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RISK MANAGEMENT STRATEGIES AND CORPORATE VALUATION OF LISTED MULTINATIONAL FIRMS IN NIGERIA

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ABSTRACT

This study examines the effect of risk management strategies on the corporate valuation of listed multinational firms in Nigeria over the period 2015–2025. Specifically, the study evaluates the effects of risk avoidance, risk mitigation, risk transfer and risk control on corporate valuation. Using a longitudinal panel research design, secondary data were obtained from the annual reports and financial statements of listed multinational firms. Corporate valuation was measured using Tobin's Q, while panel regression analysis was employed to estimate the specified relationships. The Hausman specification test supported the random-effects model. The findings revealed that risk avoidance and risk mitigation have positive but insignificant effects on corporate valuation, while risk transfer and risk control exhibit negative but non-significant on corporate valuation effects. However, the four risk-management strategies jointly exerted a significant effect on corporate valuation. The study concludes that individual risk-management strategies may not independently generate significant valuation effects, but their integrated application remains relevant to corporate valuation. The study recommends that listed multinational firms adopt an integrated risk-management framework that aligns risk-response mechanisms with strategic and valuation objectives. The study contributes to the risk-management literature by providing evidence on the valuation implications of specific risk-management strategies within the Nigerian multinational-firm context.

Keywords: Risk Management Strategies; Corporate Valuation; Risk Avoidance; Risk Mitigation; Risk Transfer; Risk Control; Tobin's Q; Multinational Firms; Nigeria

1 INTRODUCTION

Risk management has become a strategic component of corporate decision-making as firms operate under increasing economic uncertainty, market volatility, regulatory change and interconnected risk exposures. Contemporary risk management extends beyond isolated risk treatment to the systematic identification, assessment, response and monitoring of risks in pursuit of strategic objectives and value creation. Recent evidence suggests that effective enterprise risk management (ERM) can influence firm value by reducing uncertainty, strengthening organisational resilience and improving investors' assessment of future prospects (Oreshile et al., 2025; Wang & Liang, 2025).

For listed multinational firms, risk management is particularly important because cross-border operations expose firms to exchange-rate volatility, political and regulatory uncertainty, country risk, commodity-price fluctuations, financing constraints and supply-chain disruptions. Accordingly, the strategic deployment of risk avoidance (RA), risk mitigation (RM), risk transfer (RT), and risk control (RC) can influence expected cash flows, risk-adjusted returns and market perceptions of corporate prospects. Recent studies indicate that risk-management mechanisms can affect corporate value through their influence on organisational resilience and financial decision-making (Wang & Liang, 2025).

Corporate valuation provides an important basis for assessing these effects. Tobin's Q is particularly suitable because it represents a market-based measure that captures investors' forward-looking assessment of a firm's assets, growth opportunities and risk profile. Recent empirical research continues to employ Tobin's Q in examining the relationship between corporate risk, governance and market valuation (Ibrahim et al., 2024; Oreshile et al., 2025). Earlier evidence also demonstrates that ERM adoption can generate valuation benefits, suggesting that investors may attach value to firms with stronger risk-management systems (Hoyt & Liebenberg, 2011).

Nigeria provides an important emerging-market context for examining this relationship. Listed multinational firms operate amid exchange-rate instability, inflationary pressures, foreign-exchange constraints, regulatory uncertainty, infrastructure deficiencies and cross-border supply-chain disruptions. These conditions can amplify the valuation consequences of risk-management decisions by affecting expected cash flows, required returns and investor expectations. Nigerian evidence further indicates that different ERM dimensions may have heterogeneous effects on market valuation (Barau et al., 2025).

Despite growing interest in ERM and firm value, limited evidence disaggregates risk management into risk avoidance, mitigation, transfer and control and examines their independent effects on corporate valuation. This study therefore investigates the effects of RA, RM, RT and RC on Tobin's Q among listed multinational firms in Nigeria, providing more granular evidence on the risk-management-valuation nexus within an emerging-market setting.

