

## Integrated Capital Reporting and Profitability of Deposit Money Banks in Nigeria

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### Abstract

*This study was conducted to investigate the impact of integrated reporting on the profitability of listed deposit money banks in Nigeria, given the country's growing need for transparent corporate reporting and the global shift towards integrated reporting practices. This study was motivated by the prevalent focus of Nigerian banks on traditional financial reporting, which may overlook crucial non-financial factors that drive long-term value creation, potentially compromising stakeholders' decision-making and investors confidence. The main objective of this study was to assess the influence of integrated capital reporting on profitability of selected Listed Deposit Money Banks on the Nigerian Exchange Group. The study population was 44 deposit money banks in Nigeria, with a sample size of 13 banks selected using purposeful sampling technique. Secondary data used were collected from published annual reports, company websites, and Nigeria Exchange Group website, covering a 10-year period (2014-2023). The variables used for this research were; profitability (dependent variable), financial capital, manufactured capital, intellectual capital, human capital, and social capital (independent variables). Ex-post facto research design was used to examine the relationship between integrated capitals reporting and profitability of selected deposit money banks in Nigeria. Five (5) research questions and hypothesis were formulated to guide the study. Data were analyzed using descriptive statistics (mean, median, minimum, maximum, and standard deviation) and regression analysis. Based on the findings of the study it was concluded that integrated reported capitals have significant influence on the profitability of listed deposit money banks in Nigeria. Specifically, financial capital, intellectual capital, human capital and social capital all had significant effects on the profitability of listed deposit money banks in Nigeria. While manufactured capital, has insignificant influence on the profitability of the studied banks. The study recommended that banks in Nigeria should increase financial capital by raising more debt and equity, invest in intellectual capital by acquiring more intangible assets, develop human capital through employee training and motivation, enhance social capital through donations and contributions to host communities and optimize/reduce manufactured capital (PPE) to boost profitability.*

**Keyword:** Sustainability, Integrated Reported, Profitability, Financial Capital, Manufactured Capital, Intellectual Capital, Human Capital

## Introduction

### 1.1 Background of the Study

In recent decades, the demand for greater transparency and accessibility in corporate reporting has led to the rise of Integrated Reporting (IR), a framework that combines financial and non-financial information to assess both performance and sustainability. Unlike traditional reporting, IR merges financial data with sustainability, governance, and environmental issues to enhance decision-usefulness for stakeholders (Adebawo, Owolabi, & Adegbi, 2021). According to the International Integrated Reporting Council (IIRC, 2013), IR explains how organizations create value over the short, medium, and long term. Countries like South Africa, Japan, and members of the European Union have already adopted this system due to its enhanced disclosures, which strengthen investor confidence and attract foreign direct investment (Okwuosa, 2020).

Despite its global relevance, Nigeria is still in the early stages of adopting IR. Most Nigerian companies focus on financial statements prepared on a historical basis, offering little clarity to investors. Only highly regulated sectors such as banking and financial institutions attempt IR, but disclosure practices remain inconsistent since it is not mandatory. Yet, as Africa's largest economy, Nigeria cannot ignore IR if it aims to align with global standards, improve transparency, and attract investments.

The establishment of the IIRC in 2010 brought together regulators, investors, businesses, and academics to create the International Integrated Reporting Framework, which outlines principles for IR adoption (IIRC, 2021). However, Nigeria's Companies and Allied Matters Act (CAMA, 2004) only mandates financial reporting, while the Financial Reporting Council of Nigeria (FRCN, 2011) requires governance reports. These measures still fall short of addressing broader sustainability and environmental concerns that stakeholders demand.

Past studies and global cases, including corporate collapses such as Enron, highlight the dangers of focusing solely on financial performance (Patrache, 2009). The World Bank (2004) also noted Nigeria's weak corporate disclosure practices, emphasizing the urgent need for more comprehensive reporting frameworks. Thus, this study seeks to empirically examine the impact of integrated reporting on the profitability of selected listed deposit money banks in Nigeria, recognizing that both financial and non-financial disclosures are essential for sustainable business performance.

### 1.2 Statement of the Problem

General-purpose financial statements are primarily designed to provide information on an entity's financial performance (IASB, 2011). However, value creation often depends on both internal and external factors, including natural resources, whose depletion can impose significant societal costs (Busco et al., 2014). To address this, corporate reporting must extend beyond financial data to include non-financial information that reflects sustainability, governance, and environmental impacts, ensuring accountability to a wider range of stakeholders (Bhasin, 2017; Hertgers, 2016). Unfortunately, environmental disclosures remain inadequate in most corporate reports, limiting firms' accountability to their communities.

