



Risk Monitoring Committee and Firm Value of Listed Oil and Gas Companies in Nigeria: A Panel Data Analysis

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Abstract

In this paper, the relationship between the risk monitoring committee (RMC) and the firm value of listed Nigerian oil and gas firms was examined. The risk monitoring committee was measured via the presence and size of the risk committee and the contributions of non-executive directors, while firm value was measured using Tobin's Q, price-to-earnings per share, and earnings yield. Data were collected from the Machamratios database for the period 2012–2020. An aggregate panel data of eight (8) firms was obtained and the data were analyzed using descriptive and inferential statistical tools. The fixed effect (FE) and random effect (RE) models established that the risk monitoring committee measures insignificantly and negatively affected the value of the firm. This suggests that the risk monitoring committee does not affect firm value, particularly for listed Nigerian oil and gas firms. Consequently, for firms to enhance their value via a risk monitoring committee, management must develop a well-structured risk monitoring framework aimed at increasing firm value; this can be realized by reducing the size of the risk committee, the presence of the risk committee, and the contribution of non-executive directors in the risk committee structure of listed Nigerian oil and gas firms.

1. Introduction

In recent times, risk monitoring has become a contentious issue for firms' management, risk practitioners, and management researchers alike in both developed and developing countries. This contentiousness stems from the fact that risk monitoring has been suggested as a mechanism to determine the risk appetite level, as well as an emerging paradigm for the management of a firm's risk portfolios through the use of natural hedges (see (Danisman & Demirel, 2019; Erin & Aribaba, 2021; Faisal & Hasan, 2020; Kaczmarek, 2019)). Kerraous (2018) and Willumsen, Oehmen, Stingl, and Gerdali (2019) have asserted that risk monitoring performs the roles of creating, capturing, and preserving value for the firm; this is no different for listed Nigerian oil and gas firms.

Risk monitoring plays an important role in listed Nigerian oil and gas firms because the sector invests in risky projects requiring efficient risk monitoring; nevertheless, oil and gas firms have yet to fully embrace and employ risk monitoring programs in their risk management frameworks. This is evident in the way they have constituted their risk committees and how risky projects are managed in silos. The [Committee of Sponsoring Organizations of the Treadway Commission \(COSO\) \(2004\)](#) maintained that risk monitoring should be comprehensive to ensure that firms create, capture, and sustain value. Hence, the fundamental goals of enterprise risk monitoring are targeted toward creating, capturing, and sustaining firm value (Abdullah, Janor, Hamid, & Yatim, 2017; Agustina & Baroroh, 2016; Erin & Aribaba, 2021; Jesko & Sophie, 2018; Pagach & Warr, 2010). Risk monitoring is predominantly achieved through firms' risk committees (Rahman & Adnan, 2020).

Meulbroek (2002a) regarded the risk monitoring committee (RMC) as an integrated risk framework for identifying and assessing aggregate risks that might harm a firm in terms of its survival, value, and

performance. Studies on RMC and firm value employ discrete measures; however, using specific measures may not provide adequate predictions of enterprise RMC and firm value (Egberi, 2020b; Rahman & Adnan, 2020; Willumsen et al., 2019). Horvey and Ankamah (2020) and Nii-Okai (2015) asserted that a good measure for RMC should focus on an uninterrupted process rather than a discrete measure since RMC occurs continually, not on a one-off basis. Consequently, this study used uninterrupted measures of RMC (risk committee presence and size and the presence of non-executive directors on the risk committee) and firm value (Tobin's Q, earnings yield, and price to earnings per share) in its investigation.

Previous studies on the relationship between RMC and firm value have focussed strongly on risk management practices and how they affect firm performance; there is a lack of studies on how RMC could affect firm value in Nigeria. Furthermore, there have been contradictory outcomes in this area of the study; while some studies found positive and significant effects (Abdullah, Shukor, Mohamed, & Ahmad, 2015; Anton, 2018; Erin & Aribaba, 2021; Husaini & Saiful, 2017) others found negative and insignificant effects (Agustina & Baroroh, 2016; González, Santomil, & Herrera, 2020). In light of this contradiction, the current study was conducted to examine the relationship between RMC and the firm value of listed Nigerian oil and gas firms. The following sections of this paper present a review of previous literature, the research method, the results and discussion, and the conclusions and recommendations.

