Scope
Volume 13 Number 4 December 2023

Impact of Enterprise Risk Management on Organizational Resilience: A Qualitative Approach

Temitope Olabunmi Otun (MPhil Student)
Department of Business Administration, Faculty of Management Science, Nile University of Nigeria, Abuja, Nigeria
ORCID: 0009-0001-1716-8200

Taiwo Adewale Muritala (Ph.D.,CPFM, FBDFM)
Department of Business Administration, Faculty of Management Science, Nile University of Nigeria, Abuja, Nigeria
ORCID: 0000-0002-9946-0159

Umar Abbas Ibrahim (Ph.D.)
Department of Business Administration, Faculty of Management Science, Nile University of Nigeria, Abuja, Nigeria
ORCID: 0000-0001-8273-9148

Nasamu Gambo (Ph.D.)
Department of Business Administration, Faculty of Management Science, Nile University of Nigeria, Abuja, Nigeria
ORCID: 0000-0002-6745-0052

Abstract

A qualitative technique was adopted in this study to examine the effect of Enterprise Risk Management on Organizational Resilience from 2016 to 2022. The study analyzed thematic evidence from 39 previous researches that evaluated the effect of Risk Assessment, Risk Tolerance and Risk Identification on Innovation Culture. The study demonstrates a mixed outcome, with 46.15% of findings being positive and mixed respectively. The study also found the Variation-Selection-Retention theory fits in the explanation of the relationships between Enterprise Risk Management and Organizational Resilience. The use of primary data was utilized by most studies with Multi-Stage Narrative and Regression being majorly used for analysis. The authors observed limited literature on the Enterprise Risk Management and Organizational Resilience in Nigeria and recommend the use of other methods of analysis is recommended for future studies.

Keywords

Enterprise Risk Management, Risk Assessment, Organizational Resilience, Risk Identification, Risk Tolerance, Variation-Selection- Retention Theory

1.0 Introduction

The study examines the impact of enterprise risk management practices on theinnovation culture of Nigeria Banks. Focus was on the experience of deposit money banks listed on the Nigerian stock exchange during the Covid-19 pandemic.

The business environment is froth with risks and companies are daily challenged byvaried issues that attempt to impact their ability to meet objectives and targets. Risk management policies and practices aid in the reduction of risk-related losses (Lamidi et al, 2022).Banks are exposed to a variety ofriskincluding systemic, credit, market, and operational risks. The Financial Institutions Training Center (FITC) reported 12,553 fraud cases in the Banking industry in Q1, 2023 alone (Fitc, 2023). Institutionalizing ERM by Banks has been encouraged by various advisory and regulatory bodies (Arena et al., 2010).

The COVID-19 pandemic emphasized the importance of resilience in organizations. The pandemic has motivated companies around the world to operate dexterously in newer and more resilient ways (Verma & Gustafsson, 2020).The pandemic which initially commenced as a public health emergency swiftly morphed into a financial and economic crisis that affected the globe. It had a far-reaching effect on Nigerian corporations. The authors submit that covid-19 has a profound effect on corporate governance in Nigeria and it seems to be inducing a review and amendment of certain provisions of Companies and Allied Matters Act, 2020 to promote good corporate governance in Nigeria (Animashaun & Chitimira, 2022). All macroeconomic indices, including the exchange rate were affected by the Covid-19 pandemic (Gbadebo, 2022).

There has been a considerable increase in the number of publications on resilience which is likely related to the COVID-19 pandemic (Silva-Santos & Mueller, 2022), however these studies have been carried out outside Nigeria. This study seeks to unravel the impact of ERM on the ability of Nigerian banks to remain resilient the during the Covid-19 pandemic. Other sections will discuss the literature review and methodology for this study.

2.0 Literature Review

Organizational resilience as a subject, is an important study both in the research and practice of organization design as reflected in the various perspectives and studies on the subject (Ekin & Phanush, 2021) while Enterprise Risk Management can be defined as "an integrated and continuous process for managing enterprise-wide risks including strategic, financial, operational, compliance and reputational risks to minimize unexpected performance variance and maximize intrinsic firm value" (Lutch, 2023).

2.1 Conceptual:

2.1.1 Enterprise Risk Management: The ideology behind Enterprise Risk Management (ERM) is that organizationscollate all risks and manage them methodicallyas against individual risk management. ERM is described as one of the Breakthrough concepts of 2004 (Horvey and Ankhamah, 2020).Nocco & Stulz, (2022), Lucht (2023) all argue that ERM benefits organizations by enabling the integrated management of risk thereby reducing capital costs, stock price volatility while increasing risk awareness' in the organization culminating in improved strategic and operational decision making. Four proxies for enterprise risk management practices were identified however only three proxies were evaluated due to their qualitative nature. They are; risk identification, assessment and tolerance. Total cost of risk was not evaluated due to its quantitative nature (Oyerogba et al, 2016).

