Integrated reporting and performance of deposit money banks in Nigeria

Adebawo, Owolabi Olutokunbo. PhD
Owolabi, Sunday Ajao PhD
Adegbie, Folajimi Festus Ph.D

1. Deputy Bursar, Adeleke University, Ede, Osun state, Nigeria.
   Email: owolabiadebawo@yahoo.com
2. Professor of Accounting, Babcock University, Ilisan-Remo, Ogun State, Nigeria.
   Email: owolabis@babcock.edu.ng
3. Head, Department of Accounting, Babcock University, Ilisan-Remo, Ogun State, Nigeria.
   Email: adegbie@babcock.edu.ng

Corresponding Author: Adebawo Owolabi Olutokunbo Ph.D, Email: owolabiadebawo@yahoo.com

Abstract

Integrated reporting capitals emerged to combine the historical financials with non-financials in a single report to increase the value relevance of financial statements because the traditional audited accounts have failed to satisfy the information needs of the investors. This study investigated the effect of integrated reporting on the performance of deposit money banks listed on the Nigerian Stock Exchange. The study was designed as explanatory research for the population of 16 listed deposit money banks which formed the sample size. Secondary data obtained from the audited accounts and NSE daily official price list for the period of 2009-2019 were used. Multiple regression models were used to analyze the data. Findings revealed that integrated reporting had significant effect on: ROA at Adjusted R2 =0.0903, F-ratio = 3.83, (6, 165), P-value = 0.0013; P/E ratio at Adjusted R2 = 0.3395, F-ratio = 15.65, (6, 165), P-value=0.0000. The study concluded that integrated reporting had a significant effect on ROA and the P/E ratio. The study recommended that the Government and Central Bank of Nigeria should mandate the banks and other companies to adopt an integrated reporting framework.

Keywords: 1. Integrated Reporting, Return on Asset (ROA) 2. Price Earnings Ratio (P/E ratio) 3. Performance, Deposit Money Banks
Introduction
The emergence of integrated reporting as a new financial reporting system was hoped to provide a way out of the global problem of corporate performance failure. The objective of the new reporting system is to give a concise comprehensive report that merges conventional financial accounting reports with firm’s sustainability and corporate governance related issues in order to increase the decision usefulness of business reporting on the enterprise performance to all the stakeholders.

One thing that is common to most failed companies is that their investors were caught unaware about their distress and performance failures because, the traditional financial reports contained historical figures and have not been transparent enough in terms of information disclosure.

Integrated reporting is a process of information communication of an organization to the stakeholder on how the firm’s value is created in the short, medium and long run (IIRC, 2013). Many countries of the world like South Africa, Japan, Australia and European Union have embraced integrated reporting (Okwuosa, 2020). This is because integrated reporting contains more disclosure than financial reporting thus; make more corporate reporting transparent to all the stakeholders. Reporting under transparency standard is what the investors required most to satisfy their information needs (Okwuosa, 2020). It should be noted that, when the structure on which the performance of the organization is built on is transparent, investor’s confidence will be boosted to invest not only in the company, it will also serve as an incentive to Foreign Direct Investment (FDI). Integrated reporting features include financial reports, corporate social responsibility reports, governance reports, environmental reports and sustainability reports. However, all these reports must integrate together and as well relate directly with the financials.

It is noteworthy that, integrated reporting is still at its developmental stage in Nigeria because most companies in the country produce corporate reports that are basically financials whose bases of preparations are historical and not very cleared to the investors. However, Nigeria as the largest economy in Africa cannot afford not to adopt integrated reporting which is now a global financial accounting reporting system to sanitize her corporate reporting system by making its bases transparent to attract foreign direct investments and meet investors’ information needs. Integrated reporting is all about information disclosure on value creation process and the more the disclosure, the more transparent the corporate report and the more attractive and clearer the reports to the investors and other stakeholders.

It should be noted that the few companies that provide the so called integrated reports are those operating in the highly regulated sectors like banking and financial institution sectors where this study is domiciled. However, integrated reporting is not mandatory hence, information disclosed is at variant from both at intra and inter corporate levels. This confirmed the fact that integrated reporting is still at its infancy in the country and is also the motivations to domicile the study in this sector.

However, the assessment of its effects on the performance of Deposit money banks in the sector that prepares integrated reports may serve as incentive to others that are yet to adopt the reporting system. The literature revealed that studies have been conducted into different aspect of integrated reporting to determine its value relevance in both developed and developing countries but they are yet to be synthesized together. In fact, Adegboyegun, Alade, Ben-Caleb et al (2020) submitted that companies may not accept the relevance of integrated reporting if there is no evidence of its significant contributions to performance that i integrated reporting capitals s, value created. Hence, this study was designed to investigate empirically the long run effect of integrated reporting on the value created by the firms.
measured in terms of performance of the listed Deposit Money Banks\(^1\) in Nigerian stock exchange, a voluntary environment by making use of panel data of these listed banks. Thus, filling the existing gap created by the paucity of study in this area. To further address this, the main objective has been broken down to the following specific objectives:

i. to examine the long run effect of integrated reporting on return on assets of deposit money banks listed in Nigerian stock exchange.

ii. to determine the long run effect of integrated reporting on price/earnings ratio of deposit money banks listed on the Nigerian stock exchange

The following questions were answered in the study:

i. to what extent does integrated reporting affect Return on Asset of deposit money banks listed on the Nigerian Stock Exchange in the long run?

ii. how does integrated reporting affect price earnings ratio of deposit money banks listed on the Nigerian Stock Exchange in the long run?

