

ISLAMIC FINANCE AND COSO ERM: EXAMINING STRATEGIC DRIVERS OF PERFORMANCE IN SHARIA BANKS

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Abstract

This study investigates the impact of Enterprise Risk Management (ERM) disclosure, guided by the Committee of Sponsoring Organizations (COSO) framework, on the financial performance of Islamic banks. It further examines the mediating roles of Critical Success Factors (CSF) and Islamic Corporate Governance (ICG). Utilizing secondary data from financial reports spanning 2014 to 2023, the sample comprises the world's ten largest Islamic banks as ranked by Global Finance in 2022. Path analysis with Feasible Generalized Least Squares (FGLS) estimation was employed. The findings reveal that COSO ERM disclosure has a significant direct negative effect on financial performance. Interestingly, COSO ERM significantly influences both CSF and ICG, and ICG, in turn, significantly impacts financial performance. However, CSF do not demonstrate a significant direct effect on financial performance. Furthermore, neither CSF nor ICG significantly mediates the relationship between COSO ERM and financial performance. These results suggest that while COSO ERM enhances internal strategic and governance mechanisms, its influence on financial outcomes may necessitate more profound integration. This research contributes to risk management literature by incorporating the COSO ERM framework within the context of Islamic banking.

Keywords: *Framework COSO ERM; Critical Success Factors (CSF); Islamic Corporate Governance (ICG); Financial Performance; Islamic Bank*

Abstrak

Penelitian ini menganalisis pengaruh pengungkapan *Enterprise Risk Management* (ERM), berdasarkan kerangka *Committee of Sponsoring Organizations* (COSO), terhadap kinerja keuangan bank syariah. Kemudian, *Critical Success Factors* (CSF) dan *Islamic Corporate Governance* (ICG) bertindak sebagai variabel mediasi. Sampel terdiri dari 10 bank syariah terbesar di dunia, yang diperingkat oleh *Global Finance* pada tahun 2022, menggunakan data sekunder dari laporan keuangan yang mencakup tahun 2014 hingga 2023. Analisis Jalur dengan estimasi *Feasible Generalized Least Squares* (FGLS) diterapkan. Hasil penelitian ini menunjukkan bahwa



pengungkapan COSO ERM memiliki efek langsung negatif yang signifikan terhadap kinerja keuangan. COSO ERM secara signifikan memengaruhi CSF dan ICG. ICG juga memiliki pengaruh yang signifikan terhadap kinerja keuangan. Namun CSF tidak menunjukkan efek langsung yang signifikan terhadap kinerja keuangan. CSF dan ICG tidak secara signifikan memediasi hubungan antara COSO ERM dan kinerja keuangan. Temuan ini menunjukkan bahwa sementara COSO ERM meningkatkan mekanisme strategis dan tata kelola secara internal, dampaknya terhadap hasil keuangan adalah memerlukan integrasi yang lebih dalam. Penelitian ini berkontribusi pada pengembangan literatur manajemen risiko dengan mengintegrasikan kerangka kerja COSO ERM ke dalam perbankan Islam.

Kata kunci: Framework COSO ERM; Critical Success Factors (CSF); Islamic Corporate Governance (ICG); Kinerja Keuangan; Bank Syariah

INTRODUCTION

Islamic banking assets in Indonesia reached IDR 869 trillion in 2023, while Malaysian Islamic banks comprised about 41% of overall financing (Romero, 2024; Central Bank of Malaysia, 2023). This growth is largely driven by supportive regulations and rising demand for Sharia-compliant financial products, contributing to Malaysia's impressive average efficiency score of 0.6991 over 2014-2023 (Putri et al., 2024). The Committee of Sponsoring Organizations (COSO) Enterprise Risk Management (ERM) framework offers a structured approach to risk management (Scannell et al., 2013). Its adoption is typically assessed through annual report disclosures, which, while a common measure in research despite their inherent limitations, serve as a widely accepted proxy (Beretta & Bozzolan, 2004; Beasley et al., 2008; Gordon et al., 2009; Arena et al., 2010). Effective ERM implementation has been shown to enhance both governance (Bazaluk et al., 2024), and performance efficiency (Efe, 2023). Empirical evidence further indicates that COSO ERM adoption directly improves critical success factors (CSFs) and governance mechanisms in Islamic banks.. Sabani (2023) finds that a higher level of ERM embedding significantly improves CSF achievement, while Wahyuni & Novita (2021) report that integrating COSO ERM strengthens ICG processes, including Sharia Supervisory Board oversight and transparency.

The combined application of COSO ERM-driven risk management, CSF execution, and ICG principles ultimately aims to boost the financial performance of Islamic banking organizations. Structured frameworks like COSO ERM enhance risk anticipation and strategic alignment, leading to greater profitability and resilience (Beasley et al., 2008). Similarly, effective implementation of CSF allows organizations to translate risk management structures into tangible performance outcomes (Kinyua et al., 2015).