In the financial sector, especially among deposit money banks, the demand for more transparent and comprehensive disclosures has increased

due to their central role in economic growth and financial intermediation. Integrated capital reporting, which combines financial, social, human, intellectual, natural, and manufactured capitals, has been introduced as a holistic framework to show how banks create value over time. Yet, many Nigerian banks still rely heavily on traditional financial reporting that emphasizes financial capital while neglecting other dimensions of long-term value creation. This narrow focus may distort stakeholders' assessments, weaken investor confidence, and obscure links between sustainability practices and profitability.

Globally, integrated reporting has attracted significant attention, but in Nigeria, empirical evidence on its effect in the banking sector remains limited. Existing studies focus more on developed economies or on industries like manufacturing, ICT, and oil and gas (Segun et al., 2019; Adegbe et al., 2019; Aminu et al., 2021; Alade & Odgbemi, 2022). The absence of sector-specific research for Nigerian banks creates a gap in understanding how integrated reporting influences their profitability. This study, therefore, seeks to fill this gap by investigating the relationship between integrated capital reporting and profitability in selected deposit money banks in Nigeria.

### **1.3 Objectives of the Study**

The main objective of this study is to assess the influence of integrated capital reporting on profitability of selected Listed Deposit Money Banks on the Nigerian Exchange Group. The specific objectives are as follows:

- To assess the influence of financial capital on profitability of selected Listed Deposit Money Banks on the Nigerian Exchange Group.
- To evaluate the effect of manufactured capital on profitability of selected Listed Deposit Money Banks on the Nigerian Exchange Group.
- To ascertain the impact of intellectual capital on profitability of selected Listed Deposit Money Banks on the Nigerian Exchange Group.
- To ascertain the effect of human capital on profitability of selected Listed Deposit Money Banks on the Nigerian Exchange Group.
- To determine the influence of social capital on profitability of selected Listed Deposit Money Banks on the Nigerian Exchange Group.

### **1.4 Research Questions**

The following research questions were formulated for this study;

- How significant is financial capital on profitability of selected Listed Deposit Money Banks on the Nigerian Exchange Group?
- Does manufactured capital affects the profitability of selected Listed Deposit Money Banks on the Nigerian Exchange Group?
- How does intellectual capital influence the profitability of selected Listed Deposit Money Banks on the Nigerian Exchange Group?
- How significant is human capital on profitability of selected Listed Deposit Money Banks on the Nigerian Exchange Group?
- Does social capital affect profitability of selected Listed Deposit Money Banks on the Nigerian Exchange Group?

### **1.5 Research Hypotheses**

The following hypotheses were formulated for this study;

- There is no significant influence of financial capital on profitability of selected Listed Deposit Money Banks on the Nigerian Exchange Group.

- There is no significant effect of manufactured capital on profitability of selected Listed Deposit Money Banks on the Nigerian Exchange Group.
- There is no significant impact of intellectual capital on profitability of selected Listed Deposit Money Banks on the Nigerian Exchange Group.
- There is no significant effect of human capital on profitability of selected Listed Deposit Money Banks on the Nigerian Exchange Group.
- There is no significant influence of social capital on profitability of selected Listed Deposit Money Banks on the Nigerian Exchange Group.

### **1.6 Significance of the Study**

This study is significant as it examines the impact of integrated capital reporting on the profitability of listed deposit money banks in Nigeria, offering insights that can guide strategic decisions, regulatory reforms, and investment choices. By providing empirical evidence, it is expected to help banks adopt more effective reporting strategies, assist policymakers in promoting transparency and accountability, and enable investors to make better-informed decisions. Beyond practice, the study contributes to academic knowledge by addressing the limited research on integrated capital reporting in the Nigerian banking sector, thereby bridging a critical gap and advancing discourse on sustainable financial reporting in developing economies.

### **1.7 Scope and Limitations of the Study**

The study is limited to Thirteen (13) listed deposit money banks in Nigeria. It covers the period 2014 to 2023.

## **Review of Related Literature**

### **2.1 Conceptual Framework**

#### **2.1.1. Profitability**

Profitability reflects a firm's ability to generate earnings from its operating, investing, and financing activities, and is widely regarded as the foundation of long-term business survival (Lueg et al., 2016; Ali et al., 2018). High-profit firms often gain stakeholder trust and face greater expectations for non-financial performance (Modugu, 2020). Consistent with shareholder theory, the core purpose of corporate existence is profit maximization (Castelo, 2013). Unlike sustainability or CSR reporting, integrated reporting (IR) directly links profitability with long-term value creation (Serafeim, 2015), aligning with shareholder expectations and value creation principles. Research shows that more profitable firms are motivated to disclose richer information through IR to strengthen investor confidence and reduce information asymmetry (Vitolla et al., 2019; Modugu, 2020; García-Sánchez et al., 2013). Empirical findings also confirm profitability as a major determinant of IR disclosure quality across industries and countries (Girella et al., 2019; Vitolla et al., 2020; Menicucci, 2018; Muttakin & Khan, 2014).

