

Integrated Reporting and Firm Value: Evidence from Listed Consumer Goods Firms in Nigeria

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Research Article

Abstract

Purpose: This study investigates the effect of integrated reporting on the firm value of listed consumer goods firms in Nigeria. It seeks to determine how financial and non-financial capital disclosures contribute to value creation and investor confidence.

Methods: A correlational research design was employed, using data from 15 listed consumer goods firms over 10 years (2014–2023). Firm value was measured using Tobin's Q and market prices. Panel multiple regression analysis was applied, with firm size controlled to isolate the effect of integrated reporting practices.

Results: The findings indicate that integrated reporting has a significant positive effect on firm value. Specifically, disclosures related to financial capital, manufacturing capital, and social and relational capital were positively linked to firm value. However, reporting on human and intellectual capital showed no significant effects, contradicting theoretical expectations.

Implications: The results highlight the value-creating potential of comprehensive disclosure practices that integrate both financial and non-financial resources. Regulators such as the International Accounting Standards Board, the Financial Reporting Council of Nigeria, and the Securities and Exchange Commission should strengthen guidance on non-financial capital reporting. Additionally, training and capacity-building for listed firms will enhance the adoption of integrated reporting and align with global best practices.

Originality: This study contributes to the literature by providing empirical evidence on the role of integrated reporting in enhancing firm value within the Nigerian consumer goods sector, emphasizing the varying effects of different capitals.

Limitations: The study is limited to consumer goods firms listed on the Nigerian Exchange and covers 10 years. Future research could expand to other sectors, use longer timeframes, or adopt qualitative methods to yield more profound insights into integrated reporting practices.

Keywords: Sustainability Reporting, CSR, Non-Financial Information, Performance

1. Introduction

Integrated Reporting (IR) has emerged as a contemporary corporate reporting framework designed to address the deficiencies of traditional reporting systems, which focused primarily on financial disclosures to shareholders. Conventional reporting ignored non-financial dimensions of performance, such as human, intellectual, and social capital, which are now recognized as critical for long-term corporate success and sustainability (Muhi & Benaissa, 2023). The International Integrated Reporting Council (IIRC, 2013) developed IR to integrate both financial and non-financial information, thereby enhancing transparency, accountability, and value creation.

In Nigeria, demand for broader corporate disclosures has intensified due to stakeholder expectations and the development of the capital market. The consumer goods sector, a vital contributor to Nigeria's economy, faces challenges in human capital, technological innovation, supply chains, and reputational risks tied to environmental and social issues. In such a context, IR can enhance investor confidence, strengthen market perception, and potentially increase firm value. However, despite its potential, empirical evidence on the link between IR and firm market value in Nigeria remains limited and inconclusive. Existing studies focus mainly on banking and insurance sectors (Adegbie et al., 2019; Mirza et al., 2019), leaving a gap in consumer goods research. Furthermore, international findings are mixed, with some studies reporting positive effects (Lee & Yeo, 2016; Barth et al., 2017) and others showing insignificant or even negative relationships (Cosma et al., 2018; Nurkumalasari et al., 2019).

This study, therefore, investigates the effect of integrated reporting on the firm value of consumer goods firms listed on the Nigerian Exchange between 2014 and 2023. By adopting Tobin's Q and market price as proxies for firm value, it provides fresh evidence from an emerging economy context. The study's contribution is threefold. First, it extends the IR literature by examining sector-specific effects in Nigeria. Second, it evaluates the relative value relevance of different forms of capital: financial, human, intellectual, manufactured, and social. Third, it offers regulators and practitioners insights into how IR practices can be leveraged to improve corporate transparency and competitiveness. Thus, the study raised a question on how IR affected the market value of listed consumer goods firms in Nigeria.

2. Literature Review

2.1 Conceptual Framework

Firm value reflects market perceptions of a company's financial health, growth potential, and strategic positioning, typically proxied by stock price, market capitalization, or Tobin's Q (Adams & Simnett, 2011; Damodaran, 2007). Integrated Reporting seeks to bridge information asymmetry by combining financial and non-financial disclosures into a single framework (IIRC, 2013). It emphasizes six capitals: financial, human, intellectual, and manufactured, social/relationship, and natural that collectively shape sustainable value creation. For investors, IR enhances decision-making by providing prospective, future-focused information that reduces uncertainty and strengthens investors' ability to assess long-term value creation and make more informed capital allocation decisions (Kunc et al., 2021).

2.2 Theoretical Foundations

This study is anchored on three theories: (1) Stakeholder Theory (Freeman, 1984), which holds that IR addresses diverse stakeholder information needs, enhancing legitimacy and trust. (2) Resource-Based Theory (Barney, 1991) posits that IR is a strategic resource that explains how firms deploy valuable, rare, and inimitable assets to achieve competitive advantage. (3) Legitimacy Theory (Lindblom, 1994) argues that IR strengthens societal acceptance by aligning disclosure practices with stakeholder expectations. Together, these theories explain how integrated reporting can influence firm value in the Nigerian consumer goods sector.

2.3 Empirical Review

Various studies have examined integrated reporting and firm value across sectors. Many scholars have attempted to investigate the relationship between integrated reporting and firm value in a more rigorous way.

2.3.1 Financial Capital Reporting and Market Value

Several studies have explored the role of financial capital disclosures in shaping firm value. Oyong et al. (2021) examined finance companies in Nigeria (2014–2020) and found that financial capital reporting had

a positive effect on earnings per share and firm performance. Similarly, Patience and Timothy (2021) concluded that integrated reporting, including financial capital, significantly improves firm value in both voluntary and mandatory contexts. In contrast, Adegbie et al. (2019), studying 38 Nigerian consumer and industrial goods firms, found a negative relationship between financial capital and Tobin's Q, suggesting that the effect of financial capital disclosures may vary across industries. Therefore, the study formulated the following hypothesis.

H01: Financial capital reporting has no significant effect on the market value of listed consumer goods firms in Nigeria.