Furthermore, robust ICG mechanisms, including Sharia Supervisory Board oversight and ethical disclosure, have proven to improve stakeholder trust and financial efficiency (Haniffa & Hudaib, 2007). Within this context, evaluating financial performance is crucial for determining the effectiveness of managerial implementation and governance strategies. This study utilizes Return on Assets (ROA) as the principal indicator for financial performance, reflecting the efficiency with which assets generate profit. ROA is widely employed in banking studies because it captures a bank's ability to convert its asset base into net income (Dietrich & Wanzenried, 2011).

Critical Success Factors (CSFs) act as benchmarks for strategic progress (Oliveira et al., 2019; Nunes & Abreu, 2021) encompassing elements like client satisfaction, innovation, and Shariah compliance (Ahmed et al., 2021; Nugroho, 2021). Their effective execution enhances Islamic financial institutions' competitiveness and resilience (Müller & Jugdev, 2012). Likewise, Islamic Corporate Governance (ICG) fosters transparency, accountability, and Shariah compliance oversight (Sulistiyo et al., 2020), although challenges such as agency conflicts can sometimes impede its effectiveness; Schormair & Gilbert, 2020).

Despite earlier studies examining ERM's effect on financial performance, few have fully adopted the COSO framework within the Islamic banking context. This aligns with Khalil-Oliwa (2021), finding that even large Gulf-based Islamic banks lacked fully integrated COSO ERM systems. There's also a noticeable gap in studies exploring CSF and ICG as mediators. These two factors not only influence the strength of COSO ERM's impact on performance but also enhance the overall effectiveness of risk management. Prior studies Hidayah et al. (2024) and Manab et al. (2012) indicate that CSFs indirectly affect financial performance through the efficient integration of ERM into organizational processes.

This study aims to evaluate the financial performance of Islamic banks in ASEAN. This research employs Feasible Generalized Least Squares (FGLS) to address heteroskedasticity and serial correlation in panel data, ensuring more robust parameter estimates compared to prior studies that predominantly relied on Ordinary Least Squares (OLS) (Belkhaoui et al., 2020). To stabilize this model, we include asset efficiency (Earning Assets to Total Assets Ratio - AER) and capital structure (Debt to Equity Ratio - DER) as control variables (Rathnasingha & Heiyanthuduwa, 2019; Duguleană et al., 2024). The outcomes offer strategic insights for practitioners in formulating policies aimed at enhancing financial performance effectively, competitively, and in a Sharia-compliant manner.

LITERATURE REVIEW

Signaling Theory

Signaling theory offers a valuable framework for examining how companies utilize voluntary disclosures to communicate their performance to investors and other stakeholders. This theory is premised on the existence of information asymmetry, where different market participants possess varying levels of information (Siddique et al., 2021). According to signaling theory, management, holding an informational advantage, voluntarily shares disclosures to influence how external parties perceive the firm. In corporate reporting, these signals are crucial for establishing trust, credibility, strategic direction, and long-term value (Beasley et al., 2008). The adoption and disclosure of COSO Enterprise Risk Management (ERM) not only enhance internal risk management practices but also signal robust governance, a commitment to long-term strategic objectives, and an elevated awareness of risk. Similarly, the disclosure of Critical Success Factors (CSFs) and Islamic Corporate Governance (ICG) demonstrates an organization's dedication to fulfilling stakeholder expectations and upholding both ethical and institutional principles, particularly within Islamic banking (Arena et al., 2010).

In Islamic banking environments, where stakeholders prioritize both financial performance and adherence to Shariah principles, these disclosures can serve as vital indicators of institutional reputation (Arena et al., 2010). Grounded in signaling theory, voluntary reporting mechanisms, especially the application of COSO ERM, have the potential to mitigate uncertainty and strengthen stakeholder trust amidst a competitive business landscape.

Organizations that effectively implement CSFs and ICG mechanisms are better positioned to signal credibility to stakeholders, thereby fostering trust and enhancing overall performance. This rationale underpins the conceptual framework and the development of hypotheses for this investigation. As noted by Gordon et al., (2009) the alignment between disclosed risk management frameworks and strategic objectives can significantly influence stakeholders' perceptions and evaluations of an organization.

Risk Management Theory

Risk management encompasses the processes of identifying, analyzing, and mitigating risks within organizational operations, ultimately aiming to enhance overall efficiency and organizational effectiveness (Darmawi, 1990). This discipline incorporates various models and frameworks that assist organizations in minimizing uncertainty and optimizing decision-making (ISO 31000, 2018; Hopkin, 2018). Risk Management Theory specifically emphasizes the integration of the COSO Enterprise Risk Management (ERM)



framework in supporting both strategic and financial objectives (Shibani & De Fuentes, 2017). Empirical evidence suggests that ERM implementation is positively associated with firm performance, particularly in organizations operating under high uncertainty (Gordon et al., 2009). From this theoretical perspective, corporations adopting ERM are likely to experience reduced market risk, as ERM contributes to greater organizational stability and more reliable financial reporting (Beasley et al., 2008). The relationship between ERM and organizational outcomes is crucial because the COSO ERM Framework facilitates a systematic approach to practicing effective risk management within a company (Epstein & Buhovac, 2005).

