

Corporate Non-Financial Disclosure Impact on Firm Performance

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Abstract: *Our study is on corporate non-financial disclosure NFD impact on firm performance (ROA). The research design used Ex Post facto Design and collected data from 10 listed industrial goods purposefully selected from the entire listed industrial goods in Nigeria Stock Exchange NSE from 2015-2019. We applied three independent variables of NFD: (Intellectual capital disclosure ICD, Risk Management Disclosure RMD, Corporate Governance disclosure CGD) and this is shown in qualitative form using sentences and words counts in the annual report of the sampled firms for the five year period. The data collated are analyzed using Descriptive Statistic, Multi-co linearity (VIF) test and Multiple Regression. Our findings show that NFD is significantly positive on firm performance. The three predictable variables show positive significant impact on firm performance ROA and indicate that: ICD as a NFD has significant and positive impact on ROA; RMD as a NFD has significant and positive impact on ROA; and CGD as a NFD has significant and positive impact on ROA in Nigeria industrial goods. We recommend legitimate practical guideline enforcement by government for firm managements to annually disclose their NFD and their contributions to sustainable economic development. We contribute with a new modernized model of (ICD, RMD and CDD) on NFD that significantly and positively impact on firm performance; and the enormous rich literature for academia.*

Keywords: Intellectual Disclosure, Risk Management, Corporate Governance, Non-Financial.

Background to the Study

There is a necessity for non-financial disclosure by firms in the annual financial statement. As regards this matter (ACCA, 2011) said that we have campaigned over a number of years for the obligatory disclosure by relevant entities of information on social and environmental matters, and welcomed the decision to incorporate disclosure requirements on these matters in the Companies Act 2006 (through the Business Review) and the Climate Change Act 2008. ACCA, (2011) made it known that they had participated in and supported the development by the Climate Change Disclosure Board of its new reporting framework, and are actively involved also in the work of the Global Reporting Initiative (GRI). On this premise, in December 2016, it was published as new regulations implementing the European Union Directive on disclosure of non-financial and diversity information (the 'Non-Financial Reporting Directive'). The regulations are the requirements for the Strategic Report and include diversity requirements in the Disclosure and Transparency Rules (DTR). These stated for financial years beginning on or after 1 January 2017. The two most popular international sustainability reporting standards are the Global Reporting Initiative (GRI) and US Sustainability Accounting Standard Board (SASB), (KPMG, 2017; Okwuosa & Ameshi, 2017).

The annual reporting requirement of corporate bodies includes financial and non-financial information. Companies however have moved from passive to active information disclosure, from strict to know compliance disclosure and to complete disclosure and they aspire to link corporate strategy with one comprehensive stream of non-financial and financial data (Maxwell, Smith and Brewster, 2010). There has the need for integration of non-financial disclosure in corporate reporting and this has been expected to contribute greatly to information transparency and is therefore an issue of great significance in economies throughout the world (Maroun, 2017). The disclosure of non-financial information is a strategic action that fundamentally improves the communication of organizations with their stakeholders (Miska, Christof Gunter, & Mark, 2013). Ernst and Young (2017) discovered the major significance of non-financial information disclosure for users, and noted that out of 38% of investors acknowledged that they were making use of such reports in making their investment decisions. Robert, (2017) found that during 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 non-financial disclosure.

The aim of non-financial disclosure however is to inspire transparent reporting standard and to promote corporate accountability and to build up good governance, (Ping, 2012). Not much research had been conducted previously to analyze the important of non-financial disclosure as an investor decision-making despite advocate's arguments on that area (Webb, Cohen, Nath, Hoff & Wood, 2009). During 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 non-financial information (Eccles, Robert, Serafein & Consulting, 2011). In the views of (Robb, Single and Zarzeski, 2011), non financial information disclosure is qualitative information in the, companies' reports which exclude financial statements and related footnotes (Robb, Single & Zarzeski, 2011). Literatures like (Wibowo 2015; Khiiveh, Nikhasherhi, Yousefi, & Haque. 2014) on corporate social responsibility disclosure found positive correlation between

Corporate Social Responsibility Disclosures and financial performance; while (Pratten & Mashat, 2014) found that Corporate Social Responsibility Disclosure is negatively related to firms return on investment. Deumes and Knechel, (2016) found that Risk Management Disclosure on firms performance in Germany is brief, vague and not sufficient for the stakeholders to make investment decision and as thus it has no effect on firms performance. Abd. Hamid, Abdul Aziz, Dora and Said (2017) found that Corporate Governance Disclosure did not correlate with financial performance. But, Rouf (2012) found that the Corporate Governance disclosure is positively related with the firms' profitability.