The following hypotheses were tested in the study

i. \(H_01\): integrated reporting had no significant effect on Return on Assets of deposit money banks listed in Nigerian stock exchange in the long run.

ii. \(H_02\): integrated reporting had no significant effect on Price Earnings Ratio of deposit money banks listed in Nigerian stock exchange in the long run.

The remainder of the article has been organized as follows: Literature review section, Research methodology section, data analysis section which includes results and discussions of findings and conclusion section which includes conclusion, policy implications, recommendations for future research and limitation of the study.

**Literature review**

**Conceptual Review**

**Integrated Reporting Concept**

According to International Integrated Reporting Committee (IIRC) (2013), integrated reporting is defined as a concise communication of organizations to the stakeholders about the strategy, governance, performance and prospects in using the available resources within the operational environment of the organization to create value in short, medium and long term. Hence, it is a report which communicates organization’s value in a holistic picture by integrating both financial and non-financial information (Bratu, 2017).

Integrated reporting is prepared based on the framework released by IIRC in 2013, therefore, its preparation is a principle based framework (Deloitte, 2013). This suggests that the report may vary from company to company but the framework which forms the basis of its preparation must be complied with. In fact, (Deloitte, 2013) that integrated reporting framework must reflect the IIRC’S intention that corporate reporting should evolve to communicate the full range of factors which affect organization’s ability to create
value over time in terms of financial, manufacture, human, intellectual, social and relationship and natural capacity needed to do business in the 21st century.

The performance of organization can be measured in terms of value created. This is clearly explained by the value creation process contained in the IIRC framework on integrated reporting that, value created by organization is revealed in the increase, decrease, or transformation of the capitals or resources used by the organization to produce her outputs. However, the value created could be for the organization itself to generate financial in relation to the providers of financial capital and it could be for the other stakeholders and society at large (Deloitte, 2013).

Generally, providers of financial capital that is, the investors are interested in the value that the organization provides for others because, it is from this value that these other stakeholders including the financiers of the business are settled. As a matter of fact, the environmental risks created through the operating activities of the business are expected to be mitigated from the value created through the organization’s corporate social responsibility and sustainability programs for the host community. Also, the social and relationship matters are expected to be satisfied and managed from the value created for this other group of stakeholders to ensure future growth and development of the organization and this is long term in nature. However, in a bid that the organization is creating wealth for others, it is actually creating value for itself which it ploughs back to enhance its expansionary activities and increase value. In fact, any organization that creates value in this process will generally be attractive to investors either locally or externally in the form of Foreign Direct Investor (FDI).

The preparation of integrated report is based on seven guiding principles of strategic focus and future orientation, connectivity of information, stakeholder relationships, materiality, conciseness, reliability and completeness and consistency and comparability (IIRC, 2015). These seven principles formed the qualitative characteristics of integrated report as determined by International Integrated Reporting Committee. Furthermore, the elements of integrated report include organizational overview and external environment. This suggested that an integrated report should disclose the details of the organization including her major activities; Governance that is, the governance structure of the organization; stakeholder identification and relationships that is, organization should disclose the key stakeholders and how they are engaged to ensure satisfaction of their needs; business model performance that is, the organization should disclose the extent to which its strategic objectives have been achieved through the application of the capitals; Risks, Opportunities and Internal-Controls- these have to be disclosed in terms of specific risks and opportunities that affect organizations and how they are dealt with through the effectiveness of the internal control system; strategy and resource allocation that is, the organization must give details of the strategic direction; outlook that is, the future outlook of the organization must be disclosed (IIRC, 2015). It should be noted that all there elements formed the basic contents of integrated report and the focus of their narratives should be on how they have assisted the organization to create value in the short, medium and long term. In fact, (Adegboyegun, Alade, Ben- Caleb et al, 2020) confirmed that these principles and elements revealed that the integrated report is a blend of financial and nonfinancial information of an organization that can be used to evaluate the performance of a business in the short, medium and long term. It should be noted that integrated reporting can only be achieved through integrated thinking (IIRC, 2013). This is because the processes and procedures of implementing integrated reporting can only be achieved through management integrated thinking with the focus on value creation (Hurghis, 2017).
Integrated Reporting Concept and Financial Reporting in Nigeria

In Nigeria, poor attention is still being given to integrated report because investors do not consider it to be necessary information required for their investment decisions (Ogbodo, 2015). Nigeria is still at the early stage of the adoption of integrated reporting however, relevant regulatory authorities including the Institute of Chartered Accountants of Nigeria (ICAN) are now putting necessary machineries in place to herald integrated reporting to the country. The global financial crisis of 2008 revealed the risk inherent in relying on the traditional financial statement for investment decision on one hand and on the other hand, it also revealed the need for an improved corporate reporting method that will blend financial and non-financial information necessary for decision making and risk management (Abeysekera, 2013).

