



EFFECT OF INTEGRATED REPORTING PRACTICES ON CORPORATE DISCLOSURE AND TRANSPARENCY IN NIGERIAN QUOTED MANUFACTURING COMPANIES

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ABSTRACT

The demand for corporate disclosure and transparency across globe is fast increasing. Stakeholders are demanding for more information beyond the mandatory disclosure. Integrated reporting practices has been suggested by scholars as a possible way of addressing this seeming persistent problem hence this study examined the effect of integrated reporting practices on corporate disclosure and transparency in Nigerian quoted manufacturing companies. The study employed a survey research design. The population of the study comprised 54 Nigerian quoted manufacturing companies as at 2018, and the big 4 accountings which sum up to 58. A sample size of 45 was determined on convenience while 675 respondents were purposively selected using event criterion of departments believed to have information about integrated reporting. Data were collected through a validated questionnaire with Cronbach's alpha reliability coefficients which ranged from 0.73 to 0.85. A retrieval rate of 77.9% was achieved. Data were analysed using descriptive and inferential statistics of ordered logistic regression. The study revealed that integrated reporting practices jointly had significant effect on corporate disclosure and transparency ($Pseudo R^2 = 0.315$, $F(8, 526) = 164.484$, $p < 0.05$). The study concluded that integrated reporting practices contributed to corporate disclosure and transparency of Nigerian quoted manufacturing companies. The study recommended that Management of quoted companies should commence the adoption of integrated reporting practices on voluntary basis. The study further recommended that the current effort of accounting standard setters and regulators on integrated reporting practices should be fast-tracked for a new framework for corporate reporting in Nigeria.

KEYWORDS: *Business model reporting, Corporate disclosure and transparency, Governance reporting, Integrated reporting practices, Outlook reporting.*

1. INTRODUCTION

There has been an increase in demand for corporate disclosure as a key element of sustainable governance. Lack of corporate disclosure and transparency may signal that the activities of the organisation are shrouded with manipulations and fraudulent practices (Chao, Hsu & Yeh, 2010). The collapse of Enron revealed the poor standard of disclosure and transparency in its financial statements. Non-disclosure of corporate practices increases asymmetry of information and do not enables shareholders to effectively monitor management and firm performance (Zaman, Arslan & Siddiqui, 2015).

Corporate disclosure is concerned with the display of important information to investors, creditors and others in a way that allows the prediction of the company's ability to achieve profits in the future and to pay off their liabilities or obligations (Ahmed, 2013). Transparency is sharing information and acting in an open manner as it allows stakeholders to gather information that may be critical in detecting and defending their interests (Burch-Adiloglu, 2012). Transparency is going beyond the standards to provide users with all information needed in taking rational investment decisions. Both corporate disclosure and transparency keep corporate stakeholders better informed about the way a company is being managed and governed.

According to Transparency International (TI) world top companies fall short on transparency, the world's biggest companies disclose little or no financial details about their operations outside their home countries. In a report that ranks one hundred and twenty four firms, TI found that Chinese companies and several United States (US) technology giants were among the worst performer in disclosure and thereby facing serious sanctions. In 2018, the European Union (EU) General Court filed legal cases against Pari-Pharma, PTC Therapeutics International, MSD Animal Health Innovation and Intervet International for failure to disclose certain information regarding their business processes and lack of transparency in reporting.

Comprehensive studies of Nigerian quoted companies conducted by World Bank Group revealed that the Nigerian financial reporting practices are deficient (World Bank, 2004). In 2017 Stanbic IBTC Holding PLC and Flour Mills Nigeria PLC were sanctioned by the Nigerian Stock Exchange (NSE) for non-disclosure of price sensitive information in their annual accounts (NSE, 2018). It is against the seeming deficient noticed in the present reporting system that stakeholders are calling for the adoption of integrated reporting as a stop-gap in addressing the problem. According to International Integrated Reporting Council (IIRC) (2013a), integrated reporting improve the quality of information available to providers of financial capital to enable a more efficient and productive allocation of capital.

Many research works have been carried out on integrated reporting in developed countries like Adams and Simnett (2011), Anifowose, (2016), Aujirapongpan and Chanatup, (2015); Bhasin, (2017); Burke and Clark, (2016); Coelho, (2016); Cosma, Soana and Venturelli (2018); De Villiers and Hsiao, (2017) but only few studies exist in Nigeria to the best of researchers knowledge. The dearth of knowledge and awareness in this new trend of reporting has necessitated calls for more research on the concept by the IIRC. Arising from identified gaps in knowledge, this study surveyed the effect of integrated reporting practices on corporate disclosure and transparency in Nigerian quoted manufacturing companies. The following hypothesis was drafted in null form and tested accordingly:

Integrated reporting practices does not have significant effect on corporate disclosure and transparency in Nigerian quoted manufacturing companies.

The rest of the paper is arranged in the following orders. The next section contains the conceptual, theoretical and empirical review of literature. Methodology of the study followed before the findings and discussions. The conclusion of the study came thereafter and then recommendations.

2. LITERATURE REVIEW/ THEORETICAL UNDERPINNING

2.1 Conceptual Review

Integrated reporting: The phrase 'integrated reporting' was formally introduced in the King Code or Corporate Governance Principles (King III) as part of on-going corporate governance reforms in South Africa (Haji & Anifowose, 2016). Integrated reporting is a process of collating, preparing and presenting all-inclusive financial and non-financial information about the activities of organisation in an integrated report showing the value creation potential of the organisation. According to Eccles and Krzus (2010) integrated reporting is the process of environmental, social and governance (ESG) integration into the annual report of companies. Eccles and

Krzus (2010) further referred to an integrated report as 'One Report', which carries a two-dimensional meaning. Paolucci and Cerioni (2017) argued in favour that one report may refer to either a single document where the company provides a holistic view of the interests of all of its stakeholders.