2.1.2 Organizational Resilience is the capability of the organization to produce situation-specific solutions to events that threaten the organization's survival in the business environment (Verma & Gustaffson, 2020; Silva-Santos & Mueller, 2022) while Raajpoot & Sharma describe innovation culture as a set of values, beliefs, attitudes, and behaviors in the company that can encourage development and commercialization of innovative product or services (2021). The relationship between these proxies are illustrated below:

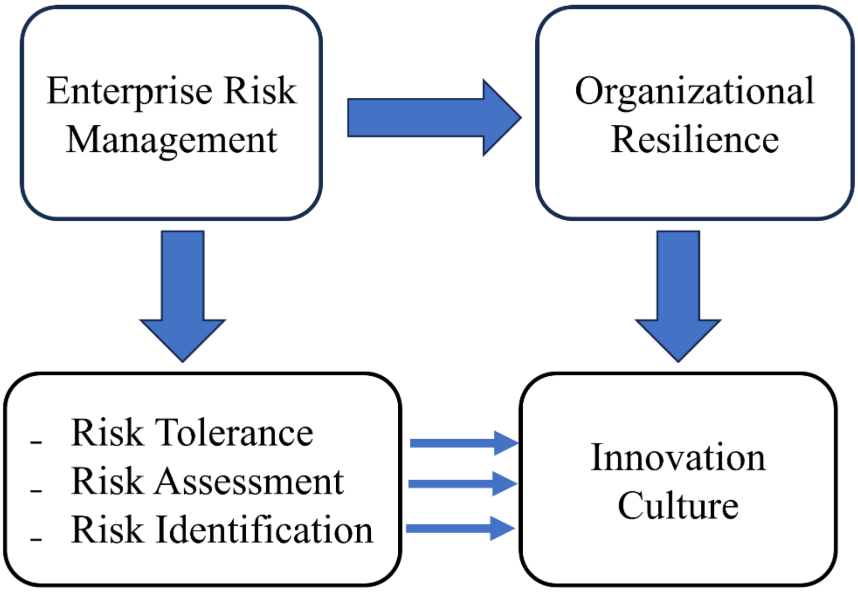

Figure 1: Relationship between ERM and Organizational Resilience

Figure 1 above suggests the relationship of Enterprise Risk Management (the independent variable) and Organizational resilience(the dependent variable). It also seeks to discover the effect of the independent variable proxies (Risk tolerance, Assessment and Identification) on the proxy for the dependent variable (innovation culture).

2.2 Theoretical Review:

The study reviewed theories ranging from Diffusion theory, Decision Making theory, Theory of Constraints to Variation, Selection, Retention Theory.

Diffusion Theory:

The diffusion of innovation theory propounded by Rogers is the most referenced. Rogers noted that the prior characteristics of the decision-making unit and perceived characteristics of the innovation and communication channel has an effect during the persuasion stage (Steriber et al, 2021; Wu& Wu, 2023). It attempts to explain how emerging technologies are adopted by the society from introduction to widespread adoption. The theory explains the passage of a new idea through stages of adoption by different people who participate in or begin using the new idea. (Huong & Duc, 2023). It seeks to explain how and why new ideas and practices are adopted, including why the adoption of new ideas can be spread out over long periods (Call & Herber, 2022).This theory is frequently referred to when companies are developing a marketing strategy for new products and developing market share (Elmghaamez et al, 2022)

Decision Making Theory: Decision-making theory is a theory of how rational individuals should behave under risk and uncertainty. The theory suggests that decision-making is the adoption and application of rational thinking for the management of private, business, or governmental organizations in efficiently. It can even mean choosing between action and non-action (Hallioui et al, 2022; Manara et al, 2023). The normative decision-making theory by Engel, Blackwell describes how individuals make their decisions in a rational way by elaborating on different stages of the decision-making process (Stevenson et al, 1990; Manara et al, 2023). This basic model of decision-making is popular in marketing research it explains that there are some stages before consumers chose a specific product: problem recognition, information search, and evaluation (Hoyer & MacInnis, 2008) as shown below:

Figure 2: The Stages of Decision making-process adapted from Stevenson et al, 1990

The theory is particularly well suited for shedding light on the questions of *why* and *how* events occur. The model will aid in breaking down the risk assessment section of ERM and its impact on innovation culture of organizations (Dmochowski, 2022; Manara et al, 2023).

