Effect of Non-Financial Disclosures on Performance of Non-Financial Firms’ in Nigeria

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Abstract

This study empirically investigated the effect of Non-Financial Disclosures on performance of non financial firms’ in Nigeria. The study is vital as it portrays the extent to which non financial disclosures influences firms’ performance. In order to determine the relationship between non financial disclosures (NFDs) and firms’ performance, NFDs key proxy variables were used in the study, namely Intellectual Capital Disclosure, Risk Management Disclosure and Corporate Governance Disclosure while firms’ performance on the other hand is represented by return on equity. Three hypotheses were formulated to guide the investigation and the statistical test of parameter estimates was conducted using panel regression model operated with STATA 15. Ex Post Facto design was adopted and data for the study were obtained from the Nigerian Stock Exchange Factbook and the published annual financial reports of the entire non financial firms quoted on NSE with data spanning from 2011-2018. The findings generally indicate that Intellectual Capital Disclosure, Risk Management Disclosure and Corporate Governance Disclosure have exerted significant influence on firms’ performance (ROE) at 5% significant level. Based on this, the study concludes that non financial disclosures have positively improved firms performance over the years. The study however suggests that firms should disclose more of these information in their annual reports concerning her corporate governance mechanism, working relationship with employees and the extent of risk management; as the level these information disclosures have exerted significant influence on firms performance over the years.

Keyword: Corporate Governance, Intellectual Capital, Risk Management, Firms Performance
1.0 Introduction

Information plays an important role in the corporate world as it can benefit companies in many ways (Katmum, 2012). The information provided in annual reports or corporate reporting includes financial and non-financial information (NFI). However, recent decades has witnessed the rise attention on NFI due to inadequacy of traditional financial information reporting to fulfill the need in assessing the organization value (PWC, 2017). Companies however have moved from passive to active information disclosure, from strict to know compliance disclosure to right to know complete disclosure and they are aspiring to link corporate strategy with one comprehensive stream of nonfinancial and financial data (Maxwell, Smith and Brewster, 2010).

The relevance and inclusion of non-financial information in corporate reporting contributes greatly to information transparency and is therefore an issue of great significance in economies throughout the world (Maroun, 2017). A growing number of organizations are publishing information evidencing the impact made by their activities on the environment, corporate governance, society, and human rights. This increased visibility of non-financial information has heightened awareness of the importance of these reports in reflecting organizational status and practices. Over recent years, the level of interest from stakeholders in corporate environmental, social and ethical performance has risen significantly. Non-financial information however enables businesses to be transparent in communicating these non financial aspects of their management and performance. It also enables business to be accountable to internal and external stakeholders for organizational performance towards the goal of sustainable development owing to continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce, their families, the local community and society at large (Mbabazi, Twesige, Claude and Jaya, 2015).

Mbabazi, Twesige, Claude and Jaya (2015) and Hervé and Luc (2018) argue that non financial information is as important as financial information in the decision-making process. Both pieces of information contain valuable insights that can yield interesting results if used correctly. The studies noted that investors disregard non financial information in their investment decision making and only fewer literature have addressed on its usefulness and relevance for investors’ decision making.

In Nigeria, non financial disclosures are regulated by code of corporate governance 2018 which covers all the categories of non financial disclosures (environment, governance, human resources, risk management and society); National Environmental Standards and Regulations Enforcement Agency (Establishment) Act 2007 & 2008; Environmental Impact Assessment Act 2004; Harmful Waste (Special Criminal Provision) Act 2004; Nuclear Safety and Radiation Protection Act 2007 etc which centered on review of regulations on air and water quality, discharge of effluents and other harmful substances as well as control of other forms of environmental pollution. These laws covered the environmental and societal aspect of non financial disclosures.

At international level, non financial disclosures have attracted considerable interest from a number of key stakeholders such as the United Nations Global Compact, the Global Reporting Initiative (GRI), the International Integrated Reporting Council (IIRC), the Sustainability Accounting
Standards Board (SASB), the Task Force on Climate-related Financial Disclosures (TFCD) and European Commission Guidelines on Reporting

Nevertheless, Global Reporting Initiative (GRI) guidelines on reporting principles and standard disclosures are still the most authoritative in the international arena (KPMG, 2017; Laura, Maria, and Helena, 2018). Based on a survey of the theoretical and empirical literature on GRI, the guideline on content index in accordance with G3 or G3.1 or G4 is strenuous but provides most effective result (Haller 2017). The guidelines however covered all the categories of non financial disclosures raging from environment, governance, human resources, risk management and society

The disclosure of non-financial information is a strategic action that fundamentally improves the communication of organizations with their stakeholders (Miska, Christof, Günter, and Mark, 2013). Thus, a recent study by Ernst and Young (2017) highlighted the major significance of this information for users, and pointed out that 38% of investors acknowledged making use of such reports in reaching their investment decisions and over the past two decades, there have been many ideas to improve business reporting, and nearly all of them focus on the importance of companies providing more NFI. Based on this observation, this, the present study is established to examine the relationship between non financial disclosures and performance of firms.

1.2 Statement of Problem

The issue of non financial information has been debated in the recent years, latest analyses by Mbabazi, Twesige, Claude and Jaya (2015) and Hervé and Luc (2018) reported that most investors disregard non financial information (NFI) disclosures in investment decision making process as it could not meet their expectations. Consistent with this argument, Ernst and Young (2017) pointed out that only 38 percent of investors acknowledged making use of NFI in reaching investment decisions as emphasis were on financial information. Odili (2018) also noted that ratio analysis and other interpretation techniques on the financial statements cannot measure all aspects of performance. For example, the effect of a business on the environment cannot be measured using financial criteria, but is increasingly regarded as an important aspect for investors’ decision making. Despite the continued use of financial information in the decision making by private sectors in Nigeria, there has been a continued failure of private entities in Nigeria. The study however expressed concerns over the significant rise in the need for non-financial reporting (NFR) in the recent years and its relevance for investors’ decision making is yet to be investigated.

