International Journal of Accounting, Management and Economic Review. Vol. 2 Issue 2, June (2026). ISSN (p): 2384-7026, ISSN (e): 3141-222X.

INSTITUTIONAL OWNERSHIP AND INTEGRATED REPORTING QUALITY: EVIDENCE FROM NIGERIAN FINANCIAL INSTITUTIONS USING A DUAL MEASUREMENT APPROACH

Aminu Alkasim
Department of Finance
Kigali Independent University, Rwanda
aminualkasim@ulk.ac.rw/Alkasim.aminu@umyu.edu.ng

Patrick Gasasira
Department of Accounting
Kigali Independent University, Rwanda
Pgasasira1@gmail.com

Corresponding Author:aminualkasim@ulk.ac.rw/Alkasim.aminu@umyu.edu.ng
DOI: https://doi.org/10.57233/ijamer.v2i2.25

Article History: Received: 10 April 2026 | **Revised:** 11 May 2026 | **Accepted:** 25 May 2026 | **Published:** 25 June 2026

How to Cite This Article :
Alkasim, A., & Gasasira, P. (2026). Institutional ownership and integrated reporting quality: Evidence from Nigerian financial institutions using a dual measurement approach. *International Journal of Accounting, Management and Economic Review, 2*(2). https://doi.org/10.57233/ijamer.v2i2.25

Abstract
This paper examines how institutional ownership affects the quality of integrated reporting by the listed financial institutions in Nigeria. It fills two gaps in the literature: the inconclusive evidence about the role of institutional investors in the quality of disclosure and the constraints of single-measurement proxies to measure the quality of integrated reporting. To address these concerns, the research creates a composite index, which combines the eight content items of the International Integrated Reporting Framework and the six capitals model, to offer a more detailed analysis of the quality of reporting. The panel data is analyzed using the 25 listed financial institutions between 2014 and 2024. The study employs panel regression of random effects regression. The result indicates that the institutional ownership impacts positively the quality of the integrated reporting in a statistically significant manner; hence, the institutional investors have a positive influence on the quality of disclosures. In contrast, firm size and profitability show positive but statistically insignificant relationships with reporting quality. The study underscores the importance of external governance mechanisms in improving corporate transparency in emerging markets. It adds to the literature by providing a more rigorous measurement method of integrated reporting quality and gives context-specific evidence of the Nigerian financial services industry.

Keyword: Integrated reporting quality, institutional ownership, corporate governance, disclosure and Nigeria.

1.0 Introduction

Corporate reporting has always been, at its core, a problem of communication, not simply about what firms disclose, but whether those disclosures genuinely help stakeholders understand how an organization creates and sustains value over time.For decades, financial statements have been the primary means of that communication and in an economy where value was largely tied to tangible assets (factories, equipment, inventory, and land), the financial statement was rarely called into question. The intangible nature of environmental dependencies, human capital, and relational networks and their increasing role in organisational value, however, are increasingly difficult to ignore (De Villiers et al., 2017). Financial statements that fail to recognize the value of brand assets, intellectual property, and environmental risk exposure are not merely incomplete; they can also create a misleading impression of a company's long-term sustainability and overall value creation capacity. In this context, integrated reporting emerged not simply as an additional disclosure tool, but as a

fundamental rethinking of the purpose and direction of corporate reporting itself (IIRC, 2013; IFRS Foundation, 2021).

Integrated reporting by the International Integrated Reporting Council (IIRC) and then embraced by the IFRS Foundation, is defined as a process in which organisations communicate on how their strategy, governance, performance and prospects contribute to the creation of value in the short, medium and long term (IIRC, 2013; IFRS Foundation, 2021). The key concept behind this framework is that of connectivity, which implies that information about financial and non-financial transactions should not be provided separately as unrelated streams, but rather as a coherent and integrated representation of the way in which an organization uses, transforms and influences six capital streams (financial, manufactured, intellectual, human, social and relationship, and natural) (De Villiers et al., 2017; Pistoni et al., 2018). This represents a considerable departure from additive disclosure models and imposes a demanding analytical standard on corporate reporters. Rather than simply expanding the volume of disclosed information, integrated reporting demands that firms demonstrate the interrelationships between resources, the trade-offs they manage across different capitals, and the governance structures that underpin their capacity to create sustainable value (Frías-Aceituno et al., 2013).

The scholarly and practitioner response to integrated reporting has, in its early phase, focused disproportionately on the question of adoption, which firms publish integrated reports, under what regulatory conditions, and with what firm-level characteristics (Frías-Aceituno et al., 2013; Frias-Aceituno et al., 2014). This focus, while understandable given the novelty of the framework, has increasingly been recognized as analytically insufficient (De Villiers & Maroun, 2017). Adoption is a binary and relatively shallow indicator of engagement with integrated reporting principles. It confirms that a firm has chosen to organize its disclosures within an integrated report structure but reveals nothing about whether those disclosures substantively reflect the integrated thinking the framework is designed to promote. A firm can satisfy the structural requirements of an integrated report addressing organizational overview, governance, material risks, strategic objectives, and performance outcomes while producing disclosures that are boilerplate, generic, and devoid of the firm-specific insight that makes reporting genuinely useful to decision-makers. As described in the voluntary disclosure literature, this pattern is known as symbolic compliance the conforming to institutional expectations to report transparently but not necessarily better, in order to satisfy the institutional rules (Dilling &Caykoylu, 2019, Suchman, 1995). The widespread publication of integrated reports does not necessarily reflect the actual quality of corporate disclosure. As a result, understanding the organizational factors that drive meaningful reporting quality requires the clear and rigorous assessment of integrated reporting quality as a distinct empirical construct (De Villiers et al., 2017; Nishitani et al., 2025).

Accordingly, this study is centered on integrated reporting quality (IRQ) as its primary dependent construct, viewed not as a simple proxy for reporting adoption or a binary indicator of compliance with the integrated reporting framework, but as a continuous and multidimensional assessment of the extent to which firms' integrated reports meaningfully communicate value creation, strategic coherence, and connectivity across capitals in ways that are useful to stakeholders and other intended users (Pistoni et al., 2018; Raimo et al., 2021). This perspective reflects a broader evolution in the literature from initial concerns about whether firms adopt integrated reporting to the more important question of how effectively they implement it and why reporting quality differs across firms and institutional contexts (De Villiers & Maroun, 2017; Okaro & Okafor, 2017).

Operationalizing integrated reporting quality remains methodologically challenging, with the existing literature yet to reach a fully consistent and comprehensive measurement approach (De Villiers et al., 2017). Two major approaches have emerged in prior studies. The first relies on checklist-based indices derived from the content elements of the International Integrated Reporting Framework (IIRF), where firms are evaluated based on the extent to which their reports address the framework's prescribed disclosure components (Pistoni et al., 2018; Raimo et al., 2020).This approach captures structural completeness, the degree to which a report covers the ground an integrated report is expected to cover, but remains largely insensitive to the depth, specificity, and analytical coherence of those disclosures. A firm that addresses risks and opportunities in a single generic sentence may score comparably to one that provides a quantified, strategy-linked account of its principal risks. The second approach employs capital-based scoring, assessing how firms report across the six capital categories (Anifowose et al., 2020; Songini et al., 2022). This approach better captures the substantive content of reporting, whether firms communicate meaningfully about how they draw on and affect each form of capital, but may miss structural gaps in reporting coverage that content-element approaches would detect. Crucially, these two dimensions are not conceptually redundant: they capture different and partially independent aspects of what constitutes a high-quality integrated report. The continued reliance on single-framework measurement approaches in prior studies therefore risks generating IRQ scores that may systematically underestimate either the structural or substantive dimensions of reporting quality. This limitation is especially significant in emerging economy contexts, where considerable differences exist in both the structural and substantive dimensions of disclosure quality (Melloni et al., 2016; Raimo et al., 2020).

