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Corporate Governance And Enterprise Risk Management Integration: A Systematic Literature Review Of Mechanisms, Challenges, And Future Research Directions

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Abstract

This study examines the integration of Corporate Governance and Enterprise Risk Management (ERM) in strengthening corporate risk governance using a Systematic Literature Review (SLR) approach. A total of 50 peer-reviewed articles published between 2021 and 2026 were systematically analyzed following the PRISMA guidelines. The review focuses on key themes related to governance mechanisms, ERM implementation effectiveness, organizational challenges, ESG integration, digital risk management, and future research directions. The synthesis indicates that the integration of Corporate Governance and ERM plays an important role in improving risk oversight, enhancing strategic decision-making, strengthening internal control, and increasing organizational resilience. However, the literature also identifies several challenges, including weak risk culture, limited organizational resources, complexity of implementation, and difficulties in integrating emerging risks such as ESG and digital risks. This study contributes to the literature by

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providing a structured synthesis of previous research and offering insights for organizations in developing adaptive and integrated risk governance frameworks.

Keywords: Corporate Governance, Enterprise Risk Management, Risk Governance, Internal Control, Organizational Resilience.

INTRODUCTION

Changing global business environments have caused companies to face various forms of strategic, operational, financial, technological, and sustainability risks that are increasingly difficult to predict. Economic globalization, accelerating digitalization, climate change, geopolitical instability, and increasing demands for transparency from investors and regulators have changed the risk characteristics of modern companies (Fraser et al., 2024; Gleißner & Berger, 2024). In these conditions, Corporate Governance has a critical role in ensuring that organizations have effective monitoring, control, and decision-making mechanisms in the face of uncertainty. Modern corporate governance is not only compliance-oriented, but also evolves into a strategic mechanism that connects risk management with the creation of corporate value through integration Enterprise Risk Management (ERM) (Gleißner & Berger, 2024; Rehman et al., 2021).

The increasing complexity of corporate risk has prompted a paradigm shift from a traditional partial risk management approach to a one-size-fits-all approach Enterprise Risk Management (ERM) is more integrated. ERM enables organizations to conduct comprehensive risk identification, evaluation, mitigation, and monitoring by involving all levels of the organization, including the board of directors and the board of commissioners as part of the mechanism Corporate Governance (Gleißner & Berger, 2024; Stein et al., 2022). In contrast to conventional approaches that focus only on loss reduction, modern ERM places risk as a strategic factor in organizational decision-making and value creation. The development of non-financial risks such as ESG risk, climate risk, cyber risk, and reputational risk further strengthens the need for companies to build an integrated ERM system (Albuquerque et al., 2026; Jagriˇ et al., 2026).

Various reports and studies show that global companies face an increasing threat of risks that can affect business sustainability. Cyber risk is one of the main threats due to companies' increasing reliance on digital technology, while climate change and ESG risks are getting more attention as they relate to the pressure of investors, regulators, and society (Albuquerque et al., 2026; Ghozali et al., 2026). In addition, the disadvantages Governance and Internal Control can also increase the likelihood of it happening Fraud, manipulation of financial statements, and a

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decrease in stakeholder trust (Zong et al., 2026). An overview of the magnitude of the impact of various risks on modern organizations can be seen in Table 1 below.

Table 1. Main Types of Risk in Modern Companies

No.	Risk Type	Main Impact	Impact Estimation	Source
1.	Cyber Risk	Data leaks, digital fraud, operational disruptions	USD 4.88 million/incident	IBM (2024)
2.	Climate Risk	Asset damage and supply chain disruptions	USD 275 billion/year	Swiss Re (2023)
3.	ESG & Governance Risk	Decline in the company's reputation and value	Increased cost of capital	OECD (2023)
4.	Fraud & Internal Control Risk	Financial losses and weak supervision	±5% of the organization's revenue	ACFE (2024)

Source : Data processed, 2026

The data in Table 1 shows that modern corporate risks have increasingly complex, multidimensional, and interrelated characteristics. Cyber risks, for example, are not only related to information technology aspects, but also related to the quality of governance, the effectiveness of internal controls, and the ability of organizations to respond to business disruptions (Ghozali et al., 2026). Similarly, ESG and climate risks have evolved into strategic factors that affect a company's reputation, access to financing, and value in the long term (Anton et al., 2025; Jagriˇ et al., 2026). This condition suggests that companies can no longer rely on traditional supervisory mechanisms, but require integration between Corporate Governance, internal control, and ERM as the foundation of organizational resilience (Organizational Resilience) (Gleißner & Berger, 2024).

Previous studies have shown that the integration between corporate governance and ERM makes an important contribution to improving corporate performance and strengthening organizational control mechanisms. Rehman et al. (2021) found that risk management acts as a connecting mechanism between corporate governance and financial performance, so that the effectiveness of governance increases when supported by a strong risk system. Furthermore, Ghozali et al. (2026) prove that the implementation of ERM is able to improve cyber fraud

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mitigation through strengthening coordination between financial risk management and information technology governance. Research by Zong et al. (2026) also shows that ERM is able to reduce earnings management practices and improve the quality of the company's financial statements.

Although the literature on Corporate Governance and ERM has developed significantly, there are still research gaps that need to be studied further. Most of the previous research still focused on the direct relationship between ERM and company performance, while aspects of how the mechanisms of integration Governance and ERM is built, the factors that hinder implementation, and the future ERM development strategy have not been comprehensively synthesized (Fraser et al., 2024). In addition, the emergence of new risks such as ESG risk, climate risk, and Cyber Risk shows that Framework ERM must continue to evolve in order to be able to adapt to changing global business environments (Albuquerque et al., 2026; Jagrič et al., 2026).

Based on the development of concepts, variations in research results, and increasing complexity of corporate risks, a systematic study is needed that is able to identify research patterns, integration mechanisms, implementation challenges, and future research development directions regarding the relationship between corporate governance and Enterprise Risk Management. The Systematic Literature Review (SLR) approach allows the literature analysis process to be carried out in a structured, transparent, and replicable manner so that it can provide a more comprehensive understanding of the development of concepts, methods, and findings of previous research (Anton et al., 2025; Albuquerque et al., 2026). Therefore, this research was conducted to synthesize the literature on the integration of corporate governance and risk management in order to make a theoretical contribution to the development of academic studies as well as practical implications for organizations in building an adaptive, sustainable, and value-creation-oriented risk governance system.

LITERATURE REVIEW

Agency Theory

Agency theory is one of the fundamental theories used to explain the relationship between company owners (Main) and management (agent) in modern organizational structures. Jensen & Meckling (1976) explains that the separation between ownership and control can lead to conflicts of interest due to differences in objectives, limited supervision, and the emergence of information asymmetry. In context Corporate Governance, such conflicts can be reduced through supervisory mechanisms such as the Board of Commissioners, Audit Committees, information transparency,

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and internal control systems that ensure management acts in the best interests of shareholders (Bagh et al., 2025; Pecina et al., 2022; Rehman et al., 2021).

From a risk management perspective, agency theory explains that management can make decisions that do not fully consider the company's long-term risks if the supervisory mechanism is not effective. Therefore, the application of Enterprise Risk Management (ERM) is one of the governance mechanisms that is able to reduce opportunistic behavior through increased accountability, transparency, and quality of decision-making (Gleißner & Berger, 2024; Fraser et al., 2024). Research by Zong et al. (2026) and Ghozali et al. (2026) shows that strengthening control and risk management can improve the quality of reporting and reduce organizational risk.

Corporate Governance

Corporate governance is a system that regulates the relationship between shareholders, management, the company's board, and stakeholders in ensuring that the organization runs in a transparent, accountable, and responsible manner. The concept of governance has evolved from a traditional approach that focuses on controlling agency conflicts to a strategic mechanism in creating corporate value and maintaining business sustainability (Rehman et al., 2021; Bagh et al., 2025). The structure of the board, the independence of commissioners, the audit committee, and the internal oversight mechanism are important elements that determine the effectiveness of corporate governance in dealing with the complexity of the modern business environment (Pecina et al., 2022; Fraser et al., 2024).