Hypothesis Development

COSO ERM and Financial Performance of Islamic Banks

The COSO Enterprise Risk Management (ERM) framework comprises eight fundamental components: internal environment, objective setting, event identification, risk assessment, risk response, control activities, information and communication, and monitoring activities (Beasley et al., 2008). Within the financial industry, the implementation of COSO ERM in Islamic banking is particularly crucial due to the complex risks involved, including the imperative of Sharia compliance. A strong association exists between the application of the COSO ERM model and enhanced control over financial statements, as well as reduced fraud, which collectively implies an improvement in the quality of financial performance (Rahman & Al-Dhaimesh, 2018; Gordon et al., 2009a; Ahmed & Manab, 2016a).

Additionally, the COSO ERM framework serves to strengthen the Critical Success Factors (CSFs) required to achieve strategic objectives. With its methodical approach to risk identification, response, and monitoring, COSO ERM fosters organizational alignment, effective risk communication, robust managerial support, and cultural sensitivity (Fraser & Simkins, 2010; Beasley et al., 2008; Arena et al., 2010). This facilitates the realization of CSFs, including technological effectiveness, competent human capital, and responsive leadership (Fraser & Simkins, 2010; Sandy & Kurdi, 2024). Thus, the implementation of COSO ERM not only directly affects financial performance but also contributes to the achievement of CSFs. While previous studies have acknowledged the role of CSFs in enhancing the effectiveness of COSO ERM implementation (Fraser & Simkins, 2010), this study further explores this relationships.

Furthermore, COSO ERM offers internal control mechanisms and strategies that facilitate the effective implementation of Islamic Corporate



Governance (ICG). The principles of COSO ERM align closely with Islamic governance values of transparency, accountability, and ethical conduct (Fraser & Simkins, 2010). To ensure the consistent embodiment of ICG values, including justice, accountability, and trustworthiness, a robust risk monitoring system is essential. Excellent risk management methods therefore promote Islamic governance procedures in Islamic banks, thereby encouraging a more transparent and accountable organization (Khalil-Oliwa, 2021).

While some studies suggest COSO ERM has a positive effect on financial performance (Beasley et al., 2006; Haniffa & Hudaib, 2007; Aslam & Haron, 2020), there is currently limited empirical data within a structured quantitative framework demonstrating how COSO ERM unequivocally improves organizational success and governance. This gap is highlighted by Kopia et al. (2017), who, in a meta-analysis of 18 empirical studies, found that the majority failed to establish a clear correlation between ERM implementation and firm performance. However, recent studies, such as Nguyet (2024), are beginning to show a positive and significant relationship between ERM adoption and financial performance, particularly Return on Assets (ROA), thereby partially addressing this gap. Thus, the following hypotheses are proposed for this study:

H1: The implementation of the COSO ERM framework has influence on the financial performance of Islamic banks.

H2: The COSO ERM affects the development of Critical Success Factors (CSF) in Islamic banks.

H3: COSO ERM affects the development of Islamic Corporate Governance (ICG) in Islamic banks.

The Role of CSF and ICG in Improving Financial Performance

In the context of Islamic banking, Critical Success Factors (CSFs) encompass a range of elements including management qualities, the effective utilization of information technology, strict adherence to Sharia standards, and robust stakeholder involvement (Nurdin, 2017; Yusuf et al., 2024). Effective management of these CSFs significantly enhances the competitive advantage of Islamic banks, leading to greater operational efficiency and improved financial performance. Similarly, Islamic Corporate Governance (ICG) is critical for ensuring the adherence of Islamic financial institutions to Shariah principles, as well as sustaining their integrity and public confidence (Rini, 2018). Strong ICG processes can reduce compliance risks and increase management efficiency, thereby boosting the financial performance of Islamic institutions.

Both academic research and business practice consistently demonstrate that CSFs have a significant positive influence on the financial performance of an organization (Chen, 1999; Ika et al., 2012; Ahmed & Manab, 2016). Furthermore, studies and observations within the Islamic banking industry indicate that ICG also exerts a significant positive influence on the financial performance of Islamic banks (Daud et al., 2014; Puspitasari et al., 2023; Syafira et al., 2025). Thus, both CSFs and ICG play an essential role in determining the extent of financial accomplishments demonstrated by Islamic financial institutions. Accordingly, the following hypotheses are formulated for this research:

H4: Critical Success Factors (CSFs) are hypothesized to exert a statistically significant influence on the financial performance of Islamic banking institutions.

H5: Islamic Corporate Governance (ICG) is expected to exert impact on the financial performance of Islamic banking institutions.

