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Financial Reporting Quality and Control System: A Mixed Approach Assessment

Mansur Lubabah Kwanbo [1]*
Esther Ali Baba [1]
Solomon Akanet [1]
Muhammad Tanko [1]

* Corresponding author: lubakwanbo@kasu.edu.ng
[1] Department of Accounting, Kaduna State University, Kaduna, Nigeria

Abstract

Listed firms have been reported by regulators to be tangled in financial scandals that have made the quality of their financial reports doubtful due to inadequate control systems of risk assessment, monitoring, information and communication, control environment and control activity. This study examines the relationship between financial reporting quality and the internal control system of listed firms in Nigeria. The research relieda hybridixed approach that sourced primary and secondary data using a bilateral convergent paralleled mixed design. The research method adopted is the interpretive post-action multiple case study that employs reduction and multiple regression as its data analysis techniques. Comparatively, results from both sources of data indicate that internal control system components are determinants of financial reporting quality. One of the implications of the findings on practice is that having financial and accounting experts on the board of directors that uses such expertise on risk assessment inhibits not achieving reporting quality. The study concludes that risk assessment improves financial reporting quality and recommends more such experts on the board of Nigerian firms.

Keywords: Financial reporting quality, Internal control, Risk assessment, Control environment

1.   Introduction

A primary output of an internal control system is financial reporting quality. In Nigeria the boards of directors are vested with the responsibility of instituting an internal control system and its effectiveness over financial reporting quality (Section 61:1&2) security and investment Act 2007; principle 17 of the 2018 Nigerian code of corporate governance. Firms in some parts of the world have been involved in accounting scandals that have resulted in the quality of their financial reports being questionable due to inadequate control systems of risk assessment, monitoring, information, communication, control environment and control activity that lived up to expectations of end users (Kwanbo & Tanko, 2018b; Bernstein, 2019; Panda, 2021). In 2015, Toshiba Corporation of Japan was found to have altered its profit value for more than seven years. In 2017, Nigeria's Lafarge PLC, formerly known as Ashaka cement, violated the 20% free float provision and Oando Plc was found with false disclosure and financial misstatements (SEC, 2017). This raises the following question: Is the control environment adequately positioned to improve Nigerian-listed firms' financial reporting quality? Can control activities of Nigerian listed firms enhance their financial reporting quality of financial reporting quality? Do Nigerian listed firms have adequate financial and accounting risk assessment experts on board to guarantee financial reporting quality? Are the monitoring procedures of Nigerian listed firms adequate to achieve financial reporting quality? Do Nigerian listed firms have sufficient information and communication procedures to achieve financial reporting quality efficiently.

Based on this question, the following objective was identified to determine whether the internal control system matters in the financial reporting quality of listed Nigerian firms. This study's findings will benefit SEC and the FRCN because their efforts to make companies institute an effective internal control system yield quality reports. The board of directors and management of firms will use the study findings to encourage more accounting and finance experts and large and independent panels.

A hand full of studies Fithri et al. (2022), Anuruddha and Mahanamahewa (2021), Murwaningsari et al. (2021), Ajao and Oluwadamilola (2020), Al-Khonain and Al-Adeem (2020), Almaqtari, et al. (2020), Salameh (2019), Agbenyo, et al. (2018), Nichita (2018), Bachmid (2018), Al-Dmour (2018), Kusnadi, et al. (2016), Ramdany (2015) and

Bahdan et al. (2015) have documented findings on financial reporting quality and internal control system by examining local government, financial and nonfinancial firms, family-owned firms without specific interest on manufacturing firms. Secondly, most of the studies like Aramide and Mustapha (2015), Eke (2018), Onah (2018), Umar and Dikko (2018), Ajao and Oluwadamilola (2020) and Fithri et al. (2022) use primary data to establish their findings while very few like Bahdan et al. (2015) and Kwanbo and Tanko (2018) use secondary data. This study bridges these gaps by examining manufacturing firms and documenting findings using primary and secondary data.