Organizational performance, on the other hand, measures how efficiently and effectively resources are used to achieve goals. It is typically evaluated through financial results, market achievements, and shareholder returns (Birley & Westhead, 2013; Nwaimo, 2020). Financial performance, in particular, indicates a firm's economic health and stewardship to investors (Farrukh & Faizan, 2016). It can be measured using indicators such as profitability, ROI, ROE, liquidity, and profit margins (Magara et al., 2015;

ICAN, 2019). In this study, financial performance is assessed using return on equity (ROE).

In the Nigerian context, the profitability of deposit money banks (DMBs) is crucial for financial stability and economic development. As key financial intermediaries, DMBs mobilize savings, allocate credit, and stimulate productive activities. However, they face challenges such as economic volatility, regulatory shifts, and intense competition, which affect profitability (Serafeim, 2015). Integrated reporting highlights performance in terms of value creation, consistent with the IIRC framework, which defines value as the increase, decrease, or transformation of capitals. This value may benefit shareholders through financial returns and also extend to broader societal outcomes (Deloitte, 2013).

### **2.1.2. Integrated Reporting**

Integrated Reporting (IR), as introduced by the International Integrated Reporting Council (IIRC, 2013), is a principle-based framework that combines financial and non-financial information to communicate how an organization's strategy, governance, performance, and external environment contribute to long-term value creation. Unlike traditional reporting, which focuses mainly on historical financial data, IR reflects a holistic view of organizational value by considering multiple forms of capital financial, manufactured, intellectual, human, social, relationship, and natural (Deloitte, 2013; IIRC, 2021). It is guided by seven principles strategic focus, connectivity of information, stakeholder relationships, materiality, conciseness, reliability and completeness, and consistency and comparability which shape its qualitative features. IR emphasizes integrated thinking, where management aligns sustainability with operations, enabling firms to disclose value creation processes and future outlooks while improving investor confidence (Hurghis, 2017; Adegboyegun et al., 2020).

Despite its benefits, IR faces challenges as an evolving field. These include resistance to change, balancing financial and non-financial data, assuring the credibility of sustainability information, and defining report formats (Kristyna, 2015). Globally, IR gained traction after the 2008 financial crisis exposed the inadequacy of traditional reporting for effective decision-making and risk management (Abeysekera, 2013). While countries like South Africa have made IR mandatory under governance codes, Nigeria is still in the early stages of adoption. Although regulatory bodies such as ICAN are advocating for its adoption, IR is not yet compulsory, and many investors give it limited attention (Ogbodo, 2015). Given Nigeria's economic size and attractiveness to international investors, adopting IR could enhance transparency, accountability, and competitiveness, aligning the nation's corporate reporting system with global best practices (Adams, 2017; Isaac et al., 2014).

### **2.1.3. Human capital Reporting**

Human capital refers to the collective knowledge, skills, experiences, competencies, and motivations of an organization's workforce, which directly influence innovation, governance, risk management, and value creation (Cosma et al., 2018). Increasingly recognized as a critical driver of organizational success, human capital is considered one of the most valuable assets in modern business models that emphasize intellectual capital and technology. Regulatory bodies such as the SEC (2021) now require

organizations to disclose human capital information including talent planning, employee experience, learning, and innovation to help stakeholders assess workforce readiness and investment in people. Poor management, toxic culture, and lack of training have been linked to corporate failures, underscoring the importance of effectively managing and reporting human capital (CIPD, 2020).

Human Capital Reporting (HCR) seeks to measure and disclose the costs and value associated with human resources, including recruitment, training, and development (AAA, 1973). Scholars argue that human capital qualifies as an asset since it is controlled by the organization and is expected to generate future economic benefits (Syed, 2009; Enofe et al., 2013). However, the absence of standardized guidelines for valuing human capital creates inconsistencies across financial statements (Afolabi, 2014). Unique among intangible assets, human capital cannot be fully controlled but can be developed, wasted, or enhanced depending on organizational practices (Apelian, 2009). Its distinctive qualities competencies, creativity, and social attributes make it both a potential source of competitive advantage and a liability if poorly managed.