According to IIRC (2011) integrated reporting practices is a modern corporate reporting system founded on integrated thinking that results in a periodic integrated report by an organisation about value creation over time, and related communications regarding aspects of value creation (IIRC, 2013a). It incorporates new models into reporting structure that could change the corporate reporting pattern, enhance the ability of investors to evaluate firms' future opportunities, and offer solutions to overcome the around-the-clock criticisms of traditional reporting models (Adhariani & de Villiers, 2018; De Villiers, Venter & Hsiao, 2017). The output of an integrated reporting is an integrated report, which acts as a substitute of an organisation's annual report.

Ioana and Adriana (2014) identified integrated reporting as an integration of sustainability and corporate social responsibility information into the annual report. Van Bommel (2014) posited that integrated reporting is a hybrid practice that spans between the different worlds of financial reporting and sustainability reporting aiming at providing a true and fair view of the firm value and thereby accounting for sustainability.

Organisational Overview and External Environment Reporting:

Organisational overview is affair of the business relating to its mission and vision. Organisational overview should provide essential context by identifying matters such as culture, ethics and values, ownership and operating structure, principal activities and markets. (IIRC, 2013a). External environment comprises factors that exist outside the organisation. These factors are capable of having serious effect on the company's growth and survival (Pakkanen, 2012). External environments consist of many different factors including political, sociological, demographical, global and technological, customer preference and related industries (Lynch, 2006). According to IIRC (2013a) significant factors affecting the external environment include aspects of the legal, commercial and social context that affect the organisation ability to create value in the short, medium and long term directly or indirectly. These factors occur in the context of the organisation industry or region and in the wider planetary context. For instance the legitimate needs and interests of key stakeholders, macro and micro economic conditions, such as economic stability, globalization and industry trends, market forces, societal issues such as population and demographic changes, human rights, health, poverty, collective values and educational systems.

Governance Reporting: Governance reporting is the process of communicating the leadership structure, ethical value, culture, including the skill and diversity of those charged with governance in the day to day running of the organisation. The UK Cadbury Report (1992) defines corporate governance as the system by which firms are directed and controlled. According to Thompson (2009) corporate governance refers to the set of systems, principles and processes by which a company is governed. Okeahalam and Akinboade (2003) defined corporate governance is concerned with the processes, systems, practices and procedures that govern institutions. The Organisation for Economic Cooperation and Development (OECD) Principles of Corporate Governance

states that corporate governance involves a set of relationships between a company's management, its board, its shareholders and other stakeholders. Corporate governance involves organisational decisions made at the senior level that directly influence the incentives, motivations and behaviour of all employees (Larcker & Tayan, 2013).

Business Model Reporting

IIRC opined that business model is 'an organisation's system of transforming inputs through its business activities into outputs and outcomes that aim to fulfil the organisation's strategic purposes and create value over the short, medium and long term (IIRC, 2013c). Business model is the framework in which a company execute its strategy, creating value through core business processes for different types of stakeholders (American Institute of Certified Public Accountants (AICPA) & Black Sun, 2018).

A business model describes the logic of the company, the way it operates and how it creates value for its stakeholders (Casadesus-Masanell & Ricart, 2010; Sukhari & de Villiers, 2018). The business model is a significant means for capturing, visualizing, understanding and communicating a company's business logic (Osterwalder, 2004). It provides a platform to measure, observe and compare company performance and improves the management of the business logic by enhancing the design, planning, changing and implementation of company strategy (Osterwalder, 2004). Ernst and Young (2014) opined that business model is a critical component of integrated reporting because it helps in meaningful engagement with investors and other user of annual report. According to IIRC (2013a) an integrated report should answer the question: What is the organisations business model? (Sec 4.10).

Risk and Opportunities Reporting

Risk refers to 'uncertainty as to the amount of benefits. It includes both potential for gain and exposure to loss' (Scantlebury & Alleyne, 2015). Risk is normally referred to as a set of outcomes arising from a decision that can be assigned probabilities whereas probabilities cannot be assigned to the set of outcomes (Watson & Head, 1998). Risk disclosure is the communicating information about firms' strategies, characteristics, operations and other external factors that have the potential to affect expected results (Beretta & Bozzolan, 2004).

Risk disclosure is an attempt to inform stakeholders of a prospective opportunity or a situation that is dangerous capable of becoming a threat or about to affect a company in the future (Linsley & Shrivs, 2006; Scantlebury & Alleyne, 2015). According to Wen and Heong (2017), risks are treated often as corporate hazards despite the fact that risks could be converted into big opportunities for corporate investment. Bekefi, Epstein and Yuthas (2008) opined that risks and opportunities are increasingly related to strategy, performance and improved shareholder value as against merely avoidance and commitment. Risk management practices and reporting are positively associated with higher profitability (Wen and Heong, 2017).

An integrated report should answer the question: What are the specific risks and opportunities that affect the organisations ability to create value over the short, medium and long term, and how is the organisation dealing with them? (Sec 4.23). An integrated report identifies the key risks and opportunities that are specific to the organisation, including those that relate to the organisations effects on, and the continued availability, quality and affordability of, relevant

capitals in the short, medium and long term (Sec 4.24). This can include identifying the specific source of risks and opportunities which can be internal, external or, commonly a mix of the two.

Strategy and Resource Allocation Reporting:

According to Casadesus-Masanell and Ricart (2010) a strategy refers to the choice of business model through which the company will compete in the marketplace. It is a contingent plan of action designed to achieve a particular goal (Sukhari & de Villiers, 2018). Strategy is viewed as the process by which companies execute their business model and how their business processes fit together. The focus of strategy is on the precise formulation of a plan of action about the intentions of the company and achieving those goal taking into account the products it supplies, the customers it serves, the countries in which it operates, the activities it undertakes as well as resource allocation (Grant, 2016).