Theory of Constraints: Theory of Constraints (TOC) originated as an effective management theory that offers solutions to complex problems (Kadhim et al, 2020). It defines a set of tools that can usedin managing constraints.Businesses can be viewed as a connected set of processes that transform inputs into profitable outputs (Smith, 2023). TOC conceptually presents this system as a chain and advocates the familiar adage that a "chain is only as strong as its weakest link." Goldratt identifies a five-step process that strengthen the weakest link, or links if implemented by a change agent. In The Goal, Goldratt proves that most organizations have very few true constraints (Vendemia, 2018; Smith, 2023). TOC has also been applied in the domains of strategy formulation, Project management and Performance Measurement (Modi et al, 2019). The theory will assist in evaluating how innovation culture of Nigerian banks is influenced by risk tolerance.

Variation-Selection-Retention (VSR) Theory: is an offshoot of the evolutionary theory. This was introduced by Staw et al. (1981) on how negatively framed situations lead to risk avoidance and maladaptive outcomes in the form of 'threat-rigidity effects'. This is because individuals and organizations are prone to emphasizing well-learned or dominant responses when facing adversity. Meyer (1982) contradicted the proposition by Staw et al. (1981) that an external threat automatically places an organization at risk. The theory suggests that organizations have two possible responses to show adaptability: they can absorb the impact of the environmental stimulus by undergoing first-order change and single-loop learning (labelled 'resiliency'), or they can take-on new practices or configurations through second-order change and double-loop learning (labelled 'retention'). Meyer (1982) further concluded that resilience is influenced by an organization's strategy and its slack resources, while retention is shaped by an organization's ideologies and constrained by organizational structures (Linnenluecke, 2017).

Currently, there is no consensus on which theoretical framework to adopt due to each theory viewing the same phenomenon from varying angles. Consequently, the authors construct a theoretical framework based on VSR Theory which suggest that A source of variation generation (Covid-19), different success rate (selection) and environmentally fit characteristics (ERM) that must be retained need to exist. These variables result in a change in the average characteristics of the population in favour of success (McDonagh, 2021)

2.3 Empirical

Lutch in her paper on strengthening organizational resilience by implementing ERM, describes ERM as "an integrated and continuous process for managing enterprise-wide risks including strategic, financial, operational, compliance and reputational risks to minimize unexpected performance variance and maximize intrinsic firm value". Her paper argues that a cyclical risk management framework which include definition of risk appetite, risk analytics, risk management and reporting all support organizational resilience in organizations. The paper also defined Organizational resiliency as "…an organization's ability to anticipate, prepare for, respond to and recover from disruptive events, whether it is a natural disaster, cyber-attack, financial crisis or something else". This encompasses capacity of an organization to withstand and adapt to changes in the external environment to maintain operations and to ensure business continuity of its strategic goals and objectives. Lutch argues that there is a similarity in the definition of ERM and organizational resiliency and both can leverage to strengthen each other(2023).

Rahman and Zhenkui (2022) investigated the relationship between enterprise risk management (ERM) and company performance in the Chinese commercial industry. The study used 175 listed Chinese commercial companies from 2009 to 2018 and found that the suboptimal ERM adopted by the Chinese commercial industry affected the performance of the companies negatively. From the study, Company's size, financial leverage, and intellectual capital can influence ERM thus establishing a a strong link between ERM and company performance. The study discovered that company performance is linked to its level of ERM adoption. Similarly, Horvey and Ankhama's (2020) study of the impact of ERM on performance of 30 listed firms on Ghanian equity market showed that ERM propels firm performance at both the firm level and market level. This paper recommends that firms should implement dynamic risk management techniques and robust measures to obtainmore improved ERM outcome. Financial firms and non-financial firms should implement Enterprise Risk Management because firms practicing ERM is highly correlated with better performance. A study of the Pakistan market by Khan et al in 2020 also supports the implementation of ERM to improve company performance.

In their study of 46 Chinese companies, Wong et al (2021) discovered that inadequate risk management and lack of risk culture can expose a company to unexpected risk events, which can negatively affect its performance. Though there were inconsistencies in variables to measure the enterprise risk management (ERM) construct, as well as insufficient embedding strategies for risk culture, the study discovered risk policy and risk appetite/tolerance, monitoring key risk and accountability are the three dimensions of risk culture

The impact of ERM on the survival rate of Small and Medium Scale Enterprises (SMEs) was studied by Ibiwoye et al (2020). The study utilized a cross-sectional survey technique on a sample of 400 the research indicated that ERM practices have a significant impact on the survival of SMEs in Lagos State and recommended adoption of ERM among the SME owners and the Lagos state government.