#### **2.1.4. Financial Capital Reporting**

Financial capital refers to the funds an organization uses to produce goods and services, typically obtained through debt, equity, grants, retained earnings, or investments. It represents the core economic resource that supports business operations, growth, and long-term sustainability by financing activities such as hiring, production, and marketing. The concept emphasizes the sources of funds rather than their direct use. Effective financial capital management requires balancing costs, risks, and stakeholder expectations to create lasting value.

While traditionally viewed as the main measure of financial health and investor decision-making, modern approaches like Integrated Reporting highlight that financial capital alone gives an incomplete picture. Organizations are encouraged to report on its interconnections with human, social, and natural capital to reflect broader impacts and sustainable value creation. However, this approach is challenging, as it requires quantifying intangible outcomes while maintaining both transparency and clarity in reporting.

#### **2.1.5. Manufactured Capital Reporting**

Manufactured capital refers to human-made physical assets such as tools, machinery, buildings, technology, and infrastructure that organizations own, lease, or control to support production or service delivery without becoming part of the final product. Its efficient use enhances flexibility, responsiveness, and resource conservation, while also fostering innovation and sustainable value creation. According to the Integrated Reporting framework, disclosing manufactured capital strengthens transparency and can increase the overall value of reporting firms.

#### **2.1.6. Intellectual Capital Reporting**

Intellectual capital has been defined in various ways, with no single universally accepted definition. Generally, it is viewed as intangible assets that are not directly reflected on a company's balance sheet but significantly influence performance. It extends beyond financial gains to include social,

environmental, and economic value. Scholars often describe it as the collective knowledge, skills, and competencies of employees that drive wealth creation and firm performance.

Pulic's (2000) Value Added Intellectual Coefficient (VAIC) model identifies intellectual capital as non-physical value, categorized into human, structural, and relational (customer) capital. Human capital represents employee expertise and skills, structural capital includes systems, processes, and organizational culture, while relational capital reflects relationships with customers, suppliers, and stakeholders. Together, these elements foster efficiency, innovation, and sustainable financial performance, making intellectual capital a key driver of organizational success.

### **2.1.7. Social Capital Reporting**

Social and relationship capital refers to the networks, trust, and collaborative norms that enable individuals, groups, organizations, and their stakeholders to work together effectively. It encompasses supply chain relationships, customer loyalty, community acceptance, government relations, and ties with competitors. Strong social and relationship capital helps firms maintain their social license to operate and creates a virtuous cycle where it enhances other forms of capital, which in turn increase firm value. Within the Integrated Reporting framework, disclosing this capital improves transparency, strengthens stakeholder inclusiveness, and enhances organizational reputation and long-term value creation.

## **2.2. Theoretical Framework**

### **2.2.1. Agency Theory**

Agency theory, developed by Jensen and Meckling (1976), explains the relationship between shareholders (principals) and managers (agents) within a firm. While shareholders aim at wealth maximization, managers may pursue self-serving interests, creating conflicts of interest. Eisenhardt (1989) highlights two key problems: information asymmetry and differing risk preferences between principals and agents. This study particularly focuses on the issue of information imbalance, as managers often have more access to firm information than shareholders. Integrated Reporting (IR) addresses this challenge by promoting comprehensive disclosure, thereby reducing asymmetry and aligning the interests of both parties.

### **2.2.2. Stakeholder Theory**

Stakeholder Theory, introduced by Schwab (1971), argues that businesses operate within a broader social context and must consider the interests of all stakeholders such as employees, customers, suppliers, creditors, communities, regulators, and governments rather than focusing solely on shareholders. While Friedman (1962) maintained that a firm's sole responsibility is profit maximization for its owners, proponents like Freeman (1990, 1994) contend that companies have a social contract with society, which obliges them to protect the environment and engage in corporate social responsibility.

Later scholars (Donaldson & Preston, 1995; Freeman et al., 2010) criticized shareholder primacy as too narrow, emphasizing that value creation is rooted in relationships with multiple groups who have a stake in the firm's survival. Meeting these stakeholders' needs requires providing both financial

and non-financial information to support decision-making. The Integrated Reporting framework aligns with stakeholder theory by ensuring transparency and addressing the information requirements of diverse capital providers.

### **2.3.1 Empirical Review**

#### **2.3.1. Financial Capital and Profitability**

Integrated Reporting (IR) combines financial and non-financial disclosures covering strategy, performance, environmental, social, and economic activities to promote value creation and sustainability (Majeed & Abdullah, 2022). Evidence from Iraqi firms showed that adopting IR significantly improved financial returns, profitability per share, and market value compared to firms without IR. Similarly, Marx et al. (2021) studied companies on the Johannesburg Stock Exchange and found positive links between IR quality and measures such as debtor collection, EBITDA, and ROE, but negative relationships with asset turnover, inventory turnover, dividend yield, and ROCE. These findings highlight IR's role in guiding better capital allocation for long-term sustainability.