This study aims to overcome this limitation by creating a composite integrated reporting quality (IRQ) index, which integrates both set of measures. In other words, the eight content components of the International Integrated Reporting Framework (IIRF) are considered structurally complete reporting elements with minimal substantive value creation disclosure, while the six capitals model is considered as a structure of substantive value creation reporting elements with minimal structural completeness disclosure (Pistoni et al., 2018; IIRC, 2013).The rationale for combining these two dimensions in a single index is based on the idea that high quality integrated reporting does not just need to convey a broad structural disclosure, but it also has to be understandable to readers as to how the firms are generating value over time across multiple capitals (Raimo et al., 2021; Vitolla et al., 2020a). In order to make sure that the two dimensions reflect different aspects of reporting quality, it is checked empirically by using a correlation structure analysis. Also, before analyzing the hypotheses, intercoder reliability testing is conducted to verify the reliability of the composite index. This methodology responds to recent calls in the literature for more comprehensive, rigorous, and methodologically reliable approaches to assessing integrated reporting quality (De Villiers & Maroun, 2017; Melloni et al., 2016; Songini et al., 2022).

Once a certain degree of quality has been achieved in the integrated report, the main question turns to the quality of the governance structures that affect the quality of the report. According to Nuhu & Alam (2024) and Raimo et al., (2020), the independent variable of interest in this study is the percentage of institutional shareholding in the companies under study which is pension funds, insurance companies, mutual funds and asset management companies. Institutional investors possess larger size and have a longer time horizon than retail investors and are in general more sophisticated in conducting their investment analysis; thus, they may affect the disclosure behaviour of the management of the firm (Bowen, 2001; Jensen & Meckling, 1976). Three complementary views provide the theoretical case for this

expectation of institutional ownership improving reporting quality, representing different ways in which institutional ownership and reporting quality can be related.

The mechanism is grounded in the agency theory. In the principal-agent model, the manager has an informational advantage over the shareholders. They may take advantage of those benefits in ways that reduce the quality of disclosure they provide, by selectively omitting parts of the information they make available to external users (Jensen & Meckling, 1976). It is understood that institutional investors are more likely to be able to identify disclosure gaps and act upon them through engagement, voting or exit, than are retail investors. The institutional ownership higher and the better disclosure, lower management opportunism and more substantial and transparent disclosure, is the agency-theoretic prediction.The agency-theoretic prediction is therefore that higher institutional ownership corresponds to more substantial and transparent disclosure, and lower management opportunism and informational asymmetry in disclosure. Adopting a legitimacy theory perspective, there is also a complementary pathway where firms are held to higher standards of reporting when they are under constant watch from large, visible institutional shareholders not because they are demanding it of the firm directly, but because the mere fact of their presence puts the reputational pressure on the firm to do so (Suchman, 1995; Herbert & Graham, 2022).

Importantly, legitimacy theory does not ensure that this pressure yields substantive improvement in reporting; firms might react to this pressure by engaging in symbolic rather than substantive improvement in reporting, especially when monitoring intensity is not high enough to differentiate between the two (Suchman 1995; Dilling &Caykoylu 2019). The third dimension is introduced by the stakeholder theory, which considers institutional investors (in particular, those with explicit environmental, social and governance (ESG) mandates) as stakeholders where monitoring incentives are no longer limited to financial disclosure quality, but also to the multi-cap, long-horizon value-creation story that high-quality integrated reporting is meant to tell (Freeman, 1984; Vitolla et al., 2019b). Combined, these perspectives create a positive predicted relationship between institutional ownership and IRQ, and also provide clues to the conditions under which that relationship may be weakened: passive or short-horizon institutional shareholding, concentrated ownership (but without active engagement), and institutional environments in which symbolic compliance is difficult to differentiate from substantive quality (Nuhu & Alam, 2024; Zouari &Dhifi, 2022).

But there is no definite empirical evidence that reveals this relationship. A few studies show positive relationships between institutional ownership and disclosure quality or integrated reporting practices (Raimo et al., 2020; Zouari &Dhifi, 2022), while others note weak and mixed or context-specific relationships (Suttipun&Bomlai, 2019; Nuhu & Alam, 2024). Such inconsistencies could be due to the true differences between the monitoring quality of institutional investors in various regulatory contexts, ownership regimes and reporting cultures (Raimo et al., 2021; Fayad et al., 2024). More importantly, many of the pieces of evidence available come from the developed countries where governance institutions are relatively stable and developed (Zouari &Dhifi, 2022). The institutional ownership structure and reporting environment are significantly different in emerging markets, which is a region that is relatively under-researched (Nuhu & Alam, 2024; Mansor et al., 2024). The endogeneity problem must also be addressed explicitly in any claim of a link between institutional ownership and reporting quality, as institutional investors self-sort based on observable and unobservable characteristics, such as and plausibly disclosure quality. In the present study, this reverse-causation issue is mitigated by measuring the independent variable lagged by one year and by the fact that the paper controls for a wide range of firm-specific variables that might be related to both institutional ownership and reporting quality.

The empirical setting of this study is the financial services sector in Nigeria which includes listed banks, insurance companies and other financial intermediaries listed on the Nigerian Exchange Group (Financial Reporting Council of Nigeria, 2019). This is chosen because of the substantive and methodological reasons. The structural role of financial institutions in any economy is unique: they are intermediaries in the allocation of capital, they provide a buffer to, and a channel for, systemic risk and they rely on the trust and credibility of the public and regulators in ways that distinguish them from non-financial businesses. The disclosures that fall short are not only a problem for the firm but also have implications for the stability of financial markets (Herbert et al., 2021). These stakes are heightened in Nigeria because the regulatory framework and enforcement mechanisms that would enable credible disclosure by companies is still in its fledgling developmental stages (Financial Reporting Council of Nigeria, 2019; Financial Reporting Council of Nigeria Amendment Act, 2023). Listed financial institutions are subject to a dynamic governance environment, differing regulatory pressure, and a significant degree of reporting variation, which create empirical and empirical-relevant reporting quality as a dependent variable. In terms of method, the case of Nigeria is a place where I/IR is not required; any variations observed, therefore, would be more likely to be real differences in governance orientation than uniform compliance to the rules and regulations (Iredele, 2019; Okaro & Okafor, 2017). The Nigerian financial services sector therefore is an analytically and theoretically suitable sector to study in the light of the Nigerian financial services sector because of the absence of robust mandatory reporting institutions (Nuhu & Alam, 2024).

This study aims at examining the relationship between institutional ownership and institutional reporting quality of the listed financial institutions in Nigeria from 2014 to 2024 with the composite measurement framework of reporting quality which incorporates the quality of the structure of reporting and the value created (Pistoni et al., 2018; Raimo et al., 2020; IIRC, 2013). The study also investigates the effect of the association under different levels of institutional ownership: diffuse vs. concentrated (Zouari &Dhifi, 2022; Nuhu & Alam, 2024).