From a risk management perspective, corporate governance has an important role in ensuring that risk is part of the company's strategic decision-making process. The board of directors and commissioners are responsible for setting the direction of risk policy, developing a risk culture, and ensuring the effectiveness of the implementation of ERM systems in the organization (Gleißner & Berger, 2024; Fraser et al., 2024). Research shows that good governance quality can strengthen risk monitoring, increase information transparency, and help companies build organizational resilience to changes in the uncertain business environment (Rehman et al., 2021; Jagrič et al., 2026).

Enterprise Risk Management (ERM)

Enterprise Risk Management (ERM) is a risk management approach that integrates risk identification, assessment, response, and monitoring processes across organizational activities to support the achievement of the company's strategic objectives. In contrast to traditional risk

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management which tends to be separate based on specific functions, ERM places risk as part of the organization's decision-making and value creation process (Gleißner & Berger, 2024; Fraser et al., 2024). This approach allows companies to understand the relationship between risks and build a risk management system that is more adaptive to changes in the external environment.

Research developments show that the application of ERM not only serves as a risk mitigation mechanism, but also as an instrument of improving company performance and resilience. Jagrič et al. (2026) show that the level of maturity of ERM is related to an increase in an organization's ability to manage uncertainty through more comprehensive risk measurement. In addition, Zong et al. (2026) found that ERM is able to improve the quality of financial reporting through a reduction in earnings management practices, while Ghozali et al. (2026) show its role in strengthening the mitigation of cyber risks and organizational fraud.

Risk Governance

Risk governance is a concept that describes how organizations direct, supervise, and control the risk management process through structures, policies, and decision-making mechanisms that involve various levels of management. This concept places risk as an integral part of a company's strategy, not just as a control function after problems occur (Gleißner & Berger, 2024; Fraser et al., 2024). In practice, risk governance includes the role of the board of directors, risk committees, risk culture, risk communication, and clarity of responsibility in ensuring the effectiveness of an organization's risk management system (Pecina et al., 2022; Jagrič et al., 2026).

The effectiveness of risk governance is highly dependent on the organization's ability to integrate risk information into the strategic planning and decision-making process. Fraser et al. (2024) show that many failures in ERM implementation are caused by weak risk cultures, lack of top-management support, and low coordination between organizational functions. Meanwhile, Jagrič et al. (2026) explain that the maturity level of risk governance can improve a company's ability to deal with uncertainty and strengthen organizational performance. Therefore, risk governance is an important link between the governance structure and the effectiveness of ERM.

ESG Risk Management And Sustainability

The development of the global business environment has caused corporate risk to expand from financial risks to non-financial risks related to environmental, social, and governance aspects. ESG risk management is becoming increasingly important because sustainability factors can affect

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reputation, investor relations, access to financing, and company value in the long term (Anton et al., 2025; Albuquerque et al., 2026). The integration of ESG risk into ERM allows companies to identify and manage sustainability risks more systematically and support the achievement of organizational strategic goals (Jagrič et al., 2026).

Despite the increasing attention to ESG risk, the implementation of integration between sustainability and ERM still faces various challenges. Albuquerque et al. (2026) show that many companies have improved climate risk disclosure and sustainability governance structures, but have not fully incorporated these risks into operational ERM processes. Anton et al. (2025) also found that research on the relationship between risk management and sustainability continues to grow, especially related to how companies build organizational resilience through long-term risk management. This condition shows the importance of strengthening governance in supporting the integration of ESG and ERM.

Internal Control And Risk Management Effectiveness

Internal control is an important element in ensuring the effectiveness of the implementation of ERM because it provides a mechanism for supervision, evaluation, and control of organizational activities. An effective internal control system is able to reduce the likelihood of fraud, improve the quality of financial information, and strengthen corporate transparency and accountability (Pecina et al., 2022; Zong et al., 2026). From a corporate governance perspective, internal control serves as an instrument that helps boards and management ensure that risk policies have been implemented in accordance with organizational objectives (Rehman et al., 2021; Fraser et al., 2024).

The relationship between internal control and ERM is increasingly important as the complexity of digital and corporate operational risks increases. Ghozali et al. (2026) show that the integration of ERM with internal control and information technology is able to improve the organization's ability to mitigate the risk of cyber fraud. In addition, Zong et al. (2026) found that strengthening control mechanisms through ERM can reduce earnings management practices and improve the quality of financial statements. Thus, the effectiveness of internal control is an important foundation in supporting the successful implementation of ERM and strengthening the company's governance system.

METHOD

This study uses the Systematic Literature Review (SLR) method by referring to the

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Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines to identify, select, evaluate, and synthesize various previous studies on the integration of corporate governance and Enterprise Risk Management (ERM). The SLR approach was chosen because it is able to provide a systematic, transparent, and replicable literature review process in identifying the development of concepts, integration mechanisms, implementation challenges, and future research directions. The source of literature in this study was obtained from several reputable academic databases, namely Scopus, Web of Science (WoS), ScienceDirect, and Emerald Insight, which are widely used in research in the fields of corporate governance, risk management, accounting, and corporate sustainability.

In line with these data sources, the articles analyzed are international scientific publications that have gone through a peer review process and are mostly indexed in the Scopus database with the quartile categories of Q1 to Q4. The literature studied includes research on corporate governance, enterprise risk management, risk governance, internal control, ESG risk management, and sustainability risk. The selection of reputable articles is carried out to ensure that the synthesis results have a strong academic basis and are able to illustrate the development of global research on the relationship between corporate governance mechanisms and integrated risk management systems (Anton et al., 2025; Albuquerque et al., 2026; Fraser et al., 2024).

The literature identification process was carried out through several stages using a combination of keywords relevant to the research focus. The main keywords used included "Corporate Governance", "Enterprise Risk Management", "ERM", "Risk Governance", "Internal Control", "ESG Risk Management", "Sustainability Risk", and "Corporate Risk Management". The initial stage is carried out by searching for articles based on titles, abstracts, and keywords in a predetermined database. Furthermore, a screening process is carried out based on the suitability of the topic, year of publication, type of document, and relevance of the article to the research objectives regarding the integration of corporate governance and ERM.

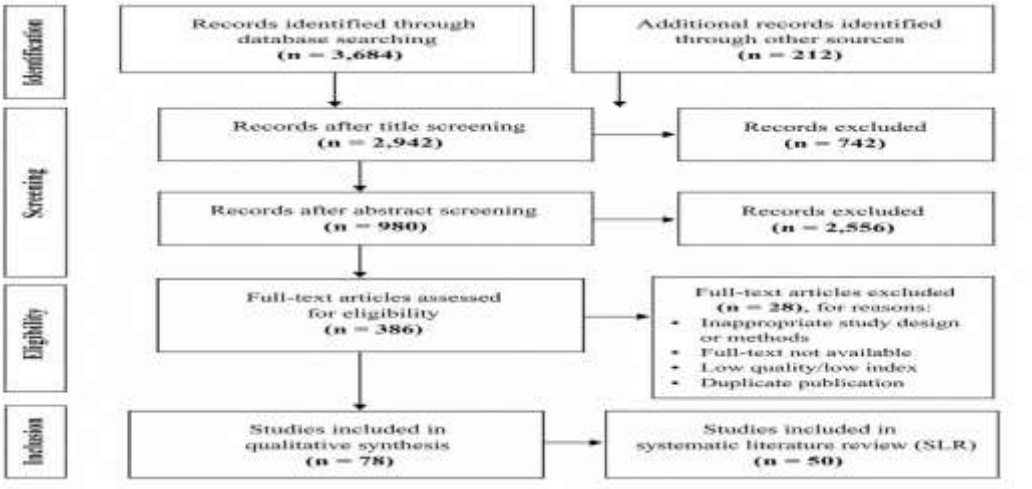
The article selection stages are carried out based on the inclusion and exclusion criteria that have been set so that the analyzed literature has appropriate quality and relevance. The inclusion criteria in this study include: (1) research articles published in the 2021–2026 period; (2) articles that discuss the relationship or relationship between corporate governance, ERM, risk governance, internal control, or ESG risk management; (3) articles published in reputable international journals and have gone through a peer review process; and (4) articles that use empirical, conceptual, bibliometric, and systematic literature review approaches that contribute to the development of corporate risk management studies. Meanwhile, exclusion criteria include

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articles that are not directly related to governance and ERM, non-academic articles, articles in the form of editorials or conference proceedings, duplicate articles, and research that does not provide adequate methodological information and research results.