In Jordan, Hamzeh et al. (2022) revealed that financial leverage, profitability, liquidity, and cash holdings positively influence the level of IR disclosure among industrial firms, while interest coverage had no significant effect. This provides new insights into IR determinants in emerging markets. In Bangladesh, Shahria (2022) examined non-bank financial institutions and found that IR adoption remained weak, with only about 60% of value creation disclosures aligning with IIRC standards. Although some firms like IDLC Finance and Lanka Bangla Finance performed well, overall disclosure quality was unsatisfactory, with most IR information concentrated in governance-related reports.

Santis and Bianchi (2020) analyzed integrated reports of banks from 2014–2018 to assess disclosure of financial and non-financial information. Using content analysis and principal component analysis, they found that firms prioritized financial capital disclosures, while non-financial capitals were less developed, though interrelationships existed among the non-financial elements. The study highlighted gaps in balanced reporting and advanced the debate on IR practices.

Similarly, Shanti et al. (2018) examined family-owned mining firms in Indonesia (2014–2017) and found that integrated reporting significantly improved earnings quality, with larger firms and those with higher leverage disclosing more information. Their findings reinforce that IR enhances transparency and reporting quality, especially in industries where disclosure practices are still evolving.

#### **2.3.2. Manufacturing Capital and Profitability**

Shahria (2023) examined integrated reporting (IR) practices among 41 manufacturing firms in Bangladesh and found that IR disclosure (measured by the IRDINX index) was positively associated with firm performance, though its link to market growth was insignificant. The study also showed a rising trend in IR adoption, encouraging broader use in the Bangladeshi context. Similarly, Adegboyegun et al. (2020) studied Nigerian banks (2009–2018) and reported that IR had no short-term impact on profitability but significantly improved performance in the long run, supporting mandatory IR adoption to enhance accountability and sustainability.

El-Deeb (2019) explored IR in Egypt's EGX30-listed companies and highlighted its potential to address the shortcomings of traditional financial reporting by integrating six forms of capital (financial, manufactured, human, intellectual, social/relationship, and natural). Using ROE, debt ratio, and market value as performance measures, the study confirmed a positive correlation between IR compliance and firm performance and value. The findings underscore that IR enhances transparency, strengthens long-term forecasting, and promotes value creation, making it a critical framework for firms in emerging markets.

### **2.3.3. Intellectual Capital Reporting and Profitability**

Lambe et al. (2022) highlighted the global shift from a resource-based to a knowledge-based economy and examined how intellectual and natural capital influence the financial performance of multinational companies in Nigeria. Using data from 19 listed firms between 2012 and 2021, the study applied an ex-post facto design with Return on Equity (ROE) as the performance measure, intellectual capital measured by the Value Added Intellectual Coefficient (VAIC), and natural capital proxied by the Environmental Disclosure Index (EDI). Results from regression analysis showed that intellectual capital had a positive and significant impact on financial performance, while natural capital had a positive but insignificant effect. The study concludes that intellectual capital is a critical driver of firm performance and recommends greater investment in human expertise and innovation. It further suggests that companies adopt best practices in talent recruitment and management to sustain long-term value creation for stakeholders.

### **2.3.4. Social Capital Reporting and Profitability**

Alade and Odugbemi (2022) examined how corporate characteristics affect the adoption of integrated reporting (IR) among oil and gas firms in Nigeria. Using annual data from 2011 to 2020 across 11 listed firms, the study employed regression analysis and found that firm size, board size, and profitability significantly influence IR adoption, while ownership structure showed no effect. The study recommended that regulators make IR mandatory to align with global standards.

Ika et al. (2019) investigated whether IR enhances firm value in Asian non-financial companies within a voluntary disclosure setting. Using moderated regression analysis on reports published between 2015 and 2017, they found no significant relationship between IR and firm value. Furthermore, organizational complexity and external financing did not moderate the relationship, suggesting that IR is not yet perceived as a crucial signaling tool by stakeholders in Asia.

Haddad et al. (2021) assessed the impact of IR disclosure on the financial performance of firms listed on the Palestine Exchange. Based on 46 companies and a customized disclosure index, findings revealed no significant link between IR and return on assets (ROA), but a positive and significant effect on return on equity (ROE) and earnings per share (EPS). This implies that while IR may not improve asset efficiency, it enhances shareholder-related performance indicators.