With these, we found a reason for the current study because prior literatures in other Nations have discussed non financial disclosures (Wibowo, 2015; Khaveh, Nikhashemi, Yousefi, & Haque, 2014; Pratten & Mashat, 2014; Deumes & Knechel, 2016) and found different results, i.e. their results varied with the various methods applied and various setting where the studied were carried out. We carry out this study corporate non-financial disclosure impact on firm performance using Nigeria listed companies to compare and contrast our result with the prior study findings.

The broad objective of our study is to determine corporate non financial disclosures impact on firms' performance using Nigeria listed firms. Other focuses of the study are: To determine the impact of Intellectual Capital Disclosure ICD on firms performance; To determine the impact of Risk Management Disclosure RMD on firms performance; and To determine the impact of Corporate Governance Disclosure CGD on firms performance.

The Research Hypotheses posited are as follows:

Ho i: Intellectual Capital Disclosure has no significant impact on firms' performance

Ho ii: Risk Management Disclosure has no significant impact on firms' performance

Ho iii: Corporate Governance Disclosure has no significant impact on firms' performance

Conceptual Framework

The Concept of Non Financial Disclosure

Sustainability reporting is the art of capturing the environmental, social, and governance footprints of private and public organizations. Being aware of, and managing, environmental, social and governance risks facing a business is fast becoming a global practice. The two most popular international sustainability reporting standards are the Global Reporting Initiative (GRI) and US Sustainability Accounting Standard Board (SASB), (Okwuosa & Ameshi, 2017). This helps investors, consumers, policy makers and other stakeholders to evaluate the non-financial performance of large companies and encourages these companies to develop a responsible approach to business. Directive 2014/95/EU – also called the non-financial reporting directive (NFRD) – lays down the rules on disclosure of non-financial and diversity information by large companies. This directive amends the accounting directive 2013/34/EU. Companies are required to include non-financial statements in their annual reports from 2018 onwards. Recently, 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. Yusuf (2016) defined non-financial disclosures as those metrics which include index scores, ratios, counts and other information not presented in the financial statements. Robb, Single, and Zarzeski, (2011) see it as qualitative information in the companies' reports which exclude financial statements and related footnotes. Rouf (2012) it is a company's social, environmental and human rights information. Pratten and Mashat (2014) views non financial disclosure as a way to improve risk management and long term social, environmental, financial performance and competitiveness. Craig and Diga, (1998) found that non-financial and social disclosures were superficially disclosed in ASEAN. They also observed that there were reasonable amount of disclosures which were mandated through policy but reluctance on disclosures related to labour and Employment, environmental activities, transfer pricing policies, government subsidies and value added as a result. Mathews, (2000) investigated social and environmental accounting and reviewed literature over a period of 25 years (1970-1995) and found that a lot of information is generated for the internal use of the management, but not for the stakeholders leave aside this being communicated. Then Robb, Single and Zarzeski, (2001) examined forward-looking information disclosures, strategy, trends and historical information comprising of environment around company, production & customers and found that companies with global focus discloses. Suttipun and Stanton (2012) found that stakeholder theory better explains environmental disclosures in developed and developing countries and they are disclosed only when they are mandated by the country regulations. Their study apart from regulations, enhanced customer loyalty, competitive advantage, customer concerns and an investor's right to information were also studied but regulation only was significant in ensuring stakeholder disclosures. In another course, Yeganeh and Barzegar (2014) studied the business challenges of managers due to increased social accountability compliance requirements and found a significant relationship between corporate social responsibility and financial performance of a business on both accounting and market based parameters. A study carried out by Hung, Shi and Wang (2015) on corporate social responsibility (CSR), employee, governance and environment and community perspectives in relation to investor confidence when these disclosures were voluntarily communicated and found that policy interventions are important to observe the effect of disclosures related to financial aspects as well as non-financial aspects of firm. Also, Sahore (4), (2015) investigated corporate social responsibility (CSR)