2. Review of Related Literature

2.1. Risk Monitoring Committee

The concept of Risk Monitoring Committee (RMC) has been used extensively in the literature. Meulbroek (2002b) saw RMC as an integrated risk monitoring framework aimed at identifying and assessing the collective risks affecting the firm, such that the risk could be systematically monitored and lessened. Erin and Aribaba (2021) and Anton (2018) found that firm value could be improved via a unified risk monitoring approach.

Liebenberg and Hoyt (2003) opined that risk monitoring emboldened firms to become more offensive and strategic in reducing risks. In the context of risk management, RMC was found to have a tendency to augment firm value (Anton, 2018; Erin & Aribaba, 2021; Hoyt & Liebenberg, 2008; Waweru & Kisaka, 2010). According to Carter, Simkins, and Simpson (2003), the successful operations of any firm largely depend on its RMC structure. Similarly, Carter et al. (2003) argued that firm value can be created, captured, and sustained by adopting and applying an effective RMC framework.

Prior studies have shown that RMC results in the maximization of owners' wealth by reducing the overall risk of a firm. Although there have been diverse outcomes concerning RMC and firm value (Abdullah et al., 2015; Anton, 2018; Erin & Aribaba, 2021; Husaini & Saiful, 2017), this cannot be said for listed Nigerian oil and gas firms. The management literature has employed diverse measures of RMC; this study, however, has used three: risk committee size, risk committee presence, and non-executive directors on the risk committee.

2.2. Firm Value

Over the years, firm value has been a prominent issue in discussions of firm management. Specifically, large firms tend to focus on what can contribute to their value (Abdullah et al., 2015; Anton, 2018; Christoffersen, 2012; Committee of Sponsoring Organizations of the Treadway Commission (COSO), 2004; Esan, Nwobu, Adeyanju, & Adeyemi, 2022; Faisal & Hasan, 2020; Fama & French, 2002; Imasuen, Okoro, & Yahaya, 2022). Firm value refers to the market value of a firm to its replacement costs. Notwithstanding the abundance of available firm value measures, this study has adopted three, namely Tobin's Q, price to earnings per share, and earnings yield.

The extant literature has shown that various factors affect firm value, such as leverage, liquidity, growth size, governance mechanism, operational efficiency, and monitoring committee size (Christoffersen, 2012; Danisman & Demirel, 2019; Husaini & Saiful, 2017; Minnis, 2011; Okoro, 2014). Christoffersen (2012) showed that risk puts firms in danger of financial distress, which, in turn, negatively affects value. Erin and Aribaba (2021) found that the presence and size of a risk committee positively and significantly affected firm value.

This paper presents a theoretical basis for empirically testing the interaction between RMC and firm value. Also, it offers theory-based propositions that can be translated into testable hypotheses. Specifically, the paper argues that the actions of the risk monitoring committee can improve the value of a firm.

2.3. Theoretical Underpinning

This study is anchored on the COSO Enterprise Risk Management (ERM) framework initiated by the COSO Treadway Commission. The COSO ERM provides organizations with a well-designed basis for establishing a viable and/or holistic risk management framework (Committee of Sponsoring Organizations of the Treadway Commission (COSO), 2004). This framework, according to Segal (2011) and Chapman (2011), is capable of helping firms to create, capture, and preserve firm value.

Firm value is created when objectives are set within suitable risk limits and the right mix of resources is used to realize these objectives. The COSO ERM framework has been used by researchers including Mikes (2009), Segal (2006), and Kaplan and Mikes (2012). ERM involves creating, capturing, and preserving firm

value by focusing on the owners' goal of wealth maximization (Chapman, 2011). Thus, firms desirous of creating, capturing, and sustaining value embrace the COSO ERM framework, given that creating, capturing, and sustaining value can only be achieved after firms have taken certain risks.

