

-RESEARCH ARTICLE-

ENTERPRISE RISK MANAGEMENT AND FINANCIAL PERFORMANCE: MEDIATING ROLE OF STRATEGIC MANAGEMENT CAPABILITY AND MODERATING ROLE OF RISK CULTURE

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—Abstract—

The research objective was to test the influence of earning risk management on financial performance of manufacturing companies with mediating effect of strategic management capability. Moderating effect of risk culture also used. Cross sectional data was collected from 290 employees via convenient sampling technique. SEM results shown that earning management has positive and significant effect on financial performance and strategic management capability. Further, strategic management capability also positively effect to financial performance. Indirect mediating effect results shown that strategic management capability significantly mediated between enterprise risk management and financial performance. Moderating effect result also indicated that risk culture strengthen the effect of strategic management capability on financial performance. The study with the significant findings contributing in the existing literature through extending the understanding of relationships to the manufacturing-sector context, where organizational structures, operational coordination, managerial practices, and employee-related factors are particularly important. The findings also have practical significance for manufacturing

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organizations because they indicate the importance of developing appropriate managerial strategies, human-resource practices, employee development initiatives, communication mechanisms, and organizational policies related to the significant factors identified in the study. By addressing these factors, manufacturing companies may be better positioned to improve their organizational processes and achieve more favorable outcomes.

Keywords: Enterprise Risk Management, Financial Performance, Strategic Management Capability, Manufacturing Companies.

INTRODUCTION

Companies are operating in the environment which has more uncertainty, regulatory pressure, changing customer demands and technology disruption (Bromiley et al., 2015). In this environment, companies forced to manage their risk to improve the organization sustainability (Beasley et al., 2005). Traditional approaches that manage risks independently within functional departments may be inadequate because risks can interact across organizational boundaries and influence the achievement of strategic objectives simultaneously. To overcome this situation, enterprise risk management (ERM) has become an integrated approach where the organizations identify, communicate, and respond to various risk as per the company objective (Bromiley et al., 2015; Nocco & Stulz, 2006). Rather than viewing risk management merely as a defensive mechanism for preventing losses, the contemporary ERM perspective emphasizes the strategic management of uncertainty and the possibility that effective risk management can contribute to organizational value creation. Literature supported that ERM could improve the identification of risk, facilitate coordinated decision making, and improve decision making which improve the financial performance (FP) (Froot et al., 1993; Nocco & Stulz, 2006). Further study of Hoyt and Liebenberg (2011) also reported a positive association between ERM and FP, while Callahan and Soileau (2017) found that ERM maturity was associated with improved FP. In addition, Resende et al. (2024) and Kachkar and Shehi (2027) also found that ERM significantly improve the FP. These findings indicate that ERM can potentially contribute to FP, but they also raise an important question concerning how the benefits of ERM are translated into superior FP.

Literature supported that ERM does not only improve the FP simply through improving the risk management procedure (Hermawan et al., 2025). To improve this, organizations should have proper policies, and proper risk assessment system. Gordon et al. (2009) provide an important explanation through a contingency perspective, arguing that the performance effects of ERM depend on organizational and environmental conditions. Similarly, Sax and Andersen (2019) demonstrate that the integration of ERM with strategic planning strengthens its favorable performance implications. These prior studies highlighted that ERM might be depended less on the formal adoption of risk

management practices and more on the organization's ability to convert risk related information into strategic action. Therefore, in the current study, it is argued that strategic management capability (SMC) is being represented an integral mechanism through which ERM can influence FP. SMC reflects an organization's ability to formulate, implement, evaluate and adapt strategies through the effective coordination and deployment of organizational resources, knowledge and information (Sax & Andersen, 2019). This is consistent with the Resource-Based View (RBV), which proposes that organizational resources and capabilities can generate competitive advantage when they enable firms to create value and deploy resources more effectively than competitors (Barney, 1991). It is also consistent with Dynamic Capability Theory, which emphasizes the ability of organizations to sense opportunities and threats, seize opportunities and reconfigure resources in changing environments (Teece, 2007; Teece, 1997). From these theories perspectives, ERM provided to organizations systematic information relevant to risk, while the SMC enables to the managers for transforming the information towards the strategic choices and organizational actions.

Relationship between ERM and SMC has been supported with the prior literature. For instance, Sax and Andersen (2019) study highlighted that strategic planning improve the implications of ERM which is providing evidence that risk management has become a valuable when it is integrated with strategic processes. Yoshikuni et al. (2025) recent study also examined ERM in relation to information systems enabled strategic enterprise management and found that ERM contributes to strategic momentum and strategic flexibility that improve the FP. They also argued that ERM could only improve the FP through proper implementation of strategic mechanism rather than focusing on direct risk reduction. In the same vein, Melesse and Knatko (2024) study also demonstrated the importance of strategic capabilities for competitive performance, while Weritz et al. (2025) show that complementary strategic capabilities facilitate digital transformation and contribute to FP. These prior studies shown that ERM effectiveness to improve FP is increased when organizations focused on SMC but this relationship is missing in the prior literature.

Therefore, current study focused on SMC as a mediating mechanism between ERM and FP. The core reason for this is that ERM only generate the specific knowledge relevant to potential threats, opportunities, and uncertainties but this information or knowledge should be interpreted and incorporated into strategic planning and implementation before it can generate economic value (Ivanov et al., 2025). Literature supported that companies with stronger SMC are likely to be more capable of using ERM generated information in these decisions and of adapting their strategies in response to changes in the external environment (Vuong, 2025). Therefore, ERM could improve FP not only through direct risk reduction but also through its contribution to stronger SMC. This mechanism provides a theoretically meaningful explanation for why organizations with comparable ERM systems may achieve different financial outcomes. However, SMC ability to give more effective financial benefits are totally depends on those

organizational context where strategic decisions are being developed and properly implemented (Marpaung et al., 2026). In this regards, study focused on risk culture (RC) as a moderating variable. RC refers to the shared values, beliefs, attitudes, norms and behavioral expectations that shape how organizational members perceive, communicate, evaluate and respond to risk (Oziri & Knox, 2025). In contrast to risk management structures, RC is properly reflects the extent where risk considerations are being embedded in everyday organizational behaviour (Vuong, 2025). Literature supported the view that RC always encourage to improve the risk awareness, accountability, and constructive challenges while the weak RC may be permitted to inappropriate risk taking, poor communication and strategic decisions that are inconsistent with organizational risk appetite (Melesse, 2026).