The Mediating Role of CSF and ICG in the Relationship between COSO ERM and Financial Performance

The internal control system inherent within the Enterprise Risk Management (ERM) framework plays a pivotal role in facilitating the effective implementation of Islamic Corporate Governance (ICG) principles. Furthermore, COSO ERM provides the structural foundation that enables the institutionalization of Critical Success Factors (CSFs) and strengthens ICG mechanisms through clearer delegation of responsibilities, heightened risk awareness, and ethical leadership. As explained by Fraser and Simkins (2010), COSO ERM offers strategic guidance that directly influences organizational processes and managerial practices. Therefore, CSFs and ICG are posited to play a crucial mediating role in translating the influence of the ERM framework into improved financial performance. This mediation is explained by the ability of CSFs to align operations and enhance responsiveness, and of ICG to foster stability through ethical and transparent governance. Under signaling theory, both elements reduce information asymmetry by conveying credible internal signals to stakeholders (Connelly et al., 2011).

Empirical studies also reinforce this theoretical pathway, although limited research explicitly examines COSO ERM's alignment with CSFs. While COSO ERM has been found to be most effective when aligned with organizational enablers such as operational efficiency and responsiveness to risk, direct empirical studies on its explicit alignment with CSFs remain scarce (Horvey & Odei-Mensah, 2024; Hidayah et al., 2025). Kinyua et al. (2015) emphasized top management support and organizational structure as critical

success factors, while Haniffa and Hudaib (2007) confirmed that strong ICG elements enhance financial outcomes. Bouheraoua and Djafri (2022) further highlighted that integrating COSO into the Shariah compliance function enhances both risk management and internal governance. Accordingly, this study proposes the following hypotheses:

H6: Critical Success Factors (CSFs) mediate the relationship between COSO ERM and financial performance.

H7: Islamic Corporate Governance (ICG) is proposed to serve as a mediating variable in the relationship between COSO ERM and the financial performance of Islamic banks.

The research model, based on a review of previous studies and a theoretical analysis, is depicted in Figure 1.

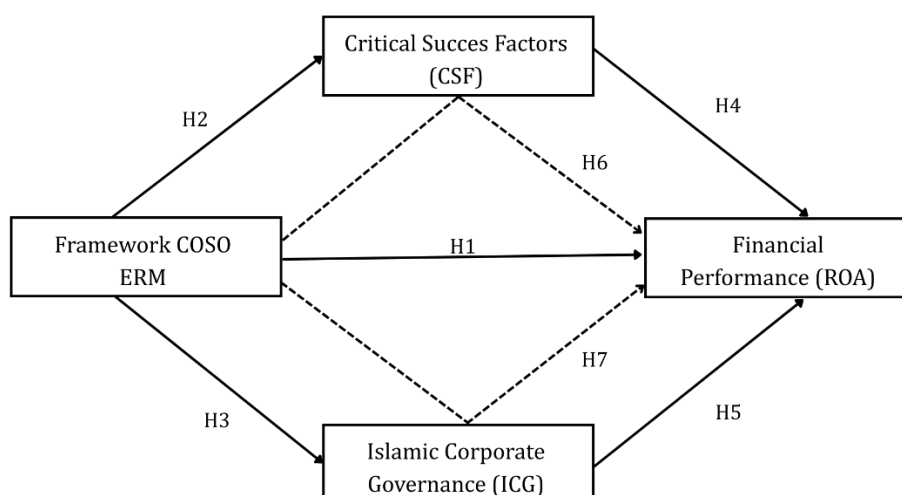
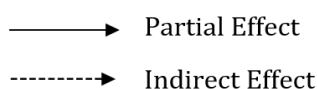


Figure 1. Research Conceptual Framework



METHOD

This study relies on secondary data retrieved from financial disclosures published on the official websites of selected banks, covering the period from 2014 to 2023. The population for this research comprises the world's ten largest Islamic banks, as ranked by Global Finance in 2022. Purposive sampling was employed, with the key criterion being that selected Islamic banks must have consistently produced annual financial reports throughout the entire research period. The sample is shown in Table 1.

Globally, leading Islamic banks are characterized by their extensive experience and mature systems in managing risks and enhancing financial performance. Meanwhile, the Islamic Corporate Governance (ICG) variable (Table 2) is assessed using disclosure procedures that demonstrate adherence to ICG norms (Haniffa & Hudaib, 2007). The selection of these disclosure items is specifically guided by relevant Islamic governance frameworks and AAOIFI (Accounting and Auditing Organization for Islamic Financial Institutions) guidelines. The complete operationalization and measurement criteria for the ICG variable can be found in Table DOV (Disclosure of Variables).

Data were analyzed using Path Analysis. Feasible Generalized Least Squares (FGLS) was employed to calculate the beta estimator value, which assesses the explanatory power of the regression model over the fluctuation observed in the dependent variable. The application of FGLS is theoretically justified as it effectively addresses common econometric issues in panel data analysis, particularly heteroscedasticity and serial correlation across entities and time periods (Greene, 2018).