A study of the effect credit risk management on the financial performance of quoted deposit money banks in Nigeria between 2010 and 2018 using data from annual reports and financial statements of seven banks by Gambo et al (2019) revealed that Loan to deposit ratio, credit risk and capital adequacy risk have insignificant impact on return on assets while solvency risk and firm size have positive significant effect on return on assets. The study recommended that that the management of the banks should establish a proper credit risk environment.

Asare-Kyire et al, (2023) studied the impact of organizational resilience on innovation performance and firm performance in the hospitality sector in Ghana. Data from the hospitality industry revealed that development of resilient capabilities is likely to make companies engage in exploratory innovation. This could include developing new products, services, or business models that have no direct linkage with current portfolio. It was also discovered that investing in building resilience capabilities, fostering culture of innovation, and focus on incremental innovations by organizations is likely to improve its competitive advantage and thus ensuring long-term success. This was also supported by Bravo & Hernandez (2021) in their study on the American oil and gas industry. In addition, social ties appear to be particularly important for firms that are more resilient. These discoveries highlight the importance of developing resilience capabilities to facilitate innovation and enhance firm performance in a highly uncertain and volatile industry

As described by Santos & Spers (2023) and Ramdani et al (2020), organizational resilience refers to the ability of an organization to develop situation-specific solutions to disruptions. They argue that organizational resilience should not be misconstrued with organizational flexibility, agility or adaptability despite having similar characteristics. Organizational resilience is connected to a specific unexpected event. Ramdani et al's study was focused on ten investment banks in the Middle east. The study revealed that banks can improve resilience by continuous adjustment of business models in response to internal and external threats. Firms frequently change their business models in order to respond to internal and external. The study further revealed that to increase performance, bank division need to respond to both internal and external threats as responding to only internal threats only help to sustain performance.

Silva-Santos and Mueller's (2022) bibliometric analysis of resilience research reveals the topic has been studied in different ways, either in theoretical studies or in empirical studies. The study viewed resilience from different perspectives: resilience in flood risk management; resilience and sustainability; and resilience and health. This reveals an interdisciplinary, academic and managerial importance of studies on resilience. The study also revealed a limited knowledge of the subject. There are still unanswered questions and little understanding of the characteristics of recent publications in the management and business research field.

Studies on organizational risk tolerance was limited. Catak and Yilmaz (2023), in the study titled "Behavioral Investor Types- Determinants of Individual Investors' Financial Risk Tolerance" discovered that gender and education are factors that significantly determine risk tolerance. It also discovered that investors are not very emotional in their investment behavior and have cognitive biases. A questionnaire that measured risk tolerance with the active or passive characteristic traits quiz and classical risk-tolerance questionnaire were utilized. Unluakin & Aktas (2023) suggest that organizational risk tolerance correlates with investment behaviour.

Raajpoot & Sharma describe innovation culture as a set of values, beliefs, attitudes, and behaviors in the company that can encourage development and commercialization of innovative product or services (2021). While Pavlovic et al, (2023) argue that there is no consensus on literature that discuss the dimensions of innovation culture,

Kokot-Stepien's study of risk identification in Small scale businesses of Poland discovered that risk identification is a significant aspects of risk management. It involves early detection of possible threats that are likely to impact the company and its goals. The study recommended that a properly conducted risk identification should cover all levels of the company (2023).

Chornous and Ursulenko (2023) studied the challenges in improving the banking risk management for Ukrainian banks with the aid of artificial intelligence, numerical mathematics, statistics and information technology. The study proposes a novel method based on modern methods of data analysis, identifying prospective directions for banking information system improvement and suggesting the implementation scenarios. The main difficulties in the use of new approaches discovered by the study are related to lack of historical data, incomplete or inappropriate data on bank attributes or credit policy.

The authors found articles on ERM readily available, however, majority of such research are focused on the accounting and finance view of ERM with little research from the management field. The samples used in the papers reviewed by the authors were largely focused on Asia countries. Papers on Nigerian subjects were viewed from the finance lens. There is little information on how ERM influences organizational resilience of Nigerian banks. This study seeks to add to the body of knowledge in this field. The study seeks to test the following null hypotheses:

$H_{o(1)}$: Risk Identification has no significant impact on innovation culture of banks in Nigeria
$H_{o(2)}$: Risk Assessment has no effect on innovation culture of banks in Nigeria
$H_{o(3)}$: Risk tolerance has no impact on innovation culture of Nigerian banks.