It is also important to note that integrated reporting is not mandatory in Nigeria. Hence, it is difficult to compel the corporate entities operating in the country to pay back to the environment in which they derived the value created overtime through corporate social responsibilities and sustainability programs. However, in South Africa, integrated reporting is mandatory, it is part of kings III and IV codes for governance and listing requirements for corporate bodies to get listed in Johannesburg stock exchange (Adams, 2017). Nigeria is the largest economy of Africa, and by virtue of her large population and diverse resources, it has become the investor’s destination in Africa. In fact, (Isaac, Asmat-Nizam and knocks, 2014) submitted that the West African giant in terms of her economy and population has an environment that is naturally endowed for international business. In the light of these obvious facts, Nigeria must embrace integrated reporting framework for her financial reporting system to attract investors.

Theoretical Review

The relevant theories to this study are stakeholders theory propounded by Dr. R. Edward Freeman in 1984, Agency theory propounded by M.C. Jensen and Meckling 1976, and Legitimacy theory also, propounded by (Lindblom, 1994). However, this study will be hinged on stakeholder theory and Legitimacy theory.

Stakeholder Theory

This theory was invented by (Freeman, 1984) and it seeks to protect the interests of all the stakeholders in business. These stakeholders go beyond the relationship between the stakeholders and managers to include customers, suppliers, shareholders, local communities and employees. In fact, stakeholder theory advocated fair treatment of the entire stakeholder in the value creation and value sharing process. According to Harrison, Freeman and Abreu (2018), stakeholders that are treated well will reciprocate positively towards the organizations by sharing valuable information (all stakeholders), buying more products (customers), providing tax relief information (communities), providing more favorable financial terms (financiers), buying more stocks (shareholders) and working hard for the organization and remain loyal. However, it is important for the firm to produce integrated report that is very detailed to satisfy the information needs of these stakeholders. This is because; such information will enhance the relationship between the various stakeholders and the business entity. Hence, the value relevance of integrated report in the financial reporting system.

Legitimacy Theory

The theory was proposed by (Lindblom, 1994) and it focused on how organization’s actions and activities can become acceptable or legitimized by the society at large (Suchman, 1995). In other words, the theory is
emphasizing that the organization’s value system must align with the value system of the larger social system of which the organization is a part. However, when disparity occurs between the two values systems, the entity’s legitimacy to exist in that environment will be threatened. The implication of the theory is that the society will continue to allow the organization to operate to the extent that it meets its expectations by complying with the value system of the larger society. This can only be achieved when there is flow of information. That is, the larger society in which the organization is operating can only be aware of how the organization is complying with the norms of the society when the entity discloses such information in a manner that such information can be verified and useful to the stakeholders. The objective of integrated reporting is that information must be made available in a detailed and comprehensive manner to prevent information gap that is capable of threatening organization’s legitimized right to exist and operate in the larger society in which it is operating. (Adegboyegun. Alade, Ben-Caleb et al, 2020).

**Empirical review**

Various studies over the last few years have examined the impact of integrated report on corporate performance. However, while some studies supported the assertion that integrated reports had significant effects on performance of firms (Albetairie and Kukreja, 2018) others concluded that it does not (Barin and Ansari, 2016). Also, (Islam, 2020) investigated the relationship between integrated reporting and firm performance in a voluntary disclosure regime from Bangladesh. He focused on firm’s operational performance, financial and growth as performance indices. The operational performance was measured with return on assets (ROA); financial performance with return on equity (ROE) and growth was measured with market –to-book value ratio respectively. He found out that integrated reporting capitals have positive and significant effects on the performance as measured with ROA, ROE and market-to-book ratio. Adegboyegun et al (2020), studied the effect of integrated reporting on corporate performance in Nigeria: Evidence from the banking industry. They found from the study that integrated reporting does not have any significant effect on corporate performance. Performance was measured with Profit after tax (PAT), debt to equity ratio and total asset (TA). They further established that no matter the level of improvements or attenuation that is, reduction in the quality of the report, it may not impact corporate performance since integrated reporting is not a tool to predict corporate performance. Also, (Appiyayis, Djajadikaerta and Xiang, 2016) investigated integrated reporting and firm performance by drawing samples of companies for the study from Australian stock exchange market (ASX) and Johannesburg stock exchange (JSE). Performance was proxy on sales growth and earnings per share which can also be used to determine company profitability. Their result revealed that integrated reporting had significant effect on corporate performance at short, medium and long term. This is contrary to the findings of (Adegboyegun. Alade, Ben-Caleb et al(2020) because as the length of years of adoption increases, integrated reporting standards are reviewed in terms of information to be disclosed which will bring improvements to the firm performance.

Furthermore, (Dilling and Caylcoyln, 2019) examined the determinants of companies that disclose high quality integrated reports. The quality of report was premised on female executive ratio, external board members ratio, profitability, leverage, and previous report experience and report length. The result showed that there was a significant correlation between integrated reporting quality and variables related to female executive ratio, external board members ratio profitability, leverage and previous report experience and length of report. However, there was no significant relationship between location, industry group and quality of report. The result also revealed that the quality of integrated reports produced by some companies are high especially, those listed in the international integrated reporting committee.
While quite a number of other companies produced low quality report. The general overview of the result is that integrated report affect company performance positively and this corroborated the findings of (Islam, 2020) and (Appiagisyis, Djaadikarta and Xiang, 2016).