Based on the search and selection process using the PRISMA approach, 3,684 articles were obtained in the initial stage of identification from all databases used. After the removal of 742 duplicate articles, 2,942 articles were obtained for the screening stage based on titles and abstracts. The screening process produced 386 articles that were considered to have initial relevance to the research topic. Furthermore, an eligibility assessment was carried out through a full-text review of the available articles, so that 78 articles were obtained that met the suitability of the research substance. This stage aims to ensure that the selected articles have relevance and quality in accordance with the research focus.

The final stage of selection was carried out by evaluating the quality of the methodology, the suitability of research variables, theoretical contributions, and the relevance of the article to the focus of corporate governance and ERM integration. Based on this process, as many as 28 articles were eliminated because they did not meet the quality criteria, had too general focus, or did not provide a discussion of organizational risk management mechanisms. Thus, 50 international journal articles were obtained that met all inclusion criteria and were used as the basis for analysis in this study. The selected articles were then analyzed based on the characteristics of the research, the method used, the country of the research, the main variables, the research findings, and opportunities for future research development.



Source : Data processed, 2026

Figure 1. PRISMA Flow Diagram

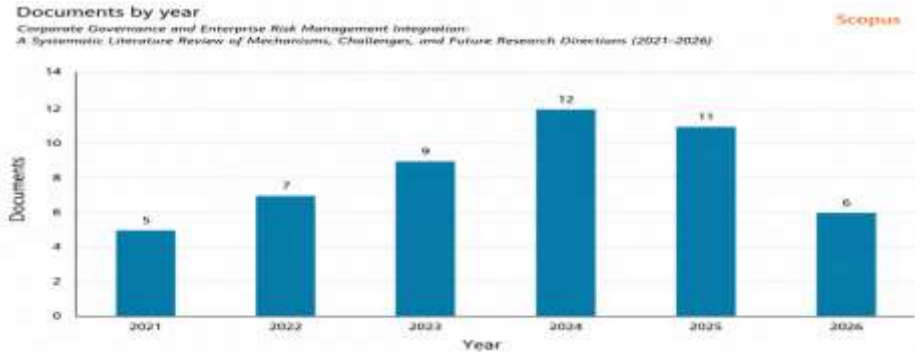
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Figure 1 shows the stages of selection of research articles that are carried out systematically using the PRISMA approach, starting from the process of identifying literature, eliminating duplicate articles, filtering by title and abstract, to feasibility evaluation through full-text review based on the inclusion and exclusion criteria that have been set. From the entire selection process, 50 international journal articles were obtained that met the criteria and were used as the basis for analysis in this study. The selected articles come from various reputable journals and represent various research perspectives on corporate governance, Enterprise Risk Management (ERM), risk governance, ESG risk management, and the effectiveness of corporate risk control.

RESEARCH RESULTS

Performance Analysis

The development of research on Corporate Governance and Enterprise Risk Management (ERM) Integration shows an increase in academic attention in recent years. The integration between corporate governance and risk management is becoming increasingly important as organizations face an increasingly complex business environment, economic uncertainty, digital transformation risks, regulatory changes, and increasing demands on sustainability practices. To understand the development of the study, an analysis of publication trends based on the scientific literature in the 2021–2026 period was conducted. This analysis aims to describe the growth of research that discusses governance mechanisms, challenges in implementing risk management, and future research development directions.



Source : Data processed, 2026

Figure 1. Publication Trends

Based on the publication trends in the figure, research on Corporate Governance and Enterprise Risk Management (ERM) Integration has developed during the 2021–2026 period. The

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number of publications was recorded as many as 5 articles in 2021, increasing to 7 articles in 2022, 9 articles in 2023, and reaching a peak in 2024 with 12 articles. Furthermore, publications decreased slightly to 11 articles in 2025 and 6 articles in 2026. This trend shows that the topic of integrating corporate governance and risk management is getting more attention in academic studies, especially in understanding governance mechanisms, the application of ERM, organizational challenges, and the development of more adaptive risk management strategies.

Table 1. Journal Index Distribution

Journal Index	Number of Articles	Percentage
Scopus Q1	32	64,00%
Scopus Q2	11	22,00%
Scopus Q3	5	10,00%
Scopus Q4	2	4,00%
Total	**50**	**100%**

Source : Data processed, 2026

Based on Table 1, the distribution of journal indexes shows that most of the articles analyzed came from high-reputable journals indexed by Scopus. A total of 32 articles (64.00%) were published in the Scopus Q1 journal, followed by 11 articles (22.00%) in Scopus Q2, 5 articles (10.00%) in Scopus Q3, and 2 articles (4.00%) in Scopus Q4. The dominance of publications in high-quartile journals shows that research on Corporate Governance and Enterprise Risk Management (ERM) Integration has an important position in international academic studies.

Table 2. Distribution of Research Theories

Theory	Number of Articles	Percentage
Agency Theory	12	24,00%
Stakeholder Theory	8	16,00%
Institutional Theory	7	14,00%
Resource-Based View (RBV)	6	12,00%
Contingency Theory	5	10,00%
Risk Management Theory	4	8,00%
Legitimacy Theory	3	6,00%
Stewardship Theory	2	4,00%

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Theory	Number of Articles	Percentage
Transaction Cost Economics	2	4,00%
Signaling Theory	1	2,00%
Total	**50**	**100%**

Source : Data processed, 2026

Based on Table 2, Agency Theory is the most dominant theoretical approach with 12 articles (24.00%). The dominance of this theory shows that many studies on the integration of Corporate Governance and Enterprise Risk Management (ERM) look at the relationship between supervisory mechanisms, conflicts of interest, and the role of the board of directors and audit committees in ensuring effective risk management. In addition, Stakeholder Theory as many as 8 articles (16.00%) and Institutional Theory as many as 7 articles (14.00%) are also widely used to explain how organizations respond to stakeholder demands, regulations, and external environmental pressures in the implementation of ERM.

In general, the distribution of theories shows that research on the integration of Corporate Governance and ERM does not only focus on internal control aspects, but also includes strategic and institutional perspectives. The use of these theories shows that the effectiveness of ERM is influenced by governance structures, organizational ability to manage resources, institutional pressures, and the need to build corporate resilience. These findings suggest that future research can develop a more integrated theoretical approach by considering aspects of digitalization, sustainability governance, and changes in the global business environment.

Table 3. Distribution of Research Countries

Country	Number of Articles	Percentage
United States	8	16,00%
United Kingdom	6	12,00%
Germany	5	10,00%
Indonesia	5	10,00%
China	4	8,00%
Australia	4	8,00%
Switzerland	3	6,00%
Italy	3	6,00%

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Country	Number of Articles	Percentage
Netherlands	2	4,00%
India	2	4,00%
Malaysia	2	4,00%
South Korea	1	2,00%
Canada	1	2,00%
South Africa	1	2,00%
Nigeria	1	2,00%
New Zealand	1	2,00%
Total	**50**	**100%**

Source : Data processed, 2026

The distribution of research countries shows that studies on Corporate Governance and Enterprise Risk Management have developed globally with the largest contribution coming from developed countries. The United States is the country with the highest number of publications, namely 8 articles (16.00%), followed by the United Kingdom with 6 articles (12.00%) and Germany with 5 articles (10.00%). In addition, Indonesia also shows a significant contribution with 5 articles (10.00%), which illustrates the increasing attention to the application of corporate governance and risk management in the context of developing countries. The dissemination of research from various countries shows that the integration of Corporate Governance and ERM is a relevant strategic issue in various sectors and business environments.