disclosures and their linkage with firm characteristics and found that the recent initiatives of Ministry of Corporate Affairs (MCA) and SEBI have lead to CSR emerging to be above compliance in Indian scenario. Further, Sahore and Verma (3), (2017) found size of the firm as represented by total assets to be significantly explaining variation in environmental disclosures by Indian firms but as far as clean energy initiatives are concerned it is the policy push, which has been instrumental in driving environmental disclosures. Finally, Agu and Amedu (2018) found that sustainability reporting i.e., economic, social and environmental reporting indexes may have insignificant effect but are positively or negatively associated with profitability proxies like Return on Assets (ROA), Return on Equity (ROE) and Net Profit Margin (NPM).

The study of Yusuf (2016) measured non financial disclosure using Corporate Social Responsibility Disclosure (CSR); while Okoye (2016) measured non financial disclosure using Intellectual Capital Disclosure (ICD). Again, Risk Management Disclosure was also used as a proxy' of non financial disclosure by (Ismail & Rahman, 2013) and (Rouf, 2012) proxy non financial disclosure using Corporate Governance Disclosure. Our study model uses Intellectual Capital (ICD), Risk Management (RMD) and Corporate Governance Disclosure (CGD),

Concept of Intellectual Capital Disclosure

Azman and Kamaluddin, (2009) indicated that Intellectual Capital disclosure reflects the corporate performance and this 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. ICD has received a significant attention among academics and research practitioners across the world (Abeysekera and Guthrie, 2014). This has been recognized as a vital asset and value creator to companies in gaining a key source of competitive advantage compared to its competitors. According to Bontis (2016) the adoption of human capital, structural capital and relational capital is the three basic dimensions of intellectual capital (ICD). In particular; ICD is described in one of its numerous and most famous definitions, as economic value of the combination of three categories of intangible assets as follows: i) Human capital (HC) is the availability of skills, talent and knowhow of employees that is needed to perform the routine tasks that are required by the firms' strategy. ii) Structural capital (SC) is the availability of information systems, knowledge applications, databases, processes and other infrastructure needed to Support the firm in executing its strategy. iii) Relational capital (RC) takes account of the knowledge embedded in business network which includes.

Previous studies concluded that ICD information was able to reduce the risk of a potential investor in making a decision towards a firm's investment (Halim, 2013; An, Davey, and Eggleton, 2011 and Abeysekera, 2010). Empirical research in "non-traditional" industries also consistently found that ICD information adds value to financial information (Vafaei, Taylor and Ahmed, 2011). Another research by Deep and Narwal, (2014) found that ICD was significantly associated with firm's performance. However we will measure ICD using the disclosure index by Rahim, Atan and Amrizah (2011)'. The disclosure, index consists of 30 items that are within the three variables, (HC, SC and RC items).

Concept of Risk Management Disclosure RMD

One of the concepts of risk management is that taking and managing risk is the very essence of business survival and growth (Axelas Global Best Practice, 2014). In other words, risk management is a useful measure that enables good corporate governance. What we mean by 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 et al., 2011). Which means that risk disclosure helps to mitigate information asymmetry and reduce stakeholder conflicts between shareholders and management. Also, risk reporting is seen as a useful instrument of change management as well as an important instrument of accountability for management (Linsley & Shrivs, 2014). Risk Management disclosure has been measured using disclosure index by (Hashim & Kaan (2016). The study of Hill and Jones (1992) indicate that satisfying one group of stakeholders can increase the risk of utility loss for other stakeholders. Arrfelt et al. (2018) indicate that risk taking by firms leads to greater overall firm risk. This shows that pursuing higher returns for shareholders (one particular stakeholder group) can increase overall firm risk, which can create significant, un-diversifiable losses (risk) for employees' human capital that is asset-specific to the company. If we consider stakeholder-agency theory, we can argue that firm non-financial disclosures, especially when they are verified and rated by an independent, third-party agency (Standard Ethics), provide broader disclosure beyond financial disclosures and a more credible perspective on a firm's overall risk. Thus, firms with greater non-financial disclosure tend to be more cautious taking risks and have more ability to manage overall risk because non-financial disclosures increase stakeholder access to better (more precise) information regarding managers' efforts to manage the many risks that can come from multiple stakeholders. Therefore, these disclosures provide a more thorough means by which to assess a firm's overall riskiness.