The relevance of the COSO paradigm to the current study is that the effective management of risk can be attained by the risk committee identifying, measuring, managing, and disclosing all fundamental risks to increase the firm's value to owners. The effective management of risk is linked to RMC mechanisms, including risk committee size and presence, and non-executive directors on the risk committee, among others. Consequently, the aim of the COSO ERM framework is to improve firm value via proactive risk monitoring.

2.4. Extant Studies

This section reviews some recent related studies on the research theme from 2016–2021 in reverse chronological order. Erin and Aribaba (2021) assessed the impact of risk governance on the value of listed Nigerian finance firms from 2013 to 2017. Risk governance was proxied using the enterprise risk management index (ERMI), risk committee presence, size, activism, and independence. The regression result showed that all the variables of risk governance had a positive and significant impact on firm value.

Horvey and Ankamah (2020) assessed the direct and indirect relationship between ERM and the performance of 30 listed firms (financial and non-financial) in Ghana from 2010 to 2016. Firm performance was gauged using Tobin's Q, return on assets, and return on equity. The fixed effect and random effect models established an indirect inverted U-shaped relationship between ERM and return on equity; in contrast, an indirect U-shape was established between enterprise risk management, Tobin's Q, and return on assets.

In Spain, González et al. (2020) examined ERM and non-finance firms' performance from 2012 to 2015. The results showed that ERM adoption was not connected with variation in firms' performance (which was proxied by return on equity, assets, and Tobin's Q), nor did it lessen firms' probability of bankruptcy.

Similarly, ERM and the value of selected Romanian firms in the pre- and post-financial crisis era were examined by Anton (2018). Firm value was gauged by Tobin's Q, leverage, and firm size. The regression results suggested that ERM adoption significantly and positively affected firm value. Also, the study showed a positive and significant link between leverage, firm size, and the value of Romanian firms.

In Indonesia, the nexus between ERM, corporate governance, and firm value from 2010 to 2013 was studied by Husaini and Saiful (2017). Tobin's Q was used as a proxy for firm value, while corporate governance was proxied by the independence of the audit committee, financial expertise, size, meetings, managerial ownership, and board independence. The regression results revealed that ERM and corporate governance increased firm value, while managerial ownership negatively and insignificantly affected firm value.

Agustina and Baroroh (2016) examined the mediating role of financial performance on the link between ERM and the value of 53 firms from 2011 to 2013. The structural equation modeling (SEM) result revealed an insignificant effect of ERM on firm value, while financial performance played no mediating role in the connection between ERM and the value of Indonesian firms.

Multiple previous empirical studies employed Tobin's Q as a basis for measuring firm value, although there are many other possible measures for firm value, such as earnings yield, price-to-earnings per share, price-to-cash flow, price-to-revenue, and others; thus, there is a gap in the literature. For this reason, we conceptualized three measures of RMC (non-executive directors and presence and size of the risk committee) and three measures of firm value (Tobin's Q, earnings yield, and price-to-earnings per share):