Table 4. Distribution of Research Methods

Research Methods	Number of Articles	Percentage
Quantitative	27	54,00%
Qualitative	10	20,00%
Literature Review	8	16,00%
Mix Method	5	10,00%
Total	**50**	**100%**

Source : Data processed, 2026

The distribution of research methods showed that the quantitative approach was the most dominant method used with 27 articles (54.00%). This shows that most of the research on Corporate Governance and Enterprise Risk Management Integration focuses on testing the

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relationship between variables, such as the influence of corporate board mechanisms, the application of ERM, and its impact on organizational performance. Furthermore, there were 10 articles (20.00%) using the literature review/systematic review approach to identify the development of theories and previous research. A qualitative approach of 8 articles (16.00%) was used to understand the ERM implementation process and organizational challenges, while a mixed method of 5 articles (10.00%) was used to obtain a more thorough analysis.

Table 5. Distribution of Research Sectors

Sectors Researched	Number of Articles	Percentage
Banking and Financial Services	12	24,00%
Non-Financial Public Companies	9	18,00%
Manufacturing Industry	7	14,00%
Energy and Mining Sector	6	12,00%
Insurance Sector	4	8,00%
Technology and Digital Companies	3	6,00%
Healthcare and Pharmaceutical Sector	3	6,00%
Government-Owned Enterprises (SOEs)	2	4,00%
Construction and Infrastructure Sector	2	4,00%
Agriculture and Primary Industry	2	4,00%
Total	**50**	**100%**

Source : Data processed, 2026

The distribution of research sectors shows that the most studies on Corporate Governance and Enterprise Risk Management (ERM) Integration are conducted in the banking and financial services sector with 12 articles (24.00%). The dominance of the financial sector shows that the banking industry has a high level of attention to the implementation of governance and risk management because of its business characteristics that are highly dependent on credit risk management, operational risk, market risk, and regulatory compliance.

In addition to the financial sector, research was also conducted on 9 articles (18.00 articles), 7 articles (14.00 articles) in the manufacturing sector, and 6 articles in the energy and mining sectors (12.00%). This shows that the implementation of ERM is not only a concern in industries with high levels of regulation, but also in sectors that face complex operational, environmental, sustainability, and business uncertainty.

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Table 6. Main Research Results

Main Research Results	Number of Articles	Percentage
Integration of Corporate Governance and ERM strengthens risk oversight and strategic decision-making	16	32,00%
The role of the board of directors, audit committee, and governance structure determines the effectiveness of ERM implementation	10	20,00%
ERM improves organizational performance through systematic and integrated risk management	8	16,00%
ERM implementation faces challenges in the form of risk culture, resource limitations, and organizational complexity	7	14,00%
The integration of ERM with sustainability governance and ESG is the latest research development direction	5	10,00%
The use of digital technology supports the strengthening of risk identification and monitoring systems	4	8,00%
Total	**50**	**100%**

Source : Data processed, 2026

The distribution of research results shows that most of the articles discuss the role of integrating Corporate Governance and Enterprise Risk Management (ERM) in strengthening risk supervision and supporting strategic decision-making, namely 16 articles (32.00%). In addition, 10 articles (20.00%) highlight the importance of the role of the board of directors, audit committee, and governance mechanism in increasing the effectiveness of ERM implementation. This shows that the success of ERM is greatly influenced by the quality of the governance structure and the organization's commitment to managing risk.

In general, the results of the study show that the integration of Corporate Governance and ERM plays an important role in increasing organizational resilience to various uncertainties.

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However, some studies still find challenges in the form of risk culture, limited resources, and complexity of implementation. Recent research has also begun to lead to the integration of ERM with sustainability governance, ESG, and the use of digital technology in strengthening corporate risk management systems.

DISCUSSION

1. Integration of Corporate Governance and ERM in Corporate Risk Governance

The integration of Corporate Governance and Enterprise Risk Management (ERM) is one of the important approaches in strengthening corporate risk governance amid the increasing complexity of the business environment. Modern companies face various interconnected strategic, operational, financial, technological, and sustainability risks that require a more integrated risk management system. In the perspective of agency theory, Corporate Governance acts as a supervisory mechanism to reduce conflicts of interest between shareholders (principal) and management (agent) through increased transparency, accountability, and effectiveness of internal control (Rehman et al., 2021; Pecina et al., 2022; Zong et al., 2026). Meanwhile, ERM serves as a systematic approach that assists organizations in identifying, evaluating, and responding to various risks that can affect the achievement of company goals (Gleißner & Berger, 2024; Fraser et al., 2024).

In the framework of corporate risk governance, the relationship between Corporate Governance and ERM shows that risk management is no longer just the responsibility of a specific function, but is part of the organization's strategy and decision-making process. Corporate Governance provides a supervisory structure through the role of the board of directors, board of commissioners, audit committee, and other control mechanisms, while ERM provides risk management processes ranging from risk identification, risk assessment, risk response, to risk monitoring (Rehman et al., 2021; Gleißner & Berger, 2024). Gleißner and Berger (2024) explain that the decision-oriented concept of ERM changes the perspective of risk management from simply reducing losses to a strategic instrument to improving the quality of company decisions. The integration of the two concepts can be illustrated through the relationship between governance mechanisms and ERM processes as shown in Figure 2.

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Source: Data processed, 2026

Figure 2. Integration of Corporate Governance and ERM in Corporate Risk Governance

Based on Figure 2, the integration of Corporate Governance and ERM illustrates the relationship between the corporate governance structure and the systematic risk management process. The Corporate Governance mechanism provides a foundation through board oversight, transparency, accountability, and internal control. Meanwhile, ERM plays a role in ensuring that risks can be managed through an integrated process of identification, evaluation, mitigation, and monitoring. Gleißner and Berger (2024) explain that effective ERM must be able to provide relevant risk information for management in determining company

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strategy. In line with that, Fraser et al. (2024) emphasize that the success of ERM is highly dependent on the organization's ability to connect the risk system with business processes and strategic decision-making.

The implementation of Corporate Governance and ERM integration also faces various challenges in practice. Fraser et al. (2024) show that many organizations experience failure in ERM implementation not because they do not have a risk framework, but because of weak top management commitment, low risk culture, and lack of coordination between organizational functions. These findings are reinforced by Almashhour et al. (2025) which identifies several main obstacles in the implementation of Sustainable ERM, namely limited resources, organizational complexity, technological readiness, and weak leadership in encouraging risk integration into company strategies. Therefore, the effectiveness of ERM is greatly influenced by the quality of governance that is able to create a risk-aware organizational environment.

Overall, the literature shows that the integration of Corporate Governance and ERM is an important mechanism in strengthening modern corporate risk governance. Corporate governance serves as the basis for oversight, transparency, and accountability, while ERM provides a structured approach to managing strategic and operational risks. Various studies show that the integration of both is able to improve the quality of decision-making, strengthen internal controls, reduce organizational risk, and support the creation of corporate value in the long term (Rehman et al., 2021; Zong et al., 2026; Jagrič et al., 2026). Recent research developments also show that ERM integration is increasingly geared towards sustainability risk management, ESG, climate risk, and the use of digital technology to build more adaptive and resilient organizations (Anton et al., 2025; Albuquerque et al., 2026; Gleißner, 2026).

2. The Role of Governance Structures in the Effectiveness of ERM Implementation

The structure of Corporate Governance is one of the main factors that determine the effectiveness of the implementation of Enterprise Risk Management (ERM) in an organization. Governance mechanisms such as the role of the board of directors, board of commissioners, audit committee, and internal oversight system have an important function in ensuring that the risk management process runs in accordance with the company's strategic objectives. From the perspective of agency theory, the existence of a governance structure is necessary to reduce conflicts of interest between management and shareholders through increased supervision, transparency, and accountability in decision-making (Rehman et al., 2021; Pecina et al., 2022; Zong et al., 2026). Thus, the effectiveness of ERM is determined not only by the

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existence of a risk framework, but also by the quality of the governance mechanisms that direct and oversee its implementation.