According to Hurghis (2017), who examined integrated reports and financial performance: an analysis and used samples of companies engaged for the pilot study at IIRC program from 2012-2014. He proxy performance on ROA and earnings per share (EPS). The result showed that financial performance did not influence compliance with integrated reporting framework designed by IIRC. This means that integrated reporting had no significant effect on financial performance of companies. Also, (Baboukardos and Rimmel, 2016) examined the value relevance of accounting information under an integrated report approach: a research note. The study used the firms in Johannesburg stock exchange to find out if the value of accounting information proxy on book value of equity and earnings have enhanced after the mandatory adoption of integrated report under king III report. The result revealed that earnings of the company increased tremendously after the adoption while the book value of equity that is, net asset reduced drastically an indication that, various inadequacies in the financial records of the company in terms of asset and liabilities were corrected to comply with the reporting standards which now brought down the book value of equity. This result revealed that integrated reporting had significant positive impact on the performance of the companies and also assisted them to keep good accounting records. According to Reon and Rozane (2019), Positive relationship existed between integrated reporting quality and earnings per share. However, no significant relationship existed between integrated reporting quality and ROE, ROA and EVA (Economic Value Added). Also, the researcher revealed that there was no significant difference in the financial performance of listed banks before and after the adoption of integrated reporting. The study was based on integrated reporting and financial performance of South African listed banks. The study made use of secondary data obtained from the annual accounts of the companies over a period of 5 years from 2010-2014.

However, (Makeredzi and Chipochangu, 2019) investigated the impact of integrated reporting on financial performance of forty top listed companies in Johannesburg stock exchange. The study proxy performance on return on asset (ROA) and found that integrated reporting did not have significant impact on performance measured by ROA. Other variable used to measure performance in the study were Economic Social Governance (ESG), Economic Value Added (EVA), Tobin’s q (TQ) and integrated reporting did not have any significant effect on each of them. Also, (Adegbie, Akintoye and Bello, 2019) evaluated the effects of integrated reporting on the value of listed manufacturing firms in Nigeria. The population of the study comprised of 53 manufacturing companies quoted on the Nigerian Stock Exchange as at 30th June 2017 out of which 38 companies were purposively selected from consumer goods and industrial goods sectors. The firm value is measured with Tobin’s Q (TQ) and descriptive and inferential statistics using regression analysis were employed to analyze the data obtained. The findings revealed that integrated reporting had significant effect on firm value measured by Tobin’s Q. Furthermore, (Iyoha, Ojeka and Ogundana, 2017) studied the Bankers’ perspectives on integrated reporting on value creation from Nigerian environment. The study administered 98 questionnaires on bank employees and the result revealed that integrated reporting had significant effect on firm’s value.

As a matter of fact, if integrated reporting is implemented, it is supposed to improve the relationships between the stakeholders of the company and the company itself because the information flows from both
Innovations, Number 67 December 2021

parties will enable each party to fulfill the expected obligation in the value creation process. Furthermore, (Olusanjo, Adegbie and Akintoye, 2019) studied the effect of integrated reporting practices on improved stakeholders’ relationship in Nigerian quoted manufacturing companies. The study employed a survey research design and a sample size of 45 firms was picked on convenient sampling technique while 675 respondents were purposively selected from the category of employees believed to have information about integrated reporting. The data obtained were analyzed using descriptive and inferential statistics of logistics regression. The dependent variable was improved stakeholders’ relationship while the dependent variable was integrated reporting practices. The findings revealed that integrated reporting practices had significant effect on improved stakeholders’ relationship.

Also, (Appah and Onowu, 2021) investigated the effects of integrated reporting on firm value of listed Insurance Companies in Nigeria for the period between 2010-2019. The study employed ex post facto and correlational research design. The sample size for the study comprised of insurance companies listed on the Nigerian stock exchange while the data was obtained from the annual audited accounts of the firms. The data were analyzed using descriptive and regression analysis. The results showed that integrated report positively and significantly affect the financial performance of listed insurance companies in Nigeria. Furthermore, it is pertinent to note that meeting the information needs of all the firms’ stakeholders is very important and having qualified people on the board of these companies to formulate policies to drive this new corporate reporting framework to maximize value creation in the long run should not be compromised. In fact, (Orshi, Dandago and Isi, 2019) carried out a study to find out whether Boards determine integrated reporting in Nigerian listed oil and Gas Firms. The study used a panel data obtained from the annual accounts of the sampled companies from 2013-2017 and multiple regression analysis was used to analyses the data. The results revealed that the board independence and board size have significant positive effect while board diligence has an insignificant positive effect on integrated reporting proxy on integrated reporting disclosures. That is, having qualified persons on the board will drive the level of integrated information disclosure by listed firms in oil and gas sector in Nigeria.