3.0 Methodology

This research adopted a qualitative approach which involved reviewing published and journal articles from databases of EBSCOhost and Google Scholar. "Enterprise Risk Management and Organizational Resilience" was initially utilized in the advance search of EBSCOhost and google scholar with limited returns based on the criteria. A second search using the proxies for Enterprise Risk Management and Organizational Resilience earlier identified; "Risk assessment and Innovation culture", "Risk Tolerance and Innovation Culture" and "Risk Identification and Innovation Culture" were then used on the advanced search of the EBSCOhost and google Scholar research databases from 2016 to 2022. There was no restriction on sample collection from countries as the pandemic was a global phenomenon. The majority of research on ERM in Nigeria were focused on the accounting and finance view with little research from the management field as such a further study the management view of ERM will be impactful to Finance industry.

The empirical evidence from earlier studies was analyzedbased on thematic areas with focus on Risk Tolerance, Risk Identification, Risk Assessment and Innovation culture. A descriptive synthesis of previous studies on the proxies generated the results. The utilization of verification strategies guarantees trustworthiness and thoroughness in the study which enabled the study come to some generalizations (Bello et al,2022; Damina et al, 2022). The Variation-Selection-Retention theory was the theoretical framework adapted in this study.

4.0 Results

An empirical review of articles that studied the Impact of Enterprise Risk Management on Organizational Resilience Of Nigerian Banks from 2016 to 2022 are presented in this section. Due to the limited research while using the search "Enterprise Risk Management and Organizational Resilience", a second search using the proxies for Enterprise Risk Management and Organizational Resilience earlier identified; "Risk assessment and Innovation culture", "Risk Tolerance and Innovation Culture" and "Risk Identification and Innovation Culture". The empirical researches were analyzedutilizingcategories based on the results from the 39 articles sampledin line with the selection criteria. The methodology adopted in the articles and the data analysis result thathave positive, negative and mixed relationships between "Enterprise Risk Management and Organizational Resilience", a second search using the proxies for Enterprise Risk Management and Organizational Resilience earlier identified; "Risk assessment and Innovation culture", "Risk Tolerance and Innovation Culture" and "Risk Identification and Innovation Culture" determined the categories.

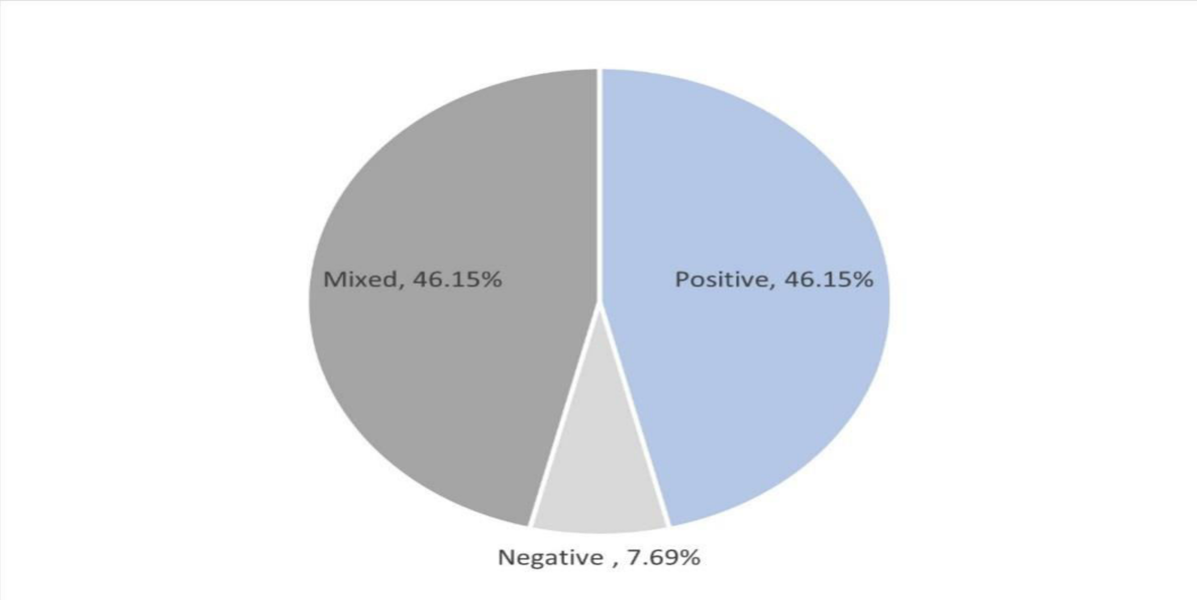

Figure 3 shows that positive and Mixed results representing 46.15% of the analysis on the relationship between Enterprise Risk Management and Organizational Resilience while the negative relationship is 7.69%.

