



## Risk Committee and Risk Disclosure Quality: Evidence from Listed Insurance Firms in Nigeria

Najib Abbas Wada<sup>1\*</sup>, Naja'atu Bala Rabi<sup>2</sup>, Kabiru Isa Dandago<sup>3</sup>  
<sup>1, 2, 3</sup>*Department of Accounting, Bayero University, Kano-Nigeria*  
\*Corresponding Author: talk2najib@gmail.com

### Abstract

**Objective** –This study investigated the impact of risk committee characteristics on the risk disclosure quality (RDQ) of listed insurance firms in Nigeria from 2011-2021.

**Design/Methodology** –Data for the research was generated from the annual reports and financial statements of seventeen listed insurance firms sampled out of a population of twenty-one. The study employed descriptive summary statistics, correlation analysis, regression analysis and factor analysis to analyze the data gathered.

**Results** –Using factor analysis, it was found that Risk Disclosure Quantity (RDQUANT) has the highest eigenvalue, making it the composite quality of the risk disclosure of listed insurance firms and denoting that the RDQ of insurance firms is best measured by the RDQUANT. Using GLS regression, it was found that Risk Committee Size (RCS) and Risk Committee Meeting (RCM) have a significant positive impact on the RDQ of Listed Insurance firms in Nigeria. Contrary, Risk Committee Executive Presence (RCEXP) has an insignificant negative impact on the RDQ of the listed insurance firms.

**Research limitations/implications** –This result influences the efforts of regulatory authorities in their attempt to develop resilient corporate governance codes that guarantee qualitative risk disclosures. The study recommends that regulatory authorities in the Nigerian insurance industry should mandate the establishment of large risk committees and set higher thresholds for committee meetings over and above the traditional quarterly meeting. The risk committee should be composed of a lower number of executive directors.

**Novelty/Originality** –The originality of this study lies in the usage of factor analysis to determine the best measure of risk disclosure quality in Nigeria. In addition, this is the first study of its kind to determine the impact of risk committee attributes on risk disclosure quality in the Nigerian Insurance industry.

**Keywords:** Risk committee, risk committee characteristics, RDQ, factor analysis.

### 1. Introduction

In the aftermath of the 2008 global financial crisis, corporate risk disclosures have gained prominence and increased attention by researchers (Jia et al., 2019). In addition, the need to ensure that the risk disclosures are qualitative was also emphasized (Hasan et al., 2023; Moumen et al., 2016). There is a consensus in the extant literature that Risk disclosure quality is the measure of the reliability, relevance and informativeness of risk disclosures (ACCA, 2014; Beretta & Bozzolan, 2004; Chandiramani, 2009; Elshandidy & Neri, 2015). Consequently, several researches have sprung up attempting to explore the determinants of qualitative risk disclosures among corporate enterprises. Studies such as that of Amran et al. (2009), Elshandidy et al. (2018) Elshandidy and Neri (2015), and Linsley and Shrivs (2000) assessed the effect of firm characteristics such as size, leverage, profitability, audit quality, etc. on risk

disclosure quality. Others such as Abraham & Cox (2007), Chakroun and Hussainey (2014), Dobler et al. (2011), Elshandidy & Neri (2015), Elzahar and Hussainey (2012) and Maas (2016) investigated the influence of corporate governance attributes such as audit committee characteristics, board structure, and ownership structure.

Most of the studies found that more robust corporate governance practices improve the risk disclosure quality of firms (Adebimpe & Peace, 2011; Bako, 2017; Kakanda et al., 2017; Onoja & Agada, 2015; Zango et al., 2016). However, it was observed by Al Maghzom et al. (2016) and Hassan et al. (2012) that the existing literature is concentrated and saturated with studies that employed the quantity of risk disclosed in the annual reports of firms as the predominant measure and determinant of risk disclosure quality. These studies completely neglected and ignored better measures of quality risk information, such as richness, informativeness, depth, outlook, and other semantic qualities of the information disclosed. Studies such as that of Beattie et al. (2004) and Beretta and Bozzolan (2004) criticized the approach of using the quantity of risk disclosed as a proxy for quality and emphatically argued that quantity as a measure of quality only counts the number of information items disclosed without recourse to the substance and value of the information disclosed. As such, the studies concluded unanimously, the weakness of quantity as a measure of the quality of risk disclosures.

The COSO and WBCSD (2018), OECD (2014), and O'Brien (2011) asserted that while enhanced corporate governance practices improve the quality of risk disclosures, the presence of a stand-alone risk committee empowers the board to exercise more rigorous and extensive risk management oversight. This is consistent with the specific suggestions of the Dodd-Frank Wall Street Reforms in the US and the Walker Review in the UK, both of which emphasized the importance of establishing a stand-alone risk committee to guarantee qualitative risk disclosures. In addition, Protiviti (2006), Bugalla et al. (2011), Yatim (2009) and Buckby et al. (2015) further opined that for effective risk oversight and quality risk disclosures, a stand-alone risk committee is indispensable.

A review of the existing body of literature and mainstream researches has shown a dearth of studies on the impact of the risk committee on risk disclosure quality. As a crucial risk-monitoring mechanism, Jia et al. (2019) contended that the risk committee bears the fundamental responsibility of risk oversight and risk disclosure quality. Thus, the risk committee is expected to have a crucial role in determining risk disclosure quality.

Consequently, Yatim (2009) and Hassan et al. (2012), have suggested the need to assess the impact of the risk committee on risk disclosure quality, as the committee by its responsibilities and functions as enshrined in various codes of governance, is central and crucial in securing qualitative risk disclosures.

Hassan et al. (2012) found that the existence of a stand-alone risk committee had a significant positive impact on the risk disclosure quality of financial instruments of the listed companies in Malaysia from 1999-2003. The findings of Hassan et al. (2012) were reaffirmed by Buckby et al. (2015) who using a cross-sectional design found that the existence of a standalone risk committee had a positive and significant impact on the quality of risk management disclosures of listed Australian companies. Abdullah et al. (2017), in an empirical investigation of 395 non-financial companies listed on *Bursa* Malaysia in 2011 observed that the presence of risk management committee tends to enhance voluntary risk management disclosures. More so, in a study of 56 manufacturing firms in Indonesia using panel data analysis, Kurniawanto et al. (2017) found that the presence of a risk committee plays a role in controlling the extent of a company's risk management disclosures. The critical role that the existence of a stand-alone risk committee plays in promoting qualitative risk disclosures was further demonstrated by the more recent findings of Elamer et al. (2019), Grassa et al. (2021), Kakanda et al. (2017) and Nahar et al. (2016). Conversely, none of these researches investigated the individual risk committee attributes and were solely focused on the

committee's existence. As a result, Nahar et al. (2020) advocated for further research into specific risk committee governance attributes and their effect on risk disclosure, particularly in emerging economies.

Studies on the impact of Risk committee attributes on risk disclosure quality are contemporary and to the best knowledge of the researcher, predominantly foreign. Al-Hadi (2015) conducted an empirical analysis of the impact of risk committee characteristics on the quality of market risk disclosure of listed financial firms in Gulf Cooperation Countries (GCC) from 2007-2011. The study observed that the size and expertise of the risk committee have a positive and significant impact on market risk disclosure quality. On the other hand, risk committee independence was observed to have an insignificant impact on market risk disclosure quality. The study failed to explore other risk category disclosures that are important to financial institutions, such as financial, credit, and liquidity risk disclosure. In addition, the study failed to encapsulate risk committee attributes like meeting and executive presence. Finally, the study is limited to GCC countries and may not be generalized to other countries due to the weak regulatory framework in GCC as observed by Hasan et al. (2023).

Viljoen et al. (2016) in a study of the impact of risk committee characteristics on the degree of enhanced risk disclosure in the top 40 non-financial firms of the Johannesburg stock exchange in South Africa from 2011-2012, observed that while risk committee expertise and meetings had a significant impact on enhanced risk disclosure, the existence of a risk officer had an insignificant impact on enhanced risk disclosure. The major limitation of this study is the short timescale it employed and the fact that it also employed quantity as a measure of risk disclosure quality while ignoring other semantic measures of risk disclosure quality.

Abdullah et al. (2020) found that risk committee attributes of listed Malaysian firms such as diversity, size, composition, and expertise have no impact on the quality of risk disclosures of hedge instruments. This study limited risk disclosures associated with hedge instruments while failing to encapsulate other classes of risk disclosures in the annual reports of financial firms.