In the context of ERM implementation, the company's board has an important role in determining the direction of risk policy, determining the level of risk appetite, and ensuring that risk information is part of the strategic decision-making process. Rehman et al. (2021) show that risk management has a role as a connecting mechanism between corporate governance and the company's financial performance. The findings show that strong governance can improve the effectiveness of risk management because companies have a supervisory system that is able to ensure that risks have been considered in every managerial decision. In line with this, Pecina et al. (2022) found that companies with a good governance structure tend to have a more mature level of ERM implementation through strengthening risk identification, evaluation, and control processes.

The role of the audit committee and internal control system is also an important element in supporting the success of ERM. An effective oversight structure allows organizations to reduce information risk, improve the quality of reporting, and ensure compliance with the company's internal policies. Zong et al. (2026) show that the implementation of ERM acts as a governance mechanism that is able to reduce earnings management practices (accrual-based earnings management and real earnings management) and improve the quality of the company's financial statements. This shows that ERM not only functions as a risk mitigation system, but also as an instrument to strengthen governance through increased transparency and control of management activities.

Although governance structures play an important role, some studies show that the effectiveness of ERM is still influenced by the quality of implementation and organizational readiness. Fraser et al. (2024) explain that many companies have failed in implementing ERM because the available formal structures have not been supported by the active involvement of top management, effective risk communication, and a strong risk culture. In addition, Almashhour et al. (2025) identified that lack of leadership commitment, limited resources, weak organizational coordination, and technological readiness are the main obstacles in building a sustainable ERM system. Therefore, the governance structure must be able to create an organizational environment that encourages risk awareness at all levels of the company.

Overall, the literature shows that the structure of Corporate Governance is the main foundation in determining the effectiveness of ERM implementation. The existence of a board

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of directors, audit committees, oversight mechanisms, and a strong risk culture allows ERM to function as part of an organization's strategy, not just as a control activity. Research by Gleißner and Berger (2024) confirms that modern ERM must be integrated with strategic decision-making processes through a decision-oriented approach to ERM. Thus, the effectiveness of ERM is highly dependent on the ability of governance structures to ensure that risks are part of the company's planning, decision-making, and value-creation processes in a sustainable manner (Gleißner & Berger, 2024; Jagrič et al., 2026).

3. Challenges of Enterprise Risk Management Implementation in Organizations

The implementation of Enterprise Risk Management (ERM) in organizations is not only related to the implementation of risk management frameworks and procedures, but is also influenced by the company's internal readiness to build risk-based decision-making systems, cultures, and mechanisms. Although ERM has evolved as a strategic approach to managing uncertainty, various studies show that many organizations still face obstacles in effectively integrating ERM into business activities. Fraser et al. (2024) explain that the main challenge in implementing ERM lies not only in the availability of a risk framework, but in the organization's ability to connect risk management with business strategy, leadership support, and decision-making processes. Therefore, the success of ERM implementation is highly dependent on the organization's readiness to build a comprehensive risk governance system.

One of the main challenges in the implementation of ERM is the low top management commitment and the weak risk culture in the organization. Almashhour et al. (2025) through the Systematic Literature Review, Delphi Method, and Interpretive Structural Modeling (ISM-MICMAC) approach identified that the lack of leadership support is the most dominant obstacle in the implementation of Sustainable Enterprise Risk Management. The research shows that the success of ERM is strongly influenced by management's involvement in setting the direction of risk, providing resources, and ensuring that risk is part of the organization's culture. In line with these findings, Fraser et al. (2024) emphasized that organizations often fail in the implementation of ERM because risk is still considered an administrative function, rather than a strategic element in decision-making.

In addition to leadership and organizational culture factors, limited resources and the complexity of company structures are also challenges in the implementation of ERM. Almashhour et al. (2025) show that limited human resources, technological capabilities, and coordination between organizational units are factors that hinder the integration of ERM as a whole. These conditions are increasingly complex when companies have to face new risk

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developments such as climate risk, ESG risks, and digital risks. Albuquerque et al. (2026) found that although companies have begun to include climate risks in disclosure and governance structures, there is still a gap between risk policies and the implementation of ERM at the operational level. This suggests that organizations need higher adaptability to integrate different types of new risks into the ERM system.

Another challenge in the implementation of ERM relates to the organization's ability to transform risk systems into strategic decision support tools. Gleißner and Berger (2024) explain that traditional ERM approaches often still focus on risk identification and loss mitigation, while modern ERM needs to evolve into a decision-oriented approach to ERM that is able to provide risk information to support enterprise planning and value creation. In addition, Gleißner (2026) points out that technological developments such as artificial intelligence (AI) provide great opportunities for ERM development, but also require organizational readiness in managing data, technology, and analytical capabilities in order to produce more accurate risk-based decisions.

Overall, the literature shows that the challenges of implementing ERM in organizations are not only related to technical aspects, but also include structural, cultural, and strategic aspects. Obstacles such as weak leadership commitment, low risk culture, limited resources, risk integration gaps, and technological readiness are the main factors that determine the success of ERM implementation (Fraser et al., 2024; Almashhour et al., 2025; Albuquerque et al., 2026). Therefore, organizations need to build an ERM approach that is more integrated with Corporate Governance, sustainability, and digital transformation in order to increase organizational resilience and face business uncertainty in the future (Anton et al., 2025; Jagrič et al., 2026).

4. Integration of ERM with ESG, Digital Risk, and Sustainability Governance

The development of modern corporate risk shows that there is an increasingly complex change in risk characteristics. Organizational risk no longer only focuses on financial and operational aspects, but also includes environmental risk, social risk, governance risk, and digital risk. This condition encourages the development of Enterprise Risk Management (ERM) from a traditional approach oriented towards loss mitigation to an approach that is more integrated with the company's sustainability strategy. From the perspective of stakeholder theory, companies have broader responsibilities not only to shareholders, but also to various stakeholders through risk management that considers economic, social, and environmental aspects (Anton et al., 2025; Albuquerque et al., 2026). Therefore, the integration of ERM with

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ESG and sustainability governance is an important mechanism in building organizational resilience and supporting long-term corporate value creation.

Recent literature shows that the integration of ESG into ERM is one of the main development directions in corporate risk management research. Increasing attention to climate risk, regulatory pressure, investor demands, and the need for sustainability transparency have led companies to need to include ESG factors in the risk identification and management process. Albuquerque et al. (2026) show that companies are starting to strengthen climate risk disclosure and sustainability governance mechanisms, but there are still gaps in integrating these risks into operational ERM processes. In line with these findings, Anton et al. (2025) explained that the relationship between risk management, sustainability, and company performance is one of the growing research themes because organizations increasingly need a risk management system that is able to support business sustainability.

In addition to sustainability risks, digital transformation also expands the scope of ERM through increasing attention to digital risk management. The development of information technology creates various new risks such as cyber attacks, data breaches, system failures, and risks of using artificial intelligence-based technology (artificial intelligence risk). Ghozali et al. (2026) shows that the integration of ERM with information technology governance is able to improve the ability of organizations to manage cyber fraud risks by strengthening coordination between technological risks and financial risks. In addition, Gleißner (2026) explained that the development of digital technology provides opportunities to improve the quality of risk analysis through the use of data and technology, but also raises the need for stronger governance mechanisms to control new emerging risks.

The integration of ERM with ESG, digital risk, and sustainability governance shows that modern enterprise risk management requires a more comprehensive approach. ERM not only serves as a control mechanism to reduce the negative impact of risk, but also as a strategic instrument that helps companies understand the relationship between risk, business strategy, and value creation. Gleißner and Berger (2024) explain that modern ERM needs to be directed towards a decision-oriented approach to ERM, which is a risk management system that is able to provide strategic information for management in making decisions. Meanwhile, Jagrič et al. (2026) shows that the level of risk management maturity has a relationship with improving the organization's ability to deal with uncertainty and maintain performance stability.