To accommodate all the hypotheses from the previous section, this study proposes three distinct models. Model 1 (Equation 1): Regresses financial performance (ROA) against COSO ERM, Critical Success Factors (CSF), and Islamic Corporate Governance (ICG). In this equation, the control variables Debt to Equity Ratio (DER) and Earning Assets to Total Assets Ratio (EAR) are also included. Model 2 (Equation 2): Regresses Critical Success Factors (CSF) against COSO ERM. Model 3 (Equation 3): Regresses Islamic Corporate Governance (ICG) against COSO ERM.

$$ROA_{i,t} = \alpha_{i,t} + \beta_{1i,t}COSO\ ERM + \beta_{2i,t}CSF + \beta_{3i,t}ICG + \beta_{4i,t}DER + \beta_{5i,t}EAR \quad (1)$$

$$CSF_{i,t} = \alpha_{i,t} + \beta_{1i,t}COSO\ ERM \quad (2)$$

$$ICG_{i,t} = \alpha_{i,t} + \beta_{1i,t}COSO\ ERM \quad (3)$$

Table 1. The Sample of the Research

Banks Name	Country
Al Rajhi Bank	Arab Saudi
Kuwait Finance House (KFH)	Kuwait
Dubai Islamic Bank (DIB)	UEA
Maybank Islamic	Malaysia
Alinma Bank	Arab Saudi
Abu Dhabi Islamic Bank	UEA
Qatar Islamic Bank (QIB)	Qatar
Masraf Al Rayan	Qatar
CIMB Islamic	Malaysia
Al Baraka Banking Group	Bahrain

Source: Data Proceed (2024)

Table 2. Variable Information

Variable	Measurement	Scale
COSO ERM	$ERM\ disclosure = \frac{Total\ item\ disclosed}{108} \times 100\%$ <p>(Desender & Lafuente, 2009)</p>	Ratio
CSF	$CSF\ Score = \frac{\sum_{i=1}^n X_i}{n} \times 100\%$ <p>Xi = 1 if the success factor i is disclosed or applied, 0 if not n = total number of success factors measured</p>	Ratio
ICG	Variable ICG is proxied using the ICG implementation score from The ESG Rating. The index used to give a score is in the form of numbers ranging from 0 to 100. If the company has a score close to or reaches a value of 100 then the company is getting better at implementing the ICG. The score range of 85 - 100 is categorized as very reliable, the score of 70 - 84 is categorized as reliable and the score of 55 - 69 is categorized as quite reliable.	Ratio
ROA	$ROA = \frac{Net\ Profit}{Total\ Assets}$	Ratio
DER	$DER = \frac{Total\ Debt}{Total\ Equity} \times 100$	Ratio
EAR	$EAR = \frac{Total\ Equity}{Total\ Assets}$	Ratio

In this study, mediation analysis was conducted using the Sobel Test to evaluate the statistical significance of the mediating roles of Critical Success Factors (CSFs) and Islamic Corporate Governance (ICG) in the relationship between COSO Enterprise Risk Management (ERM) disclosure and the Return on Assets (ROA) of Islamic banks. The Sobel Test is one of the most commonly used and valid methods for statistically testing mediation effects. Hypothesis testing serves as a statistical procedure to assess the validity of characteristics within a population by analyzing sample data. The institutional profiles of the ten largest Islamic banks worldwide, which serve as the focus of this study, are presented below.

RESULTS AND DISCUSSION

The Effect of COSO ERM Framework On Financial Performance of Islamic Banks

Table 3 presents the estimation results for model parameters 1, 2, and 3. The findings demonstrate that the COSO Enterprise Risk Management (ERM) Framework has a negative and significant effect on Islamic banks' financial

performance (ROA). Specifically, the estimated coefficient for COSO ERM in Model 1 indicates that a higher level of COSO ERM disclosure is associated with lower Return on Assets (ROA). This observed negative effect may be attributable to several factors, including the costly nature of ERM implementation in its early phases, a potentially overly conservative risk-averse approach, or temporary operational inefficiencies arising from system transitions. Conversely, Critical Success Factors (CSFs) exhibit a positive but statistically non-significant direct impact on ROA. On the other hand, Islamic Corporate Governance (ICG) exerts a positive and significant effect on ROA. To further investigate the mediating effects, a Sobel Test was conducted, with the results detailed in Table 4. The findings reveal that the mediation paths between COSO ERM and ROA through both CSFs and ICG yield p-values exceeding the 0.05 significance threshold. Consequently, neither CSFs nor ICG were found to be statistically significant mediators in this relationship. These results suggest that while the COSO ERM framework may initially hinder financial performance due to implementation challenges, effective Islamic corporate governance can still play a vital role in enhancing ROA.