Prior studies investigated the level of risk management disclosure (Oliveira, Rodrigues & Craig, 2011; Amran, Abdul Manaf & Che Haat, 2009; Ismail and Rahman, 2013; Deumes & Knechel, 2008). Generally, those studies found that risk disclosure level are too brief, vague and not sufficient for the stakeholders to make investment decision. This inadequacy problem in RMD had been

recognized. Other studies also investigated the incentives for voluntary disclosure and disclosure quality (Htay, Rashid, Adnan & Meera, 2012).

Corporate Governance Disclosure

Corporate governance is the way an organization is directed, administrated and controlled. Blair (2015) defined corporate governance as 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. Literature has classified corporate governance into internal and external mechanisms. According to (Mccahery, Sautner & Starks, 2011) CG is important for the institutional investors' investment decisions. However, past studies have shown that there are links between CG and investment decisions, majority of them have only focused their studies on institutional investors such as (Mizuno, 2010; Gill, Sharma, Mand & Mathur, 2012). Other researchers examined the relationship between quality of CG disclosure and financial performance. Abd. Hamid, Abdul Aziz, Dora & Said, (2012) found that the quality of CG did not correlate with financial performance. They measured financial performance using ROA. On the other hand, CG disclosure and financial performance was conducted (Rouf, 2012) on non-financial listed companies in Bangladesh using a total of 94 annual reports of selected listed companies and analyzed with Ordinary Least Square method of estimation. The study found that the quality of CG disclosure was positively correlated with the profitability measure by ROA. Again Abd. Hamid, Abdul Aziz, Dora and Said, (2017) found that corporate governance disclosure did not correlate with financial performance in France. Aylin, Tuba and Lale (2014) in Germany used regression model and found positive significant relationship between firms performance and Corporate Governance Disclosure. Corporate Governance disclosure is however measured using the disclosure measure of (Brown and Caylor, 2006; Black, Jang and Kim, 2012; Byun, Kwak and Hwang, 2008; Chen et al., 2009).

The concept of Firms Performance

Literature has shown that shareholders, managers and other interested parties use the information provided by financial statements to forecast performance (Worthington & Tracey, 2004). Investors recognize the potentials of a company, both current and future, through its market valuation. Thus, they always expect managers to increase the market value of the firm in anticipation of high returns on their investments. This is because a rise in the market value of a company's shares is considered an increase in wealth for the company. Poor growth prospects adversely affect firm value; therefore, an effective performance measure is one that reflects the extent of the growth (Gikonyo, 2008). Financial performance is a subjective, measure of how well a firm can use assets from its primary mode of business 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. One of the commonly employed measure of profitability in firm performance is return on assets (ROA) and have been extensively been applied as in (Ugwu, I. V, 2020; Brammer & Pavelin, 2008; Cormier, Ledoux, Magnan & Aerts, (2010); Cormier et al., (2011). Selvam, Gayathri, Vinayagamoorthi and Kasilingam (2016) developed a performance model with nine determinants/dimensions: profitability, growth, market value, customer satisfaction, employee satisfaction, environmental audit, corporate governance and social performance and found that these nine performance dimensions or determinants cannot be used interchangeably since they represent different aspects of firm performance and different stakeholders of firms have different demands that need to be managed independently.

In this study we use return on asset ROA to evaluate firm's performance ability in profit making according to total investments in assets (Babalola, 2013). ROA is a financial ratio that shows the percentage of profit that a firm earns in relation to its overall resources. It is generally defined as net income (or Pretax profit)/total asset. According to Babalola (2013), ROA is calculated as the net profit after tax divided by total assets and indicates the returns generated from the assets financed by the firm. It can be expressed mathematically as:

$$\text{ROA} = \frac{\text{NPAT}}{\text{Total Assets}}$$

Theoretical Framework

Corporate disclosure and the firm agency costs (Jensen & Meckling, 1976) point out the agency problem arises when managers' interests deviate from those of the shareholders. When these conditions exist, managers are more likely to pursue their own self-interest at the expense of the owners (Gupta et al. 2018). The separation of ownership and control in corporations has been identified as the source of the agency problem (Jensen and Meckling 1976). Hill and Jones (1992) indicate that conflicts of interest (agency problem) also arise between the managers and broader stakeholders, which create a deadweight (residual or