An integrated report should answer the question: Where does the organisation want to go and how does it intend in getting there? (Sec 4.27). An integrated report ordinarily identifies the organisations short, medium and long term strategic objectives. The strategies it has in place, or intends to implement to achieve those strategic objectives. The resource allocation plans it has to implement its strategy. How it will measure achievements and target outcomes for the short, medium and long term (Sec 4.28).

Performance Reporting: CIMA (2004) opines that performance reporting is a means to an end, never an end in itself. Niculescu (2005) posits that performance is a state of competitiveness of the economic entity reached through an efficiency and productivity level, which ensures its durability on the market. Bagu (2001) states that performance represents the level of best obtained results. Ittner, Larcker and Rajan (1997) suggests that using non-financial indicators quickly provide the shareholders with information regarding the effort put by the manager into creating value at the level of the organisation. Elena (2014) states that the performance of a company implies entwining various types of abilities that characterize the activity of the company such as productivity, profitability or competitiveness.

An integrated report should answer the question: To what extent has the organization achieved its strategic objectives for the period and that what are its outcomes in terms of effects on its capital? (Sec 4.30). An integrated report contains qualitative and quantitative information about performance that may include matters such as quantitative indicators with respect to targets and risks and opportunities, explaining their significance, their implications, and the methods and assumptions used in compiling them.

Outlook Reporting: Section 4.34 of IIRC (2013a) framework opined that integrated report should answer the question: What challenges and uncertainties is the organisation likely to encounter in pursuing its strategy, and what are the potential implications for its business model and future performance? Section 4.35 of IIRC (2013a) posited that an integrated report ordinarily highlights anticipated changes over time and provides information built on sound and transparent analysis, about the organisations expectations about the external environment the organisation is likely to face in the short, medium and long term. Furthermore, the IIRC (2013a) stated that the report should reveal how that will affect the organization and how the organisation is currently equipped to respond to the critical challenges and uncertainties that are likely to arise (Sec 4.35).

Basis of Preparation and Presentation Reporting:

An integrated report should answer the question: How does the organisation determine what matters to include in the integrated report and how are such matters quantified or evaluated? (Sec 4.40). An integrated report describes its basis of preparation and presentation including a summary of the organisations materiality determination process. A description of the reporting boundary and how it has been determined. A summary of the significant frameworks and methods used to quantify or evaluate material matters (Sec 4.41). An integrated report includes a summary of the organisations materiality determination process and key judgements, this may include Brief description of the process used to identify relevant matters, evaluate their importance and narrow them down to material matters.

Corporate Disclosure and Transparency

Karim and Ahmed (2005) regards disclosure as the appearance of an item of information in the annual report of an entity, but Khodadadi, Khazami and Aflatooni (2010) was more specific as to the type of information involved by defining it as the transferring and presentation of economic information, (financial/non-financial and quantitative/qualitative) relating to the status and operations of the firm. With globalized market, foreign investors particularly are demanding greater transparency of non-financial information that is valuable for decision making (Abeysekera, 2013; Cooper & Owen, 2011; Eccles, Krzus, & Serafeim, 2011; Wen & Heong, 2017). Integrated reporting engenders corporate disclosures to reduce information asymmetry between managers and stakeholders to contain the related risks to trade (as investor, client, supplier, and customer) within the organisation (Giorgino, Supino, & Barnabe, 2017).

Disclosure is regarded as mandatory when it is demanded by regulatory bodies and firms are expected to comply or face some sanctions. Such forms of information disclosure are usually specified (Karim, Islam & Chowdhury, 1998). However, regulatory bodies demand for increased non-financial information disclosure has intensified after the corporate scandals and fraud (Appiagyei, Djajadikerta & Xiang, 2016). Arguments for mandating information disclosure are based on either the view of accounting information being a public good (Watts & Zimmerman, 1986) or the view of the need for redistribution of wealth in the information environment (Healy & Palepu, 2001).

As a public good, accounting information may be under-produced in the absence of regulation and can affect the efficiency of the capital markets (Healy & Palepu, 2001). Also, since managers consider the cost and benefits in information disclosure (Sehar, Bilal & Tufail (2013), in the absence of regulation, there will be an information gap between informed managers and the uninformed stakeholders. In contrast to mandatory information disclosure which is a regulatory requirement, any other information which is beyond the requirement is voluntary disclosure (Healy & Palepu, 2001). Hence managers exercise discretion on voluntary disclosure by considering the costs and the benefits involved (Abeysekera, 2013).

In addition, prior literature finds that voluntary disclosure can be used by management as either a complement to mandatory disclosure (Sehar, Bilal & Tufail (2013). Generally, financial information provided in the annual report to meet the needs of shareholders are specified by accounting standards and a country's companies Act (Abeysekera, 2013).

However, reporting non-financial information is largely voluntary. According to Ioannou and Serafeim (2014), voluntary reporting of social and environmental information may be used by firms to make claims about social and environmental performance that has not been met. Hence, mandating such disclosure could motivate firms to perform better in their socio-environmental activities, although some firms may incur higher costs which can affect shareholder value.

Havlova (2015) found that integrated reporting has changed the volume and extent of disclosures and usage of information technology in reporting. Atkins & Maroun (2014) found that the community welcomed integrated reporting despite concerns and obstacles looking forward to its development and progress and viewed integrated reporting as an improvement in disclosures that will enhance decision making. Eccles and Armbester (2011) assert that integrated reporting provides a high level of transparency so that the company gets full credit for its performance by making it easy for analysts and investors to get the needed information. Krzus (2011) commented that integrated reporting framework was developed to be adopted by companies all over the world and to offer stakeholders a better understanding in disclosures.

This study posits that corporate disclosure and transparency is revealing all relevant material information about a corporate body for the benefit of stakeholders, most especially capital providers in order to have complete picture of the entity.