Lastly, Hasan et al. (2023) and Jia et al. (2019) examine the impact of risk management committee on risk disclosure quality in Australia and Pakistan. Jia et al. (2019) employed factor analysis methodology and observed that quantity is the best measure of risk disclosure quality. Hasan et al. (2023) on the other hand, employed a risk disclosure index similar to that of Al-Maghzom et al. (2016). Both studies observed that size engenders improved risk disclosure quality. More so, Jia et al. (2019) further found that risk committee expertise has a significant impact on risk disclosure quality. On the contrary, both studies found that risk committee independence is negatively associated with risk disclosure quality. Hasan et al. (2023) observed that risk committee gender diversity does not improve risk disclosure quality. The criticism of the research of Jia et al. (2019) is that it adopted a very short timescale of three years. This makes the findings of the study a little bit weak and justifies the need for further empirical analysis especially in the context of developing countries like Nigeria where the corporate governance structure is not as robust as that of Australia. In addition, the study failed to encapsulate executive presence as part of risk committee attributes. Also, the lack of impact on risk disclosure quality contradicts the findings of Viljoen et al. (2016). Apart from the fact that the study of Hasan et al. (2023) failed to encapsulate risk committee meetings and executive presence, the study also employed quantity as a measure of risk disclosure quality while ignoring other semantic measures of quality.

More so, in Nigeria, the only studies on risk committee attributes in the context of risk disclosure quality to the best knowledge of the researcher was that of Yusuf et al. (2023) and Zango et al. (2016). Zango et al. (2016) investigated the impact of a stand-alone risk committee on the effectiveness of risk disclosures in listed deposit banks in Nigeria. Yusuf et al. (2023) on the other hand appraised the impact of risk committee attributes on the risk-taking of deposit money banks. While Zango et al. (2016) failed to

encapsulate committee effectiveness attributes such as size, executive presence, and meeting, Yusuf et al. (2023) focused on risk-taking activities as opposed to risk disclosures.

It is against the backdrop of the above limitations observed in the literature on the impact of risk committee characteristics on the risk disclosure quality, that this study becomes necessary. Consequently, this study addresses the scarcity of research regarding risk committee characteristics in developing economies such as Nigeria as recommended by Hasan et al. (2023) and Nahar et al. (2020), despite the theoretical significance of the risk committee in the overall corporate governance literature. Furthermore, the study specifically caters to the limitations in the literature by including risk committee meeting and executive presence as one of the characteristics explored. Also, the study addresses the limitations of the study of Hasan et al. (2023) and Viljoen et al. (2016) by extending the scope of risk disclosure quality beyond quantity to other semantic measures of quality such as outlook, depth, and coverage. The study also addresses the limitation of Jia et al. (2019) by employing a timescale of 11 years. More so, this study aims to further address the inconsistency of findings observed from the literature. Lastly, the study focuses on the Nigerian Insurance industry which is a sector that attracts low research attention in Nigeria.

Summarily, this study encapsulates all the categories of risk disclosed by insurance firms in Nigeria, while exploring the impact of risk committee governance attributes (size, meeting, and executive presence) on risk disclosure quality from 2011-2021.

## **2. Literature Review, Theoretical Framework, and Hypothesis Development**

### **2.1 Risk Committee**

The risk committee, according to Harrison (1987), is set up to assist the board in discharging its risk oversight function. Protiviti (2011) opined that risk oversight is a task put in place by the board to ensure that firms have procedures for managing significant risks. Risk oversight also entails evaluating whether these procedures are continuously improved in response to changing dynamics in the business environment (Protiviti, 2006). Accordingly, this responsibility is delegated to the board risk committee (FRCN, 2018). The formation of a stand-alone risk committee is a practice recommended by the code of corporate governance in the UK, US, Malaysia, South Africa and many OECD countries. The Nigerian Code of Corporate Governance (NCCG) issued by FRCN in 2018 and the NAICOM legislation (2009) for insurance companies require all quoted Insurance firms to put in place a stand-alone risk committee.

The Risk Committee is tasked with assisting the Board in its oversight of the firm's risk profile, risk management framework, and risk-reward strategy as determined by the board. The committee must be guided by written terms of reference, which must include reviewing and approving the company's risk management policy, including risk strategy and risk appetite. In addition, the committee is tasked with reviewing the adequacy and effectiveness of risk management procedures and controls, as well as conducting a periodic assessment of developments in the economic and business environment, including emerging trends and other factors relevant to the firm's risk profile (FRCN, 2018). The committee is also responsible for overseeing management's mechanism of risk prevention, detection, and reporting. Lastly, the committee is critical in making sure that potential conflict of interest between the risk-averse executives and shareholders with diversified portfolios (that aren't necessarily concerned about risk), is managed and avoided through constant board monitoring (Tao & Hutchinson, 2012). Ayuningtyas and Harymawan (2022) maintained that the role of the risk committee role includes among others, monitoring the activities of the firm and putting in place a broader scope for identifying risks within the firm.

There is consensus in the existing risk committee literature that the establishment of a separate committee to manage risk demonstrates the willingness of the board to have an intensive and on-site risk oversight that is aimed at enhancing the quality of risk disclosures to stakeholders (Aebi et al., 2012; Bensaid et al., 2021; Brancato et al., 2011; Kirkpatrick, 2009 & Yusuf et al., 2023). The criticism and concern by some researchers (Ali et al., 2017) that a separate risk committee creates confusion and results in duplication of responsibilities with the audit committee (Protiviti, 2011) is addressed by the terms of reference issued to each committee by the board specifying the functions and responsibilities of each committee in a manner that will reduce the likelihood of conflict.

The existing literature on corporate governance suggests that the effectiveness of a board committee essentially depends on the committee's functional and structural characteristics (Akhtaruddin & Haron, 2010; Bedard & Gendron, 2010; Dhaliwal et al., 2011; Madi et al., 2014). As such, the ability of the risk committee to effectively oversee risk management and make qualitative decisions in the context of qualitative risk disclosures relies on its functional and structural characteristics such as Size, executive presence, and meetings.

Size as an attribute of the risk committee relates to the total number of directors sitting on the committee. Several research findings have indicated that the size of a board or its committee influences its ability to effectively discharge its responsibilities. Ujunwa (2012) maintained that a large committee brings more knowledge, visions, opinions, and proposals that improve the quality of deliberations and decisions of the committee. Other studies, such as that of Jensen (1993) and Lin et al. (2011), argued that relatively small-sized committees tend to have a more significant impact on the performance of the committee. Conclusively, Tao & Hutchinson (2012) concluded that the size of a committee impacts significantly the monitoring function of the committee. Also, Grassa et al. (2021) maintained that board subcommittees that are large have better monitoring capacity. The National Code of Corporate Governance by FRCN (2018) and the Corporate Governance Legislation for Insurance Firms by NAICOM (2009) did not specify a threshold for committee size. However, the code recommends that the risk committees should have an adequate size to enable the committees to effectively discharge their duties.

Risk committee executive presence refers to the percentage of executive directors on the risk committee. The presence of executive directors on the Committee will provide valuable and high-quality inside information about the company that would be difficult for outsiders to obtain (Aguilera et al., 2012). This will turn equip the committee with more information for its risk oversight function. According to Bailey & Filzen (2020), in a 2019 survey, most executives reported "somewhat" to "extensive" external pressure to provide more risk information. Furthermore, there is a greater amount of risk disclosure on the average, when a firm has the Chief Risk Officer on the risk committee. However, a counter opinion was offered by Tao and Hutchinson (2012) who contended that the presence of the CEO and other senior executive management members on the risk committee of a firm impairs the ability of the committee to offer oversight and monitoring of risk-taking activities of the management. This hinders the efficiency and efficacy of the risk committee. Similarly, FRCN (2018) and NAICOM (2009) discouraged firms from having risk committees composed of too many executive directors.

Risk committee meetings refer to the frequency of times the committee meets. The number of meetings held by the risk committee should influence the quality of risk disclosures, as argued by Viljoen et al. (2016). The number of meetings is indicative of the frequency with which the committee discusses and brainstorms on risk issues. Additionally, it has been asserted that regular board meetings give directors more time to develop strategies and evaluate managerial and organizational performance (Vafeas, 1999). This puts directors in a better position to handle emerging crucial concerns by



enabling them to be informed and aware of significant events within the organization (Mangena & Tauringana, 2007). In addition, frequent committee meetings, according to Tao and Hutchinson (2012), allow potential issues, risks, and uncertain events to be thoroughly identified, discussed, and effectively managed. Hence, regular meetings are probably going to lead to better risk monitoring.

## 2.2 Risk Disclosure Quality

Risk disclosure quality is a multi-dimensional concept. Sengupta (1998) contended that high-quality risk disclosures are timely and detailed in such a manner that they lower shareholders' perception of default risk. In the opinion of Beretta and Bozzolan (2004), high-quality risk disclosures are risk information which meets the needs of the company's shareholders.