Recent empirical study of Bockius and Gatzert (2024) also highlighted that RC encompasses multiple dimensions, including tone from the top, risk awareness and comprehension, accountability, communication and challenge, and incentives. Their review also identifies substantial evidence concerning the value relevance of risk culture while highlighting continuing gaps in understanding its measurement and organizational consequences. This is particularly relevant to the present study because RC may determine whether strategic capabilities are exercised in a manner that balances opportunity seeking with appropriate risk consideration. Acheampong and Ibeji (2024) study also found that stronger RC was associated with lower weighted average cost of capital, cost of equity and cost of debt. They also argued that RC can influence how organizational capabilities are converted into economic outcomes. However, existing studies have predominantly considered RC as a direct antecedent of performance, an element of ERM, or a determinant of risk-taking behavior. In the prior literature, less attention has been given whether the risk culture changes the strength of the relationship between SMC and FP and it is showing the more relevant gap. Literature supported that managers with the effective RC are more able to consider risk-return trade-offs, communicate risk implications, challenge inappropriate assumptions, maintain accountability and align strategic initiatives with organizational risk appetite (Acheampong & Ibeji, 2024). Consequently, the financial benefits of SMC should be greater when RC is strong. In contrast, where RC is weak, strategic capabilities may be directed toward aggressive growth or short-term objectives without adequate consideration of associated risks, potentially reducing their contribution to FP (Acheampong & Ibeji, 2024). Thus, based on previous literature risk culture could not only be focused on improving the FP but it should also be focused on those boundaries which determines the more effectiveness of SMC to improve FP. Therefore, current study used the RC as a moderating variable.

Along with the focusing on the relationship of ERM, SMC and RC to improve FP, still various empirical gaps also existed in the prior studies. For instance, various studies have been explored on the relationship of ERM and FP (Callahan & Soileau, 2017; Hoyt & Liebenberg, 2011; Resende et al., 2024), whereas SMC studies have focused on the

relationship between capabilities and FP (Hao & Song, 2016; Melesse & Knatko, 2024; Weritz et al., 2025). In the same vein, RC studies also focused on improving the FP (Bockius & Gatzert, 2024). Although some studies have begun to connect ERM with strategic mechanisms, including strategic planning, strategic momentum and strategic flexibility (Sax & Andersen, 2019; Yoshikuni et al., 2025). Lastly, prior studies were also focused majorly on other sectors with a limited attention on manufacturing companies (Hao & Song, 2016; Melesse & Knatko, 2024; Weritz et al., 2025). Thus, based on previous gaps, where studies highlighted limited attention on concerning SMC as a mediating variable between ERM and FP and also limited focus of RC as a moderating variable between SMC and FP particularly in the context of manufacturing companies. To overcome this limitation, this study focused on testing the influence of ERM on FP with mediating effect of SMC and moderating effect of RC in the context of manufacturing companies.

Based on this objective, study has main three contributions. Firstly, study extended the research on EMR moving beyond the conventional direct ERM–performance relationship and identifying SMC as a mediating mechanism. This addresses calls for greater attention to the organizational processes through which ERM creates value and is consistent with evidence that strategic integration can enhance the performance consequences of ERM (Sax & Andersen, 2019; Yoshikuni et al., 2025). Secondly, the study contributed towards the strategic management research through positioning ERM as an organizational source of risk related knowledge that can strengthen the strategic capabilities through which firms respond to uncertainty and allocate resources. Thirdly, the current study extended the literature on using the RC as a moderating except focusing on simply a direct predictor or component of ERM. This approach helps explain why similar levels of SMC may generate different financial outcomes across organizations. Rest of the papers was divided into main five parts.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Enterprise Risk Management and Financial Performance

Financial Performance (FP) is being referred to the extant where organizations achieve their financial objectives with effective utilization of the resources (Yoshikuni et al., 2025). It has been emphasized by Richard et al. (2009) that FP remain particularly important because they reflect the economic consequences of managerial decisions and organizational capabilities. It has been observed that ERM effect to the FP because uncertainty and risk can directly affect profitability, cash flows, investment decisions, financing costs, and firm value (Yoshikuni et al., 2025). Effective ERM always enable to the companies to identify all those potential threats before they materialize which reduces the unexpected losses (Sax & Andersen, 2019). Froot et al. (1993) theoretically argue that risk management can create value by reducing financial constraints and ensuring that firms have sufficient internal resources to undertake profitable

investments. Nocco and Stulz (2006) similarly argue that integrated risk management can protect a firm's financial capacity and improve resource allocation which increases the FP. Hoyt and Liebenberg (2011) empirically found a positive association between ERM implementation and FP. Baxter et al. (2013) study also demonstrated that ERM programs significantly FP, which is suggesting that the effectiveness of ERM is more important than merely having a formal ERM system. Florio and Leoni (2017) study results also found that ERM quality positively and significantly increase the FP. In the same vein, Gordon et al. (2009) study also argued that ERM is more effective when it fits to organizational and environmental conditions such as industry competition, environmental uncertainty, firm size, and board monitoring. This implies that ERM may generate greater financial benefits when it is appropriately aligned with organizational conditions. More recent studies provide important evidence supporting the continuing relevance of ERM. Resende et al. (2024) found that ERM significantly affects firm performance among European Union firms and further showed that its effects can operate indirectly through CSR strategy. A 2025 study of 648 firms found that ERM implementation was associated with higher financial-reporting quality and lower volatility in future operating cash flows and stock returns. Fung et al. (2025), using international listed property and liability insurers, found that firms with more mature ERM systems were better able to withstand the COVID-19 crisis. Their findings indicate that ERM can enhance organizational resilience and protect firm performance under extreme uncertainty. In other study, Kachkar and Shehi (2027) found that ERM was positively associated with both ROA and Tobin's Q, with a stronger relationship for financial performance. On the other hand, Khurram et al. (2026) study found that ERM did not significantly affect FP in its particular sample, illustrating that the performance consequences of ERM may depend on institutional and organizational conditions. This inconsistency provides further justification for examining mechanisms through which ERM contributes to financial performance rather than assuming that ERM automatically generates superior results. Based on these, study has following hypothesis,

