructed constructs. These findings indicate that the research instrument has good measurement quality and is able to capture relevant information from each variable.

Table 5. Discriminant Validity (Fornell-Larcker Criterion)

Variables	BR	FR	MC
Business Resilience (BR)	0.860		
Financial Risk (FR)	-0.600	0.947	
Managerial Capability (MC)	0.720	-0.018	0.907

Source: SmartPLS Output (2026)

The results of the discriminant validity test show that the square root of the AVE value for each construct is greater than the correlation with other constructs. Business Resilience has a square root of AVE of 0.860, while its correlation with Financial Risk is -0.600 and with Managerial Capability is 0.720. Financial Risk has a square root of AVE of 0.947, which is higher than the relationship with other constructs in the model.

Managerial Capability achieved a square root of AVE of 0.907, higher than its correlation with Business Resilience and Financial Risk. This pattern indicates that each construct has distinct characteristics and is better able to explain its own indicators than the indicators of other constructs. These results demonstrate a clear separation of constructs within the research model.

Table 6. Heterotrait-Monotrait Ratio (HTMT)

Variables	BR	FR	MC
Business Resilience (BR)	-	0.640	0.774
Financial Risk (FR)		-	0.031

Variables	BR	FR	MC
Managerial Capability (MC)			-

Source: SmartPLS Output (2026)

The HTMT ratios were 0.640 for Business Resilience–Financial Risk, 0.774 for Business Resilience–Managerial Capability, and 0.031 for Financial Risk–Managerial Capability. All values were below 0.90, supporting empirical distinctness among the constructs. The full indicator cross-loading matrix is reported in Appendix A as an additional transparency check (Henseler et al., 2015).

Table 7. Inner Model Test Results

Endogenous variable	R ²	R ² Adjusted	Q ²
Business Resilience	0.862	0.861	0.627
Relationship	f²	Inner VIF	Interpretation
Financial Risk → Business Resilience	2.497	1.000	Model-specific; interpret cautiously
Managerial Capability → Business Resilience	3.647	1.000	Model-specific; interpret cautiously

Source: SmartPLS Output (2026)

The R² value of 0.862 indicates exceptionally high in-sample explanatory power for a two-predictor behavioral model. It is therefore evaluated together with predictive tests, collinearity diagnostics, measurement overlap, and common-method evidence. The value should not be treated as independent proof of validity or as evidence that the model will explain the same proportion of variance in another sample.

The f² values were 2.497 for Financial Risk and 3.647 for Managerial Capability. These are unusually large model-specific contributions to explained variance. Although the larger value for Managerial Capability is consistent with its larger standardized coefficient, direct substantive ranking remains limited because Financial Risk and Managerial Capability represent different theoretical phenomena. The comparison therefore indicates a stronger statistical association within this model, not universal managerial importance or causal priority.

Blindfolding with an omission distance of seven produced a Q² value of 0.627 for Business Resilience. In the repeated 10-fold predictive assessment, the five Business Resilience indicators showed lower PLS-SEM RMSE values than the linear-model benchmark, with Q²predict values ranging from 0.609 to 0.666. This pattern supports predictive relevance, although the margins over the benchmark were modest and do not remove the concerns raised by common-method diagnostics.

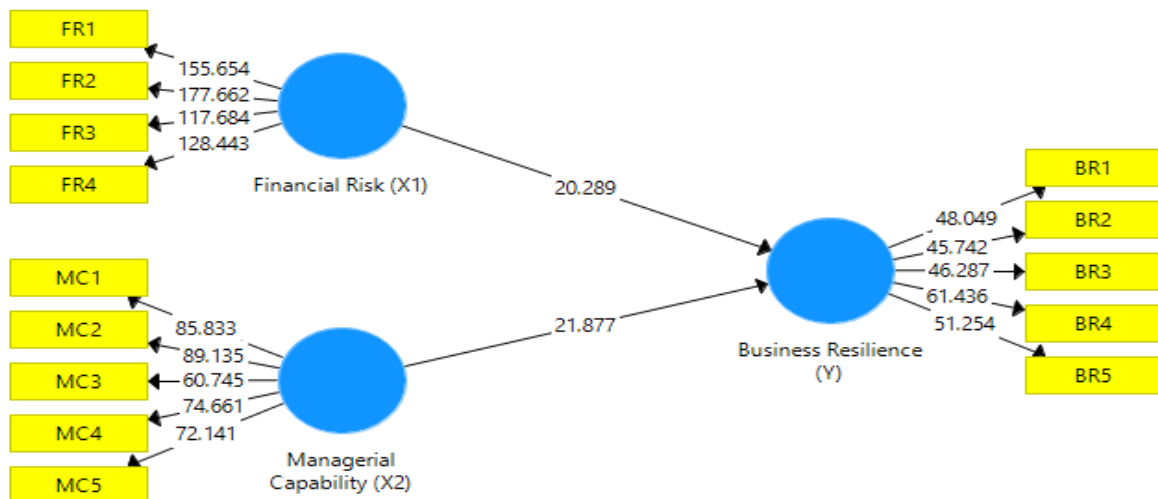
Table 8. Additional Diagnostic and Predictive Validity Tests

