Financial and Manufactured Capital Reporting and Firm Value of Listed Consumer and Industrial Goods Firms in Nigeria: A Comparative Analysis

Clement Ejiofor Okeke, Jonah Okpe Arumona, Solomon Mangba Aza

Department of Accounting, Bingham University, Karu, Nigeria

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ABSTRACT

The consumer and industrial goods sectors in Nigeria are vital to the nation's economic expansion and job generation. Recent events have demonstrated that these sectors' performances have been inconsistent and unimpressive for more than a decade. This study examined the effect of financial and manufactured capital reporting on the firm value of consumer and industrial goods firms in Nigeria. The study used an ex-post facto research design and secondary data were obtained from the annual financial reports of the selected consumer and industrial goods firms in Nigeria for twelve years from 2013-2024. Firm value is the dependent variable proxied by Price to Book ratio (P/B Ratio), while Financial and Manufactured capital reporting are independent variables. Both financial-based and disclosure level-based measures were analyzed, while STATA 16 was used to carry out regression analyses of the direct effect of relevant variables. The study found that Financial Capital Reporting and Manufactured Capital Reporting measured through both financial and disclosure level-based indices have no statistically significant effect on the firm value of listed consumer and industrial goods firms in Nigeria. Nonetheless, a positive but insignificant coefficient observed for manufactured capital disclosures level suggests a potentially emerging informational value. It is recommended that Firms should improve the value relevance of financial and manufactured capital disclosures by aligning key metrics such as debt, reserves, grants, and physical assets with strategic narratives on financing, asset use, risk, and long-term performance. Regulators should support this through sector-specific templates and standards to ensure clarity, comparability, and a stronger link to value creation.

Keywords: Firm value, Financial Capital Reporting, Manufactured Capital Reporting, Price-to-Book Value, Revenue Growth.

INTRODUCTION

Firm value is directly tied to how effectively a business generates returns and meets the expectations of its stakeholders. The assessment of a company's worth is therefore linked not only to its profitability but also to its ability to deliver on broader responsibilities, including social and governance obligations (Khunkaew et al., 2023; Kurniasih et al., 2022; Mahmudah et al., 2023; Posner, 2024). Investors' perceptions of a firm's performance are reflected in its valuation (Azaro et al., 2020; Chabachib et al., 2020; Sutrisno et al., 2023), and companies often strive to enhance their value in order to maintain investor confidence and meet stakeholder demands (Gelb et al., 2023; Segura et al., 2024).

While firm value can be measured in various ways, financial performance remains one of the most widely adopted approaches (Adegboyegun et al., 2020; Christofi et al., 2024; Harnovinsah et al., 2023). However, a more holistic perspective is offered by integrated reporting, which captures multiple dimensions of value creation within a single framework. Integrated reporting, as articulated by the International Integrated Reporting Council (IIRC, 2021), identifies six capitals as essential to organizational value creation, including financial and manufactured capital (Hoque, 2017).

This study focuses on how financial capital and manufactured capital reporting affect firm value in Nigeria's consumer and industrial goods sectors. Unlike prior studies that largely emphasize the financial services sector, this research makes three distinct contributions. First, it introduces a comparative methodological approach by

employing both finance-based and disclosure-based proxies of capital reporting, thereby providing a more nuanced understanding of measurement effects. Second, it extends the scope of integrated reporting research to the consumer and industrial goods sectors in Nigeria, industries that remain relatively underexplored despite their significant economic contribution. Third, the study offers policy-relevant insights into why capital reporting practices may exhibit limited value relevance in emerging markets, highlighting the role of market inefficiency, regulatory enforcement, and macroeconomic volatility in shaping investor responses.

In contemporary corporate settings, the assessment of firm value has become progressively intricate due to the convergence of systemic and structural dynamics. Market fluctuations, driven by variable investor sentiment and geopolitical instability, have intensified valuation unpredictability, rendering conventional financial indicators less reliable (Brealey et al., 2025). Exacerbating this situation is the persistent macroeconomic rigidity marked by inflationary trends, currency volatility, and limited fiscal space, all of which distort market signals and diminish investor assurance (World Bank, 2025). Furthermore, misvaluation arises from dominant market perceptions and inconsistencies between perceived enterprise worth and actual performance, particularly in sectors prone to speculative behaviour. Risk management systems have likewise attracted increased scrutiny, as numerous organisations exhibit inadequate mitigation strategies in response to emerging uncertainties, thereby intensifying value depreciation. Technological advancements further disrupt traditional valuation models and destabilise corporate worth by swiftly rendering physical assets and operational models obsolete. Deficiencies in governance such as opacity and ineffective board oversight compromise stakeholder confidence and impair organisational resilience. In addition, restricted liquidity positions hinder firms' strategic responsiveness and operational adaptability, adversely affecting value creation potential. Ultimately, valuation has assumed new dimensions due to sustainability imperatives and the escalating demand for ESG alignment, especially among entities that lag in adapting to shifting environmental and societal expectations. These multifaceted pressures necessitate a critical reappraisal of how firm value is defined, assessed, and communicated thus underpinning the rationale for the current study.

In Nigeria's consumer and industrial goods sectors, firm value is influenced by economic conditions, operational performance, and investor perceptions. The consumer goods sector, which includes Fast-Moving Consumer Goods (FMCG) companies, is crucial to the Nigerian economy but faces challenges such as rising inflation, currency devaluation, and high production costs, which erode profit margins and reduce investor confidence (Adegbie et al., 2019; Ariemu, 2024). On the other hand, the industrial goods sector, comprising cement, building materials, and manufacturing firms, which is constrained by high energy costs, infrastructure deficits, and fluctuating demand (Tunji, 2024).

Accurately measuring firm value is essential for investors and corporate decision-makers. One widely used metric is the Price-to-Book (P/B) Ratio, which compares a company's market capitalization to its book value. The P/B Ratio is calculated by dividing the current closing price of the stock by the book value per share (BVPS) (J. Fernando, 2024; Shittu et al., 2016). In Nigeria's consumer and industrial goods sectors, the P/B Ratio provides valuable insights into how companies are valued in the stock market relative to their net assets. A higher P/B Ratio (>1) suggests that the market values a firm above its book value, indicating strong growth prospects and investor confidence. Conversely, a lower P/B Ratio (<1) may signal undervaluation or weak market performance. For example, fluctuations in Tobin's Q for consumer and industrial firms in Nigeria often reflect currency devaluation, inflationary trends, and policy shifts affecting production costs and revenues (Olujinmi, 2024).

The P/B Ratio is particularly useful for identifying undervalued companies. A ratio of less than one may indicate that the stock is trading below the company's intrinsic value, presenting a potential investment opportunity. However, it's important to consider that a low P/B Ratio could also reflect underlying issues within the company, such as poor return on assets. Therefore, investors should analyze additional financial metrics and the overall financial health of the company before making investment decisions (McClure, 2024). While Return on Equity (ROE), Earnings per Share (EPS), and other accounting-based metrics are used to assess business value, market-based metrics such as Market Value Added (MVA), Price to Book Ratio (P/B Ratio). According to Al-Matari et al. (2014), it is the total of the stock's market value and operational performance. Market-based metrics such as the P/B Ratio offer insights into how the market perceives a company's value. The share price was used to

calculate the firm value in one of the Vietnamese research projects on the factors influencing firm value (Ha & Minh, 2020). Furthermore, the Price-To-Book (P/B) Ratio has been used to evaluate the company value in another study on the optimization of capital structure and firm value (Uzliawati et al., 2018). In this study, the P/B Ratio is calculated as the Market Price per Share divided by the Book Value per Share, following methodologies outlined in financial analysis literature, as used in (Doblas et al., 2020; Marangu & Jagongo, 2014; Shittu et al., 2016; Sibarani et al., 2024). The study measures the association between firm value (using Price-To-Book (P/B) Ratio) and Financial and Manufactured Capital Reporting.

Financial capital reporting is the disclosure of an organization's financial resources, such as debt, equity, and internally produced funds, which are used to fund operations and spur expansion. Financial capital is "the pool of funds available to an organisation for use in the production of goods or the provision of services, obtained through financing, such as debt, equity, or grants, or generated through operations or investments," according to the International Integrated Reporting Council (IIRC) Framework (2021). In addition to giving stakeholders information about liquidity, solvency, profitability, and financial sustainability, financial capital reporting guarantees openness in an organization's acquisition, distribution, and management of financial resources. Financial capital reporting is measured through financial statements, including balance sheets, income statements, and cash flow statements. Key indicators include total assets, total liabilities, shareholders' equity, revenue growth, profitability ratios (such as return on equity and return on assets), and debt-to-equity ratios (OECD, 2020).

Manufactured capital reporting involves disclosing an organization's physical assets, such as buildings, machinery, infrastructure, and technology systems supporting production and service delivery. The IIRC (2021) defines manufactured capital as "manufactured physical objects (as opposed to natural physical objects) that are available to an organisation for use in the production of goods or the provision of services." These resources are essential for long-term value, competitive advantage, and operational effectiveness. Key indicators include property, plant, and equipment (PPE) capital expenditures, asset depreciation, infrastructure investments, production efficiency, and revaluation or impairment adjustments. Organisations disclose manufactured capital in financial, sustainability, and integrated reports to highlight the role of tangible assets in economic success. Empirical studies often use content analysis of corporate disclosures to evaluate the depth of manufactured capital reporting (Dumay & Garanina, 2013).

In Nigeria's consumer and industrial goods sectors, maintaining and enhancing firm value has been a persistent challenge due to economic instability, operational inefficiencies, and weak financial disclosures. In the consumer goods sector, firms struggle with inflation, currency devaluation, rising production costs, and heavy reliance on imports. Despite being one of Africa's largest Fast-Moving Consumer Goods (FMCG) markets, the sector faces shrinking profit margins and declining investor confidence (Adegbie et al., 2019; Ariemu, 2024). Due to a decline in industrial output, the manufacturing sector's GDP share dropped from 11.4% in 2000 to 8.8% in 2023 (Erumebor & Samande, 2025). According to Erumebor and Samande, (2025) the industrial sector's 2.2% export share in 2023 remained low, demonstrating a lack of global competitiveness. These challenges make it difficult for firms to sustain long-term value creation. Traditional financial reporting overlooks key value drivers, weakening investor confidence. Integrated Reporting, through six capitals disclosure, enhances transparency and supports long-term value creation.(ICAN, 2021; IIRC, 2021).

However, despite its global adoption, the use of integrated reporting such as the compulsory reporting of the six capitals (financial, manufactured, intellectual, human social and relationship, and natural) in Nigeria's consumer and industrial sectors remains under-researched. Existing studies on the effect of the six capitals on firm value have produced contradictory findings some suggest a positive impact (Adegbie et al., 2019; Akpan et al., 2022; Appah & Onowu, 2021; Bangara et al., 2024; Chirairo & Molele, 2024; El-Deeb, 2019; Juniarti, et al., 2023; Ni et al., 2021; Nwoye et al., 2021), while others find no significant effect (Ahmad et al., 2021; Igbinovia & Agbadua, 2023; Nurkumalasari et al., 2019). Furthermore, most research has focused on banking (Adegbie et al., 2019; Dey, 2020; Doni et al., 2019; Mansor et al., 2021) and insurance (Appah & Onowu, 2021; Forvis Mazara Group, 2015; IR NETWORK et al., 2015), neglecting consumer and industrial firms, despite their economic importance. Other related research by Albetairi et al., (2018); Opanyi and Omare, (2022) produced conflicting findings.

To bridge this gap, this study investigates the impact of financial and manufactured capital reporting on the firm value of listed consumer and industrial goods firms in Nigeria employing both financial-based measures and disclosure level-based measures for the two capitals. This study provides empirical insights into whether financial and manufactured capital reporting enhance firm value in these critical sectors. The study has reviewed the problem of declining firm value in Nigeria's consumer and industrial sectors and examined whether financial and manufactured capital reporting serve as a viable strategy to enhance transparency, investor confidence, and long-term value creation. The following hypotheses are developed for the study to accomplish the objectives:

Ho_1: Financial Capital Reporting Index, measured using both financial and disclosure level-based approaches, has no significant effect on the price-to-book(P/B) ratio of consumer and industrial goods firms in Nigeria.

Ho_2: Manufactured Capital Reporting Index, measured using both financial and disclosure level-based approaches, has no significant effect on the price-to-book(P/B) ratio of consumer and industrial goods firms in Nigeria.