Statement of the Problem

Listed multinational firms in Nigeria operate within a complex risk environment characterised by exchange-rate volatility, inflation, regulatory uncertainty, foreign-exchange constraints, infrastructure deficiencies and cross-border operational risks. These exposures can increase uncertainty surrounding future cash flows and influence investors' assessment of firms, thereby affecting corporate valuation. Consequently, effective risk management is important for protecting corporate resources and sustaining investors' confidence.

However, the existence of risk-management practices does not necessarily translate into higher corporate valuation. Strategies such as risk avoidance, risk mitigation, risk transfer and risk control may reduce uncertainty and potential losses, but they may also involve significant implementation, monitoring and compliance costs. Thus, their individual effects on corporate valuation remain an empirical question.

Although existing studies have examined risk management and firm value, limited evidence exists on the separate effects of these four risk-management strategies on the valuation of listed multinational firms in Nigeria. This creates a contextual and empirical gap, particularly given the distinctive domestic and international risks faced by multinational firms. The study therefore examines the effects of risk avoidance, risk mitigation, risk transfer and risk control on the corporate valuation of listed multinational firms in Nigeria, using Tobin's Q as the measure of corporate valuation.

2 LITERATURE

2.1 Theoretical Perspective

The study is anchored on Agency Theory, which posits that risk-management mechanisms can reduce agency conflicts arising from information asymmetry and managerial opportunism. Effective risk responses may constrain inefficient managerial decisions, protect shareholder wealth and improve the market's assessment of expected future cash flows. This theoretical logic is consistent with evidence linking risk governance and managerial ownership to market valuation.

Accordingly, Risk Avoidance (RA), Risk Mitigation (RM), Risk Transfer (RT), and Risk Control (RC) represent distinct mechanisms through which firms manage uncertainty. Their valuation effects may differ because each strategy entails different risk-reduction benefits, implementation costs and residual exposures. This study therefore extends the conventional aggregate ERM perspective by examining these four risk-response strategies separately and their implications for corporate valuation measured by Tobin's Q among listed multinational firms in Nigeria.

3 CONCEPTUAL PERSPECTIVE

Risk Management Strategies: Risk management is the systematic process of identifying, assessing and responding to risks that may affect an organisation's objectives. COSO (2017) views enterprise risk management as the integration of risk with strategy and performance, emphasising the role of risk management in preserving and creating value. In this study, risk management strategies are disaggregated into risk avoidance, risk mitigation, risk transfer and risk control.

Risk Avoidance (RA): Risk avoidance involves eliminating activities, transactions or exposures that could subject a firm to unacceptable levels of risk. It represents a deliberate decision not to undertake an activity where the potential adverse consequences outweigh its expected benefits (ISO, 2018).

Risk Mitigation (RM): Risk mitigation involves implementing measures that reduce the likelihood or potential impact of adverse events. It may include preventive controls, diversification and operational safeguards designed to limit potential losses (ISO, 2018).

Risk Transfer (RT): Risk transfer involves shifting the financial or operational consequences of an identified risk to another party. Insurance, contractual risk-sharing arrangements and certain hedging mechanisms are common forms of risk transfer (ISO, 2018).

Risk Control (RC): Risk control refers to policies, procedures and monitoring mechanisms established to modify and maintain risk within an organisation's acceptable limits. Effective controls can reduce the likelihood of adverse outcomes and improve the reliability of organisational processes (COSO, 2013).

Corporate Valuation (CV): Corporate valuation refers to the assessment of the economic value of a firm. For listed companies, market-based measures are particularly relevant because they incorporate investors' expectations regarding future cash flows, growth and risk. This study measures corporate valuation using Tobin's Q, which relates the market value of a firm to the value of its assets (Tobin, 1969; Chung & Pruitt, 1994).

3.1 Empirical Perspective

Recent empirical evidence indicates that enterprise risk management (ERM) has important but heterogeneous implications for corporate valuation. Permatasari and Zulaecha (2026) examined transportation and logistics firms listed on the Indonesia Stock Exchange during 2021–2024 and found that ERM positively and significantly affected firm value measured by Tobin's Q. The study further showed that corporate governance strengthened the ERM–valuation relationship, suggesting that effective governance enhances the value relevance of risk-management practices.