Thirdly, unlike what the literature is used to, this study used the experiences of former and serving directors and the position of the security and investment act of 2007 and principle 17 of the Nigerian code to show that it is the responsibility of the board of director to institute the control environment and activities components of the internal control system to set the tone of the organisation and structures that inhibit achieving quality reports respectively, hence, control environment and activities were proxied by the board of directors' size and independence respectively. With this, the study documented that a large and independent panel are resources that can be relied upon to establish the reliability of the internal control system over the financial reporting quality of Nigerian firms.

The study is in 5 sections; section 1 includes this paragraph and the research introduction. Section 2 presents the literature, section 3 shows the methodology, and section 4 discusses the findings, including their implication on policies. Section 5 concludes and gives recommendations on the results.

2.   Literature Review and Hypotheses Development

This section presents the operational definition, some empirical studies and theories on the research concepts.

2.1   Financial Reporting Quality

It is defined as how good or valuable the information aids a user in taking a position (Moses, 2016) that is unbiased (Matinez & Moaes, 2017) and is referred to as both reliable financial and non-financial information for decisions (Herath & Albarqi, 2017). It is the accuracy of the information presented (Martínez-Ferrero et al., 2013). We

defined it as the information that indeed indicates the situation of an organisation in a particular period.

2.2   Internal Control System

In 2003 COSO defined it as a system relied upon by the board of directors, management and employees of an organisation to reasonably assure stakeholders that rules and objectives deployed for operations, reporting and compliance will be adhered to and achieved. Companies use five internal control system components defined as follows.

2.2.1   Control Environment

Management philosophy, its operating style and structure (Sumito et al., 2021). It sets the tone of an organisation by influencing its efficacy in procedures, methods, and policies (Husaini and Mohammed 2018). An organisation's internal regulations and control consciousness are impacted by its ethical standards, monitoring and strategies (Agbenyo et al., 2018; Chan et al., 2020). This definition is adopted.

2.3   Financial Reporting Quality and Control Environment

Anuruddha and Mahanamahewa (2021), Ajao and Oluwadamilola (2020), Salameh (2019) and Agbenyo et al. (2018) had the objective of examining the impact of internal control system on financial reporting quality administered questionnaire to 217 respondents in Srilanka; 98 respondents of insurance companies in Nigeria; 88 respondents of Banks in Jordan; 50 Ghana revenue authority staff respectively, the studies used regression as a technique of analysis to establish that control environment significantly influences financial reporting quality. The direction these studies took to examine the control environment on financial reporting quality using primary data did not show the influence of the board of directors in the control environment of the ICS on financial reporting quality as achieved by the current study through combining both primary and secondary data.

Differently, Akeju and Babatunde (2017) sampled 40 firms; Onuorah and Imene (2016) sampled five firms they used 2006-2015 to examine financial reporting quality using Board size by relying on secondary data and regression as a technique to show that size of a board influences financial reporting quality these studies did not establish the

size of the board of directors as the trim tab of control environment on affecting financial reporting quality which makes the current study different. This study hypothesises that:

H0$_1$ Financial reporting quality of listed Nigerian firms is not significantly influenced by their control environment control environment

2.3.1   Control Activities

The component is defined as the segregation of roles to identify operations, authorisation and approvals authorisation 2021). It is defined as the execution of work at a different level to achieve set goals (Bachmid, 2018). The policies, procedures and rules ensure that management directives are appropriately distributed (Muhunyo, 2018). We define it as monitoring authorisation and approving processes that influence achieving reporting objectives.

2.4   Financial Reporting Quality and Control Activities

Muhammad and Isah (2020) examined control activities on financial reporting quality using the period 2015-2018 of some microfinance banks; Kwanbo and Tanko (2018) used 2012-2016 to examine 15 firms on lotus Islamic index; Bahdan et al. (2015) used 2004-2007 to examine 446 firms on S&P 500 firms. They used quantified secondary information from the firms' financial reports and relied on regression as an analysis technique. Mohammad and Isah (2020) and Kwanbo and Tanko (2018) found that control activities strongly influenced financial reporting quality. However, Bhadhan et al. (2015 study evidence independency of a board that constitutes more family members does not significantly influence financial reporting quality. These studies used a period of 4 and 5 years; the current study used a period of 10 years 2011-2020 to document findings which makes it different. Again, Kaawaase et al. (2021); used primary data to examine board independence on financial reporting quality of 62 financial institutions in Uganda; Fithri et al. (2022) sampled 146 respondents from 15 agencies under the Takalar district and used regression as a technique of analysis to document that control activities influence financial reporting quality. The current study examined Nigerian listed firms using a mixed approach. This study hypothesises that:

H0₂ Financial reporting quality of listed Nigerian firms is not significantly influenced by their control activities.

2.4.1   Risk Assessment

It is a procedure used to identify threats, fraud, and mistakes that inhibit achieving objectives (Chan et al., 2020; Umar & Dikko (2018) It is the uninterrupted and iterative process of identifying, responding to and managing threat (Ajao & Oluwadamilola, 2020; Wang, 2019; Annette & Philip, 2019). We define it as an ongoing process of identifying and inhibiting threats to achieve reporting quality.

2.5   Financial Reporting Quality and Risk Assessment

Salameh (2019), Ajao and Oluwadamilola (2020), and Fithri et al. (2022) used primary data and regression techniques to analyse responses and revealed that financial reporting quality is significantly influenced by risk assessment. Differently, Nichita (2018) used secondary data to examine 10 Romania enterprises from 2013-2016 and found that risk assessment strongly influences financial reporting quality. The current study used 10 years of secondary data and primary data from participants to establish its findings which makes it different. This research hypothesises that:

H0₃ Financial reporting quality of listed Nigerian firms is not significantly influenced by their risk assessment.

2.5.1   Information and Communication

This study defines it as a process to relay action, feedback and directives to employees to achieve objectives. Kwanbo and Onyebuenyi (2018) define it as communicating information to staff within a certain period. It is the process of collecting, sharing and disseminating information across the company (Alawaqleh, 2021; Moeller, 2016).

2.6   Financial Reporting Quality and Information and Communication

The following studies used primary data to examine information and communication on financial reporting quality: Fithri et al. (2022) sampled 146 respondents from 15 agencies under the Takalar district; Bachmid (2018) 40 respondents in Bandung city. They used regression to evidence that I&C significantly influence financial reporting quality. Also,

Lashgari et al. (2015) extracted secondary data from 200 firms in Tehran companies from 2003-2008 to evidence that information and communication significantly influence financial reporting quality. This study examined Nigerian listed firms by using a bilateral mixed design. This research hypothesises that:

H04 Financial reporting quality of listed Nigerian firms is not significantly influenced by their information and communication procedures.

2.6.1 Monitoring

This research defines it as a process relied upon by the board of directors to use their expertise and independence to ensure procedures and policies for achieving quality reports are met. It is a process to determine whether policies are carried out (Ogunmakin, 2020). The rapid evaluation of operations is completed with corrective measures (Muhammad and Isah, 2020). It is a process used internally and externally to assess a company's operations (Montri et al., 2015).

2.7   Financial Reporting Quality and Monitoring

The subsequent studies used primary data to examine monitoring financial reporting quality: Fithri et al. (2022) sampled 146 respondents from 15 agencies under the Takalar district and used regression as a technique to establish that financial reporting quality is influenced by MO the data, design and findings of Anuruddha and Mahanamahewa (2021), Ajao and Oluwadamilola (2020), Salameh (2019) and Agbenyo et al. (2018) support Fithri et al. (2022). The current study uses secondary and primary data to prove that monitoring procedures influence Nigerian firms' financial reporting quality. This study hypothesises that:

H05 Financial reporting quality of listed Nigerian firms is not significantly influenced by their monitoring procedures

3.   Theoretical Framework

The Resource Dependency Theory underpins the study variables. This is because financial reporting quality is influenced by the size, independence and expertise of the board of directors, which are considered resources the sampled firms depend on in influencing risk assessment, monitoring, communication and information on financial

reporting quality. The theory was propounded by Pfeffer and Salancik (1978). They explained that a firm's behaviour could be significantly affected by the external resource they possess. It can go to the extent of accepting change by negotiating with the external environment to secure a resource for its survival. Several studies have validated this theory, including Heide, 1994; Paloviita & Luoma-aho, 2010; Jum'a, Zimon, & Ikram, 2021; Ikegwuru & Henshaw, 2020.