Financial Capital Reporting

Financial capital, which primarily comes from two sources, debt and equity, is seen as the pool of resources that are easily accessible for the organisation to use (IIRC, 2013). Financial capital, according to (IIRC, 2021) is "the pool of funds that is available to an organisation for use in the production of goods or the provision of services and obtained through financing, such as debt, equity, or grants, or generated through operations or investments." All of the broad financial resources that an organisation has at its disposal to carry out its operations and accomplish its goals could be further characterised as financial capital. These funds may be obtained from outside sources (long-term loans) or internally (equity). By using this approach, organizations can preserve ownership control while utilizing outside financial resources. But it also brings with it financial responsibilities that need to be managed carefully to maintain sustainability and solvency. In contrast, equity financing entails investors providing money in exchange for shares or retained earnings, which represent ownership holdings in the business. Although equity financing does not have payback responsibilities like debt, it does involve sharing earnings with investors and often reducing ownership control. Institutional or governmental grants are another form of funding for firms; these provide non-repayable funds to support initiatives or activities.

Additionally, financial capital is crucial to corporate governance and strategic planning. Effective financial capital management includes risk assessment, capital structure optimisation, and ensuring that funds are allocated efficiently to support innovation and expansion. Organisations that maintain a balanced approach to financial capital, minimising excessive debt while taking advantage of investment opportunities, have a better chance of achieving long-term stability and competitiveness. In conclusion, financial capital reporting is a crucial part of corporate financial management since it provides a comprehensive understanding of an organization's financial situation, funding sources, and strategic direction. This goes beyond typical financial disclosures. Aza and Suleiman, (2019) demonstrated that some unreported practices such as debt covenant violations are negatively associated with firm value due to increased financial risk and opportunistic earnings management, aligning with the need for Integrated reporting to increase openness and investor trust. Companies that adhere to established reporting frameworks and ensure financial disclosures are transparent can enhance their ability to generate sustainable value and win over stakeholders. According to Arumona et al. (2019), board financial literacy improves financial performance and decision-making, which is consistent with Integrated Reporting's goal of enhancing governance and stakeholder trust through high-quality disclosures.

Financial Capital Reporting Index

The Financial Capital Reporting Index (FCRI) is a composite measurement tool designed to evaluate the extent and quality of financial capital disclosures made by firms in line with integrated reporting principles and frameworks. It serves as a structured mechanism to quantify and standardise the reporting of financial capital components such as debt obligations, equity structure, reserves, and grant funding based on both quantitative data and qualitative narrative disclosures. Drawing on established financial reporting standards and integrated reporting frameworks (IIRC, 2021), the FCRI enables researchers to systematically assess how comprehensively firms disclose their financial resource base and its role in value creation. The index is constructed using a

disclosure checklist or scoring framework that categorises reporting practices along defined indicators, allowing for objective comparison across firms and over time.

The relevance of the FCRI lies in its utility for empirical analysis, particularly in investigating the relationship between financial capital transparency and firm-level outcomes such as market valuation, investor perception, and governance quality. Prior studies have employed similar indices to examine how disclosure quality affects firm performance, stakeholder trust, and capital market efficiency (De Villiers et al 2022). By capturing both the presence and the depth of financial capital disclosures, the FCRI goes beyond traditional financial ratios and offers a multidimensional perspective on reporting behaviour. It provides a valuable basis for hypothesis testing within integrated reporting research, especially in contexts where regulatory enforcement and disclosure practices vary significantly across sectors and jurisdictions. In addition to the use of weighted disclosure-based measures, this study measured the Financial Capital Reporting Index is measured as Total Financial Capital (TFC) = Shareholders' Equity + Total Debt

Manufactured Capital Reporting

Manufactured capital refers to an organisation's tangible resources, such as property, plant, equipment, and infrastructure.. IIRC, (2021) defines it as "manufactured physical objects (as opposed to natural physical objects) that are available to an organisation for use in the production of goods or the provision of services," including buildings, equipment, ports, roads, bridges, and treatment plants. The IR Framework adds that manufactured capital can be outputs from other organisations or assets produced by the reporting organisation for sale or internal use. Valuing this capital is tedious, particularly in determining depreciation, devaluation, and revaluations. It supports business operations and includes assets like property, plant, and infrastructure. The IIRC emphasises the inclusion of production facilities and infrastructure in manufactured capital. Manufactured capital reporting is a key aspect of integrated reporting, linking it to financial, human, and natural capital. Investments in manufactured capital can impact productivity, operational costs, and working conditions, thus affecting financial and human capital. Sustainable infrastructure investments support environmental conservation, aligning with natural capital.

Despite its role in value creation, reporting manufactured capital presents challenges. Valuation is subjective, especially for unique assets. Depreciation rates and asset lifespan depend on industry norms, technology, and historical data. Market and economic changes can also affect valuations, requiring regular reassessment. Sustainability concerns are another challenge. With growing ESG expectations, organisations must disclose energy use, emissions, and asset management. Investments in energy-efficient facilities and green buildings may be reported in financial and sustainability statements, reflecting a shift towards responsible practices. Manufactured capital reporting provides insight into tangible assets driving operations. It involves valuation, depreciation, and disclosure to reflect true financial standing. Despite complexities, effective reporting ensures compliance, transparency, and supports long-term value creation.

Manufactured Capital Reporting Index

Manufactured Capital Reporting Index (MCRI) is a comprehensive and structured disclosure assessment framework designed to evaluate the extent, quality, and consistency of corporate reporting on manufactured capital. The index is conceptually anchored in the Integrated Reporting (IR) Framework developed by the International Integrated Reporting Council (IIRC, 2021) and is further aligned with internationally recognised disclosure standards, including the Global Reporting Initiative (GRI, 2025), the Sustainability Accounting Standards Board (SASB, 2025), and the IFRS Sustainability Disclosure Standards (IFRS S1/S2).

Manufactured capital refers to the tangible, human-made physical assets that are either owned, leased, or controlled by an organisation and are utilised in the production of goods or the delivery of services. This includes, but is not limited to, office buildings, warehouses, factories, plant and machinery, equipment, and infrastructure. Effective reporting on manufactured capital provides stakeholders with insight into the organization's operational capacity, productivity enablers, asset utilisation, and long-term value creation potential. In addition to the use of weighted disclosure level-based measures, this study measured Manufactured Capital Reporting Index as Non-Current Asset Ratio (NCAR) = Non-Current Assets divided by Total Assets expressed in

percentage. i.e. MCRI= NCAR = NCA/TA

Firm Value

Firm value is the whole value of a business as assessed by its market position, financial performance, and potential for future expansion. When evaluating a company's financial health and prospects, investors, analysts, and other stakeholders use this crucial metric, which includes the total worth of all the firm's assets, both tangible and intangible. Any organization's first priority is to raise the wealth and worth of its shareholders (Gharaibeh & Qader, 2017). Out of all the organisational performance metrics, stakeholders have paid close attention to firm value. According to Al-Matari et al. (2014), investors must first assess the company's performance before making an investment in order to determine the firm's value. The value of an organisation can be affected by both endogenous and exogenous causes, and changes in a number of variables, such as the business's size, price-earnings ratio, dividend coverage ratio, etc., are associated with changes in firm value. A few factors that have been recognised as determining business worth include the organization's structure, current technology workforce, wealth, established hierarchy, etc. (Sucuahi & Cambarihan, 2016). Besides the traditional concept, the studies based on firm value pointed out that the stakeholders' value links with the firm value. Consequently, to expand the value relevant to the firm, organizations have to enlarge the wealth creation to all the stakeholders (Busch et al., 2018; De Kluyver, 2024; HBS Online, n.d.; Lonkani, 2018; Nasrudin, 2025) (Nasrudin, 2025) (De Kluyver, 2024) (Busch et al., 2018) When the companies are not giving quality and adequate information to the stakeholders, the information asymmetry will not decline and it will not enhance the value of the firm (Nurkumalasari et al., 2019). Therefore, business organizations must create a sound balance between information and shareholder wealth. In this study firm value is proxied by Price to Book ratio.

Price-To-Book (P/B) Ratio

The Price-to-Book (P/B) Ratio is an important financial indicator that is used to evaluate the market value and book value of a company. The analysis provides profound insights regarding a stock's potential undervaluation and its corresponding market value. The Price-to-Book (P/B) ratio serves as a critical instrument for analysts and investors in assessing the intrinsic value of tangible assets, such as production facilities and inventory, particularly within Nigeria's consumer and industrial goods sectors. This data can significantly enhance investment decision-making frameworks, risk management methodologies, and portfolio optimization strategies. For stakeholders engaged in Nigeria's consumer and industrial domains, the application of the P/B ratio holds substantial implications. The efficacy and prosperity of a corporation are gauged by its firm value, which is intrinsically linked to the valuation of its publicly traded shares. Corporate value is the result of management's efforts in several areas, such as growth, capital costs, and net cash flow from investment choices according to (Hirdinis, 2019; Uwah, 2019) Since corporate value is a measure of how the market views the company, it is a crucial notion for investors. A company's worth reflects its growth potential and is impacted by several factors, including dividend policy, funding choices, political connections, and investment choices. Identifying sources of value generation within the company and determining firm value are important for many reasons, such as company sales, mergers, and acquisitions. The prevailing market price of the corporation's common stock, which serves as a reflection of the organization's financial structuring, dividend distribution, and investment decisions, constitutes a robust metric for assessing corporate valuation. In a particular research endeavour undertaken in Vietnam concerning the factors influencing firm value, the valuation of the firm was evaluated based on the price per share (Ha & Minh, 2020). Moreover, in another study of the optimization of capital structure and firm value, the firm value has been measured using the price-to-book value (Uzliawati et al., 2018). This study measures Price-To-Book (P/B) Ratio as Price per share(P/S) divided by book value per share (BVPS) for the sampled firms over the period. That is

P/B Ratio = (P/S)/(BVPS)

Revenue Growth

If the inflows from the next period are greater than the previous amounts, the revenue, often referred to as sales,

is said to be expanding. An organisation that wants to improve the wealth of its owners would be particularly interested in making sure that its sales and revenue increase because it is one of the essential requirements for a strong return on shareholders' equity. To improve the return on equity, efforts are made to increase sales. Revenue growth is calculated by dividing the change in revenue by the revenue from the prior year. The revenue change for the current year is calculated by deducting the revenue from the prior year. One of the most important measures of an organization's overall performance and financial health is revenue growth. It describes the rise in an organization's income over a given time frame, usually expressed as an annual or quarterly increase. Before expenses are subtracted, revenue which is frequently confused with sales is the total amount of money received from an organization's main business operations. When an organization's revenue rises over the prior period, it indicates that business operations are expanding, that market demand is higher, or that sales efficiency has increased. Since revenue growth has a direct impact on profitability, return on investment (ROI), and long-term financial sustainability, it is a crucial goal for companies looking to increase shareholder value. Attracting investors, preserving a competitive market position, and guaranteeing operational resilience in changing economic circumstances all depend heavily on a company's capacity to produce steady revenue growth. In this study, the revenue growth (RG) is used as a control variable and measured as current year revenue (CYRV) minus previous year's revenue (PYRV) divided by the previous year's revenue.

That is RG = (CYRV-PYRV) x 100 PYRV

Empirical Review

Onumoh et al. (2024) studied the impact of Integrated Reporting on Firm Value of Listed Manufacturing Firms in Nigeria. Investigating the relationship between listed manufacturing businesses' integrated reporting company value in Nigeria between 2011 and 2022 was the aim of the study. The study chose a sample of eight manufacturing companies for analysis. Using information from the published yearly financial statements of the manufacturing firm under study, multiple regression models were employed to examine the relationship between integrated reporting characteristics and firm value. Tobin's Q served as a proxy for the dependent variable, firm value, while intellectual capital, human capital, manufacturing capital, social capital, and relationship capital served as proxies for the independent variable, integrated reporting; leverage was employed as a variable. The study found that manufacturing capital and leverage significantly influenced firm value, while intellectual capital, human capital and social capital did not show statistical significance on firm value of listed manufacturing firm in Nigeria during the period under review. As a result, the study highlighted the significance of financial leverage and manufactured capital reporting in raising firm value among Nigerian manufacturing companies. The study recommended that in order to boost their values, manufacturing companies should concentrate on enhancing their social and relational capital and maximising financial leverage within appropriate bounds. The study's conclusions were severely hampered by the fact that a sample of just eight businesses was insufficient to draw broad conclusions about the 59 listed manufacturing enterprises in Nigeria. The authors' failure to complete the six integrated reporting capitals as stand-ins for the independent variables taken into consideration in the current investigation was another flaw in the research.