Several stakeholders have also expressed concerns over the need for NFI to meet their expectations and not much have been done in academic literature in addressing the usefulness and relevance of non financial information disclosures for investors decision making.

In the developed nations, attempts were made as follows; Rahim, Atan and Amrizah (2017) and Abd. Hamid, Abdul Aziz, Dora and Said (2017) investigated intellectual capital disclosure (ICD) and firms’ performance in Germany and France respectively using disclosure index by GRI G4 and found insignificant effect. Deumes and Knechel, (2016) and Hashim and Koon (2016) found insignificant negative effect on risk management disclosure (RMD) and firms performance. On the contrary, Oliveira, Rodrigues and Craig (2015) found significant positive effect. Wan and
Sulong (2015) also reported that corporate governance disclosure (CGD) using disclosure index by GRI G4 did not correlate with financial performance of firms. In contrast, Rouf (2016) found that corporate governance disclosure (CGD) was positively related with firms’ profitability.

The previous literatures researched in the developed nations as shown above discussed non financial disclosures (NFDs) measured using IC, RM and CG independently which couldn’t meet the expectations of the investors (Rahim, Atan and Amrizah 2017; Deumes and Knechel, 2016; Hashim and Koon, 2016; Oliveira, Rodrigues and Craig, 2015 etc). Owing to the investors’ needs, those categories of non financial disclosures (IC, RM and CG) were combined to develop a model fit on Non Financial Disclosures ranging from human resources, risk management, to governance as there is a gap in knowledge on the joint effect of these categories of NFDs on firms’ performance in the developed nations.

In the developing nations, efforts were made in examining the usefulness and relevance of non financial information disclosures in meeting the expectations of the investors as follows;

Raheman, Salleh, Afza and Chek (2014) examined intellectual capital disclosure (ICD), risk management disclosures (RMD) and firms’ profitability and reported significant positive effect. This disagrees with Okoye (2016) who found insignificant effect between intellectual capital disclosure (ICD) and firms’ performance. Nahiba (2017) on the same note found significant positive effect between corporate governance disclosures and firms performance. Ismail and Rahman (2013) found significant positive relationship between risk management disclosures (RMD) and firms’ performance. In agreement, Yusuf (2016); reported significant positive effect on risk management disclosure (RMD) and firms’ performance.

As it can also be seen in the literature reviewed in the developing nations, the following lapses were noted; none of these studies adopted any guideline by international key stakeholders especially the GRI guideline on content index in accordance with G3or G3.1or G4 which stills the most authoritative in the international arena (KPMG, 2017; Laura, Maria, and Helena, 2018). Secondly, the studies covered only financial service sector, oil and gas sector, consumer goods sector and industrial goods sector. Thirdly, only the study of Raheman, Salleh, Afza and Chek (2014) attempted and covered 2 major categories of NFDs leaving the other categories unattended which calls for further investigation and no study had addressed on this in both developed and developing nations.

Based on these observations in both developed and developing nations, the present study adapted and modified the models of Okoye (2016), Wan and Sulong (2015) and Hashim and Koon (2016) into a model covering (governance, human resources and risk management) with reference to all the non financial firms quoted on Nigerian Stock Exchange. This is to capture the real effect of these categories of NFDs on firms’ performance in order to meet the expectations of the investors and also identify the category of NFI disclosure that has the highest level of influence on firm’s performance.

To achieve this purpose, the following hypotheses were formulated:
H\textsubscript{01}: Intellectual Capital Disclosure has no significant effect on firms' Performance  

H\textsubscript{02}: Risk Management Disclosure has no significant effect on firms' Performance  

H\textsubscript{03}: Corporate Governance Disclosure has no significant effect on firms' Performance  

2.0 Review of Related Literature  

2.1.1 Non Financial Disclosures  

In the recent decade, non financial information disclosure has witnessed and gained a growing attention and recognition in the developing and emerging nations due to inadequacy of traditional financial information reporting to fulfill the need in assessing the organization value (PWC, 2017). The study also pointed out that most top managers and executives in multinational companies believe that non-financial performance measures outweigh financial performance measures in terms of creating and measuring long-term shareholder value.

According to Yusuf (2016), non-financial disclosures are those metrics which include index scores, ratios, counts and other information not presented in the basic financial statements. Corporate organizations have moved from passive to active information disclosure, from strict to know compliance disclosure to right to know complete disclosure and they are aspiring to link corporate strategy with one comprehensive stream of non financial and financial data (Maxwell, Smith and Brewster, 2010).

According to Robb, Single, and Zarzeski, (2011), NFI disclosure is viewed as qualitative information in the companies’ reports which exclude financial statements and related footnotes. According to PWC (2017), non financial disclosures are used to reference all information outside the financial statements (metrics and narratives). It is recognized that NFDs may be an imperfect term as the information may ultimately have a financial dimension or impact.

The study of Okoye (2016) measured non financial disclosure using Intellectual Capital Disclosure (ICD). Risk Management Disclosure was used as a proxy for non financial disclosure by Ismail and Rahman, (2013), Rouf (2016) proxy non financial disclosure using Corporate Governance Disclosure

For the purpose of this research, the present study developed a model fit on non financial disclosures using the following Indexes; Intellectual Capital Disclosure (ICD), Risk Management Disclosure (RMD) and Corporate Governance Disclosure (CGD).