3.1   Research Approach, Data Source and Method

The study uses a mixed approach because it combines three data from primary and secondary sources. The research method adopted is an interpretive post-action multiple case study. The choice of the technique is influenced by the fact that the study is a multiple and single reality research that directs its research questions to participants who have experienced the problem investigated and to historical documents, which are, in this case, the financial statements of the sampled firms for various years.

3.2 Research Design: The research design for the study is a bilateral convergent paralleled mixed design. The design was chosen because the study uses three types of data; qualitative (collected from participants using unstructured interviews), quantitative (historical, sourced from the statement of income, assets and liabilities) and quantified (sourced from the preliminary reports). The design was selected because the quantitative and quantified data were collected and extracted simultaneously but analysed separately, made a comparative analysis and reported the findings together.

3.2.1 Population and Sample Size and Technique of Data Analysis

Because the data collection and extraction were done simultaneously, it was possible to make a sample for primary data collection by taking 10% of the population of the 79 listed manufacturing firms,s and 7.9 were arrived at. The choice of selecting 10% is influenced by the positions of Boyd (2001) and Creswell's (1998) recommendation of two to ten participants as satisfactory for a primary data collection study. The research assistants could interview 6 (4 former and two serving) directors at their convenience who agreed on the names of their companies not to be mentioned as well as their names. For the quantitative data extraction, a census of the population was taken as the sample

for the period 2011-2020. The choice of the period is influenced by the regulator's efforts on reposition firms towards achieving financial reporting quality. The research separately analysed the qualitative data using reduction, categorisation and interpretation techniques. For the quantitative analysis, multiple regression techniques were used because the study has 5 IVs and 1 DV.

3.2.2   Variable Measurement and Model Specification

It is important to note here that the unstructured qualitative data collected are not variables, but the quantitative data are. Residuals of Collins et al, (2017) model ,which is the first model specifie,d are used to measure financial reporting quality in thselecteded second model. Kwanbo and TTanko's(2018) ratio of the index on monitoring, information and communication are adopted, while the total size and proportion of independent directors are used to measure the control environment and control activity and RA is measured as a dichotomous variable. Table 1 presents the measurement. Immediately after the table are the research models.

Table 1 variable measurement

Variables	Acronyms	Type of Variable	
Financial Reporting Quality	FRQ	Dependent Variable	Absolute Residuals Collins, Pungaliya, & Vijh, (2017)
Control Environment	CE	Independent Variable	Total Number of Directors(Nesrine and Abdelwahed 2011)
Control Activity	CA	Independent Variable	The proportion of Independent Directors (Uwalomwa et al. 2018)
Risk Assessment	RA	Independent Variable	1 for the presencean of accounting expert on the board otherwise 0 (Kankanamage 2015)
Information and Communication	I & C	Independent Variable	Information and communication index disclosure ratio of actual scores to the expected scores (Kwanbo and Tanko 2018)
Monitoring	MO	Independent Variable	Monitoring index disclosure ratio of actual scores to the expected scores (Kwanbo and Tanko 2018)
Firm Size	FSZ	Control Variable	Natural log of Assets (Al-Sraheen 2014)

Source: Researchers creation, 2022

As mentioned earlier, two models are used in this study. The residuals of Collins, Pungaliya, & Vijh, (2017) are used to measure financial reporting quality in Equation (1).

$$TA_{it}/A_{it} = \beta_0 + \beta_1(1/A_{it-1}) + \beta_2(\Delta REV_{it} - \Delta REC_{it}/A_{it-1}) + \beta_3(PPE_{it}/A_{it-1}) + \beta_4(ROA_{it}) +$$
$$\beta_5(SG_{it}) + \varepsilon_{it} \tag{1}$$

where:

$TA_{i,t-1}$	Total assets at the end of the fiscal period t-1 for firm i,
A_{it}	Assets during the fiscal period t for firm i
$\Delta REV_{i,t}$	Change Revenues in year t, less the revenues from year t-1, for firm i,
$\Delta REC_{i,t}$	Change Receivables in year t, less the revenues from year t-1, for firm i,
$PPE_{i,t}$	Property, plant and equipment/average assets in period t for firm i,
$ROA_{i,t}$	Net income/average assets in period t for firm i,
SG_{it}	Sales in year t, less sales from year t-1, for firm i/sales in year t.
ε_{it}	Error in the course of the year t, for firm i,
β_1 to β_5	coefficients of the parameters for firm i,

The second model is specified below:

$$FRQ_{it} = \beta_0 + \beta_1 CE_{it} + \beta_2 CA_{it} + \beta_3 RA_{it} + \beta_4 I\&C_{it} + \beta_5 MO_{it} + \beta_6 FZ_{it} + \mu_{it} \tag{2}$$

where

FRQ	Financial reporting quality
CE	Control environment
CA	Control activities
RA	Risk assessment
I&C	Information and communication
MO	Monitoring
FZ	Firm size
β_0	Constant
β_1-β_5	Coefficient of parameters
μ	Error term

4.   Results and Discussion

This section presents the results and discussion. Firstly the analysis of the qualitative data results are presented in Tables 2 and 3 and then the quantitative data results in Table 4 afterwards a comparative analysis of the finding and discussion of both the qualitative

and quantitative findings leading to addressing the research questions and hypotheses testing is reported. Table 2 shows the interviewees' status, board membership experience and qualification of the directors.

Table 2 Interviewees
Participants

Intervie wees	Former and Serving Directors	Membership Experience	Highest Qualification	Professional Qualification
1	Executive Director	6 years	BSc	NIM
2	Independent Director	5 years	BSc	NIPS
3	Nonexecutive Director	4 years	MBA	NIMC
4	Independent Director	5 years	MBF	CIBN
5	Nonexecutive Director	7 years	HND	CIEN
6	Executive Director	5years	MSc	NIQS

Tables 3 show the theme and findings from the interview. Columns 1 and 2 of the tables show the emerged themes and also findings. Columns 3 to 8 show the participant numbers indicated in table 2. The columns are used to reveal which participant the theme originates from and is indicated with small letter **x**.

Table 3 Interviewees

Theme: Inadequate procedures and codes of governance to achieve financial reporting quality		Interviewees from table 2					
Themes	**Findings**	**1**	**2**	**3**	**4**	**5**	**6**
Inadequate BOD and complexity of structures	Then the code did not specifically state the maximum board members but the minimum. Board members also serve on other boards of less than 5, 6 and 8 members thus attention deficit is experience in proper monitoring of quality reporting.	x		x	x	x	x
	Having more branches to oversee is a herculean tax when the board is small with 4, 5, 6 members.	x		x	x	x	x
	Where structures are set up to achieve reporting objectives the complexity of such structures inhibited achieving that because board members were proxy and in some cases not large enough to withstand such complexity.			x	x	x	x
Weak board independence	The experience is having only one independent director or none and more of nonexecutive directors. This has a way of reducing the independence of the board in monitoring and controlling activities	x		x	x	x	x
Lack of finance and accounting expertise	Instituting an ICS over FRQ is our responsibility. However, while we are able to do that, members of the BOD do not really have the knowledge of preparing accounts and interpreting them because their background is not accounting and finance	x		x	x	x	x
Board oversight and communication	Being a member of the audit committee will grant you access to both the internal and external auditors on grey areas that can prevent quality reporting. Monitoring is difficult with compounding activities using a small member committee of audit which serves the board.	x	x		x	x	

	Communication is effective and efficient when members get reports on time before scheduled meetings for meaningful inputs; this is not obtainable most of the time.					x	x	x
Information	Financial and none financial information on the website and those issued at AGM and within and outside the company achieves the objective of quality reporting.	x	x	x	x	x	x	