IV: Integrated Reporting

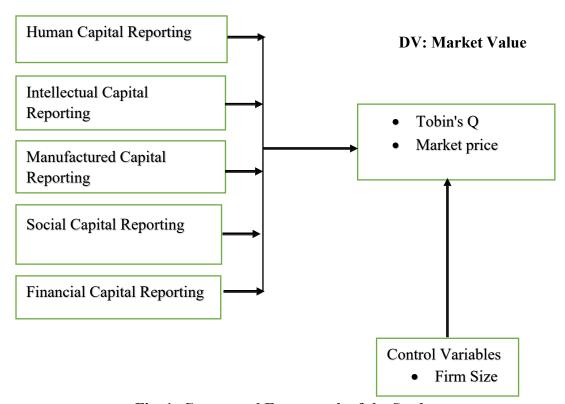


Fig. 1: Conceptual Framework of the Study

2.3.2 Human Capital Reporting and Market Value

Human capital reporting has been recognized as a key driver of firm competitiveness and value creation. In Nigeria, Akpan et al. (2022) assessed manufacturing firms from 2011 to 2020 and found that human capital was the only significant driver of firm value, underscoring the importance of workforce quality. However, Onumoh et al. (2024) analyzed 59 listed manufacturing firms and found no significant effect of human capital disclosures on firm value. International evidence is equally mixed: Suttipun (2017), using 150 Thai firms, observed that human capital disclosures had a positive effect on Tobin's Q, whereas other studies (e.g., Nwoye et al., 2022, in Nigeria and South Africa) reported insignificant results. The study hypothesized as follows.

H02: Human capital reporting has no significant effect on the market value of listed consumer goods firms in Nigeria.

2.3.3 Intellectual Capital Reporting and Market Value

Intellectual capital reporting, covering intangible assets such as patents and R&D, is expected to enhance investor confidence. However, findings are inconsistent. In Nigeria, Adegbie et al. (2019) reported that

intellectual capital disclosures exerted an insignificant effect on firm value, while Onumoh et al. (2024) similarly found no meaningful relationship in manufacturing firms. By contrast, Jihene and Paturel (2013) in Europe and Albetairi et al. (2018) in Bahrain showed that intellectual capital disclosures positively influenced firm performance and investor perceptions. These divergent results indicate that the value relevance of intellectual capital may depend on industry and institutional context. Therefore, the study hypothesized as follows.

H03: Intellectual capital reporting has no significant effect on the market value of listed consumer goods firms in Nigeria.

2.3.4 Manufactured Capital Reporting and Market Value

Manufactured capital, representing physical assets and production capacity, has been widely studied as a driver of market valuation. Onumoh et al. (2024) found that manufactured capital had a significant positive effect on the firm value of Nigerian manufacturing firms. Similarly, Akpan et al. (2022) confirmed its importance in sustaining competitiveness in Nigeria's manufacturing sector. International studies, such as Suttipun (2017) in Thailand and Huda et al. (2018) in Bahrain, also reported positive associations between manufactured capital disclosures and firm performance. However, Adegbie et al. (2019) observed that manufactured capital had only a negligible influence on Tobin's Q among Nigerian consumer and industrial goods firms, suggesting mixed evidence in the Nigerian context. The following hypothesis is formulated. *H04: Manufactured capital reporting has no significant effect on the market value of listed consumer goods firms in Nigeria*.

2.3.5 Social and Relational Capital Reporting and Market Value

Social and relational capital reporting covering stakeholder relationships, reputation, and community engagement has shown varying effects on firm value. Nwoye et al. (2022), in a cross-country study of oil and gas firms in Nigeria and South Africa, reported that social capital disclosures significantly improved firm value by strengthening investor confidence. Conversely, Onumoh et al. (2024) found no significant effect of social capital on the market value of Nigerian manufacturing firms. Outside Africa, Soumillon (2018) examined 63 South African firms and found that IR quality, including social capital, did not significantly affect market value. By contrast, Suttipun (2017) in Thailand demonstrated a positive link between social capital disclosures and Tobin's Q; Shehu and Abubakar (2025) in Nigerian Banks found that enhanced Environmental, Social, and Governance disclosure boosts investor confidence and contributes to higher firm value. These findings indicate that the impact of social capital on firm value may be highly context-specific. The following hypothesis is formulated.

H05: Social and reporting have no significant effect on the market value of listed consumer goods firms in Nigeria

The reviewed literature demonstrates that the effect of integrated reporting on firm value remains inconclusive across contexts. While some studies report positive associations between specific capitals (financial, human, manufactured, and social) and firm value (e.g., Akpan et al., 2022; Suttipun, 2017; Nwoye et al., 2022), others find insignificant or even adverse effects (Adegbie et al., 2019; Onumoh et al., 2024; Soumillon, 2018). Intellectual capital reporting has yielded consistently weak or mixed results in Nigeria, despite theoretical expectations of its importance.

Moreover, much of the Nigerian evidence has focused on banking and insurance sectors, with limited attention to consumer goods firms, despite their significant role in employment, household welfare, and investor interest. Many studies also adopt short timeframes (3–5 years), restricting their ability to capture long-term trends in integrated reporting practices. In addition, differences in measurement approaches ranging from content analysis indices to financial ratios have contributed to inconsistent findings.

These limitations highlight the need for further investigation into the value relevance of integrated reporting in Nigeria's consumer goods sector using updated data and robust econometric techniques. By examining 10 years of panel data (2014–2023) from listed consumer goods firms, the present study addresses these gaps and provides fresh evidence from an emerging-economy perspective.

3. Research Methodology

This study follows a positivist research paradigm that relies upon quantitative methodologies. This study employed an ex post facto correlational research design. This is because an ex post facto research design is a systematic empirical inquiry in which the researcher does not have direct control of the variables. It ascertains the current condition and seeks back in time for plausible contributing factors. The study's design is appropriate because it helps determine the effect of integrated reporting on the market value of consumer goods firms in Nigeria.

3.1 Population and Sample of the Study

The population of this study comprises all 25 consumer goods firms listed on the Nigerian Exchange (NGX) as of December 2023 (Table 1). The consumer goods sector of the manufacturing sector was used as the most visible, with high societal impact; it is the third in terms of the number of companies. The financial statements are deemed to be reliable due to their compliance with the Companies and Allied Matters Act sections 352-254, all appropriate regulatory bodies, and accounting standards as duly verified by the external auditors. Hence, these data are reliable and are expected to meet the study's objectives. Numerically, there are twenty-five, listed in Table 1.

