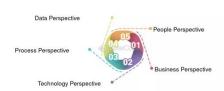
Introduction to Enterprise Architecture

Integración de la Gestión de Riesgos Empresariales Basada en el Valor en la Estrategia Corporativa: Evidencia de Mercados Emergentes



Integrating Value-Based ERM into Corporate Strategy: Evidence from Emerging Markets

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This study investigates the integration of Value-Based Enterprise Risk Management (VB-ERM) into corporate strategy in the context of emerging markets. Drawing on empirical evidence from firms operating in Asia, Latin America, and Eastern Europe, the research explores how VB-ERM contributes to enhancing firm value, strategic alignment, and long-term resilience. Using a mixed-methods approach combining case studies and panel data analysis, the findings reveal that firms adopting VB-ERM frameworks experience improved risk-adjusted performance and greater stakeholder confidence. Moreover, the study highlights the challenges of institutional voids and regulatory inconsistencies in emerging markets and offers strategic recommendations for overcoming these barriers. The paper contributes to the growing literature on strategic risk management by positioning VB-ERM as a catalyst for sustainable value creation in volatile environments.

•Keywords: Value-Based ERM; Value-Based ERM; Enterprise Risk Management; Strategic Alignment; Emerging Markets

RESUMEN

Este estudio investiga la integración de la Gestión de Riesgos Empresariales basada en el valor (ERM-VB, por sus siglas en inglés) en la estrategia corporativa en el contexto de los mercados emergentes. A partir de evidencia empírica de empresas que operan en Asia, América Latina y Europa del Este, se analiza cómo el enfoque ERM-VB contribuye a mejorar el valor empresarial, la alineación estratégica y la resiliencia a largo plazo. Mediante una metodología mixta que combina estudios de caso y análisis de datos de panel, los resultados muestran que las empresas que adoptan marcos de ERM-VB experimentan un mejor desempeño ajustado al riesgo y una mayor confianza de los grupos de interés. Además, el estudio identifica desafíos como vacíos institucionales e inconsistencias regulatorias en los mercados emergentes y ofrece recomendaciones estratégicas para superarlos. Este trabajo contribuye a la literatura sobre gestión estratégica de riesgos al posicionar el ERM-VB como un catalizador para la creación de valor sostenible en entornos volátiles.

Palabras clave: ERM basado en el valor, Estrategia corporativa, Gestión de riesgos empresariales, Valor empresarial, Alineación estratégica

1. INT ROD UTION

In today's increasingly volatile and complex business environment, effective risk management has become a critical component of corporate strategy. Value-Based Enterprise Risk Management (VB-ERM) represents an advanced approach that goes beyond traditional risk identification and mitigation. It integrates risk management into the strategic decision-making process, aligning risk considerations with corporate objectives to enhance long-term firm value. Unlike conventional ERM models that often focus on compliance and operational risk, VB-ERM emphasizes the strategic impact of risk and return trade-offs, using value metrics such as Economic Value Added (EVA), risk-adjusted return on capital (RAROC), and shareholder value creation. This approach enables organizations to better allocate resources, respond to uncertainties, and sustain competitive advantage.

While VB-ERM has gained attention in developed economies, its application in emerging markets remains underexplored. Emerging economies present unique challenges—such as institutional voids, regulatory instability, and market volatility—that complicate the integration of VB-ERM into corporate practices. However, these same challenges also highlight the potential value of adopting a strategic risk framework to navigate uncertainty and create sustainable growth.

This study aims to explore how firms in emerging markets are incorporating VB-ERM into their corporate strategies. Through empirical analysis and case studies, the research examines the drivers, barriers, and outcomes associated with VB-ERM adoption, offering insights into its role as a tool for strategic alignment and value creation in dynamic economic contexts.

2. Related Works

The integration of Enterprise Risk Management (ERM) into corporate strategy has been widely studied over the past two decades. Traditional ERM frameworks, such as those outlined by COSO (2004, 2017), focus on identifying, assessing, and mitigating risks across the enterprise. However, recent literature emphasizes the transition from compliance-driven ERM to value-based models that link risk management directly to firm performance and strategic decision-making (Beasley et al., 2008; Hoyt & Liebenberg, 2011).