Darminto et al. (2024) explored the impact of integrated reporting on firm value and earnings quality as a moderator in Southeast Asia. The study's goal was to examine the variables that affect integrated reporting and ascertain how it affects firm value by using earnings quality as a moderator. The SEM-PLS analysis method was used in the investigation. From greatest to smallest in numerical order, the Energy Sector's population in the Southeast Asia were as follows: Indonesia has 76 companies, Thailand has 69, Singapore has 41, Malaysia has 32, and the Philippines has 12 enterprises. The sample size is arranged sequentially from largest to smallest, with 10 enterprises from Indonesia, 9 from Thailand, 3 from Malaysia, 2 from Singapore, and 2 from the Philippines. 26 businesses were selected. The study investigated the variables that affect integrated reporting and how earnings quality moderates its effects on company value. The study reviewed how firm growth, firm age, board size and board independence affected integrated reporting on one hand and how integrated reported influenced firm value on the other hand. Earnings quality was used as a moderating variable on the influence of integrated reporting on firm values. Firm value was proxied by Return on Average Assets (ROAA). The proxies for integrated reporting were developed. The study found that while board independence has a negative impact on

integrated reporting, leverage, age, and board size all had beneficial effects. Additionally, the study discovered that integrated reporting increases firm value and that earnings quality had no moderating effect on this relationship. According to the study's findings, organisational complexity and decision-making procedures make it less likely for a corporation to embrace integrated reporting as its size grows. Integrated reporting is more likely to be adopted by older corporations and those with larger boards of directors, although the percentage of independent board members has no bearing on this choice. The study suggested that in order to improve openness and comprehension, businesses should understand that integrated reporting includes social and sustainability components and combine them with financial aspects. Because there were only 26 companies out of 230 in the population, the study's findings were flawed due to the sample size. The study's conclusions might also be erroneous since, in contrast to the current study, which has identified the shortcomings in the previous study, the before and post diagnostic analysis that was necessary on the panel data was not performed.

Gathoni and Muiru, (2023) analyzed the effect of integrated financial reporting on the value of firms listed at the Nairobi Securities Exchange. The study objective was to investigate the influence of Integrated financial reporting on the value of firms listed at the Nairobi Stock Exchange (SE). The study used both primary data and secondary data. A sample of 64 firms listed in the Nairo Security Exchange was considered in the from 2016 to 2020. Integrated financial reporting was proxied by financial capital reporting, manufactured capital reporting, intellectual capital reporting, human capital reporting, social, and environmental capital reporting. The dependent variable, firm value, was measured with Tobin's Q. Multiple linear regression models were used in the study to examine the combined impact on the dependent variable. The study concluded that the value of companies listed at the NSE was positively and significantly correlated with financial capital reporting, that the value of companies listed at the NSE was positively and significantly correlated with manufactured capital reporting, that the value of companies listed at the NSE was positively and significantly correlated with intellectual capital reporting, that the value of companies listed at the NSE was positively and significantly correlated with human capital reporting, that the value of companies listed at the NSE was negatively correlated with environmental capital reporting, and that the value of companies listed at the NSE was not significantly impacted by social capital reporting. Thus, the study concluded that the value of companies listed on the NSE is positively correlated with integrated financial reporting. According to the survey, in order to increase the value of their companies, management of companies listed on the NSE should work to implement several forms of integrated financial reporting. The study's conclusions were constrained by the fact that it only looked at data spanning five years. If ten years are taken into account for analysis, the outcomes can be different.

Bui et al. (2023) examined the connection between financial capital and firm value in their study titled "The Impact of Capital Structure on Firm Value: Evidence from Listed Companies in Vietnam." The study aimed to assess how different sources of financial capital, particularly debt and equity financing, affect firm value. Additionally, it sought to determine the ideal debt-to-equity ratio that minimizes financial risks while maximizing business value. Since capital structure decisions influence a firm's performance, market valuation, and long-term sustainability, understanding the impact of financial capital is crucial for corporate managers, investors, and policymakers. The study focused on publicly traded companies in Vietnam from 2012 to 2021, selecting 200 firms using purposive sampling to ensure complete financial data availability. Tobin's Q ratio was used to measure firm value, while financial capital was operationalized through leverage (debt ratio), equity financing, firm size, profitability, and expansion prospects. Secondary data were sourced from stock market records and corporate financial statements, and fixed effects and random effects regression models were applied to analyze the relationship between financial capital and firm value. STATA was used to conduct the necessary regression analysis. Findings revealed that debt financing positively influenced firm value up to an optimal level, beyond which excessive debt led to financial distress and reduced firm value. Equity financing also contributed to firm value, though its impact was weaker than debt financing. Additionally, firm size and profitability positively correlated with firm value, while growth opportunities had a negative relationship, suggesting that firms with aggressive expansion strategies may face higher financial risks. The study recommended that firms maintain an optimal debt-equity ratio, focus on profitability and operational efficiency, and that regulatory bodies implement policies to guide financing decisions. It concluded that while debt financing is a key driver of firm value, excessive reliance on it may lead to financial distress. Limitations included its focus on Vietnamese firms, lack of industry-specific analysis, and reliance on historical data. Future research should explore cross-country comparisons, industry-based analyses, and alternative measures of firm value Lambe et al. (2022) examined the

relationship between financial capital, manufactured capital and financial performance of listed multinational corporations in Nigeria. Over a ten-year period (2011–2020), the study was aimed at investigating the effects of manufactured and financial capital on the financial performance of listed multinational corporations in Nigeria. A longitudinal study design was employed. Because the researchers maintained their independence from the quantitative data they gathered, positivism was the study philosophy. A sample of 21 multinational corporations was chosen from the population of 25 multinational corporations listed on the Nigeria Exchange Group as of December 31, 2020. The study used secondary data from financial statements that were made public. The study

used a regression model based on Islam (2021) and multiple regression analysis with the STATA 16 statistical tool. Return on equity (ROE) was the dependent variable, and manufactured capital (MC) and financial capital (FC) were the independent variables. Revenue Growth (RG) served as the control variable. The study found that financial capital positively and significantly affected the financial performance of listed multinational organisations, whereas manufactured capital inversely and insignificantly affected financial performance. The study recommended that since integrated reporting improves financial performance and transparency, businesses should ensure that it becomes their accepted way of reporting. The study recommended that companies should mandatorily adopt and continue with the practice of integrated reporting since. according to the study, in order to maximise returns on equity, businesses should optimise their financial capital structures. One of the study's main limitations is that it only included 21 multinational corporations in its sample, which may have limited how broadly the results may be applied. Once more, the study was constrained by the removal of certain businesses because of insufficient data, which would have affected how reliable the findings were. Due to its exclusive focus on Nigeria, the study's geographical reach was also limited, making it less applicable to other multinational corporations operating in other economic environments.

Opanyi and Omare, (2022) investigated the effect of integrated reporting on firm value of listed companies in Kenya. The study's goal was to assess the possible advantages of integrated reporting (IR) for companies that are listed on the Nairobi Stock Exchange (NSE). The study examined the level of IR in the annual reports of 56 businesses listed on the NSE between 2015 and 2019 using content analysis techniques. The study used the IIRC framework to create proxies for the Integrated Reporting Index. To determine the relationship between the and company worth, the study employed panel data regression. Using Tobin's Q measure, the study discovered that IR had an impact on firm value, whereas Return on Assets (ROA) showed no discernible effect. The study found that among the companies listed on the NSE, IR had a negative association with Tobin's Q and a positive link with ROA. This demonstrated that businesses who used IR had higher ROA values, indicating that high-value businesses are more likely to use IR, which is in line with earlier research on the topic. According to the study's findings, IR is becoming more and more popular and will shape corporate transparency in the future. The study advises policymakers and corporate report writers to use IR in order to demonstrate its advantages and adopt an integrated approach to business. Among the flaws in the study's conclusions is the notion that companies who had implemented IR had lower firm values in terms of Tobin's Q. That was a setback to the study as the effect of IR on firm value differed depending on whether firm value was proxied by ROA or Tobin’s Q. As rightly noted in the study, future researchers may explore the possible causes of differences and how to deal with inconsistence in results with respect to ROA and Tobin’s Q.

Fernando and Jeewanthi, (2021) examined the impact of Integrated Reporting on Firm Value of Licensed Banks and Finance Companies in Sri Lanka. The objective of the study was to synthesize the impact of IR on the firm value of licensed banks and finance companies in Sri Lanka. A sample of 20 licensed banks and finance companies were reviewed over the period 2015 to 2020. The independent variable integrated reported was measured using content analysis with the support of an integrated reporting index and, the dependent variable, firm value was proxied by Tobin’s Q and market to book value. The study found a significantly negative relationship between IR and firm value. The study comes to the conclusion that business value decreases as IR rises. The study's conclusions also help practitioners and policymakers reconsider how IR should be adopted and used. Therefore, rather than focussing on a single industry, the report suggests conducting similar research on all companies listed on the Colombo Stock Exchange (CSE). The study's findings were constrained by its

narrow focus, which only examined one industry, and its brief six-year timeframe, which was insufficient to draw any significant generalisations.

Islam, (2021) investigated the relationship between integrated reporting and firm performance in a voluntary disclosure regime: insights from Bangladesh. In Bangladesh's voluntary disclosure, the study's goal was to observe the integrated reporting disclosure pattern and look into how it relates to a company's financial, operational, and market growth performance as indicated by the market-to-book value ratio, return on equity (ROE), and return on assets (ROA). Twenty companies registered under ten distinct nonfinancial industries on the Dhaka Stock Exchange (DSE) between 2015 and 2018 make up the study's sample. Ordinary Least Square (OLS) regression was used in the study's analysis. A manual content analysis based on a structured integrated reporting disclosure index (IRDIN), which gauges the level of disclosure in corporate annual reports, was used to determine the dependent variable, integrated reporting. The independent variables were market-to-book value, ROA, and ROE. The control variables were financial leverage and the natural logarithm of total assets. According to the study, there is a significant and positive correlation between the IRDIN and all three performance metrics. Content analysis indicates that the sample firms are revealing the constructed index elements more frequently. The study came to the conclusion that the practice of IR has garnered a lot of interest from the sample non-financial firms in Bangladesh's voluntary setting after the ICAB distributed a disclosure checklist that is in line with the globally utilised IR framework. The study suggested that if the Bangladesh Securities Exchange Commission (BSEC) requires listed companies in Bangladesh to adopt the IR checklist developed in compliance with the IIRF by the ICAB, there will be an improvement in the quality of disclosure going forward. The findings of the study were limited because of the small size of sample used and the 3-year period reviewed. Use of IRDIN index scores may be affected by subjective judgment while assessing the annual report.

Adegbie et al. (2019) evaluated the effect of integrated reporting on the value of listed manufacturing firms in Nigeria. The study employed an ex-post facto research design. The research population consisted of 53 manufacturing companies that were listed on the Nigerian Stock Exchange (NSE) as of June 30, 2017. 38 of these businesses, including those engaged in consumer and industrial goods throughout the 2012–2016 study period, were specially selected. The purpose of the study was to assess how the value of Nigerian listed manufacturing companies was affected by the voluntary adoption of integrated reporting. Regression analysis was used in the study to apply both descriptive and inferential statistics. Tobin's Q served as proxy for the dependent variable, firm value, whereas the independent variable Disclosure of Financial Capital, Disclosure of Manufactured Capital, Disclosure of Intellectual and Human Capital, and Disclosure of Natural Capital served as stand-ins for integrated reporting. The control variables were firm leverage and firm value size. The study discovered that integrated reporting had a considerable influence on the firm's worth as measured by Tobin's Q (TQ). Disclosure of Financial Capital (DFC) had a very detrimental effect on TQ. According to the study's findings, integrated reporting is still relatively new in Nigeria but could be useful in determining the firm value of listed Nigerian manufacturing companies. According to the study, regulators had to provide a framework, provide training, and increase awareness on Nigeria's required adoption of integrated reporting. The findings of the study were limited because only a 5-year period was considered and the proxies for IR did not include Social and Relationship Capital as recommended by (IIRC, 2021)

El-Deeb, (2019) conducted a study on the Impact of Integrated Reporting on Firm Value and Performance: evidence from Egypt. The purpose of the study was to identify key challenges, opportunities, strengths and weaknesses to be experienced by companies listed in the stock exchange of Egypt stock exchange (EGX30) within the integrated reporting implementation process. The study utilized data from companies listed in EGX30 index in the Egyptian stock exchange market from 2012 to 2017. The data collected through the annual reports of the companies were analyzed through group statistical analysis like, Descriptive analysis, Pearson correlation, regression analysis. The independent variable, integrated reporting was represented by the researcher’s constructed index which included 42 items divided over seven main components (Organizational overview, Opportunities and risks, Strategy and resource allocation, Business model, Governance, Performance and Future outlook) derived from past literature and the bulletins of the professional companies like Big 4 auditing firms.