2.1.1.1 Intellectual Capital Disclosure  

The Intellectual Capital disclosure reflects the corporate performance whereby it encourages users’ better decision making and evaluation on the company for preceding periods as well as alleviating ambiguity as economic value derives from production of goods and creation of Intellectual Capital (Azman and Kamaluddin, 2009).
Intellectual Capital reporting has received significant attention among academics and research practitioners across the world (Abeysekera and Guthrie, 2014). It is recognized as a vital asset and value creator to companies in gaining a key source of competitive advantage compared to its competitors.

Stewart (2017) defines it as “Packaged useful knowledge”. Sullivan (2010) saw it as knowledge that can be converted into profit. Roos and Roos (2017) state that intellectual capital is sum of knowledge of its members and practical translation of this knowledge into brands, trademarks and processes. Edvinson and Malone (2011) define it as the possession of knowledge, applied experiences, organizational technology, customer’s relations and professional skills that provide a company with a competitive edge in the market.

According to Nigerian Code of Corporate Governance 2018, paying adequate attention to employees and occupational health and safety ensures successful long term business performance of the company.

The following is recommended by NCCG 2018 as regard to ICD:

- report on the management of safety issues including workplace accidents, fatalities, occupational and safety incidents;
- plans and strategy for addressing and managing the impact of serious diseases on the company’s employees and their families;
- training initiatives, employee development and the associated financial investment;

The position of Global Reporting Initiative (G4-LA2, LA5, LA6, LA7 and LA8) on adequate disclosure on intellectual capital is as follows:

- report on the benefits which are standard for full-time employees of the organization and availability of skills needed to achieve goals
- report on availability and applicability of information systems, knowledge applications, databases, processes and other infrastructure
- report on knowledge embedded in business network, which includes connections outside the organization
- Percentage of total workforce represented in formal joint management committees that help monitor and advise on employees-customers-supplier relations
- Workers who are involved in occupational activities who have a high incidence or high risk, talent and know-how of employees needed to achieve goals

2.1.1.2 Risk Management Disclosure
In recent years, the importance of risk management has been evidenced in the corporate sector. Risk management is important because effective risk management improves the company’s performance by contributing to reduce fraud, managing potential threats, and more efficient use of resources. Taking and managing risk is the very essence of business survival and growth (Axelos Global Best Practise, 2014).

In addition, risk management is a useful measure that enables good corporate governance. A good corporate governance is concerned with the balance of power between the various stakeholders involved in the business and with the way in which the organization is governed (Acharya and Clement, 2011).

Risk disclosure however helps to mitigate information asymmetry and reduce stakeholder conflicts between shareholders and management. Furthermore, risk reporting is seen as a useful instrument of change management as well as an important instrument of accountability for management (Linsley and Shrives, 2014).

According to Nigerian Code of Corporate Governance 2018, a sound framework for managing risk and ensuring an effective internal control system is essential for achieving the strategic objectives of the Company. The following are recommended by NCCG 2018 as regard to RMD;

The Board should ensure the establishment of a risk management framework that:

- defines the Company’s risk policy, risk appetite and risk limits; and
- identifies, assesses, monitors and manages key business risks to safeguard shareholders’ investments and the Company’s assets;
- formally approve the risk management framework and ensure that it is communicated in simple and clear language to all employees;
- ensure that the risk management framework is integrated into the day-to-day operations of the business and provide guidelines and standards for management of key risks;
- articulate, implement and review the Company’s internal control systems to strengthen the risk management framework;
- conduct at least annually, or more often in companies with complex operations, a thorough risk assessment covering all aspects of the Company’s business and ensure that mitigating strategies have been put in place to manage identified risks;
- obtain and review relevant reports periodically to ensure the ongoing effectiveness of the Company’s risk management framework;
- ensure that the Company’s risk management framework is disclosed in the annual report; and
• ensure that the risk management function is headed by a member of senior management who is a professional with relevant qualifications, competence, objectivity and experience.

The position of Global Reporting Initiative (G4-2a-e) on risk management for its effectiveness is as follows

• Description of the most important risks and opportunities for the organization arising from sustainability trends

• Prioritization of key sustainability risks and opportunities according to their relevance for long-term organizational strategy, competitive position, qualitative, and (if possible) quantitative financial value drivers

• Description of governance mechanisms in place specifically to manage these risks and opportunities, and identification of other related risks and opportunities

• Targets for the next reporting period and medium term objectives and goals (that is, 3–5 years) related to key risks and opportunities

• Description of sustainability trends, risks, and information system opportunities on the long-term prospects

2.1.1.3 Corporate Governance Disclosure

Corporate governance is the way an organization is directed, administrated and controlled. According to Blair (2015), corporate governance refers to the whole set of cultural, legal and institutional arrangements that determine what organizations could do, who controls them, how that control is exercised, and how the risks and return from the activities they undertake are allocated. In addition, the corporate governance structure specifies the distribution of rights and responsibilities among different participants in the organization, such as the board, managers, shareholders and other stakeholders, and spells out the regulations and procedures for making decisions on corporate affairs. Corporate governance covers a wide range of arrangements and aspects and scholars classify them into internal and external mechanisms.

According to Nigerian Code of Corporate Governance 2018, to ensure that corporate governance practices are adequate and effective, the following are recommended

• The Board should ensure that an annual corporate governance evaluation, including the extent of application of this Code, is carried out. The evaluation should be facilitated by an independent external consultant at least once in three years.