### 2.3.5. Human Capital and Profitability

Akpan et al. (2022) explored how integrated reporting influences firm value among Nigerian manufacturing firms from 2011 to 2020. Using disclosure indices for human, manufacturing, and social/relationship capital as proxies for integrated reporting, and Tobin's Q as a measure of firm value, the study analyzed secondary data from 51 sampled firms through robust regression. Findings revealed that only human capital disclosure significantly enhanced firm value, while other forms of capital disclosure had no significant impact. The study concluded that firms should prioritize comprehensive disclosure of human capital information and adopt a culture of transparent non-financial reporting to strengthen long-term market value and shareholder wealth.

Ehichioya (2019) examined the link between integrated reporting and financial performance (ROE, ROCE, EPS, and PBT) in Nigerian quoted firms over 2012–2016. Using data from 121 firms, analyzed with SPSS, the study found that integrated reporting had a strong and significant influence on ROCE and EPS, and also significantly affected PBT. These results suggest that integrated reporting serves as a key determinant of firm performance in Nigeria. The study recommended that companies disclose more integrated reporting information to enhance investor confidence, transparency, and accountability in financial reporting.

## Methodology

### 3.1. Research Design

The present study adopted the ex-post facto research design. According to Kerlinger (1964), ex post facto research defines as: that research, in which the independent variable or variables have already occurred and in which the researchers start with the observation of a dependent variable or variables. He then studies the independent variables in retrospect for their possible relations to, and effects on the dependent variable or variables.

### 3.2. Population of the Study

The population of the study consist of all the deposit money banks in Nigeria. According to the Central Bank of Nigeria Report, 2024, there are 44 deposit money banks in Nigeria segmented into different licence categories.

### 3.3. Sample Size of the Study

Purposeful sampling technique was adopted in this study. Thirteen (13) out of the listed population was selected as sample size for the study. These are presented on Table 3.2

**Table 3.2: List of Sample companies**

| S/N | Company                    |
|-----|----------------------------|
| 1   | Access Bank Holding Plc    |
| 2   | First Bank Holding Plc     |
| 3   | FCMB Group Plc             |
| 4   | Fidelity Bank Plc          |
| 5   | Guaranty Trust Holding Plc |
| 6   | Jaiz Bank Plc              |

|    |                            |
|----|----------------------------|
| 7  | Stanbic IBTC Holding Plc   |
| 8  | Sterling Bank Plc          |
| 9  | Union Bank Plc             |
| 10 | United Bank for Africa Plc |
| 11 | Unity Bank Plc             |
| 12 | Wema Bank Plc              |
| 13 | Zenith Bank Plc            |

**Source: Researcher 2025**

### 3.4. Sources and Methods of Data Collection

Due to the nature of the econometric models employed which was necessitated by the objectives of the study together with the research design employed, the study relies majorly on secondary sources of data. The data were collected from the annual reports of the sample companies, websites of the sample companies and from the Nigeria Exchange Group website for all the relevant periods. The study period covers a period of 10 years from 2014 to 2023.

### 3.5. Nature and source of data

The study made use of secondary data. Data from the financial reports will be extracted using content analysis from the financial statements of the selected banks.

### 3.6. Theoretical Specification of model

The theoretical model specification for this study is that financial capital, manufactured capital, intellectual capital, human capital, and social capital determine the profitability of selected listed Deposit Money Banks on the Nigerian exchange Group. The model describes the influence of the integrated reporting capitals on the profitability of the selected banks in Nigeria.

### 3.7. Empirical Specification of Model

The above theoretical specification of model can be stated empirically thus:

$$Y = a + bx$$

Further expanded to be:

$$PF = f(IRC)$$

Equation 3.1

$$PF = f(\text{FinC}, \text{ManC}, \text{IntC}, \text{HumC}, \text{SocC})$$

Equation 3.2

To test the hypothesis formulated for this study, an econometric model was adapted from the works of previous researchers (Akpan et al., 2022). The model is therefore stated thus:

$$PF_{it} = \alpha_0 + \beta_1 \text{FinCit} + \beta_2 \text{ManCit} + \beta_3 \text{IntCit} + \beta_4 \text{HumCit} + \beta_5 \text{SocCit} + \varepsilon$$

Equation 3.3

Where:

PF = Profitability

FinC = Financial Capital

ManC = Manufactured Capital

IntC = Intellectual Capital

HumC = Human Capital  
 SocC = Social Capital  
 B0 = Intercept estimates  
 B1 –  $\beta$ 5 = Coefficient of the independent variables  
 $\varepsilon$  = error term

### 3.8. Measurement and Identification of Variables

The variables of the study are explained in this section of the study.

