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Enterprise Risk Management (ERM) Effectiveness During Global Crises

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Abstract

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This study examines the effectiveness of enterprise risk management in helping organizations navigate global crises characterized by severe disruptions, uncertainty, and heightened financial pressures. The review aims to clarify Enterprise Risk Management's role by synthesizing recent empirical findings on how integrated risk frameworks support preparedness and resilience during large-scale shocks. The results indicate that firms with more mature ERM practices achieve stronger performance, enhanced governance, and greater adaptability when confronting crisis conditions. The article discusses how ERM effectiveness is shaped by managerial involvement, risk culture, and the depth of integration into strategic planning. It also highlights differences in outcomes across organizational contexts, showing that ERM contributes most when supported by strong oversight structures and timely risk information. Overall, the study finds that ERM strengthens stability and crisis response capabilities, although its impact depends heavily on implementation quality and organizational readiness.

1. Introduction

Enterprise Risk Management (ERM) has become a critical component of organizational governance as firms face an increasingly complex and unpredictable global risk landscape. Recent years have witnessed a series of large-scale disruptions, including economic downturns, supply chain breakdowns, geopolitical tensions, and, most notably, the COVID-19 pandemic. These events exposed significant vulnerabilities in traditional risk management approaches that focus on isolated risk categories rather than integrated, enterprise-wide assessments. In response, ERM has gained momentum as a holistic framework designed to identify, evaluate, and manage risk exposures across strategic, operational, financial, and compliance domains. Studies emphasize that ERM's value lies not only in risk mitigation but also in aligning risk-taking with strategic objectives and building organizational resilience (Jankensgård, 2019; Sax & Andersen, 2019).

Despite the growing adoption of ERM, empirical evidence on its effectiveness during global crises remains mixed. Some studies find that firms with mature ERM systems, stronger board oversight, and dedicated risk committees experience better performance, enhanced value creation, and lower financial risk exposure (Yang et al., 2018; Malik et al., 2020). Others report that the relationship between ERM adoption and firm outcomes is contingent on contextual factors such as industry conditions, organizational culture, and the risk maturity of the firm (Anton & Nucu, 2020). These findings indicate that ERM does not function as a universally effective mechanism but rather depends on how deeply it is embedded into managerial decision-making, information sharing, and strategic planning. Moreover, ERM effectiveness is influenced by the quality of risk information, scenario analysis capabilities, and the firm's ability to integrate risk insights into real-time crisis responses (Kanu, 2021).

The COVID-19 pandemic provided a unique stress test for ERM practices worldwide. Scholars observe that while ERM frameworks helped some organizations respond more effectively to operational disruptions and financial shocks, the crisis also revealed significant gaps in preparing for low-probability, high-impact events. Weaknesses in supply chain risk monitoring, business continuity planning, and interdependency assessment were common across industries. Pagach and Wieczorek-Kosmala (2020) argue that COVID-19 highlighted limitations in existing ERM models, particularly in their capability to anticipate systemic and cascading risks that spread rapidly across global networks. These observations underscore the need for a systematic understanding of when and how ERM contributes to resilience under extreme conditions.

This article aims to address this gap by conducting a systematic literature review of peer-reviewed studies published between 2017 and 2021 to evaluate the effectiveness of ERM during global crises. The review synthesizes conceptual developments and empirical findings to clarify the mechanisms through which ERM supports or fails to support organizational resilience. By integrating insights across diverse contexts, this study contributes to ongoing debates on ERM maturity, crisis preparedness, and risk governance, and it identifies critical design factors that enhance ERM's relevance in turbulent environments.

2. Literature Review

The literature on enterprise risk management increasingly emphasizes its role as a strategic governance mechanism that integrates risk assessment across organizational functions. In the period from 2017 to 2021, scholars have highlighted that ERM enhances coordination, improves the quality of risk information, and supports managerial decision-making when navigating complex risk environments. Studies show that ERM helps organizations align risk-taking with strategic priorities, contributing to more informed and forward-looking risk responses (Jankensgård, 2019; Sax & Andersen, 2019). However, ERM maturity varies across industries and countries, and its effectiveness is influenced by regulatory developments, governance arrangements, and the depth of organizational risk culture.