In explaining the inadequacy of the internal control system procedures for the control environment and activities to achieve FRQ, **interviewee 6** expressed that *'in clear terms between 2011 -2015 during the time he was a member of the board, codes then did not state maximum number of members on board but the emphasis was members not to be less than 5'*. Also, **interviewee 4** revealed that *'board members of less than 4 and 5 were experienced because he served on different board to make up for the minimum size required and for a complex company monitoring and control was a serious tax that inhibited achieving quality reports'*. **Interviewee 2** revealed that' *having the financial and accounting expertise to be able to interpret or understand the process involved in the preparation of financial statements coupled with the fact that independent director status was not really emphasized for the period he sat on different boards 2010-2016 were stumbling blocks to achieving quality reports because most board members did not have the background'*. On board oversight in monitoring, communication and information **Interviewee 5** expressed that '*financial and nonfinancial information displayed on website and revealed at AGM, within and outside the company is good, however, monitoring activities regarding FRQ require a large board that appoints a large audit committee, more so having transaction records sent to members on time before scheduled meeting is not always on time in real time due to complexity of operations which affects quality of reports.*

4.1   Quantitative Results

The cumulative R2 of 0.37, which is the multiple coefficients of determination, offers the proportion (percentage) of the total variation in the dependent variable (FRQ) as explained jointly by the independent variables. Therefore, it signifies that 37% of the total variation in FRQ of listed manufacturing firms in Nigeria is accounted for by the joint contribution of control environment, control activity, RA, C&I and MO. The Wald

Chi2 Statistics value of 138, for the model with a p-value of 0.00 which is statistically significance at 1% significance level indicated that the independent variables measurements are appropriately specified to predict the dependent variable (FRQ) of the study. Consequently, the model is fit for the study and that there is a very high chance that the associations among the study variables were not incidental. Similarly, the independent variables reliably explained the dependent variable as reported in table 4.

Table 4 Descriptive and Inferential Statistics

Variables	Mean	Std. Dev	Min	Max	Corr.	Coef.	P. values
FRQ	-0.2	0.51	-5.80	2.30	1		
CE	0.97	2.77	4.00	15.00	0.38	0.44	0.000
CA	0.58	0.16	0.10	0.93	-0.23	-0.12	0.000
RA	0.63	0.48	0.00	1.00	-0.37	-1.25	0.000
I&C	0.46	0.11	0.20	0.80	0.11	-0.08	0.028
MO	0.31	0.13	0.12	0.76	0.15	-0.24	0.000
FZ	16.57	2.38	6.91	23.93	0.19	0.19	0.017
Const.						-0.00	0.687
Estimation Test:							
Hettest	127						
Hettest Sig.	0.00						
Hausman	121						
Hausman sig	0.00						
Mean VIF	3.98						
R^2	0.37						
Wald Stats.	138						
Wald Sig.	0.00						

In Table 4, on the average FRQ is at -0.2 with minimum of -5.80 and a maximum of 2.30 values. The result shows that during the study period sampled firms experienced a 20% reduction in FRQ this was worse for some firms with -5% and some better quality at 23%. A standard deviation of 0.5 higher than the mean indicates ICS components can influence FRQ since the distance is not that wide.

On the average **control environment** is at 0.97 with minimum of 4.00 and a maximum of 15.00 values. The result shows that during the study period sampled firms experienced having a 9 member board, where most firms had minimum of 4 directors while few had 15 directors on board.

On the average **CA** is at 0.58 with minimum of 0.10 and a maximum of 0.93 values. The result shows that during the study period sampled firms experienced having a 58% independence of board controlling activities, where most firms had minimum of 10% independence some had 93% independence of board.

On the average **RA** is at 0.63 with minimum of 0.00 and a maximum of 1.00 values. The result shows that during the study period sampled firms experienced having a 63% risk assessment by directors with accounting expertise on the board, where most firms had no expert on board, some had at least 1on board. This is not surprising considering the study period includes those period when board members with accounting expertise was not an emphasis.