The dependent variables were return on equity(ROE), Leverage and Market Value. The study found a positive correlation between the level of IR compliance and firm value. The study recommended the implementation of the integrated reporting as it would enhance the companies' performance and value in the Egyptian market. The findings of the study did not emanate from basic pre and post diagnostic analysis of panel data before progressing to the conduct of regression, hence, this could lead to spurious regression and therefore affect the overall result of the study. Another major defect of the study was its reliance on past literature and the bulletins of the professional companies like Big 4 auditing firms instead of using the published annual statements of the companies sampled as done in the current study.

THEORETICAL FRAMEWORK

Resource-Based View (RBV) Theory

The Resource-Based View (RBV) Theory, introduced by Wernerfelt (1984) and expanded by Barney (1991), asserts that firms gain sustained competitive advantage by effectively managing internal resources that are valuable, rare, inimitable, and non-substitutable. Integrated reporting (IR) supports this by highlighting and strategically managing intangible resources like human, intellectual, social, and natural capital. Through IR, firms present a holistic view of financial and non-financial performance, which enhances stakeholder trust, reputation, and decision-making. By increasing transparency and accountability, IR strengthens investor confidence and operational efficiency, while reducing environmental and regulatory risks. Disclosures on sustainability, carbon footprint, and environmental impact position firms as responsible entities, improving access to sustainable finance. Empirical evidence links strong ESG reporting with better market valuation and reduced financial volatility, reinforcing IR's role as a value-enhancing tool. Institutional Theory complements RBV by explaining IR adoption as a response to external pressures such as regulations, stakeholder expectations, and industry norms. It views IR as a way for firms to gain legitimacy and align with accepted standards. Together, RBV and Institutional Theory provide a comprehensive lens for understanding IR. RBV focuses on internal value creation through strategic resource management, while Institutional Theory explains external motivations for adoption. These perspectives show that IR contributes to competitive advantage, legitimacy, and long-term business value.

Agency Theory

The interaction between principals (owners/shareholders) and agents (managers/executives) in a firm is explained by Agency Theory, which was created by Jensen and Meckling in 1976. According to the concept, processes such as corporate governance, incentive systems, and financial reporting are necessary to align interests because managers may not always behave in the best interests of shareholders. Agency theory is the study of the agency relationship and the problems that result from it, especially the conflict that arises when the principal and agent have different interests yet are working towards the same objective (Eisenhardt, 1989). In a nutshell the idea that the two parties—principals and agents—have different interests gave rise to agency costs. The principal (shareholders) pays monitoring costs to curb the agents' anomalous behaviour, while managers, acting as agents, pay bonding costs to make sure their choices and actions won't risk the principal's interests. When the agents' choices diverge from those that would maximise the welfare of the principal, residual loss results. Additionally, voluntary disclosure can help to ameliorate the agency problem since it reduces agency costs and persuades external users that managers are operating in the best interests of the company(Darus & Taylor, 2009). There is a strong connection between Agency Theory and Integrated Reporting and Firm Value, by offering both financial and non-financial data (such as governance, sustainability, and ESG performance), integrated reporting improves transparency. This closes the information gap between investors (principals) and management (agents). By guaranteeing that managers are held responsible for sustainability, social responsibility, and financial success, IR offers a more comprehensive perspective of the business's long-term value creation. IR restricts managers' capacity to participate in earnings management or short-term decision-making that favours them at the expense of others since it mandates that they disclose relevant environmental, social, and governance (ESG) facts (Ayem et al., 2024). Through the commitment and application of a broader range or scope in reporting, which is the central message in integrated reporting, information gaps between managers, or "the agents," and shareholders, or "the principals," are decreased in Nigeria's industrial and

consumer products sector.

Stakeholders Theory

Stakeholder Theory proposed by Freeman in 1984 holds that companies should consider the interests of all parties involved, including employees, consumers, investors, regulators, and society, rather than just shareholders. Because it encourages open, comprehensive, and long-term value creation that benefits all stakeholders, Integrated Reporting is consistent with Stakeholder Theory. A stakeholder is any individual or organisation that has an impact on or has the potential to have an impact on the business (R Edward et al., 2018). In general, a public limited liability company's stakeholders comprise its owners, management, staff, clients, suppliers, government, and the general public (Kujala et al., 2022). Listed companies are no longer just legal entities that allow people to conduct their own business dealings. They have expanded proportionately and developed into a "corporate system" that has drawn a variety of qualities and abilities to itself. They have also gained enough notoriety to be considered a significant social institution. Stakeholder theory's fundamental tenet is that a company's success will depend on its ability to effectively manage its relationships with its stakeholders, gain their support, and modify its operations to be responsive. In business reporting, management must make sure that the data it offers pleases all other interest groups within the stakeholder context in addition to the owners (shareholders). Since each can influence the other in terms of rights and obligations, as well as advantages and harms, the stakes are reciprocal. Because it also has an interest in modern corporation, management plays a unique function. Apart from being an employee, management is responsible for protecting the corporation, which is an abstract entity.

Management, particularly top management, is responsible for maintaining the company's health, which entails juggling the many demands of opposing stakeholders. A thorough report on the company's financial and non-financial operations is expected by these stakeholders with different levels of interest to inform decisions both now and in the future. In this regard, the (IIRC, 2013, 2021) highlight that stakeholders are people whose operations can be expected to reasonably impact the entity's ability to create value in the short, medium, and long term, or who can be expected to be reasonably impacted significantly by the business activities, outputs, or outcomes of the entity. Therefore, companies must disclose in their annual report how they affect and are affected by stakeholders (shareholders, investors, society, supplier partnerships, governments, customers, etc.) through their integrated Reporting. Stakeholder theory's universal applicability is questioned due to the ambiguous definition of the term "stakeholder," which departs from Freeman's groundbreaking idea that it encompasses all individuals who are or were influenced by the organisation. Identifying stakeholders and managing their interests effectively without management intervention is a significant task (Bangara et al., 2024b; Bello & Abu, 2021). Additionally, Bello and Abu, (2021) citing Nwanji and Howell, (2007) suggested that the criticism focusses on the dynamic nature of the stakeholder pool, which is constantly evolving due to the fluctuating interests of the current stakeholders and addressing any new interests that may arise from the new stakeholders.

Integrated Reporting Theory

This study is underpinned by Integrated Reporting Theory, which posits that corporate disclosures should provide a holistic and interconnected representation of how an organisation creates, preserves, and communicates value over time. The theory evolved from the development of the International Integrated Reporting (IR) Framework, formally introduced by the International Integrated Reporting Council (IIRC) in 2013, and revised in 2021. While the framework itself is a practical guideline, its underlying logic has been advanced into a theoretical model by scholars such as Eccles and Krzus (2010) and later formalised through empirical and conceptual contributions by Dimes and De Villiers (2024). These scholars demonstrate that meaningful reporting extends beyond conventional financial disclosures and includes narrative, contextual, and forward-looking information on multiple capitals, including financial and manufactured capital. Dimes and De Villiers (2024) articulated four essential organizational dimensions; namely strategic leadership, stakeholder-engaged integrated strategy, a collaborative culture, and integrated intelligence systems which in their opinion collectively operationalize the construct of Integrated Thinking and its interplay with Integrated Reporting. According to this theory, corporate reporting is a strategic tool for lowering information asymmetry, increasing transparency, and facilitating stakeholder decision-making in addition to being a record of financial success. It

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contends that value-relevant information resides in both the numerical indicators typically found in financial statements and the accompanying disclosures that explain how resources such as buildings, equipment, and infrastructure are managed and deployed to support long-term value creation. This perspective aligns directly with the integrated disclosure of manufactured capital and financial capital, which are central to the present study.

The theory provides a strong analytical lens for this research, which compares financial-based and disclosure level-based reporting approaches in relation to firm value among listed consumer and industrial goods firms in Nigeria. Given the variation in reporting quality and disclosure consistency across firms and sectors in the Nigerian context, Integrated Reporting Theory offers an appropriate framework for examining how differences in the structure, quality, and integration of disclosures influence market-based valuation outcomes. The theory's emphasis on transparency, multi-capital connectivity, and decision-usefulness positions it as a suitable foundation for evaluating integrated reporting practices and their implications for firm value.

METHODOLOGY

The study adopts ex post facto research design as secondary data were obtained from sampled firms' annual reports for the study period, and historical market data from the Nigeria Exchange Group (NGX). The population consisted of all thirteen (13) Industrial Firms and twenty-one (21) Consumer Goods firms that were listed on the Nigeria Exchange Group ((NGX) and had audited financial account as of 31st December 2024. To arrive at the sample size, a purposive sampling method using filter approaches was employed for this study because it was important to ensure unbiased sample size that would give each member of the population an equal opportunity of being selected. A total of 13(61.9%) of the consumer goods firms and 10(76.9%) of the industrial goods firms were selected as sample size for this study based on the following criteria: These numbers gave a total sample to 23(67.6%) of the 34 consumer and industrial goods firms listed in the Nigeria Exchange Group as of end of 2024, based on the following criteria..

1. Firms are in operation during the study period 2013-2024
2. Throughout the study period, firms were not delisted. This is to prevent the issue of data attrition.
3. Firms were actively participating in the NGX during the period under review.
4. Firms carried out business activities within the period and provided complete and accessible annual account and report.

Details of the 23(67.6%) selected firms are listed in appendix 12

The study's 12-year timeframe was 2013–2024. Descriptive statistics, panel regression, correlation analysis, and post regression diagnostic tests on variables were used to analyse the secondary data gathered for the dependent and independent variables using STATA 16.

In order to examine the effect of financial and manufactured capital reporting on firm value of listed industrial and consumer goods firms in Nigeria, the study adapted with modifications the model used by (Adegbie et al., 2019). Model used by Adegbie et al. (2019) is stated as follows:

TQ = $\alpha 6 + \beta 9$ DFC it + $\beta 10$ DMC it + $\beta 11$ DIHC it + $\beta 12$ DNC it + $\beta 13$ SIZE it + $\beta 14$ FLEV it + $\mu 6$……………………………………………………...…………………….…(i)

Models of this study

Using Financial-based measures

Model 1

P/B Ratio = $\alpha_3 + \beta_1 FCRFin_{it} + \beta_2 MCRFin_{it} + \beta_3 RG_{it} + \mu_3$ ………………………(ii)

Where:

P/B Ratio = Firms' value measured by Price-to-Book (P/B) ratio

FCRFin = Financial Capital Reporting (finance-based values)

MCRFin = Manufactured Capital Reporting (finance-based)

RG = Revenue Growth

Using Disclosure level-based measures

Model 2

$P/B\ Ratio = \alpha_3 + \beta_1\ FCRDisc_{it} + \beta_2\ MCRDisc_{it} + \beta_3 RG_{it} + \mu_3$ ……...(iii)

Where:

P/B Ratio = Firms' value measured by Price-to-Book (P/B) ratio

FCRDisc = Financial Capital Reporting (disclosure-based)

MCRDisc = Manufactured Capital Reporting (disclosure-based)

RG = Revenue Growth

Others:

α_1- α_3 = constant

β_1 – β_3 =- coefficient

μ = Error term which is incorporated in the equation to cater for other factors that may influence firm value.

i = cross section of consumer and industrial firms and

t = time in terms of years.

The apriori expectation:

$\beta_1, \beta_2, \beta_3 > 0$. This implies that all the explanatory and control variables are expected to have a positive relationship with the dependent variable.

Table 1: Definition of variables using financial-based measurement.

Variable Acronym	Variable Name	Measurement	Source(s)
(P/B) Ratio	Price-To-Book Value Ratio	Price per share divided by book value per share	(Akbar et al., 2021; J. Fernando, 2024; Shittu et al., 2016; Suyono et al., 2020)
FCRFin	Financial Capital Reporting Index	Total Financial Capital (TFC) =Shareholders' Equity + Total Debt	(Gurungarrow, 2024)

Variable Acronym	Variable Name	Measurement	Source(s)
MCRFin	Manufactured Capital Reporting Index	Non-Current Asset Ratio (NCAR) = Non-Current Assets divided by Total Assets expressed in percentage.	Lambe et al., (2022); Ullah & Ahmad, (2019)
RG	Revenue Growth	(Current Year Revenue (CYR) minus Prior Year Revenue (PYR)) divided by (Prior Year Revenue) i.e.. ((CYR-PYR)/ PYR) x 100	Kasoga, (2020); Lambe et al., (2022)

Source: Researchers compilation (2025)

This table details the indicators used to measure disclosure level in Financial and Manufactured Capital, based on international reporting standards. Financial capital has 11 items while Manufactured Capital has 12 items. The level of disclosure for each item will be determined by the scoring framework as listed in table 3. This was adapted from Baharudin et al (2020) (see details are in Appendix 9, 10 &11).