Empirical research offers mixed findings on the performance implications of ERM adoption. Some studies report that firms with structured ERM frameworks, risk committees, and strong governance practices exhibit improved financial performance, reduced risk exposure, and better competitive positioning (Yang et al., 2018; Malik et al., 2020). Evidence from emerging markets also suggests that ERM enhances financial reporting quality by strengthening internal controls and monitoring systems. Madu and Hassan (2021) show that ERM adoption among Nigerian non-financial firms improves the reliability and transparency of financial statements, indicating that ERM contributes to higher reporting discipline. Nonetheless, other scholars argue that ERM's impact is contingent on organizational capabilities, managerial engagement, and the integration of ERM into strategic planning processes (Anton & Nucu, 2020; Kanu, 2021). These findings suggest that ERM benefits are neither uniform nor automatic.

A growing stream of studies has examined ERM performance during global disruptions, particularly the COVID-19 crisis. Research shows that firms with more advanced ERM structures were better positioned to manage liquidity pressures, supply chain disruptions, and operational shocks (Ding et al., 2021). Florio and Leoni (2017) also report that ERM adoption contributes to more stable performance in uncertain environments, though the extent of benefits varies across sectors. However, the pandemic exposed limitations in many ERM systems, especially in anticipating interconnected and systemic risks. Pagach and Wieczorek-Kosmala (2020) note that gaps in scenario planning and stress testing reduced the ability of some organizations to respond effectively. Collectively, these studies reinforce the idea that ERM can strengthen resilience, but its effectiveness depends on implementation quality, adaptability, and the capacity to incorporate emerging risk information into decision-making.

3. Methods

This study uses a systematic literature review approach to examine the effectiveness of enterprise risk management during global crises. The review focuses on peer-reviewed articles published between 2017 and 2021 to ensure coverage of recent ERM developments and crisis-related insights, particularly those shaped by the COVID-19 pandemic. Relevant studies were identified through searches in major academic databases, including Scopus, Web of Science, and Google Scholar, using keywords such as “enterprise risk management”, “ERM effectiveness”, “risk governance”, and “global crises”. Studies were included if they provided empirical or theoretical analysis of ERM implementation, risk governance structures, organizational resilience, or crisis response mechanisms. Conceptual papers, review articles, and studies outside the specified publication years were excluded to maintain consistency and analytical focus.

The selection process followed standard SLR procedures, beginning with the identification of potential articles, screening of abstracts, and full-text evaluation. For each included study, data were extracted on research context, methodological approach, ERM components examined, and key findings related to crisis preparedness and resilience. A narrative synthesis was used to integrate results across diverse organizational settings, allowing comparison of ERM outcomes, governance features, and contextual factors that influence effectiveness. This approach provides a structured way to analyze how ERM supports or fails to support organizations during periods of widespread disruption.

4. Results and Discussion

The findings from the reviewed studies indicate that enterprise risk management plays an important role in strengthening organizational resilience during periods of global disruption. Empirical evidence across various contexts shows that firms with more developed ERM frameworks were better prepared to absorb shocks associated with crises such as the COVID-19 pandemic. Studies highlight that risk committees, integrated risk registers, and centralized oversight helped firms manage liquidity constraints, reinforce operational continuity, and address disruptions in supply chains more efficiently than firms with fragmented risk management practices. These structural features enhanced coordination and allowed management teams to respond more quickly to emerging risks, thereby reducing the spread of financial distress and operational failures throughout the organization (Malik et al., 2020; Ding et al., 2021).