Risk disclosure quality therefore provides a measure of the relevance of risk disclosures. Elshandidy et al. (2018) maintained that risk disclosures are considered qualitative if they capture such information, which is needed by shareholders, investors, creditors, and other stakeholders to accurately measure the level of uncertain events that face a firm and the extent to which those events may adversely impact the profitability of the firm.

Researchers have maintained that the determination of the quality of risk disclosures entails making reference to certain quality attributes that characterize the information disclosed. Chandiramani (2009) maintained that there are many methods employed to measure risk disclosure quality. Chakroun and Hussainey (2014) contended that the literature on disclosure quality is delineated into two strands.

The first strand comprises of studies that contend that the quality of corporate disclosures can best be measured by the quantity and volume of the disclosures. Disclosure researches that employed this approach included those of Al-Shammari (2014), Amran et al. (2009), Bako (2017), and Madrigal et al., (2015).

The other strand of the literature comprises studies that advocated that the best methodology to measure the quality of disclosures is to focus on some distinct characteristics and attributes that define the disclosure. These characteristics include the relevance, reliability, richness, quantity, understandability, outlook, etc. The first landmark study to develop a metric for measuring disclosure quality in this strand of the literature was that of Beattie et al. (2004). The study attempts to provide a general framework applicable to various types of disclosures in the assessment of quality. According to the study, disclosure quality can be measured as an index of quantity, in addition to a four-dimensional framework employed in the literature for the content analysis of accounting narratives. This framework encapsulates the spread, time orientation, financial orientation, and quantitative orientation of the information disclosed. Beretta and Bozzolan (2004) maintained that 'spread' is defined by the aggregate number of risk topics disclosed in line with the classes of risk related to the firm. In addition, time orientation connotes whether the risk information disclosed is either forward-looking or historical. Furthermore, the financial orientation of the risk information disclosed underscores whether the disclosures are non-financial or financial. Lastly, quantitative orientation explains whether the information disclosed is either qualitative or quantitative. Studies such as that of Beretta and Bozzolan (2004), Elshandidy et al. (2018), and Miihkinen (2012), etc. can be categorized under this second strand of the literature that measures disclosure quality by considering some specific attributes of the information disclosed.

## 2.3 Empirical Review of Literature and Hypothesis Development

### 2.3.1 Risk committee size and risk disclosure quality

Jia et al. (2019), in a study of the top 100 Australian Securities Exchange (ASX)-listed firms observed that risk committee size has a significant positive impact on risk disclosure quality. Furthermore, Al-Hadi (2015) also found that risk committee size had a significant positive impact on the market risk disclosures of GCC listed financial

firms. Hasan et al. (2023) also observed that risk committee size is positively associated with risk disclosure. In addition, these findings are further supported by those of Al Maghzom et al. (2016), Bako (2017), Elshandidy and Neri (2015), Maas (2016), and Moumen et al. (2016) who observed that size as a board or committee attribute is strongly associated with increased and improved levels of risk disclosure in corporate firms.

On the contrary, Ashfaq et al. (2016) and Chakroun and Hussainey (2014) concluded that the number of members in any committee has no substantial favorable impact and ultimately does not induce improved and increased levels of risk disclosure. Based on the foregoing, the following hypothesis is developed:

H1: Risk committee size has a positive impact on the risk disclosure quality of listed insurance firms in Nigeria.

### 2.3.2 *Risk committee executive presence and risk disclosure quality*

Carcello et al. (2011), Grove et al. (2011) and Kallamu (2015) found that the executive director's presence in the risk committee has no impact on risk disclosure quality. More specifically, Grove et al. (2011) argued that the presence of executive directors in the subcommittees of the board will further aggravate agency problems, undermine the board oversight mechanism, and eventually result in poor disclosures by firms due to an upsurge in information asymmetry.

On the contrary, Aguilera et al. (2012) and Akhigbe and Martin (2006) found that executive presence has a significant impact on risk disclosure quality. Consequently, the following hypothesis is developed:

H2: Risk committee executive presence has a positive impact on the risk disclosure quality of listed insurance firms in Nigeria.

### 2.3.3 *Risk committee meetings and risk disclosure quality*

Abdullah et al. (2020), Dey (2008), and Viljoen et al. (2016) observed that risk committee meetings had a considerable positive impact on the quality of a firm's risk disclosure, thus, implying that regular meetings by the risk committee results in increased risk disclosure quality. These findings are further supported by Al Maghzom et al. (2016), Allegrini and Greco (2013), O'Sullivan et al. (2008), and Susana and Alves (2011) where it was observed that meetings as a board or committee attribute were strongly associated with increased and improved levels of risk disclosure in corporate firms.

Jia et al. (2019) on the contrary, found that risk committee meetings do not engender improved risk disclosures. The results of Jia et al. (2019) are consistent with that of Neifar and Jarboui (2018) who observed that audit committee meetings have an insignificant impact on the quality of operational risk disclosure. The findings of Elamer et al. (2019) in the study of Libyan companies further support the above result. Consequently, the following hypothesis is developed:

H3: Risk committee executive presence has a positive impact on the risk disclosure quality of listed insurance firms in Nigeria.

## 3. Research Method

The population of the study consists of the totality of the 21 listed insurance firms in Nigeria (NSE website, 2021). Further review shows that four listed insurance firms were delisted during the scope of the study (2011-2021) due to various regulatory infractions. Consequently, using the filtering technique, the four firms were filtered out of the main population to obtain a new population of 17 firms. This is consistent with the method employed by Helbok and Wagner (2006). Using the census sampling technique, the new population of 17 listed firms was employed as the sample of the study. This is justified by the fact that the population is small and the data on the variables of this study is readily available from annual reports and financial statements

of the listed insurance firms. This is consistent with (Samaila, 2014). The data on risk disclosure quality was generated using manual content analysis. Texts and sentences contained in the annual reports were reviewed and examined to classify whether they were risk disclosures or not. A sentence is classified as a risk disclosure if it includes, among others, a "forward-looking statement that helps stakeholders to project the future cash flows of a firm, information on the sources of uncertainty surrounding projections of the firm's future cash flows, and information on the sources of systematic risk that affect a firm's cost of capital" (Miihkinen, 2013). Furthermore, historical information about initiatives taken to mitigate risks and futuristic information about programs envisaged to address risks were also considered risk disclosures.

Risk disclosure sentences obtained from the annual reports were coded and analyzed based on the risk disclosure checklist developed by (Malafronte et al., 2014) on the classes of risks that affect insurance firms. The main risk topics and sub-topics are shown in Appendix A. The main risk topics are underwriting risk, operational risk, Risk management, Strategic risk, Credit risk, Market risk, Liquidity risk, and other risks. Sentences in the annual report were coded in line with the above definitions and matched to the appropriate category of risk topic by the checklist in Appendix A.

### 3.1 *Variables of the Study and their Measurement*

The study variables were in two sets. These are the dependent and explanatory variables.

The dependent variable of the study is risk disclosure quality (RDQ). On the background of the inherent conceptual difficulties of measuring disclosure quality in a complete, valid, and reliable manner, the study measures risk disclosure quality based on the methodology employed in the work of Elshandidy et al. (2018), Jia et al. (2019), Lindqvist (2016) and Miihkinen (2013) where risk disclosures are summarized and coded into five indicators. Miihkinen (2013) argued that under this methodology, certain quality indicators developed in the existing related literature that provide useful approximations of some important aspects of quality are employed to develop the risk disclosure quality factor. The five indicators are Risk Disclosure Quantity (RDQUANT), Risk Disclosure Coverage (RDCOV), Risk Disclosure Quantity Depth (RDEPTH), Risk Disclosure Outlook (RDOUT) and Composite Quality of Risk Disclosure (COMPQUAL). The COMPQUAL measure was used to summarize the quality indicators above using factor analysis. It examines the relationship between the proxies employed as indicators of risk disclosure quality by combining them into one data set. Miihkinen (2013) opined that the COMPQUAL is expected to improve the overall validity and reliability of the measurement of risk disclosure quality. The empirical indicator for this variable is given as:

COMPQUAL = (the score of the principal component with the highest Eigenvalue)

The study employed factor analysis to analyze the first four proxies of the dependent variable. The proxy with the highest eigenvalue was utilized as the Composite quality of risk disclosure (COMPQUAL), which served as the representative of the dependent variable based on which the research model of the study was specified.

The independent variables envisaged in this study are the risk committee characteristics that serve as the major indicators of the effectiveness of the committee in listed insurance firms in Nigeria. These are Risk Committee Size (RCS), Risk Committee Executive Presence (RCEXP), and Risk Committee Meetings (RCM). (See Table 1 for study variables and their measurement).

In line with previous literature (Abraham & Cox, 2007; Dobler et al., 2011; Elshandidy et al., 2018; Elshandidy & Neri, 2015; Jia et al., 2019), this study employed control variables to manage random variations that could affect risk disclosure quality due to effect of variables not captured in the model of the study. The control variables



employed include size, profitability, leverage, and growth. (See Table 1 for study variables and their measurement.