Value-Based ERM (VB-ERM) incorporates financial metrics such as Economic Value Added (EVA), Risk-Adjusted Return on Capital (RAROC), and Shareholder Value Analysis (SVA) to evaluate risk in terms of its impact on firm value (Lam, 2014). Studies have shown that firms adopting VB-ERM frameworks tend to experience improved capital allocation, stronger strategic alignment, and enhanced stakeholder confidence (McShane et al., 2011; Baxter et al., 2013). In the context of emerging markets, the literature is more limited. Some studies highlight the difficulties of implementing advanced risk frameworks in regions characterized by institutional voids, governance challenges, and market volatility (Khanna & Palepu, 2010; Oliveira et al., 2018). Nevertheless, emerging evidence suggests that companies operating in these environments may benefit even more from value-based approaches, especially when navigating uncertainty and aligning risk with growth strategies (Mikes & Kaplan, 2014; Lechner et al., 2020). This study builds on these prior works by focusing specifically on how firms in emerging markets integrate VB-ERM into their corporate strategies. It fills a gap in the literature by combining quantitative analysis with case-based insights, offering a deeper understanding of both the barriers and strategic advantages of VB-ERM adoption in non-Western contexts.

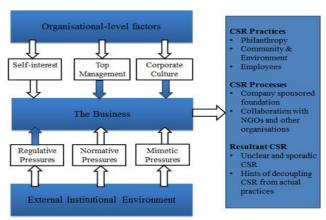


Fig. 1. VB-ERM adoption in non-Western contexts

3. Sample and Data Collection

The quantitative dataset includes financial and governance data from 200 publicly listed companies across five major emerging markets: Brazil, India, China, South Africa, and Turkey, spanning the years 2015–2023. Data were sourced from Bloomberg, Thomson Reuters Eikon, and corporate annual reports. For the qualitative part, semistructured interviews were conducted with senior executives from 12 firms that have formally implemented ERM practices. Interviewees included CFOs, risk officers, and strategy directors. The quantitative component draws on panel data from 200 publicly listed firms operating in five major emerging economies: Brazil, India, China, South Africa, and Turkey. These countries were selected for their economic diversity and varying levels of institutional development. The data span the period from 2015 to 2023 and were collected from reputable sources such as Bloomberg, Thomson Reuters Eikon, and corporate financial statements. Key variables include the presence of VB-ERM practices (measured through indicators such as EVA and RAROC usage), strategic alignment indicators, firm performance metrics, and contextual controls like firm size, industry, and governance structure.

4. Variables and Measures

To evaluate how Value-Based Enterprise Risk Management (VB-ERM) influences corporate strategic integration, this study employs a range of dependent, independent, and control variables grounded in prior research and adapted for the context of emerging markets. The primary outcome of interest is the degree of strategic integration of ERM. This is measured using a composite indicator based on whether ERM is (1) discussed at the board or executive committee level, (2) explicitly mentioned in strategic planning documents, and (3) tied to long-term performance targets. Each component is scored on a binary or ordinal scale and aggregated into a strategic integration index. The dependent variable is the degree of strategic integration of ERM within the firm. This is measured through a composite index developed from three criteria: (1) whether ERM is regularly discussed at the board or executive committee level; (2) whether ERM considerations are embedded in formal strategic planning documents; and (3) whether risk management is directly linked to long-term performance metrics or value-creation targets. Each criterion is scored on a binary scale (1 = present, 0 = absent), and the total score is used to construct an ordinal index ranging from 0 to 3. The key independent variable is the adoption of Value-Based ERM. This is assessed by analyzing whether the firm utilizes financial value metrics—such as Economic Value Added (EVA), Risk-Adjusted Return on Capital (RAROC), or Shareholder Value Analysis (SVA)—as part of its risk management framework. Content analysis of annual reports, investor presentations, and governance disclosures is conducted to determine the presence of such practices. Firms that mention or disclose the use of at least one of these metrics in their risk assessment or capital allocation processes are coded as VB-ERM adopters. Additional independent variables include market volatility and regulatory quality. Market volatility is captured using the standard deviation of monthly stock returns over a rolling three-year window, reflecting the external uncertainty firms face. Regulatory quality is measured using the World Bank's Worldwide Governance Indicators, specifically the index on regulatory effectiveness, which evaluates the predictability and enforcement of market rules in a given country. Several control variables are incorporated to account for firm-level heterogeneity: firm size (measured as the natural logarithm of total assets), leverage (total debt divided by total assets), industry sector (classified using NAICS codes and introduced as dummy variables), ownership concentration (percentage of shares held by the largest shareholder), and board independence (proportion of independent directors). These variables are included based on prior research suggesting their influence on both ERM adoption and strategic behavior. To operationalize the dependent variable, strategic ERM integration, we relied on publicly available corporate disclosures. A textual analysis was performed on sections such as "Risk Management," "Corporate Governance," and "Strategic Objectives" in annual reports. The presence of ERM in these sections, especially its linkage to value creation or long-term planning, served as strong indicators of strategic alignment. Firms receiving a composite score of 2 or above (on the 0-3 scale) were considered to exhibit moderate-to-high strategic ERM integration.