On the average **I&C** is at 0.46 with minimum of 0.20 and a maximum of 0.80 values. The result shows that during the study period sampled firms experienced having 46% information and communication activities, where some firms experienced 20%, some had 80% experience which is good.

On the average MO is at 0.31 with minimum of 0.12 and a maximum of 0.76 values. The result shows that during the study period sampled firms experienced having 31% monitoring activities, where most firms experienced 12%, some had 76% experience which is good.

4.2   Comparative Analysis

The research design used to answer the research questions requires analysis of both data (see tables 2 and 3 for qualitative analysis and table 4 for quantitative analysis) to be compared so that the differing and similarity pattern in addressing the questions shown in the 4th column of table 5 can be clearly seen and the ease of reporting both findings together is established.

Table 5 Comparative Analysis

	Questions	Results		Findings
		Qualitative	*Quantitative*	
1	Is the control environment control environment adequately positioned to improve FRQ of Nigerian listed firms?	Not adequate in the early part of the study period due to small size of board, complexity of operations	On the average firms had 9 member board, where most firms had minimum of 4 directors while few had 15 directors on board	control environment is comparatively adequate
2	Can control activity CA of Nigerian listed	Having only one independent director or none and more of	On the average firms had 58% independence of board controlling	Comparatively, the independence of the board is

	firms enhance their FRQ?	nonexecutive directors. This has a way of reducing the independence of the board in monitoring and controlling activities	activities, where most firms had minimum of 10% independence some had 93% independence of board	above average; CA is above average
3	Do Nigerian listed firms have adequate financial and accounting risk assessment RA, experts on board to guarantee FRQ?	members of the BOD do not really have the knowledge of preparing accounts and interpreting them because their background is not accounting and finance	On the average firms had 63% risk assessment by directors with accounting expertise on the board, where most firms had no expert on board, some had at least 1on board	Comparatively, the expertise of the board is adequate because 2016-2020 of the sampled period experts where on most BOD. RA is adequate
4	Are the monitoring MO procedures of Nigerian listed firms adequate enough to achieve FRQ?	Monitoring is difficult with compounding activities	On the average firms had 31% monitoring activities, where most firms experienced 12%, some had 76% experience	Comparatively, MO activities are not adequate because most firms experienced less MO
5	Do Nigerian listed firms have effective information and communication I&C procedures that can efficiently achieve FRQ?	Financial and none financial information are disclosed on the website and Communication is effective and efficient when members get reports on time before scheduled meetings for meaningful inputs	On the average firms had 46% information and communication activities, where some firms experienced 20%, some had 80% experience	Comparatively, I&C procedures are below average because few firms experienced more than most firms in the study period

4.3   Addressing Questions and Hypotheses Testing

On research question 1: Is the control environment control environment adequately positioned to improve FRQ of Nigerian listed firms? Yes considering the study period and primary data collected the findings on table 3 and specifically table 4 shows a standard deviation of 2.77 higher than the mean indicates control environment that consists of a small board cannot influence FRQ since the distance is that wide, this was revealed in table 3. This is why the coefficient value of 0.44 indicates that an increase of a director on board increases FRQ by 44% which reveals a significant relationship at 1% because of the p-value is 0.00 and a correlation value of 0.38. In line with this finding **H0$_1$** is rejected and is supported by the studies of Murwaningsari, Martani and Mayangsari (2021); Muhammad and Isah (2020); Ajao and Oluwadamilola, (2020); Salameh (2019); Kwanbo and Tanko (2018) and Kewo and Afiah (2017).

On research question 2: Can control activity of Nigerian listed firms enhance their FRQ? Yes considering the study period and primary data collected, the findings on table 3 and specifically table 4 shows a standard deviation of 0.16 lower than the mean indicates that CA coordinated by board with very high independence can influence FRQ since the distance is not wide this was revealed in table 3. However, the coefficient value of -0.12 indicates that an increase in number of independent directors on boards that have 93% independence reduces FRQ by 12% which reveals a significant relationship at 1% because of the p-value is 0.00. In line with this finding **H0$_2$** is rejected and is supported by the studies of Muhammad and Isah (2020); Ajao and Oluwadamilola (2020); Salameh (2019); Kwanbo and Tanko (2018); Akeju and Babatunde (2017) and Widyaningsih (2016).