utility) loss known as the stakeholder–agency costs. Stakeholder–agency costs adversely affect firm value and firms with higher stakeholder–agency costs are more likely to “lose ground and...eventually [be] selected out” (Hill & Jones, 1992). Moreover, Agency issues can also arise between the managers and a broader range of stakeholders due to managers’ self-interests and, more importantly, due to the complex nexus of explicit and implicit contracts between the firm and its stakeholders. Therefore, managers’ decision to satisfy the interest of one group of stakeholder may come at the expense of different stakeholders. Thus, continuous alignments between managers’ interests and various stakeholders’ interests are critical because firm performance is adversely affected when managers fail to align the interests of managements and the stakeholders (Jensen 2002; Rausch 2011; Wall and Greiling 2011). This study argues that corporate non-financial disclosures reduce the cost of acquiring information regarding firm (managerial) commitments to satisfying their broad stakeholders (especially when a credible, independent third party verifies the disclosures). Lower information acquisition costs bring greater transparency to managerial decisions as managers’ actions become more visible to their stakeholders, which, in turn, can increase the incentive for managers to align their interests with those of their stakeholders. (Rossi & Harjoto (2019) said non-financial disclosures reduce the stakeholder–agency costs that arise in corporations because non-financial disclosures realign managers’ interests with stakeholders’ interests.

Empirical Review

Ahmed, Bahamman, and Ibrahim (2015), assessed the non- financial measures of performance of deposit money banks in Nigeria. They sampled 9 banks out of population of 21 banks and employed expos-factor research design; data were collected using content analysis method of scoring and grading. The study concluded that Nigerian deposit money banks disclose some part of non-financial measure of performance in their annual report and also found that deposit money banks disclosed voluntary information in their annual report.

Titko and Shina (2017) examined the most important non-financial bank value drivers, and to investigate the relationship between bank value and non-financial value factors from 2012-2015. The authors used expert survey method and statistical data processing, in particular, correlation analysis and multiple regression analysis. Result found that the most important value drivers from the viewpoint of banking experts are competence and operating efficiency of bank employees, and effective remuneration and motivation system. Correlation analysis yielded a statistically significant correlation between bank value and all analyzed non-financial bank value indices.

Sahore and Verma, discussed non-financial disclosures and firm’s competitive performance, with an objective to find if ‘firm performance’ and/or ‘policy and regulatory interventions’ are driving Indian firms to communicate on social, community, environmental and other stakeholder perspectives of business responsibility to harness the competitive edge. The findings demonstrate that profitability as a firm’s competitive performance indicator that can be an underlying cause of firm’s non-financial disclosures in annual reports as ROE is significantly and positively impacting disclosures while NPM is significantly but negatively impacting disclosures. Another major finding of this study is the impact of policy intervention and legislation on firm’s non-financial performance reporting.

Rossi and Harjoto (2019) examined the relationship between corporate non-financial disclosure ratings, the Italian Legislative Decrees 231/2001 and 254/2016, and three outcomes of Italian listed firms: performance, risk and agency cost. Based on stakeholder–agency theory, this study conceptualizes the role of firms’ non-financial disclosures in reducing asymmetric information and agency costs between managers and broad stakeholders. Utilizing the Standard Ethics Rating (SER) as a measure of firms’ non-financial disclosure rating, they finds that SER ratings are positively related to firm value and are negatively related to firms’ risk and agency costs. This study also provides evidence that the adoption of Decrees 231/2001 and 254/2016, and the SER of firms’ non-financial disclosure, has a positive impact on firm outcomes.

Mohamad, Salleh, Ismail and Chek (2014) determine the level of quality of Non-Financial Information disclosure in Malaysia, using CSR, ICD, RMD and CGD as variables. Data was collected from 100 randomly selected annual reports of Public Listed Companies was analyzed using Multiple Linear Regression. Result reveals mixed finding on the influence of Non-Financial and firms’ profitability and further show that Corporate Governance disclosure has the highest influence on firm’s profitability.