Table 1 is a breakdown of the resultdistribution based on the methodology adopted and the findings. Multi-stage Narrative Analysis was the most utilised estimation model, with 28.21% of the studies adopting the methodology.

S/N	Methodology	Results			Total	Percentage
		Positive	Negative	Mixed		
1	Multi-Stage Narrative Analysis	4	1	6	11	28.21%
2	Regression Model	2	1	2	5	12.82%
3	Multiple Linear Regression	1	0	2	3	7.69%
4	Q-ROF-Entropy-Rank-Sum-Aditive Ratio Assessment	1	0	1	2	5.13%
5	Partial Least Square Based Structural Equation Modeling (PLS-SEM)	2	0	0	2	5.13%
6	Discrete event Simulation	0	0	1	1	2.56%
7	Linear Metric Approximation	1	0	0	1	2.56%
8	Fuzzy FMEA	0	0	1	1	2.56%
9	Improved Rough Number Approach	1	0	0	1	2.56%
10	Time Series Panel Data Analysis	1	0	0	1	2.56%
11	Ordinary Least Square Regression	1	0	0	1	2.56%
12	Anito-Regression Conditional Analysis	0	0	1	1	2.56%
13	Panel Regression Analysis	0	1	0	1	2.56%
14	PRISMA Guidelines	0	0	1	1	2.56%
15	Thematic Content Analysis	1	0	0	1	2.56%
16	PRISM	1	0	0	1	2.56%
17	Structural Equation Modelling	0	0	1	1	2.56%
18	Delphi Fuzzy	1	0	0	1	2.56%

19	Data Spatialization	1	0	0	1	2.56%
20	Competing Value Framework	0	0	1	1	2.56%
21	RTH Model	0	0	1	1	2.56%
	Total				**39**	

From Table 1, the second most popular methodology was the Regression Model with 12.82% however, if all a consolidation of all the variations of regression models are done, Regression Model jumps to 25.64% still placing Regression Model as the second most utilized model. Other methods used as shown in Table 1 were, the Linear Metric Approximation, PLS-SEM, Delphi Fuzzy and Structural Equation Modelling.

5.0 Discussion

The analysis reveals different results of the impact of Enterprise Risk Management on Organizational Resilience. The study reveals that organizational resilience is equally impacted by ERM Positively and Mixed. This is in alignment with the theoretical underpinning of Variation-Selection-Retention theory as postulated by Staw et el (1981) which suggests organizations can either become resilient or retentive to show adaptability.

More than one-quarter of the previous studies on the impact of Enterprise Risk Management on Organizational Resilienceused Multi-Stage Narrative analysis as the predominant estimator.This suggest that multiple intervening factors of ERM play roles in impacting Organizational resilience concurrently thus making it challenging for a consistent and generalizable decision. This is corroborated by Rahman & Zhenkui (2022) who suggest company's size, financial leverage, and intellectual capital impact on Enterprise Risk Management. Another possible reason could be studies misinterpretation of flexibility as resilience which was observed by Santos & Spers (2023) and Ramdani et al (2020). These results nullify the hypotheses of this study. Risk Assessment, Risk Identification and Risk Tolerance all have significant impact on the Innovation Culture of Nigerian Banks. The limited negative significance on the effect of Enterprise Risk Management on Organizational Resilience is in tandem with Wong et al's (2020) and Rahman & Zhenkui (2022) study which showed inadequate ERM can make the company more vulnerable to risk while robust Enterprise Risk Management provides a layer of protection.

Theoretically, the findings in the articles analyzed support the assertion of the Variation-Selection-Retention theory which states that Organization can either absorb the impact of the environmental stimuli by undergoing first-order change and single-loop learning (labelled 'resiliency'), or they can adopt new practices or configurations through second-order change and double-loop learning (labelled 'retention'). This is evident in the even distribution of the Positive and Mixed reactions.