Barau et al. (2025) investigated ERM and firm value among 12 Nigerian listed deposit money banks over 2014–2024. Their findings revealed that operational and compliance dimensions of ERM had positive and significant effects on Tobin's Q, whereas the strategic dimension exerted a significant negative effect. This evidence demonstrates that the valuation consequences of risk management differ according to the specific dimension examined.

Oreshile et al. (2025) examined corporate reputation risk and ERM quality among listed non-financial firms in Sub-Saharan Africa. The study found that reputation risk negatively affected firm value, while higher-quality ERM mitigated this adverse effect, indicating that effective risk management can strengthen firms' valuation resilience.

Ososuaikpor and Okoro (2023) examined ERM size, independence and disclosure among commercial banks in Nigeria, South Africa and Kenya. Using Tobin's Q, their findings established the relevance of ERM characteristics to market valuation within Sub-Saharan Africa. Similarly, Silva et al. (2019), based on 649 firm-year observations of Brazilian listed firms, reported a positive relationship between ERM and Tobin's Q, suggesting that investors may value comprehensive risk-management systems.

Overall, the evidence suggests that the ERM–valuation relationship is positive but context dependent, with outcomes varying across ERM dimensions, institutional environments and firm characteristics. However, existing studies largely examine aggregate ERM rather than specific risk-response mechanisms. This study addresses this limitation by disaggregating risk management into Risk Avoidance (RA), Risk Mitigation (RM), Risk Transfer (RT), and Risk Control (RC) and examining their individual effects on Tobin's Q among listed multinational firms in Nigeria.

3.2 Implication

The study yields three key implications. First, the predominance of aggregate ERM measures implies that risk management should be operationalised as a multidimensional construct, distinguishing risk avoidance (RA), risk mitigation (RM), risk transfer (RT), and risk control (RC) to capture their heterogeneous valuation effects. Second, the

limited evidence on strategy-specific valuation effects underscores the relevance of Tobin's Q as a market-based valuation metric, reflecting investors' assessment of risk exposure, expected cash flows, and future growth prospects. Third, the paucity of evidence from Nigerian listed multinational firms implies that the valuation consequences of risk-response strategies are institutionally and contextually contingent, given firms' exposure to domestic and cross-border risks. These implications enhance the precision of risk-strategy evaluation and inform corporate risk allocation, investment decisions, and regulatory oversight in Nigeria.

4 METHODOLOGY AND DATA

This study adopts a longitudinal panel research design to examine the effect of risk management strategies on the corporate valuation of listed multinational firms in Nigeria over the period 2015–2025. Panel data combine cross-sectional and time-series dimensions, allowing researchers to account for unobserved individual-specific heterogeneity and exploit greater variation in the data (Baltagi, 2021; Wooldridge, 2010).

The study relies on secondary data obtained from the audited annual reports, financial statements and corporate governance reports of sampled multinational firms listed on the Nigerian Exchange Group (NGX). Data on Risk Avoidance (RA), Risk Mitigation (RM), Risk Transfer (RT), and Risk Control (RC) are extracted from relevant risk-management, governance and corporate disclosures. Data required to measure Corporate Valuation (CV), proxied by Tobin's Q, are obtained from firms' financial statements and market-related information. Tobin's Q is widely employed as a market-based measure of firm value because it captures investors' assessment of a firm's future prospects (Chung & Pruitt, 1994; Hoyt & Liebenberg, 2011). Information from the NGX and other relevant official sources is used where necessary to obtain market data.

Firms with adequate and consistent financial, market and risk-management information during the study period are selected using purposive sampling, consistent with the requirements of firm-level panel studies where data availability is an important selection criterion. The data are analysed using descriptive statistics and panel regression techniques. The Hausman specification test is employed to determine the appropriate estimator between the Fixed Effects and Random Effects models. The Hausman framework provides a formal basis for assessing whether the individual-specific effects are correlated with the explanatory variables (Hausman, 1978). Accordingly, the methodological framework enables the study to estimate the individual and joint effects of risk avoidance, risk mitigation, risk transfer and risk control on the corporate valuation of listed multinational firms in Nigeria.