H1: *Enterprise Risk Management has a significant positive effect on Financial Performance.*

Enterprise Risk Management and Strategic Management Capability

Strategic management capability (SMC) is being referred to the ability for formulating, implementing, and adapt strategies through effective utilization effective utilization and coordination of organizational resources and knowledge (Melesse & Knatko, 2024). It shown the capacity of managers and organizations for translating information and resources into strategic decision to improve the FP (Melesse & Knatko, 2024). Barney (1991) based on RBV theory argues that firms can achieve sustained competitive advantage when they possess valuable, rare, difficult-to-imitate, and non-substitutable resources. However, resources alone are insufficient. Firms must also possess

capabilities that allow them to effectively deploy and reconfigure these resources. The Dynamic Capability Theory of Teece (1997) extends this argument by emphasizing the firm's ability to integrate, build, and reconfigure competencies in changing environments. Teece (2007) subsequently identifies three central processes of dynamic capabilities namely sensing, seizing, and reconfiguring. SMC is therefore particularly important when organizations operate under uncertainty because managers must continuously assess environmental changes and adapt strategies. On the other hand, Hussain (2026) study also argued that SMC effect to the strategic change because managers are responsible for identifying opportunities, making strategic choices, and modifying organizational resources. Thus, SMC enables firms to transform knowledge and information into strategic action. Melesse and Knatko (2024) empirical study also found significant relationships between strategic capabilities and FP. Their study used moderated mediation and showed that strategic capabilities can serve as important mechanisms linking strategic orientations with FP. Melesse (2026) provides an extensive systematic and bibliometric review of strategic capabilities and competitive performance. The study identifies management practices, human resource management, information technology, learning competencies, knowledge resources, and strategic orientations as important factors influencing strategic capability effectiveness. The review further confirms that strategic capabilities remain an important research area for improving FP.

Nocco and Stulz (2006) study also provide ERM always provided an effective way to the senior managers with an enterprise wide understanding of risk exposure, allowing them to determine appropriate risk responses. Bromiley et al. (2015) study also argued that ERM creates greater value when it is connected with organizational strategy. This argument is particularly supported by Sax and Andersen (2019) study also found that ERM was associated with higher profitability and lower financial leverage, while strategic planning reinforced these favorable outcomes. Their findings suggest that ERM becomes more useful when risk information is incorporated into strategic planning. Yoshikuni et al. (2025) further study also found that ERM positively and significantly effect to the FP. Furthermore, findings of Otter et al. (2026) also found that ERM with strategic change and risk governance, reinforcing the contemporary view that risk management should be integrated into strategic change processes rather than treated as a separate organizational activity. These findings emphasized that ERM can influence strategic processes rather than simply reducing risk and accordingly hypothesis are,

H2: *Enterprise risk management has a significant positive effect on strategic management capability.*

Strategic Management Capability and Financial Performance

SMC is expected to effect the FP because the companies need ability for transforming their resources into the effective actions (Melesse & Knatko, 2024). When the companies have effective valuable resources but still the organization unable to performance good in performance then companies need a effective SMC. Barney (1991) establishes that organizational resources and capabilities can become sources of competitive advantage. Teece (1997) further explain that dynamic capabilities enable organizations to respond to changing environments by integrating and reconfiguring resources. Thus, SMC provides an important bridge between what a firm possesses and what it actually achieves. Strategic capability can improve financial performance through several mechanisms. Vorhies and Morgan (2005) empirical study also highlighted that SMC were associated with the FP. Hao and Song (2016) provide particularly relevant evidence by demonstrating that different strategic capabilities were positively related to firm performance. Their study further showed that strategic capabilities can operate as mediating mechanisms through which strategic orientations influence firm performance. Zehir and Vural (2025) also found that dynamic capabilities contribute to organizational performance, although the strength of this relationship depends on organizational and environmental conditions. Melesse and Knatko (2024) further study highlighted that strategic capabilities were significantly associated with FP. In the same vein, Weritz et al. (2025) study also found that complementary strategic capabilities facilitate digital transformation success and improve firm performance. Their study emphasizes that strategic capabilities enable firms to convert technological and organizational resources into successful strategic transformation. Melesse (2026) study also further emphasizes that strategic capability is important factor to improve the companies FP. Ayoub and Sopuru (2026) extend this literature into the digital era by examining AI-enabled dynamic capability, data-driven culture which improves the companies FP. These prior studies highlighted the importance of organizational capability for improving the FP and accordingly hypothesis is,

H3: *Strategic management capability has a significant positive effect on financial performance.*

Mediating Role of Strategic Management Capability

Relationship between ERM and FP is not properly explain in the prior literature where found that how ERM creates the FP. ERM always provided the information about the risk but effective availability of risk information does not automatically generate the FP (Melesse & Knatko, 2024). To improve this, managers should interpret this information which could help to improve the FP. This provides the theoretical basis for proposing SMC as a mediator between ERM and FP. This mediating effect is being justified from dynamic capability theory where Teece (1997) argued that companies achieve their competitive advantage through their ability to integrate and reconfigure resources which increases the companies FP. In prior various studies, ERM effect on FP has been

tested. For instance, [Resende et al. \(2024\)](#) found that ERM effect FP both directly and indirectly through CSR strategy. Their study demonstrates that ERM-performance relationships can operate through organizational mechanisms rather than exclusively through direct risk reduction. In the same vein, [Yoshikuni et al. \(2025\)](#) study also found that ERM influenced strategic enterprise management and strategic momentum, which subsequently enhanced FP. Based on these mediating effects, [Hao and Song \(2016\)](#) study also demonstrated that strategic capabilities could be act as an intervening mechanism between the strategic orientation and FP. On the other hand, [Melesse and Knatko \(2024\)](#) study also demonstrate the importance of strategic capabilities as mechanisms through which strategic orientations influence competitive performance. Other study of [Kachkar and Shehi \(2027\)](#) also conceptualize that ERM itself as a strategic organizational capability and find positive effects on both financial performance and firm value. Therefore, the proposed mediation argues that firms with stronger ERM are more capable of developing effective SMC and which enable to the companies to convert risk information and organizational resources into superior FP.