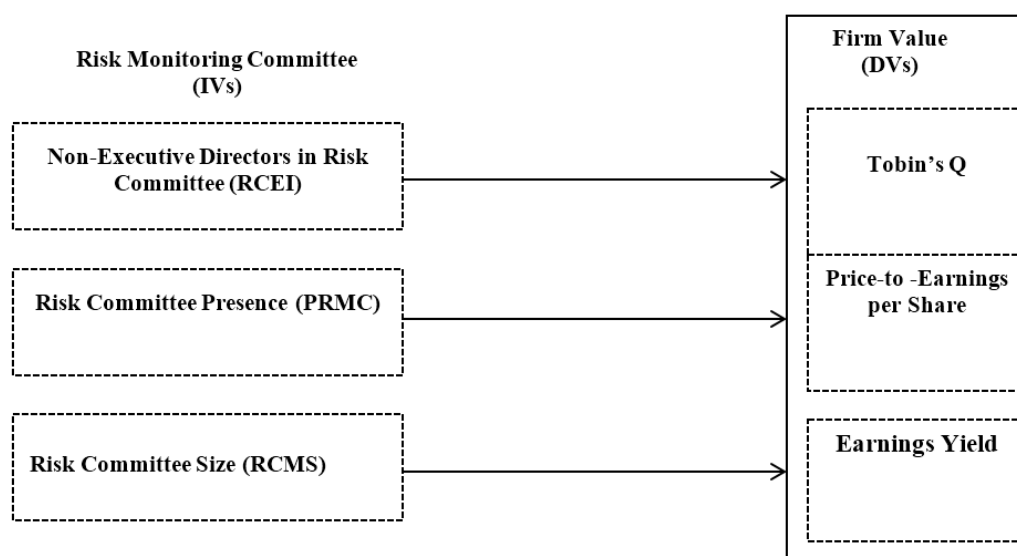


Figure 1. Conceptualized study model.

Figure 1 illustrates the conceptual model of the study, showing the connection between the measures of RMC (non-executive directors on risk committee, risk committee presence, and risk committee size) and firm value (Tobin's Q, price-to-earnings per share, and earnings yield) for listed Nigerian oil and gas firms.

3. Research Method

The connection between RMC and firm value for listed Nigerian oil and gas firms was studied using an *ex-post facto* design. The study population was composed of all oil and gas firms listed on the Nigerian Exchange Group (NGX) – a total of thirteen (13). A non-random sampling method (purposive sampling) was employed to select eight (8) listed oil and gas firms. The choice of sampling technique was motivated by the availability of the datasets required for the study as it required listed oil and gas firms that had consistently reported their risk management practices during the study period

Specifically, data on the risk committee presence and size and the presence of non-executive directors on the risk committee (proxies for RMC) and on Tobin's Q, earnings yields, and price-to-earnings per share (proxies for firm value) were obtained from the Machameratios database for the years 2012–2020. The variables used for firm value in this study were similar to those utilized in the work of González et al. (2020) and Horvey and Ankamah (2020), while the RMC measurements were similar to those employed by Erin and Aribaba (2021). The dependent variable was firm value and the independent variable was RMC measures. Consequently, three (3) models were estimated, as shown in Equations 1-6:

$$TOBINQ = f(rcei, prmc, rcms) \tag{1}$$

$$EAYD = f(rcei, prmc, rcms) \tag{2}$$

$$PEPS = f(rcei, prmc, rcms) \tag{3}$$

Where: *TOBINQ* = Tobin's Q; *EAYD* = earnings yield; *PEPS* = price-to-earnings per share; *RCEI* = number of non-executive directors on risk committee; *PRMC* = risk committee presence; *RCMS* = risk committee size; α , β , and μ are constants; $i = 1, 2, 3, \dots, 8$ indicates the number of listed oil and gas firms; $t = 1, 2, \dots, 10$ (time frame). Equations 1-3 are the implicit forms of the regression model; thus, Equations 4-6 were re-estimated explicitly:

$$TOBINQ_{it} = \beta_0 + \beta_1 rcei_{it} + \beta_2 prmc + \beta_3 rcms + \epsilon_t \tag{4}$$

$$EAYD_{it} = \beta_0 + \beta_1 rcei_{it} + \beta_2 prmc + \beta_3 rcms + \epsilon_t \tag{5}$$

$$PEPS_{it} = \beta_0 + \beta_1 rcei_{it} + \beta_2 prmc + \beta_3 rcms + \epsilon \tag{6}$$

Table 1. Description of variables.