2.2 Theoretical Framework

This study is hinged on Voluntary disclosure theory credited to Jensen and Meckling (1976) and Innovation diffusion theory propounded by Everett Rogers (1962). Voluntary disclosures are aimed at reducing the information asymmetry among managers and investors and provide clarifications about long-term business sustainability that concerns various stakeholder groups. Grossman (1981) explained that companies should voluntarily publish all information accessible, investors believe that the company withhold information, they assume to be negative, leading to a decline in the company's market value.

Innovation diffusion theory originated in communication to explain how an idea or product over time gain momentum and diffuses (or spreads) through a specific population or social system. The end result of this diffusion is that people as part of a social system adopt a new idea, behaviour or product. Adoption means that a person does something differently than what they had previously that is purchase or use a new product, acquire and perform a new behaviour. The key to adoption is that the idea, behaviour or product is perceived as new or innovative in order to make the diffusion possible.

Researchers have found that people who adopt an innovation early have different characteristics than people who adopt an innovation later. South African adopted integrated reporting as part of reforms to support national objectives on increasing the inflows of foreign direct investment, and to reduce corruption as well as social and economic inequalities in the country (De Villiers & Hsiao, 2017). The practice of integrated reporting by companies across globe represents the diffusion of practices compliant with global responsibility and sustainability principles which are intended to fulfil the expectations of the stakeholders in terms of economic, social and environmental disclosures.

2.3 Empirical Review

Surdy, Yasseen and Padia (2018) investigated the trends in integrated reporting by state-owned companies in South Africa. The study found that the level of reporting disclosures by state-owned companies increased over the period evaluated after the adoption of integrated reporting. Vitezic and Petrlc (2018) investigated the extent to which The International IR Framework is recognised in Croatian companies. The study found that companies after the adoption of integrated reporting have more transparently report about their results through data on economic, environmental and social aspect of business.

Setia, Abhayawansa, Hoshi and Huynh (2015) examined the initial evidence of integrated reporting in South Africa. The study found that the introduction of integrated reporting in South Africa has resulted in an increase in the extent of disclosure of human, social and relational, natural and intellectual capital information of the listed companies.

Solomon and Maroun (2012) carried out a study on integrated reporting; the influence of King III on social, ethical and environmental reporting. The study found that the introduction of integrated reporting has resulted in an increase in the extent of social, environmental and ethical disclosures with a marked increase in the quantity of social information.

Ernst & Young (2014) conducted a survey of integrated reports of South Africa’s top 100 JSE-listed companies. The study found that many companies have increased their level of disclosure on the different capitals, or resources and relationships. Joshi (2018) examined integrated reporting as current trends in financial reporting. The study concluded that the awareness of integrated reporting among the companies’ accountants and executives has increased and that the report contain more disclosure on non-financial information for transparency and this will likely continue in the future.

Sukhari and de Villiers (2018) studied the influence of integrated reporting on business model and strategy disclosures. The study found that business model and strategy were not disclosed before the requirement to publish an integrated report in South Africa but were disclosed thereafter. Furthermore the study showed that companies disclose their strategic goal more transparently.

Van Zyl (2013) investigated sustainability and integrated reporting in the South African corporate sector. The study found that there has been an increase in risk disclosure and risk management plans. Furthermore, the study found that companies are disclosing some measures such as CO₂ emissions and water usage in their report.

3. METHODOLOGY

The study adopted survey research design. The population of this study consisted of fifty eight (58) companies comprising fifty four (54) quoted manufacturing companies on the Nigerian Stock Exchange (NSE) or ‘The Exchange’ as at 30th June, 2018 and the big four (4) accounting firms. Convenience sampling technique was adopted in the selection of the sampled companies. Three staff each in the managerial category of the five departments of Finance, Sustainability, Corporate services, Investors relations, Internal audit and risk management were randomly selected. 675 questionnaires were distributed while 526 were retrieved and analysed. Data were collected through a validated questionnaire with Cronbach’s alpha reliability coefficients which ranged from 0.73 to 0.85. Data were analysed using descriptive and inferential statistics of ordered logistic regression.

Corporate disclosure and transparency was operationalized as the dependent variable while integrated reporting practices was the predictors. This operational relationship was expressed as a model in mathematical equation (1)

Model Specification

$$CDT = \beta_0 + \beta_1 OOEER_i + \beta_2 GR_i + \beta_3 BMR_i + \beta_4 ROR_i + \beta_5 SRAR_i + \beta_6 PR_i + \beta_7 OR_i + \beta_8 BPPR_i + \mu_i$$

Where: CDT = Corporate Disclosure and Transparency, OOEER = Organisational Overview and External Environment Reporting, GR = Governance Reporting, BMR = Business Model Reporting, ROR = Risk and Opportunities Reporting, SRAR = Strategy and Resource Allocation Reporting, PR = Performance Reporting, OR = Outlook Reporting, BPPR = Basis of Preparation and Presentation Reporting.

4.RESULTS AND FINDINGS

Results and Findings

Descriptive Analysis

Descriptive analysis using mean and standard deviation were used to examine the elements of integrated reporting practices and corporate disclosure and transparency. The analysis are presented in Table 1:

Table 1: Descriptive Statistics

	Mean	Std. Dev
Organisational Overview and External Environment Reporting	5.22	0.79
Governance Reporting	5.18	0.76
Business model reporting	5.12	0.74
Risks and opportunities reporting	5.15	0.77
Strategy and resource allocation reporting	5.11	0.85
Performance reporting	5.23	0.77
Outlook reporting	5.05	0.81
Basis of preparation and presentation reporting	4.86	0.93
Corporate disclosure and transparency	5.31	0.8

The table 1 shows that on the average the respondents agreed that OOEER, GR, BMR, ROR, SRAR, PR, OR and BPPR as denoted by the mean value of (5.22, 5.18, 5.12,

5.15, 5.11, 5.23, 5.05 and 4.86) will promote corporate disclosure and transparency in Nigerian quoted manufacturing companies.