H4: *Strategic management capability significantly mediates the relationship between enterprise risk management and financial performance.*

Risk Culture as a Moderating variable

Relationship between SMC and FP is not clear in the prior literature which is indicating that further research needs to be addressed with moderating variable. For this purpose, risk culture (RC) could be used a moderating variable. RC is being referred to the shared values, beliefs, and behavioral expectations which effect how the organizational members perceive, communicate, evaluate, and respond to risk. It represents the behavioral and cultural dimension of risk management ([Oziri & Knox, 2025](#)). RC is particularly important because the formal risk management could not only produce the intended outcomes if employees and managers do not internalize risk-management principles ([Bianchi et al., 2021](#)). A company may have various risk policies, committees and other sophisticated ERM, but employees may still ignore risks if the organizational culture rewards excessive risk-taking or discourages employees from challenging managerial decisions. [Bockius and Gatzert \(2024\)](#) conducted a structured review of and identified that organizational RC has considerable relevance for FP.

Furthermore, it has been also observed that risk culture could influence FP because it affects the quality of risk-related behavior and managerial decision-making. A strong RC encourages employees to communicate emerging risks, challenge inappropriate decisions, consider long-term consequences, and align risk-taking with organizational objectives ([Bianchi et al., 2021](#)). Furthermore, [Acheampong and Ibeji \(2024\)](#) study also highlighted that a strong RC could be potentially improve FP through reducing the cost associated with external financing and improving investor confidence. Based on these study used the RC as a moderating variable on the assumption that SMC does not

produce identical FP in every organization. The effectiveness of SMC depends partly on the organizational environment in which managers formulate and implement strategies. RC represents an important contextual condition because strategic decisions inevitably involve risk. Teece (2007) argues that organizational capabilities must be deployed and reconfigured according to environmental conditions. Therefore, organizational capabilities should not necessarily be expected to have identical effects across different organizational environments.

On the other hand, RC provides additional support for this argument. Bockius and Gatzert (2024) identify organizational RC as an important determinant of risk-management effectiveness and FP. Their systematic review demonstrates that RC is associated with dimensions of FP and that its effects depend on organizational practices and contextual conditions. Furthermore, Acheampong and Ibeji (2024) further demonstrated that stronger RC is associated with lower costs of capital. This suggests that risk culture could influence the financial consequences of organizational decisions. In addition, Oziri and Knox (2025) conceptualize RC as a strategic resource and demonstrate that it improves FP through leadership, accountability, communication, and innovation. These findings suggest that RC could enhance the effectiveness of organizational capabilities rather than merely operate as an independent predictor. Melesse (2026) also argued that strategic capability effectiveness depends on how these organizational resources are aligned and deployed. Based on these, it could be argued that positive relationship between SMC and FP could be stronger when the RC is high. When RC is weak, even organizations with strong strategic capabilities may make decisions that emphasize growth or short-term financial benefits while insufficiently considering risk exposure. In this regards, current study used RC as a moderating variable because prior studies RC as a direct determinant of performance and as an element of ERM. While, there remains a gap on how the RC as a moderator between SMC and FP will be used. This constitutes an important research gap addressed by the present study and accordingly hypothesis is below,

H5: *Risk culture significantly moderates the relationship between strategic management capability and financial performance, such that the relationship is stronger when risk culture is high.*

RESEARCH METHODS

The study aimed to test the influence of ERM on FP with mediating influence of SMC. RC also used to increase the effect of ERM on FP. For this purpose, researchers employed the quantitative research approach. The quantitative research approach provides objective, measurable, and statistically analyzable data, allowing researchers to test hypotheses and examine relationships between variables. It increase the reliability, generalizability, and statistical rigor by using standardized instruments and larger samples. Data was collected using self-administered questionnaire and for this

cross sectional research design was employed. A cross sectional research design efficiently collects data at a single point in time, enabling researchers to examine relationships among variables quickly and cost-effectively.

Research Instrument and Framework

The research instrument was adopted from prior literature. ERM was comprised from 4 items of (Labaran, 2025). FP was comprised from 4 items of (Labaran, 2025). Strategic management capability comprised from 5 items of (Basit et al., 2024). Risk culture was measured by four dimensions from top, accountability, effective challenge, and incentive. Each of dimension was comprised with 3 items and adopted from (Oziri & Knox, 2025). Five point Likert Scale was used to measure the items. The research framework is formulated below in Figure 1.

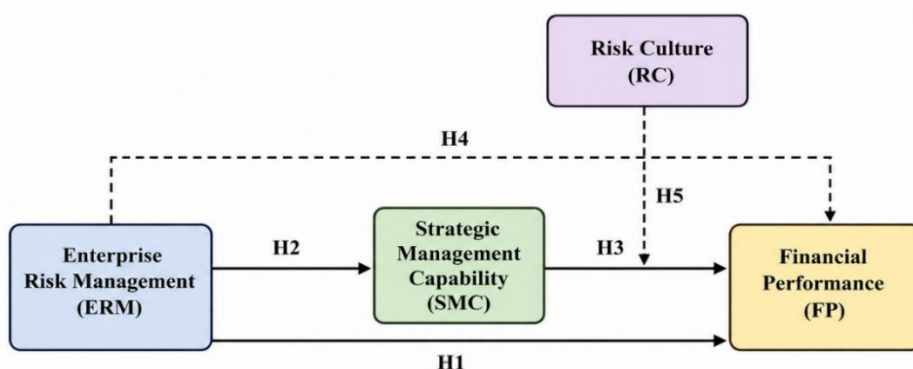


Figure 1: Research Model

Sampling Technique and Sample Size

Study target population was consisted of employees who are working in manufacturing companies. The employees were being selected because their experiences and their perceptions are directly related to understand organizational practices. There are two sampling techniques namely probability and non-probability techniques. The study used the convenient sampling which is a non-probability sampling technique in which respondents are selected based on their accessibility and willingness to participate. This technique was considered appropriate because access to a complete sampling frame of manufacturing-company employees can be difficult, while convenience sampling allows data to be collected efficiently within available time and resource constraints (Etikan et al., 2016). Total 450 questionnaires were distributed among manufacturing companies employees. 290 questionnaires were returned back which were valuable for the analysis that is showing 64.44% response rate. The 290 valid responses were considered adequate for conducting the planned quantitative statistical analyses, while the relatively high response rate indicates satisfactory participation from the targeted respondents. Sample size and response considerations are important elements in

determining the suitability and quality of quantitative research data (Saunders et al., 2023).