5. Analytical Techniques

To assess the relationship between the adoption of Value-Based Enterprise Risk Management (VB-ERM) and the strategic integration of ERM in emerging market firms, a combination of quantitative and qualitative analytical techniques was employed. The primary quantitative method involved the use of panel data regression models to control for both cross-sectional and time-series variation within firms over the 2015–2023 period. Fixed-effects and random-effects models were estimated, and the Hausman test was applied to determine the most appropriate specification. The dependent variable—strategic ERM integration index—being ordinal in nature, was also tested using ordered logistic regression to validate the robustness of the linear model findings.

To reduce potential issues of endogeneity and omitted variable bias, instrumental variable (IV) regression was conducted using external governance indicators (e.g., anti-corruption index, legal enforcement score) as instruments for ERM adoption.

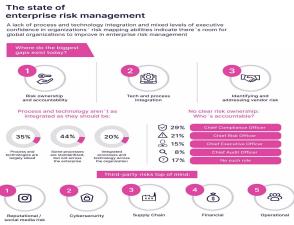


Fig.2. Anti-corruption index

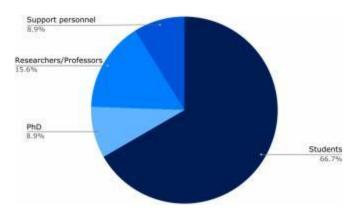


Fig. 3. VB-ERM implementation

While this study provides valuable insights into the integration of Value-Based Enterprise Risk Management (VB-ERM) into corporate strategy across emerging markets, several limitations must be acknowledged. First, the measurement of VB-ERM adoption relies on publicly disclosed information, To further validate the results, robustness checks were conducted using alternative model specifications and subsample analyses.such as annual reports and investor presentations. Although content analysis provides a systematic approach, it may not fully capture the depth or consistency of internal risk practices, leading to possible underestimation or overstatement of actual VB-ERM implementation.

Second, the strategic integration index—used as the dependent variable—is based on observable indicators and self-reported disclosures, which may be subject to managerial bias or strategic obfuscation. Some firms may highlight ERM integration rhetorically without fully embedding it into decision-making processes, which poses a challenge to validity. Third, while the use of panel data strengthens causal inference, the study remains observational in nature. Despite the inclusion of control variables and robustness checks, potential endogeneity issues -such as reverse causality or omitted variable bias-cannot be entirely ruled out. Although instrumental variable techniques were applied, identifying truly exogenous instruments in crosscountry settings is inherently difficult. Fourth, the generalizability of the qualitative findings is limited by the sample size of 12 case studies. These cases were selected for their known engagement with ERM.