4.2 Test of Hypothesis

The hypothesis for the study was tested with multiple regression analysis as presented in Table 2.

Table 2: Regression Results
Dependent Variable: CDT

Variables	Coefficients	Exponent of Coefficients	Standard Error	Wald-Test	Prob
Constant	9.441		1.272	60.660	
OOEER	-0.294	-0.745	0.175	2.840	0.092
GR	0.740	2.096	0.175	17.979	0.000
BMR	0.392	1.480	0.187	4.396	0.036
ROR	0.412	1.510	0.194	4.505	0.034
SRAR	0.474	1.606	0.161	8.699	0.003
PR	0.247	1.280	0.179	1.906	0.167
OR	0.490	1.632	0.177	7.639	0.006
BPPR	-0.087	-0.917	0.134	0.418	0.518
Pseudo R-Square	0.315				

Source: SPSS Regression Output, (2019)

Notes: Corporate Disclosure and Transparency (CDT) is the dependent variable; the explanatory variables are Organisational overview and External Environment Reporting (OOEER), Governance Reporting (GR), Business Model Reporting (BMR), Risk and Opportunities Reporting (ROR), Strategy and Resource Allocation Reporting (SRAR), Performance Reporting (PR), Outlook reporting (OR) and Basis of Preparation and Presentation Reporting (BPPR).

Interpretation

Table 4.28 shows the results of regression analysis for the effect of integrated reporting practices on corporate disclosure and transparency in Nigerian quoted manufacturing companies. The results show that, governance reporting, business model reporting, risk and opportunities reporting, strategy and resource allocation reporting and outlook reporting have positive and significant effect on corporate disclosure and transparency in Nigerian quoted manufacturing companies ($\beta_2 = 0.740$, *Wald test* = 17.979, *p* = 0.000; $\beta_3 = 0.392$, *Wald test* = 4.396, *p* = 0.036; $\beta_4 = 0.412$, *Wald test* = 4.505, *p* = 0.034; $\beta_5 = 0.474$, *Wald test* = 8.699, *p* = 0.003 and $\beta_7 = 0.490$, *Wald test* = 7.639, *p* = 0.006) respectively. This implies that governance reporting, business model reporting, risk and opportunities reporting, strategy and resource allocation reporting and outlook reporting are significant factors influencing changes in corporate disclosure and transparency in Nigerian quoted manufacturing companies.

However, performance reporting has positive but insignificant effect on corporate disclosure and transparency in Nigerian quoted manufacturing companies ($\beta_6 = 0.247$, *Wald test* = 1.906, *p* = 0.167) while basis of preparation and presentation reporting has negative but insignificant effect on corporate disclosure and transparency in Nigerian quoted manufacturing companies ($\beta_8 = -0.087$, *Wald test* = 0.418, *p* = 0.518). This also implies that performance reporting and basis of preparation and presentation reporting are not significant

factors influencing changes in corporate disclosure and transparency in Nigerian quoted manufacturing companies.

Concerning the magnitude of the estimated parameters for the coefficients of the ordered logistic regression, the exponents of the parameters are used and they are $e(-0.294, 0.740, 0.392, 0.412, 0.474, 0.247, 0.490$ and $-0.087)$ gives $-0.745, 2.096, 1.480, 1.510, 1.606, 1.280, 1.632$ and -0.917 . This implies that a unit increase in governance reporting, business model reporting, risk and opportunities reporting, strategy and resource allocation reporting, performance reporting and Outlook reporting will lead to 2.096, 1.480, 1.510, 1.606, 1.280 and 1.632 increase in corporate disclosure and transparency in Nigerian quoted manufacturing companies while a unit increase in organisational overview and external environment reporting and basis of preparation and presentation reporting will lead to 0.745 and 0.917 decrease in corporate disclosure and transparency in Nigerian quoted manufacturing companies respectively.

The resulting model 5 from the analysis is given as follow:

$$CDT = 9.441 + 0.740GR + 0.392BMR + 0.412ROR + 0.474SRAR + 0.490OR$$

The Pseudo R-square which measure the proportion of the changes in corporate disclosure and transparency in Nigerian quoted manufacturing companies as a result of changes in organisational overview and external environment reporting, governance reporting, business model reporting, risk and opportunities reporting, strategy and resource allocation reporting, performance reporting, outlook reporting and basis of preparation and presentation reporting explains about 32% changes in corporate disclosure and transparency, while the remaining 68% were other factors explaining changes in corporate disclosure and transparency in Nigerian quoted manufacturing companies but where not captured in the model

4.3 Diagnostic Tests

This sub section shows the post estimation tests for Model 5 of this study.

Table 4.3 Diagnostic Tests

	Chi-Square	df	Prob
Model Fitting Information (F-stat)	164.484	8	0.000
Goodness of Fit			
Pearson	631.704	610	0.263
Deviance	632.093	610	0.260
Test of Parallel Lines	15.012	16	0.213

Source: Researcher's study output, (2019)

Table 4.3 presents the F-stat of 164.484 is significant at 5% level; this implies that the final model gives a significant improvement over the baseline constant model. The two goodness of fit statistic of 631.704 and 632.093 is not significant at any level, thus the non-rejection of the null hypothesis that the fit is good. This implies that the data and the model predictions are similar and that it is a good model. The statistic for the test of parallel lines is given as 15.012. This value is not significant; this implies that the null hypothesis that the slope coefficients are the same across response categories cannot be rejected. Thus, the proportional odds assumption holds for general model.

The F-stat of 164.484 is statistically significant with $p = 0.000$ indicating that on the overall, the statistical significance of the model showed that the null hypothesis that there is no significant relationship between integrated reporting practices and corporate disclosure and transparency in Nigerian quoted manufacturing companies was rejected. Thus, the alternative hypothesis that there is a significant relationship between integrated reporting practices and corporate disclosure and transparency in Nigerian quoted manufacturing companies was accepted.