On research question 3: Do Nigerian listed firms have adequate financial and accounting risk assessment RA, experts on board to guarantee FRQ? Yes considering the study period and primary data collected, the findings on table 3 and specifically table 4 shows a standard deviation of 0.48 lower than the mean indicates that RA that are coordinated by board with accounting expertise can inhibit not achieving FRQ since the distance is not wide. However, the coefficient value of -1.25 indicates that an increase in number of directors without accounting expertise to assess risk of not achieving FRQ reduces FRQ by 125%, which is terrible. This was revealed in table 3. The p-value of 0.00 reveals a significant relationship. In line with this finding **H0$_3$** is rejected and is supported by the studies of Kaawaase, Nairuba, Akankunda and Bananuka, (2021) and Salameh (2019); but did not support the findings of Ajao and Oluwadamilola (2020);Nichita (2018); Onuorah and Imene (2016); Yudianti and Suryandari (2015).

On research question 4: Are the monitoring MO procedures of Nigerian listed firms adequate enough to achieve FRQ? To some considerable extent yes bearing in mind the study period and primary data collected the findings on table 3 and specifically table 4 shows a standard deviation of 0.11 lower than the mean indicates that I&C that are coordinated by a large board with accounting expertise can inhibit not achieving FRQ since the distance is not wide. However, the coefficient value of -0.08 indicates that an increase in information and communication for firms with 80% experience reduces FRQ by only 8%, which is negligible. The p-value of 0.02 and a correlation coefficient of 0.11 reveal a significant relationship. In line with this finding **H0$_4$** is rejected and is supported

by the studies of Ajao and Oluwadamilola (2020); Salameh (2019); Lashgari, Abdulrahman and Bakhshayesh (2015) and Ramdany (2015) and is in contrast to the result of   Bachmid (2018) and Al-Dmour (2018).

On research question 5: Do Nigerian listed firms have effective information and communication I&C procedures that can efficiently achieve FRQ? To some considerable extent Yes bearing in mind the study period and primary data collected, the findings on table 3 and specifically table 4 shows a standard deviation of 0.13 lower than the mean indicates that I&C that are coordinated by a large board with accounting expertise can inhibit not achieving FRQ since the distance is not wide. However, the coefficient value of -0.24 indicates that an increase in monitoring activities for firms with 76% experience reduces FRQ by only 24%, which is not good. The p-value of 0.00 and a correlation coefficient of 0.15 reveal a significant relationship. In line with this finding **H0$_5$** is rejected and is supported by the studies of Al-Khonain and Al-Adeem (2020); Muhammad and Isah (2020); Almaqtari, Hashed, Shamim and Al-Ahdal (2020); Ajao and Oluwadamilola, (2020); Kwanbo and Tanko (2018); Umobong and Ibanichuka (2017); Akeju and Babatunde (2017). The findings however, is not in line with Eke (2018); Eyenubo, Mohamed and Ali (2017) and Onuorah and Imene (2016).

4.4   Implication of Findings

CE, CA, RA, MO, I&C findings shows that a large board with more independent directors with accounting expertise significantly influences FRQ in practice. Secondly, the policy regarding having an adequate board as large as 15 and having independent nonexecutive directors and nonexecutive directors with accounting expertise is adequately in the right direction. Thirdly, findings of the study validate the resource dependency theory that the size, independence and expertise of the board are resources that manufacturing firms relied on to achieve FRQ.

5. Conclusion and Recommendation

The study relied on a mix approach that has a unilateral convergent unparalleled mixed design to address the research questions raised. Based on the findings the study concludes that internal control system's control environment, CA, RA, MO, I&C matters in producing quality financial reports of listed manufacturing firms in Nigeria. The study

recommends for the practice of having a large enough board that consists of more independent nonexecutive directors with finance and accounting expertise coordinating the affairs of the complexity of the activities of Nigerian firms should be encouraged and sustained.

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