• The summary of the report of this evaluation should be included in the Company’s annual report and on the investors’ portal of the Company.
The Board should approve policies that articulate and give effect to its direction on fair, responsible and transparent remuneration.

The Board should assume responsibility for the governance of remuneration by setting the direction for how remuneration should be addressed on a Company-wide basis.

The remuneration policy should be designed to attract, motivate, reward and retain high performing human capital.

The Board should periodically confirm that the implementation and execution of the remuneration policy achieves its objectives.

The position of Global Reporting Initiative (G4-34, G4-35, G4-38, G4-45, and G4-46) on corporate governance for its effectiveness on the other hand is as follows;

These Standard Disclosures should provide an overview of:

- Report on the process of delegating authority for economic, environmental and social topics from the highest governance body to senior executives and other employees.
- Description of governance structure of the organization, including committees of the highest governance body. Identify any committees responsible for decision-making on economic, environmental and social impacts.
- Report on the composition of the highest governance body and its committees by executive or non-executive, independence, tenure on the governance body etc.
- Description of highest governance body’s role in reviewing the effectiveness of the organization’s risk management processes for economic, environmental and social topics.
- Report on the highest governance body’s role in the identification and management of economic, environmental and social impacts, risks, and opportunities.

2.1.2 Firms Performance

Financial performance is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. This term is used as a general measure of a firm’s overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation (Okeke, 2015).

There are many different ways to measure financial performance, but all measures should be taken in aggregation. Line items such as revenue from operations, operating income or cash flow from operations can be used, as well as total unit sales. Furthermore, the analyst or investor may wish to look deeper into financial statements and seek out margin growth rates or any declining debt.

For the purpose of this study, one accounting based measurement (ROE) was used. i.e Return on Equity (ROE) was used to measure financial performance as used by Oliveira, Rodrigues and Craig, (2015), Raheman, Salleh, Afza and Chek (2014). This was captured as Net Profit After Tax divided by Total Equity i.e (ROE) This is expressed mathematically as:

\[
\text{ROE} = \frac{\text{NPAT}}{\text{Total Equity}}
\]

**Figure 1: The Diagram of Conceptual Framework**

**2.2 Theoretical Framework**

**2.2.1 The Legitimacy Theory**

This study employs legitimacy theory as a theoretical framework. This theory was propounded by Donavan in the year 1984. The legitimacy theory presents two basic ideas whereby corporate organizations need to legitimize their activities and this legitimacy process provides benefits to the organization. Disclosing quality Non Financial Information is a way for companies to legitimize their activities. The benefit from the legitimacy process is represented by firm’s profitability. Legitimacy theory presumed that a corporation will act to ensure that its activities and actions were congruent with whom it believed has the necessary attributes to affect the corporation’s image and ultimately, existence (Donavan, 1984).

Suchman (1995) described legitimacy theory as a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs and definitions. Using the legitimacy perspective, firms voluntarily disclose non financial information to show that they are conforming to the expectations and values of the society within which they operate. According to Guthrie and Parker (2009), they argue that...
if the legitimacy explanation holds true, the corporate disclosure policies will react to major social and environmental events.

On the other hand, the theory suggests that social expectations no longer rests upon mere generation of profit but has broadened to include health and safety of employees and local communities as well as concern for the natural environment. Therefore, firms need to provide voluntary information to meet the broad expectations of society relating to employee welfare, community and the treatment of the natural environment. Hence the study is anchored on Legitimacy theory.

2.3 Empirical Review

2.3.1 Intellectual Capital Disclosure and Firms’ Performance

Okoye (2016) on the nexus between non financial information and performance of firms listed on consumer goods sector of NSE, measured non financial information using intellectual capital disclosure (ICD) with dummy variables and explored the test tool of simple regression and found insignificant effect between ICD disclosure and firms performance measured by ROE.

Raheman, Salleh, Afza and Chek (2014) on non-financial information disclosures and its Influence on Firms’ Profitability in Malaysia used regression model and content analysis and measured non financial information disclosure using intellectual capital disclosure and risk management disclosure index and found that intellectual capital information disclosure and risk management disclosure is positively and significantly related with firms profitability measured by ROA and ROE.

This is not in agreement with the findings of Damarchi, Amiri and Rezvani, (2012) whose study was on effect of Disclosure and Reporting of Intellectual Capital on performance of firms in Italy. The study measured performance using ROA and carried out the analysis using OLS and argued that disclosure and reporting on intellectual capital was negatively and insignificantly related with ROA.

The above finding is in agreement with the study of Rahim, Atan and Amrizah, (2017) whose study was on the relationship between non financial disclosures and financial performance of listed manufacturing firms in Germany used the variable of intellectual capital disclosure. The study also adopted word count content analysis and explored regression model and found that intellectual capital reporting in Germany technological industries does not related or have effect on performance.

This is not in tandem with the research by Deep and Narwal, (2014) on Intellectual Capital and its Association with Financial Performance in Indian textile firms. The study used OLS with word count content analysis and found that IC disclosure significantly associated with firm’s performance.
Abd. Hamid, Abdul Aziz, Dora and Said (2017) whose study concentrated on intellectual capital disclosure and performance of firms in France. The study used simple regression model and found that there is an insignificant negative association between ICD and firms performance over the years.

2.3.2 Risk Management Disclosure and Firms’ Performance

Yusuf (2016) in his study on effect of non financial disclosure on profitability of firms listed on industrial goods sector of NSE measured non financial information using risk management (RM) disclosure with dummy variables and explored the test tool of regression model and found significant positive effect between risk management (RM) disclosure and firms profitability. The study however concludes that non financial disclosures have exerted significant influence on firms’ performance over the years.