Discussion of findings

This regression analysis as shown in Table 4.2 revealed that GR, BMR, ROR, SRAR and OR have significant positive effect on corporate disclosure and transparency at 5% level of significance.

The finding revealed that GR has a significant positive relationship with corporate disclosure and transparency. This implies that GR about leadership structure, skill and diversity of those charged with governance, particular actions those charged with governance have taken to influence and monitor the strategic direction of the organisation will promote corporate disclosure and transparency. Also, reporting of how the organisation culture and value are reflected in its use of and effects on the capitals namely financial, social and relationship, intellectual, natural, manufactured and human capital will provide complete disclosure and transparency to the stakeholders. This finding is consistent with Wen and Heong (2018) which reported a significant positive relationship between governance disclosure and company performance.

In relation to BMR, this implies that business model reporting of various capitals namely financial, social and relationship, intellectual, natural, manufactured and human capital will give room for disclosures and transparency in the organisation. It further shows that reporting of key business activities, key products and services by the organisation will constitute disclosure and transparency. In addition, reporting of and key outcomes such as employee morale, organisational reputation, and customers' satisfaction, social and environmental by the organisation will provide financial and non-financial disclosures. This finding is consistent with Albetari *et al.* (2018) and Wen and Heong (2018) which

reported a significant positive relationship between business model disclosure and financial performance.

With regard to ROR, this implies that reporting of specific sources of risks which can be internal, external or mix of the two and specific steps being taken to mitigate or manage the identified risk is a demonstration of corporate disclosures and transparency. In addition, organisation reporting of specific sources of opportunities which can be internal, external or mix of the two and specific steps being taken to create value from key opportunities signifies complete disclosure and transparency. This result aligns with Wen and Heong (2018) which found an insignificant positive relationship between risks and opportunities disclosure and financial performance. Contrariwise, the finding of this study negates Albetari *et al.* (2018) which found a significant negative relationship between risks and opportunities disclosure with financial performance.

In respect of SRAR, this implies that reporting of where organisation intends to go and how it intends to get there is a reflection of corporate disclosure and transparency. Also, reporting of organisation short, medium and long term strategic objectives, resource allocation plans to implement the strategy and how the achievements and target outcomes will be measured in the short, medium and long term amounts to corporate disclosure and transparency. This findings aligned with Albetari *et al.* (2018) which revealed that strategy and resource allocation have a significant positive relationship with financial performance. Contrarily, Wen and Heong (2018) showed a significant negative relationship between strategy and resource allocation disclosure and financial performance. Theoretically, the finding aligns with underpinning proposition of stakeholders theory which provides a means of connecting ethics and strategy which can help organisations who have the intention of serving the interests of all the stakeholders create value over time.

In relation to SRAR, this implies that reporting of expectation about the external environment that organisation is likely to face in the short, medium and long term is a demonstration of corporate disclosure and transparency. Also, reporting of how organisation is currently equipped to respond to the critical challenges and uncertainties that are likely to arise denotes complete disclosure and transparency. This finding does not align with Wen and Heong (2018) which reported a significant negative relationship between outlook disclosure and financial performance. This finding is inconsistent with Albetari *et al.*, (2018) which found an insignificant negative relationship between outlook disclosure and financial performance.

5.1 CONCLUSION AND RECOMMENDATIONS

The study examined the effect of integrated reporting practices on corporate disclosure and transparency in Nigerian quoted manufacturing companies. To achieve this objective, the eight content element of integrated report which are organisational overview and external environment reporting,

governance reporting, business model reporting, risk and opportunities reporting, strategy and resource allocation reporting, performance reporting, outlook reporting and basis of preparation and presentation reporting were adopted as the independent variables to explain variation in corporate disclosure and transparency.

As evidence by the main findings of this paper, it is certain that implementation of integrated reporting will engender corporate disclosure and transparency in Nigerian quoted companies. Therefore the findings of this paper will provide a significant impetus for the adoption of integrated reporting among Nigerian quoted companies. The findings of this paper would enable companies to gain insight to the contribution of integrated reporting, especially in terms of promoting corporate disclosure and transparency which is critical for the company survival.

The study recommended that Management of quoted companies should commence the adoption of integrated reporting practices on voluntary basis. The study further recommended that the current effort of accounting standard setters and regulators on integrated reporting practices should be fast-tracked for a new framework for corporate reporting in Nigeria.

5.2 Limitation of the Study

The study was limited to the Nigerian quoted manufacturing companies considering the strategic position they occupy in the Nigerian industrial sector. The study was also limited to the administration of questionnaire only since to the best of researcher knowledge no company in Nigeria has prepared integrated report. The study was also limited to the administration of questionnaire to the 675 top management employee of Nigerian quoted manufacturing companies and the big four accounting firms.

5.3 Suggestions for Further Studies

Further related research can be conducted in other sectors such as banking, insurance and oil and gas companies in Nigeria quoted companies.