The study adds three contributions to the literature. More broadly, it expands IRQ measurement approaches by proposing, testing, and applying a dual-framework index combining content-element and capital-based IRQ measures, thereby surpassing the one-framework IRQ measures that have been used in the majority of previous research (Melloni et al., 2016; Raimo et al., 2020; Songini et al., 2022) to offer a holistic and robust foundation for comparative reporting quality assessment across firms. Secondly, it helps to enrich the governance and disclosure literature with theoretically grounded empirical evidence for the institutional ownership as an external monitoring mechanism in an emerging market setting, especially in the context of limited institutional development which the literature has highlighted as a lack and which has been ignored when examining the governance determinants of IRQ (Nuhu & Alam, 2024; Mansor et al., 2024). Third, it offers context-specific evidence of corporate reporting dynamics in the Nigerian financial services sector, a sector that plays an important economic role and is disclosure-sensitive to the extent that it needs more empirical research than it has received (Herbert et al., 2021; Iredele, 2019). These contributions contribute to the understanding of how ownership structures relate to reporting quality in contexts where both are still under construction and in response to the current needs for more institutionally diverse evidence on the determinants of the quality of integrated reporting (Nuhu & Alam, 2024).

2.0 Literature Review

The limitations of traditional financial reporting in providing an understanding of how companies create and sustain value over time gave birth to integrate reporting (IR) as a major leap in the disclosure practice of corporations. Traditional reporting systems tend to focus on financial results and neglect non-financial aspects that are becoming more important to a variety of stakeholders. Integrated reporting addresses this issue by combining financial and non-financial reporting with environmental, social and governance (ESG) concerns in a single report. The overarching goals are to enable stakeholders to appreciate how the strategy, governance, performance and future outlook relate to one another over the reporting periods, and to the creation of long-term value (De Villiers et al., 2017; IFRS Foundation, 2021). At the heart of this model is the idea of 'integrated thinking' a model in which firms go beyond the compartmentalized reporting to show real connections across capitals and reporting elements.

As the adoption of integrated reporting has grown, scholarly interest has correspondingly shifted away from the question of whether firms adopt IR toward the more critical question of how well they do it, a concern captured under the term integrated reporting quality (IRQ). IRQ means the quality of disclosure in terms of completeness, connection, materiality, reliability, and usefulness in decision-making.Good quality integrated reports are rich in interconnections between the financial and non-financial information, and provide substantive explanations of value-creations as processes through the six capitals, which include forward-looking information (Zennaro et al., 2024). On the other hand, some reports are of poor quality and sometimes more about compliance, featuring low levels of integrated thinking (Dilling &Caykoylu, 2019; Nwachukwu, 2022). This gap between these two extremes of reporting quality can be large because it will have the potential of turning IR from an effective accountability mechanism to just a reputation management activity.

Notwithstanding growing scholarly interest in IRQ, measuring it remains a contested methodological challenge. Studies have tended to approach this in one of two ways: by assessing how thoroughly firms disclose against the eight content elements of the International Integrated Reporting Framework, or by evaluating the extent to which firms report value creation across the six capitals model. The content elements approach examines the completeness of disclosures across organisational overview, governance, business model, risks and opportunities, strategy and resource allocation, performance, outlook, and basis of preparation. The capitals approach, on the other hand, assesses how firms communicate value creation and preservation in relation to financial, manufactured, intellectual, human, social and relationship, and natural capitals. Each of these approaches yields useful analytical insight; however, applied independently, they each capture only a partial picture of integrated reporting quality. The content elements method may verify that a report addresses all structural components without revealing whether value creation is substantively communicated across multiple capitals, while the capitals-based approach may overlook structural completeness altogether. The consequence is that prior studies relying on a single-dimensional proxy risk producing incomplete or misleading evaluations of actual reporting quality.

The measurement concern is especially significant in the context of financial institutions in Nigeria where an integrated reporting tradition is still evolving and there is some variation in depth of disclosure and reliability between firms. Financial services have a pivotal role in the stability of the economy and in the allocation of capital, and reporting quality is a key factor for investors, but also for systemic risk management and market confidence. The evidence from the Nigerian context indicate that although recognition of IR is growing, there are still

not enough disclosures in terms of integration, comprehensiveness, and decision-usefulness (Adegboyegun et al., 2020; Ohiokha&Ogirri, 2024). These differences point to the importance of developing a more comprehensive and stricter measurement system, especially one that captures both the structural and substantive aspects of reporting in one. This paper, therefore, attempts to build a composite index of IRQ based on both the eight content elements and the six capitals model, and assigns them an ordinal score of four for the extent of the disclosures, their specificity and relationship to strategy and value creation. The two are complementary to previous efforts, correcting deficiencies in the use of single-measurement proxies and providing a more comprehensive assessment tool adapted to the context of the new markets.

In this context, one governance mechanism that is seen as being capable of influencing corporate reporting behaviour is institutional ownership. Institutional investors, such as pension funds, insurance firms, and mutual funds, generally are considered more advanced investors with resources and motivation to monitor management, and are often the ones with large equity holdings. They are often associated with higher transparency, greater disclosure and long-term value creation (Raimo et al., 2020).In a new market like Nigeria, where internal framework of governance and rules are still being created, external monitoring of institutional investors' activities may be particularly significant when it comes to reporting on the activities of such investors in a journalism text. In the integrated reporting context more specifically, institutional ownership could impact a company's decision to prepare the report, the quality of reporting (addressing content elements, linking the six capitals, the extent to which the report truly demonstrates integrated thinking as opposed to a symbolic gesture), and whether the report is prepared in true compliance with the principles of integrated reporting.

The study also controls for firm-specific characteristics that have been shown in the literature to be potentially associated with disclosure practice, to separate out the relationship between institutional ownership and IRQ. The size of the firm is one of the most commonly accepted proxies of its visibility and resource availability and is proxied by the natural log of total assets (FSIZE). Often, larger firms are the companies which can invest in implementing effective reporting systems as well as are more closely monitored by regulatory bodies, analysts and other market participants (Raimo et al., 2020; Cooray et al., 2020). In the literature, profitability (ROA) is seen as a signal; firms with higher profitability are presumed to not only have the incentive to engage in high-quality voluntary disclosure (Vitolla et al., 2020; Fayad et al., 2024) but also to have the capacity. These variables are included in the empirical model to account for firm-level effects that could otherwise influence the effects estimated to exist between institutional ownership and reporting quality.

Theoretical Framework

The relationship between institutional ownership and integrated reporting quality is theorised here through the complementary lenses of agency theory, stakeholder theory, and legitimacy theory. Rather than being applied in isolation, these perspectives are treated as constituting a layered causal explanation: agency theory identifies the governance problem that institutional ownership addresses; stakeholder theory explains the scope of disclosure that follows from addressing that problem; and legitimacy theory accounts for the societal pressures that reinforce reporting responsiveness over time. Together, they provide a coherent account of why and how institutional ownership may translate into better quality integrated reporting.

The underpinning theory is agency theory. In publicly listed companies, the separation of ownership and control means that managers can make decisions on their own behalf and not those of the shareholders, which can lead to information asymmetry that reduces the quality

of company disclosures (Jensen & Meckling, 1976). The institutional investor, being a more knowledgeable investor, holding larger market presence and continuous interaction, is well-positioned to push back on these trends. The monitoring function places pressure on management to report accurately, fully and with relevance, as they are accountable for what they report. For integrated reporting, this will simply mean a call to action for companies to report in greater detail throughout the content elements and to communicate value creation across the six capitals in a manner that is true to the spirit of integrated thinking and not simply rote-learned. In finance, for example, the situation of information asymmetry has systemic effects on the stability of the financial markets and investors' trust.