**Table 1.**  
Summary of  
variables and their  
definitions

Variable	Variables	Label	Measure	Source
Dependent Variables	Risk disclosure Quantity	RDQUANT	Natural logarithm of risk disclosure sentences. The magnitude of the concentration of risk disclosure sentences across risk topics using <i>Herfindahl</i> index. The index is calculated as the arithmetic sum of the proportion of risk disclosure sentences in each topic squared	Miihkinen (2013)
	Risk disclosure Coverage	RDCOV	Natural logarithm of the total number of risk disclosure sentences containing quantitative information.	Miihkinen (2013) and Lindqvist, (2016).
	Risk disclosure Outlook	RDOUT	Natural logarithm of the number of risk information sentences that contain information about action taken.	Miihkinen (2013)
	Composite quality of risk disclosure	COMPQUAL	The score of the principal component with the highest eigenvalue.	Miihkinen (2013)
Independent Variables	Risk committee Size	RCS	Number of individual directors on the Risk committee.	Al-Hadi (2015), Hasan et al. (2023) and Jia et al. (2019)
	Risk Committee Executive Presence	EREXP	Number of executive directors in the Risk committee to the total number of Directors in the committee.	(Kallamu, 2015; Malahim, 2023)
	Risk committee Meeting	RCM	Total number of meetings held by the risk Committee members in a year.	(Abdullah et al. (2020) and Tao and Hutchinson (2012)
Control Variables	Size	SIZE	Measured by the logarithm of total assets.	Al-Hadi (2015)
	Leverage	LEV	Measured by the sum of short-term and long-term loans scaled by total equity.	Nasution et al. (2019)
	Profitable	ROE	Calculated by profit after tax scaled by total equity.	(Al-Hadi (2015)
	Growth	GROWTH	Measured by the percentage change in gross premium.	Dzingai and Fakoya (2017)

Source: Constructed by Researcher, 2021

### 3.2 Model Specification

This study resorted to the use of multiple regression analysis based on panel methodology. As such, multiple regression analysis was used to test the hypotheses encapsulated in the study. Thus, the regression equation is stated as:

$$RDQ=f(RCS, RCM, RCEXP, SIZE, LEV, ROE, GROWTH) \quad (1)$$

Thus, the proposed research model is formulated as follows:

$$COMQUAL_{it}=\beta_0+\beta_1RCS_{it}+\beta_2RCM_{it}+\beta_3RCEXP_{it}+r_1SIZE_{it}+r_2LEV_{it}+r_3ROE_{it}+r_4GROWTH_{it}+\epsilon_{it} \quad (2)$$

Where

$\beta_0$ : Regression intercept of Insurance firm i in period t

$\beta_1 - \beta_5$ : Regression slope of independent variables of Insurance firm i in period t

$r_1 - r_4$ : Regression slope of control variables of Insurance firm i in period t

RDQ: Risk Disclosure Quality

COMPQUAL: Composite Risk Disclosure Quality Function of Insurance firm i in period t

RCS: Risk Management Committee Size of Insurance firm i in period t

RCM: Risk Management Committee Meeting of Insurance firm i in period t

RCEXP: Risk Management Committee Executive Presence of Insurance firm i in period t

SIZE: Size of Insurance firm i in period t

LEV: Leverage of Insurance firm i in period t

ROE: Return on equity of Insurance firm i in period t

GROWTH: Growth of Insurance firm i in period t

$\epsilon$  = error term

Risk Committee and Risk Disclosure Quality: Evidence from Listed Insurance Firms in Nigeria

## 4. Results and Discussion

### 4.1 Pre-Estimation Test

To ensure the compliance of the data set with the principles of multivariate analysis and attest to the suitability of the data set for regression analysis, pre-estimation tests of reliability and linearity were conducted. The Cronbach alpha coefficient was used as a measure of reliability to assess how well a data set captures an underlying construct. The Cronbach alpha coefficient of the study was 0.895. Daud et al. (2018) stated that an alpha Cronbach's value above 0.6 is considered a high reliability and an acceptable index. As such, the instrument used to collect the data on risk disclosure quality could be deemed reliable (See Appendix A).

The scatterplot method was employed to examine the bivariate linear relationship in the data set. From Appendix A, it could be observed that the pattern of points of the independent variables of the study are scattered along the path of a straight line, which, based on the submission of Hair et al. (2010) represents a linear relationship.

### 4.2 Post-Estimation Test

Post-estimation follow-up tests were conducted in this study to maximize the validity of all the statistical inferences for the study. The Post-Estimation tests undertaken in this study included multicollinearity, Hausmann test, heteroscedasticity, and normality of residuals.

To test for multicollinearity, the study utilized the Variance inflation factor (VIF). Using variance inflation factor (VIF), it was observed that none of the explanatory variables has a VIF of more than 10, indicating the absence of multicollinearity (See Appendix A).

The Hausmann Specification test was employed as a criterion to make a rational choice between fixed effect and random effect regression. In Appendix A, the result of the primary regression result shows a prob >chi2 coefficient of 0.00 denoting that fixed effect regression result is the most suitable going by the assertion of Sheytanova (2014), that a prob >chi2 coefficient of less than 0.05 indicates the existence of endogeneity in the random effect, making the fixed effect more suitable

In addition, the study conducted a Breusch-Pagan/Cook-Weisberg test for heteroscedasticity on the OLS regression result. The result of the Prob > chi2 was 0.0001 indicating that the variance of the residuals is unequal over a range of measured values, thus, heteroscedasticity exists. The Heteroscedasticity problem observed in the OLS was addressed by running a robust regression. The fixed effect was tested for heteroscedasticity using the Modified Wald test for groupwise heteroscedasticity. The modified Wald test indicated the existence of heteroscedasticity prompting the researcher to utilize the panel corrected standard error to address the issue of heteroscedasticity (See Appendix A). According to Beck and Katz (1996), the panel corrected standard error is an estimator with good small-sample properties, which, in the original time-clustering setting, is robust against cross-sectional heteroscedasticity and correlation. This is consistent with the approach employed by Ayagi (2014) and Samaila (2014).

To ensure that the p-values of the t-tests and F-test are valid, the study utilized the kdensity, pnorm, and qnorm to analyze the normality of residuals. From the result in Appendix A, the result of kdensity indicates that the kernel density plot of the data set is close to normal density. In addition, the result of the pnorm shows no indication of non-normality, as the standardized normal probability of the data closely follows the straight line path. In addition, the qnorm shows a slight deviation from normality at the tails. Overall, the deviation is minimal and we can conclude that the residuals are close to normal distribution (See Appendix A).

#### 4.3 Descriptive Statistics

Table 2 shows the result of descriptive statistics on the research variables. It could be seen that RDQUANT has a mean score of 5.13 in natural logarithm form indicating that, the average value of total risk disclosure sentences by listed insurance firms in Nigeria from 2011-2021 is 170.61. The standard deviation of 53.60 indicates a significant variation from the mean value. The mean score of RDCOV was 0.61 underscoring that the average concentration of risk disclosure sentences across the main risk disclosure topics of the listed insurance firms in Nigeria is 0.61.

In Addition, it was observed that the mean of RDEPTH and RDOUT stands at 4.04 and 2.77, respectively in natural Log form. This indicates that the arithmetic average of the sum of risk disclosure sentences encapsulating quantitative information about the expected financial impact of the identified risk on the financial performance of listed insurance firms was around 56 sentences. In addition, the average number of risk disclosure sentences containing information about actions taken or programs about action to be taken by the management which is measured by RDOUT was about 16 sentences. The standard deviation of RDEPTH AND RDOUT was 58.06 and 54.62 respectively, which is indicative of the fact that the variability of both variables among listed insurance firms is significant.

**Table 2.**  
Descriptive  
Statistics

<b>Variable</b>	<b>Obs</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Min</b>	<b>Max</b>
RDQUANT	187	5.139	0.536	3.400	5.860
RDCOV	187	0.610	0.093	0.270	0.770
RDEPTH	187	4.040	0.581	2.300	4.820
RDOUT	187	2.770	0.546	0.000	3.530
RCS	187	5.519	1.601	0.000	9.000
RCEXP	187	0.399	0.195	0.000	1.000
RCM	187	3.497	1.180	0.000	7.000
SIZE	187	7.175	0.306	6.580	8.000
LEVERAGE	187	1.380	2.498	0.120	22.060

PROFITABILITY	187	0.051	0.199	-0.610	1.960
GROWTH	187	0.117	0.227	-0.430	1.240

Risk Committee and Risk Disclosure Quality: Evidence from Listed Insurance Firms in Nigeria

From the perspective of the independent variables, RCS has a mean of 5.512, which underscores the average size of risk committees among listed insurance firms over the scope of the study was 5. In addition, the maximum RCS of 9 and minimum of 0 indicates that over the scope of the study, some listed insurance companies in Nigeria had 9 directors sitting on the risk committee while others had no risk committee. More so, the standard deviation to the magnitude of 1.60 indicates that dispersion in RCS of listed insurance firms in Nigeria is significant.