Table 2: Indicators for Financial and Manufactured Capital Disclosure.

Financial Capital (11 items)	Manufactured Capital (12 items)
- Short term debt	- Owner-occupied buildings
- Long-term debt	- Investment property: buildings
- Reservations	- Leased buildings
- Share capital	- Owner-occupied warehouse
- Share premium	- Investment property: warehouse
- General reserves	- Leased warehouse
- Special purpose reserves	- Owner-occupied property, plant & equipment
- Asset replacement reserve	- Investment property: property, plant & equipment
- Industry grants	- Leased property, plant & equipment
- Government grants	- Production equipment and tools: owned
- Local authority grants	- Production equipment and tools: leased
	- Infrastructure (such as roads, ports, bridges and waste and water treatment plants)

Source: Researchers compilation (2025)

This table details the scores for each indicator used to measure disclosure level in Financial and Manufactured Capital. A scoring system/methodology was used to determine the extent indicators of the capitals were reported. The scoring system was based on a review of previous studies that used content analysis to determine the correct number of points to be allocated per indicator. Larsson and Ringholm (2016) used three-point system while Sun

et al. (2022) used a four-point system. In this study, 4-point system, similar to (Sun et al., 2022) was used to ensure broad differentiation on the disclosure levels of the indicators per company. Each indicator gets a score from 0 to 3 depending on the availability of numerical values and details of the disclosures. The annual reports of the firms selected were reviewed to establish the level of financial and manufactured capital disclosures based on the indicators listed in table 2. Where disclosures include numerical values with details, a score of 3 is given, where numerical values are provided but no details are given, a score of 2 is granted. Where the disclosure is just a narrative or no disclosure is provided, such indicators are scored 1 or 0 respectively. The total scores from the indicators are thereafter divided by the number of indicators to get the weighted average score (proportion of the total score from the indicators to the maximum expected score) for the capital in each year. Financial Capital Disclosure has 11 indicators hence the expected maximum scores would be 11 x 3=33. Where in a given year the total score is 18, the proportion or level of score is calculated as 18/33=0.545454 or 55%. This was adapted from Sun et al (2022) (see details are in Appendix 9, 10 & 11).

Table 3: Scoring Framework

Score	Definition
3	Disclosure includes numerical data/values and is detailed (e.g. breakdown by source/type, trend or purpose)
2	Disclosure includes numerical values but lacks details (e.g. total only)
1	Disclosure is narrative only, without any numerical data/values
0	No disclosure

Source: Researchers compilation (2025)

Table 4 Definition of variables using disclosure level-based measurement.

Acronym	Variable Name	Measurement	Source(s)
FCRDisc	Financial Capital Reporting using disclosure level	Sum of the scores of the indicators divided by the number of indicators under financial capital. i.e. Sum of the scores of the indicators divided by 11	Sun et al., (2022)
MCRDisc	Manufactured Capital Reporting using disclosure level	Sum of the scores of the indicators are divided by the number of indicators under Manufactured Capital. i.e. Sum of the scores of the indicators divided by 12	Sun et al., (2022)

Source: Researcher's compilation (2025)

RESULTS AND DISCUSSION

Descriptive Statistics

Descriptive statistics are used to present, in summarised form, the primary characteristics of a dataset. They consist of metrics such as mean, median, standard deviation. These statistics aid in comprehending the general pattern and variability of the data. They offer a starting point for additional statistical analysis. An analysis of the all variables (both finance-based and disclosure-based) were obtained using STATA 16 software for the period under review.

Table 3: Descriptive Statistic Result-(using finance-based measures for the explanatory variables)

	Obs	Mean	Std_Dev	Min	Max	p1	p99	Skew	Kurt
pbratio	276	3.704	7.836	-26.42	67.896	-7.515	40.719	4.125	29.473
fcrfin	276	237.052	524.291	1.074	5194.814	1.303	2658.463	4.983	37.251
mcrfin	276	.53	.238	.076	1.235	.121	.968	.108	2.212
rg	276	.202	.437	-1	5.076	-.576	1.366	5.778	61.486

STATA 16 output (2025)

Table 4: Descriptive Statistic Result- (using disclosure level-based measures for the explanatory variables)

	Obs	Mean	Std_Dev	Min	Max	p1	p99	Skew	Kurt
pbratio	276	3.704	7.836	-26.42	67.896	-7.515	40.719	4.125	29.473
fcrdisc	276	.457	.08	.212	.788	.273	.788	.601	6.026
mcrdisc	276	.296	.094	.139	.639	.139	.583	1.773	5.691
rg	276	.202	.437	-1	5.076	-.576	1.366	5.778	61.486

STATA 16 output (2025)

Table 3 & 4 present the descriptive statistics for the financial and manufactured capitals, revenue growth, and firm value (as measured by the price-to-book ratio). Table 3 summarised the primary characteristics of the variables when financial and manufactured capitals are proxied by finance-based values while table 4 summarised the features when the two capitals are proxied by disclosure level-based scores. In both tables P/B ratio showed a high standard deviation (7.8361), maximum (67.8963), and Sum of Squared Deviations (SSD) of 16,886.0496, and average of 3.7041, indicating a substantial fluctuation that is probably caused by a few numbers of highly capitalised or high-performing companies. In table 3, the distribution of financial capital (FCRFin) is likewise quite wide, with a mean of 237.0515 billion naira, a maximum of 5,194.8140 billion naira, a median of 43.4305 billion naira, and an SSD of 75,592,426.3572 billion naira. This pattern is typically linked to the existence of larger companies with substantial asset bases or financing. Significant non-normality in the majority of variables is confirmed by skewness and kurtosis values, particularly in table 3 where RG has skewness of 5.778, kurtosis = 61.486 and FCRFin has skewness of 4.125 and kurtosis of 29.473. In both tables p1 and p99 represent the percentage points at 1% and 99% respectively, showing percentage observations with less than or equal the values stated in each case.

Table 4 also shows distributional features which indicate variations in firm characteristics and imply the existence of outliers. FCRDisc and MCRDisc have maximum disclosure level of 79% and 64% respectively. The mean disclosure level for FCRDisc stood at 46% while that of MCRDisc stood at 30%. As a result, using robust regression techniques or non-parametric approaches would be more appropriate for further analysis. The inclusion of the continuously high observation count (276 for all variables) improves the data's interpretability and resilience, offering a strong basis for additional econometric modelling.

CORRELATION MATRIX

Correlation Analysis of the two measures.

Table 4 presents correlation matrix displaying the Person correlation coefficients between the dependent and independent variables as well as among the independent variables of the study using the finance-based measure. It displays correlation values, which are derived from Pearson Correlation output, between the dependent and independent variables as well as the correlation among the independent variables themselves.

Table 5: Correlation Matrix- (finance-based measures)

	pbratio	fcrfin	mcrfin	rg
pbratio	1.0000			
fcrfin	0.0087 0.8852	1.0000		
mcrfin	-0.0840 0.1638	0.2320* 0.0001	1.0000	
rg	-0.0122 0.8406	0.1196* 0.0471	-0.0092 0.8787	1.0000

STATA 16 ouput (2025)

Table 5 reports the Pearson correlation coefficients among firm value (P/B Ratio), financial capital (FCRFin and MCRFin), and revenue growth (RG). The aim is to explore initial linear associations before regression modeling. P/B Ratio shows a weak correlation with FCRFin (r = 0.0087, p = 0.8852), MCRFin (r = -0.0840, p = 0.1638), or RG (r = -0.0122, p = 0.8406), suggesting that these variables do not individually explain variation in firm value at the bivariate level. However, a significant positive correlation exists between FCRFin and MCRFin (r = 0.2320, p = 0.0001), indicating that firms with greater financial capital may invest more in manufacturing assets. Similarly, FCRFin is weakly but significantly associated with RG (r = 0.1196, p = 0.0471), implying a modest link between financial strength and growth. These results support the use of regression analysis to examine possible indirect impacts while adjusting for other factors, but they do not imply a direct linear link between the explanatory variables and company value.

Table 6: Correlation Matrix- (using disclosure-based measures for the explanatory variables)

	pbratio	fcrdisc	mcrdisc	rg
pbratio	1.0000			
fcrdisc	0.0380 0.5301	1.0000		
mcrdisc	-0.0670 0.2674	0.4614 0.0000	1.0000	
rg	-0.0122 0.8406	0.1252 0.0376	0.0325 0.5907	1.0000

STATA 16 output (2025)

Table 6 reports on the Pearson correlation coefficients among firm value (P/B Ratio), financial capital (FCRDisc and MCRDisc), and revenue growth (RG). The aim is to explore initial linear associations before regression modeling. P/B Ratio shows no significant correlation with FCRDisc (r = 0.0380, p = 0.5301), MCRDisc (r = -0.0670, p = 0.2674), or RG (r = -0.0122, p = 0.8406), suggesting that these variables do not individually explain variation in firm value at the bivariate level. However, a significant positive correlation exists between FCRDisc and MCRDisc (r = 0.4614, p = 0.0000), indicating that firms with greater financial capital may invest more in manufacturing assets. MCRDisc showed an insignificant association with RG (r = 0.0325, p = 0.5907). These results support the use of regression analysis to examine possible indirect impacts while adjusting for other factors, but they do not imply a direct linear link between the explanatory variables and company value

Multi-Collinearity Test

Variance Inflation Factor (VIF) for the two measures

The Variance Inflation Factor quantifies the extent to which multicollinearity among the independent variables inflates the variance of a regression coefficient. While values above 5 or 10 indicate a high degree of correlation, which could compromise the accuracy of coefficient estimates, a VIF value of 1 shows no multicollinearity. It assists in locating superfluous variables that might need to be consolidated or eliminated.

Table 7: Variance Inflation Factor (VIF) – (using finance-based measures for the explanatory variables)

Variable	VIF	1/VIF
fcrfin	1.07	0.931359
mcrfin	1.06	0.944794
rg	1.02	0.984251
Mean VIF	1.05	

STATA 16 output (2025)

Table 7 shows that all variables have modest Variance Inflation Factor (VIF) values (mean VIF = 1.05), which suggests that multicollinearity is not an issue and permits accurate interpretation of individual coefficients.

Table 8: Variance Inflation Factor (VIF) (using disclosure-based measures for the explanatory variables)

Variable	VIF	1/VIF
fcrdisc	1.29	0.774921
mcrdisc	1.27	0.786432
rg	1.02	0.983511
Mean VIF	1.19	

STATA 16 output (2025)

Table 8 shows that all variables have modest Variance Inflation Factor (VIF) values (mean VIF = 1.19), which suggests that multicollinearity is not an issue and permits accurate interpretation of individual coefficients

Heteroskedasticity Tests for the two measures

As a diagnostic check to confirm the robustness of the estimations, a heteroskedasticity test was performed. When the standard error of the variable under observation varies over time, this is known as heterogeneous variance. The validity of analytical conclusions may be impacted by heteroscedasticity, which goes against the assumptions of linear regression modelling. Heteroscedastic, on the other hand, decreases precision and increases the likelihood of estimating less precise coefficients without introducing bias into the estimates. After removing the correct population values, the estimates are far from accurate.

Decision Rule: At 5% level of significance

HYPOTHESIS

H_0 The Error Variances are all Equal (Homoscedastic).

H_1 The Error Variances are not Equal (Heteroskedasticity)

Table 9: Heteroskedasticity Test (using finance-based measure of the explanatory variables)

```
Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: fitted values of pbratio

         chi2(1)      =     4.77
         Prob > chi2  =   0.0290
```

STATA 16 output (2025)

Table 9 shows a p-value of 0.0290 and a Chi-square statistic of 4.77. Hence, the null hypothesis is rejected since the p-value is below the traditional significance level of 0.05. The presence of heteroskedasticity is demonstrated statistically by this finding, which shows that the error components in the model do not have constant variance. This result suggests that the ordinary least squares (OLS) regression's standard errors could be skewed, which could result in inaccurate hypothesis testing. Subsequent regression studies used the robust standard errors to address this problem and guarantee reliable inference.