Table 1: Population of the Study

SN	Company Name	NGX Sector	Year of Listing
1	Cadbury Nig. Plc	Consumer Goods	1976
2	Champion Brew. Plc	Consumer Goods	1983
3	Dangote Flour Mills Plc	Consumer Goods	2008
4	Dangote Sugar Refi. Plc	Consumer Goods	2008
5	BUA Foods Plc	Consumer Goods	2022
6	Flour Mill Nig. Plc	Consumer Goods	1979
7	DN Tyre & Rubber Plc	Consumer Goods	1970
8	Golden Guinea Brew. Plc	Consumer Goods	1979
9	Guinness Nigeria Plc	Consumer Goods	1965
10	Honeywell Flour Mills Plc	Consumer Goods	2009
11	International Brew. Plc	Consumer Goods	1995
12	Jos Int Brew. Plc	Consumer Goods	1975
13	PS Mandrid Plc	Consumer Goods	2004
14	Menichols Ple	Consumer Goods	2009
15	Multi-Trex Integrated Foods Plc	Consumer Goods	2010
16	National Salt Co. Plc	Consumer Goods	1992
17	Vitafoam Nig Plc	Consumer Goods	1973
18	Nigerian Brew. Plc	Consumer Goods	1973
19	Nestle Nigeria Plc	Consumer Goods	1979
20	Northern Nigeria Flour Mills Plc	Consumer Goods	1978
21	Nigerian Enamelware Plc	Consumer Goods	1991
22	Premier Brew. Plc	Consumer Goods	1980
23	PZ Cussons Nig Plc	Consumer Goods	1974
24	Unilever Plc	Consumer Goods	1973
25	Union Dicon Salt Plc	Consumer Goods	1993

Source: Nigeria Exchange Group (December 2023).

The sample size of the study is fifteen (15) listed consumer goods companies on the Nigerian Exchange (NGX), as in Table 2. The size was determined through a purposive sampling technique. This sampling

technique was used to select listed consumer goods firms on the Nigerian Exchange (NGX) based on the availability of annual reports for the period of 2014 to 2023.

Table 2: Sample Size of the Study

SN	Company Name	NGX Sector	Year of Listing
1	Cadbury Nig. Plc	Consumer Goods	1976
2	Champion, Brew. Plc	Consumer Goods	1983
3	Dangote Flour Mills Plc	Consumer Goods	2008
4	Flour Mill Nig. Plc	Consumer Goods	1979
5	Guinness Nigeria Plc	Consumer Goods	1965
6	Honeywell Flour Mills Plc	Consumer Goods	2009
7	International Brew. Plc	Consumer Goods	1995
8	Menichols Ple	Consumer Goods	2009
9	Vitafoam Nig Plc	Consumer Goods	1973
10	Nigerian Brew. Plc	Consumer Goods	1973
11	Nestle Nigeria Plc	Consumer Goods	1979
12	Northern Nigeria Flour Mills Plc	Consumer Goods	1978
13	Nigerian Enamelware Plc	Consumer Goods	1991
14	PZ Cussons Nig Plc	Consumer Goods	1974
15	Unilever Plc	Consumer Goods	1973

3.2 Source and Method of Data Collection

The study relies primarily on secondary data collected from the published annual financial reports and accounts of the selected consumer goods companies, as well as the Nigerian Exchange Fact Book. The period of this study is 2014 to 2023. To obtain data for the integrated reporting metrics, a disclosure checklist by the IIRC (2013) Framework checklist was developed, and a dummy of '1' was assigned to integrated reporting items disclosed and '0' for otherwise.

3.3 Technique of Data Analysis

The study employed the Panel Regression Technique for data analysis (cross-sectional and time-series), which was chosen because it is a widely used estimation technique in longitudinal empirical studies. The technique, when its assumptions hold, provides the best possible estimators. These assumptions include: linearity of the model, normality of the error term, homoscedasticity, absence of serial correlation, and absence of perfect multicollinearity among independent variables. Further, since the study's data were panel (a combination of cross-sectional and time-series), it ran fixed-effect and random-effect regressions. The Hausman specification test was also run to determine between fixed- and random-effect regression. If the Hausman specification test favors random effects, the Lagrange multiplier test for random effects was conducted to compare random-effects estimates with pooled OLS regression estimates.

In addition, other data analysis techniques, such as descriptive statistics and a correlation matrix, were used. Mean, standard deviation, minimum, and maximum were used to describe the data, and Pearson's correlation was used to examine relationships among all variables. Similarly, robustness tests were conducted to satisfy the restrictive assumptions required for OLS. These tests include the normality test of the error term, the multicollinearity test using the variance inflation factor (VIF), and the Breusch-Pagan/Cock-Weisberg test for Heteroskedasticity.

3.4 Variables Definition and Their Measurement

The dependent variable of the study is the firm value, while the independent variable is integrated reporting. The study used firm size as a control. The dependent variable is measured using Tobin's Q and Market Price Per Share. Different proxies of integrated reporting (Financial Capital Reporting, Intellectual Capital

Reporting, Human Capital Reporting, Manufactured Capital Reporting, Social and Relational Capital Reporting) were used through content analysis of information from firms' annual reports.

3.4.1. Dependent Variable

Tobin's Q (TBQ) – Tobin's Q is the ratio between physical assets and their replacement value, as illustrated by Kaldor (1966) and modified by Chung and Pruitt (1994) in Wolfe and Sauaia (2003). In this study, Tobin's Q is adopted as a measure of firm value, following the methods used by Adegbie et al. (2019) and Oyedokun et al. (2019).

Tobin's Q = (MVS+D)/TA, where:

MVS = market value of all outstanding shares, which is share price*outstanding shares,

TA = total assets, which is the total value of property, plants, and equipment + cash + inventories + receivables,

D = net debt.

Market Price (MVS) - The price model, which links a firm's market value of equity to its book value of equity and profits, will be used as in earlier studies in the value-relevance literature (Khidmat et al., 2019; Cooray et al., 2020).

3.4.2. Independent Variables

A disclosure checklist developed by the IIRC (2013) Framework checklist was developed, and dummy values of '1' were assigned to integrated reporting items disclosed and '0' for otherwise to all the components.

Table 3: Variables Measurement

Variable & Type		Measurement	Apriori	Literature
			Expectation	
Dependent Varia	ıble			
Firm Value		Tobin's Q = (MVS+D)/TA share price*outstanding shares + net debt / total assets		Adegbie et al. (2019), Oyedokun et al. (2019)
		Market Price of Equities:		Khidmat et al. (2019), Cooray
		Book value per share Earnings per share		et al. (2020)
Independent Var	riables			
•	Capital	The pool of funds that is available to an organization 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	Positive Effect	Oyong et al (2021), Patience & Timothy (2021), Suttipun (2017)
Human C Reporting	Capital	Disclosure checklist on scores for a company's employee turnover, employment growth, and compensation levels.	Positive Effect	Akpan et al (2022), Nwoye et al (2022), Suttipun (2017)
Intellectual C Reporting	Capital	The total value of the company's brands, plus Research and Development Expenses and Net Intangible Assets, is added and scaled by Total Sales to form the intellectual capital proxy.	Positive Effect	Nwoye et al (2022), Suttipun (2017), Federica et al (2016)
Manufactured C Reporting	Capital	Reported values for Property, Plant, and Equipment	Positive Effect	Onumoh et al. (2024), Suttipun (2017), Akpan et al. (2022), Nwoye et al. (2022)
Social and Relationship Capital Reporting		The IIRC (2013) Framework/Disclosure checklist on relationships within and between communities, groups of stakeholders, and other networks, and the ability to share information	Positive Effect	Patience & Timothy (2021), Suttipun (2017)
Control variable Firm size		Natural Logarithm of Total Asset	Positive Effect	Adegbie et al (2019)