Table 3. Research Model Parameter Estimation

Model 1					
	Estimate	Std.Error	T-Value	Sig. (Pr(> t))	Results
(Intercept)	-0,0002	0,007007	-0,029	0,9769	
COSO	-0,42847	0,083678	-5,1205	1,62E-06***	H1 Accepted
CSF	0,01002	0,007194	1,3929	0,1669	H4 Rejected
ICG	0,029312	0,006129	4,7822	6,41E-06***	H5 Accepted
DER	-0,00094	0,00017	-5,5411	2,73E-07***	
EAR	0,086897	0,018785	4,6258	1,19E-05***	
Model 2					
(Intercept)	0,497428	0,034522	14,409	<2,20E-16***	
COSO	6,888889	0,779113	8,842	3,93E-14***	H2 Accepted
Model 3					
(Intercept)	0,384774	0,045033	8,5442	1,73E-13***	
COSO	6,222222	1,016338	6,1222	1,91E-08***	H3 Accepted

Note: Sig.< 1%***, > 1% < 5% **, < 5% ** sig under 5%*.

Sumber: Data Procceced (2024)

Table 4. Sobel Test

Hypothesis	Z-Value	P-Value	Results
COSO ERM → CSF → ROA	0,889606	0,373678	H6 Rejected
COSO ERM → ICG → ROA	-0,97111	0,331492	H7 Rejected

Note: Sig.< 1%***, > 1% < 5% **, < 5% ** sig under 5%*.

Sumber: Data Procceced (2024)

DISCUSSION

The Effect of COSO ERM Framework on Financial Performance of Islamic Banks

The test findings suggest that disclosing the COSO Enterprise Risk Management (ERM) Framework has no significant positive impact on the financial performance of Islamic banks. This conclusion implies that while Islamic banks may have comprehensively implemented risk management, COSO ERM has not made a direct and substantial contribution to achieving optimal financial performance (Oyewo, 2021).

This indicates that the adoption of COSO ERM may remain largely compliance-oriented, failing to achieve full integration into the bank's strategic and operational processes. This aligns with Beasley et al. (2008), who observed that over half of organizations view ERM minimally as a strategic tool and struggle to integrate it into core decision-making and planning processes. In numerous Islamic banks, risk management is often perceived as a supportive function rather than a core element in strategic decision-making (Sitasari, 2021). This limited strategic integration may account for its minimal influence on financial performance (Fatihin et al., 2024)

Furthermore, the COSO ERM framework prioritizes long-term dimensions of governance and internal control mechanisms, which might also explain this minimal effect (Lestari & Mayangsari, 2023; Anton et al., 2025; Nasr et al., 2019). Given that the social dimension and adherence to Sharia principles often take precedence over pure profit maximization in Islamic banking, even when risks are effectively managed, the positive impact may not be immediately reflected in earnings or profitability ratios (Cakranegara, 2021; Hassan & Aliyu, 2018).

This observation is consistent with the empirical evidence presented with Subagio and Saraswati (2022) which suggests that the implementation of ERM does not exhibit a strong association with financial performance. Similarly, Liem (2020) found that ERM deployment in the banking industry had no meaningful influence on enhancing financial performance. Furthermore, a study by Nguyen & Dang (2024) indicates that risk management primarily serves as a stabilizing factor rather than a principal catalyst for short-term financial success.

The Effect of COSO ERM Framework on Critical Success Factors (CSFs)

Furthermore, the outcome of Model 2 indicates a positive and significant relationship between the COSO Enterprise Risk Management (ERM) Framework and Critical Success Factors (CSFs). This provides evidence that a higher level of COSO ERM embedding better facilitates the achievement of CSFs



in Islamic banks. Theoretically, COSO ERM should facilitate CSFs by making explicit many critical systems, such as risk communication, organizational linkage, and risk response (Fraser & Simkins, 2010). This is particularly relevant, as success factors in Islamic banking necessitate complex compliance, advanced technology adoption, and deep stakeholder engagement, all in accordance with Sharia law. COSO ERM can significantly enrich managers' capabilities, intra-firm coordination, and forward-looking elements that are essential for achieving CSFs. It also implies that employing COSO ERM in risk governance will offer greater clarity in enterprise objective setting, enhance information communication, and optimize resource allocation (Efe, 2023).

The effective implementation of COSO ERM and the linkages among its components enhance the effectiveness of strategic planning, which directly leads to improved performance (Wahyuni & Novita, 2021; Malik et al., 2020). Consequently, CSFs are more likely to be attained with strong risk management systems in place (Müller & Jugdev, 2012). In addition, research by Giffari (2021) showed a structured management process, accompanied by a strengthened organizational culture, effective communication, and a clear strategic focus, results in improved performance and managerial ability.

Overall, the COSO ERM framework serves not only to mitigate risks but also acts as a strategic success enabler, supporting the internal and external capabilities required to accomplish CSFs. From the perspective of signaling theory, the structured application of COSO ERM also informs stakeholders regarding the organization's strategic direction, operational discipline, and risk maturity. Such signals are especially important in Islamic banks, where institutional credibility and Sharia-compliant effectiveness are essential for sustaining stakeholder confidence and long-term success (Connelly et al., 2011).