Table 10: Heteroskedasticity Test (using disclosure-based measure of the explanatory variables)

```
Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: fitted values of pbratio

         chi2(1)      =    21.13
         Prob > chi2  =   0.0000
```

STATA 16 output (2025)

Table 10 shows a p-value of 0.0000 and a Chi-square statistic of 21.13. Similar to the illustrations in table 9 the null hypothesis is rejected since the p-value is below the traditional significance level of 0.05. And this result suggests that the ordinary least squares (OLS) regression's standard errors could be skewed, which could result in inaccurate hypothesis testing. Subsequent regression studies used the robust standard errors to address this problem and guarantee reliable inference.

Hausman Test the two measures

To choose between fixed and random effects models in panel data analysis, the Hausman test is a model specification test. In this study, both fixed and random effects were performed because the datasets used were panel. To select between the fixed-effects and random-effects regression models, a Hausman specification test was employed. The purpose of this test was to ascertain whether the erroneous term was related to the regressor. As a result, the Hausman specification test decision rule is provided at a significance level of 5%.

H_o: Random effect is more appropriate for the panel regression analysis

H_1: Fixed effect is more appropriate for the panel regression analysis

Decision Rule: If the p-value is less than 0.05, the null hypothesis is rejected, and the alternate hypothesis should be accepted.

Table 11: Hausman Test (using finance-based measure of the explanatory variables)

```
. * STEP 5: Hausman Test (FE vs. RE)
. hausman fixed random
```

	Coefficients (b) fixed	(B) random	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
fcrfin	-.0012135	-.0007203	-.0004932	.0006733
mcrfin	-.4487357	-1.050035	.6012991	1.392744
rg	-.3155391	-.3238835	.0083445	.1469546

```
                b = consistent under Ho and Ha; obtained from xtreg
 B = inconsistent under Ha, efficient under Ho; obtained from xtreg

    Test:  Ho:  difference in coefficients not systematic

                chi2(3) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                        =        1.11
              Prob>chi2 =      0.7755
```

STATA 16 output (2025)

Table 12: Hausman Test (using disclosure level-based measure of the explanatory variables)

```
. hausman fixed random
```

	Coefficients (b) fixed	(B) random	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
fcrdisc	-4.850826	-1.264977	-3.585849	3.488407
mcrdisc	7.930839	3.254223	4.676616	2.932619
rg	-.4062376	-.395515	-.0107226	.1307602

```
                b = consistent under Ho and Ha; obtained from xtreg
 B = inconsistent under Ha, efficient under Ho; obtained from xtreg

    Test:  Ho:  difference in coefficients not systematic

                chi2(3) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                        =        2.94
              Prob>chi2 =      0.4010
```

STATA 16 output (2025)

Lagrange Multiplier Test.

The Lagrange multiplier (LM) test is used to choose between pooled and random effects models in panel data analysis. Both pooled and random effects regression analyses were performed because the dataset comprised a panel. Then, a Breusch-Pagan Lagrangian multiplier test was used to identify the best model between the pooled-effects and random-effects regression models.

At a 5% significance level, the decision rule for Breusch-Pagan Lagrange multiplier test is providing:

H_0: Pooled effect is more appropriate for panel regression analysis

H_1: Random effect is most appropriate for panel regression analysis.

Table 13: LM Test (using finance-based measure of the explanatory variables)

```
Breusch and Pagan Lagrangian multiplier test for random effects

        pbratio[id,t] = Xb + u[id] + e[id,t]

        Estimated results:
                         |       Var     sd = sqrt(Var)
                 ---------+------------------------------
                 pbratio |   61.40382       7.836059
                       e |   42.29699       6.503614
                       u |   22.75766       4.770499

        Test:   Var(u) = 0
                                chibar2(01) =   140.72
                            Prob > chibar2 =   0.0000
```

STATA 16 output (2025)

Table 14: LM Test (using disclosure level-based measure of the explanatory variables)

```
Breusch and Pagan Lagrangian multiplier test for random effects

         pbratio[id,t] = Xb + u[id] + e[id,t]

         Estimated results:
                          |       Var     sd = sqrt(Var)
                  ---------+------------------------------
                  pbratio |   61.40382       7.836059
                        e |   42.22518        6.49809
                        u |   21.43597         4.6299

         Test:   Var(u) = 0
                                 chibar2(01) =   131.03
                             Prob > chibar2 =   0.0000
```

STATA 16 output (2025)

Regression Analysis for the two measures

Table 15: Regression Analysis (using finance-based measure of the explanatory variables)

```
. xtreg pbratio fcrfin mcrfin rg, re vce(robust)

Random-effects GLS regression                   Number of obs      =         276
Group variable: id                              Number of groups   =          23

R-sq:                                           Obs per group:
     within  = 0.0034                                         min =          12
     between = 0.0005                                         avg =        12.0
     overall = 0.0013                                         max =          12

                                                Wald chi2(3)       =        0.66
corr(u_i, X)   = 0 (assumed)                    Prob > chi2        =      0.8827

                                  (Std. Err. adjusted for 23 clusters in id)
------------------------------------------------------------------------------
             |               Robust
     pbratio |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
      fcrfin |  -.0007203   .0011687    -0.62   0.538     -.003011    .0015703
      mcrfin |  -1.050035   3.333312    -0.32   0.753    -7.583206    5.483137
          rg |  -.3238835   .5216138    -0.62   0.535    -1.346228    .6984608
       _cons |   4.496583   2.511179     1.79   0.073    -.4252374    9.418404
-------------+----------------------------------------------------------------
     sigma_u |  4.7704994
     sigma_e |  6.5036139
         rho |  .34982375   (fraction of variance due to u_i)
------------------------------------------------------------------------------
```

STATA 16 output (2025)

Table 15 shows Random Effects Generalized Least Squares (GLS) regression model with robust standard errors which was estimated to examine the influence of Financial Capital Reporting (fcrfin), Manufactured Capital Reporting (mcrfin), and Revenue Growth (rg) on firm value, proxied by the price-to-book ratio. The selection of the Random Effects model was justified by a significant LM test ($p < 0.01$), a non-significant Hausman test ($p = 0.7755$), and rho ($\rho = 0.3498$) indicating the presence of firm-specific heterogeneity. The model included 276 observations across 23 firms over 12 years. However, none of the predictors were statistically significant at the 5% level (p-values for fcrfin, mcrfin, and rg were 0.538, 0.753, and 0.535, respectively), and the overall explanatory power of the model was extremely low (R-squared = 0.0013). The constant term was marginally significant ($p = 0.073$), suggesting an average P/B ratio of approximately 4.5 when all predictors are zero. Despite the lack of significant findings, the use of robust standard errors accounts for both heteroskedasticity and residual non-normality, ensuring that the inference remains statistically valid. The results imply that within the scope of this sample, financial capital, manufactured capital, and revenue growth do not significantly explain variations in firm value, although firm-level differences still matter. This finding highlights the importance of moving to disclosure-based analysis as the next phase of this study.

Table 16: Regression Analysis (using disclosure-based measures of the explanatory variables)

```
Random-effects GLS regression                   Number of obs     =         276
Group variable: id                              Number of groups  =          23

R-sq:                                           Obs per group:
     within  = 0.0048                                         min =          12
     between = 0.0688                                         avg =        12.0
     overall = 0.0047                                         max =          12

                                                Wald chi2(3)      =        1.55
corr(u_i, X)   = 0 (assumed)                    Prob > chi2       =      0.6699

                                  (Std. Err. adjusted for 23 clusters in id)
------------------------------------------------------------------------------
             |               Robust
     pbratio |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     fcrdisc |  -1.264977   4.810799    -0.26   0.793    -10.69397    8.164016
     mcrdisc |   3.254223   3.374837     0.96   0.335    -3.360336    9.868782
          rg |   -.395515   .5676189    -0.70   0.486    -1.508028    .7169977
       _cons |   3.397858   2.552485     1.33   0.183    -1.604921    8.400638
-------------+----------------------------------------------------------------
     sigma_u |  4.6298999
     sigma_e |  6.4980903
         rho |  .33671985   (fraction of variance due to u_i)
------------------------------------------------------------------------------
```

STATA 16 output (2025)

Table 16 shows Random-effects GLS regression examining the effect of Financial Capital Disclosure, Manufactured Capital Disclosure, and Revenue Growth on firm value (proxied by Price-to-Book Ratio). The model, based on 276 observations across 23 firms, revealed that none of the explanatory variables were statistically significant at the 5% level. Financial Capital Disclosure had a negative but insignificant effect (Coef. = -1.264977; p = 0.793), while Manufactured Capital Disclosure showed a positive, though also insignificant, relationship with firm value (Coef. = 3.254223; p = 0.335). Revenue Growth had a weak negative effect (Coef. = -0.395515; p = 0.486). The overall model fit was poor (Wald $chi^2 = 1.55$; p = 0.6699), with low R-squared values (within = 0.0048; between = 0.0688; overall = 0.0047), indicating limited explanatory power. The intraclass correlation (rho = 0.337) suggests that 34% of the variation in firm value is due to differences across firms, justifying the random-effects approach. In summary, while some directional trends are observed, the model does not provide statistically significant evidence that the disclosure variables or revenue growth explain firm value.

Comparative Summary of the two models estimated using Random Effects GLS with robust standard errors. The results are presented in parallel to facilitate comparison.

Metric	Disclosure-Based Model	Finance-Based Model
Coefficient: FCR	-0.265 (p = 0.793)	-0.00072 (p = 0.538)
Coefficient: MCR	3.254 (p = 0.335)	-1.050 (p = 0.753)
Coefficient: RG	-0.396 (p = 0.486)	-0.324 (p = 0.535)
R-squared	0.0047	0.0013
Wald Chi²	1.55 (p = 0.6699)	0.66 (p = 0.8827)
Rho	0.337	0.350

Source: Researcher's compilation (2025)

DISCUSSION OF FINDINGS

The results from both the disclosure-based and finance-based models indicate that neither Financial nor Manufactured Capital reporting exerted a statistically significant influence on firm value, as proxied by the Price-to-Book Ratio. While Manufactured Capital Disclosure produced a positive but insignificant coefficient, suggesting a potential directional relationship, the finance-based measures performed comparatively worse, with negative and insignificant effects. These outcomes suggest that the way capital information is disclosed may carry more interpretive value for stakeholders than the raw financial figures themselves, even if such effects are not yet strong enough to attain statistical significance.

This pattern aligns with prior evidence. Dimes et al. (2023) observed that narrative capital disclosures, although not always significant, often provide decision-useful insights for stakeholders, particularly when framed within sectoral contexts. Similarly, Arumona et al. (2019) and Adegbie et al. (2019) emphasized that the communicative quality of disclosures is especially critical in emerging markets like Nigeria, where investors may struggle to interpret financial figures in isolation. The insignificant negative coefficient for Financial Capital Disclosure is consistent with Aza and Suleiman (2019), who documented weak investor responses to uncontextualized financial data.

However, the null findings should not be interpreted as evidence that capital reporting is irrelevant to firm value. Rather, they must be situated within Nigeria's macroeconomic and institutional environment. Market inefficiencies and relatively low investor sophistication limit the integration of firm-level disclosures into pricing decisions. Weak enforcement of reporting standards further erodes the reliability and comparability of information, while persistent macroeconomic instability—characterized by high inflation, exchange rate volatility, and policy uncertainty—tends to overshadow firm-specific signals. Moreover, structural challenges such as infrastructure deficits and high operating costs may blunt the immediate value relevance of Manufactured Capital disclosures, even where such information is available.

Taken together, these results underscore two key insights. First, disclosure-based metrics—particularly those relating to Manufactured Capital—appear to hold relatively greater interpretive promise than financial proxies, even if the evidence remains weak at present. Second, the lack of statistical significance reflects broader systemic challenges in the Nigerian capital market, rather than the irrelevance of capital reporting per se. Future reforms aimed at strengthening enforcement, improving market efficiency, and enhancing investor education could improve the extent to which capital reporting translates into firm value.

CONCLUSION AND RECOMMENDATIONS

This study examined the effect of Integrated Reporting on firm value, focusing on Financial and Manufactured Capital Reporting among listed consumer and industrial goods firms in Nigeria from 2013 to 2024. Using the Price-to-Book Ratio as the measure of firm value and Revenue Growth as a control, two random-effects GLS regression models were estimated: a disclosure-based model and a finance-based model. Neither Financial nor Manufactured Capital Reporting demonstrated statistically significant effects on firm value. Nevertheless, Manufactured Capital Disclosure produced a positive coefficient, suggesting a potential though inconclusive relationship with firm valuation, while finance-based measures performed comparatively worse.