Variable(s)	Codes	Description
Firm Value	TOBINQ	Total liabilities plus market capitalization minus cash flows divided by total assets
	EAYD	Profit after tax divided by market capitalization
	PEPS	Annual average closing share price divided by earnings per share
Non-executive directors on risk committee	Rcei	Number of non-executive directors on risk committee
Risk committee presence	Prmc	Ratio of non-executive directors to directors on risk committee
Risk committee size	Rcms	Total number of directors and non-directors on risk committee

Table 1 presents the descriptions and measurements of the dependent and independent variables employed in the study. The obtained data were analyzed using both descriptive and inferential statistical tools. To determine the most suitable models for evaluating the nexus between RMC and firm value, a Hausman specification analysis was carried out. The statistical analysis was conducted via STATA version 13.0.

4. Results and Discussion

Table 2 presents the summary of the descriptive statistics of the entire panel data involving the measures of RMC (independent variable) and firm value (dependent variable). The descriptive statistics revealed that the average firm value for the listed oil and gas firms (Tobq = Tobin's Q, Eayd = earnings yield, and Peps = price-to-earnings per share) were 1.20 (Tobq), 19.32 (Eayd), and 7.90 (Peps), while the RMC measures were 1.56 (Rcei), 0.46 (Prmc), and 2.11 (Rcms), with the highest value of 3266.75 (Eayd), recorded by Japaul Oil and Maritime Services in 2019. Additionally, the lowest value was zero (0) for all listed oil and gas firms in Nigeria; this was expected since Rcei, Prmc, and Rcm are expressed as a percentage of RMC.

Table 2. Summary of descriptive statistics.

Parameters	Tobq	Eayd	Peps	Rcei	Prmc	Rcms
Mean	1.204	19.315	7.902	1.563	0.463	2.113
Median	0.928	9.171	8.977	0	0	0
Min. Value	0.502	-684.739	-730.00	0	0	0
Max. Value	6.287	3266.75	470.00	7	1	9
Std. Dev.	0.869	387.559	113.947	1.861	0.502	2.475
Kurtosis	18.292	64.221	28.662	2.425	1.023	2.137
Skewness	3.506	7.454	-2.244	0.725	0.150	0.626
N	72	72	72	72	72	72

Furthermore, the standard deviations revealed that the oil and gas firms are not divergent from each other and that the variables of the study are not constant over the studied period. Additionally, the skewness values showed that the variables were skewed positively with coefficients of 3.51 (Tobq), 7.45 (Eayd), 0.72 (Rcei), 0.15 (Prmc), and 0.6 (Rcms), aside from Peps (-2.24), which was negatively skewed; the least kurtosis was 1.02 (Prmc) and the most was 3.51(Tobq). The kurtosis values suggested that the study variables were normally distributed since the kurtosis values were far from zero (0).

Table 3. Pearson correlation result.

Variables	Tobq	Eayd	Peps	Rcei	Prmc	Rcms
Tobq	1.000					
Eayd	0.072	1.000				
Peps	0.089	0.013	1.000			
Rcei	-0.041	-0.044	0.102	1.000		
Prmc	-0.099	-0.048	0.153	0.091	1.000	
Rcms	-0.072	-0.048	0.149	0.094	0.093	1.000

Table 3 presents the Pearson correlation coefficients of the RMC and firm value measures for the entire data set. The Pearson correlation results revealed that all the RMC measures (Rcei, Prmc & Rcms) were negatively correlated with firm value (Tobq, Eayd & Peps). This implies that RMC relates negatively to firm value. Remarkably, no pairs of explanatory variables were totally correlated since none of the Pearson correlation coefficients achieved the benchmark of 0.9 (Egberi, 2020a; Okoro & Egberi, 2020; Okoro & Ihenyen, 2020). This indicates the nonexistence of multicollinearity problems in the study’s empirical model. The correlation results were supported by the variance inflation factor (VIF), as captured in Table 4.

Table 4. Result of variance inflation factors (VIF).

Variables	VIF	1/VIF
Rcms	8.76	0.114
Rcei	9.45	0.106
Prmc	7.95	0.126
Mean VIF	8.72	0.346

Table 4 presents the VIF involving the measures of the independent variables (RMC). The mean VIF = 8.72 and was below the conventional VIF of 10.0; this suggests the absence of multicollinearity in the RMC and firm value models.