It is very pertinent to note that integrated reporting is still at its developmental stage in Nigeria and for the researcher to assess its impact on the firms’ performance, samples of previous researchers’ works reviewed were drawn across the globe to include the works (Appah and Onowu, 2021), (Adegboyegun et al, 2020), (Islam, 2020), (Appiagyis et al, 2016), (Dilling and Cayloyln, 2019), (Hurghis, 2017), (Baboukardos and Rimmel, 2016), (Reon and Rozane, 2019) and (Markaredzi and Chipochangu, 2019). However, results of these studies have generated mixed reports on the effects of integrated reporting on firm performance through creation of value over time. While some studies claimed that it has significant effect on performance of company (Appah and Onowu, 2021); (Islam, 2020); (Orshi, 2019); (Dilling and Cayloyln, 2019); (Adegbie et al, 2019) and (Olusanjo etal, 2019) and (Iyoha, et al, 2017) and (Appiagyis et al, 2017), others found that it does not have significant effect on firm performance (Adegboyegun, et al, 2020); (Markaerzedzi and Chipochangu, 2019); (Reon and Rozane, 2019) and (Hurghis, 2017). The inconsistency observed in the results confirmed the fact that integrated reporting is still undergoing developmental stages. In addition to this, some of the studies were carried out in the environment where integrated reporting is mandatory like South Africa, (Appiagyis et al, 2016) while others were from voluntary environment like Bangladesh thus presenting a gap in a way.
In Nigeria the gap is obvious, there is no framework for integrated reporting due to the fact that it is not mandatory, although, there have been ongoing discussions by various financial reporting standard setters and accounting bodies to adopt integrated reporting standard (Oba and Ibikunle, 2015). Apart from this, the present crop of accountants that are presently preparing and auditing financial reports need to be retrained to keep abreast of information and better equipped for the job. This gap has contributed to the paucity of studies on the effect of integrated reporting on performance of firms in terms of value creation over short, medium and long term period. More importantly, the few studies carried out in this area of financial reporting in Nigeria assumed integrated reporting to be improving quality of information and by extension value of the firm. This study has been designed to test this assumption empirically and fill the gap created by paucity of studies on integrated reporting in the banking sector in Nigeria.

**Research Methodology**

**Data and Sampling Procedure**

The study adopted explanatory research design because there was a reason to determine the effect of integrated reporting on the Deposit money banks' performance. The population for the study included all the sixteen Deposit Money Banks listed on the Nigerian Stock exchange between 2009 - 2019. However, due to the small population size, all the sixteen banks were included in the sample. The data for the independent variable X (Integrated reporting capital) were collected from the sixteen listed deposit money banks on the Nigerian stock exchange from 2009-2019 through content analysis of the information disclosed in the audited annual reports. The data for the dependent variable Y (performance) proxy on profitability that is, Return on Asset (ROA) and market earnings proxy on P/E ratio were also extracted from the audited accounts of the banks.

**Estimation Techniques**

Descriptive, correlation and inferential statistics were used to analyze the linear relationship that existed between the variables with the use of Stata 14, statistical software. The explanatory power of the proxies of the variables was based on the Adjusted R-squared and the level of F-ratio and relevant P-value.

**Descriptive and Measurement of Variables**

Integrated reporting was measured in terms of information disclosed by the company on the six major capitals of integrated reporting. The study adapted a score sheet prepared by (Appiagyas et al., 2016) in a similar study in South Africa, adjusted it in line with the objectives of the study to content analyze the information disclosed in the audited accounts of the banks from 2009-2019 with respect to the integrated reporting concepts. This represented the data for the independent variable X.

\[
PF = f \left( IR \right)
\]

Integrated Reporting (IR) sub-variables are:

- \[ x_1 = \text{Financial Capital (FC)} \]
- \[ x_2 = \text{Human Capital (HC)} \]
- \[ x_3 = \text{Social Capital (SC)} \]
- \[ x_4 = \text{Manufactured Capital (MC)} \]
Innovations, Number 67 December 2021

\[ x_5 = \text{Environmental Capital (EC)} \]
\[ x_6 = \text{Natural Capital (NC)} \]
\[ Y = \text{Performance (PF)} \]

The sub-variables are:
\[ y_1 = \text{Return on Assets (ROA)} \]
\[ y_4 = \text{Price Earnings Ratio (PE/Ratio)} \]

1. \[ \text{ROA} = f(FC, HC, SC, MC, EC, NC) \] \text{equation 1} 
2. \[ \text{P/E Ratio} = f(FC, HC, SC, MC, EC, NC) \] \text{equation 2} 
3. \[ \text{ROA} = \beta_0 + \beta_1 FC + \beta_2 HC + \beta_3 SC + \beta_4 MC + \beta_5 EC + \beta_6 NC + \epsilon \] \text{Model 3} 
4. \[ \text{P/E R} = \beta_0 + \beta_1 FC + \beta_2 HC + \beta_3 SC + \beta_4 MC + \beta_5 EC + \beta_6 NC + \epsilon \] \text{Model 4} 

Source: Researcher's Model (2021)

The description and measurement of variables are given in Table 1 in the list of Table.

In order to ensure consistency and clarity in the measurement of variables on dependent and independent variables, the model used for the computation of ROA, PE ratio and Integrated reporting (IR) capitals are as presented and explained in Table 1.