Mutiva, Ahmed and Muiruri-Ndirangu (2015) investigated empirically the relationship between voluntary disclosures and financial performance measure, Return on Investment (ROI), of 10 companies quoted at the Nairobi Securities Exchange from 2011-2013 and analyzed using regression. Findings revealed that the individual predictor variables produced mixed results when regressed against ROI. However, the multivariate regression analysis depicted a strong positive relationship between voluntary disclosure and financial performance measure, as evidenced by a Pearson Product Moment Correlation Coefficient (R) of 0.6235. As such, only 38.9% of the data points will appear on the linear plot.

Menassa (2010) examined corporate social responsibility using logistic regression model and found that CSR disclosure has significant implications on firms’ performance. The study however gives a better understanding to users of annual reports on the

influence of Non-Financial Information disclosure on firm's profitability. Yusuf (2016) studied non financial disclosure on profitability of firms listed on industrial goods sector of NSE and measured non financial information using (CSR) and risk management (RM) disclosure with dummy variables and explored the test tool of logistic regression and found significant positive effect. Amran and Siti-Nabiha (2009) examined CSR in Malaysia using regression model and found significant negative relationship between CSR and firms' performance. Pratten and Mashat (2014) examined the CSR disclosure in Canada using logistic regression and dummy variables and found that CSR disclosure has no significant effect on firms' performance. Wibowo (2015) investigated between CSRDC and profitability of Italian Firms using regression model and found positive correlation between CSR disclosures and financial performance. In the same vein, Khaveh, Nikhashemi, Yousefi and Haque (2014) studied environmental and social performance disclosure and shareholders' wealth in France applying OLS analysis and found positive correlation between CSR disclosures towards financial performance.

Okoye (2016) investigated the nexus between non-financial information and performance of listed consumer goods, measured non-financial information using intellectual capital disclosure (ICD) using logistic regression and found insignificant effect between ICD disclosure and firms performance measured by ROA. Damarchi, Amiri and Rezvani, (2012) studied effect of Disclosure and Reporting of Intellectual Capital on performance of firms in Italy. They measured performance using ROA and analysis it using logistic regression and found that disclosure and reporting on intellectual capital was negatively and in significantly related with ROA. Rahim, Atan and Amrizah, (2011) explored intellectual Capital Reporting in Malaysian Technology Industry using word count content analysis and analyzed it with regression model and found that intellectual capital reporting in Malaysian technological industries does not related or have effect on performance. Deep and Narwal, (2014) studied intellectual capital and its association with financial performance in Indian textile firms. They used word count· content and analyzed it with OLS and found that IC disclosure is significantly associated with firm's performance. An, Davey and Eggleton, (2011) examined ICD information to reduce the risk of a potential investor in making a decision towards a firm's investment and found positive and significant relationship between intellectual capital disclosure and firms performance.

Methodology

The research design used Ex Post facto Design and collected data from 10 listed industrial goods purposefully selected from the entire listed industrial goods in Nigeria Stock Exchange NSE from 2015-2019. We applied three independent non financial disclosure variables (ICD, RMD and CGD) as shown in qualitative form using sentences and words counts in the annual report of the sampled firms for the five year period. Hence, we applied word count content analysis procedure to convert the qualitative data to quantitative data for the study. But the data for the dependent variable ROA, we applied net profit after tax and total asset which is already a quantitative data and does not require any conversion.

The data collated are analyzed using Descriptive Statistic, Multi-co linearity (VIF) test and Multiple Regression. Decision Rule of the study are as follows: Ho (null hypothesis) will be accepted if the P-value is greater than 5% significance level and to be rejected where the P-value is less than the 5% significance, where $P > 5\%$ we accept null hypothesis and where $P < 5\%$, we reject null hypothesis.

Our dependent variable function is Firm Performance which is proxy with Return on Asset ROA as mentioned earlier in literature and measured in (Ugwu, I. V, 2020; Brammer & Pavelin, 2008; Cormier, Ledoux, Magnan & Aerts, 2010; Cormier et al., 2011). ROA is calculated as the net profit after tax divided by total assets and indicates the returns generated from the assets financed by the firm. It is expressed mathematically as:

$$\text{ROA} = \frac{\text{NPAT}}{\text{Total Assets}}$$

Independent Variable

Our independent variable of Non Financial Disclosures is proxy with Intellectual Capital Disclosure (ICD) as used in Okoye (2016) and measured using the disclosure index adopted from the study of Rahim, Atan and Amrizah (2011). The disclosure index consists of 30 items that are within the three variables (Human capital HC, Structural capital SC and Relational capital RC) adopted as applied in (Rahim et al., 2011) for scores for the company calculated as the ratio of actual sum of scores from the company for a maximum of 5 year period, see appendix.