Diagnostic	Reported result	Criterion	Conclusion
Inner VIF	1.000 for both predictors	< 3.0 or < 5.0	No critical predictor collinearity

Diagnostic	Reported result	Criterion	Conclusion
Common method bias test	First factor = 52.901%; one-factor SRMR = 0.259	First factor < 50%; acceptable SRMR < 0.08	Potential method variance cannot be ruled out; single-factor fit is inadequate
Q ²	0.627	> 0	Predictive relevance established
PLSpredict	PLS RMSE lower than LM for 5 of 5 BR indicators; Q ² predict = 0.609–0.666	PLS errors compared with LM benchmark	High predictive power by indicator-level rule, with modest margins
Full-collinearity VIF	FR = 3.498; MC = 4.648; BR = 7.254	≤ 3.3 as conservative reference	Possible method variance and/or conceptual overlap; interpret R ² and paths cautiously

The supplementary full-collinearity results reinforce the need for caution. In particular, the value for Business Resilience is high because it shares substantial variance with both predictors. The pattern may reflect genuine theoretical association, common response tendencies, conceptual proximity, or a combination of these influences. The analysis cannot separate these explanations definitively, so the estimated coefficients are presented as strong sample-specific associations.

Figure 2. Bootstrapping Results of the Research Model



Bootstrapping produced statistically stable estimates for both structural paths. The Financial Risk–Business Resilience relationship had $t = 20.289$, while the Managerial Capability–Business Resilience relationship had $t = 21.877$. These results support the direction and

statistical significance of the associations in the sampled data, but they do not establish causal order.

Table 9. Hypothesis Testing Results

Hypothesis	Relationship	β	t	p	Bias-corrected 2.5% CI	Bias-corrected 97.5% CI	Decision
H1	Financial Risk → Business Resilience	-0.587	20.289	< 0.001	-0.644	-0.535	Accepted
H2	Managerial Capability → Business Resilience	0.709	21.877	< 0.001	0.641	0.769	Accepted

Source: SmartPLS Bootstrapping Results (2026)

The first hypothesis test shows a negative and statistically significant association between Financial Risk and Business Resilience ($\beta = -0.587$, $t = 20.289$, $p < 0.001$). The direct SmartPLS bias-corrected 95% bootstrap confidence interval is [-0.644, -0.535], which excludes zero. Higher perceived financial risk is therefore associated with lower business resilience, supporting H1.

The second hypothesis test shows a positive and statistically significant association between Managerial Capability and Business Resilience ($\beta = 0.709$, $t = 21.877$, $p < 0.001$). The direct SmartPLS bias-corrected 95% bootstrap confidence interval is [0.641, 0.769], which excludes zero. Stronger managerial capability is therefore associated with higher business resilience, supporting H2.

4.2 Discussion

The findings are best interpreted through the dual-mechanism framework developed in this study. Perceived financial risk represents the vulnerability of the firm's resource base, whereas managerial capability represents the owner-manager's capacity to organize a response. Both mechanisms are associated with resilience, but they operate in different ways and should not be treated as interchangeable predictors.

The negative association between perceived financial risk and business resilience is consistent with the resource-depletion logic found in SME crisis research (Battisti et al., 2019; Buganová et al., 2023; Eggers, 2020; Pal et al., 2014). When cash inflows become unstable, liquidity tightens, or obligations become difficult to meet, managers are pushed toward immediate survival decisions. Inventory, staffing, market development, and process improvements may be postponed, leaving the business with fewer options when conditions worsen. The result is not simply a weaker financial position, but a narrower capacity to anticipate, absorb, and recover from disruption.

This interpretation must remain aligned with the way Financial Risk was measured. The indicators capture the financial pressure perceived by owners and managers rather than audited leverage, current ratios, or volatility in accounting returns. Such perceptions matter because they shape decisions, but they may also reflect optimism, pessimism, or differences in financial knowledge. The observed relationship therefore concerns experienced financial vulnerability and should be complemented by objective financial indicators in future studies.

The positive association between managerial capability and resilience reflects an orchestration mechanism. Planning and attention to environmental change support sensing; timely decisions and resource allocation support seizing; and operational coordination and problem solving support reconfiguring. Through these activities, an MSME can redirect cash, employees, supplier relationships, and market effort toward the functions that matter most during a disruption (Kotsios, 2023; Martinelli et al., 2018; Ozanne et al., 2022; Teece, 2007).

The theoretical contribution does not lie in claiming that financial risk and managerial capability have never been connected to resilience. Instead, it lies in placing a vulnerability mechanism and a capability mechanism in one model and showing how their relative statistical patterns differ. Managerial Capability has the stronger standardized association in this sample, suggesting that response capacity accounts for more of the observed variation in resilience than perceived financial exposure within the specified model. This is a bounded statistical insight, not evidence that managerial capability is always more important or that it causally overrides financial risk.