Overall, the literature shows that the integration of ERM with ESG, digital risk, and sustainability governance is an important development in building adaptive and sustainable

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corporate risk governance. Future risk management requires not only mitigation capabilities, but also the ability of organizations to anticipate changes in the business environment, manage sustainability impacts, and use technology responsibly. Thus, companies that are able to integrate ESG, digital risk, and governance aspects into ERM will have greater ability to build competitive advantages, increase stakeholder trust, and strengthen organizational resilience in the face of global uncertainty (Anton et al., 2025; Albuquerque et al., 2026; Jagrič et al., 2026).

5. Future Research Directions

The development of research on Corporate Governance and Enterprise Risk Management (ERM) shows a shift in focus from traditional approaches that only emphasize risk control to a strategic approach that integrates risk with corporate value creation. Previous literature has extensively discussed the relationship between governance structures, the implementation of ERM, and organizational performance, but the development of the global business environment suggests a need to expand the study on new risk aspects such as ESG, climate change, digital transformation, and geopolitical uncertainty. Gleißner and Berger (2024) explain that future ERM research needs to lead to a decision-oriented approach to ERM that places risk information as an important part of the strategic decision-making process. In line with that, Fraser et al. (2024) emphasizes the importance of developing an ERM model that is able to connect business strategies, risk culture, and governance mechanisms in a more integrated manner.

One of the future research directions is the development of an integration model between ERM and ESG and sustainability governance. Increasing attention to environmental risk, social risk, and governance risk shows that companies need a risk framework that is able to accommodate the sustainability dimension in decision-making. Albuquerque et al. (2026) shows that although companies have improved climate risk disclosure and sustainability governance mechanisms, there are still gaps in incorporating ESG risks into operational ERM processes. Therefore, further research can develop empirical models that explain how ESG-ERM integration can improve organizational resilience and long-term corporate performance (Anton et al., 2025).

In addition to the sustainability aspect, the development of digital technology also opens up new research opportunities related to the integration of ERM with digital risk management and analytics technology. The increasing dependence of companies on technology causes risks such as cyber risk, data security, system failure, and artificial

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intelligence risk to become an important part of modern risk governance. Ghozali et al. (2026) show that the integration of ERM with information technology governance can improve an organization's ability to manage cyber fraud risks. Furthermore, Gleißner (2026) explained that the use of technologies such as AI and data analysis (advanced analytics) can improve risk prediction capabilities, but further research is still needed on governance mechanisms to ensure that the use of these technologies remains transparent, safe, and responsible.

The next direction of research can also focus on the development of ERM maturity level measurement and its effect on organizational success in dealing with uncertainty. Jagrič et al. (2026) show that the level of risk management maturity has a relationship with an organization's ability to manage risk and maintain performance stability. However, there are still research opportunities to develop more comprehensive ERM measurement indicators by considering different aspects of governance, ESG, digital technology, and industry characteristics. In addition, comparative research between countries and between sectors is needed to understand how differences in regulations, organizational culture, and levels of economic development affect the effectiveness of ERM implementation.

Overall, future research on Corporate Governance and ERM needs to move towards a more multidimensional approach by integrating aspects of governance, sustainability, technology, and business strategy. The literature shows that ERM no longer only serves as a risk mitigation mechanism, but develops into a strategic instrument in building an adaptive and sustainable organization. Therefore, further research can be directed at the development of a more dynamic, technology-based, and sustainable ERM framework that is able to respond to global risk challenges through the integration of Corporate Governance, ESG, digital transformation, and sustainability governance (Anton et al., 2025; Albuquerque et al., 2026; Gleißner, 2026; Jagrič et al., 2026).

CONCLUSION

Based on the results of the Systematic Literature Review (SLR) of 50 scientific articles that discuss the integration of Corporate Governance and Enterprise Risk Management (ERM), this study concludes that the integration of corporate governance and risk management is a strategic approach in strengthening modern corporate risk governance. The literature synthesis shows that Corporate Governance plays a role in providing supervisory, transparent, and accountability mechanisms through board structures, audit committees, and internal control systems, while ERM functions as an integrated approach in identifying, evaluating, and managing various

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organizational risks. The integration of these two concepts has been proven to improve the quality of strategic decision-making, strengthen organizational resilience, and support the creation of company value in the long term.

Viewed from the perspective of corporate risk governance, the implementation of ERM is greatly influenced by the quality of the corporate governance structure, management commitment, risk culture, and the organization's ability to integrate risk into business strategies. However, several studies also show that there are challenges in the implementation of ERM, especially related to limited resources, organizational complexity, weak internal coordination, and the gap between risk policies and operational implementation. In addition, the development of new risks such as ESG, digital risk, cyber risk, and sustainability risk shows that ERM needs to be continuously developed to be able to respond to changes in the global business environment.

RESEARCH LIMITATIONS

This study has several limitations that need to be considered in interpreting the results of the study. The results of the study are entirely based on the analysis of the available literature so that they are strongly influenced by the quality, scope, and methodological approach of the analyzed articles, without being accompanied by direct empirical testing of certain companies. Thus, the findings obtained describe a conceptual synthesis regarding the development of Corporate Governance and ERM research and depend on the consistency and quality of previous research methodologies.

In addition, the heterogeneity of the industrial sector, the characteristics of the country, the level of governance maturity, and the difference in organizational regulations are factors that can limit the level of generalization of research results. Companies in different sectors can have different risk management approaches according to the characteristics of the business and the complexity of the risks faced. In addition, the possibility of publication bias cannot be completely eliminated because research with significant results or strong theoretical contributions tends to be published more often than research with insignificant results.

SUGGESTIONS

Further research is suggested to combine the SLR approach with empirical research based on corporate data to gain a more comprehensive understanding of the influence of Corporate Governance and ERM integration on organizational performance. In addition, future studies can expand the focus of research by analyzing the integration of ERM with ESG, digital risk

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management, artificial intelligence, and sustainability governance to produce a risk governance model that is more adaptive and relevant to global business developments.

PRACTICAL & THEORETICAL IMPLICATIONS

The practical implications of this study confirm that the implementation of the Global Minimum Tax (GMT) requires strengthening institutional capacity and harmonizing fiscal policies across jurisdictions. Policymakers need to align domestic regulations with global standards and improve tax administration systems, including the implementation of IIR and UTPR. In addition, tax authorities must strengthen data and supervisory infrastructure, while companies are required to adjust tax strategies that are more transparent and compliant.

Theoretically, this study enriches the international tax literature by placing GMT as part of global tax governance. The agency theory perspective explains the opportunistic behavior of companies, while international tax governance emphasizes the importance of coordination between countries. These findings broaden the understanding of the relationship between global tax policy, corporate behavior, and institutional capacity, and open up opportunities for further empirical research related to the effectiveness of GMT.

REFERENCES

Abdellattif, D. H. E., Nomer, A. R. M., & Eldawayaty, D. M. A. (2025). Sustainability Risk Management and Financial Distress : The Moderating Role of Financial Performance in Saudi Firms. Sustainability, 17(94), 1–37. https://doi.org/10.3390/su17219401

ACFE. (2024). Occupational Fraud 2024: A Report To The Nations.