Risk Management Disclosure RMD as applied in Ismail and (Rahman, 2013; Yusuf, 2016), and measured using the disclosure index adopted in (Hashim & Koon, 2016), for scores for the company calculated as the ratio of actual sum of scores from the company for a maximum of 5 year period, See appendix.

Corporate Governance Disclosure CGD as applied in Rouf (2012) and as measured using the disclosure index adopted from the study of (Wan & Sulong (2010), for scores for the company calculated as the ratio of actual sum of scores from the company for a

maximum of 5 year period, See appendix.

In our model specification we consider the models of Yusuf (2016) and Okoye (2016) for both dependent and independent variables and modify them as follows

Okoye (2016): $ROA = \beta_0 + \beta_1 ICD + \mu_{it}$ model i

Yusuf(2016): $ROE = \beta_0 + \beta_1 RMD + \mu_{it}$ model ii

ICD = Intellectual Capital Disclosure

RMD = Risk Management Disclosure

COD = Corporate Governance Disclosure

The Main regression modified for the study:

$ROA_{it} = \beta_0 + \beta_1 ICD_{it} + \beta_2 RMD_{it} + \beta_3 CGD_{it} + \mu_{it}$ Model iii

By definition as follows:

β_0 = Constant term (intercept) of the study model; $\beta_1 - \beta_3$ = Coefficients of Non-financial disclosure; μ_{it} = Component of unobserved error term of the firms, i in period t ; ICD_{it} = Intellectual Capital Disclosure i in period t ; RMD_{it} = Risk Management Disclosure of the firms i in period t ; CGD_{it} = Corporate Governance Disclosure of the firms i in period t ; while $t=5$ years

Data Presentation, Analysis, Discussions and Summary of Findings

Table One: Descriptive Statistics of Quality on Non-Financial Disclosure NFD

Variables	Minimum	Maximum	Mean	Std Dev.	N,000s
ROA	0.01110	0.8600	0.33082	0.1960	100
ICD	0.02000	0.7101	0.82161	0.3002	100
RMD	0.10000	0.9000	0.83433	0.1100	100
CGD	0.50000	0.9300	0.27319	0.0344	100

Source: Authors Computation, 2020

The above table one shows the quality of non-financial disclosure as seen in the descriptive statistics. The minimum, maximum, mean and standard deviation of ROA is 0.011, 0.860, 0.330 and 0.196. The quality of variables of NFD shows highest mean as 0.83 for RMD, the lowest mean 0.273 for CGD and the lowest standard deviation is 0.0344 from CGD.

Table Two: Multiple regression of Non-Financial Disclosure Impact on Firm Performance

Variables	Un-standardized Coef.		Stdz Coef.	t.stat.	Sign.	Co linearity	
	C	Std Error				Tolerance	VIF
ROA	0.67011	0.1810		2.670	0.044		
ICD	0.56813	0.1391	0.7383	2.589	0.043	0.2390	4.1760
RMD	0.62433	0.0341	0.7854	2.876	0.033	0.7073	1.4152
CGD	0.68241	0.0413	0.8255	1.908	0.015	0.3765	2.6586
R-square=0.640; Adj. R-square=0.583; F-Statistics=5.121, Prob. (f-statistic)=0.024; Durbin-Watson=2.127							

Source: Authors Computation, 2020

Test of Multi-Co linearity

From the model above the test of Multi-Co linearity shows Vector Inflation Factor VIF for the predictor variables with average figure of (2.75). The VIF of each of the variables has a figure below the bench mark of 10 for indication of failure of any of the variables. We conclude that there is an absence of multi-co-linearity and means that no independent variable was dropped from the model.

Model Analyses

We observe from the model above that the pooled regression has the adjusted R-square value of 0.583 showing that about 58% of the systematic variations in the dependent variable ROA in the pooled firms over the period of interest are jointly explained by the predictor variables. The unexplained part of the dependent 42% can be attributable to exclusion of very important independent that can explain the dependent variable but are outside the scope of our study. The F-statistics value of 5.121 and its associate P-value of 0.024 shows that the model in overall is statistically significant at 5% significance levels, and this indicates that the regression model is valid and can be applied for statistical inference.