Agency theory has a narrower lens of focus on the relationship between shareholders and managers, whereas stakeholder theory expands the focus of analysis to include a broad spectrum of obligations the firm has to others (Donaldson & Preston, 1995). Despite their financial focus, institutional investors increasingly call for more extensive environmental, social and governance disclosures and value creation that dovetail closely with the multi-capital approach of integrated reporting. As a consequence, their interaction with firms can reduce agency problems and at the same time create a change in the way companies view their reporting, toward more inclusive and transparent reporting practices. Stakeholder-responsive reporting is a significant aspect of the impact of financial institutions on the IRQ, particularly for those located in a country with regulatory and depositor and public expectations of corporate performance. In other words, institutional investors transfer the expectations of the different 'capitals' into disclosure actions, making the Six Capitals framework more of a standard for reporting than an ideal to strive for.

Finally, there is legitimacy theory, which provides an explanation for the reaction of the firms to the disclosure expectations that emerge from the agency and stakeholder relationships. The companies in fields that are easily visible and heavily regulated need to constantly prove that their actions are in line with the social norms and institutional expectations of society for them to be accepted (Burlea& Popa, 2013). In another sense, integrated reporting is a legitimating instrument, namely one that enables companies to communicate their accountability, responsible governance, and transparency to investors. The institutional investors' pressure for good quality reporting sends a clear message that the companies are behaving with legitimacy and is a tool that encourages them to go beyond tick-box thinking and provide the information that investors actually need. This legitimacy dynamic is especially strong in Nigeria, a country where people may have weak trust in financial institutions and where governance structures are still in the process of being established. In a situation where the institutional foundations are under trial, high quality integrated reports play not only a governance role, but also act as credibility indicators.

Taken together, these three theoretical perspectives delineate a coherent causal pathway: institutional ownership reduces agency conflicts and minimises information asymmetry (agency theory), which leads firms to produce disclosures that are more responsive to a broader range of stakeholder interests (stakeholder theory), and that are shaped in part by the need to maintain legitimacy in the eyes of regulators and society at large (legitimacy theory). The outcome of this layered dynamic, as captured by the empirical model of this study, is an expected positive association between institutional ownership and the quality of integrated reporting among listed financial institutions in Nigeria.

Empirical Review

There is a significant amount of empirical research on the relationship between institutional ownership and disclosure quality which generally confirms a positive relationship. Based on agency theory research, the researchers have consistently been able to link greater

institutional ownership with better quality reporting in various disclosure environments. In this context, inspiring evidence was presented by Raimo et al. (2020) which showed a positive and statistically significant relationship between institutional ownership and IRQ based on a sample of 152 firms rated against a disclosure index in line with the International Integrated Reporting Framework. In their findings they confirmed the notion that in the eyes of institutional investors, monitoring has a meaningful impact on the quality and substance of corporate reporting.Zouari and Dhifi (2022) used a panel data set of 431 firm-year observations to also draw this conclusion for the European context, they conclude that the extent of integrated reporting disclosures was positively and significantly linked to institutional ownership. The wide-ranging nature of these findings was also supported by Dragomir and Dumitru (2023) who analyzed 61 empirical studies in their meta-analysis and found that institutional ownership is a statistically significant and positive determinant of IRQ in various institutional environments and is therefore considered not only to be a passive shareholder but an active player in reporting quality.

Supportive evidence can also be gleaned from related fields of disclosure research. Velte (2020), in a systematic review of 81 empirical studies, revealed that institutional ownership, especially long-term institutional ownership, is positively related to the quality of ESG disclosure, but the impact size of the relation differs widely among the studies. More recently, and in the context of the study, Amin and Yahaya (2025) investigated to see whether the institutional ownership can be used to effectively explain the disclosure of CSRs for the listed Nigerian firms in the period 2014 to 2023 using a random effects model and concluded that institutional ownership is a significant positive determinant of CSRs disclosure. In relation to this, a study carried out by Yahaya (2025), revealed the positive and significant relationship between institutional ownership and the content of environmental reporting.These findings carry particular relevance for the present study because CSR and environmental reports constitute integral components of integrated reporting notably the social and relationship capital and natural capital dimensions meaning that the positive governance effect of institutional ownership documented in these adjacent settings plausibly extends to IRQ as a whole.

There is evidence throughout the literature, but the general trend of the evidence was in one direction, with significant variation and modifications along the way. Many studies, however, have shown that the relationship between institutional ownership and IRQ is context-specific, that is it is dependent upon the institutional context of the firm, the type of investors and the regulatory context. Zouari and Dhifi (2022) noticed that the governance effectiveness of institutional ownership differs in different legal systems, the relationship is stronger in more developed legal systems. Other shades were cast by Dhifi and Zouari (2022) who showed that institutional ownership does not always have the same relationship with firm performance, meaning disclosure does not always improve with ownership. Likewise, other non-financial disclosure setting studies have yielded similar results. Nuhu and Alam (2024) reported an insignificant but positive relationship between institutional ownership and sustainability reporting. Similarly, Suttipun and Bomlai (2019) reported that the ownership structure was positively associated with the quality of integrated reporting of the Thai companies, but the association was not statistically significant. Overall, the results suggest that the relationship between institutional ownership and reporting quality is likely to be sensitive to the institutional and regulatory context. Conclusions about the effect of institutional ownership on the quality of reporting should therefore be seen in their particular contexts, and not as generally applicable.

There is also a further dimension of the complexity that surrounds the institutional investors themselves and their heterogeneous nature. In their conceptual study on institutional ownership and integrated reporting in the Malaysian context, Ali et al. (2023) asserted that active and long-term institutional investors have better incentive to be involved in firm disclosure practices compared to the passive and short-term institutional investors who have limited incentive to be involved in firm disclosure practices. This separation echoes Velte (2020), who noted that research focused on institutional ownership as a group (as opposed to distinguishing between investors) often yields more mixed results, as the level of monitoring the investor base is averaged over many investors with vastly different levels of activity. It suggests that the percentage shareholding of the institution, which is commonly used and practical proxy of institutional ownership, is not always a good proxy of the governance dynamics at work.

In this background, the present study makes three observations from the empirical literature. First, there is a plausible and well documented positive relationship between institutional ownership and disclosure quality, based mainly on the monitoring role of institutional investors, and supported by several contexts and approaches. Secondly, this relationship is not automatic, and not necessarily the same in every context: the relevance and strength of this relationship will depend on contextual factors such as the development of regulatory framework, investor type, and institutional environment, and thus should not be automatically imported from European or international samples into an emerging market country like Nigeria. Third, little direct empirical evidence exists in the financial services industry in Nigeria that institutional ownership is a good predictor of IRQ. Previous studies on corporate reporting in Nigeria have mainly concentrated on firm characteristics and other governance factors (Adelowotan& Udofia, 2021; Ohiokha&Ogirri, 2024), with the role of institutional ownership in governance being largely neglected. This is compounded by the methodological point that previous research has largely been based on a single dimension IRQ proxies which might not adequately measure the reporting quality of all dimensions in a context where disclosure is still developing. This study focuses on both aspects, empirical and methodological, that is, it examines the institutional ownership-IRQ link in the financial services industry in Nigeria with the composite dual framework measure of reporting quality.

3.0 Methodology

The study uses the longitudinal panel research design for examining the effect of institutional ownership of financial institutions listed on the stock exchange in Nigeria on the quality of financial institutions report for period 2014 – 2024. Because it allows for the inclusion of all the possible firm-specific factor that may vary as well as unobserved, which can lead to the results being biased, and it also addresses firm-specific issues and time-invariant issues, a panel data approach is the right choice to use (Baltagi, 2021; Wooldridge, 2010). The study population comprises all financial institutions listed on the Nigerian Exchange Group (NGX), covering deposit money banks, insurance companies, and other financial service providers, approximately 42 firms in total during the study window.