ANALYSIS AND FINDINGS

Demographic Characteristics

Study demographic results consisted of 290 respondents. From the demographic findings, majority of respondents were belong to the male 218 (75.2%), while 72 (24.8%) were female, which is reflecting a predominantly male representation in the manufacturing-sector sample.

Table 1: Demographic Profile

Demographic Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	218	75.2
	Female	72	24.8
	Total	290	100.0
Age	20–30 years	71	24.5
	31–40 years	108	37.2
	41–50 years	74	25.5
	51 years and above	37	12.8
	Total	290	100.0
Education	Intermediate/Diploma	39	13.4
	Bachelor's degree	126	43.4
	Master's degree	98	33.8
	MPhil/PhD	27	9.3
	Total	290	100.0
Work Experience	1–5 years	82	28.3
	6–10 years	96	33.1
	11–15 years	65	22.4
	16 years and above	47	16.2
	Total	290	100.0
Designation	Top/Senior Management	45	15.5
	Middle Management	108	37.2
	Operational/Lower Management	112	38.6
	Other	25	8.6
	Total	290	100.0

With respect to age, most of respondents in age were between 31 to 40 years 108 (37.2%), 41–50 years (74, 25.5%), 20–30 years (71, 24.5%), and 51 years and above (37, 12.8%). This distribution suggested that most of the respondents were professional because they were mature enough in their fields and they are potentially providing substantial workplace experience. With respect to education, 126 respondents (43.4%) held a bachelor's degree, followed by 98 (33.8%) with a master's degree, 39 (13.4%) with an intermediate/diploma qualification, and 27 (9.3%) with an MPhil/PhD. Thus, the sample was generally well educated, with a substantial majority holding at least a

bachelor's degree. With respect to work experience, 96 (33.1%) respondents have 6 to 10 years' experience, representing the largest group, followed by 82 (28.3%) with 1–5 years, 65 (22.4%) with 11–15 years, and 47 (16.2%) with 16 years or more. Finally, in terms of designation, 112 respondents (38.6%) belonged to operational/lower management, 108 (37.2%) to middle management, 45 (15.5%) to top/senior management, and 25 (8.6%) to other positions. Above results are in [Table.1](#).

Convergent Validity

The study used the Smart PLS for hypothesis testing. Structural Equation Modeling (SEM) technique was used. Two validity models were used namely convergent and discriminant.

Table 2: Convergent Validity

Construct	Items	Loadings	Cronbach's Alpha	CR	AVE
Risk Culture–Tone from the Top	RCT1	0.807	0.787	0.828	0.616
	RCT2	0.750			
	RCT3	0.796			
Risk Culture–Risk Communication & Awareness	RCA1	0.776	0.772	0.821	0.604
	RCA2	0.784			
	RCA3	0.771			
Risk Culture–Risk Culture & Employee Commitment	RCEC1	0.785	0.769	0.819	0.602
	RCEC2	0.762			
	RCEC3	0.810			
Risk Culture–Risk Control & Integration	RCI1	0.769	0.733	0.803	0.577
	RCI2	0.752			
	RCI3	0.857			
Enterprise Risk Management	ERM1	0.754	0.774	0.855	0.596
	ERM2	0.797			
	ERM3	0.870			
	ERM4	0.766			
Strategic Management Capability	SMC1	0.714	0.776	0.848	0.527
	SMC2	0.724			
	SMC3	0.745			
	SMC4	0.811			
	SMC5	0.736			
Financial Performance (FP)	FP1	0.768	0.710	0.812	0.465
	FP4	0.712			
	FP5	0.710			

Convergent validity was assessed using factor loadings, Cronbach's Alpha, composite reliability (CR), and Average Variance Extracted (AVE). Following [Hair \(2017\)](#), factor loadings should preferably be 0.70 or above, while Cronbach's Alpha and CR should be ≥ 0.70 , indicating acceptable internal consistency reliability. In addition, AVE

should be ≥ 0.50 , demonstrating adequate convergent validity because the construct explains at least 50% of the variance in its indicators (Fornell & Larcker, 1981).

Therefore, constructs meeting these recommended thresholds can be considered to have satisfactory reliability and convergent validity and can be retained for further structural model analysis. Above results are Table 2 and Figure 2.