The study by Ismail and Rahman, (2013) concluded that the overall score for RM disclosure among public listed companies in Bangladesh is 53%, demonstrating that there are rooms for improvement on the level of risk disclosure. The study explored simple regression model and however notes that risk management disclosures positively associates with firms performance.

This is also in agreement with the study of Oliveira, Rodrigues and Craig, (2015), who investigated the level of risk management disclosure in Australia and explored the statistical tool of logistic regression and found that risk management disclosure is closely related to firms profitability measured by ROE.

This contradicts with the finding of Deumes and Knechel (2016) who investigated Risk Management Disclosure on firms performance in Germany using simple regression, the study found that risk management disclosure level are too brief, vague and not sufficient for the stakeholders to make investment decision. The study concludes that RMD has no significant effect on firms’ performance.

This agrees with the study of Hashim and Koon (2016) who investigated on the effect of risk management disclosures on performance of listed Germany used the variable of risk management disclosure and ROA, the study also used OLS and found negative association between risk management and ROA. Based on this, the study concludes that non financial disclosures have no effect on firms performance.

Raheman, Salleh, Afza and Chek (2014) on non-financial information disclosures and its Influence on Firms’ Profitability in Malaysia used regression model and content analysis and measured non financial information disclosure using intellectual capital disclosure and risk management disclosure index and found that intellectual capital information disclosure and risk management disclosure is positively and significantly related with firms profitability measured by ROA and ROE.

2.3.3 Corporate Governance Disclosure and Firms’ Performance
The study of Rouf (2016) on CG disclosure and financial performance non-financial listed companies in Japan used the annual reports of selected listed companies and the collected data analyzed using Ordinary Least Square method of estimation. The results indicated that Corporate Governance Disclosure was positively correlated with the profitability measure by ROE and ROA.

Popa, Blidi and Bogdan (2009) who examined CGD disclosure in Romania using logistic regression. The study evidenced that investor’s sees social and environmental information as an important tool in making investment decisions and hence demand adequate disclosure of such information.

Aylin, Tuba and Lale (2014) in their study on effect of non financial information on financial performance of firms in Germany used simple regression model and found positive significant relationship between firms performance and Corporate Governance Disclosure. The study recommends that shareholders should not only consider firms profitability in making their decisions but also the firms level of Corporate Governance Disclosure which has implication on performance.

This disagrees with the study of Wan and Sulong (2015) on effect of non financial disclosures on performance of firms in Australia who used the variable of corporate governance disclosure and return on equity. The study established a significant negative association between corporate governance disclosures and firms performance.

This seems agreeable with the study of Nnamani (2017) whose study was on effect of corporate governance disclosure on firms performance in Nigeria. The study found insignificant negative association between corporate governance disclosures and firm’s performance.

2.4 Summary of Literature

The previous literatures researched in the developed nations as shown above discussed non financial disclosures measured (NFDs) using IC, RM and CG independently which couldn’t meet the expectations of the investors (Rahim, Atan and Amrizah 2017; Deumes and Knechel, 2016; Hashim and Koon, 2016; Oliveira, Rodrigues and Craig, 2015 etc). Owing to the investors’ needs, those categories of non financial disclosures (IC, RM and CG) were combined to develop a model fit on Non Financial Disclosures ranging from human resources, risk management, to governance as there is a gap in knowledge on the joint effect of these categories of NFDs on firms’ performance in the developed nations.

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As it can also be seen in the literature reviewed in the developing nations, the following lapses were noted; none of these studies adopted any guideline by international key stakeholders especially the GRI guideline on content index in accordance with G3or G3.1or G4 which stills the most authoritative in the international arena (KPMG, 2017; Laura, Maria, and Helena, 2018). Secondly, the studies covered only financial service sector, oil and gas sector, consumer goods sector and industrial goods sector. Thirdly, only the study of Raheman, Salleh, Afza and Chek (2014) attempted and covered 2 major categories of NFDs leaving the other categories unattended which calls for further investigation and no study had addressed on this in both developed and developing nations.

Based on these observations in both developed and developing nations, the present study adapted and modified the models of Okoye (2016), Wan and Sulong (2015) and Hashim and Koon (2016) into a model covering (governance, human resources and risk management) with reference to all the non financial firms quoted on Nigerian Stock Exchange. This is to capture the real effect of these categories of NFDs on firms’ performance in order to meet the expectations of the investors and also identify the category of NFI disclosure that has the highest level of influence on firm’s performance.

3.0 Methodology

This study adopts ex-post facto design. This was adopted based on the fact that our data is secondary data that exists already which cannot be manipulated or controlled. The population of the study consists of the entire 112 non financial firms quoted on NSE as at 2019 business list covering from 2011-2018. The use of quoted companies on NSE could be justified based on availability and reliability of their financial data. Out of 112 firms that formed our sample size, 5 firms have empty financial information within the period under study (Golden Guinea Breweries Plc, Evans Medical Plc, Juli Plc, Multi-Trex Integrated Foods Plc and Nigerian German Chemical Plc) which was removed. Based on this, a total of 107 firms formed our sample size with 856 observations.

The study employed panel data from secondary sources which are quantitative in nature. The data were obtained from the NSE Factbook and annual reports and accounts of the firms. The technique of data analysis employed in this study is the panel regression analysis. The study adopted this technique to ascertain the effect of the firm non financial disclosures (ICD, RMD & CGD) on firms’ performance which was measured using return on equity (ROE). The data was analyzed using STATA 15 statistical package, and the outcome was used to test the hypothesis formulated for the study after conducting necessary tests. Various robustness tests such as test for multicollinearity between the independent variables were carried out to improve the validity of the results obtained.