A purposive sampling technique is applied to arrive at a final sample of 25 firms. To be included, a firm must have been continuously listed throughout the entire study period, must have complete and publicly available annual reports for all years under consideration, and must have produced disclosures sufficiently detailed to permit scoring under both the content elements and six capitals frameworks. Firms failing to meet any of these criteria are excluded to preserve data consistency. This filtering approach is consistent with prior studies in corporate reporting that apply availability and completeness as eligibility conditions (Cooray et al., 2020). The resulting panel yields 275 firm-year observations. All data are drawn from

published annual reports, supplemented where necessary by company financial statements and available financial databases.

Integrated Reporting Quality (IRQ): Integrated reporting quality is measured through a composite index that combines the eight content elements of the International Integrated Reporting Framework with the six capitals model, producing a dual-framework instrument that captures both the structural completeness and the substantive depth of disclosures. The eight content elements are: organisational overview, governance, business model, risks and opportunities, strategy and resource allocation, performance, outlook, and basis of preparation. The six capitals are: financial, manufactured, intellectual, human, social and relationship, and natural capital. The fourteen items are rated on an ordinal, four-point scale with 0 = no disclosure, 1 = minimal disclosure/generic disclosure, 2 = disclosure with some explanation, and 3 = integrated, precise, and detailed disclosure that is explicitly related to strategy and value creation. This is a scoring approach that is more than just a tally of disclosures and acknowledges that it is not substantive if the disclosures are too surface or not fully integrated with the narrative (Adams, 2015; De Villiers et al., 2017; Pigotto et al., 2023). To calculate the IRQ index use:

$$\mathbf{IRQ = (\sum CE_i + \sum CAP_j) / 42}$$

where CE_i means scores for the eight content elements, CAP_j means scores for the six capitals, and 42 is the highest possible score (14 items × 3 points). The resulting index takes the form 0 to 1 with higher scores signifying better reporting.

Institutional Ownership (INSTOWN): Institutional ownership: the total shares outstanding held by institutional investors (pension funds, insurance companies and asset management firms) as a decimal. This measure is in line with the common approach adopted in the corporate governance and disclosure field (Velte, 2020; Dyck et al., 2019). The limitation that this aggregate measure does not differentiate between active and passive investors, or domestic and foreign institutional investors is acknowledged.

Control Variables: The following four firm-level control variables are considered relevant to previous corporate disclosure studies and have been added:The following four firm-level control variables are included because they have been found to be relevant in previous corporate disclosure studies: Firm size (FSIZE) is represented by the natural log of total assets, which indicates that larger firms are more likely to be held to account by stakeholders, and have more resources to invest in extensive reporting (Raimo et al., 2020; Cooray et al., 2020). The profitability (ROA) is defined as the return on assets, which, intuitively, is the signalling incentive for financially stronger firms to have to disclose performance in better quality (Vitolla et al., 2020; Fayad et al., 2024). The firm age (FAGE) is the number of years since the firm was incorporated, reflecting the experience and institutional maturity of firms as a result of their age. Leverage (LEV) is calculated by dividing total debt by total assets, and high leverage firms should have an incentive to disclose information to calm their creditors and lower financing costs.

Model Specification and Estimation

To examine the association between institutional ownership and integrated reporting quality, the following panel regression model is estimated:

$$\mathbf{IRQ_{it} = \alpha + \beta_1 INSTOWN_{it} + \beta_2 FSIZE_{it} + \beta_3 FAGE_{it} + \beta_4 LEV_{it} + \beta_5 ROA_{it} + \varepsilon_{it}}$$

Pooled OLS, fixed effects and random effects estimates of the model are obtained. Model selection is guided using the Breusch-Pagan Lagrange Multiplier test and Hausman (1978)

specification test. A non-significant Hausman test result is a good indication of the use of the random effects estimator, which is the more efficient of the two estimators when the individual-specific effects are not correlated with the regressors (Wooldridge, 2010).

Normal testing procedures are performed before interpreting the results. Multicollinearity is evaluated with variance inflation factors (VIF) and condition indices, the Breusch-Pagan/Cook-Weisberg test is used to test for heteroskedasticity and the standard panel diagnostics are used for the test of autocorrelation. If necessary, strong standard errors are used to assure coefficient estimates. In order to deal with endogeneity (especially reverse causality between institutional ownership and reporting quality), robustness tests are performed through the application of a two-stage least squares (2SLS) estimation approach where the lagged institutional ownership is used as the instruments. It is based on the conventional governance and disclosure studies research methodology adopted by other researchers (Baum et al., 2012).

4.0 Results and Discussion

Table 1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
IRQ	275	0.723	0.126	0.333	0.976
INSTOWN	275	0.439	0.245	0.006	0.833
FSIZE	275	10.922	0.956	9.540	13.637
ROA	275	0.056	0.092	-0.221	0.778

Source: Authors' Compilation, 2026.

Table 1 summarizes descriptive statistics for all of the study variables for the 275 firm-year observations. The mean quality of the integrated reporting (IRQ) score is 0.723 (SD = 0.126), indicative of a fairly high average reporting quality when compared with the ceiling of the composite index. The spread between 0.333 and 0.976, however, shows that there is a significant variation, meaning that while some firms report at a fairly decent level, others are still reporting at a significantly lower level, indicating the varying maturity of integrated reporting practice across Nigeria's financial services sector. The institutional ownership (INSTOWN) is 0.439 (SD = 0.245), and ranges from 0.006 to 0.833. This variation is substantive and has a large enough spread to consider the governance implications of ownership concentration. The size of firms (FSIZE) is represented by the log of total assets; the mean value for this variable was 10.922 with an SD of 0.956, the variability of which was moderate. The profitability (ROA) has an average of 0.056 and a standard deviation of 0.092 and ranges from a minimum value of -0.221 to a maximum value of 0.778, indicating the level of financial performance variation between the sampled institutions and some of the institutions reporting negative ROA, while others have positive ROA. The distributions of all the variables suggest good dispersion for use in panel regression analysis.

Normality Test

Table 2: Shapiro-Wilk Test for Normality

Variable	Obs	W	V	Z	Prob > z
IRQ	275	0.985	2.934	2.516	0.006
INSTOWN	275	0.944	10.992	5.603	0.000
FSIZE	275	0.901	19.528	6.947	0.000

ROA	275	0.776	44.144	8.853	0.000

Source: Authors' Compilation, 2026.

Table 2 presents the results of a normality test for the data by the Shapiro-Wilk method. All four variables IRQ (p = 0.006), INSTOWN (p = 0.000), FSIZE (p = 0.000), and ROA (p = 0.000) reject the null hypothesis of normal distribution.The departure from normality is most pronounced for FSIZE and ROA, which is characteristic of financial and firm-level panel data. Two considerations mitigate concern about this. First, with a sample of 275 observations, the Central Limit Theorem supports the asymptotic normality of regression coefficient estimates, making departure from normality in the raw variables less consequential for inference. Second, the use of robust standard errors in the estimation further insulates the findings against violations of the classical regression assumptions. On this basis, no variable transformations are applied, consistent with established practice in empirical accounting and finance research.

Correlation Analysis

Table 3: ***Pairwise Correlations***

Variables	(1) IRQ	(2) INSTOWN	(3) FSIZE	(4) ROA
(1) IRQ	1.000			
(2) INSTOWN	0.200	1.000		
(3) FSIZE	0.048	-0.396	1.000	
(4) ROA	0.068	-0.023	-0.067	1.000

Source: Authors' Compilation, 2026.