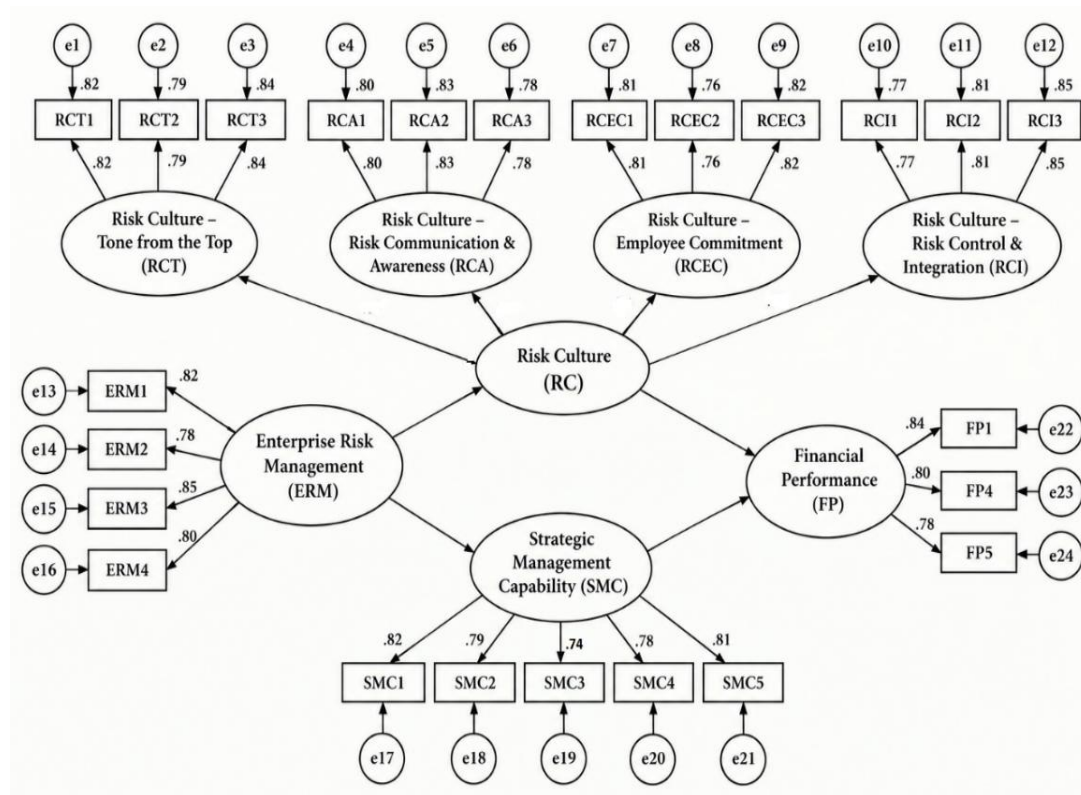


Figure 2: Measurement Model

Discriminant Validity and Multicollinearity

The discriminant validity was being assed using the Fornell and Larcker Criterion which shown that each indicator diagonal value should be greater from below value. The square root of the AVE for each construct was greater than its correlations with other constructs.

This indicates that each construct shares more variance with its own indicators than with other constructs Henseler et al. (2015). Discriminant validity results are in Table.3.

Table 3: HTMT Discriminant Validity

Constructs	RCT	RCA	RCEC	RCI	ERM	SMC	FP
RCT	—						

RCA	0.811	—					
RCEC	0.631	0.647	—				
RCI	0.457	0.399	0.607	—			
ERM	0.546	0.487	0.508	0.522	—		
SMC	0.303	0.366	0.356	0.321	0.542	—	
FP	0.185	0.224	0.199	0.190	0.398	0.361	—

Furthermore, Variance Inflation Factor (VIF) was used to assess multicollinearity among the predictor variables. A VIF value below 5.0 indicates that multicollinearity is not a serious concern (Hair, 2017). This is also showing the discriminant validity of construct. Table.4 for represents the VIF results.

Table 4: VIF Results

Predictor	VIF
ERM	2.10
SMC	2.35
RC	2.18

Hypothesis Results

The results demonstrate that ERM has a positive and significant effect on FP ($\beta = 0.355$, $t = 7.568$, $p < 0.001$). This indicates that organizations with stronger ERM practices tend to demonstrate better financial performance. Therefore, H1 is supported. ERM has a strong positive and statistically significant influence on SMC ($\beta = 0.470$, $t = 9.878$, $p < 0.001$). The result suggesting that ERM plays an important role in developing the organization's SMC. Hence, H2 is supported. The results indicate that SMC positively and significantly influences FP ($\beta = 0.278$, $t = 5.298$, $p < 0.001$). This suggests that organizations possessing stronger strategic management capabilities are more likely to achieve improved financial outcomes.

Table 5: Hypothesis results

Path	Coefficients	T-value	Significance Level	Decision
ERM → FP	0.355	7.568	***	Supported
ERM → SMC	0.470	9.878	***	Supported
SMC → FP	0.278	5.298	***	Supported
ERM → SMC → FP	0.055	6.289	***	Supported
SMC × RC → FP	0.367	7.121	***	Supported

Consequently, H3 is supported. Further indirect effect results shown that SMC positively and significantly mediated between ERM and FP ($\beta = 0.055$, $p < 0.001$). This provides evidence that SMC significantly mediates the relationship between ERM and FP. Therefore, H4 is supported. Further, moderating effect results shown that RC positively and significantly moderated between SMC and FP ($\beta = 0.367$, $t = 7.121$, $p < 0.001$).

These findings indicate that Risk Culture significantly moderates the relationship between SMC and FP. Thus, H5 is supported.

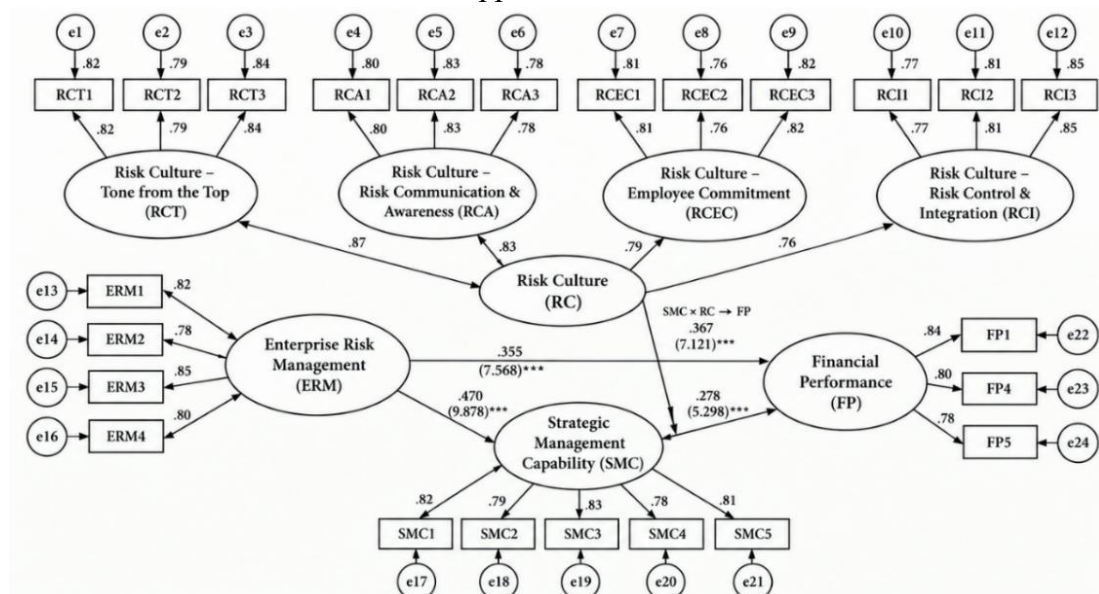


Figure 3: Structural Model

Above results are in Table 5, Figure 3 and Figure 4:

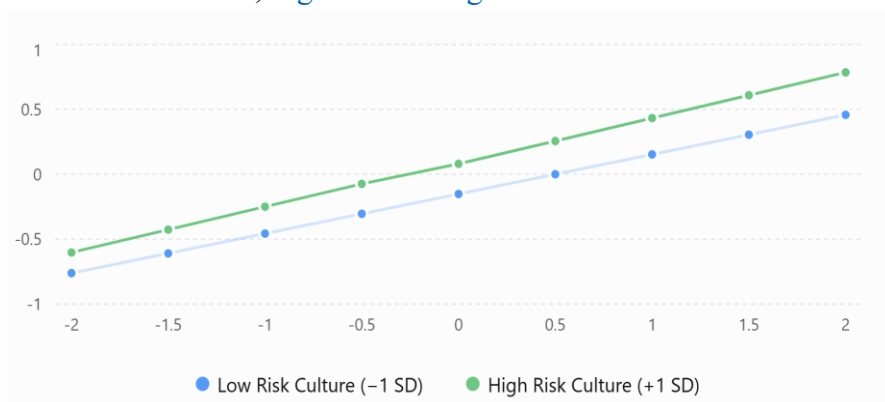


Figure 4: Interaction Effect

DISCUSSION AND IMPLICATION

The study aimed to test the influence of ERM on FP with mediating influence of SMC. RC also used to increase the effect of ERM on FP. For this purpose, researchers employed the quantitative research approach. Objective results indicated that ERM positively and significantly effect to the FP among the manufacturing companies. Study positive effect of ERM indicating that manufacturing with their stronger ERM practices are being more able to achieve the FP. This finding is particularly relevant to

manufacturing organizations because they face interconnected risks related to raw-material prices, production interruptions, supply chains, inventory, technology, market demand, financial conditions, and operational processes. An effective ERM system enables manufacturing companies to identify and evaluate these risks and incorporate them into managerial decision-making. Study results is supported with the study of [Pan et al. \(2023\)](#) where they found that ERM adoption increased firm value, with stronger benefits associated with higher-quality ERM programs. [Otegunrin et al. \(2021\)](#) also provided that manufacturing sector evidence concerning the importance of integrated risk management for firm outcomes. Thy also demonstrates that ERM related mechanisms can influence the FP of manufacturing companies. Therefore, the present finding is consistent with previous empirical evidence and suggests that ERM represents an important managerial mechanism through which manufacturing companies can control uncertainty, reduce costly risk exposures, and improve financial outcomes.

Further result shown that ERM also positively and significantly effect to SMC. This result indicated that ERM contributes substantially to the development of SMC in manufacturing companies. In the manufacturing sector, risk information can influence strategic decisions concerning production capacity, procurement, inventory, technology investment, supplier selection, market expansion, resource allocation, and competitive positioning. Thus, ERM can provide managers with systematic information about uncertainty and potential threats, allowing them to formulate and implement more informed strategies. This result is consistent with [Sax and Andersen \(2019\)](#), where found that ERM was associated with higher profitability and lower financial leverage, while strategic planning reinforced these favorable outcomes. Their findings demonstrate the importance of integrating risk management with strategic planning rather than treating ERM as a separate control activity. More specifically, a study of manufacturing firms in Pakistan reported that ERM contributes to operational and strategic decision-making capabilities and helps firms reduce costly surprises ([Muneer, 2020](#)). This interpretation is further supported by manufacturing research demonstrating that risk management capabilities can be developed through manufacturing planning and control activities, thereby strengthening organizational responses to supply-chain uncertainty. In addition, [Pan et al. \(2023\)](#) emphasize that manufacturing firms face complex and interconnected risks and that high-quality ERM programs can provide greater organizational benefits. Accordingly, the present finding suggests that ERM in manufacturing companies should not be understood merely as a compliance or control mechanism; instead, it can function as a strategic capability that improves managers' ability to anticipate uncertainty, evaluate alternatives, allocate resources, and formulate effective organizational strategies.

The results also indicating that SMC has a significant positive effect on FP. This finding indicates that manufacturing companies with stronger SMC are more capable of converting organizational resources, knowledge, and strategic decisions into improved

financial outcomes. SMC is particularly important in manufacturing because firms must continuously make decisions concerning production efficiency, product quality, technological investment, cost management, supply-chain configuration, capacity utilization, and market responsiveness. Empirical evidence from manufacturing organizations strongly supports this relationship. González-González-Benito and Suárez-González (2010) examined the relationship between manufacturing strategic objectives, manufacturing capabilities, business strategy, and performance and demonstrated that manufacturing capabilities and competitive priorities are important in explaining commercial and financial performance. Similarly, Sardana et al. (2016) found that strategic alignment of manufacturing operations with organizational objectives was a key contributor to firm performance and that responsiveness capabilities also contributed significantly to performance. Romain (2020) also found that manufacturing capability contributed positively and significantly to FP. Further evidence is provided by Madume et al. (2024), who examined SMC and FP specifically within manufacturing firms in Nigeria and investigated strategic planning through environmental scanning, strategy formulation, implementation, and evaluation/control. Earlier evidence is also particularly relevant: Armstrong (1991) where found especially favorable evidence for manufacturing firms, with nine studies reporting a positive association between formal planning and performance and none reporting a detrimental relationship. Therefore, the significant positive effect found in the present study is consistent with manufacturing-sector research and indicates that strategic management capability enables manufacturing companies to align their operations, resources, and competitive priorities with changing market requirements, thereby contributing to improve FP.

SMC also positively and significantly mediated between ERM and FP. These results confirm that SMC acts as a significant mediator in the between ERM and FP. In manufacturing companies, this finding suggests that ERM contributes to FP through two mechanisms. First, ERM can directly reduce exposure to operational, financial, supply-chain, and strategic risks. Second, ERM can provide risk information that strengthens strategic management capability, which subsequently improves FP. This interpretation is consistent with Sax and Andersen (2019), who found that strategic planning reinforces the favorable outcomes associated with ERM and emphasized the importance of integrating risk management with strategic planning. It is also supported by Muneer (2020), whose research on manufacturing firms in Pakistan found that ERM contributes to operational and strategic decision-making and FP. Further results also shown that ERM can create value for manufacturing companies, particularly when ERM programs are implemented with higher quality (Pan et al., 2023). Moreover, research on manufacturing strategy also demonstrated that capabilities provide an important mechanism through which strategic alignment is translated into superior FP (González-Benito & Suárez-González, 2010). These findings shown that ERM supplies manufacturing managers with risk-related information and controls provide information

and then SMC converts that information into strategic actions, and these actions contribute to improve FP. Thus, the results demonstrate that the financial benefits of ERM are not exclusively direct but can also be realized through enhanced strategic management capability.