A consistent pattern across the literature is that ERM maturity is closely associated with improved performance and risk mitigation during crises. Firms with advanced ERM implementation experienced stronger financial outcomes, more stable earnings, and reduced exposure to operational vulnerabilities. Lechner and Gatzert (2018) find that firms with well-developed ERM programs tend to achieve lower earnings volatility and improved long-term performance, reflecting the benefits of integrated risk oversight. These findings align with evidence from emerging market studies, where ERM adoption has been shown to support financial stability. Ali et al. (2019) report that Malaysian firms with structured ERM frameworks exhibit superior financial performance, suggesting that the integration of risk management into corporate governance processes yields measurable economic value. During global crises, these benefits translate into greater capacity for timely decision-making, resource allocation, and strategic adaptability.

At the same time, the literature highlights that ERM effectiveness is heavily shaped by internal organizational factors such as managerial engagement, risk culture, and information quality. ERM contributes to resilience only when risk processes are embedded meaningfully into strategic planning rather than implemented as compliance routines. Anton and Nucu (2020) argue that ERM's value depends on the depth of integration across managerial levels, particularly in translating risk information into operational and strategic decisions. This view is supported by emerging market evidence, where researchers note that organizational readiness, board involvement, and training play significant roles in ERM success. Madu and Hassan (2021) find that ERM enhances financial reporting transparency in Nigerian firms by strengthening internal governance and monitoring systems. Similarly, Saeidi et al. (2021) show that intellectual capital enhances the effectiveness of ERM, indicating that human, structural, and relational capital support more robust risk practices. These findings suggest that ERM outcomes are contingent on both governance structures and organizational capabilities.

Crisis-related studies also reveal important weaknesses in ERM design that were exposed during events such as the COVID-19 pandemic. While ERM helped some firms prepare for disruptions, many organizations lacked robust tools for analyzing systemic and interconnected risks. Researchers note that deficiencies in scenario planning, stress testing, and interdependency mapping limited the responsiveness of certain firms, especially those operating in highly globalized supply chains. Pagach and Wieczorek-Kosmala (2020) observe that many ERM frameworks underestimated tail risks and cascading failures, reducing their ability to guide rapid crisis response. These gaps highlight the challenges in developing ERM systems that can anticipate low-probability but high-impact events that spread across markets, sectors, and geographies.

Taken together, the literature demonstrates that ERM enhances organizational resilience by improving preparedness, facilitating coordinated responses, and strengthening governance during global crises. However, its effectiveness is not universal and depends on ERM maturity, the strength of managerial engagement, data quality, and organizational culture. Firms that embedded ERM into decision-making processes were more agile and better positioned to protect financial stability during disruptive events. At the same time, crisis experiences show that ERM frameworks must evolve to address emerging risks, systemic interdependencies, and dynamic operating environments. As global crises become more frequent and complex, organizations will need ERM systems that support agility, long-term value creation, and continuous adaptation.

5. Conclusion

The findings of this systematic review show that enterprise risk management has become an essential governance mechanism for supporting organizational resilience during global crises. Across the literature, ERM contributes to improved preparedness by enhancing risk awareness, strengthening oversight structures, and supporting more coordinated responses to disruptions. Firms with mature ERM practices demonstrated greater ability to manage liquidity pressures, operational shocks, and supply chain interruptions, highlighting ERM's role in stabilizing performance when uncertainty is at its peak.

At the same time, the review indicates that ERM effectiveness is shaped by important organizational factors, including risk culture, managerial involvement, and the quality of internal information systems. The evidence suggests that ERM creates value only when it is embedded into key decision-making processes rather than adopted as a symbolic or compliance-oriented practice. Studies also emphasize that ERM benefits vary across firms and regions due to differences in governance structures, resource availability, and institutional conditions. These findings underscore that ERM is not a one-size-fits-all solution and must be tailored to organizational capabilities and strategic priorities.

Overall, the results demonstrate that ERM enhances resilience and supports more stable performance during periods of global disruption, but its effectiveness depends on the maturity of implementation and the adaptability of risk processes. As crises become more frequent and interconnected, organizations will need ERM systems that emphasize strategic alignment, continuous learning, and real-time risk intelligence. Strengthening these elements will help firms better anticipate emerging threats, manage complex interdependencies, and maintain financial and operational stability in increasingly volatile environments.

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