The Effect of COSO ERM Framework on ICG

The findings of this study indicate that the implementation of the COSO Enterprise Risk Management (ERM) framework has a positive and statistically significant impact on Islamic Corporate Governance (ICG). This emphasizes that a structured and integrated approach to risk management significantly contributes to strengthening and enhancing governance practices within Islamic financial institutions. The Governance and Culture component of COSO ERM is closely tied to the broader governance framework, core organizational values, and the competencies of human resources, serving as fundamental pillars for the effective application of ICG (Everson et al., 2017). The concept of ICG in Islamic financial institutions emphasizes not only conventional pillars



like transparency and accountability but also incorporates fundamental Sharia values, including *sidq* (truthfulness), *amanah* (trust), and social obligation (Sodiq, 2017).

This finding is consistent with Sabani (2023), whose research demonstrates that the active involvement of the board of directors, as an integral part of the governance mechanism, significantly enhances the effectiveness of ERM. This study thus supports the notion of a mutually beneficial relationship between governance and risk management. Furthermore, the study Wahyuni and Novita (2021) indicates that integrating COSO ERM into Islamic banks' strategic operations improves the quality of planning and control in accordance with ICG standards..

From the perspective of signaling theory, the adoption and disclosure of COSO ERM practices serve as credible signals of sound governance, long-term strategic focus, and adherence to Shariah principles (Ahmad & Teo, 2024). This, in turn, reduces information asymmetry, enhances stakeholder trust, and reinforces the legitimacy of Islamic banks in a competitive financial environment (Connelly et al., 2011). However, while COSO ERM can improve the quality of governance, it is crucial to ensure that governance processes extend beyond formal frameworks. These practices must be deeply embedded in everyday decision-making processes and ethical behavior to truly create a substantial improvement in bank performance.

The Effect of Critical Success Factors (CSFs) on the Financial Performance of Islamic Banks

Concerning the empirical evidence from the Sobel Model, the results reveal that while Critical Success Factors (CSFs) contribute positively to the financial performance of Islamic banks, this relationship lacks statistical significance. This implies that while CSFs are strategically important, their direct contribution to profitability may not be statistically significant in the sample studied (Paul, 2025). One possible explanation for this finding is that the implementation of CSFs within these banks may still be at a formative stage, thus limiting their immediate, measurable financial impact.

CSFs often serve as measures of the accountability of Islamic bank management's success, which can sometimes be highly subjective. Accountability should ideally be measured not only by activities carried out but also by the value these activities generate (Jabbour et al., 2018). CSFs can be understood as the necessary organizational actions to ensure success and competitiveness, thereby supporting organizational change processes within companies (Rockhart, 1978). Identifying key success factors is crucial for prioritizing valuable resources, especially in resource-scarce contexts (Mittal



& Sangwan, 2014), including the development of more environmentally sustainable organizations (Mittal & Sangwan, 2014) which includes the development of more environmentally sustainable organizations (Jabbour et al., 2018). Moreover, understanding CSFs for environmentally sustainable manufacturing can be key to achieving environmentally sustainable production and consumption (Luthra et al., 2015).

However, Islamic banks that effectively implement and disclose CSFs are better positioned to manage and translate these into long-term financial performance. From the signaling theory perspective, such disclosure serves as a credible signal from the bank regarding its strategic capabilities and commitment to Sharia principles. This helps reduce information asymmetry and enhances stakeholder trust (Connelly et al., 2011). These practices ultimately improve the efficiency and competitiveness of Islamic banks, aiming to enhance both financial and ethical aspects (Farook et al., 2011; Haniffa & Hudaib, 2007).

The Effect of ICG on the Financial Performance of Islamic Banks

In Model 1, the estimation results indicate that Islamic Corporate Governance (ICG) exerts a positive and statistically significant effect on the financial performance of Islamic banks. This suggests that strengthening the implementation of ICG, through mechanisms such as enhanced transparency, robust monitoring based on Islamic Law, and rigorous accountability, can lead to improved profitability, as represented by Return on Assets (ROA).

For banks, it is essential to recognize that not only shareholders but also depositors and other community stakeholders have a vested interest in the bank's operations. Therefore, sustainability mechanisms and governance should be emphasized more strongly for the banking sector compared to other industries (Aras & Crowther, 2008). A highly relevant intervention arising from this research is to develop an ICG framework that explicitly includes dimensions of Sharia governance, aimed at evaluating its comprehensive impact on financial performance (Jan et al., 2021; Buallay, (2019).

This result aligns with the findings of Farook et al. (2011), who stressed that well-functioning Islamic governance mechanisms can enhance investor confidence and help reduce informational asymmetry, which in turn fosters long-term financial growth. From the perspective of signaling theory, these governance disclosures act as credible signals to external stakeholders about the bank's ethical integrity, robust risk oversight, and strategic direction. This transparency enhances trust and ultimately contributes to improved financial performance. Therefore, the empirical evidence of this research affirms the



acceptance of H5 and emphasizes the strategic role of strong governance in improving Islamic bank performance.