3.1 Operationalization and Measurement of Variables
3.1.1 Dependent Variable

The dependent variable in this study is Firms’ Performance and it was proxy and measured using Return on Equity. This is in harmony with the works of Oliveira, Rodrigues and Craig, (2015). Return on Equity is captured as Net Profit After Tax (NPAT) measured by Total Equity.

3.1.2 Independent Variable

The independent variables of Non Financial Disclosures were proxy using Intellectual Capital Disclosure (ICD) as used by Okoye (2016), Risk Management Disclosure as used by Ismail and Rahman, (2013) and Yusuf (2016), and Corporate Governance Disclosure as used by Rouf (2016).

The independent variables are therefore measured as follows:

3.1.2.1 Intellectual Capital Disclosure (ICD)

Intellectual Capital Disclosure is measured using disclosure index adopted from the Global Reporting Initiative as exposited in the study of Rahim, Atan and Amrizah (2017), Abd. Hamid, Abdul Azizi, Dora and Said (2017). A dichotomous procedure by (GRI) was applied in scoring the items whereby specifically, a “1-point” score was awarded for each item that is disclosed in the annual report and otherwise, a “0-point”.

3.1.2.2 Risk Management Disclosure (RMD)

Risk Management Disclosure is measured using disclosure index adopted from the Global Reporting Initiative as used in the study of Deume and Knechel (2016), Hashim and Koon (2016), Oliveira, Rodrigues and Craig (2015). A dichotomous procedure by (GRI) was applied in scoring the items whereby specifically, a “1-point” score was awarded for each item that is disclosed in the annual report and otherwise, a “0-point”.

3.1.2.3 Corporate Governance Disclosure (CGD)

Corporate Governance Disclosure is measured using disclosure index adopted from the Global Reporting Initiative as exposited in the study of Wan and Sulong (2015), Rouf (2016). A dichotomous procedure by (GRI) was applied in scoring the items whereby specifically, a “1-point” score was awarded for each item that is disclosed in the annual report and otherwise, a “0-point”.

3.2 Model Specification

In line with the previous researches, the researcher adapted and modified the Models of Okoye (2016), Hashim and Koon (2016) and Wan and Sulong (2015) in determining the effect of non financial disclosures on firms’ performance. This is shown below as thus:

Okoye (2016): \[ ROE = \beta_0 + \beta_1ICD + \mu \]
Hashim and Koon (2016): $\text{ROA} = \beta_0 + \beta_1 \text{RMD} + \mu$ \hfill 11

Wan and Sulong (2015): $\text{ROE} = \beta_0 + \beta_1 \text{CGD} + \mu$ \hfill 111

Where:

ROE = Return on Equity

ICD = Intellectual Capital Disclosure

RMD = Risk Management Disclosure

CGD = Corporate Governance Disclosure

The explicit form of the regression modified for the study is expressed as thus:

Model 1: $\text{ROE}_{it} = \beta_0 + \beta_1 \text{ICD}_{it} + \beta_2 \text{RMD}_{it} + \beta_3 \text{CGD}_{it} + \mu$

4.0 Results and Discussion

This section presents the results from the analysis of data and its interpretation

Table 1: Descriptive Statistics

<table>
<thead>
<tr>
<th>Variables</th>
<th>Observations</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Median</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\text{ROE}$</td>
<td>856</td>
<td>.7242056</td>
<td>.681014</td>
<td>0.0245</td>
<td>1.8210</td>
<td>4.5022</td>
</tr>
<tr>
<td>$\text{ICD}$</td>
<td>856</td>
<td>1.664486</td>
<td>.675340</td>
<td>1.2343</td>
<td>1.4235</td>
<td>4.1345</td>
</tr>
<tr>
<td>$\text{RMD}$</td>
<td>856</td>
<td>3.604224</td>
<td>.583284</td>
<td>0.5452</td>
<td>.8123</td>
<td>11.8127</td>
</tr>
<tr>
<td>$\text{CGD}$</td>
<td>856</td>
<td>1.043028</td>
<td>1.808551</td>
<td>0.1232</td>
<td>.9322</td>
<td>12.9328</td>
</tr>
</tbody>
</table>

Source: STATA 15 Computational Results (2020).

The table 4.1 above shows that the mean value of return on equity (ROE) among the sampled firms was 0.724. This implies that about 72.4% of the observations had no financial information disclosure items in their annual reports.

The mean value of intellectual capital disclosure (ICD), risk management disclosure (RMD) and corporate governance disclosure (CGD) for the sampled firms’ were 1.66, 3.60 and 1.04 respectively. This implies that firms’ with ICD values of 1.66 poorly disclosed this information in their annual reports, firms with RMD values of 3.60 moderately disclosed this information in their annual reports while firms with CGD values of 1.04 poorly disclosed this information in their annual reports.
There is a high variation in maximum and minimum values of ICD which stood at 4.1345 and 1.4235 respectively; RMD stood at 11.8127 and 0.8123 respectively while CGD stood at 12.9328 and 0.9322 respectively. These wide variations in ICD, RMD and CGD values among the sampled firms justify the need for this study as we assume that firms with higher ICD, RMD and CGD values are higher profit making firms than those firms with low CGD and ED values.

**Table 2: Collinearity Statistics**

<table>
<thead>
<tr>
<th>Variable</th>
<th>VIF</th>
<th>1/VIF (TV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICD</td>
<td>1.73</td>
<td>0.577887</td>
</tr>
<tr>
<td>RMD</td>
<td>1.59</td>
<td>0.628201</td>
</tr>
<tr>
<td>CGD</td>
<td>1.02</td>
<td>0.976885</td>
</tr>
<tr>
<td><strong>Mean VIF</strong></td>
<td><strong>1.45</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: STATA 15 Computational Results (2020).