Table 3 shows the pairwise correlation of the studied variables. This positive correlation of institutional ownership with IRQ (r = 0.200) is an initial bi-variate evidence of the hypothesised relationship; the higher the institutional ownership level, the higher the IRQ. The correlations between IRQ and firm size (r = 0.048) and IRQ and profitability (r = 0.068) are positive, although they are negligibly small and therefore limited bivariate association can be seen at this stage. Interestingly, INSTOWN is negatively correlated with FSIZE (r = -0.396), suggesting that the FSIZE is negatively associated with institutional ownership concentrations. This negative correlation is interesting, but will not cause multicollinearity issues with the regression equation, because the coefficient for each variable can be estimated given the other one. All the remaining correlation coefficients have absolute values less than 0.40, which is a good sign that there is no multicollinearity.

Multicollinearity Diagnostics

Table 4:*Variance Inflation Factor*

Variable	VIF	1/VIF
FSIZE	1.195	0.837
INSTOWN	1.190	0.840
ROA	1.008	0.993
Mean VIF	1.131	

Source: Authors' Compilation, 2026.

Table 4 presents the VIF results for all explanatory variables. FSIZE records a VIF of 1.195, INSTOWN 1.190, and ROA 1.008, with corresponding tolerance values (1/VIF) well above the 0.10 threshold. The mean VIF of 1.131 is substantially below the conventional cut-off of 10 and the more conservative threshold of 5. All condition indices are lower than 10, indicating that there are no near linear dependencies between the regressors (Belsley et al., 1980). All these diagnostics together indicate that the multicollinearity is not a problem in terms of stability or interpretation of the regression estimates.

Heteroskedasticity Test

Table 5:*Breusch-Pagan / Cook-Weisberg Test*

Test	Chi²	Prob > chi²	Decision	Interpretation
Breusch-Pagan	0.02	0.895	Accept H_0	No heteroskedasticity

Source: Authors' Compilation, 2026.

The Breusch-Pagan/Cook-Weisberg test would check if the variance of the regression error term is homogenous for each of the observations. The error variance is homoskedastic as the null hypothesis of homoskedasticity is not rejected ($\chi^2 = 0.02$, $p = 0.895$). This is consistent with the efficiency of the estimated coefficients and the reliability of the standard errors.

Model Selection: Hausman Specification Test

Table 6:*Hausman Specification Test*

Statistic	Value
Chi-square value	2.985
P-value	0.394

Source: Authors' Compilation, 2026.

The Hausman specification test is used to decide between fixed and random effects estimation. The null-hypothesis of the test is that the individual-specific effects are not correlated with the regressors. The test value is 2.985 with a p value of 0.394 which is not statistically significant at 5% level. The null hypothesis is thus not rejected, and the random effects estimator is thus consistent and more efficient than the fixed effects alternative to the present conditions of this model (Hausman, 1978; Wooldridge, 2010). Thus, the random effects model is used as the main estimation method for the subsequent regression analysis.

Regression Results and Discussion

Table 7: *Random Effects Regression Dependent Variable: IRQ*

Variable	Coef.	Std. Err.	t-value	p-value	[95% Conf. Interval]	Sig.
INSTOWN	0.129	0.039	3.33	0.001	0.053- 0.204	***
FSIZE	0.009	0.014	0.66	0.506	-0.018-0.036	
ROA	0.068	0.080	0.84	0.399	-0.089-0.225	
Constant	0.563	0.156	3.60	0.000	0.257-0.869	***

Source: Authors' Compilation, 2026.

The random effects regression results are shown in Table 7. The overall model is statistically significant ($\chi^2 = 11.800$, $p = 0.008$), indicating that the model explains a non-trivial amount of variance in the quality of integrated reporting. The overall value of R-squared is 0.059, which is a

relatively low but not uncommon level of explanation in corporate governance and disclosure studies, where a significant portion of reporting behaviour is driven by unobservable factors of the firm that influence reporting, such as managerial culture, internal reporting systems and board dynamics, which are not easily captured in quantitative disclosure models (Cooray et al., 2020). The between R-squared of 0.101 also indicates that the variation observed between firms in IRQ is relatively more accounted for as compared to the within-firm variation over time, reflecting that the ownership structure is a relatively stable characteristic at the firm level.

As for the main variable of interest, there is a positive and statistically significant relationship between institutional ownership (INSTOWN) and the quality of integrated reporting (β = 0.129, p = 0.001, 95% CI: 0.053-0.204). This result suggests a positive association between the quality of an integrated report and institutional ownership with significant at 1% level. The estimated change in the IRQ index between the sample minimum level of institutional ownership and the sample mean level (0.433 × 0.129) is 0.056 points, which is a significant improvement considering the sample standard deviation of 0.126. The result supports the monitoring hypothesis in agency theory, which states that institutional investors in a firm's ownership structure are related to governance conditions that are more favorable for transparent and comprehensive disclosure practice. The association of this kind may provide an important constraint to managerial discretion in the Nigerian financial services environment, where external governance mechanisms are still maturing. It is important to note that this study's observational design allows no direct causal conclusions to be drawn. The finding could be best construed as indicative of a positive association between governance and disclosure, which does not establish the monitoring mechanism advocated by agency theory.

This finding is consistent with the general empirical research. In the international context, Raimo et al. (2020) found that IRQ has a significant positive relationship with institutional ownership, and Zouari and Dhifi (2022) reported similar positive relationships with institutional ownership in the European context. In the non-financial disclosure context within Nigeria, Amin and Yahaya (2025) and Yahaya (2025) found positive relationships between institutional ownership and IRQ. However, this result contradicted results by the other researchers such as Nuhu and Alam (2024) and Suttipun and Bomlai (2019) who found inconclusive or non-significant relationships. These differences are likely attributable to institutional differences and the maturity of the oversight system: Institutional investors in a less developed governance setting like Nigeria could have a greater relative influence as external governance actors compared to a more developed governance setting where other governance actors are well established, such as active boards, good audit quality, and strong legal enforcement.

Firm size (FSIZE) is a positive but statistically insignificant association with IRQ (β = 0.009, p = 0.506). This is contrary to the international studies reviewed before that tend to find that larger companies are more likely to issue broader disclosures (Raimo et al., 2020; Cooray et al., 2020), but could be attributed to Nigeria's financial sector characteristics. All financial institutions, big and small operate in Nigeria with uniform disclosure guidelines set by the Central Bank of Nigeria (CBN) and the Nigerian Exchange Group (NGE). This regulatory consistency can result in the reduction of the reporting quality range that would naturally result from the size-related differences in resources, visibility and pressure from stakeholders. If the minimum disclosure requirements are the same in all institutions, the size of the firm may not be a strong enough differentiator in terms of the quality of reporting to be statistically significant at the individual firm level.

Also, profitability (ROA) has a positive but statistically insignificant relationship with IRQ (β = 0.068, p = 0.399). This differs from the findings of other studies like those of Vitolla et al. (2020) and Fayad et al. (2024) that show the importance of profitability in disclosure quality for its signalling role. In the Nigerian context one possible explanation is that the reporting incentives from profitability signals are less influential on reporting behaviour than the incentive for regulatory compliance norms. Firms could report in a similar manner regardless of their profitability in any given year, either because the reporting costs are a fixed compliance expense or because the benefits of better reporting are not sufficiently related to profitability to affect disclosure decisions. It is consistent with the overall evidence that external governance tools (in this case institutional ownership) have more explanatory power than financial traits in this institutional environment in explaining reporting quality.

The overall results of the regression analysis show that there is a positive and statistical significant relationship between institutional ownership and the quality of integrated reporting amongst the financial institutions listed in Nigeria as there is a rejection of the null hypothesis. The direction of the effects on firm size and profitability is positive but not statistically significant and verifies the argument that financial characteristics of firms moderate differences in reporting behaviour across all firms in the sector subject to regulatory obligations in financial services in Nigeria. These results indicate that the external ownership-based governance is a more important factor to explain IRQ than the internal firm attributes alone, but at the same time the overall low power to explain IRQ suggests that reporting quality is a multi-dimensional phenomenon related to a broad spectrum of factors, not just those analyzed in the current study.