Adam, M., Soliman, A. M., & Mahtab, N. (2023). Measuring enterprise risk management implementation: A multifaceted approach for the banking sector. Quarterly Review of Economics and Finance, 87(02), 244–256. https://doi.org/10.1016/j.qref.2021.01.002

Adedayo, H., Bala, H., Olajide, J., Saif, M., Al-absy, M., Sani, A., & Khatoon, G. (2026). Assessing the role of chief risk officer expertise on the nexus between enterprise risk management and performance of banks in emerging economy. Social Sciences & Humanities Open, 13(80), 1–11. https://doi.org/10.1016/j. ssaho.2025.102380

Albuquerque, L., Helena, S., Carra, Z., Santos, L., Tosto, G., & Dornelles, H. (2026). How Is the Integration of Climate-Related Risk into Enterprise Risk Management at Firm Level ? A Systematic Literature Review. Sustainability, 18(59), 1–32. https://doi.org/10.3390/su1812 5900

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

Almashhour, R., Al-mhdawi, M. K. S., Qazi, A., & Daghfous, A. (2026). Sustainable enterprise risk management in construction: Insights from the United Arab Emirates. Sustainable Operations and Computers Journal, 7(16), 128–145. https://doi.org/10.1016/j.susoc.2026.02.002

Amer, H. A., Nasr, S. M., & Soliman, N. F. (2026). Regional Studies in Marine Science PMF-based source apportionment and ecological risk of sediment-bound potentially toxic elements in an industrialized Mediterranean coastal bay. Regional Studies in Marine Science, 98(89), 1–16. https://doi.org/10. 1016/j.rsma.2026.105089

Anton, C. E., Baba, C. M., & Bucs, O. (2025). Perspectives on Integrating Risk Management and Sustainability for Financial Performance: A Systematic Literature Review. Sustainability, 17(56), 1–25. https://doi.org/10.3390/su170 83456

Asuming, A., Adu, D., Agyei-holmes, A., Baidoo, I., & Bruce, D. (2024). Indigenous risk management practices and their effects on small agribusiness firm growth amid economic crisis in Ghana. Scientific African, 23(95), 1–15. https://doi.org/10.1016/j.sciaf.20 24.e02095

Bagh, T., Imran, A., & Corbet, S. (2025). The impact of corporate governance on firm value: Understanding the role of strategic change. International Review of Economics and Finance, 103(June 2024), 104472. https://doi.org/10.1016/j. iref.2025.104472

Barbosa, M. W., Ignacia, S., Carrasco, M., Carolina, P., & Abarca, R. (2022). The effect of enterprise risk management competencies on students' perceptions of their work readiness. The International Journal of Management Education, 20(2), 1–14. https://doi.org/10.1016/j.ijme.2022.100638

Beal, J., Sakurahara, T., Farshadmanesh, P., Reihani, S., Kee, E., Rowell, A., Yilmaz, F., & Mohaghegh, Z. (2024). Progress in Nuclear Energy Modeling interconnections of safety and financial performance of nuclear power plants, Part 2 : Methodological developments and case study. Progress in Nuclear Energy, 171(100), 1–19. https://doi.org/10.1016/j.pnucene.2024.105100

Beasley, M., Branson, B., Pagach, D., & Panfilo, S. (2021). Are SEC proxy disclosures required about the board's role in risk oversight substantive ? Journal of Accounting and Public Policy, 40(1), 1–19. https://doi.org/10.1016/j.jac cpubpol.2020.106816

Berge, T. T., Hussein, B., Haaskjold, H., Hovd, B. A., & Allred, R. (2026). A holistic framework for portfolio risk management of megaprojects. Procedia Computer Science, 278(1877), 1807–1814. https://doi.org/10.1016/j.procs. 2026.03.173

Biggeri, M., Borsacchi, L., Braito, L., & Ferrannini, A. (2023). Measuring the compliance of

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management system in manufacturing SMEs: An integrated model. Journal of Cleaner Production, 382(97), 1–14. https://doi.org/10.10 16/j.jclepro.2022.135297

Blakely, B., Kurtenbach, J., & Nowak, L. (2022). Exploring the information content of cyber breach reports and the relationship to internal controls. International Journal of Accounting Information Systems, 46(68), 1–12. https://doi.org/ 10.1016/j.accinf.2022. 100568

Buchetti, B., Romana, F., & Perdichizzi, S. (2025). Analysis A literature review on corporate governance and ESG research : Emerging trends and future directions. International Review of Financial Analysis, 97(9), 103759. https://doi.org/10.1016/ j.irfa.2024.103759

Carolina, M., & Marques, M. (2025). Subcontracting Risk Management in the Portuguese Moulds and Plastics Industry Plastics Industry. Procedia Computer Science, 253(35), 3108–3114. https://doi.org/10.1016/j.procs.2025.02.035

Cheng, H., Feng, Y., & Dong, D. (2023). Will emission reduction commitments hedge the carbon risk premium ? Journal of Cleaner Production, 430(47), 1–11. https://doi.org/10.10 16/j.jclepro.2023.139747

Farshadmanesh, P., Beal, J., Sakurahara, T., Reihani, S., Kee, E., Rowell, A., Yilmaz, F., & Mohaghegh, Z. (2024). Modeling interconnections of safety and financial performance of nuclear power plants part 1 : Categorical review and theoretical bases. Progress in Nuclear Energy, 171(23), 1–16. https://doi.org/ 10.1016/j.pnucene.2024.105123

Fraser, J., Quail, R., & Simkins, B. (2024). What's Wrong with Enterprise Risk Management ? Journal of Risk and Financial Management, 17(274), 1–11. https://doi.org/10. 3390/jrfm17070274

Fraser, J. R. S., Quail, R., & Simkins, B. J. (2022). Questions asked about enterprise risk management by risk practitioners. Business Horizons, 65(3), 251–260. https://doi.org/10.1016/j.bushor.2021.02.046

Fung, D. W. H., Yan, W., & Yang, C. C. (2025). Surviving the storm: Evaluating the role of enterprise risk management in property and liability insurers' performance during the COVID-19 pandemic. Journal of Corporate Finance, 91(51), 1–19. https://doi.org/10.10 16/j.jcorpfin.2025.102751

Gao, C., & Zhang, S. (2025). ESG performance and corporate financialization: A dual perspective of risk management and value creation. Finance Research Letters, 71(42), 1–9. https://doi.org/10.1016/j.frl.2024.106442

Ghozali, I., Roro, R., Aprilia, K., & Hersugondo, H. (2026). Enterprise Risk Management and Cyber Fraud Mitigation: Evidence from Indonesian State-Owned Enterprises. Journal of Risk and Financial Management, 19(280), 1–17.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

Gleißner, W., & Berger, T. B. (2024). Enterprise Risk Management: Improving Embedded Risk Management and Risk Governance. Risks, 12(196), 1–15. https://doi.org/10.3390/risks 12120196

Group, S., Liu, S., Roy, D., & Group, S. (2021). Multi-Agents Mechanism and Blockchains Enterprise Platform of Logistics Services Based Multi-Agents and Enterpri. IFAC PapersOnLine, 54(1), 825–830. https://doi.org/10.10 16/j.ifacol.2021.08.097

Guo, Y., Ge, H., Liao, Z., Hu, Y., & Huang, B. (2024). The influence of financial innovation on enterprise risk management. Finance Research Letters, 62(98), 1–8. https://doi.org/10.1016/j.frl.2024.105098

Gupta, C., & Gevaers, R. (2025). Literature Review on the interconnectedness of risk. Transportation Research Procedia, 82(31), 2976–2983. https://doi.org/ 10.1016/j.trpro. 2024.12.231

He, J., Gao, H., Li, S., Guo, L., Lei, Y., & Cao, A. (2024). An intelligent maintenance decision-making based on economic life cutters. International Journal of Production Economics, 267(75), 1–21. https://doi.org/10.1016 /j.ijpe.2023.109075

He, Y., & Lin, C. (2025). Dynamic impact of media coverage on corporate risk management: Moderating effect of environmental policies and heterogeneity analysis. International Review of Economics and Finance, 100(09), 1–10. https://doi.org/10.1016/j.iref.20 25.104109

Huang, J., Kombate, B., Li, Y., Kouadio, K. R., & Xie, P. (2023). Effective risk management in the shadow of COVID-19 pandemic: The evidence of Indonesian listed corporations. Heliyon, 9(5), 1–21. https://doi.org/10.10 16/j.heliyon.2023.e15744

Huber, C., Kraus, K., & Meidell, A. (2025). Integrating the balanced scorecard and enterprise risk management: Exploring the dynamics between management control anchor practices and subsidiary practices. Management Accounting Research, 66(24), 1–16. https://doi.org/10.1016/j.mar.2024.100924

Hudáková, M., & Kuricová, A. (2026). Dynamics of the Approach to Enterprise Risk Management in the Context of Economic Growth and Global Crises. Administrative Sciences, 16(141), 1–25. https://doi.org/10.3390/admsci1603 0141

Hugo, V., Jr., K., & Reilley, J. T. (2024). The temporal dynamics of enterprise risk management. Critical Perspectives on Accounting, 99(63), 1–18. https://doi.org/10.1016/j.cpa.2021. 102363

Jagri, T., Malnar, A., & Galun, M. (2026). From ESG Risk Governance to Firm Performance:

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Measuring the Quality of Corporate Risk Management. Sustainability, 18(51), 1–19. https://doi.org/10.3390/su18105131

Jemaa, F. (2022). Recoupling work beyond COSO: A longitudinal case study of Enterprise-wide Risk Management. Accounting, Organizations and Society, 103(69), 1–18. https://doi.org/10.1016/j.aos.2022.101369

Jensen, M., & Meckling, W. (1976). Theory of the Firm: An Analysis of Managerial Behavior, Agency Costs, and Ownership Structure. Journal of Financial Economics, 3(4), 305–360. https://doi.org/10.1017/CBO9780511817410.023.