Data Analysis

Table 2 shows the level of information disclosure by the deposit money banks on the six major capitals of integrated reporting and overall, financial information disclosure is more prominent among the banks with a score of 94.9%. All the banks included in the sample made higher disclosure of information on integrated reporting on financial capital (FC) 94.9%; Human capital (HC) 89.2%; Social capital (SC) 92.4%; Environmental capital (EC) 92.3% and manufactured capital (MC) 93.5%. However, on the contrary, information disclosure on natural capital has the lowest level of 45.9% among the banks over the period covered by the study. This is an indication that the banks have not disclosed much information to the investors and other stakeholders on natural capital hence; not complying with integrated reporting requirements, also an indication that integrated reporting is still at its developmental stage in Nigeria.

Data analysis and discussion of results

The findings from the analysis carried out are reported as follows:

Table 3a shows the correlation analysis of integrated reporting and ROA which generally indicated positive correlation with ROA. This implied that the information disclosed by the banks under various capital subheadings has a positive relationship with performance and the potential to boost stakeholders' confidence if the basis is clear in terms of disclosure. It also shows the effect of voluntary disclosure and that integrated reporting is still at its developmental stage in Nigeria.

Table 3b also shows correlation analysis of integrated reporting and price earnings ratio of deposit money banks. It indicated that integrated reporting capitals have a positive correlation with the PE ratio. Meanwhile, the positive correlation is an indication that it can boost performance if the information to disclose is standardized. As a matter of fact, the significant level of the information disclosed will be determined by the inferential statistical results.
Research Hypothesis One

$H_0$: Integrated reporting had no significant effect on Return on Assets of deposit money banks listed in Nigerian stock exchange market.

The effect of integrated reporting on ROA of Deposit Money Banks as stated in hypothesis one is analyzed in Table 4.

In the Table 4, the results of the regression analysis ran on the effect of integrated reporting on the overall return on assets of the deposit money banks listed on the Nigerian stock exchange was presented. The overall results indicated that integrated reporting had significant effect on the Returns on Asset (ROA) of the banks with F ratio of 3.83; P- value of 0.0013; Adjusted $r^2$ of 0.0903 and $r^2$ of 0.1222. The adjusted $r^2$ of 9% showed that only 9% of the variables of integrated reporting capitals had effects on the ROA of the banks while the remaining 91% represented the composition of other factors that were outside the model but also affected ROA of the banks. However, these factors were not significant as indicated by F –ratio of 3.83 which was greater than P- value of 0.05 adopted for the study.

The study found that integrated reporting capitals had significant effect on ROA of deposit money banks listed on the Nigerian stock exchange. The result was supported by the findings of Islam (2020) who investigated the relationship between integrated reporting and firm performance in a voluntary disclosure regime from Bangladesh. He found that integrated reporting capitals had positive and significant effect on the return on asset (ROA) of the company. Also, (Appiagysis et al, 2016) corroborated the result through their findings in a similar research in South Africa that integrated reporting had significant effect on corporate performance at long, medium and short runs. However, (Makeredzi and Chipochangu, 2019) investigated the impact of integrated reporting on financial performance of forty top listed companies in Johannesburg stock exchange. The study proxy performance on return on asset (ROA) and found out that integrated reporting did not have significant impact on performance measured by ROA. Other variable used to measure performance in the study were Economic Social Governance (ESG), Economic Value Added (EVA), Tobin’s q (TQ) and integrated reporting did not have any significant effect on each of them. These results did not support the findings of the study that integrated reporting impacted return on asset (ROA) significantly. Of course, this might be due to the fact that the study was carried out in an environment where adoption of integrated reporting was made mandatory for the listed companies and the sampled companies were not in the same sector of financial institutions.

On the whole, the result revealed that the information disclosed by the banks is not standardized yet which confirmed that integrated reporting is still at its infancy in Nigeria. Furthermore, the non-significant level of the information disclosed under financial, human, social and environmental capitals indicated by the coefficients of these variables revealed that, the basis of such information is not clear to the investors and may not boost the investors' confidence and customers' patronage in both the market and the banks until they are standardized and made mandatory.

**Decision**

At the level of significance of 0.05, the F- statistics was 3.83 while the P- value of the F- statistics was 0.0013 which was less than 0.05 level of significance adopted for the study. Therefore, the study rejected the null hypothesis.

This meant that overall, integrated reporting capitals had significant effect on ROA of deposit money banks listed on the Nigerian stock exchange.
Research Hypothesis Two

Integrated reporting had no significant effect on Price Earnings Ratio of deposit money banks listed on Nigerian stock exchange.

The effect of integrated reporting on Price Earnings Ratio of Deposit Money Banks as stated in hypothesis two is analyzed in Table 5.