Source: Authors' Compilation

3.5 Model Specification

The models of the study are mathematically expressed as follows;

$$\begin{split} TBQ_{it} &= \alpha_0 + \beta_1 FCR_{it} + \beta_2 HCR_{it} + \beta_3 ICR_{it} + \beta_4 MCR_{it} + \beta_5 SCR_{it} + \beta_6 FSZ_{it} + \epsilon_{it}......i\\ MVS_{it} &= \alpha_0 + \beta_1 BVS_{it} + \beta_2 EPS_{it} + \beta_3 FCR_{it} + \beta_4 HCR_{it} + \beta_5 ICR_{it} + \beta_6 MCR_{it} + \beta_7 SCR_{it} + \beta_8 FSZ_{it} + \epsilon_{it}.....ii \end{split}$$

Where;

 TBQ_{it} = the Tobin's Q of firm I in year t

 $\begin{array}{ll} MVS_{it} = & \text{the market price per share of firm I in year t} \\ FCR_{it} = & \text{the financial capital reporting of firm I in year t} \\ HCR_{it} = & \text{the Human capital reporting of firm I in year t} \\ ICR_{it} = & \text{the Intellectual capital reporting of firm I in year t} \\ MCR_{it} = & \text{the manufacturing capital reporting of firm I in year t} \\ SCR_{it} = & \text{the social and relational capital reporting of firm I in year t} \\ \end{array}$

 FSZ_{it} = the size of firm I in year t

 BVS_{it} = the book value per share of firm I in year t EPS_{it} = the earnings per share of firm I in year t

 α_0 is the intercept; β_1 - β_8 are the coefficients; and ϵ_{it} is the error term/residual

4. Empirical Results

4.1 Descriptive Statistics

This sub-section presents descriptive statistics for the study's dependent, explanatory, and control variables. It provides summary statistics for the collected data, including the mean, standard deviation, skewness, kurtosis, and minimum and maximum values for each variable. The descriptive statistics of the variables are presented in Table 4.

Table 4: Descriptive Statistics

Variables	Mean	Std. Dev.	Minimum	Maximum	Skewness	Kurtosis	Obs	
TBQ	1.049	0.1985	0.5685	1.5161	-0.1781	2.7611	150	
MVS	104.73	311.63	0.86	1557	3.7656	16.0497	150	
FCR	4.940	5.570	144.745	2.590	1.3776	4.0950	150	
HCR	0.966	0.1801	0.000	1.000	-5.1995	28.034	150	
ICR	1.240	1.480	337.301	8.330	1.829	6.735	150	
MCR	5.970	7.750	702.640	4.410	2.084	7.932	150	
SCR	0.946	0.225	0.000	1.000	-3.976	16.806	150	
BVS	13.656	16.634	-98.450	63.36	-1.201	16.024	150	
EPS	411.193	1364.27	-1275	10026	4.319	24.020	150	
FSZ	1.410	1.640	150,704	7.970	1.614	5.317	150	

Source: Results Output from STATA

The descriptive results in Table 4 indicate that the mean Tobin's Q (TBQ) for the sampled consumer goods firms in Nigeria is 1.049, with a standard deviation of 0.1985. The mean value indicates that the market values of the listed consumer goods firms' assets exceed their replacement costs. This suggests that the firm has strong growth potential, intangible assets (brand reputation). The minimum and maximum values of TBQ are 0.5685 and 1.5161, respectively. The standard deviation indicates that the TBQ data deviate from the mean by 0.1985 on both sides during the study period. Similarly, the table revealed that the skewness of -0.1781 indicates negatively skewed data, while the kurtosis of 2.7611 indicates peakedness, suggesting that the data is not normally distributed. The table also showed that the average market value per share (MVS) of the sampled consumer goods firms in Nigeria during the study period was \$\mathbb{N}104.73\$, with a standard deviation of 311.63. The standard deviation indicates that the MVS data are widely dispersed from

the mean by 311.63. The minimum MVS is N0.86, while the maximum value is N1.557. The table also showed that the data did not meet the assumption of normality, as evidenced by the skewness of 3.7656 and the kurtosis of 16.0497. The coefficient of Skewness indicates that the data are positively skewed, while the Kurtosis confirms the peakedness of the variable.

Table 4 revealed that the mean value of Financial Capital Reporting (FCR) for the sampled consumer goods firms in Nigeria is №4.940 billion, with a standard deviation of 5.570. The standard deviation indicates that the FCR data are widely dispersed from the mean by 5.570. The minimum FCR is №144.745 million, while the maximum value is №25.90 billion. Similarly, the table revealed that the skewness of 1.3776 indicates a positive skew, while the kurtosis of 4.0950 indicates peakedness, suggesting that the data is not normally distributed.

Table 4 shows that the mean Human Capital Reporting (HCR) score for the sampled consumer goods firms in Nigeria is 0.966, with a standard deviation of 0.1801. The minimum and maximum values of HCR are 0 and 1, respectively. The standard deviation indicates that the data for HCR deviate from the mean by 0.1801 on either side during the study period. Similarly, the table revealed that the skewness of -5.1995 indicates negatively skewed data, while the kurtosis of 28.034 shows peakedness, suggesting that the data is not normally distributed.

Table 4 revealed that the mean value of Intellectual Capital Reporting (ICR) for the sampled consumer goods firms in Nigeria is №1.240 billion, with a standard deviation of 1.480. The standard deviation indicates that the ICR data are widely dispersed from the mean by 1.480. The minimum ICR is №337.301 million, while the maximum value is №8.330 billion. Similarly, the table revealed that the skewness of 1.829 indicates positively skewed data, while the kurtosis of 6.735 indicates peakedness, suggesting that the data is not normally distributed.

Table 4 revealed that the mean value of Manufacturing Capital Reporting (MCR) for the sampled consumer goods firms in Nigeria is \$\frac{1}{2}5.970\$ billion, with a standard deviation of 7.750. The standard deviation indicates that the MCR data are widely dispersed from the mean by 7.750. The minimum MCR is \$\frac{1}{2}702.640\$ million, while the maximum value is \$\frac{1}{2}44.10\$ billion. Similarly, the table revealed that the skewness of 2.084 indicates a positive skew, while the kurtosis of 7.932 indicates peakedness, suggesting that the data is not normally distributed.