4.1 Model in the Study

The functional relationship between exchange rate volatility and corporate valuation is specified as:

$$CV = f(RA, RM, RT, RC)$$

For panel data on listed multinational firms in Nigeria, the model is specified as:

$$CV_{it} = \beta_0 + \beta_1 RA_{it} + \beta_2 RM_{it} + \beta_3 RT_{it} + \beta_4 RC_{it} + \mu_{it}$$

Where:

- CV_{it} Corporate valuation of firm (i) at time (t)
- RA_{it} Risk avoidance strategy of firm (i) at time (t)
- RM_{it} Risk mitigation strategy of firm (i) at time (t)
- RT_{it} Risk transfer strategy of firm (i) at time (t)
- RC_{it} Risk control strategy of firm (i) at time (t)
- β_0 Intercept
- $\beta_1, \beta_2, \beta_3, \beta_4$ Slope coefficients
- μ_i Firm-specific unobserved effect (fixed or random)
- ε_{it} Idiosyncratic error term
- $i = 1, 2, \dots, N$ (firms)
- $t = 1, 2, \dots, T$ (time periods, 2015–2025)

Table 1: Estimated Effect of Risk Management and Corporate Valuation

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RC	-0.169306	0.437600	-0.386897	0.6995
RA	6.595782	4.462508	1.478044	0.1421
RM	7.475308	4.835986	1.545767	0.1249
RT	-0.013317	0.298426	-0.044626	0.9645
C	14.56134	2.942272	4.949012	0.0000
R-squared	0.021087	Mean dependent var		10.10152
Adjusted R-squared	-0.012962	S.D. dependent var		0.811889
S.E. of regression	0.817134	Akaike info criterion		2.474746
Sum squared resid	76.78640	Schwarz criterion		2.590892
Log likelihood	-143.4848	Hannan-Quinn criter.		2.521913
F-statistic	0.619314	Durbin-Watson stat		0.482879
Prob(F-statistic)	0.649633			
Variable	Coefficient	Std. Error	t-Statistic	Prob.
RC	-0.243650	0.663599	-0.367165	0.7142
RA	7.078352	4.832897	1.464619	0.1460
RM	8.066391	5.272451	1.529913	0.1291
RT	-0.005514	0.365154	-0.015101	0.9880
C	14.93129	3.206904	4.655983	0.0000
	Effects Specification			
Cross-section fixed (dummy variables)				
R-squared	0.023053	Mean dependent var		10.10152
Adjusted R-squared	-0.117853	S.D. dependent var		0.811889
S.E. of regression	0.858399	Akaike info criterion		2.656069
Sum squared resid	76.63220	Schwarz criterion		3.027735
Log likelihood	-143.3642	Hannan-Quinn criter.		2.807004
F-statistic	0.163606	Durbin-Watson stat		0.488492
Prob(F-statistic)	0.999846			
Variable	Coefficient	Std. Error	t-Statistic	Prob.
RC	-0.169306	0.459698	-0.368299	0.7133
RA	6.595782	4.687861	1.406992	0.1621
RM	7.475308	5.080199	1.471460	0.1439
RT	-0.013317	0.313496	-0.042480	0.9662
C	14.56134	3.090854	4.711105	0.0000
	Effects Specification			
			S.D.	Rho
Cross-section random			0.000000	0.0000
Idiosyncratic random			0.858399	1.0000

	Weighted Statistics		
R-squared	0.221087	Mean dependent var	10.10152
Adjusted R-squared	0.212962	S.D. dependent var	0.811889
S.E. of regression	0.817134	Sum squared resid	76.78640
F-statistic	4.619314	Durbin-Watson stat	0.482879
Prob(F-statistic)	0.009633		
	Unweighted Statistics		
R-squared	0.021087	Mean dependent var	10.10152
Sum squared resid	76.78640	Durbin-Watson stat	0.482879
Correlated Random Effects - Hausman Test			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.209280	4	0.9949