Furthermore, from Table 2 RCEXP and RCM have a mean of 0.399 and 3.49. The 0.39 mean of RCEXP denotes that the risk committee of most Nigerian listed insurance firms has a substantially lower proportion of executive directors. The mean of RCM denotes the average number of meetings held by the risk committee of insurance firms each year was three.

From the perspective of the control variables, SIZE had a mean of 7.17 in Log form. On the other hand, LEVERAGE has a mean of 1.38, indicating that the listed insurance firms have an average leverage of 1.38 denoting that most firms have a debt that is 1.3 times the book value of the equity. This shows that the listed insurance firms in Nigeria have a significant percentage of debt in their capital structure and are ultimately highly geared. PROFITABILITY, had an average of 0.05, indicating that firms have a fairly low ROE of 6%. The low ROE is explained below by the fairly low growth, indicating the competitiveness of the insurance industry leading to fairly low profits. Lastly, GROWTH measured by the percentage change in gross premium has a mean of 11.67%, indicating a fairly good average rate of growth among listed insurance firms in Nigeria.

#### 4.4 Correlation Analysis

Table 3 below shows the result of Spearman correlation analysis. It could be seen that the highest positive correlation between the explanatory variables was that of RCS and SIZE to the magnitude of 0.54, which is moderate based on the assertion of Moore et al. (2013). In addition, the highest negative correlation between the explanatory variables was that between RCS and RCEXP to the tune of -0.25, which is very weak and indicates that as the size of the risk committee increases, the percentage of executive directors in the committee decreases. This indicates that multi collinearity between the research variables is not likely to arise, as only a correlation value greater than 0.8 indicates the presence of multicollinearity between the variables as contended by Hair et al. (2010).

	RDQUANT	RDCOV	RDEPTH	RDOUT	RCS	RCEXP	RCM	SIZE	LEV	PROF	GROWTH
RDQUANT	1.000										
RDCOV	0.648	1.000									
RDEPTH	0.965	0.678	1.000								
RDOUT	0.925	0.647	0.865	1.000							
RCS	0.689	0.352	0.701	0.618	1.000						
RCEXP	-0.234	-0.128	-0.278	-0.158	-	1.000					
RCM	0.546	0.420	0.551	0.492	0.259	0.424	-0.146	1.000			
SIZE	0.387	0.210	0.309	0.437	0.541	0.111	0.269	1.000			
LEV	-0.016	0.013	-0.047	0.065	0.018	0.144	0.099	0.363	1.000		
PROF	-0.228	-0.153	-0.198	-0.198	-	0.303	-	0.059	0.205	1.000	
GROWTH	-0.170	-0.158	-0.169	-0.170	0.197	-	0.053	-	-	0.150	1.000
					0.067	-0.055	0.146	0.063	-	0.105	

**Table 3.** Correlation matrix

Furthermore, the highest correlation between the measures of the dependent variable of the study was that between RDQUANT and RDEPTH to the tune of 0.96, indicating a strong positive correlation based on the assertion of Moore et al. (2013). Furthermore, all the measures of the dependent variable were observed to have a positive and strong correlation with each other. The least correlation between the measures of the dependent variables was between RDOUT and RDCOV to the tune of 0.61, indicating a positive but moderate correlation. This indicates that measures of the dependent variable are highly correlated in such a way that they serve as perfect factors and proxies of risk disclosure quality of listed insurance firms in Nigeria. The large correlation coefficient between the measures of the dependent variables suggests the presence of multicollinearity among the measures. This is desirable based on the argument of Hair et al. (2010) that the objective is to determine some set of inter-relationships between the set of variables.

#### 4.5 Factor Analysis

In this study, the principal component factor analysis was employed to determine the composite quality of risk disclosure since the objective is to summarize the original information in a minimum number of variables for prediction purposes (Hair et al., 2010). The composite quality of risk disclosure is the measure that best describes the quality of risk disclosure of listed insurance firms in Nigeria among all the risk disclosure quality measures employed in the study. Table 4 shows the outcome of principal factor analysis on the measures of the dependent variable.

**Table 4.**  
Factor analysis

Factor	Eigenvalue	Difference	Proportion	Cumulative
Factor1	3.271	3.204	0.99	0.99
Factor2	0.067	0.059	0.02	1.01
Factor3	0.008	0.05	0.003	1.013
Factor4	-0.041	.	-0.013	1
Factor loadings				
Variable	Factor1	Factor2	Factor3	Uniqueness
RDQUANT	0.982	-0.109	-0.034	0.023
RDCOV	0.722	0.192	0.036	0.441
RDEPTH	0.978	0.074	-0.049	0.036
RDOUT	0.911	-0.114	0.061	0.153

As earlier observed in the correlation analysis, all of the four measures of the dependent variable are strongly correlated, indicating their inter-relationship and their suitability to serve as RDQ measures. From Table 4, factor 1 which represents RDQUANT, with an eigenvalue of 3.27, is the only factor with an eigenvalue greater than 1. All the other factors have eigenvalues less than 1, making them insignificant and ultimately disregarded. Going by the latent root criterion, as succinctly proposed by Hair et al. (2010), only factors with an eigenvalue greater than 1 are considered significant. As such RDQUANT, is employed as the best measure of RDQ, which significantly captures all the variance in the other measure. RDQUANT cumulatively captures a 99% variance in the successive factors. As such, RDQUANT is the Composite quality (COMPQUAL) of risk disclosure. The selection of RDQUANT as the COMPQUAL that represents RDQ is further buttressed and justified by the factor loadings in the Table, which indicates that RDQUANT as a factor has a 97.8% correspondence with RDEPTH, 72.2% correspondence with RDCOV and a 91.1% correspondence with RDOUT. The result of the factor analysis in this study is compatible with that of Elshandidy et al. (2018), Jia et al. (2019), and Miihkinen (2013).



4.6 Regression Analysis

Table 5 below depicts the OLS and PCSE regression result of the impact of risk committee attributes on composite of risk disclosure quality of listed insurance firms in Nigeria. The R<sup>2</sup> of the PCSE regression result was 0.51 denotes that 51% of the variation in the model is accounted for by the explanatory variables of the study. The Prob > F of 0.000 significant at 1% indicates the goodness of fitting of the model and further emphasizes that the research findings could be relied upon.

RDQUANT	OLS (Robust)				PCSE (Fixed Effect)			
	Coef.	Std.Err	T	P> T	Coef.	Std.Err	Z	P> Z
RCS	0.163	0.028	5.910	0.000	0.163	0.028	5.860	0.000
RCEXP	-0.187	0.174	-1.070	0.284	-0.187	0.119	-1.570	0.116
RCM	0.152	0.025	6.190	0.000	0.152	0.035	4.300	0.000
SIZE	-0.036	0.133	-0.270	0.788	-0.036	0.072	-0.490	0.622
LEVERAGE	0.006	0.015	0.430	0.664	0.006	0.014	0.470	0.641
PROFITABILITY	0.030	0.197	0.150	0.880	0.030	0.170	0.170	0.861
GROWTH	-0.179	0.106	-1.690	0.094	-0.179	0.134	-1.340	0.180
_CONS	4.048	0.841	4.810	0.000	4.048	0.517	7.840	0.000
Obs	187				Obs	187		
Prob > F	0.000				Prob > chi2	0.000		
R-squared	0.512				R <sup>2</sup>	0.512		
Root MSE	0.381							
F(7, 179)	29.11							

**Table 5.** Regression result on risk committee characteristics and risk disclosure quality (RDQUANT)

The foregoing result demonstrates that RCS has a significant positive impact on RDQ consistent with Al-Hadi (2015), Hasan et al. (2023), and Jia et al. (2019), indicating that the size of the risk committee enhances risk disclosure quality. Conversely and consistent with Carcello et al. (2011), Grove et al. (2011) and Kallamu (2015), it was observed that RCEXP has an insignificant negative impact on risk disclosure quality denoting that the greater the number of executive directors on the risk committee, the lower the quality of risk disclosure. Furthermore, RCM has a significant positive impact on risk disclosure quality consistent with Abdullah et al. (2020), Dey (2008), and Viljoen et al. (2016) but contrary to Jia et al. (2019). Specifically, the result signifies that the major drivers of risk disclosure quality are size, executive presence, and meetings. Based on the result, we accept Ha1 and Ha3 are accepted while Ha2 is rejected. Furthermore, the finding that risk committee size and meetings drive risk disclosure quality is in line with the agency theory, underscoring the fact that a large risk committee with regular meetings increases risk monitoring and oversight among listed insurance firms. This reduces agency costs and asymmetry of information, resulting in high risk disclosure quality. In addition, the result that executive presence does not influence risk disclosure quality is consistent with the agency theory and further indicates that the existence of executives in the risk committee confounds agency conflict, consequently impeding risk disclosure quality.