Table 4 shows that the mean Social Capital Reporting (SCR) score for the sampled consumer goods firms in Nigeria is 0.946, with a standard deviation of 0.225. The minimum and maximum values of SCR are 0 and 1, respectively. The standard deviation indicates that the data for SCR deviate from the mean by 0.225 on both sides during the study period. Similarly, the table revealed that the skewness of -3.976 indicates negative skew, while the kurtosis of 16.806 shows peakedness, suggesting that the data is not normally distributed.

The table also shows that the average book value per share (BVS) of the sampled consumer goods firms in Nigeria during the study period was \$\frac{1}{3}.656\$, with a standard deviation of 16.634. The standard deviation indicates that the BVS data are widely dispersed from the mean by 16.634. The minimum BVS is -\frac{1}{3}\text{98.450}\$, while the maximum value is \$\frac{1}{3}\text{63.36}\$. The table also revealed that the data did not meet the assumption of normality, as evidenced by the skewness of -1.201 and kurtosis of 16.024. The coefficient of Skewness indicates that the data are negatively skewed, while the Kurtosis confirms the peakedness of the variable. The table also showed that the average Earnings per share (EPS) of the sampled consumer goods firms in Nigeria during the study period was \$\frac{1}{3}\text{11}\$, with a standard deviation of 13.64. The standard deviation indicates that the EPS data are widely dispersed from the mean by 13.64. The minimum EPS is -\frac{1}{3}\text{12.75}\$, while the maximum value is \$\frac{1}{3}\text{10.03}\$. The table also revealed that the data did not meet the normal distribution assumption, as evidenced by the skewness of 4.319 and the kurtosis of 24.020. The coefficient of Skewness indicates that the data are negatively skewed, while the Kurtosis confirms the peakedness of the variable.

Table 4 shows that the mean firm size (FSZ) for the sampled consumer goods firms in Nigeria is \$1.410 billion, with a standard deviation of 1.640. The standard deviation indicates that the FSZ data are widely

dispersed from the mean by 1.640. The minimum FSZ is \$\frac{\textbf{N}}{150.704}\$ million, while the maximum value is \$\frac{\textbf{N}}{79.70}\$ billion. Similarly, the table revealed that the skewness of 1.614 indicates a positive skew, while the kurtosis of 5.317 indicates peakedness, suggesting that the data is not normally distributed.

The descriptive statistics analysis revealed that the study variables did not meet the normality assumption of parametric tests. However, to assess data normality, the study employed the Shapiro-Wilk test. The test results are presented in Table 5.

Table 5: Data Normality Test

Variables	W	V	Z	Prob>Z	Obs
TBQ	0.9947	0.613	1.109	0.8663	150
MVS	0.3027	81.132	9.966	0.0000	150
FCR	0.8028	22.937	7.102	0.0000	150
HCR	0.8852	13.351	5.875	0.0000	150
ICR	0.9885	1.336	0.657	0.2555	150
MCR	0.9199	9.313	5.059	0.0000	150
SCR	0.9855	1.687	1.186	0.1177	150
BVS	0.7641	27.445	7.509	0.0000	150
EPS	0.4268	66.695	9.522	0.0000	150
FSZ	0.5397	53.554	9.024	0.0000	150

Source: Results Output from STATA

The Shapiro-Wilk test is a valuable tool for testing normality. The null hypothesis principle is used in the Shapiro-Wilk (W) test for normal data; under the principle, the Null hypothesis that 'the data is normally distributed' is tested. Table 5 indicates that data from all variables in the study are not normally distributed, as the P-values are significant at the 1% level (p-values of 0.0000), except for TBQ, ICR, and SCR, which are not statistically significant at any level of significance (p-value of 0.2287). Therefore, the null hypothesis (that the data are normally distributed) is rejected for MVS, FCR, HCR, MCR, BVS, EPS, and FSZ, but not for the TBQ, ICR, and SCR. This may lead to problems in OLS regression, which is why more generalized regression models are needed.

4.2 Correlation Analysis

Table 6 shows the correlation coefficients between the dependent and the independent variables. The asterisk beside the correlation coefficient shows the coefficient's significance level. The correlation indicates the direction and strength of the relationship—its value ranges from -1 to 1. The sign of the correlation coefficient indicates the direction of the relationship (positive or negative), and its absolute value indicates the strength, with larger values indicating stronger relationships.

Table 6: Correlation Matrix

					~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	011 1.11001				
Varia	TBQ	MVS	BVS	EPS	FCR	HCR	ICR	MCR	SCR	FSZ
TBQ	1.0000									
MVS	0.2947^{*}	1.0000								
BVS	-0.0765	-0.0761	1.0000							
EPS	0.0005	-0.0676	0.1015	1.0000						
FCR	0.1111	0.1247	-0.1697	-0.2029*	1.0000					
HCR	0.1570	0.1137	0.0395	0.1865^{*}	-0.2192*	1.0000				
ICR	0.0530	-0.033	-0.0726	-0.0279	0.0611	0.1059	1.0000			
MCR	0.6291^*	0.3875^*	-0.0778	-0.1483	0.0805	0.0366	0.0052	1.0000		
SCR	0.4267^*	0.0089	0.1139	-0.035	-0.4006*	0.0944	-0.0403	0.5430^{*}	1.0000	
FSZ	0.1642^*	0.0418	0.1000	0.0337	0.1455	-0.1591	0.1125	0.2201^*	0.0347	1.0000

*= Significant at 5% Level

Source: Results Output from STATA

The correlation results in Table 6 indicate that FCR is positively correlated with TBQ (r = 0.1111). Similarly, the table shows that FCR is positively associated with MVS (as indicated by a correlation coefficient of 0.1247). That is, an increase in financial capital reporting increases the market values of listed consumer goods firms in Nigeria. However, the relationship is not statistically significant at all levels of significance.

The correlation results also show that HCR is positively related to TBQ (from the correlation coefficient of 0.1570). Similarly, the table shows that HCR is positively associated with MVS (as indicated by a correlation coefficient of 0.1137). That is, an increase in human capital reporting increases the market values of listed consumer goods firms in Nigeria. However, the relationship is not statistically significant at all levels of significance.

Table 6 shows that ICR is positively related to TBQ (from the correlation coefficient of 0.0530). That is, an increase in Intellectual capital reporting increases the market values of listed consumer goods firms in Nigeria. However, the relationship is not statistically significant at all levels of significance. Similarly, the table shows that ICR is negatively related to MVS (as indicated by the correlation coefficient of -0.0330). That is, a decrease in Intellectual capital reporting increases the market values of listed consumer goods firms in Nigeria. However, the relationship is not statistically significant at all levels of significance.