Source: Computed by Researchers from E-view 12.0

5 DISCUSSION OF FINDINGS

- The Random Effects Model is supported by the Hausman specification test ($\chi^2 = 0.209280$, $p = 0.9949$). The model is jointly significant ($F = 4.619314$, $p = 0.009633$) and explains 21.3% of the variation in Tobin's Q (adjusted $R^2 = 0.212962$), indicating that risk-management strategies possess collective explanatory power for corporate valuation.
- Risk Avoidance (RA) has a positive but insignificant effect on Tobin's Q ($\beta = 6.595782$, $p = 0.1621$), while Risk Mitigation (RM) is also positive and insignificant ($\beta = 7.475308$, $p = 0.1439$). The positive signs imply that eliminating and reducing risk exposures are directionally associated with higher valuation; however, the absence of statistical significance indicates that these strategies do not independently generate a measurable valuation premium. This provides only partial support for the positive ERM-valuation evidence reported by Hoyt and Liebenberg (2011) and Silva et al. (2019).
- Conversely, Risk Control (RC) ($\beta = -0.169306$, $p = 0.7133$) and Risk Transfer (RT) ($\beta = -0.013317$, $p = 0.9662$) exhibit negative and statistically insignificant effects. The results suggest that control and transfer mechanisms, when considered independently, do not translate into significant market-valuation effects, potentially reflecting implementation costs, residual exposures and limited investor observability.
- Overall, the findings indicate a jointly significant but individually insignificant risk-management-valuation relationship. This implies that capital-market participants may respond more strongly to the aggregate quality and coherence of risk-management **architecture** than to isolated risk-response mechanisms. The evidence therefore extends the ERM literature by demonstrating heterogeneous but statistically weak valuation effects across specific risk-management strategies in Nigerian listed multinational firms.

Summary

This study examines the effects of Risk Avoidance (RA), Risk Mitigation (RM), Risk Transfer (RT), and Risk Control (RC) on the corporate valuation of listed multinational firms in Nigeria over the period 2015–2025. Using a longitudinal panel framework and Tobin's Q as the market-based valuation measure, the Random Effects estimator, validated by the Hausman test, reveals heterogeneous but statistically insignificant individual effects. Risk avoidance and risk mitigation exert positive effects on corporate valuation, whereas risk control and risk transfer exhibit negative effects; however, none is statistically significant individually.

Collectively, the four strategies significantly explain variations in corporate valuation, indicating that investors may respond more to the integrated risk-management architecture than to isolated risk-response mechanisms. These findings demonstrate that the valuation implications of risk management are not uniform across strategic responses and may depend on their combined effectiveness within the multinational operating environment. The results underscore the importance of integrated risk governance, strategic risk allocation, and enhanced risk-management disclosure for corporate decision-making, investor assessment, and market valuation in Nigeria.

6 CONCLUSION

The study concludes that risk avoidance, risk mitigation, risk transfer and risk control do not individually exert statistically significant effects on the corporate valuation of listed multinational firms in Nigeria. However, their joint significant effects observed indicate that the collective risk-management framework remains relevant to corporate valuation. The findings therefore suggest that valuation benefits may depend more on the integrated effectiveness of risk management than on isolated risk-response mechanisms.

Recommendations

Based on the findings, the study recommends that:

- Multinational firms should adopt an integrated risk-management framework that coordinates risk avoidance, mitigation, transfer and control rather than implementing these mechanisms independently.
- Management should strengthen risk avoidance and mitigation systems, particularly for material operational, foreign-exchange, regulatory and cross-border risks, while ensuring that implementation costs do not outweigh expected benefits.
- Firms should enhance the effectiveness of risk-control mechanisms through robust internal controls, continuous monitoring, independent oversight and periodic risk assessment.
- Management should employ risk-transfer mechanisms strategically, including appropriate insurance and contractual arrangements, with careful evaluation of associated costs and residual exposures.
- Regulatory authorities and the NGX should strengthen risk-management disclosure requirements to improve transparency and enable investors to better assess the implications of firms' risk-management practices for corporate valuation.

STATEMENTS ON COMPLIANCE WITH ETHICAL STANDARDS

Disclosure of conflict of interest

The authors declare no conflicts of interest regarding this manuscript.

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