4.7 Additional Analysis: Robust Checks

A further test was conducted to strengthen the robustness of the findings. This was by employing Risk Disclosure Coverage (RDCOV) as an alternative measurement of RDQ of the listed insurance firms in Nigeria. As observed in the factor analysis conducted earlier, RDCOV is the factor with the second highest eigenvalue. The result

JAROE  
VOL. 6(2)

of the regression analysis with RDCOV as an alternative measure of RDQ is presented below:

RDCOV	OLS (Robust)				PCSE (Fixed Effect)			
	Coef.	Std.Err	T	P> T	Coef.	Std.Err	Z	P> Z
RCS	0.016	0.005	3.020	0.003	0.016	0.006	2.540	0.011
RCEXP	0.047	0.041	1.140	0.254	0.047	0.039	1.200	0.228
RCM	0.026	0.006	4.440	0.000	0.026	0.006	4.480	0.000
SIZE	-0.010	0.026	-0.400	0.692	-0.010	0.017	-0.610	0.543
LEVERAGE	0.001	0.004	0.170	0.865	0.001	0.003	0.190	0.847
PROFITABILITY	-0.034	0.037	-0.920	0.360	-0.034	0.035	-0.970	0.332
GROWTH	-0.006	0.021	-0.280	0.777	-0.006	0.027	-0.220	0.826
_CONS	0.484	0.170	2.850	0.005	0.484	0.116	4.180	0.000
Obs	187				Obs	187		
Prob > F	0				Prob > chi2	0		
R-squared	0.2338				R <sup>2</sup>	0.2338		
Root MSE	0.0828							
F(7, 179)	6.81							

**Table 6.**  
Regression result on risk committee characteristics and risk disclosure quality (RDCOV)

From the confirmation analysis in Table 6, it could be seen that RCS and RCM still have a significant positive impact on RDQ consistent with the primary regression result. On the contrary, RCEXP has an insignificant positive impact on RDQ, slightly different from the insignificant negative result found in the primary regression analysis. However, in both cases, ERCEXP is depicted as an undesirable attribute of the risk committee.

Based on the findings of the robust checks, it could be concluded that the results obtained using RDCOV as an alternative measure of RDQ are similar to those obtained in the primary analysis. This helps to justify that the results are not sensitive to the choice of the RDQ proxy.

## 5. Conclusion

The study examined the impact of risk committee attributes on the risk disclosure quality of listed insurance firms in Nigeria over 11 years from 2011-2021. Consistent with the expectation of the study, it was observed that the size and frequency of the meetings of the risk committee have a significant positive impact on the quality of risk disclosures in the annual reports of listed insurance firms. These findings are in line with the theoretical underpinning of the agency theory. This further indicates that an effective and robust risk committee composed of an adequate number of directors with frequent meetings improves monitoring and transparency, which in turn enhances risk disclosure quality (Jensen & Meckling, 1976). On the other hand, the presence of executive directors in the risk committee was found to have an insignificant positive impact on risk disclosure quality consistent with the agency theory. The result indicates the presence of executive directors who are management staff in the risk Committee impedes the quality of risk disclosure in the listed insurance firms. It further implies that executive directors impede the efficient risk oversight, monitoring, and reporting functions of the risk committee.

The result has policy implications for both users of financial statements and policy makers. From the above findings, investors, shareholders, and management should note that qualitative risk disclosures can be further guaranteed and secured with

the presence of a separate risk committee having an optimum size, regular meetings, and composed mostly of non-executive directors. In addition, the findings also have huge implications for regulatory authorities in the insurance industry such as NAICOM, SEC, and FRCN. These authorities develop, codify, and ensure intensive compliance with corporate governance regulations articulating sound board and committee practices to maximize capital market efficiency. From the above encapsulated findings, these regulators should note that risk committee regulations relating to size, executive presence, and meetings need to be strengthened.

Lastly, the study recommends that to improve the monitoring capabilities of the risk committee, the listed insurance firms in Nigeria should increase the size of their risk committees to undermine the likelihood of information asymmetry and enhance value-creating activities and processes that overall, improve the quality of risk disclosures. Furthermore, the board is encouraged to appoint more non-executive directors to strengthen and optimize risk disclosures. Lastly, since the frequency of meetings of the committee reinforces the quality of risk disclosures in listed insurance firms, it is recommended to the board of listed insurance firms and regulators such as NAICOM and FRCN, that the minimum number of Committee meetings, which currently stands at four in all of the corporate governance codes and regulations, should be increased.

## References

- Abdullah, A., Isa, N. M., Isa, H. M., & Triwastuti, R. (2020). Keywords: Risk management committees, corporate governance, hedging activities, disclosure, financial instruments. *17(5)*, 1202–1219.
- Abdullah, M., Shukor, Z. A., & Rahmat, M. M. (2017). The influences of risk management committee and audit committee towards voluntary risk management disclosure. *Jurnal Pengurusan*, *50*, 83–95. <https://doi.org/10.17576/pengurusan-2017-50-08>
- Abraham, S., & Cox, P. (2007). Analysing the determinants of narrative risk information in UK FTSE 100 annual reports. *British Accounting Review*, *39(3)*, 227–248. <https://doi.org/10.1016/j.bar.2007.06.002>
- ACCA. (2014). Reporting risk. The Association of Chartered Certified Accountants, 1–14. <http://www.accaglobal.com/content/dam/acca/global/PDF-technical/financial-reporting/pol-afb-rr.pdf>
- Adebimpe, U., & Peace, O. (2011). Corporate Governance, Company Attributes and Voluntary Disclosures: A Study of Nigerian Listed Companies. *International Journal of Research in Computer Application & Management*, *1(2)*, 20–29.
- Aebi, V., Sabato, G., & Schmid, M. (2012). Risk management, corporate governance, and bank performance in the financial crisis. *Journal of Banking and Finance*, *36(12)*, 3213–3226. <https://doi.org/10.1016/j.jbankfin.2011.10.020>
- Aguilera, R. V., Desender, K. A., & de Castro, L. R. (2012). A Configurational Approach to Comparative Corporate Governance. *SAGE Handbook of Corporate Governance*. New York: Sage Publications, 1–54. <http://ideas.repec.org/p/ecl/illbus/11-0103.html>
- Akhigbe, A., & Martin, A. D. (2006). Valuation impact of Sarbanes-Oxley: Evidence from disclosure and governance within the financial services industry. *Journal of Banking and Finance*, *30(3)*, 989–1006. <https://doi.org/10.1016/j.jbankfin.2005.06.002>
- Akhtaruddin, M., & Haron, H. (2010). Board ownership, audit committees' effectiveness, and corporate voluntary disclosures. *Asian Review of Accounting*, *18(3)*, 245–259. <https://doi.org/10.1108/13217341011089649>
- Al-Hadi, A. K. H. (2015). Three essays on market risk disclosures: corporate governance, investment efficiency and implied cost of equity capital: evidence from Gulf Cooperation Council (GCC) (Issue July) [Curtin University].