Juul, T., Sax, J., & Giannozzi, A. (2022). Conjoint effects of interacting strategy-making processes and lines of defense practices in strategic risk management: An empirical study. Long Range Planning, 55(6), 1–21. https://doi.org/10.1016/j.lrp.2021.102164

Kardos, P., & Hudakova, M. (2023). Risk identification of beverages transport process using decomposition method. Transportation Research Procedia, 74(07), 1463–1470. https://doi.org/10.1016/j.trpro.2023.11.307

Kuo, Y., Lin, Y., & Chien, H. (2021). Corporate social responsibility, enterprise risk management, and real earnings management: Evidence from managerial confidence. Finance Research Letters, 41(05), 1–19. https://doi.org/10.1016 /j.frl.2020.101805

Visit, A. Al, Hussin, B. M., Rizuan, M., & Kadir, A. (2025). The Impact of Enterprise Risk Management on Firm Competitiveness: The Mediating Role of Competitive Advantage in the Omani Insurance Industry. Risks, 13(199), 1–26. https://doi.org/10.3390/risks13100199

Lee, C., & Hussain, J. (2024). A carbon neutral supply chain management by considering emission-risk minimization and green purchasing through optimal decision-making. Environmental Research, 251(1), 118662. https://doi.org/10. 1016/j.envres.2024.118662

Li, W., & Zhou, Q. (2025). Can capital structure mismatch influence corporate risk-taking? From the prospective of earning management. Finance Research Letters, 73(66), 1–8. https://doi.org/10.1016/j.frl.2024.106566

Moazzeni, S., Goez, J. C., Sgarbossa, F., Fabio, N. H. H., & Goez, C. (2024). Operations among Medium-Sized Collaborative Operations among Medium-Sized. IFAC PapersOnLine, 58(19), 403–408. https://doi.org/10.1016/j.ifacol.2024.09.245

Mustafa, S., Al, A., Fuentes-bargues, L., & Ferrer-gisbert, P. S. (2024). Bibliometric analysis of the literature on risk management in the construction sector: Exploring current and future trends. Ain Shams Engineering Journal, 15(43), 1–9. https://doi.org/10.1016/j.asej.2024.102843

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

Nassar, F. S., & Abbas, A. O. (2025). Crisis and risk management in poultry production: Preparing future leaders for sustainability and food security. Poultry Science, 104(12), 1–11. https://doi.org/10.1016/j.psj.2025.105903

Ng, E., Davison, R. M., Wong, L., Tan, B., & Hong, J. (2026). The impact of enterprise and public social media use on guanxi formation and task performance. International Journal of Information Management, 88(30), 1–14. https://doi.org/10.1016/j.ijinfomgt.2026.103030

Pecina, E., Sprˇcí, D. M., & Lackoví, I. D. (2022). Qualitative Analysis of Enterprise Risk Management Systems in the Largest European Electric Power Companies. Energies, 15(28), 1–19. https://doi.org/10.3390/en15155328

Rehman, H., Ramzan, M., Zia, M., Haq, U., & Hwang, J. (2021). Risk Management in Corporate Governance Framework. Sustainability, 13(15), 1–17. https://doi.org/10.3390/su13095015

Ruohonen, J., Korpela, S., & Rintam, T. (2026). Rethinking AML/CFT risk management: Towards a risk strategy for banks. Journal of Economic Criminology Journal, 12(29), 1–14. https://doi.org/10.1016/j.jeconc.2026 .100229

Schafer, B. (2026). Internal audit professionals and generative artificial intelligence: implications for public policy, research, and practice. Journal of Accounting and Public Policy, 59(64), 1–7. https://doi.org/10.1016/j.jaccpub pol.2026.107464

Shahzad, F., Tayeenul, M., Sadaf, I., & Arslan, A. (2026). AI for the underdogs : Navigating risk and growth in high-tech micro-firms through generative artificial intelligence. Journal of Strategy & Innovation, 37(1), 1–17. https://doi.org/10.1016/j.jsinno.2026.200566

Soner, M., & Karadag, M. (2026). A COSO-Based Enterprise Risk Management Maturity in the Service Industry: Perspectives from Turkish Hotels and Hospitals. Sustainability, 18(29), 1–21. https://doi.org/10.3390/su18041929

Sufi, F., & Islam, S. (2026). From risk to resilience: Empirical validation of a multi dimensional entrepreneurial risk management model in developing markets. Strategic Business Research, 2(1), 1–18. https://doi.org/10.1016/j.sbr.20 26.100206

Wardi, A. El, Hammouch, H., Hammouch, K., & Trivedi, S. (2026). Do ESG Risks Constitute a Financial Deterrent to Investment Attractiveness ? An Empirical Multi-Country Analysis. Risks, 14(120), 1–22. https://doi.org/10.3390/risks 14050120

Xu, S., Liu, S., & Wang, X. (2026). Corporate investment under different manifestations of climate policy uncertainty : An analysis within a real options framework. Research in International Business and Finance, 89(79), 1–21. https://doi.org/10 .1016/j.ribaf.2026. 103479

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

Xu, Y., Han, B., Zhang, X., Liu, Y., Ge, Y., Zheng, L., & Bay, L. (2026). Ecological risk assessment of PAHs in surface sediments near Longkou Artificial Island (Laizhou Bay, China): Insights from content, source and toxicity equivalents. Marine Pollution Bulletin, 222(03), 1–8. https://doi.org/10.1016/j.mar 2025.118923

Yang, S., Ellina, P., Christofi, K., Sfiniadaki, P., & Kythreotis, A. (2026). Developing an ESG Disclosure Quality Framework for the Agricultural Chemicals Industry: A GRI-Based Approach. Administrative Sciences, 16(402), 1–30. https://doi.org/10.3390/admsci16080 402

Yang, Y., & Chen, Y. (2025). Risk management of transaction security using blockchain technology in the international logistics industry. Sustainable Futures, 10(37), 1–15. https://doi.org/10.1016/j.sftr.2025.101537

Zheng, S., Hu, Y., Yee, A., Chong, L., & Tan, C. (2022). Information & Management Leveraging blockchain technology to control contextualized business risks: Evidence from China. Information & Management, 59(7), 1–13. https://doi.org/10.1016/j.im.2022.103628

Zhu, D., Li, Z., & Raj, A. (2023). Technological Forecasting & Social Change Evaluation of the critical success factors of dynamic enterprise risk management in manufacturing SMEs using an integrated fuzzy decision-making model. Technological Forecasting & Social Change, 186(37), 1–12. https://doi.org/10.1016/j.techfore.2022.122137

Zong, Z., Hafizuddin, M., Bangaan, S., Imna, S., & Amin, M. (2026). Enterprise Risk Management and Earnings Management: Accrual-Based and Real Activities Evidence from Chinese Listed Firms. Journal of Risk and Financial Management, 19(339), 1–28. https://doi.org/10.3390 /jrfm19050339

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