The results also show that MCR is positively related to TBQ (as indicated by a correlation coefficient of 0.6291). Similarly, the table shows that MCR is positively associated with MVS (as indicated by a correlation coefficient of 0.3875). That is, an increase in manufacturing capital reporting increases the market values of listed consumer goods firms in Nigeria, and the relationship is statistically significant at the 5% level.

Table 6 shows that SCR is positively related to TBQ (from the correlation coefficient of 0.4267). That is, an increase in social capital reporting increases the market value of listed consumer goods firms in Nigeria, and the relationship is statistically significant at the 5% level. Similarly, the table shows that SCR is positively associated with MVS (as indicated by a correlation coefficient of 0.0089). That is, an increase in social and relational capital reporting is associated with higher market values for listed consumer goods firms in Nigeria. However, the relationship is not statistically significant at any level of significance.

The correlation results indicate that BVS is negatively associated with MVS among listed consumer goods firms in Nigeria (correlation coefficient = -0.0761). However, the relationship is not statistically significant at any level of significance. The correlation results also show that EPS is negatively related to MVS for listed consumer goods firms in Nigeria (correlation coefficient = -0.0676), and the relationship is statistically significant at all levels of significance. The correlation results show that FSZ is positively associated with TBQ among listed consumer goods firms in Nigeria (r = 0.1642), and the relationship is statistically significant at the 5% level. The correlation results, on the other hand, show that FSZ is positively associated with MVS among listed consumer goods firms in Nigeria (r = 0.0418). However, the relationship is not statistically significant at any level of significance.

In conclusion, the correlation results revealed that integrated reporting is significantly and positively associated with the firm values of listed consumer goods firms in Nigeria during the study period.

4.3 Regression Diagnostic Tests

Consistent with the classical regression assumptions, the study conducted robustness tests to ensure the validity and reliability of its statistical inferences and findings. The tests include Data Normality (Table 5), Heteroscedasticity, Multicollinearity, Model Specification Test, and Model Fit Test. When these assumptions are not met, the estimators are biased and cannot be used to draw any inference.

4.3.1. Heteroskedasticity Tests

This study subjected the models to robustness tests due to uncertainty about their conformity with the classical regression assumptions and the panel nature of the data. For instance, one of the classical regression assumptions is that the error terms have constant variance (Homoskedasticity), as shown in Table 7. The

tests conducted (Heteroskedasticity-Test Breusch-Pagan/Cook-Weisberg) for Models 1 and 2 indicate Chi-Square coefficients of 1.10 (p-value = 0.2939) and 0.97 (p-value = 0.3239), respectively, confirming the absence of heteroskedasticity in both models; that is, the error variance is constant.

Tables 7: Regression Summary – Diagnostic

	Model 1 (Tobii	n's Q Model)	Model 2 (Market Value Model)				
Variables	Coefficients	P-Value	Coefficients	P-Value			
Hettest: Chi2	1.10	0.2939	0.97	0.3239			
Mean VIF	1.41		1.36				
Omitted Variable Test	0.32	0.8088	0.32	0.8102			
Hausman Test: Chi2	147.91	0.0000	89.00	0.0000			
Random Effect Test	12.90	0.0002	16.36	0.0000			
R Squared	0.4209		0.4288				
F-Statistic (Wald Chi2)	140.80	0.0000	154.10	0.0000			

Source: Results Output from STATA

4.3.2. Multicollinearity Tests

The explanatory variables are also expected not to be perfectly correlated (absence of multicollinearity). The results provide evidence of the absence of perfect multicollinearity among the independent variables, as all mean Variance Inflation Factors (VIFs) are less than 10. The rule of thumb for the VIF is that a value of 10 or above indicates perfect multicollinearity. Hence, Table 4.4 indicates that the mean VIFs for Models 1 and 2 are 1.41 and 1.36, respectively.

4.3.3. Model Specification Tests

Model specification errors can arise when relevant variables are omitted or when irrelevant variables are included. If important variables are omitted, the shared variance they have with the included variables might be incorrectly attributed to those variables, leading to an inflated error term. Conversely, if irrelevant variables are included, the variance they share with the included variables might be misattributed to them. These specification errors can significantly impact the accuracy of the regression coefficients. Therefore, Ramsey's (1969) test for model specification is employed in this study.

Model specification tests are conducted to determine whether the model is correctly specified and free of specification errors. The Ramsey Test hypothesized the non-existence of omitted variables. The test uses the fitted values of the dependent variables (TBQ and MVS). The results of the tests for Models 1 and 2 indicate that the models are well-fitted and correctly specified; hence, they do not require any additional variable(s). Thus, it is revealed that the model does not suffer from any misspecification or lack of functional fit. From the P-values 0.8088 and 0.8102, respectively.

Table 7 also shows that the Hausman Specification Test (Chi2 of 147.91 with a p-value of 0.0000) is statistically significant at the 1% level, suggesting that the Fixed-Effect Regression Model is suitable for model 1. However, the Breusch and Pagan Lagrangian Multiplier Test for Random Effects indicated that there is a statistically significant difference among the Units of the Panel (Chibar2 of 12.90 with p-value of 0.0002), and therefore, the Random Effect regression model can be used for model 1 of the study. Similarly, Table 7 shows that, for model 2, the Hausman Specification Test (Chi2 of 89.00 with p-value of 0.0000) is statistically significant at the 1% level, suggesting that the Fixed-Effect Regression Model is suitable for model 2. However, the Breusch and Pagan Lagrangian Multiplier Test for Random Effects indicated that there is a statistically significant difference among the Units of the Panel (Chibar2 of 16.36 with p-value of 0.0000), and therefore, the Random Effect regression model can be used for model 2 of the study.

For model 1, the results in Table 7 indicate that the explanatory variables explain 42.09% of the total variation in the dependent variable (Tobin's Q) for the sampled consumer goods firms during the study

period, with an R2 of 0.4209. The table also shows that model 1 is fit, as evidenced by the F-statistic of 140.80, which is significant at the 99% level (as indicated by the Prob-value of 0.0000). The model fit indices indicated that model 1 has a good fit, suggesting that the proposed model adequately captures the relationships among the variables in the data. Hence, the result is fit for analysis and hypothesis testing. For model 2, the results in Table 7 indicate that the explanatory variables explain 42.88% of the total variation in the dependent variable (market value per share) for the sampled consumer goods firms during the study period, as indicated by the R² value of 0.4209. The table also shows that model 2 is fit, as evidenced by the F-statistic of 154.10, which is significant at the 99% level (as indicated by the Prob-value of 0.0000). The model fit indices analyzed indicated that model 2 in the study has a good fit, indicating that the proposed model adequately captures the relationships among the variables in the data. Hence, the result is fit for analysis and hypothesis testing.