6.0 Conclusion

This paper reviewed the effect of Enterprise Risk Management on Organizational Resilience from 2016 to 2022. Previous studies' findings and the theoretical implications were discussed. The qualitative analysis revealed that studies on the effect of Enterprise Risk Management on Organizational Resilience returned largely positive and mixed results with Multi-Stage Narrative analysis utilized the most. The results showed that 46.15% of the papers reviewed had positive and mixed results. Negative results was minimal (7.69%) suggesting organizations are aligned that Enterprise Risk management is significant in development of organizational resilience. The study further revealed that over 15 models were adopted in the various studies that that covered the globe, with the Multi-stage narrative model being the most adopted technique of analysis, followed by Regression Model all returning Positive and Mixed outcomes. The study revealed limited studies on Enterprise Risk Management have been carried out in Nigeria with Asia with the largest count.

Future studies on the effect of Enterprise Risk Management on Organizational Resilience in Nigeria should be carried out with focus on specific industries like Energy, Finance and Health.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper

References

1. Asare-Kyire, L., Bonsu, C. A., Appienti, W. A., & Ackah, O. (2023). Organizational Resilience, Innovation and Firm Performance: Moderating Role of Social Ties. *Open Journal of Business and Management, 11,* 2034-2050.
2. Animashaun, O.; Chitimira, H. (2022) Is the Covid-19 Pandemic Rewriting the Rules of Corporate Governance in Nigeria?*Perspectives of Law & Public Administration.* 11(4),
3. Bello, U., Zubairu, U., & Ibrahim, U. (2022). Impact of Capital Market Performance on Economic Growth in Developing Nations: A Qualitative Approach. *Journal of Service Science and Management*, 15, 340-349.
4. Bravo,O.; Hernandez, D., Measuring Organizational Resilience:Tracing disruptive events facing unconventional oil and gas enterprise performance in the Americas. *Energy Research & Social Science 80*1-14
5. Call, R. D., Herber R. D., (2022) Applicability of the diffusion of innovation theory to accelerate model-based systems engineering adoption *Systems Engineering 25*. 574-583
6. Catak, C., Yilmaz, S.A, (2023) Behavioral Investor Types- Determinants of Individual Investors' Financial Risk Tolerance. *The Journal of Accounting and Finance. 99* 223-236
7. Damina, E. K., Muritala, T., & Umar, A. I. (2022). Effect of Corporate Governance on the Capital Structure on Non-Financial Firms in Developing Countries: A Qualitative Approach. *Open Journalof Business and Management, 10*, 3230-3244.
8. Dmochowski J.P. (2023) A statisticaltheory of optimal decision-making in sportsbetting. *PLOS ONE 18*(6): e0287601.
9. Elmghaamez, I.K, Attah-Boakye, R., Adams K., Agyemang J., (2022) The diffusion of innovation theory and the effects of IFRS adoption by multinational corporations on capital market performance: a cross-country analysis *Thunderbird International Business Review 64*., 81-108
10. Hallioui A., Herrou, B., Santos R., Katina P., Khadiri, H., Egbue, O. (2022) Systems Theory and Evidence-Based Decision-Making as Keys forArbitrating between Optimal Production and EfficientMaintenance: A Case StudyDiscrete *Dynamics in Nature and Society*
11. Horvey, S., Ankamah, J. (2020)Enterprise risk management and firm performance: Empirical evidence from Ghana equity market *Cogent Economics & Finance. 8* (1), 1-20.
12. Gambo, H., Bambale, A., Ibrahim, M.A. (2019) Credit Risk Management and Financial Performance of Quoted Deposit Money Banks in Nigeria *Journal of Finance, Accounting and Management, 10*(1), 26-42,
13. Gbadebo, A.O. (2022) Effect of COVID-19 Pandemic on Foreign Exchange Rate Volatility: The Nigeria experience*Economic Studies & Analyses / Acta VSFS.* 16(1),43-62.
14. Huong, P.T., Duc, N.L., (2023) The Perceptions of Prospective Digital Transformation Adopters: An Extended Diffusion of Innovations Theory *TEM Journal. (12)*1, 459-469,
15. Ibiwoye A., Mojekwu J., Dansu F. (2020) Enterprise Risk Management Practices and Survival of Small and Medium Scale Enterprises in Nigeria *Studies in Business & Economics*. 15(1), 68-82.