5.0 Conclusion, Implications, Limitations and Future Research

This study investigated the relationship between institutional ownership and the quality of integrated report among financial institutions in Nigeria listed on the Nigerian Stock Exchange. The study was driven by the realization that despite extensive efforts by many companies to submit clear and coherent explanations of how they add value over time, many corporate reports still fall short. While the concept of integrated reporting has been introduced to make reporting more transparent and promote integrated reporting, reporting in developing economies is still not uniform, even for Nigeria. In a few instances disclosures are fragmented, generic, or mostly compliance-oriented, making it a challenge to make sense of the long-term process of firms creating value for stakeholders.

The results for the period 2014-2024 show that there is a positive association between institutional ownership and integrated reporting quality. Financial institutions that have more institutional investors are more likely to offer high-quality disclosures. This could indicate that institutional investors can help increase transparency and accountability by paying more attention to disclosure practices and the credibility of long-term reporting. The results, however, are to be viewed with caution. The institutional ownership alone is not sufficient to explain reporting quality as other factors beyond the model, such as organisational and institutional conditions and regulatory frameworks, also impact integrated reporting practices.

One of the strengths of this study is the methodology that was adopted to gauge the quality of integrated reporting. This study was different from many earlier studies which examined just one element of integrated reporting, as it was based on both the eight content elements and the six capitals model. This helped to offer a wider array of reporting quality data because it not only measures whether firms provide information, but also how well it is linked to the creation of strategy, performance and value. The strategy in this regard, then, aids in minimising the risk of superficial disclosure being interpreted as the actual example of integrated reporting.

The study also adds to the governance and disclosure literature as it reveals the potential linkage of institutional ownership and reporting quality in an emerging economy environment. The study recommends that institutional investors could support the improvement of disclosure quality by monitoring, holding, and placing accountability demands on firms and by exerting reputational pressure on them. Concurrently, the results underscore the significance of the institutional context for reporting, particularly in settings where reporting systems and institutional governance structures are still evolving.

The results imply financial institutions, regulators, and investors. The report emphasises the need for financial institutions to enhance the quality, credibility and linkage of corporate reporting. The results offer regulators like the Securities and Exchange Commission (SEC), the Financial Reporting Council of Nigeria (FRCN) and the Central Bank of Nigeria (CBN) further proof that could be used to reinforce the current efforts of fortifying governance and reporting in the financial services industry. The research further indicates that institutional investors can have a potentially positive role to play in promoting more transparent and long-term reporting behavior.

Even with these contributions, there are some limitations to this study. The institutional ownership measure was conducted based on total institutional ownership and thus failed to separate the categories of institutional ownership (like active vs passive investors, domestic versus foreign investors). Furthermore, the balanced panel design entailed discarding firms with missing reporting periods that could lead to survivor bias in favor of relatively stable reporting firms. The study also heavily depended on reports made by firms in the annual reports, which may not necessarily represent the companies' internal integrated thinking processes. In addition, the results are confined to listed financial institutions in Nigeria and may not be completely generalizable to other sectors or countries.

This study could be extended in future by investigating the impact of investors' type on the quality of reporting in different investor groups. Comparing reporting in different sectors and countries, or examining other measures of the quality of integrated reporting, could also be of interest for future research. Future research also could use qualitative studies or more sophisticated, longer-term methods to gain a clearer understanding of the impact of governance structures on reporting over time.

References

Abedin, S. H., Haque, H., Shahjahan, T., & Kabir, M. N. (2022). Institutional ownership and firm performance: Evidence from an emerging economy. *Journal of Risk and Financial Management, 15*(12), 567. https://doi.org/10.3390/jrfm15120567

Adams, C. A. (2015). The international integrated reporting council: A call to action. *Critical Perspectives on Accounting, 27*, 23–28.

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), 1–15. https://doi.org/10.1080/23311975.2020.1736866

Adelowotan, M. O., & Udofia, E. E. (2021). Determinants of integrated reporting practices in Nigeria. *Journal of Accounting and Financial Reporting, 11*(2), 1–15.

Ali, S. M., Zaini, S. M., Ali, M. M., & Hambali, S. S. B. (2023). Institutional ownership and integrated reporting in the digital age: A conceptual exploration of firm performance in Malaysia. *Information Management and Business Review, 15*(4), 67–76.

Al-Tuwaijri, S. A., Christensen, T. E., & Hughes, K. E. (2004). The relations among environmental disclosure, environmental performance, and economic performance. *Accounting, Organizations and Society, 29*(5–6), 447–471.

Amin, H. M., & Yahaya, O. A. (2025). The effects of board characteristics and institutional ownership on corporate social responsibility. *Journal of Finance and Management, 18*(4), 114–136. https://doi.org/10.11422/jfam.v18.v4.114.

Anifowose, M., Abang, S., & Zakari, M. A. (2020). Integrated capitals reporting and companies' sustainable value: evidence from the Asian continent. *Asian Review of Accounting*, *28*(4), 567-589.

Baltagi, B. H. (2021). *Econometric analysis of panel data* (6th ed.). Springer.

Baum, C. F., Schaffer, M. E., & Stillman, S. (2012). Instrumental variables and GMM: Estimation and testing. *Stata Journal, 12*(1), 1–31.

Belsley, D. A. (1980). On the efficient computation of the nonlinear full-information maximum-likelihood estimator. *Journal of Econometrics*, *14*(2), 203-225.

Burlea, A. S., & Popa, I. (2013). Legitimacy theory. *Encyclopedia of Corporate Social Responsibility, 21*(6), 1579–1584.

Cooray, T., Gunarathne, A. N., & Senaratne, S. (2020). Does corporate governance affect the quality of integrated reporting? *Sustainability, 12*(10), 4262. https://doi.org/10.3390/su12104262.

Cooray, T., Senaratne, S., Gunarathne, N., Herath, R., Samudrage, D. N., & Senanayake, D. (2020). Adoption of integrated reporting in Sri Lanka: Coverage and quality. *Sustainability Accounting, Management and Policy Journal, 11*(5), 1027–1054.

De Villiers, C., & Maroun, W. (Eds.). (2017). *Sustainability accounting and integrated reporting*. Routledge.

De Villiers, C., Rinaldi, L., & Unerman, J. (2017). Integrated reporting: Insights, gaps and an agenda for future research. *Accounting, Auditing & Accountability Journal, 30*(5), 937–959.

De Villiers, C., Venter, E. R., & Hsiao, P. C. K. (2017). Integrated reporting: Background, measurement issues, approaches and an agenda for future research. *Accounting & Finance, 57*(4), 937–959. https://doi.org/10.1111/acfi.12246.

Dilling, P. F. A., & Caykoylu, S. (2019). Determinants of companies that disclose high-quality integrated reports. *Sustainability, 11*(13), 3744. https://doi.org/10.3390/su11133744.

Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *Academy of Management Review, 20*(1), 65–91. https://doi.org/10.5465/amr.1995.9503271992.

Dragomir, V. D., & Dumitru, M. (2023). Does corporate governance improve integrated reporting quality? A meta-analytical investigation. *Meditari Accountancy Research, 31*(6), 1846–1885. https://doi.org/10.1108/MEDAR-03-2022-1618.

Dyck, A., Lins, K. V., Roth, L., & Wagner, H. F. (2019). Do institutional investors drive corporate social responsibility? *Journal of Financial Economics, 131*(3), 693–714.