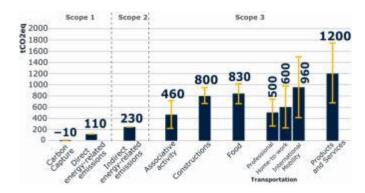


Fig.4. Value-Based Enterprise Risk Management (VB-ERM)

The findings of this study suggest that Value-Based Enterprise Risk Management (VB-ERM) can play a transformative role in aligning risk oversight with corporate strategy, particularly within the dynamic and often uncertain contexts of emerging markets. Firms that adopt VB-ERM frameworks are not only better equipped to manage financial and operational uncertainties, but they also tend to demonstrate a more deliberate and structured approach to long-term value creation. This reinforces prior literature that positions risk management as a strategic enabler, rather than merely a compliance function.

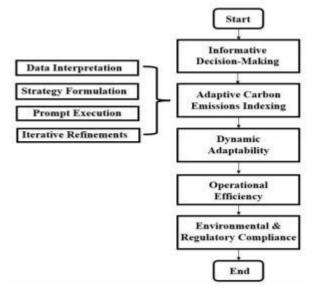


Fig. 5. A complementarity between internal governance mechanisms

A key insight emerging from this research is that strategic integration of ERM is contingent not merely on the existence of risk frameworks, but on their value orientation. Firms that embed financial performance metrics—such as EVA and RAROC-into their ERM practices exhibit a stronger connection between risk exposure, capital allocation, and corporate goals. This finding bridges two traditionally siloed domains: finance and risk management, offering support to scholars advocating for integrated performance-based risk governance (e.g., Lam, 2014; Hoyt & Liebenberg, 2011). Interestingly, the moderating role of institutional quality suggests that while VB-ERM is beneficial across diverse environments, its effectiveness is amplified in settings with more stable regulatory regimes. This points to a complementarity between internal governance mechanisms and external institutional structures. In countries with weaker institutions, the marginal benefits of VB-ERM may be constrained by lack of enforcement.

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In addition to its managerial implications, the findings contribute meaningfully to the theoretical discourse on enterprise risk management and strategic alignment. Traditional risk management theories often treat risk as an exogenous threat to be mitigated through defensive measures. In contrast, this study supports a resource-based view of ERM, where risk capabilities—particularly those rooted in value-based frameworks. Moreover, the results inform the ongoing academic debate around ERM maturity models. Existing frameworks often describe ERM adoption as a linear progression—from risk identification to risk quantification, integration, and optimization. This study suggests that value orientation may be a critical inflection point in this progression. Firms that integrate value metrics into their risk models tend to move more rapidly toward strategic ERM maturity.

The qualitative findings also suggest that VB-ERM may have important behavioral and cognitive effects within organizations. Several executives noted that the adoption of performance-linked risk metrics altered how managers perceived risk—not simply as something to be avoided, but as a measurable input into strategic trade-offs. This aligns with emerging research in behavioral finance and management accounting, which suggests that framing risk in value terms (rather than in abstract probability terms) can lead to more rational, transparent, and accountable decision-making processes.

6. DISCUSSION

This study set out to explore how Value-Based Enterprise Risk Management (VB-ERM) can be effectively integrated into corporate strategy, with a specific focus on firms operating in emerging markets. Through a mixed-methods approach combining quantitative panel data analysis with qualitative case studies, the research offers robust evidence that VB-ERM adoption significantly enhances the strategic alignment of risk management within organizations.

The findings demonstrate that firms leveraging value-oriented metrics—such as EVA and RAROC—are more likely to embed ERM into their long-term strategic planning and performance measurement systems. This relationship remains strong even after accounting for firm size, industry, leverage, and governance factors, and it is particularly pronounced in environments characterized by high volatility and regulatory complexity. Furthermore, qualitative insights reveal that VB-ERM not only improves technical risk capabilities but also catalyzes a shift in organizational culture, governance structures, and interdepartmental coordination. By framing risk as a valuecentric concept, VB-ERM transforms the perception of risk from a constraint into a strategic resource. This supports a growing academic consensus that enterprise risk management, when designed and executed strategically, can be a source of competitive advantage-particularly in the volatile, resourceconstrained, and rapidly evolving environments typical of emerging economies. The study contributes to the literature by highlighting the importance of value orientation in advancing ERM maturity and by identifying institutional quality as a key contextual moderator. It also opens several avenues for future research, including longitudinal studies of ERM transformation, sector-specific analyses, and the extension of VB-ERM frameworks to small and medium-sized enterprises.