Table 5. Results of fixed effect (RE) and random effect (RE) for Tobin's Q.

Estimator	FE (Obs.=72)		RE (Obs. =72)	
	Coef.	Prob.	Coef.	Prob.
Rcei	-0.142 (-0.83)	0.409	-0.155 (-0.95)	0.342
Prmc	-0.566 (-0.97)	0.337	-0.557 (-1.00)	0.318
Rcms	-0.005 (-0.03)	0.974	-0.030 (-0.22)	0.825
_Cons	-1.252 (-1.96)	0.679	-1.281 (-1.60)	0.743
Within R-Sq.	0.020		0.019	
Between R-Sq.	0.152		0.263	
Aggregate R-Sq.	0.023		0.024	
Wald Ch2(3) =1.86; Prob. Ch2 =0.601; Hausman: Prob.>Chi2=0.813				

Table 5 presents the fixed and random effects results of the RMC and firm value (Tobin's Q) measures of the entire panel data. The Hausman tests showed that the random effects (RE) model was more suitable than the fixed effects (FE); consequently, we relied on the RE result. The RE coefficient of Rcei was 0.155, Prmc -0.557, and Rcms -0.030, suggesting that when listed oil and gas firms in Nigeria engaged in risk monitoring (Rcei), it led to an approximate 15.5% increase in firm value (Tobq). On the other hand, Prmc and Rcms led to decreases in firm value of approximately 55.7% and 3.0%, respectively.

Furthermore, the t-test results were 0.83 (Rcei), -0.97 (Prmc), and -0.03 (Rcms). The t-test results confirmed that the RMC measures (Rcei, Prmc & Rcms) were not significant in explaining the variation in the firm value (Tobq). However, the R² was 0.024 for RE, suggesting that RMC only explained about 2.4% of the variation in firm value (Tobq). The Wald chi-square result was 1.86 (prob. Value = 0.601), indicating that RMC insignificantly affected the firm value (Tobq) of listed Nigerian oil and gas firms.

Table 6. Results of fixed effect (FE) and random effect (RE) for earnings yield.
(Eayd, Rcms, Rcei & Prmc)

Estimator Variables	FE (Obs.=72)		RE (Obs. =72)	
	Coef.	Prob.	Coef.	Prob.
Rcei	-12.49 (-0.17)	0.866	-6.490 (-0.09)	0.929
Prmc	-21.647 (-0.09)	0.932	-13.42 (-0.05)	0.957
Rcms	-24.691 (-0.39)	0.699	-10.53 (-0.17)	0.863
_Cons	-42.03 (-0.69)	0.490	-38.98 (-0.60)	0.550
Within R-Sq.	0.007		0.006	
Between R-Sq.	0.087		0.058	
Aggregate R-Sq.	0.002		0.002	
Wald Ch2(3) =0.23; Prob. Ch2 =0.972; Hausman: Prob.>Chi2=0.778				

Table 6 presents the fixed and random effects results of the RMC and firm value (earnings yield) measures of the entire panel data. The Hausman test showed that the RE model was more efficient than the FE. The RE coefficient of Rcei was 6.490, Prmc was -13.42, and Rcms was -10.53, implying that when listed Nigerian oil and gas firms engaged in risk monitoring (Rcei), it led to approximately a 64.9% increase in firm value (Eayd). On the other hand, Prmc and Rcms led to approximately a 134.2% and 105.3% decrease in firm value, respectively.

Additionally, the t-test results were 0.09 (Rcei), -0.05 (Prmc), and -0.17 (Rcms); the t-test confirmed that the RMC metrics (Rcei, Prmc & Rcms) were not significant in explaining the changes in firm value (Eayd). However, the R² was 0.0024 for RE, suggesting that RMC only explained about 0.24% of the variation in firm value (Eayd). Also, the Wald chi-square was 0.23 (prob. value = 0.9719), indicating that RMC insignificantly affected the firm value (Eayd) of listed oil and gas firms in Nigeria.