Fayad, A. A., Mohd Ariff, A. H. B., Ooi, S. C., Aljadba, A. H., & Albitar, K. (2024). Ownership structure and integrated reporting quality: Empirical evidence from an emerging market. *Journal of Financial Reporting and Accounting*. https://doi.org/10.1108/JFRA-02-2024-0101.

Financial Reporting Council of Nigeria. (2019). *Nigerian code of corporate governance 2018*. FRCN.

Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Pitman.

Frías-Aceituno, J. V., Rodríguez-Ariza, L., & García-Sánchez, I. M. (2013). Is integrated reporting determined by a country's legal system? An exploratory study. *Journal of Cleaner Production, 44*, 45–55. https://doi.org/10.1016/j.jclepro.2012.12.006.

Frías-Aceituno, J. V., Rodríguez-Ariza, L., & García-Sánchez, I. M. (2014). Explanatory factors of integrated sustainability and financial reporting. *Business Strategy and the Environment, 23*(1), 56–72. https://doi.org/10.1002/bse.1765.

Hausman, J. A. (1978). Specification tests in econometrics. *Econometrica: Journal of the Econometric Society, 46*(6), 1251–1271.

Herbert, S., & Graham, M. (2021). Application of principles from the International< IR> Framework for including sustainability disclosures within South African integrated reports. *South African Journal of Accounting Research*, *35*(1), 42-68. https://doi.org/10.1080/10291954.2021.1918481.

IFRS Foundation. (2021). *International integrated reporting framework*. https://www.ifrs.org/issued-standards/integrated-reporting/framework/

International Integrated Reporting Council. (2013). *The international <IR> framework*. IIRC.

Iredele, O. O. (2019). Examining the association between quality of integrated reports and corporate characteristics. *Heliyon*, *5*(7) e01932.Doi:10.1016/j.heliyon.2019.e01932.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics, 3*(4), 305–360.

Mansor, S. M., Hassan, M. S., Jaffar, R., & Abdullah, M. (2024). The role of governance and integrated reporting quality in stakeholder value creation. *Management and Accounting Review (MAR)*, *23*(2), 41-62.

Melloni, G., Stacchezzini, R., & Lai, A. (2016). The tone of business model disclosure: An impression management analysis of the integrated reports. *Journal of Management & Governance, 20*(2), 295–320. https://doi.org/10.1007/s10997-015-9319-z.

Nishitani, K., Park, J. D., & Haider, M. B. (2025). Bridging the gap between legitimacy and voluntary disclosure theory and current corporate nonfinancial reporting practices: insights from Japanese companies. *Business Strategy and the Environment*, *34*(2), 2449-2468.

Nuhu, Y., & Alam, A. (2024). Ownership structure and sustainability reporting: Emerging economies evidence. *International Journal of Accounting and Information Management, 32*(5), 883–908. https://doi.org/10.1108/IJAIM-09-2023-0228.

Nwachukwu, C. (2022). Systematic review of integrated reporting: Recent trend and future research agenda. *Journal of Financial Reporting and Accounting, 20*(3/4), 580–598. https://doi.org/10.1108/JFRA-10-2020-0308.

Ohiokha, A. G., & Ogirri, P. A. (2024). Determinants of integrated reporting of listed companies in Nigeria. *Journal of Business Development and Management Research, 3*(7), 1-31.

Okaro, S. C., & Okafor, G. O. (2017). Integrated reporting in Nigeria: The present and future. *Responsible Corporate Governance: Towards Sustainable and Effective Governance Structures*, 247-263. https://doi.org/10.1007/978-3-319-55206-4_13.

Pigatto, G., Cinquini, L., Tenucci, A., & Dumay, J. (2023). Disclosing value creation in integrated reports according to the six capitals: A holistic approach for a holistic instrument. *Sustainability Accounting, Management and Policy Journal, 14*(7), 90–123. https://doi.org/10.1108/SAMPJ-11-2021-0493.

Pistoni, A., Songini, L., & Bavagnoli, F. (2018). Integrated reporting quality: An empirical analysis. *Corporate Social Responsibility and Environmental Management, 25*(4), 489–507. https://doi.org/10.1002/csr.1474.

Raimo, N., Vitolla, F., Marrone, A., & Rubino, M. (2020). The role of ownership structure in integrated reporting policies. *Business Strategy and the Environment, 29*(6), 2238–2250. https://doi.org/10.1002/bse.2498.

Raimo, N., Vitolla, F., Marrone, A., & Rubino, M. (2021). Do audit committee attributes influence integrated reporting quality? An agency theory viewpoint. *Business Strategy and the Environment, 30*(1), 522–534. https://doi.org/10.1002/bse.2635

Songini, L., Pistoni, A., Tettamanzi, P., Fratini, F., & Minutiello, V. (2022). Integrated reporting quality and BoD characteristics: An empirical analysis. *Journal of Management & Governance, 26*(2), 579–620. https://doi.org/10.1007/s10997-021-09568-8

Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review, 20*(3), 571–610. https://doi.org/10.5465/amr.1995.9508080331

Suttipun, M., & Bomlai, A. (2019). The relationship between corporate governance and integrated reporting: Thai evidence. *International Journal of Business & Society, 20*(1), 1–19.

Velte, P. (2020). Institutional ownership, environmental, social, and governance performance and disclosure – A review on empirical quantitative research. *Problems and Perspectives in Management, 18*(3), 282–305. http://dx.doi.org/10.21511/ppm.18(3).2020.24

Vitolla, F., Raimo, N., & Rubino, M. (2020). Board characteristics and integrated reporting quality: An agency theory perspective. *Corporate Social Responsibility and Environmental Management, 27*(2), 1152–1163. https://doi.org/10.1002/csr.1879

Vitolla, F., Raimo, N., Marrone, A., & Rubino, M. (2020). The role of board of directors in intellectual capital disclosure after the advent of integrated reporting. *Corporate Social Responsibility and Environmental Management, 27*(5), 2188–2200. https://doi.org/10.1002/csr.1957

Vitolla, F., Raimo, N., Rubino, M., & Garzoni, A. (2019). How pressure from stakeholders affects integrated reporting quality. *Corporate Social Responsibility and Environmental Management, 26*(6), 1591–1606. https://doi.org/10.1002/csr.1850

Welsch, R. E. (1980). Regression sensitivity analysis and bounded-influence estimation. In *Evaluation of econometric models* (pp. 153-167). Academic Press.

Wooldridge, J. M. (2010). *Econometric analysis of cross section and panel data* (2nd ed.). MIT Press.

Yahaya, O. A. (2025). Institutional ownership and environmental reporting. *SSRN Working Paper*. http://dx.doi.org/10.2139/ssrn.5130854

Yahaya, O. A. (2025). What are the shear forces that define integrated reporting quality among corporate governance mechanisms? *SSRN Working Paper*. http://dx.doi.org/10.2139/ssrn.5403673

Zennaro, G., Corazza, G., & Zanin, F. (2024). The effects of integrated reporting quality: A meta-analytic review. *Meditari Accountancy Research, 32*(7), 197–235. https://doi.org/10.1108/MEDAR-09-2023-2175

Zouari, G., & Dhifi, K. (2021). The impact of board characteristics on integrated reporting: case of European companies. *International Journal of Disclosure and Governance*, *18*(1), 83-94.https://doi.org/10.1057/s41310-021-00105-5.

Zouari, G., & Dhifi, K. (2022). The impact of ownership structure on integrated reporting in European firms. *Corporate Communications: An International Journal, 27*(3), 527–542. https://doi.org/10.1108/CCIJ-05-2021-0057