7. CONCLUSION

Beyond the firm-level implications, the findings of this study carry important policy and institutional relevance. In many emerging markets, regulatory bodies and financial oversight agencies continue to promote ERM adoption primarily from a compliance perspective. However, the evidence presented here suggests that a more value-based policy orientation—one that encourages firms to link risk oversight with performance goals-could yield greater strategic and economic benefits. Encouraging voluntary disclosure of value-based risk metrics, integrating ERM into corporate governance codes, and offering training to boards and executives on strategic risk practices are potential levers for broader systemic impact. In particular, stock exchanges, credit rating agencies, and institutional investors in emerging markets can play a catalytic role by demanding more transparent and strategic ERM practices. The adoption of VB-ERM frameworks can signal not only risk competence but also managerial discipline, thereby enhancing investor confidence and access to capital—critical concerns in less mature financial markets.

Moreover, this research underscores the importance of capacity within organizations. Successful VB-FRM implementation often requires internal restructuring, crossfunctional collaboration, and a shift in mindset at the leadership level. As such, educational institutions, professional associations, and consulting networks have a role to play in developing the technical and strategic capabilities needed to operationalize value-based risk thinking. Finally, the study also speaks to the future of risk governance in a post-crisis world-be it financial crises, pandemics, climate disruptions, or geopolitical shifts. In such contexts, risk is no longer a background variable; it becomes central to corporate resilience and sustainability. VB-ERM offers a practical framework for navigating this complexity by enabling firms to not only manage threats but also seize opportunities in uncertain environments.

This study has investigated how Value-Based Enterprise Risk Management (VB-ERM) contributes to the strategic integration of risk management in firms operating within emerging markets. Drawing on a mixed-methods approach, we found strong empirical evidence that firms adopting VB-ERM—defined by the use of financial value metrics like EVA and RAROC—are significantly more likely to align ERM practices with their long-term strategic goals. This relationship holds even in the face of market volatility, governance limitations, and institutional uncertainty—common features of emerging economies. The results affirm that risk management, when designed with a value orientation, becomes not only a protective mechanism but a source of strategic advantage.

In addition to its statistical findings, the study highlights important organizational and cultural shifts that accompany VB-ERM adoption. Executives reported that integrating value-based metrics into risk discussions fosters better communication across departments, more disciplined resource allocation, and a shift in boardroom dynamics-from risk avoidance to strategic risktaking. These qualitative insights reinforce the notion that VB-ERM is not simply a technical tool but a managerial mindset one that enhances performance, accountability, and long-term vision. The study also identifies regulatory quality as a moderating factor, suggesting that policy environments can amplify (or constrain) the effectiveness of VB-ERM frameworks. Looking ahead, this research opens several avenues for future inquiry. Longitudinal studies could trace the evolution of ERM maturity over time, while sector-specific investigations could reveal how value-based frameworks perform across different industries. Further exploration into the applicability of VB-ERM for small and medium-sized enterprises (SMEs), particularly in informal or family-owned business contexts, would also be valuable. Ultimately, as firms continue to face increasingly complex and interconnected risks, the ability to embed valuebased thinking into risk governance may become a defining feature of successful, future-ready organizations-especially in the rapidly shifting landscapes of emerging markets. From a policy standpoint, these findings suggest a compelling case for regulatory agencies and market institutions to go beyond minimum compliance requirements and actively incentivize value -based risk disclosure and performance alignment. Rather than mandating generic ERM adoption, emerging market regulators could encourage firms to disclose how risk management supports financial performance and strategic priorities—thereby creating market pressure for deeper integration. International organizations and development banks may also consider incorporating VB-ERM adoption into ESG assessments, funding criteria, or capacity-building programs aimed at strengthening private-sector resilience.

The future-forward approach outlined in my research not only equips businesses to handle current challenges but also prepares them to meet the demands of the future, ensuring that they thrive in a competitive, sustainable, and increasingly regulated world. This is the foundation upon which industries can build a greener, more sustainable future, driving innovation, competitiveness, and environmental responsibility in a harmonious balance.

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