The distinction between resilience and sustainability is also important for interpreting the findings. The dependent variable concerns preparation, adaptation, continuity of essential functions, and recovery after disruption. It does not measure long-term economic, social, and environmental performance. Improved resilience may support longer-term viability, but the study does not test business sustainability as a separate outcome (Marchese et al., 2018).

The exceptionally high R^2 should not be read as uncomplicated evidence of a superior model. Harman's first factor exceeded 50%, and the supplementary full-collinearity VIFs were above the conservative 3.3 reference. Although the one-factor model fitted poorly and HTMT supported discriminant validity, common response tendencies and conceptual proximity between Managerial Capability and Business Resilience may still have inflated the shared variance. The model therefore provides strong associations in the present sample, while the exact magnitudes require replication with multi-source and longitudinal data.

The Indonesian setting may also shape these relationships. Many owner-managed MSMEs depend heavily on the judgment of a small number of decision-makers and have limited formal separation between financial management, operations, and strategy. Under these conditions, the same manager who recognizes liquidity pressure is often responsible for changing suppliers, reallocating labor, negotiating with lenders, and finding new customers. This concentration of responsibility may make managerial capability especially visible in resilience outcomes, although the non-probability online panel prevents population-level generalization (Priyono et al., 2020).

The practical implication is a two-part resilience intervention rather than a generic training program. Government agencies and SME development organizations can first assess financial vulnerability using a short diagnostic covering cash-flow coverage, debt-service pressure, working-capital adequacy, and customer or supplier concentration. Firms with high vulnerability can then receive targeted liquidity planning, debt restructuring referrals, emergency working-capital support, and a 13-week cash-flow template.

Capability development should be equally specific. Business incubators and training providers can organize modules around sensing, seizing, and reconfiguring: market and risk scanning for sensing; rapid scenario-based decisions and resource prioritization for seizing; and supplier diversification, process redesign, digital sales channels, and workforce redeployment for reconfiguring. Financial institutions can support these efforts through simple digital bookkeeping dashboards, early-warning alerts, and coaching tied to financing

rather than offering credit without management support (Matarazzo et al., 2021; Papadopoulos et al., 2020; Priyono et al., 2020).

These recommendations should be applied with attention to firm heterogeneity. A microenterprise facing immediate liquidity pressure may first need basic cash visibility and payment scheduling, whereas a larger MSME may benefit more from scenario planning, supplier-risk mapping, and formal continuity protocols. A tiered approach allows policy support to respond to both the vulnerability profile and the capability gaps of each business. Future work should test whether the two mechanisms interact, mediate one another, or vary across sectors and stages of disruption. Longitudinal data could establish whether managerial capability precedes recovery, objective financial records could validate perceived risk, and a higher-order measurement model could examine sensing, seizing, and reconfiguring as separate lower-order capabilities. Probability-based or stratified sampling would also clarify how far the present pattern extends across the Indonesian MSME population.

5. Conclusion and Suggestion

This study finds that perceived Financial Risk is negatively associated with MSME Business Resilience, while Managerial Capability is positively associated with it. The theoretical contribution is an integrated dual-mechanism interpretation: financial vulnerability restricts the resources and discretion available for responding to disruption, whereas managerial capability supports sensing, decision-making, coordination, and resource reconfiguration. Managerial Capability shows the stronger standardized association within this particular model, but this pattern does not establish causal priority or universal managerial importance. The outcome examined is business resilience, defined through anticipation, adaptation, continuity of essential operations, and recovery; business sustainability was not measured. For practice, the findings support combining financial-vulnerability screening with focused capability development. MSME support should include cash-flow monitoring, debt and working-capital diagnostics, scenario planning, market sensing, rapid resource prioritization, supplier and customer diversification, and digital financial tools. These actions are intended to strengthen the capacity to respond to disruption rather than to guarantee long-term sustainability.

The findings are bounded by the cross-sectional, self-reported design, the use of an online purposive panel, incomplete response-rate and sector metadata, and mixed common-method diagnostics. Perceptual Financial Risk may not correspond fully with objective financial ratios, and the first-order Managerial Capability measure does not separately estimate sensing, seizing, and reconfiguring. The high R^2 and large effect sizes should therefore be treated as sample-specific. Replication with longitudinal, multi-source, objective financial, higher-order capability, and probability-based data is needed.

6. Limitations and Future Research

The present study has several limitations. First, the cross-sectional design does not establish temporal or causal order. Second, all focal constructs were reported by the same owner or manager, and both Harman's test and full-collinearity VIF indicate that common method variance or conceptual overlap cannot be dismissed. Third, Financial Risk was measured perceptually rather than with audited liquidity, leverage, profitability-volatility, or working-capital ratios. Fourth, Managerial Capability was estimated as a first-order reflective construct rather than a hierarchical sensing seizing reconfiguring capability. Fifth, the online purposive

panel and missing invitation, province, and sector records restrict statistical generalization. Future research should use longitudinal and multi-source designs, objective and perceptual financial measures, multi-item lower-order capability dimensions, marker-variable or method-factor procedures designed before data collection, and probability or stratified sampling whenever feasible.

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