**Table 3.1: Dependent and Independent Variables**

| S/N | Variables            | Types       | Definition                           | Apriorio Expectation |
|-----|----------------------|-------------|--------------------------------------|----------------------|
| 1.  | Profitability        | Dependent   | Net Interest Margin                  |                      |
| 2.  | Financial Capital    | Independent | Total Debts + Total Equity           | Positive             |
| 3   | Manufactured Capital | Independent | Carrying Amount of PPE               | Positive             |
| 4   | Intellectual Capital | Independent | Carrying Amount of Intangible Assets | Positive             |
| 5   | Human Capital        | Independent | Personnel Cost                       | Positive             |
| 6   | Social Capital       | Independent | Investment in CSR                    | Positive             |

**Source: Researcher's Compilation (2024)**

## Data Presentation, Analysis And Discussion

### 4.1 Data Presentation

The study analyzed secondary data from the annual reports of thirteen listed Nigerian deposit money banks between 2014 and 2023, examining the effect of integrated reporting capitals (independent variables) on profitability (dependent variable).

### 4.2 Data Analysis

#### 4.2.1 Descriptive Statistics

The descriptive statistics of the variables are presented in Table 4.2. The descriptive statistics were mean, median, maximum, minimum, standard deviation.

| Table 4.1 Descriptive Statistics |     |              |                  |                  |                  |
|----------------------------------|-----|--------------|------------------|------------------|------------------|
|                                  | N   | Minimum      | Maximum          | Mean             | Std. Deviation   |
| Financial Capital (N'000)        | 130 | 33,915,651.0 | 14,972,310,000.0 | 2,786,671,474.53 | 2,821,468,128.36 |
| Manufactured Capital(N'000)      | 130 | 1,051,702.0  | 293,152,000.0    | 65,637,027.63    | 61,096,097.26    |
| Intellectual Capital (N'000)     | 130 | 80,866       | 73,782,000       | 9,825,044.89     | 13,484,032.49    |
| Human Capital (N'000)            | 130 | 883,231.0    | 128,772,000.0    | 37,385,079.66    | 28,415,548.59    |
| Social Capital (N'000)           | 130 | .0           | 5,103,761,859.0  | 680,567,538.62   | 988,547,118.30   |
| Net Interest Margin (N'000)      | 130 | 915,849.0    | 366,627,000.0    | 120,601,977.26   | 101,696,189.64   |
| Valid N (listwise)               | 130 |              |                  |                  |                  |

**Source: Researcher's Computation (2025)**

Between 2014 and 2023, the financial capital of selected Nigerian banks, measured by total debts and equity, ranged from ₦33.92 billion to ₦14.97 trillion, with an average of about ₦2.79 trillion and a standard deviation of ₦2.82 trillion. Manufactured capital, represented by property, plant, and equipment, varied from ₦1.05 billion to ₦293.15 billion, averaging ₦65.64 billion with a standard deviation of ₦61.10 billion. Intellectual capital, proxied by intangible assets, spanned from ₦80.87 million to ₦73.78 billion, with an average of ₦9.83 billion and a standard deviation of ₦13.48 billion.

Human capital, assessed through personnel costs, ranged between ₦883.23 million and ₦128.77 billion, averaging ₦37.39 billion and a standard deviation of ₦28.42 billion. Social capital, measured by CSR investments (2013–2022), recorded values from ₦0 to ₦5.10 trillion, with an average of ₦680.57 billion and a standard deviation of ₦988.55 billion. Finally, profitability, proxied by net interest margin, ranged from ₦915.85 million to ₦366.63 billion, averaging ₦120.60 billion with a standard deviation of ₦101.70 billion.

#### 4.2.3. Test of Hypotheses

The research hypotheses were tested in this section of the study. The result of the regression analysis was used to test the hypotheses

**Table 4.4: Regression Output**

| Variable             | Coefficient | Std. Error            | t-Statistic | Prob. |
|----------------------|-------------|-----------------------|-------------|-------|
| C                    | .128        | .256                  |             |       |
| Financial Capital    | .432        | .088                  | 4.507       | .000  |
| Manufactured Capital | .076        | .071                  | 1.044       | .298  |
| Intellectual Capital | .109        | .027                  | 2.697       | .008  |
| Human Capital        | .254        | .095                  | 3.218       | .002  |
| Social Capital       | .151        | .030                  | 3.238       | .002  |
|                      |             | Effects Specification |             |       |
| R-squared            | 0.923       |                       |             |       |
| Adjusted R-Squared   | 0.920       |                       |             |       |
| F-statistic          | 0.000       | Durbin-Watson Stat    | 1.758       |       |
| Prob (F-Statistics)  | 286.772     |                       |             |       |

**Source: Researcher's Computation (2025).**

#### Hypothesis One:

The study tested whether financial capital has no significant effect on profitability. The null hypothesis was rejected since the p-value ( $0.000 < 0.05$ ) and t-value ( $4.507 > 1.978$ ) indicated significance. Thus, financial capital significantly influences profitability of listed deposit money banks in Nigeria.