Testing of the Hypotheses

Here we test the posited hypotheses of the study and provide the specific analyses for each of the explanatory variables.

Xi-ICD [Model result = 0.56813(0.043)] as an independent variable to Non-financial Information Disclosure NFD appears to have a positive and significant influence on ROA firm performance @ 5% level. This therefore means we should reject the hypothesis 1

(Hoi: ICD as NFD does not significantly impact on Firm Performance). This result agrees with the prior empirical results which show that ICD is a major driver of corporate performance (Okoye, 2016; Deep and Narwal, 2014; An et al., 2011) and disagrees with (Damarchi et al 2012; Rahim et al., 2011)

Xii-RMD [Model result = 0.62433(0.033)] as an independent variable to Non-financial Information Disclosure NFD appears to have a positive and significant influence on ROA firm performance @ 5% level. This therefore means we should reject the hypothesis 2 (**Hoi: RMD as NFD does not significantly impact on Firm Performance**). This result agrees with the prior empirical results which show that RMD is a major driver of corporate performance (Rossi & Harjoti, 2019; Menassa, 2010).

Xiii-CGD [Model result = 0.68241(0.015)] as an independent variable to Non-financial Information Disclosure NFD appears to have a positive and significant influence on ROA firm performance @ 5% level. This therefore means we should reject the hypothesis 1 (**Hoi: CGD as NFD does not significantly impact on Firm Performance**). This result agrees with the prior empirical results which show that CGD is a major driver of corporate performance (Mohamad et al., 2010).

Further, the overall model being significant on firm performance i.e. showing that Non-Financial Disclosure NFD (ICD, RMD, CGD) has significant impact on corporate firm performance agrees with the prior empirical results (Ahmed et al., 2015; Titko and Shina, 2017; Sahore and Verma,; Rossi & Harjioto, 2019; Mutiva et al., 2015; Soti-Nahbiha, 2009; Pratter & Mashal, 2014; Wibowo, 2015; Khavey, et al., 2014) and disagrees with (Mohamed et al., 2014), who found that non-financial disclosure does not impact firm performance.

Summary of Findings, Conclusion and Recommendations

Summary of Findings

This study finding shows that non-financial information disclosure is significantly positive on firm performance. The three predictable variables show positive significant impact on firm performance summarized as thus: Intellectual Capital Disclosure ICD as a non-financial disclosure has significant and positive impact on firm performance; Risk Management Disclosure RMD as a non-financial disclosure has significant and positive impact on firms performance; and Corporate Governance Disclosure CGD as a non-financial disclosure has significant and positive impact on firm performance.

Conclusion

The study conclusion is that the three independent variables applied in this study developed a model fit on non financial disclosures using (ICD, RMD, CGD), which explained the criterion variable by having positive significant impact on the pooled sample firms Return on Asset ROA for the period.

Recommendations

There should be legitimate practical guideline enforcement by government of nations given to entity operation to annually disclose their non-financial information and contribution to sustainable economic development in their various locations.

Contribution to Knowledge

We contribute a new model of (ICD, RMD and CGD) on Non-Financial Disclosure (NFD) that significantly and positively impact on firm performance and the enormous rich literature for academia.

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Appendix

The Sampled Listed Firms For the Study in Nigeria Stock Exchange NSE 2015-2019

Firms	ROA	ICD *a	RMD *b	CGD *c
A	0.24	70.62	150.00	149.42
B	0.18	34.70	118.70	83.18
C	0.08	42.80	143.62	158.02
D	0.05	38.23	141.30	131.21
E	0.03	37.21	127.43	44.60
F	1.04	38.56	128.30	94.41
G	0.02	36.21	83.00	86.50
H	0.25	65.40	107.54	108.10
I	0.31	154.80	212.00	228.39
J	0.16	83.50	179.30	154.52

Source: Authors Computation, 2020

*a Content Analysis for Intellectual Capital Disclosure adapted from (Rahim et al., 2011)

*b Content Analysis for Risk Management Disclosure adapted from (Hushim and Koon, 2016)

*c Content Analysis for Corporate Governance Disclosure adapted from (Wan and Sulong, 2010)