- <https://espace.curtin.edu.au/handle/20.500.11937/2215>
- Al-Shammari, B. (2014). Kuwait Corporate Characteristics and Level of Risk Disclosure: a Content Analysis Approach. *Journal of Contemporary Issues in Business Research* ©, 3(3), 128–153.
- Al Maghzoum, A., Hussainey, K., & Aly, D. . (2016). Corporate Governance and Risk Disclosure: Evidence from Saudi Arabia Abdullah Al-Maghzom\*, University of Gloucestershire UK Khaled Hussainey, Plymouth University UK Doaa Aly, University of Gloucestershire UK. *Corporate Ownership and Control*, 13(2), 1–29.
- Ali, M. M., Besar, S. S. N. T., & Mastuki, N. M. (2017). Audit committee characteristics, risk management committee and financial restatements. *Advanced Science Letters*, 23(1), 287–291. <https://doi.org/10.1166/asl.2017.7160>
- Allegrini, M., & Greco, G. (2013). Corporate boards, audit committees and voluntary disclosure: Evidence from Italian Listed Companies. *Journal of Management and Governance*, 17(1), 187–216. <https://doi.org/10.1007/s10997-011-9168-3>
- Amran, A., Manaf Rosli Bin, A., & Che Haat Mohd Hassan, B. (2009). Risk reporting: An exploratory study on risk management disclosure in Malaysian annual reports. *Managerial Auditing Journal*, 24(1), 39–57. <https://doi.org/10.1108/02686900910919893>
- Ashfaq, K., Zhang, R., Munaim, A., & Razzaq, N. (2016). An investigation into the determinants of risk disclosure in banks: Evidence from financial sector of Pakistan. *International Journal of Economics and Financial Issues*, 6(3), 1049–1058.
- Ayagi, S. R. (2014). Intellectual capital and financial performance in the listed Nigerian oil marketing companies. Bayero University, Kano-Nigeria.
- Ayuningtyas, E. S., & Harymawan, I. (2022). Risk Management Committee and Textual Risk Disclosure. *Risks*, 10(2), 1–15.
- Bailey, C., & Filzen, J. (2020). Risk Management Strength and. *ISACA*, 3, 1–7. [www.isaca.org](http://www.isaca.org)
- Bako, M. M. (2017). Firm Attributes and Risk Disclosure of Listed Deposit Money Banks in Nigeria. *Asian Journal of Business Management Studies*, 8(2), 71–77.
- Beattie, V., McInnes, B., & Fearnley, S. (2004). A methodology for analysing and evaluating narratives in annual reports: A comprehensive descriptive profile and metrics for disclosure quality attributes. *Accounting Forum*, 28(3), 205–236. <https://doi.org/10.1016/j.accfor.2004.07.001>
- Beck, N., & Katz, J. N. (1996). Nuisance vs. Substance: Specifying and Estimating Time-Series-Cross-Section Models. *Political Analysis*, 6(June), 1–36. <https://doi.org/10.1093/pan/6.1.1>
- Bedard, J., & Gendron, Y. (2010). Strengthening the financial reporting system: Can audit committees deliver? *International Journal of Auditing*, 14(2), 174–210.
- Bensaid, A., Bin Ishak, S., & Binti Mustapa, I. R. (2021). Risk management committee attributes: A review of the literature and future directions. *Universal Journal of Accounting and Finance*, 9(3), 388–395. <https://doi.org/10.13189/ujaf.2021.090313>
- Beretta, S., & Bozzolan, S. (2004). A framework for the analysis of firm risk communication. *International Journal of Accounting*, 39(3), 265–288. <https://doi.org/10.1016/j.intacc.2004.06.006>
- Brancato, C., Tonello, M., Hexter, E., & Newman, K. R. (2011). The Role of U.S. Corporate Boards in Enterprise Risk Management. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.941179>
- Buckby, S., Gallery, G., & Ma, J. (2015). An analysis of risk management disclosures: Australian evidence. *Managerial Auditing Journal*, 30(8–9), 812–869. <https://doi.org/10.1108/MAJ-09-2013-0934>
- Bugalla, J., Kallman, J., Lindo, S., & Narvaez, K. (2011). The new model of governance and risk management for financial institutions. *Journal of Risk Management and*

- Financial Institutions, 5(2), 181–193.
- Carcello, J. V., Hermanson, D. R., & Ye, Z. (2011). Corporate governance research in accounting and auditing: Insights, practice implications, and future research directions. *Auditing*, 30(3), 1–31. <https://doi.org/10.2308/ajpt-10112>
- Chakroun, R., & Hussainey, K. (2014). Disclosure quality in Tunisian annual reports. *Corporate Ownership and Control*, 11(4 A), 58–80. <https://doi.org/10.22495/cocv11i4p5>
- Chandiramani, G. (2009). Quality of risk reporting. ERASMUS UNIVERSITY ROTTERDAM.
- COSO and WBCSD. (2018). Enterprise risk management: Applying enterprise risk management to environmental, social and governance-related risks. *Enterprise Risk Management: Applying Enterprise Risk Management to Environmental, Social and Governance-Related Risks*, 300–317. <https://www.coso.org/Documents/COSO-WBCSD-ESGERM-Guidance-Full.pdf>
- Daud, K. A. M., Khidzir, N. Z., Ismail, A. R., & Abdullah, F. A. (2018). Validity and Reliability of Instrument to Measure Social Media Skills Among Small and Medium Entrepreneurs at Pengkalan Datu River. *International Journal of Development and Sustainability*, 7(3), 1026–1037. [www.isdsnet.com/ijds](http://www.isdsnet.com/ijds)
- Dey, A. (2008). Corporate governance and agency conflicts. *Journal of Accounting Research*, 46(5), 1143–1181. <https://doi.org/10.1111/j.1475-679X.2008.00301.x>
- Dhaliwal, D. S., Naiker, V., & Navissi, F. (2011). The Association Between Accruals Quality and the Characteristics of Accounting Experts and Mix of Expertise on Audit Committees. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1548766>
- Dobler, M., Lajili, K., & Zéghal, D. (2011). Attributes of corporate risk disclosure: An international investigation in the manufacturing sector. *Journal of International Accounting Research*, 10(2), 1–22. <https://doi.org/10.2308/jiar-10081>
- Dzingai, I., & Fakoya, M. B. (2017). Effect of corporate governance structure on the financial performance of Johannesburg stock exchange (JSE)-listed mining firms. *Sustainability (Switzerland)*, 9(6), 1–15. <https://doi.org/10.3390/su9060867>
- Elamer, A. A., Ntim, C. G., Abdou, H. A., Zalata, A. M., & Elmagrhi, M. (2019). The impact of multi-layer governance on bank risk disclosure in emerging markets: the case of Middle East and North Africa. *Accounting Forum*, 43(2), 246–281. <https://doi.org/10.1080/01559982.2019.1576577>
- Elshandidy, T., & Neri, L. (2015). Corporate Governance, Risk Disclosure Practices, and Market Liquidity: Comparative Evidence from the UK and Italy. *Corporate Governance: An International Review*, 23(4), 331–356. <https://doi.org/10.1111/corg.12095>
- Elshandidy, T., Neri, L., & Guo, Y. (2018). Determinants and Impacts of Risk Disclosure Quality: Evidence from China. *Journal of Applied Accounting Research*, April, 1–26. <https://doi.org/10.2139/ssrn.3206228>
- Elzahar, H., & Hussainey, K. (2012). Determinants of narrative risk disclosures in UK interim reports. *Journal of Risk Finance*, 13(2), 133–147. <https://doi.org/10.1108/15265941211203189>
- FRCN. (2018). Nigerian code of corporate governance. 1–4.
- Grassa, R., Moumen, N., & Hussainey, K. (2021). What drives risk disclosure in Islamic and conventional banks? An international comparison. *International Journal of Finance and Economics*, 26(4), 6338–6361. <https://doi.org/10.1002/ijfe.2122>
- Grove, H., Patelli, L., Victoravich, L. M., & Xu, P. T. (2011). Corporate Governance and Performance in the Wake of the Financial Crisis: Evidence from US Commercial Banks. *Corporate Governance: An International Review*, 19(5), 418–436. <https://doi.org/10.1111/j.1467-8683.2011.00882.x>
- Hair, J., Black, W., Babin, B., & Anderson, R. (2010). *Multivariate data analysis*. In *Multivariate Data Analysis* (2nd ed., Issue 12). Pearson Prentice Hall. <https://doi.org/10.3390/polym12123016>