The results further demonstrated that RC significantly and positively moderates the relationship between SMC and FP. The positive interaction effect indicates that the positive relationship between SMC and FP becomes stronger when manufacturing companies have a stronger RC. This means that strategic capabilities are more likely to generate superior financial outcomes when managers and employees collectively recognize risks, communicate risk information, accept responsibility for risk-related decisions, and integrate risk considerations into everyday organizational activities. Manufacturing-sector evidence provides particularly strong support for this interpretation. [Kurniawan et al. \(2017\)](#) also found that RC positively moderated the relationships between supply-chain visibility and supply-chain effectiveness and between supplier-development strategies and supply-chain effectiveness. This is highly relevant to the present study because it demonstrates empirically within manufacturing organizations that RC can strengthen the effectiveness of organizational capabilities and strategies. More recent manufacturing research also emphasizes the importance of RC and formalized risk management for resilience in manufacturing SMEs ([Sakka et al., 2025](#)). In addition, [Bui et al. \(2018\)](#) found that RC was an important predictor of FP during crisis periods, demonstrating that organizational approaches to risk can have significant consequences for performance. Therefore, the positive moderation found in the present study suggests that manufacturing companies cannot rely solely on SMC to achieve superior FP. Rather, these capabilities need to operate within a supportive RC in which risk awareness, and communication, accountability, and informed risk-taking are embedded throughout the organization. The result therefore extends previous research by showing that RC is not simply an organizational characteristic but an important boundary condition that strengthens the conversion of SMC into FP.

Study results have various theoretical and practical implications. Theoretically, firstly empirical results contribute to the existing literature by providing evidence regarding the relationships among the study variables within the manufacturing-sector context, an area where organizational and employee-related relationships may operate differently from service-based industries. The significant relationships identified among the constructs provide empirical support for the theoretical assumptions underlying the proposed research model and demonstrate that the selected variables are relevant for explaining the focal outcome. Second, the findings extend existing theoretical knowledge by demonstrating how the independent and mediating or moderating constructs, where applicable in the proposed model, interact within manufacturing organizations. This is particularly important because manufacturing firms are characterized by formal organizational structures, operational interdependence, hierarchical decision-making, and strong performance requirements. Third, the results

strengthen the generalizability of existing theories by testing their assumptions using data collected from 290 respondents working at different organizational levels, including senior, middle, and operational management. The demographic diversity of the sample also provides a broader basis for understanding the applicability of the theoretical relationships across employees with different levels of education, age, experience, and organizational responsibilities. Finally, the study provides a foundation for future researchers to replicate and extend the proposed model in other industrial sectors, geographical settings, or organizational contexts and to examine additional mediating or moderating mechanisms that may explain the observed relationships.

The findings also offer meaningful implications for managers and practitioners in manufacturing companies. First, managers should focus on strengthening the organizational and behavioral factors that were found to have significant effects on the study's outcome variable. Since manufacturing organizations depend heavily on coordination, employee involvement, managerial support, and effective organizational processes, managers can use the findings to develop targeted policies and managerial practices that enhance employee and organizational performance. Second, senior and middle-level managers should translate the findings into practical initiatives such as employee development programs, effective communication mechanisms, participative decision-making, recognition systems, and supportive leadership practices, depending on the specific variables examined in the study. Third, the results can assist HR managers and production managers in designing policies that are appropriate for employees at different organizational levels because the sample includes respondents from senior, middle, and operational management. Finally, manufacturing companies can use these findings as an evidence-based foundation for improving organizational policies and allocating resources toward practices that strengthen the relationships identified in the research model. Collectively, study results could provide guide to the managers along with empirical evidence that can support more informed decision-making and help manufacturing organizations achieve sustainable improvements in employee and organizational outcomes.

CONCLUSION AND FUTURE DIRECTIONS

The study aimed to test the influence of ERM on FP with mediating influence of SMC. RC also used to increase the effect of ERM on FP within the context of manufacturing companies. Based on the empirical analysis of data collected from 290 respondents, the findings provide substantial evidence concerning the hypothesized relationships and demonstrate that the variables included in the research model are relevant for explaining the phenomenon under investigation. The results generally support the theoretical assumptions of the study and indicate that the identified organizational and employee-related factors have meaningful implications for the focal outcome. The demographic findings further show that the respondents represented different age groups, educational backgrounds, levels of work experience, and organizational positions, including

top/senior management, middle management, and operational/ management, which provides a broad organizational perspective on the issues examined. The study therefore contributes to the existing literature by extending the understanding of the proposed relationships to the manufacturing-sector context, where organizational structures, operational coordination, managerial practices, and employee-related factors are particularly important. The findings also have practical significance for manufacturing organizations because they indicate the importance of developing appropriate managerial strategies, human-resource practices, employee development initiatives, communication mechanisms, and organizational policies related to the significant factors identified in the study. By addressing these factors, manufacturing companies may be better positioned to improve their organizational processes and achieve more favorable outcomes. From a theoretical perspective, the study strengthens existing knowledge by empirically examining the proposed model and providing evidence from an industrial context that remains important for organizational research. Despite its contributions, the study may be subject to limitations related to its research design, sample, geographical context, and reliance on respondents' perceptions, which should be considered when interpreting and generalizing the findings. Future researchers may therefore replicate the study in other industries, regions, and organizational settings and may employ longitudinal or mixed-method research designs to obtain deeper insights into the relationships examined. In conclusion, this study provides meaningful theoretical and practical contributions by demonstrating the importance of the proposed factors within manufacturing companies and offers a useful foundation for managers, practitioners, and future researchers seeking to understand and improve the organizational outcomes examined in this research.

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