In the Table 5, the results of the regression analysis showed that the effect of integrated reporting on the overall price earnings ratio of the deposit money banks listed on the Nigerian stock exchange market. The overall results indicated that integrated reporting had significant effect on the price earnings ratio of the banks with F ratio of 15.65; P- value of 0.0000; Adjusted $r^2$ of 0.3395 and $r^2$ of 0.3627. The adjusted $r^2$ of 34% showed that 34% of the changes in the price earnings ratio of deposit money banks were caused by changes in integrated reporting capitals. The balance of 66% were caused by factors outside the model but the effects were not significant as indicated by F- ratio of 15.65 which was greater than P- value of 0.0000

The findings of the study corroborated the result of (Hurghis, 2015) on the similar study carried out on integrated reports and financial performance: an analysis. He used sample of companies that participated in the pilot study program between 2012 and 2014 and proxy performance on earnings per share which was an accounting ratio. The study reported that financial performance of the companies did not influence the extent to which the companies complied with integrated reporting framework. ROA was the other variable used to measure performance in the study. Also, (Baboukardos and Rimmel, 2016) investigated the value relevance of accounting information under an integrated approach: a research note. They established from the study that earnings of the company listed on Johannesburg stock exchange increased sharply after the mandatory adoption of integrated reporting frame work based on the recommendation of King III reports. This suggested that integrated reports had significant effect on the performance of the company.

The study premised performance on the earnings of the company and other variables used to measure performance in the study were the book value of the equity that is, the net assets which fell sharply after the mandatory adoption of the integrated reporting format. Of course, the various inadequacies in the accounting records which were not properly captured in the books of accounts in compliance with the mandatory adoption of integrated reports might be responsible for the decline in the value of the equity (Baboukardos and Rimmel, 2016).

It was noticed from the findings that while some study supported that integrated reporting affected the performance of companies, others did not. The reason for this might not be unconnected with the mandatory and voluntary disclosure environment that they operated in and the study was carried out. Furthermore, the non-significance of the information disclosed under financial and natural capitals as indicated by their coefficients revealed that the basis of preparation of such information disclosed was not cleared to the investors and could not boost their confidence in investing in the banks thus impacting positively in their performance.

Decision

At the level of significance of 0.05, the F- statistics was 15.65 while the P- value of the F- statistics was 0.0000 which was less than 0.05 level of significance adopted for the study. Therefore, the study rejected the null hypothesis.

This meant that overall, integrated reporting capitals had significant effect on price earnings ratio of deposit money banks listed on the Nigerian stock exchange market.
Conclusion

From the findings of the study which had been supported by various relevant literatures, this study concluded that integrated reporting capitals had significant long run effect on the return on asset (ROA) and price earnings ratio of the deposit money banks listed on the Nigerian stock exchange. In sum, the findings indicated that, if information disclosed under the integrated reporting capital variables are standardized and made mandatory, they have the potentials to increase the value created by the company overtime in the long run and boost investors' confidence both locally and internationally. However, the multiplier effect of this will increase the performance of the firms in the long run. Hence, the study recommended that all the banking and other government regulatory bodies should mandate the banks and even other companies to prepare corporate reports in compliant with integrated reporting format.

The empirical evidence provided by the study revealed the longrun effect of integrated reporting on the performance of deposit money banks thus, filling the gap created by paucity of study in this area of financial reporting in Nigeria and by extension in other countries of the world where integrated reporting is still at its infancy.

Endnotes

1. Same as commercial banks in other countries of the world
2. It is the integrated thinking of the management and board of the company that gave rise to integrated reporting. Integrated thinking is a process through which the management consider the business models, strategy, operations and long term capitals and their value creation process
3. Return on Asset is a profitability ratio that measures the efficiency of the management in utilizing the assets of the company to generate earnings.
4. It compares the market price per share of the company stock with its earnings per share. It is a market performance variable.

References


Tables

**Table 1. Description and Measurement of Variable.**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Description</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>Return on asset</td>
<td>Net income/total assets</td>
</tr>
<tr>
<td>P/E</td>
<td>P/E ratio</td>
<td>Price per share/earnings per share</td>
</tr>
<tr>
<td>IR</td>
<td>Integrated reporting capitals:</td>
<td></td>
</tr>
<tr>
<td>FC</td>
<td>Financial capital</td>
<td>Content analysis of info</td>
</tr>
<tr>
<td>HC</td>
<td>Human capital</td>
<td>Content analysis of info</td>
</tr>
<tr>
<td>SC</td>
<td>Social Capital</td>
<td>Content analysis of info</td>
</tr>
<tr>
<td>EC</td>
<td>Environmental capital</td>
<td>Content analysis of info</td>
</tr>
<tr>
<td>MC</td>
<td>Manufactured capital</td>
<td>Content analysis of info</td>
</tr>
<tr>
<td>NC</td>
<td>Natural Capital</td>
<td>Content analysis of info</td>
</tr>
</tbody>
</table>

Source: Researcher’s study, (2021)

Table 1 presents the description and measurement of variables of both the dependent and independent variables of the study.