REFERENCES

1. Abeyskera, I. (2013). *A template for integrated reporting*. *Journal of Intellectual Capital*, 14(2), 227-245.
2. Adhariani, D., & de Villiers, C. (2018). *Integrated reporting: Perspectives of corporate report preparers and other stakeholders*. *Sustainability Accounting, Management and Policy Journal*, 1-31. Retrieved from <https://doi.org/10.1108/SAMPJ>
3. AICPA & Black Sun. (2018). *Purpose Beyond Profit*. AICPA and Black Sun.
4. Ahmed, S. S. (2013). *The relationship between corporate governance and transparency and disclosures in state owned enterprises*. *International Journal of Business and Management Studies*, 5(2), 1309-1330.
5. Appiagyei, K., Djajadikerta, H., & Xiang, E. (2016). *Integrated Reporting and Firm Performance: A Research Framework*. Western Australia: School of Business and Law, Edith Cowan University.
6. Aujirapongpan, S., & Chanatup, S. (2015). *Integrated reporting: New Dimension of Firm's Performance Reporting*. *AU-GSB e-JOURNAL*, 8(1), 51-60.
7. Atkins, J., & Maroun, W. (2015). *Integrated reporting in South Africa in 2012. Perspectives from South Africa institutional investors*. *Meditari Accountancy Research*, 23, 197-221.
8. Adams, S. & Simnett, R. (2011). *Integrated reporting: An opportunity for Australia's not-for-profit sector*. *Australian Accounting Review*, 21(3), 292-301.
9. Anifowose, A. A. (2016). *The trend of integrated reporting practice in South Africa: Ceremonial or substantive?* *Sustainability Accounting, Management and Policy Journal*, 7(2), 1-44.
10. Bagu, C. (2001). *Managementul Productiei. Politici Manageriale de Productie*. Bucuresti: Tribuna Economica.
11. Bekefi, T., Epstein, M. J., & Yuthas, K. (2008). *Managing Opportunities and Risks*. Retrieved from http://www.cimaglobal.com/documents/importedddocuments/cid_mag_managing_opportunities_and_risk_pdf
12. Beretta, S., & Bozzolan, S. (2004). *A framework for the analysis of Firm Risk Communication*. *The International Journal of Accounting*, 39(3), 265-288.
13. Bhasin, M. L. (2017). *Integrated reporting at the crossroads: Will it become Trendsetter Model for the Corporate Reporting*. *International Journal of Management Sciences and Business Research*, 6(2), 35-59.
14. Burch-Adiloglu, B. V. (2012). *The relationship between the financial ratios and transparency levels of financial information disclosures within the scope of corporate governance: Evidence from Turkey*. *The Journal of Applied Business Research*, 28(4), 543-554.
15. Burke, J. J., & Clark, C. E. (2016). *The business case for integrated reporting: Insights from leading practitioners, regulators, and academics*. *Business Horizon*, 1276, 1-11.
16. Cadbury Report. (1992). *Report of the committee on the financial aspects of corporate governance*. Retrieved August 22, 2018, from <http://www.ecgi.org/codes/documents/cadbury.pdf>
17. Casadesus-Masanell, R., & Ricart, J. E. (2010). *From strategy to business model and onto tactics*. *Long Range Planning*, 43, 195-215.
18. Chao, C., Hsu, C., & Yeh, H. (2010). *The relationship between information transparency and firm value: Evidence from Taiwan*. *Int. J. Business Excellence*, 3(2), 125-141.
19. CIMA. (2004). *Performance reporting to Boards: A guide to good practice*. London: The Chartered Institute of Management Accountants. Retrieved from www.cimaglobal.com
20. Coelho, A. M. (2016). *Towards the Existence of Integrated Reporting: An International perspective*. Lisbon: ISCTE Business School.
21. Cooper, S., & Owen, D. (2011). *Corporate social reporting and stakeholder accountability: The missing link*. *Accounting, Organisations and Society*, 32(7-8), 649-667.
22. Cosma, S., Soana, M. G., & Venturelli, A. (2018). *Does the market reward integrated report quality?* *African journal of Business Management*, 12(4), 78-91.
23. De Villiers, C. & Hsiao, P. C. (2017). *Integrated Reporting, in de Villiers, C & Maroun, W. (Eds.) Sustainability Accounting and Integrated reporting*. Abingdon, UK: Routledge
24. De Villiers, C., Venter, E., & Hsiao, P. (2017). *Integrated reporting: Background, measurement issues, approaches and an agenda for future research*. *Accounting & Finance*, 57(4), 937-959.
25. Eccles, R. G., & Armbrester, K. (2011). *Two disruptive ideas combined: Integrating reporting in the Cloud*. *IESEInsight 8 (first quarter)*, 13-20.
26. Eccles, R. G., & Krzus, M. P. (2010). *One Report: Integrated Reporting for a Sustainable Strategy*. New Jersey: John Wiley & Sons, Inc.
27. Eccles, R. G., Krzus, M. P., & Serafeim, G. (2011). *Market interest in non-financial information*. *Journal of Applied Corporate Finance*, 23(4), 113-127.