These findings confirm both hypotheses (H_{01} and H_{02}), showing that financial and manufactured capital reporting—whether measured through disclosures or financial values—do not significantly affect firm value in Nigeria's consumer and industrial goods sectors. However, these null results carry important implications. They suggest that investors may currently discount capital reporting due to weak enforcement, market inefficiency, or limited investor sophistication, and that macroeconomic volatility in Nigeria may overshadow firm-specific disclosure signals.

The contribution of this study therefore lies in three areas. First, it introduces a comparative methodological framework by analyzing both disclosure-based and finance-based measures of capital reporting, thereby highlighting the potential importance of disclosure quality over raw financial aggregates. Second, it extends integrated reporting research into Nigeria's consumer and industrial goods sectors, an underexplored area compared to the banking and insurance industries. Third, it provides policy-relevant insights into why current reporting practices may have limited value relevance in emerging markets, underscoring the need for stronger enforcement mechanisms, improved reporting quality, and greater investor education.

Future studies could build on these insights by testing alternative proxies of financial and manufactured capital, expanding the scope to additional sectors, and incorporating qualitative assessments of reporting practices. In doing so, scholars and practitioners may better understand how integrated reporting can evolve into a more reliable driver of firm value in emerging markets.

These outcomes collectively reinforce the validity of Ho1 and Ho2 at the conventional levels of statistical significance. However, the directional consistency of the manufactured capital coefficient implies a potential for informational enhancement and value relevance, especially with improved reporting standards and sector-specific contextualisation. These complements previous findings by De Villiers et al. (2022) and supports the Integrated Disclosure Theory. Recommendations based on the study findings are as follows:

1. Firms should enhance the value relevance of financial capital disclosures by embedding metrics such as debt, reserves, and grants within coherent narratives that articulate financing strategies, long-term goals, and risk management plans. Regulatory bodies are encouraged to provide structured disclosure templates to improve clarity, comparability, and investor usefulness.
2. The firms should go beyond reporting asset existence by disclosing asset utilisation, efficiency, and alignment with strategic outcomes. Sector-specific standards (e.g., IAS 16, IFRS 16) should be applied to ensure that asset condition, depreciation, and operational contribution are clearly linked to productivity, infrastructure renewal, and long-term value creation.

REFERENCES

1. Adegbie, F. F., Akintoye, I. R., & Isiaka, B. (2019). Evaluation of Integrated Reporting and the Value of Listed Manufacturing Firms in Nigeria. European Journal of Accounting, Auditing and Finance Research, 7(7), 31–59.
2. Adegboyegun, A. E., Alade, M. E., Ben-Caleb, E., Ademola, A. O., Eluyela, D. F., & Oladipo, O. A. (2020). Integrated Reporting and Corporate Performance in Nigeria: Evidence from the Banking Industry. Cogent Business & Management, 7(1), 1736866. https://doi.org/10.1080/23311975.2020.1736866

3. Ahmad, R. A. R., Ayob, A. A., Zainon, S., & Probohudono, A. N. (2021). The Influence of Environmental, Social and Governance Reporting on Firm Value: Malaysian Evidence. International Journal of Academic Research in Business and Social Sciences, 11(9), 1058–1080. https://doi.org/10.6007/IJARBSS/v11-i9/10877
4. Akbar, J. S., Pertiba, S., & Pinang, P. (2021). The Effect of Return on Assets and Return on Equity on Price to Book Value onBanking Companies listed on the Indonesian Stock Excahnge. International Journal of Economics, Business and Accounting Research (IJEBAR), 5(2), 9–20.
5. Akinleye, G. T., Olarewaju, O. M., & Fajuyagbe, B. S. (2019). Corporate Governance and Financial Performance: An Empirical Analysis of Selected Multinational Firms in Nigeria. Problems and Perspectives in Management, 17(1), 11–18. https://doi.org/10.21511/ppm.17(1).2019.02
6. Akpan, D. C., Charles, U. J., & Robinson, A. G. (2022). Effect of Integrated Reporting on Firm's Value: The Nigeria Manufacturing Sector Experience. European Journal of Accounting, Auditing and Finance Research, 10(8), 10–26.
7. Albetairi, H. T. A., Kukreja, G., & Hamdan, A. (2018). Integrated Reporting and Financial Performance: Empirical Evidences from Bahraini Listed Insurance Companies. Accounting and Finance Research, 7(3), 102. https://doi.org/10.5430/afr.v7n3p102
8. Al-Matari, E. M., Al-Swidi, A. K., & Fadzil, F. H. B. (2014). The Measurements of Firm Performance's Dimensions. Asian Journal of Finance & Accounting, 6(1), 24. https://doi.org/10.5296/ajfa.v6i1.4761
9. Appah, E., & Onowu, J. Uche. (2021). Integrated Reporting Disclosures and Firm Value of Listed Insurance Companies in Nigeria. African Journal of Accounting and Financial Research, 4(2), 55–76. https://doi.org/10.52589/AJAFR-WQIAKPZY
10. Ariemu, O. (2024, April 1). Q1 2024: NGX records 39.8% gains, becomes second best-performing stock in Africa. Daily Post Nigeria. https://dailypost.ng/2024/04/01/q1-2024-ngx-records-39-8-gains-becomes-second-best-performing-stock-in-africa/
11. Arumona, J., Erin, O., Onmonya, L., & Omotayo, V. (2019). Board Financial Education and Firm Performance: Evidence from the Healthcare Sector in Nigeria. Academy of Strategic Management Journal, 18(4), 1–389. https://www.abacademies.org/abstract/board-financial-education-and-firm-performance-evidence-from-the-healthcare-sector-in-nigeria-8278.html
12. Ayem, S., Kusuma, H., & Arifin, J. (2024). Integrated Reporting, ESG Disclosure, Forecast Accuracy, and Firm Value: Profitability as Moderating Variable. Journal of Lifestyle and SDGs Review, 5(2), e02608. https://doi.org/10.47172/2965-730X.SDGsReview.v5.n02.pe02608
13. Aza, S. M., & Suleiman, M. (2019). Effect of Debt Covenant Violation on Accrual-Based Earnings Management of Listed. 1–16.
14. Azaro, K., Djajanto, L., & Sari, P. A. (2020). The Influence of Financial Ratios and Firm Size on Firm Value (An Empirical Study on Manufacturing Companies Sector Consumers Goods Industry Listed in Indonesian Stock Exchange in 2013–2017). Proceedings of the 1st Annual Management, Business and Economic Conference (AMBEC 2019). 1st Annual Management, Business and Economic Conference (AMBEC 2019), Batu, Indonesia. https://doi.org/10.2991/aebmr.k.200415.028
15. Baharudin, D. M., Marimuthu, M., & Jie, Q. W. (2020). A New Integrated Reporting'S 6-Capitals Scoring Index Towards Firm Financial Performance. 136–151. https://doi.org/10.15405/epsbs.2020.10.12
16. Bangara, S. N., Chesoli, J. W., Ngacho, C., & Nyanga'u, A. S. (2024). Human Capital Disclosure, Business Model and Firm Value: Empirical Evidence from Kenya and South Africa. International Journal of Economics, Business and Management Research, 08(09), 182–215. https://doi.org/10.51505/IJEBMR.2024.8912
17. Bello, U., & Abu, M. M. (2021). Shareholder and Stakeholder Theories. Understanding Corporate Governance Practice. Nile Journal of Business and Economics, 7(17), 93–99. https://doi.org/10.20321/nilejbe.v7i17.05
18. Brealey, R. A., Myers, S. C., Allen, F., & Edmans, A. (2025). Principles of corporate finance (2025 release). McGraw Hill.
19. Bui, T. N., Nguyen, X. H., & Pham, K. T. (2023). The Effect of Capital Structure on Firm Value: A Study of Companies Listed on the Vietnamese Stock Market. International Journal of Financial Studies, 11(3), 100. https://doi.org/10.3390/ijfs11030100

20. Busch, T., Hamprecht, J., & Waddock, S. (2018). Value(s) for Whom? Creating Value(s) for Stakeholders. Organization & Environment, 31(3), 210–222. https://doi.org/10.1177/1086026618793962
21. Chabachib, M., Hersugondo, H., Ardiana, E., & Pamungkas, I. D. (2020). Analysis of Company Characteristics of Firm Values: Profitability as Intervening Variables. International Journal of Financial Research, 11(1), 60–70. https://doi.org/10.5430/ijfr.v11n1p60
22. Chirairo, F., & Molele, M. H. (2024). Social and Relationship Capital Effect on the Value of Firms Listed on the Johannesburg Stock Exchange-An Integrated Reporting Approach. Journal of Economic and Social Development (JESD) – Resilient Society, 11(1), 56–64.
23. Christofi, K., Chourides, P., & Papageorgiou, G. (2024). The Role of Knowledge Assets and Corporate Social Responsibility in Creating Firm Value. Knowledge and Performance Management, 7(1), 163–173. https://doi.org/10.21511/kpm.07(1).2023.13
24. Darminto, D. P., Lysandra, S., Mulyadi, H. D., & Ahmar, N. (2024). Impact of integrated reporting on firm value and earnings quality as a moderator in Southeast Asia. Investment Management and Financial Innovations, 21(2), 191–204. https://doi.org/10.21511/imfi.21(2).2024.15
25. Darus, F., & Taylor, D. (2009). Influences of proprietary and political costs on voluntary disclosure relating to financial instruments before and after mandatory requirements. Corporate Ownership and Control, 6(4), 391–406. https://doi.org/10.22495/cocv6i4c3p5
26. De Kluyver. (2024). Corporate Governance. Open Education Resource (OER). https://LibreTexts.org
27. Dey, P. K. (2020). Value Relevance of Integrated Reporting: A Study of the Bangladesh Banking Sector. International Journal of Disclosure and Governance, 17(4), 195–207. https://doi.org/10.1057/s41310-020-00084-z
28. Dimes, R., & De Villiers, C. (2024). Hallmarks of Integrated Thinking. The British Accounting Review, 56(1), 101281. https://doi.org/10.1016/j.bar.2023.101281
29. Dimes, R., De Villiers, C., & Chen, L. (2023). How Integrated Thinking can be Detected in Management Disclosures in Annual Reports-Insights from a Large-scale text-Analysis Approach. Journal of Management Accounting Research, 35(3), 75–99. https://doi.org/10.2308/JMAR-2022-082
30. Doblas, M. P., Enriquez, J. A., & Lagaras, Ma. C. P. (2020). Price to Earnings and Price to Book Ratios as Determinants of Stock Return: The Case of Financial Institutions Listed in Bahrain Bourse. Journal of Applied Economic Sciences (JAES), 3(69), 532–539. https://doi.org/10.57017/jaes.v15.3(69).02
31. Doni, F., Larsen, M., Bianchi Martini, S., & Corvino, A. (2019). Exploring integrated reporting in the banking industry: The multiple capitals approach. Journal of Intellectual Capital, 20(1), 165–188. https://doi.org/10.1108/JIC-11-2017-0146
32. Dumay, J., & Garanina, T. (2013). Intellectual Capital Research: A Critical Examination of the Third Stage. Journal of Intellectual Capital, 14(1), 10–25. https://doi.org/10.1108/14691931311288995
33. Eccles, R. G., & Krzus, M. P. (2010). Integrated reporting for a sustainable strategy: One Report has the potential to significantly change how companies operate and investors think, shifting the focus from that of meeting short-term financial goals to developing a long-term business strategy that not only makes a commitment to corporate social responsibility, but also to a sustainable society. Financial Executive, 26(2), 28–33. https://go.gale.com/ps/i.do?p=AONE&sw=w&issn=08954186&v=2.1&it=r&id=GALE%7CA223140894&sid=googleScholar&linkaccess=abs
34. Eisenhardt, K. M. (1989). Agency Theory: An Assessment and Review. The Academy of Management Review, 14(1), 57–74. https://doi.org/10.2307/258191
35. El-Deeb, M. S. (2019). The Impact of Integrated Reporting on Firm Value and Performance: Evidence from Egypt. Alexandria Journal of Accounting Research, 3(2), 1–33.
36. Erumebor, W., & Samande, D. (2025). Industrialising Nigeria: A Roadmap for 2025 and Beyond—Businessday NG. Business Day. https://businessday.ng/opinion/article/industrialising-nigeria-a-roadmap-for-2025-and-beyond/
37. Fernando, J. (2024). Price-to-Book (P/B) Ratio: Meaning, Formula, and Example. Investopedia. https://www.investopedia.com/terms/p/price-to-bookratio.asp
38. Fernando, M. B. V. L., & Jeewanthi, H. A. C. (2021). Impact of Integrated Reporting on Firm Value of Licensed Banks and Finance Companies in Sri Lanka. Sri Lanka Journal of Management Studies, 3(2), 124–140. https://doi.org/10.4038/sljms.v3i2.80