16. Kadhim, H.K., Najm, K.J., Kadhim H.N., (2020) Using Throughput Accounting for Cost Management and Performance Assessment: Constraint Theory Approach *TEM Journal.9(2)*, 763-769,
17. Khan, W., Asif, M., Shah, S.Q. (2020) An Empirical Analysis of Enterprise Risk Management and Firm's Value: Evidence from Pakistan*Journal of Independent Studies & Research: Management & Social Sciences & Economics*. 18(1), 107-123.
18. Linnenluecke, M., (2017) Resilience in Business and Management Research: A Review of Influential Publications and a Research Agenda. *International Journal of Management Reviews 19*. 4–30
19. Lucht J.M. (2023) Using enterprise risk management to strengthen organisational resiliency: One institution's story *Journal of Business Continuity & Emergency Planning 17*(1) 61-73
20. Manara, M.U., Nubold, A., van Gils S., ZijlstraF.R.H. (2023) Exploring the path to corruption– Aninformed grounded theory study on the decision-making process underlying corruption. *PLoS ONE18*(9)
21. McDonagh, N. (2021)The evolution of bank bailout policy: twocenturies of variation, selection and retention Journal of Evolutionary Economics. 31(3), 1065-1088.
22. Mwangi, H.M, Ngugi L.(2018)Risk Management Practices andPerformance of Construction Projects inNairobi City County Government, Kenya*International Academic Journal of Information Sciences and Project Management 3*(2), 111-136Available Online at:http://www.iajournals.org/articles/iajispm_v3_i2_111_136.pdf
23. Nocco B.W, Stulz, R.M (2020) Enterprise Risk Management: Theory and PracticeJournal of Applied Corporate Finance 34(1) 81-94
24. Nedyalkova, P. (2023)Risk Assessment as A Stage of Risk Management in Enterprises In Tourism Sector. *Financial Internet Quarterly 'e-Finanse'.* 19(3), 31-47.
25. Olaniyi, O.A, Tella S.A, Onanuga, A.T (2023) Physical Infrastructure and Economic Performance in Nigeria: A Ridge Regression Analysis*AUDOE 19(*4). 113-124
26. Ranganathan P, Caduff C. (2023) Designing and validating a research questionnaire - Part 1. *Perspect Clin Res14*. 152-155.
27. Rahman, M.J.; Zhenkui C. (2022) Enterprise Risk Management and Company's Performance: Empirical Evidence from China.*Journal of Accounting, Business & Management*. *29*(1) 107-119.
28. Santos, A. Y. P., & Spers, R. G. (2023). How to measure organizational resilience? Validatinga simplified model. *Revista de Administração Mackenzie, 24*(6), 1–32.
29. Silva-Santos J.L., Mueller A., (2022) Resilience in the management and business research field: a bibliometric analysis. *Management Letters / Cuadernos de Gestión 22*(2) 61-79
30. Smith, K. F. (2023). On Critical Chain Scheduling & Buffering: A Critique on the Theory of Constraints as Applied to Project Management, *PM World Journal*, 12(1) pmworldlibrary.net
31. Steiber, A., Al¨ange, S., Ghosh, S. & Goncalves, D. (2021). Digital transformation of industrial firms: an innovation diffusion perspective, *European Journal of Innovation Management, 24*(3), 799-819.
32. Stevenson M.K., Busemeyer J.R., Naylor J.C. (1990) Judgment and decision-making theory. *Handbook of industrial and organizational psychology*. Consulting Psychologists Press; US. 283–374.
33. Ünlüakın, C. ve Aktaş, H. (2023). Interactions of financial risk tolerance, internal fit, external fit and personality traits on corporate investment behaviour. *Anadolu Üniversitesi Sosyal Bilimler Dergisi*, *23*(2), 375-398.
34. Vendemia, W.G. (2018) "Are there any Questions?" The Theory of Constraints as Justification for using Student Response Systems in a Required Operations Management Course *Business Education Innovation Journal* 10(2)
35. Verma, S., & Gustafsson, A. (2020). Investigating the emerging COVID-19 research trends in the field of business and management: A bibliometric analysis approach. *Journal of Business Research, 118, 253-261.*

36. Wang B., Chuanzhe Y., Najaf I., Zeeshan F., Ahmad A. (2022) Impact of human capital and fnancial globalization on environmental degradation in OBOR countries: Critical role of national cultural orientations*Environmental Science and Pollution Research29,*37327–37343
37. Wong C.C.; Rahim, M., Faizul Azli; Loo Siaw Chuing. Enterprise Risk Management and Risk Culture in Construction Public Listed CompaniesJournal of Construction in Developing Countries. 2021, Vol. 26 Issue 2, p17-36.
38. Wu. C., Wu, F., (2023) Forecasting Technological Change via Driving Force Approach based on Innovation Diffusion and Complexity Theory *International Journal of Information & Management Sciences 34*. 161-178.