28. Elena, N. I. (2014). *Company Performance Measurement and Reporting Methods*. Bucuresti: West University of Timisoara.
29. EY. (2014). *Integrated Reporting. Elevating Value*. Retrieved July 17, 2018, from [http://www.ey.com/Publication/vwLUAssets/EY-Integrated-reporting?\\$FILE/EY-Integrated-reporting.pdf](http://www.ey.com/Publication/vwLUAssets/EY-Integrated-reporting?$FILE/EY-Integrated-reporting.pdf)
30. Grant, R. M. (2016). *Contemporary Strategy Analysis: Text and cases edition, 9th edition*. Chichester, UK: John Wiley & Sons.
31. Giorgino, M. C., Supino, E., & Barnabe, F. (2017). *Corporate disclosure, materiality and integrated report: An event study analysis*. *Sustainability*, 9, 1-15.
32. Grossman, S. (1981). *The informational role of warranties and private disclosure about product quality*. *Journal of Law and Economics*, 24, 461-489.
33. Haji, A. A., & Anifowose, M. (2016). *The trend of integrated reporting practice in South Africa: Ceremonial or substantive? Sustainability Accounting, Management and Policy Journal*, 7(2), 190-224.
34. Havlova, K. (2015). *What integrated reporting changed: The case of early adopters*. *Business Economics and Management 2015 Conference* (pp. 231-237). Czech Republic: www.elsevier.com.
35. Healy, P. M., & Palepu, K. G. (2001). *Information asymmetry, corporate disclosure and capital markets: A review of the empirical disclosure literature*. *Journal of Accounting and Economics*, 31(1-3), 405-440.
36. IIRC. (2011). *Towards Integrated Reporting. Communicating Value in the 21st Century*. IIRC. Retrieved from www.theiirc.org
37. IIRC. (2013a). *The International <IR> Framework*. London: International Integrated Reporting Council.
38. IIRC. (2013c). *Business Model, Background Paper*. Retrieved August 16, 2018, from www.theiirc.org/wp-content/uploads/2013/03/Business_model.pdf
39. Ioana, D., & Adriana, T. (2013). *The integrated reporting initiative from an institutional perspective: Emergent factors*. *Procedia: Social and Behaviour Sciences*, 92, 275-279.
40. Ioannou, I & Serafeim, G. (2017). *The Consequences of Mandatory Sustainability Reporting*. Harvard: London Business School
41. Ittner, C., Larcker, D., & Rajan, M. (1997). *The choice of Performance measures in Annual Bonus contracts*. *The Accounting Review*, 72(2).
42. Jensen, C., & Meckling, W. H. (1976). *Theory of the firm: managerial behavior, agency cost and ownership structure*. *Journal of Financial Economics*, 3, 306-360.
43. Joshi, P. L. (2018). *Integrated reporting: Current trends in financial reporting*. *International Journal of Accounting*, 6(2), 1-4.
44. Karim, A. K. M., & Ahmed, J. U. (2005). *Determinant of IAS disclosure compliance in emerging economics: Evidence from Bangladesh*. Working paper series of Centre for Accounting, Governance and Taxation Research, 25, 1-29.
45. Karim, A. K. M., Islam, A., & Chowdhury, A. (1998). *Financial reporting in Bangladesh: the regulatory framework*. *Journal of Business Administration*, 24(1), 57-88.
46. Khodadadi, V., Khazami, S., & Aflatooni, A. (2010). *The effect of corporate governance structure on the extent of voluntary disclosure in Iran*. *Business Intelligence Journal*, 3(2), 151-164
47. Krzus, M. P. (2011). *Integrated reporting: If not now, when? 271-276*. Retrieved August 16, 2018, from <http://www.mikekrzus.com/downloads/file/IRZ-integrated-reporting.pdf>
48. Larcker, D., & Tayan, B. (2013). *A Real Look at the Real World. Corporate Governance*. United States: Guitman.
49. Linsley, P., & Shrives, P. (2005). *Examining Risk Reporting in UK Public Companies*. *The Journal of Risk Finance*, 6(4), 292-305.
50. Lynch, R. (2006). *Corporate Strategy. 4th edition*. London, UK: Prentice Hall.
51. Niculescu, M. (2005). *Diagnostical Global Strategic*. Bucuresti: Editura Economica.
52. Okeahalam, C. C., & Akinboade, O. A. (2003). *A review of corporate governance in Africa: Literatures, issues and challenges*. *Global corporate governance forum*, 15, 1-34.
53. Osterwalder, A. (2004). *The business model ontology- a proposition in a design Science approach*. *Business Doctor*, 1-169.
54. Pakkanen, T. (2012). *Internal and External Analysis*. International Business.
55. Paolucci, G., & Cerioni, E. (2017). *Integrated Reporting and Italian Companies: An Empirical Investigation*. *International Journal of Business and Management*, 12(9), 221-230.
56. Scantlebury, K., & Alleyne, P. (2015). *A content analysis of Risk management disclosures in Barbadian Public Limited Companies' Annual Report*. *Journal of Eastern Caribbean Studies*, 40(2), 127-165.
57. Sehar, N., Bilal, T., & Tufail, S. (2013). *Determinants of voluntary disclosure*. *Management and Administrative Sciences Review*, 2(2), 181-195.
58. Setia, N., Abhayawansa, S., Hoshi, M., & Huynh, A. V. (2015). *Integrated reporting in South Africa: Some initial evidence*. *Sustainability Accounting, Management and Policy Journal*, 6(3), 397-424.
59. Solomon, J., & Maroun, W. (2012). *Integrated Reporting: The influence of King III on Social, Ethical and Environmental Reporting*. London: ACCA.
60. Sukhari, A., & de Villiers, C. (2018). *The influence of integrated reporting on business mode and strategy disclosures*. *Australian Accounting Review*, 1-31.
61. Surty, M., & Yasseen, Y. (2018). *Trends in integrated reporting: A state-owned company analysis*. *Southern African Business Review*, 22, 1-22.
62. Thompson, M. (2009). *What is corporate governance?* Retrieved August 22, 2018, from http://articles.economicstimes.indiatimes.com/2009-01-18/news/28462497_1_corporated-governance-satyam-books-fraud-by-satyam-founder
63. Van Bommel, K. (2014). *Towards a legitimate compromise?: An exploration of integrated reporting in the Netherlands*. *Accounting, Auditing and Accountability Journal*, 27(7), 1157-1189.
64. van Zyl, A. S. (2013). *Sustainability and integrated reporting in the South African corporate sector*. *International Business & Economics Research Journal*, 12(8), 903-926.
65. Vitez, N., & Petric, A. (2018). *Integrated reporting concept and impact of performance of Croatian companies*. *Journal of Accounting and Management*, 8(1), 71-82.
66. Watson, D., & Head, T. (1998). *Corporate Finance Principles and Practice*. London: Financial Times Management.
67. Watts, R. L., & Zimmerman, J. L. (1978). *Towards a positive theory of determination*. *The Accounting Review*, 53(1), 112-134.
68. Wen, L. P., & Heong, A. Y. K. (2017). *Integrated reporting and financial performance: Evidence from Malaysia*. *Management & Accounting Review*, 16(2), 101-130
69. Zaman, R., Arslan, M., & Siddiqui, M. A. (2015). *The role of transparency and disclosure in banking sector of Pakistan*. *International Letters of Social and Humanistic Sciences*, 43(1), 152-166.