4.4 Regression Analysis and Hypothesis Testing

In this section, the regression results obtained are analyzed and interpreted to generate findings that address the research objectives. The results are presented in Table 8. The tables report the results for the effects of the dependent variables under both models.

Tables 8: Regression Coefficients

	Model 1 (Tobii	n's Q Model)	Model 2 (Market Value Model)		
Variables	Coefficients	P-Value	Coefficients	P-Value	
FCR	0.8202	0.011	0.9159	0.007	
HCR	0.0895	0.206	0.0789	0.281	
ICR	0.1142	0.366	0.1070	0.386	
MCR	0.0752	0.000	0.0776	0.000	
SCR	0.0406	0.000	0.0432	0.000	
BVS			-0.0003	0.750	
EPS			0.0000	0.063	
FSZ	0.3889	0.629	0.0325	0.683	
CONSTANT	-0.1160	0.743	-0.1557	0.658	

Source: Results Output from STATA (Appendix)

Table 8 reveals that the FCR has a significant positive effect on TBQ, with a coefficient of 0.8202 and a p-value of 0.011. This relationship is significant at 5% level. It implies that a unit increase in financial capital reporting of listed consumer goods firms in Nigeria would cause an increase in the firm value based on Tobin's Q. The result, on the other hand, shows that FCR has a significant positive effect on MVS, with a coefficient of 0.9159 and a p-value of 0.007. This relationship is significant at the 1% level. It implies that a unit increase in financial capital reporting for listed consumer goods firms in Nigeria would increase firm value as measured by market prices. Based on this evidence, the study rejects the null hypothesis (H01) that financial capital reporting has no significant effect on the firm value of listed consumer goods firms in Nigeria.

Table 8 also shows that the HCR has an insignificant positive effect on Tobin's Q, with the coefficient 0.0895 and a p-value of 0.206. This relationship is not significant at all levels. It implies that a unit increase in human capital reporting of listed consumer goods firms in Nigeria would cause an increase in the firm value based on the Tobin's Q. The result, on the other hand, shows that HCR has an insignificant positive effect on MVS, with the coefficient 0.0789 and with a p-value of 0.281. This relationship is not significant at any level, suggesting that a unit increase in human capital reporting for listed consumer goods firms in Nigeria would not increase firm value as measured by market price. Based on this evidence, the study failed to reject the null hypothesis (H02) that human capital reporting has no significant effect on the firm value of listed consumer goods firms in Nigeria.

Table 8 also shows that the ICR has an insignificant positive effect on TBQ, with a coefficient of 0.1142 and a p-value of 0.366. This relationship is not significant at all levels. It implies that a unit increase in intellectual capital reporting for listed consumer goods firms in Nigeria would increase firm value, as

measured by Tobin's Q. The result, on the other hand, shows that ICR has an insignificant positive effect on MVS, with a coefficient of 0.1070 and a p-value of 0.386. This relationship is not significant at any level, suggesting that a unit increase in intellectual capital reporting for listed consumer goods firms in Nigeria would not increase firm value as measured by market price. Based on this evidence, the study failed to reject the null hypothesis (H03) that intellectual capital reporting has no significant effect on the firm value of listed consumer goods firms in Nigeria.

Table 4.5 reveals that the MCR has a significant positive effect on TBQ, with a coefficient of 0.0752 and a p-value of 0.000. This relationship is significant at 1% level. It implies that a unit increase in manufacturing capital reporting of listed consumer goods firms in Nigeria would cause an increase in the firm value based on the Tobin's Q. The result, on the other hand, shows that MCR has a significant positive effect on MVS, with a coefficient of 0.0776 and with a p-value of 0.000. This relationship is significant at the 1% level. It implies that a unit increase in manufacturing capital reporting for listed consumer goods firms in Nigeria would increase firm value, as measured by market prices. Based on this evidence, the study rejects the null hypothesis (H04) that manufacturing capital reporting has no significant effect on the firm value of listed consumer goods firms in Nigeria.

Table 8 reveals that the SCR has a significant positive effect on TBQ, with a coefficient of 0.0406 and a p-value of 0.000. This relationship is significant at 1% level. It implies that a unit increase in social capital reporting of listed consumer goods firms in Nigeria would cause an increase in the firm value based on Tobin's Q. The result, on the other hand, shows that SCR has a significant positive effect on MVS, with a coefficient of 0.0432 and a p-value of 0.000. This relationship is significant at the 1% level, and it implies that a unit increase in social and relational capital reporting by listed consumer goods firms in Nigeria would increase firm value, as measured by market price. Based on this evidence, the study rejects the null hypothesis (H05) that social capital reporting has no significant effect on the firm value of listed consumer goods firms in Nigeria.

Table 8 shows that the BVS has an insignificant adverse effect on MVS, with a coefficient of -0.0003 and a p-value of 0.750. This relationship is not significant at any level, implying that a unit increase in the book values of listed consumer goods firms in Nigeria would decrease the firms' market values. The result also shows that the EPS has a significant positive effect on MVS, with a coefficient of 0.0000 and a p-value of 0.063. This relationship is significant at the 10% level and implies that a unit increase in earnings for listed consumer goods firms in Nigeria would increase the firm's market value.

Lastly, Table 8 reveals that the FSZ has an insignificant positive effect on TBQ, with a coefficient of 0.3889 and a p-value of 0.629. This relationship is not significant at all levels. It implies that a unit increase in asset size of listed consumer goods firms in Nigeria would cause an increase in the firm value based on the Tobin's Q. The result, on the other hand, shows that FSZ has an insignificant positive effect on MVS, with a coefficient of 0.0325 with a p-value of 0.683. This relationship is not significant at any level, suggesting that a unit increase in the asset size of listed consumer goods firms in Nigeria would not increase firm value as measured by market prices.

4.5 Discussion of Major Findings

As expected in H01, the result reveals that FCR has a significant positive effect on TBQ and MVS, implying that a unit increase in financial capital reporting for listed consumer goods firms in Nigeria would increase their market value. The result is statistically significant, consistent with Suttipun (2017), Patience & Timothy (2021), and Nwoye (2022). It implies that increased financial capital reporting for listed consumer goods firms in Nigeria would raise their market values. Also, this study contradicts the study of Adegbie et al (2019), which holds that Financial Capital Reporting hurts firms' value measured by Tobin's Q. Additionally, the findings conform with the stakeholder's theory, which holds that an integrated report must

provide details, which can comprehensively meet the information needs of various stakeholders. The finding is also consistent with the Resource-based theory, which suggests that an organization is a conglomerate of different resources and capabilities, such as financial, physical, human, technological, reputational, organizational, and intangible, which positively enhance firm value.