39. Forvis Mazara Group. (2015). Integrated Reporting—How Far Have We Come. www.mazaes.com
40. Gathoni, J. N., & Muiru, M. W. (2023). Effect of Integrated Financial Reporting on the Value of Firms listed at the Nairobi Securities Exchange. Research Journal of Business and Finance, 2(1), 1–20. https://doi.org/10.58721/rjbf.v2i1.196
41. Gelb, J., McCarthy, R., Rehm, W., & Voronin, A. (2023). Investors Want to Hear from Companies about the Value of Sustainability. McKinsey & Company.
42. Gharaibeh, A. M. O., & Qader, A. A. A. A. (2017). Factors Influencing Firm Value as Measured by the Tobin's Q: Empirical Evidence from the Saudi Stock Exchange (TADAWUL). International Journal of Applied Business and Economic Research, 15(6), 333–358.
43. GRI. (2021). Consolidated Set of the GRI Standards. Global Sustainability Standards Board.
44. GRI content index. (2025). https://www.woodside.com/sustainability/materiality-for-sustainability-topics/sustainability-frameworks-and-supporting-information/gri-content-index
45. Gurungarrow, M. (2024). Total Capital: What Is It, Calculation, Importance & Interpretation. Investing.Com. https://www.investing.com/academy/analysis/total-capital-definition/
46. Ha, N. T. L., & Minh, B. T. (2020). Determinants of Firm Value in Vietnam: A Research Framework. International Journal of Science and Research, 9(1), 626–631. https://doi.org/10.21275/ART20204002
47. Harnovinsah, H., Sopanah, A., Hadijah, Y., Iswari, H. R., Mala, I. K., & Saptaria, L. (2023). What Factors Influence a Firm Value? Optimistic Financial Performance. JMK (Jurnal Manajemen Dan Kewirausahaan), 8(2), 121–133. https://doi.org/10.32503/jmk.v8i2.3476
48. HBS Online. (n.d.). A Manager's Guide to Finance & Accounting. Retrieved January 24, 2025, from https://online.hbs.edu/Documents/managers-guide-to-finance-and-accounting.pdf?_gl=1*ha40ab*_gcl_au*NzM4NTYyNDQuMTczNzcwOTg3OA..
49. Hirdinis, M. (2019). Capital Structure and Firm Size on Firm Value Moderated by Profitability. International Journal of Economics and Business Administration, 7(1), 174–191. https://doi.org/10.35808/ijeba/204
50. Hoque, M. E. (2017). Why Company Should Adopt Integrated Reporting? International Journal of Economics and Financial Issues, 7(1), 241–248.
51. ICAN. (2021). Case 5tudy_Study Text. The Institute of Chartered Accountants of Nigeria. https://icanig.org/ican/assets/docs/pro-study-texts-2021/C5_Case-study.pdf?utm_source=chatgpt.com
52. IFRS Accounting Standards tracker | ICAEW. (2025). https://www.icaew.com/technical/corporate-reporting/ifrs/ifrs-accounting-standards-tracker
53. Igbinovia, I. M., & Agbadua, B. O. (2023). Environmental, Social, and Governance (ESG) Reporting and Firm Value in Nigeria Manufacturing Firms: The Moderating Role of Firm Advantage. Jurnal Dinamika Akuntansi Dan Bisnis, 10(2), 149–162. https://doi.org/10.24815/jdab.v10i2.30491
54. IIRC. (2013). THE-INTERNATIONAL-IR-FRAMEWORK. https://integratedreporting.ifrs.org/wp-content/uploads/2013/12/13-12-08-THE-INTERNATIONAL-IR-FRAMEWORK-2-1.pdf
55. IIRC. (2021). Integrated Reporting Framework. https://integratedreporting.ifrs.org/wp-content/uploads/2024/08/IntegratedReporting_Framework_061024.pdf
56. IR NETWORK, AEGON, GENERALI, & MAZARS. (2015). Business-Case-IR-Insurance-Industry-Network.
57. Islam, Md. S. (2021). Investigating the relationship between integrated reporting and firm performance in a voluntary disclosure regime: Insights from Bangladesh. Asian Journal of Accounting Research, 6(2), 228–245. https://doi.org/10.1108/AJAR-06-2020-0039
58. Juniarti, Hermawan, C. F., & Sheevanya, A. F. (2023). Does Voluntary Adoption of Integrated Reporting affect Firm Value? (Petra Repository). https://repository.petra.ac.id/20676/1/Publikasi1_94015_9865.pdf
59. Kasoga, P. S. (2020). Does Investing in Intellectual Capital improve Financial Performance? Panel Evidence from Firms listed in Tanzania DSE. Cogent Economics & Finance, 8(1), 1–26. https://doi.org/10.1080/23322039.2020.1802815
60. Khunkaew, R., Wichianrak, J., & Suttipun, M. (2023). Sustainability reporting, gender diversity, firm value and corporate performance in ASEAN region. Cogent Business & Management, 10(1), 2200608. https://doi.org/10.1080/23311975.2023.2200608
61. Kujala, J., Sachs, S., Leinonen, H., Heikkinen, A., & Laude, D. (2022). Stakeholder Engagement: Past, Present, and Future. Business & Society, 61(5), 1136–1196.

https://doi.org/10.1177/00076503211066595
62. Kurniasih, A., Rustam, M., Heliantono, & Endri, E. (2022). Cost of capital and firm value: Evidence from Indonesia. Investment Management and Financial Innovations, 19(4), 14–22. https://doi.org/10.21511/imfi.19(4).2022.02
63. Lambe, I., Ame, J. O., Dzugwahi, H., & Tion, W. A. (2022). Financial, Manufactured Capital and Financial Performance: Evidence from Listed Multinational Companies in Nigeria. International Journal of Social Sciences and Management Review, 5(5), 150–175. https://doi.org/10.37602/IJSSMR.2022.5512
64. Larsson, J., & Ringholm, L. (2016). Governance Disclosures According to IIRC's Integrated Reporting Framework-Are Annual Reports of Swedish Listed Companies in Line with the Framework? [Masters Degree Project in Accounting, University of Gothenburg]. https://gupea.ub.gu.se/bitstream/handle/2077/47516/gupea_2077_47516_1.pdf?sequence=1
65. Lonkani, R. (2018). Firm Value. In P. S. Hoffmann (Ed.), Firm Value—Theory and Empirical Evidence. InTech. https://doi.org/10.5772/intechopen.77342
66. Mahmudah, H., Yustina, A. I., Dewi, C. N., & Sutopo, B. (2023). Voluntary disclosure and firm value: Evidence from Indonesia. Cogent Business & Management, 10(1), 1–10. https://doi.org/10.1080/23311975.2023.2182625
67. Mansor, N., Mahmud, R., Halid, S., & Rahman, R. A. (2021). Integrated Reporting and Environmental, Social and Governance: A Study on Malaysian Banking Sector. International Journal of Academic Research in Accounting, Finance and Management Sciences, 11(3), Pages 644-660. https://doi.org/10.6007/IJARAFMS/v11-i3/11094
68. Marangu, K., & Jagongo, A. (2014). Price to Book Value Ratio and Financial Statement Variables. Global Journal of Commerce & Management Perspective, 3(6), 50–56. www.gifre.org
69. Nasrudin, A. (2025). Maximizing Value Creation for All Stakeholders: The Secret to Business Growth — Penpoin. https://penpoin.com/maximizing-value-creation-for-all-stakeholders/
70. Ni, Y., Cheng, Y.-R., & Huang, P. (2021). Do intellectual capitals matter to firm value enhancement? Evidences from Taiwan. Journal of Intellectual Capital, 22(4), 725–743. https://doi.org/10.1108/JIC-10-2019-0235
71. Nurkumalasari, I. S., Restuningdiah, N., & Sidharta, E. A. (2019). INTEGRATED REPORTING DISCLOSURE AND ITS IMPACT ON FIRM VALUE: EVIDENCE IN ASIA. International Journal of Business, Economics and Law, 18(5), 99–108.
72. Nwoye, C. M., Egbunike, P. A., & Osegbue, I. F. (2021). Integrated Reporting and Firm Value in the Nigerian and South African Oil and Gas Sector. Econometric Research in Finance, 6(2), 163–181. https://doi.org/10.2478/erfin-2021-0008
73. OECD. (2020). OECD Economic Outlook, Volume 2020 Issue 2: Preliminary version. OECD. https://doi.org/10.1787/39a88ab1-en
74. Onumoh, A. Y., Ahmed, M. N., Tauhid, S., & Mustapha, L. O. (2024). Integrated Reporting and Firm Value of Listed Manufacturing Firm in Nigeria. International Journal of Advance Research and Innovative Ideas in Education, 10(1), 1070–1076.
75. Opanyi, R. O., & Omare, D. A. (2022). Effect of Integrated Reporting on Firm Value of Listed Companies in Kenya. European Journal of Accounting, Auditing and Finance Research, 10(7), 31–52. https://doi.org/10.37745/ejaafr.2013/vo10.n7pp3152
76. Posner, M. (2024, December 17). Conscience Incorporated: Pursue Profits While Protecting Human Rights. https://www.stern.nyu.edu/experience-stern/faculty-research/conscience-incorporated-pursue-profits-while-protecting-human-rights
77. R Edward, Harrison, J. S., & Zyglidopoulos, S. (2018). Stakeholder Theory: Concepts and Strategies. Cambridge: Cambridge University Press, 1–5.
78. Segura, L. C., Naser, A., Abreu, R., & Perez-Lopez, J. A. (2024). ESG Dimensions and Corporate Value: Insights for Sustainable Investments. Sustainability, 16(17), 1–22. https://doi.org/10.3390/su16177376
79. Shittu, I., Ahmad, A. C., & Ishak, Z. (2016). Price to Book Value, Price to Sales Multiples and Stock Price; Evidence from Nigerian Listed Firms. Journal of Advanced Research in Business and Management Studies, 3(1), 85–93.
80. Sibarani, A., Edward, Y. R., Simorangkir, E. N., & Toni, N. (2024). The Influence of Price to Book Value and Return on Equity on Stock Prices with debt to Equity Ratio as an Intervening Variable.

International Journal of Science and Research Archive, 12(2), 2832–2843. https://doi.org/10.30574/ijsra.2024.12.2.1594

81. Sucuahi, W., & Cambarihan, J. M. (2016). Influence of Profitability to the Firm Value of Diversified Companies in the Philippines. Accounting and Finance Research, 5(2), 149–153. https://doi.org/10.5430/afr.v5n2p149
82. Sun, Y., An, Y., Fang, Q., & Wu, N. (2022). Does Multiple Capitals Disclosure Affect the Capital Market- An Empirical Analysis in an Integrated Reporting Perspective. Frontiers in Psychology, 13(837209), 1–11. https://doi.org/doi: 10.3389/fpsyg.2022.837209
83. Sutrisno, F., Trisnawati, E., & Jap, Y. P. (2023). Factors Affecting Firm Value With Profitability As A Mediating Variable In Consumer Cyclicals Sector Companies. Jurnal Pajak Dan Keuangan Negara (PKN), 4(2), 521–528. https://doi.org/10.31092/jpkn.v4i2.1983
84. Suyono, S., Sudarno, S., Suhardjo, S., Sari, Y., & Purnama, I. (2020). The Influence of Price to Book Value on Capital Structure and Profitability of Health and Pharmaceutical Companies in Indonesia. Journal of Applied Business and Technology, 1(3), 181–187. https://doi.org/10.35145/jabt.v1i3.43
85. Tunji, S. (2024, November 25). Nigeria's GDP grows by 3.46% in Q3 2024. Punch Newspapers. https://punchng.com/nigerias-gdp-grows-by-3-46-in-q3-2024/
86. Ullah, H., & Ahmad, W. (2019). Impact of Current and Non-Current Assets on the Profitability of Pharmaceutical Companies of Pakistan. International Journal of Management, Accounting and Economics, 6(11), 770–779. https://www.ijmae.com/
87. Uwah, U. E. (2019). Capital Expenditure Decisions And Long Term Value Of The Firm: Evidence From Nigerian Manufacturing Companies. International Journal of Accounting and Finance ·, 8(1), 152–169.
88. Uzliawati, L., Yuliana, A., Januarsi, Y., & Santoso, M. I. (2018). Optimisation of Capital Structure and Firm Value. European Research Studies Journal, 21(2), 705–713. https://doi.org/10.35808/ersj/1034
89. World Bank. (2025). Global Economic Prospects [Text/HTML]. World Bank. https://www.worldbank.org/en/publication/global-economic-prospects