#### Hypothesis Two:

The second hypothesis examined manufactured capital. With a p-value of 0.298 ( $> 0.05$ ) and a t-value of 1.044 ( $< 1.978$ ), the null hypothesis was accepted. This shows manufactured capital does not significantly affect profitability.

#### Hypothesis Three:

The effect of intellectual capital was tested, and the null hypothesis was rejected as the p-value ( $0.008 < 0.05$ ) and t-value ( $2.697 > 1.978$ ) confirmed

significance. Hence, intellectual capital has a positive influence on profitability.

#### **Hypothesis Four:**

For human capital, the null hypothesis was rejected because the p-value ( $0.002 < 0.05$ ) and t-value ( $3.218 > 1.978$ ) showed significance. This indicates that human capital significantly impacts profitability.

#### **Hypothesis Five:**

Finally, the test on social capital revealed a p-value of 0.002 ( $< 0.05$ ) and a t-value of 3.238 ( $> 1.978$ ), leading to rejection of the null hypothesis. Therefore, social capital significantly contributes to profitability.

### **4.3 Discussion of Findings**

The study revealed that different forms of capital contribute to the profitability of listed deposit money banks in Nigeria, though the extent of their influence varies. Financial capital was found to have the strongest effect, explaining 43.2% of variations in profitability, suggesting that stronger capital bases enhance banks' capacity to generate returns. This finding, however, contrasts with Adegbe et al. (2019), who observed a negative link between financial capital disclosure and firm value in Nigerian manufacturing firms. Manufactured capital, though positive, had a relatively weak impact, accounting for only 7.6% of profitability. This aligns with evidence from Ebimobowei et al. (2021) that integrated reporting of tangible resources can support financial performance, though often alongside other factors such as debt and firm size.

Intellectual and human capital both showed meaningful influences, contributing 10.9% and 25.4% respectively. These results highlight the growing importance of knowledge assets, skills, and workforce-related investments in driving profitability, consistent with Mugisha (2023) and Akpan et al. (2022), who emphasized that intellectual and human capital disclosures enhance firm value across different sectors. Social capital also emerged as a significant driver, explaining 15.1% of profitability variation, in line with Abdullahi et al. (2021), who found positive links between corporate performance and integrated reporting, particularly through long-term stakeholder engagement.

Overall, the findings demonstrate that while financial capital remains a crucial determinant of profitability, intangible resources especially human, intellectual, and social capital play increasingly significant roles in shaping the performance of Nigerian banks. This underscores the need for banks to balance traditional financial investments with sustained investment in people, innovation, and stakeholder relationships to achieve long-term value creation.

## **Summary, Conclusion and Recommendations**

### **5.1 Summary of Findings**

The major findings of the study are summarized as follows:

- The findings of the study revealed that financial capital has a significant influence on the profitability of listed deposit money banks in Nigeria.
- The findings of the study showed that there is an insignificant influence of manufactured capital on the profitability of listed deposit money banks in Nigeria.

- Iii .It was revealed that intellectual capital has a significant and positive influence on the profitability of listed deposit money banks in Nigeria.
- The result of the analysis also indicates that human capital significantly affects the profitability of listed deposit money banks in Nigeria.
- The study shows that social capital significantly contributes to the profitability of listed deposit money banks in Nigeria.

## 5.2 Conclusion

The study concludes that integrated reporting capitals play a vital role in shaping the profitability of listed deposit money banks in Nigeria. Among the components, financial, intellectual, human, and social capital were found to significantly enhance profitability, while manufactured capital showed no meaningful effect on the banks' performance.

## 5.3 Recommendations

The following recommendations were raised based on the findings of the study;

The study recommends that Nigerian banks strengthen their financial capital base through increased debt and equity financing, as this enhances profitability by providing more investment resources. Conversely, investment in manufactured capital such as property, plant, and equipment should be minimized since it has little effect on profitability and may reduce returns due to depreciation costs. Greater emphasis should be placed on intellectual capital by acquiring intangible assets that can boost performance. In addition, banks should enhance human capital through continuous training and employee motivation, given its significant contribution to profitability. Finally, investment in social capital should be expanded through community support initiatives and donations, as such activities positively influence banks' profitability.

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