From the table above TV ranges from 0.58 to 0.98 which suggests non multi-collinearity feature. The VIF which is simply the reciprocal of TV ranges from 1.73 to 1.02 also indicates non multi-collinearity feature. Multi-collinearity feature according to Sabo, Rabi, Usman, Fatima, and Tijani (2015) exists when the value of TV is less than 0.20 or where VIF exceeds 10 i.e VIF>10

**Table 3: Ramsey Reset Test for Model**

. estat ovtest

Ramsey \textit{RESET} test using powers of the fitted values of ROE  
\textit{Ho:} model has no omitted variables  
\[ F(3, 847) = 5.32 \]  
\[ Prob > F = 0.7843 \]

The above result was obtained from the test for miss-specification or omitted variables using Ramsey \textit{RESET} Test. The probability value of 0.7843 resulting from the test implies that the model has no omitted variables.

**Table 4: Breush Pagan/Cook Weisberg Heteroskedasticity Test**
The above result was obtained from the test for heteroskedasticity. The probability value of 0.4180 resulting from the test for heteroskedasticity implies that the model is free from the presence of unequal variance. Thus implies that our probability values for drawing inference on the level of significance are reliable and valid. The absence of heteroskedasticity validates the panel regression model results, which means there is no need for robust or weighted least square regression.

4.1 Test of Hypotheses

Table 5: Panel Regression Result

<table>
<thead>
<tr>
<th>Variable</th>
<th>Co-efficient</th>
<th>T-value</th>
<th>P-value</th>
<th>Co-efficient</th>
<th>Z-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONSTANT</td>
<td>.8567834</td>
<td>3.40</td>
<td>0.000</td>
<td>.9567465</td>
<td>2.84</td>
<td>0.000</td>
</tr>
<tr>
<td>ICD</td>
<td>.0065678</td>
<td>5.12</td>
<td>0.000</td>
<td>.8564653</td>
<td>4.22</td>
<td>0.001</td>
</tr>
<tr>
<td>RMD</td>
<td>.0675673</td>
<td>4.89</td>
<td>0.042</td>
<td>.7565345</td>
<td>6.54</td>
<td>0.004</td>
</tr>
<tr>
<td>CGD</td>
<td>.7865674</td>
<td>2.16</td>
<td>0.000</td>
<td>1.8536423</td>
<td>7.09</td>
<td>0.000</td>
</tr>
</tbody>
</table>

R-Sq:
- Within: 0.4356
- Between: 0.5874
- Overall: 0.7102

Prob > F: 0.0020

HAUSMAN TEST: Prob > Chi2 = 0.0000

Note: * 5% level of significance
not preferred to fixed effect model at 5% level of significance. Based on this, we adopted the fixed effect panel regression results in drawing our conclusion and recommendations. Thus implies that the fixed effect results tend to be more appealing statistically when compared to the random effect. Following the above, the discussion of the fixed effect results became imperative.

The coefficient of determination “R-Square” shows 71.02% for the model which indicates that the variables considered in the model accounts for about 71.02% change in the dependent variable of ROE. Thus implies that the remaining 28.98% is as a result of other variables not addressed by this model.

The within R² of 43.56% which indicate that the model could account for 43.56% variations within the panel units. Thus implies that only 43.56 of intra-individual variability of the endogenous variable (ROE) is explained by exogenous variables (ICD, RMD & CGD). Also the between R² of 58.74% indicates that the models could account for just 58.74% variations between the separate panel units. Thus reflects that the contribution of the fixed effects in the model is equal to 58.74%.

The sig. (or p-value) for the Model is .002 which is below the .05 level; hence, we conclude that the overall model is statistically significant, or that the variables have a combined or joint effect on the dependent variable. With this, the researcher affirms the validity of the panel regression model adopted in this study.

4.2: Discussion of Findings.

In addition to the above, the specific finding from each explanatory variable from fixed effect regression model as shown on table 4.5.1 are provided below as follows:

**H01: Intellectual Capital Disclosure has no significant effect on firms’ performance.**

This hypothesis was tested and the result of the fixed effect regression model as exposited on table 5 indicate that the relationship between ICD and ROE is positive and significant with a P-value (significance) of 0.000 for the model which is less than the 5% level of significance adopted.

Likewise the result of positive coefficient of 0.0065 for the model is proving that an increase in firms’ IC increases ROE by 0.65%. Thus implies that firms with capital adequacy make higher profit.

We consequently rejected null hypothesis and accepted alternate hypotheses which contends that Intellectual Capital Disclosure has significant effect on firms’ performance. This observation is in tandem with the priori expectation of Raheman, Salleh, Ismail And Chek (2014), Deep and Narwal, (2014), Clarke, Seng and Whiting (2016), Chan (2019) who found that intellectual capital information disclosure positively and significantly related with firms profitability. This agreement with the findings supports legitimacy theory that disclosure of non financial information is associated with a lot of benefits shown on firms’ profitability.
this is not in agreement with the expectations of Okoye (2016), Diez, Majda, Begona and Alice (2016), Maheram, Muhammad and Ishmael (2019), Rahim, Atan and Amrizah, (2011) who found insignificant effect between IC disclosures and firms performance. The disagreement was based on the number of observations used in the present study.