Table 7. Results of fixed effect (FE) and random effect (RE) for price-to-earnings per share.
(Peps, Rcms, Rcei&Prmc)

Estimator Variables	FE (Obs.=72)		RE (Obs. =72)	
	Coef.	Prob.	Coef.	Prob.
Rcei	-25.911 (-1.20)	0.234	-24.115 (-1.14)	0.256
Prmc	-28.366 (-0.38)	0.703	-48.209 (-0.67)	0.506
Rcms	18.162 (-0.98)	0.331	14.763 (-0.83)	0.406
_Cons	-3.172 (-0.18)	0.858	-7.860 (-0.45)	0.653
Within R-Sq.	0.034		0.032	
Between R-Sq.	0.081		0.162	
Aggregate R-Sq.	0.038		0.040	
Wald Ch2(3) =3.13; Prob. Ch2 =0.373; Hausman: Prob.>Chi2=0.438				

Table 7 presents the fixed and random effects results of the RMC and firm value (price-to-earnings per share) measures of the entire data set. The Hausman tests showed that RE was more suitable than FE; the RE coefficient of Rcei was -24.115, Prmc was 48.209, and Rcms was 14.763, implying that when listed Nigerian oil and gas firms engaged in risk monitoring management, it led to increases in firm value (Peps) of

approximately 482.1% (Prmc) and 147.6% (Rcms), respectively. In contrast, Rcei led to an approximate -241.2% decrease in firm value.

The t-test results of the RMC metrics were -1.14 (Rcei), 0.67 (Prmc), and 0.83 (Rcms), respectively. The t-test results confirmed that all the RMC metrics (Rcei, Prmc & Rcms) were insignificant in explaining the changes in the firm value (Eayd). Moreover, the R^2 was 0.040 for RE, meaning that RMC only explained about 4.0% of the variation in firm value (Eayd). The Wald chi-square result was 3.13 (prob. value = 0.373), indicating that RMC insignificantly affected the firm value (Eayd) of listed oil and gas firms in Nigeria.

In recent years, RMC has received substantial attention in the management literature. The debate in the management literature has focused on whether RMC significantly affects firm value. Several studies (Anton, 2018; Faisal & Hasan, 2020; Willumsen et al., 2019) have shown that a risk committee significantly affects the value of a firm; whether this is the case for listed Nigerian oil and gas firms had not been previously researched. A model that split RMC and firm value into separate variables was developed to resolve the literature gap.

The results showed, first, that all measures of RMC (Rcei, Prmc & Rcms) related negatively to the firm value measures (Tobq, Peps & Eayd) employed in the study. Furthermore, the t-test and Wald statistic showed that RMC insignificantly affected firm value. The negative effects of RMC on firm value could be linked to the reality that Nigerian oil and gas firms had large risk committees with exceedingly high numbers of non-executive directors.

Consequently, listed Nigerian oil and gas firms are lacking a viable and holistic risk management framework, which was established as a necessity by the COSO Treadway Commission for proactive risk monitoring to augment the value of a firm. In this, the study result agrees with Danisman and Demirel (2019) and Senol, Karaca, and Erdoğan (2017).

5. Conclusion and Recommendations

The study examined the connection between RMC and the value of listed Nigerian oil and gas firms from 2012 to 2020. In the study, RMC was proxied using risk committee size, the presence of a risk committee, and the proportion of non-executive directors on the risk committee. Firm value, on the other hand, was measured using Tobin's Q , price-to-earnings per share, and earnings yield. Panel data of (8) listed Nigerian oil and gas firms were sampled, and the findings revealed that the RMC measures employed in the study did not affect firm value significantly, and their overall effect was negative.

The implication of this finding is that RMC does not matter to firm value, particularly for listed Nigerian oil and gas firms. Hence, to augment firm value, firms' management should devise well-structured risk monitoring frameworks aimed at increasing firm value; this can be done by reducing the size and presence of the risk committee, as well as the proportion of non-executive directors on the risk committee.

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