**Table 2. Information Disclosure On Integrated Reporting Capitals (2009-2019)**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Score</th>
<th>Max. Score</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC</td>
<td>3702</td>
<td>3900</td>
<td>94.9</td>
</tr>
<tr>
<td>HC</td>
<td>1740</td>
<td>1950</td>
<td>89.2</td>
</tr>
<tr>
<td>SC</td>
<td>4806</td>
<td>5200</td>
<td>92.4</td>
</tr>
<tr>
<td>EC</td>
<td>2399</td>
<td>2600</td>
<td>92.3</td>
</tr>
<tr>
<td>MC</td>
<td>3038</td>
<td>3250</td>
<td>93.5</td>
</tr>
<tr>
<td>NC</td>
<td>2090</td>
<td>4550</td>
<td>45.9</td>
</tr>
</tbody>
</table>

Source: Researcher’s Study, 2021

Table 2 presents the level of information disclosed by the deposit money banks on the six major capitals of integrated reporting.
### Table 3a. Correlation Analysis of Integrated Reporting Capitals and Return on Assets (ROA)

<table>
<thead>
<tr>
<th>Variables</th>
<th>ROA</th>
<th>FC</th>
<th>HC</th>
<th>SC</th>
<th>EC</th>
<th>MC</th>
<th>NC</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FC</td>
<td>0.2461</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HC</td>
<td>0.2401</td>
<td>0.9029</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC</td>
<td>0.1908</td>
<td>0.7340</td>
<td>0.7602</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EC</td>
<td>0.2096</td>
<td>0.7629</td>
<td>0.7654</td>
<td>0.8119</td>
<td>1.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MC</td>
<td>0.0710</td>
<td>0.6174</td>
<td>0.6509</td>
<td>0.7296</td>
<td>0.7812</td>
<td>1.0000</td>
<td></td>
</tr>
<tr>
<td>NC</td>
<td>0.2567</td>
<td>0.8477</td>
<td>0.9345</td>
<td>0.6903</td>
<td>0.6212</td>
<td>0.6196</td>
<td>1.0000</td>
</tr>
</tbody>
</table>

Source: Researcher's study, 2021

Table 3a presents the correlation analysis of integrated reporting capitals and ROA of Deposit Money banks.

### Table 3b. Correlation Analysis of Integrated Reporting Capitals and Price Earnings Ratio (PE ratio)

<table>
<thead>
<tr>
<th>Variables</th>
<th>PE ratio</th>
<th>FC</th>
<th>HC</th>
<th>SC</th>
<th>EC</th>
<th>MC</th>
<th>NC</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE ratio</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FC</td>
<td>0.0928</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HC</td>
<td>0.0442</td>
<td>0.9029</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC</td>
<td>0.3342</td>
<td>0.7340</td>
<td>0.7602</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EC</td>
<td>0.3576</td>
<td>0.7629</td>
<td>0.7654</td>
<td>0.8119</td>
<td>1.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MC</td>
<td>0.4229</td>
<td>0.6174</td>
<td>0.6509</td>
<td>0.7296</td>
<td>0.7812</td>
<td>1.0000</td>
<td></td>
</tr>
<tr>
<td>NC</td>
<td>0.0223</td>
<td>0.8477</td>
<td>0.9345</td>
<td>0.6903</td>
<td>0.6212</td>
<td>0.6196</td>
<td>1.0000</td>
</tr>
</tbody>
</table>

Source: Researcher's study, 2021

Table 3b also presents correlation analysis of integrated reporting capitals and price earnings ratio of deposit money banks.
Table 4: Regression Table for Effect of Integrated Reporting on ROA of Deposit Money Banks

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of squares(ss)</th>
<th>Df</th>
<th>Mean of squares(ms)</th>
<th>F-ratio</th>
<th>P-value</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>0.036283728</td>
<td>6</td>
<td>0.006047288</td>
<td>3.83</td>
<td>0.0013</td>
<td>0.1222</td>
<td>0.0903</td>
</tr>
<tr>
<td>Residual</td>
<td>0.260595338</td>
<td>165</td>
<td>0.001579366</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>0.296879066</td>
<td>171</td>
<td>0.001736135</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Researcher's Study, 2021

Table 4 presents the results of the regression analysis ran on the effect of integrated reporting on the overall return on assets of the deposit money banks listed on the Nigerian stock exchange.

Table 5: Regression Table for effect of integrated reporting on Price Earnings Ratio (P/E ratio) of deposit money banks

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of squares(ss)</th>
<th>Df</th>
<th>Mean of squares(ms)</th>
<th>F-ratio</th>
<th>P-value</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>12285.1528</td>
<td>6</td>
<td>2047.52547</td>
<td>15.65</td>
<td>0.0000</td>
<td>0.3627</td>
<td>0.3395</td>
</tr>
<tr>
<td>Residual</td>
<td>21585.704</td>
<td>165</td>
<td>130.822449</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>33870.8569</td>
<td>171</td>
<td>198.075186</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Researcher's Study, 2021

Table 5 presents the results of the regression analysis on the effect of integrated reporting on the overall price earnings ratio of the deposit money banks listed on the Nigerian stock exchange.

Author biography

Adebawo Owolabi Olutokunbo is the Deputy Bursar of Adeleke University, Ede, Nigeria. Had a distinguished career in Odua Investment Company Limited, Ibadan, the largest conglomerate in Africa. He was appointed the Executive Director Finance, Wemabod Estates Limited in 2007 (a subsidiary of Odua group) the position he held till 2018 that he disengaged from the group to join Adeleke University same year. Before then, he had extensive experience in key auditing, finance insurance, accounting and real estates functions. He is a Fellow of the Institute of Chartered Accountants of Nigeria and Chartered Institute of Taxations of Nigeria. He holds a Master degree in Accounting and Doctor of philosophy In Business Administration, as a researcher, he has some publications to his credit.