**H02:** Risk Management Disclosure has no significant effect on firms’ performance.

This hypothesis was tested and the result of the fixed effect regression model as exposited on table 5 indicate that the relationship between RMD and ROE is positive and significant with a P-value (significance) of 0.042 for the model which is less than the 5% level of significance adopted. Likewise the result of positive coefficient of 0.0675 is proving that an increase in firms’ RM practice improves ROE by 6.75%. Thus implies that firms’ with effective risk management make higher profit.

We consequently rejected null hypothesis and accepted alternate hypotheses which contends that Risk Management Disclosure has significant effect on firms’ performance. This tends to agree with Ismail and Rahman, (2013) and Yusuf (2016), Raheman, Salleh, Afza and Chek (2013), Meek (2015), Ferguson (2016) who found significant positive effect. The agreement in the finding justifies legitimacy theory that disclosure of non financial information is associated with a lot of benefits represented on firms’ profitability.

This contradicts with the finding of Deumes and Knechel (2016) who found that RMD has no significant effect on firms’ performance. The disagreement was based on the sample for the study as the present study used 112 firms as against the smaller sample used by Deume and Knechel

**H03:** Corporate Governance Disclosure has no significant effect on firms’ performance.

This hypothesis was tested and the result of the fixed effect regression model as exposited on table 5 indicates that the relationship between CGD and ROE is positive and significant with a P-value (significance) of 0.000 for the model which is less than the 5% level of significance adopted.

Likewise the result of positive coefficient of 0.786 is proving that, an increase in firms’ CG practice while other remaining variables remain constant increases firms’ ROE by 78.6%. Thus implies that firms’ with effective corporate governance make higher returns.

We consequently rejected null hypothesis and accepted alternate hypotheses which contends that Corporate Governance Disclosure has significant effect on firms’ performance. The observation seems agreeable with the study of Rouf (2012) who concentrated on the listed companies in Japan and found that Corporate Governance Disclosure was positively correlated with the profitability. This also agrees with Elewechi (2018) who found significant positive association between corporate governance and financial performance of listed firms in UK. This is also in agreement with the priori expectations of Nahiba (2017), Aylin, Tuba and Lale (2014), Salami (2013), Uchenna and Alheri (2013). This agreement with the findings supports legitimacy theory that disclosure of non financial information is associated with a lot of benefits shown on firms’ profitability.
5.1 Conclusion

The study having developed a model fit on non financial disclosures using (ICD, RMD & CGD) captured that ICD, RMD and CGD have joint effect on firms’ performance. Based on this, the study concludes that non financial disclosures have significant influence on firms’ performance.

5.2: Recommendations

1. The study established that the level of firms’ intellectual capital improves performance. Based on this, the study suggests the need for quoted firms to disclose more of quality intellectual capital information in its financial reporting as it ensures higher return and IC is also crucial in competitive advantage and value creation. Firms would do well if they voluntarily disclose more information on this aspect.

2. The study also established that firms with effective risk management make higher profit. Thus the study recommends that firms should continue to improve on its voluntary disclosure on risk management in their reporting as it is essential for investors’ decision making.

3. The study also found CG disclosure having highest level of influence on firms’ return on equity, thus the study recommends that firms should continue to improve on its voluntary disclosure on corporate governance in order to uphold their market value

5.3: Contribution to Knowledge

- Literature on non financial disclosures and firms’ performance in both developed and developing nations as shown in the problem statement were greeted with different measurements. The studies discussed non financial disclosures measured using (IC, RM and CG) independently which couldn’t meet the expectations of the investors (Ramin, Klaus and Frank 2016; Rahim, Atan and Amrizah 2017; Wibowo, 2015; Pratten and Mashat, 2014; Kowaleski, 2014; Deumes and Knechel, 2016, Okoye, 2016, Yusuf, 2016, Nahuba, 2017 etc).

Owing to the investors’ needs, the present study combined these categories of NFDs (IC, RM and CG) in order to develop a model fit on Non Financial Disclosures ranging from human resources, risk management, to governance. Thus helped to determine the joint effect of non financial disclosures on firms’ performance so as to meet the expectation of the investors and also identify the category of NFI disclosure that has the highest level of influence on firm’s performance

- The present study adapted and modified the Models of Okoye (2016), Hashim and Koon (2016) and Wan and Sulong (2015) in determining the effect of non financial disclosures on firms’ performance. This is shown below as thus:

Okoye (2016): \[ \text{ROE} = \beta_0 + \beta_1 \text{ICD} + \mu \]  
Hashim and Koon (2016): \[ \text{ROA} = \beta_0 + \beta_1 \text{RMD} + \mu \]
Wan and Sulong (2015): \[ \text{ROE} = \beta_0 + \beta_1 \text{CGD} + \mu \]

The explicit form of the regression modified for the study is expressed as thus:

**Model 1:** \[ \text{ROE}_{it} = \beta_0 + \beta_1 \text{ICD}_{it} + \beta_2 \text{RMD}_{it} + \beta_3 \text{CGD}_{it} + \mu \]

The study contributed to knowledge by revealing that:

\[ \text{ROE}_{it} = \beta_0 + \beta_1 \text{ICD}_{it} (0.0065\{0.000\}) + \beta_3 \text{RMD}_{it} (0.067\{0.042\}) + \beta_4 \text{CGD}_{it} (0.786\{0.000\}) + \mu \]

By this implication, the study asserts that the overall model is statistically significant. The variables (ICD, RMD and CGD) have significant effect on the dependent variable (ROE).

**References**


Axelos Global Best Practice (2014). *Risk Management Disclosure*


GRI (2017). Reporting principles and standard disclosure requirements for elimination of reporting confusion


Nigerian Code of Corporate Governance (2018). Issued by financial reporting council of Nigeria in accordance with section 11 and 51 subsection c of the Act


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