- Harrison, J. R. (1987). The Strategic Use of Corporate Board Committees. *California Management Review*, 30(1), 109–125. <https://doi.org/10.2307/41165269>
- Hasan, A., Sufi, U., & Hussainey, K. (2023). Risk committee characteristics and risk disclosure in banks: evidence from an emerging economy. *Journal of Applied Accounting Research*. <https://doi.org/10.1108/JAAR-09-2022-0236>
- Hassan, M. S., Mohd Salleh, N., Yatim, P., & Che Abdul Rahman, M. R. (2012). Risk Management Committee and Financial Instrument Disclosure. *Asian Journal of Accounting and Governance*, 3(1), 13–28. <https://doi.org/10.17576/ajag-2012-3-6512>
- Helbok, G., & Wagner, C. (2006). Determinants of operational risk reporting in the banking industry. *The Journal of Risk*, 9(1), 49–74. <https://doi.org/10.21314/jor.2006.140>
- Jensen, M. C. (1993). The Modern Industrial Revolution, Exit, and the Failure of Internal Control Systems. *The Journal of Finance*, 48(3), 831–880. <https://doi.org/10.1111/j.1540-6261.1993.tb04022.x>
- Jensen, M., & Meckling, W. (1976). Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(1976), 305–306. <https://doi.org/10.1177/0018726718812602>
- Jia, J., Li, Z., & Munro, L. (2019). Risk management committee and risk management disclosure: evidence from Australia. *Pacific Accounting Review*, 31(3), 438–461. <https://doi.org/10.1108/PAR-11-2018-0097>
- Kakanda, M. M., Salim, B., & Chandren, S. a/p. (2017). Corporate Governance, Risk Management Disclosure, and Firm Performance: A Theoretical and Empirical Review Perspective. *Asian Economic and Financial Review*, 7(9), 836–845. <https://doi.org/10.18488/journal.aefr.2017.79.836.845>
- Kallamu, B. S. (2015). Risk Management Committee Attributes and Firm Performance. *International Finance and Banking*, 2(2), 1–24. <https://doi.org/10.5296/ifb.v2i2.8580>
- Kirkpatrick, G. (2009). The Corporate Governance Lessons from the Financial Crisis Main conclusions. *OECD Journal: Financial Market Trends*, 1(February), 61–87.
- Kurniawanto, H., Suhardjanto, D., Bandi, & Agustiniingsih, S. W. (2017). Corporate governance and corporate risk disclosure: Empirical evidence of non-financial companies listed in Indonesia Stock Exchange. *Review of Integrative Business and Economics Research*, 6(4), 255–270. <https://liverpool.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=ecn&AN=1687190&site=eds-live&scope=site>  
<http://buscompress.com/view-articles.html>
- Lin, T. C. W., Law, F., Allen, A., Bernstein, A., Cohn, S., Dean, S., Fisch, J., Karmel, R., Kuklin, B., Park, J., Pal, M., & Taylor, W. (2011). A Behavioral Framework for Securities Risk. *Seattle University Law Review*, 34(325), 325–378.
- Lindqvist, A. (2016). What drives risk disclosure quality? - The impact of the financial crisis [Hanken School of Economics Helsinki]. <https://helda.helsinki.fi/bitstream/handle/10138/166393/lindqvist.pdf?sequence=3&isAllowed=y>
- Linsley, P., & Shrives, P. (2000). Risk management and reporting risk in the UK. *The Journal of Risk*, 3(1), 115–129. <https://doi.org/10.21314/jor.2000.034>
- Maas, J. (2016). The quality of liquidity risk disclosure by European banks (Issue December) [Radboud University Department]. <http://theses.uibn.ru.nl/handle/123456789/3576>
- Madi, H. K., Ishak, Z., & Manaf, N. A. A. (2014). The Impact of Audit Committee Characteristics on Corporate Voluntary Disclosure. *Procedia - Social and Behavioral Sciences*, 164(December), 486–492. <https://doi.org/10.1016/j.sbspro.2014.11.106>
- Madrigal, H. M., Aibar Guzmán, B., & Aibar Guzmán, C. (2015). Determinants of

- corporate risk disclosure in large Spanish companies: A snapshot. *Contaduria y Administracion*, 60(4), 757–775. <https://doi.org/10.1016/j.cya.2015.05.014>
- Malafrente, I., Porzio, C., & Starita, M. G. (2014). Disclosure Practices and Financial Crisis: Empirical Evidences in the European Insurance Industry. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2374688>
- Malahim, S. S. (2023). the Relationship Between the Risk Disclosure and Risk Management Committee on Banks Value: Empirical Evidence From Jordan. *International Journal of Professional Business Review*, 8(3), 1–29. <https://doi.org/10.26668/businessreview/2023.v8i3.572>
- Mangena, M., & Taurigana, V. (2007). Corporate compliance with non-mandatory statements of best practice: The case of the ASB statement on interim reports. *European Accounting Review*, 16(2), 399–427. <https://doi.org/10.1080/09638180701391014>
- Miihkinen, A. (2012). What Drives Quality of Firm Risk Disclosure? The Impact of a National Disclosure Standard and Reporting Incentives under IFRS. *International Journal of Accounting*, 47(4), 437–468. <https://doi.org/10.1016/j.intacc.2012.10.005>
- Miihkinen, A. (2013). The usefulness of firm risk disclosures under different firm riskiness, investor-interest, and market conditions: New evidence from Finland. *Advances in Accounting*, 29(2), 312–331. <https://doi.org/10.1016/j.adiac.2013.09.006>
- Moore, David s, Notz, W. I., & Fligner, Michael A. (2013). *The Basic Practice of Statistics* (6th ed.). W. H. Freeman and Company New.
- Moumen, N., Othman, H. Ben, & Hussainey, K. (2016). Board structure and the informativeness of risk disclosure: Evidence from MENA emerging markets. *Advances in Accounting*, 35, 82–95.
- Nahar, S., Azim, M. I., & Hossain, M. M. (2020). Risk disclosure and risk governance characteristics: evidence from a developing economy. *International Journal of Accounting and Information Management*, 28(4), 577–605. <https://doi.org/10.1108/IJAIM-07-2019-0083>
- Nahar, S., Azim, M., & Jubb, C. (2016). The determinants of risk disclosure by banking institutions Evidence from Bangladesh. *Asian Review of Accounting*, 24(4), 426–444. <https://doi.org/10.1108/ARA-07-2014-0075>
- NAICOM. (2009). Code of Good Corporate Governance for the Insurance Industry in Nigeria. Page 1. 1–18.
- Nasution, E. A., Putri, L. P., & Dungga, S. (2019). The Effect of Debt to Equity Ratio and Total Asset Turnover on Return on Equity in Automotive Companies and Components in Indonesia. *Advances in Economics, Business and Management Research*, 92(September). <https://doi.org/10.2991/icame-18.2019.20>
- Neifar, S., & Jarboui, A. (2018). Corporate governance and operational risk voluntary disclosure: Evidence from Islamic banks. *Research in International Business and Finance*, 46, 43–54. <https://doi.org/10.1016/j.ribaf.2017.09.006>
- O'Brien, C. (2011). Risk governance in UK insurers: Beyond the audit committee. *Centre for Risk & Insurance Studies, Paper Seri(2011.I)*, 1–18.
- O'Sullivan, M., Percy, M., & Stewart, J. (2008). Australian evidence on corporate governance attributes and their association with forward-looking information in the annual report. *Journal of Management and Governance*, 12(1), 5–35. <https://doi.org/10.1007/s10997-007-9039-0>
- OECD. (2014). Risk management and corporate governance: Interconnections in law, accounting and tax. In *Risk Management and Corporate Governance (Corporate)*. OECD Publishing. <https://doi.org/10.4337/9781849807999>
- Onoja, A. G. O., & Agada, G. O. (2015). Voluntary risk disclosure in corporate annual reports: An empirical review. *Research Journal of Finance and Accounting*, 6(17), 1–8.
- Protiviti. (2006). *Guide to Enterprise Risk Management*.

- <https://doi.org/10.1111/j.1748-1716.1970.tb04819.x>
- Protiviti. (2011). Board Perspectives: Risk Oversight 9 (Recommendations from Protiviti's Board Risk Oversight Survey). 15.
- Samaila, I. . (2014). corporate governance and financial reporting quality in the Nigerian oil marketing industry. Bayero University Kano-Nigeria.
- Sheytanova, T. (2014). The Accuracy of the Hausman Test in Panel Data: a Monte Carlo Study. Örebro University.
- Susana, H., & Alves, A. (2011). Corporate Governance determinants of voluntary disclosure and its effects on information asymmetry: An analysis for Iberian Peninsula Listed Companies. University of Coimbra.
- Tao, N. B., & Hutchinson, M. (2012). Corporate Governance and Risk Management: The role of risk management and compensation committees. Corporate Governance and Risk Management: The role of risk and compensation committees. 1–39.
- Ujunwa, A. (2012). Board characteristics and the financial performance of Nigerian quoted firms. Corporate Governance (Bingley), 12(5), 656–674. <https://doi.org/10.1108/14720701211275587>
- Vafeas, N. (1999). Board meeting frequency and firm performance. Journal of Financial Economics, 53(1), 113–142. [https://doi.org/10.1016/S0304-405X\(99\)00018-5](https://doi.org/10.1016/S0304-405X(99)00018-5)
- Viljoen, C., Bruwer, B. W., & Enslin, Z. (2016). Determinants of enhanced risk disclosure of JSE Top 40 Companies: the board risk committee composition, frequency of meetings and the chief risk officer. Southern African Business Review, 20, 208–235. <https://doi.org/10.25159/1998-8125/6050>
- Yatim, P. (2009). Audit committee characteristics and risk management of Malaysian listed firms. Malaysian Accounting Review, 8(1), 19–36.
- Yusuf, I., Ahmed Aliyu, I., & Al-Faryan, M. A. S. (2023). Board risk committee composition and risk-taking of deposit money banks in Nigeria. Cogent Business and Management, 10(1), 1–14. <https://doi.org/10.1080/23311975.2023.2187884>
- Zango, A. G., Kamardin, H., & Ishak, R. (2016). Audit quality, board gender and financial risk disclosure. International Journal of Economics and Financial Issues, 6(4), 55–61.