The Effect of The COSO ERM Mediated by CSF and ICG on Financial Performance of Islamic Banks

The mediating test reveals that the indirect effect via Critical Success Factors (CSFs) and Islamic Corporate Governance (ICG) is statistically insignificant, suggesting a limited mediating role. These findings imply that while COSO Enterprise Risk Management (ERM) significantly influences internal enablers such as strategic alignment, leadership, and communication, these influences have not yet translated into improved financial outcomes within the observation period. Therefore, CSFs may function only as partial or latent mediators in the relationship between risk management and performance. According to signaling theory, the adoption of COSO ERM can be perceived as a strategic signal to external stakeholders, indicating a bank's commitment to structured risk control and long-term sustainability. However, if these signals do not lead to an immediate improvement in financial performance, their perceived reliability among stakeholders may diminish (Oyewo, 2021). These findings suggest that while CSFs have not demonstrated a full mediating effect in this study, they remain vital for the long-term integration of ERM into strategic processes and may influence financial performance more significantly as implementation maturity increases.

Consequently, based on the Sobel Test, neither CSFs nor ICG demonstrate a statistically significant mediating role in the relationship between COSO ERM and financial performance. From the perspective of signaling theory, the disclosure of COSO ERM, CSFs, and ICG can be viewed as organizational signals intended to build stakeholder trust and demonstrate commitment to sound risk management. Yet, if these signals do not yield immediate performance gains, their short-term credibility might be limited. Nevertheless, both variables remain conceptually important, serving as internal strategic and governance mechanisms that may enhance the long-term effectiveness and impact of enterprise risk management in Islamic banking contexts.

In the current post-pandemic economic climate, Islamic banks are increasingly facing external pressures such as market volatility, evolving regulatory demands, and rapid digital transformation (Rahman et al., 2023). While frameworks like COSO ERM are designed to mitigate such uncertainties through structured risk oversight, the absence of significant mediation by CSFs and ICG may indicate a lag in internal adaptation (Jemaa, 2022). Many Islamic banks in emerging markets are still in the early stages of integrating strategic enablers into operational frameworks, which limits their capacity to convert



robust risk governance into measurable financial gains. Furthermore, organizational inertia and a lack of dynamic capabilities in swiftly adjusting strategies often hinder the effectiveness of CSFs and internal control structures.

Recent developments in financial technology and sustainability standards also demand a broader redefinition of what constitutes "success factors" in Islamic banking (Ishak et al., 2025). Traditional CSFs, such as leadership commitment, alignment with Sharia principles, and service quality, while still relevant, may no longer be sufficient on their own to drive financial performance without being paired with digital agility, Environmental, Social, and Governance (ESG) compliance, and heightened stakeholder responsiveness. Consequently, the insignificant mediation effect observed in this study could be attributed to a misalignment between evolving external expectations and the internal readiness of the institutions. As stakeholder trust becomes increasingly tied to measurable performance outcomes rather than symbolic adherence to governance structures, the role of CSFs and ICG must evolve beyond formality into active, agile, and data-driven functions.

CONCLUSION

This research found that the implementation of the COSO Enterprise Risk Management (ERM) framework has a significant negative direct effect on the financial performance of Islamic banks, as measured by Return on Assets (ROA). Although COSO ERM successfully fostered improvements in Critical Success Factors (CSFs) and Islamic Corporate Governance (ICG), only ICG was found to have a significant positive effect on ROA. Conversely, CSFs did not demonstrate a significant direct effect on financial performance. Mediation tests conducted using the Sobel Test also indicated that neither CSFs nor ICG served as statistically significant mediators in the relationship between COSO ERM and financial performance.

These results indicate that while COSO ERM promotes the strengthening of internal structures and governance mechanisms, its influence on financial outcomes is not yet optimal in the short term. One contributing factor is the still-immature level of ERM integration, alongside the early-stage application of CSFs, which may not yet fully support strategic decision-making processes. Additionally, in the context of Islamic banking, which inherently emphasizes compliance with Sharia principles, a long-term orientation towards sustainability, ethics, and stability is often prioritized over the sole achievement of short-term financial gains. Within the framework of signaling theory, the practices of ERM disclosure, CSFs, and ICG remain important

strategic signals, but still require evidence of tangible results to enhance credibility in the eyes of stakeholders.

Practically, this research implies that reinforcing COSO ERM needs to be accompanied by a deeper internal transformation, as well as adjustments to external dynamics such as digitization, Environmental, Social, and Governance (ESG) demands, and evolving stakeholder expectations. Islamic banks should focus on enhancing data-driven implementation, improving managerial capabilities, and strategically integrating risk management with operational performance. The limitations of this research include an observation period that may not sufficiently capture the long-term impacts of ERM implementation, and the reliance on secondary data from annual report disclosures, which may offer limited representation of actual practices. Future research is recommended to test the model using a longitudinal approach and to consider other external variables, such as digital maturity, to provide a more comprehensive picture of the relationship between risk management and financial performance in the Islamic banking sector.

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