Additionally, the HCR has an insignificant positive effect on the market value of listed consumer goods firms in Nigeria. This relationship is not significant at all levels. This result is inconsistent with *a priori* expectations, as it was expected that the integrated reporting measured by Reporting of Human Capital would have a positive effect on the market value of listed consumer goods firms in Nigeria. These results are consistent with those of Adegbie et al. (2019) and Onumoh et al. (2024), who found that human capital reporting does not exhibit statistically significant correlations. However, this result is contrary to Nwoye's (2022) research, which found that human capital reporting improved firms' market value. The finding also disagrees with the ITR theories.

Furthermore, the results demonstrate that ICR has an insignificant positive effect on the market value of listed consumer goods firms in Nigeria. This relationship is not significant at any level, suggesting that a unit increase in intellectual capital reporting among listed consumer goods firms in Nigeria would increase market value. Also, the results confirm the findings of Onumoh et al. (2024), who found that the intellectual capital of Nigerian manufacturing firms has no bearing on firm value. Adebgie et al (2019) confirm that Intellectual Capital Reporting had an insignificant negative impact on the market value of listed manufacturing firms in Nigeria. The studies by Suttipun (2017), Akpan et al. (2022), and Nwoye et al. (2022) are contrary to this study, as their results show that ICR has a significant effect on a firm's market value. However, the finding contradicts integrated reporting theories, which hold that intellectual capital reporting is a value-driven activity.

In addition, the results show that the MCR has a significant positive effect on the market value of listed consumer goods firms in Nigeria. Moreover, it implies that a unit increase in manufacturing capital reporting would raise the market value of listed consumer goods firms in Nigeria. This finding aligns with the results of Suttipun (2017) and Onumoh et al. (2024), which indicate that manufacturing capital reporting has a significant effect on the firm's market value. Relevantly, Adegbie et al. (2019) and Akpan et al. (2022) found that manufactured capital reporting has a positive, insignificant effect on firm value. The finding also aligns with integrated reporting theories.

In the same vein, the results show that the SCR has a significant positive effect on market value, suggesting that a unit increase in social capital reporting by listed consumer goods firms in Nigeria would increase their market value. This finding aligns with Suttipun's (2017) study and the integrated reporting theory. On the contrary, the study by Onumoh et al. (2024) shows that social and relational capital reporting do not exhibit statistically significant correlations. Also, Akpan et al. (2022) reveal that it has an adverse, insignificant effect on a firm's market value.

Lastly, the control variables, as shown in Table 8, indicate that firm size has an insignificant positive effect on TBQ and MVS. This relationship is not significant at any level, suggesting that a unit increase in the asset size of listed consumer goods firms in Nigeria would not increase firm value, as measured by the market value of those firms. It supports the study of Adegie (2019), which holds that firm size does not have a significant controlling influence on the impact of integrated reporting on Firms' value in listed manufacturing firms in Nigeria. This result is inconsistent with *a priori* expectations, as it was expected that integrated reporting measures would have a positive effect on firms' market value, even after controlling for firm size.

5. Conclusion

This study examined the effect of integrated reporting components, specifically Financial Capital Reporting (FCR), Human Capital Reporting (HCR), Intellectual Capital Reporting (ICR), Manufacturing Capital Reporting (MCR), and Social Capital Reporting (SCR), on the market value of listed consumer goods firms in Nigeria. The study, therefore, concludes that integrated reporting practices have a significant positive

effect on the value of listed consumer goods firms in Nigeria during the period. Specifically, the study concludes that FCR, MCR, and SCR have a statistically significant positive impact on firm value, suggesting that these forms of capital reporting enhance investor confidence and market perception. These results align with stakeholder and resource-based theories, which emphasize the value-creating potential of both financial and non-financial resources when adequately disclosed.

The study, on the other hand, concludes that HCR and ICR have an insignificant effect on firm value, contrary to expectations and the assertions of integrated reporting theory. This suggests a possible gap in the recognition or communication of intangible assets in the Nigerian context, which may limit their market-perceived value. Additionally, firm size, used as a control variable, exhibited an insignificant effect, underscoring that the quality of reporting, rather than firm scale, is more relevant in driving firm valuation.

5.1 Recommendations

Based on the findings and conclusions, the study recommends that the management of consumer goods firms in Nigeria should capture all disclosure items related to financial capital and manufacturing capital in their financial statements, as this tends to improve the firm's market value and increase shareholders' wealth. Management should develop an inclusive organizational culture for disclosing non-financial (social and relational capital) information with long-term value-creating capacity, as this can maximize the firm's market value across short-, medium-, and long-term horizons.

The Financial Reporting Council of Nigeria should increase awareness and training and provide a framework for the adoption of integrated reporting in Nigeria. Regulators such as the International Accounting Standards Board, the Financial Reporting Council of Nigeria, and the Securities and Exchange Commission should update reporting standards to provide more explicit guidance on disclosing non-financial capital, particularly human and intellectual capital. The Financial Reporting Council of Nigeria should make the adoption of integrated reporting compulsory for companies listed on the Nigerian Exchange Group to improve the relationship between integrated reporting and firms' market value.

Consumer goods firms should adhere to the regulatory framework to ensure adequate corporate disclosure, thereby raising the confidence of current and potential investors in the Nigerian economy. Management should prioritize accuracy, clarity, and consistency in reporting capital examined to strengthen investor confidence and the firm's reputation.

5.2 Limitations and Suggestions for Further Research

One limitation of the study is that it focuses on listed consumer goods firms in Nigeria; therefore, caution should be exercised when extending the findings to other sectors. The study also concentrated on the quantitative research methodology, while complementing it with qualitative evidence would have improved the work. Moreover, other integrated capital components have not been covered in this study (like natural capital).

This study examined the effect of integrated reporting on the firm value of listed consumer goods firms in Nigeria. To achieve the study's objectives, the following are used: Financial Capital Reporting, Human Capital Reporting, Intellectual Capital Reporting, Manufacturing Capital Reporting, and Social and Relational Capital Reporting. In light of the above, the research findings paved the way for further research. Future studies should include qualitative methods, such as questionnaires and interviews with financial managers, to understand the specific challenges they face and the prospects for integrated reporting. Future studies should replicate the study in other sectors of the economy, such as Banks and other financial institutions, and the Oil and Gas industry. Compare the findings across sectors and determine whether this is an industrial issue or part of a broader trend, to provide adequate input to policy-makers. Future studies should include additional integrated capital components that this study did not cover, such as natural capital.

Author Contributions: Prof. M. Y. Abubakar conceived the idea and supervised the research; Udoh Eunice Sylvester collected the data and wrote the paper; Abubakar M. analyzed the data.

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