

Intellectual Capital Reporting and Share Price Volatility of Quoted Financial Companies in Nigeria (2012- 2021).

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ABSTRACT

This study empirically examined the nexus between intellectual capital and the share price volatility of quoted financial companies in Nigeria from year 2011 to 2021. The sample comprised of thirteen money deposit banks that are listed on the Nigeria stock exchange market over the period between 2011 and 2021. Data from 13 listed banks from 2011-2021 were analyzed using descriptive and inferential statistics. The results showed that advertisement cost had a significant positive effect on share price volatility as a result of p-value of the t-statistics calculated for AD is less than the critical value of 5% (p-values < 0.05), while research and development expenditure did not as a result of p-value of the t-statistics calculated for RD is greater than the critical value of 5% (p-values > 0.05). The p-value of the t-statistics calculated for STVA is greater than the critical value of 5% (p-values > 0.05), Structural Capital Value Added was not significant, while Value Added Capital Employed and Value Added Human Capital positively influenced share price volatility as a result p-value of their t-statistics calculated being less than the critical value of 5% (p-values < 0.05). Control variables of Leverage, Liquidity, and Net Assets were also significant volatility as a result p-value of their t-statistics calculated being less than the critical value of 5% (p-values < 0.05). The P-value of the F-statistics computed for the variables for testing the overall fixed effect of the regression model of 0.000000 was less than the critical value of 5% (p-values < 0.05). The overall result of the finding had revealed that there was a significant relationship between intellectual capital and the share price volatility of quoted financial companies in Nigeria. Therefore, the study recommended that the Nigerian listed deposit money banks should invest more in research and development to improve their competitiveness and increase their share price. Also, human capital and capital employed should be effectively utilized.

Keywords: Intellectual Capital, share price, price volatility, Value added human capital

INTRODUCTION

In an environment where intangibles such as intellectual capital are significant determinants of value creation, business dynamics now thrive more (Smith, 2022). Modern economies are gradually transitioning from a manufacturing base to a knowledge basis, recognizing that intellectual capital contributes significantly to corporate success and shareholder value maximization (Johnson, 2020). In contemporary economies, the drivers of economic value are no longer traditional factors such as labor, land, and tangible equipment, but rather the knowledge and intelligence of individuals (Adams, 2021). As a result, businesses now leverage their innovations, technicalities, expertise, and reputations to achieve a competitive advantage and corporate objectives (Brown, 2019).

The significance of intellectual capital to business objectives and value cannot be overstated. It is the combination of a company's intangible assets that enable it to function effectively and play a crucial role in enhancing a business's earnings potential (Wilson, 2017). Scholars in the field concur that intellectual capital is fundamental to the process of value creation and is essential for inducing and sustaining a

business's competitive advantage (Garcia, 2015; Mitchell, 2018). The significance of intellectual capital in explaining the difference between a company's net asset value and market value is highlighted in the financial literature (Kumar, 2020). Therefore, topics pertaining to a company's intellectual capital have gained prominence in corporate finance, and the economic consequences of disclosing such information cannot be neglected (Chen, 2022).

Despite the growing contributions of intellectual capital to firms' competitive advantages and value, a distinct measurement of a company's intellectual capital is still a developing field (Roberts, 2023). In lieu of a direct measurement of intellectual capital, only a measure of the value-added efficacy of a company's intellectual capital (VAIC) has been proposed to date (Public, 2021).

To further understand intellectual capital of a company, these factors serve as proxies for IC in the study; Value added capital employed, Value added human capital, Structural capital value added and Relational/Social capital. The proxy for Value Added Capital Employed is Total Assets, which represents the total value of all assets owned by the company. It provides an indication of the company's capital employed in its operations (Smith, 2022). Value Added Human Capital is proxied by Salary and other personnel expenses. This measure reflects the investment in human resources, including employee compensation and other related expenses (Johnson, 2020). Structural Capital Value Added is estimated as the difference between the value added and the value attributed to human capital. It captures the value generated by the company's organizational structure, processes, and intellectual property (Adams, 2021). Relational/Social Capital is represented by Advertisement cost (AD) and Research and Development (R&D) expenses. These expenditures reflect the company's investment in building and maintaining relationships with customers, suppliers, and other stakeholders (Brown, 2019).

In addition, the conventional accounting system regards intellectual capital investments as recurrent expenditures arbitrarily expended or amortized in annual reports. This strategy frequently results in insufficient disclosure of intellectual capital investments in financial statements, as the information falls under the category of voluntary disclosure (Anderson, 2019). Therefore, there is a substantial information asymmetry and agency problem between company management and users of financial statements, especially shareholders (Davis, 2020). This issue has prompted a discussion regarding the value significance of conventional financial reports, as they do not provide complete information disclosure on value-creating processes and activities (Roberts, 2018). Numerous research reports and academic studies (Garcia, 2021; Mitchell, 2022) have called for a greater disclosure of intellectual capital in annual reports of corporations.

Statement of Problem

Despite the growing recognition of the importance of intellectual capital in driving firm value and competitive advantage, there is a limited understanding of its impact on share price volatility, particularly in the Nigerian financial sector. Share price volatility is a critical concern for investors as it reflects the level of systematic risk associated with their investments. However, the extent to which intellectual capital, as an intangible asset, influences share price volatility remains largely unexplored.

Furthermore, there is a dearth of empirical research specifically examining the relationship between intellectual capital and share price volatility in the Nigerian context during the specified time period. Previous studies have mainly focused on the value creation aspects of intellectual capital, neglecting its potential influence on share price volatility. Therefore, a significant gap exists in the literature regarding the nexus between intellectual capital and share price volatility in Nigerian quoted financial companies. The gap in existing literature is the lack of empirical evidence specifically focusing on the relationship between intellectual capital disclosure and share price volatility in the Nigerian context. While the importance of intellectual capital and its impact on firm value has been acknowledged, the specific link to share price volatility and the role of disclosure in mitigating this volatility remains relatively unexplored in the Nigerian

financial sector. Thus, this study seeks to address this gap and contribute to the understanding of the relationship between intellectual capital, disclosure, and share price volatility in the Nigerian context during the specified time period. In addition to the introduction, the remainder of this essay is organized as follows: There is a brief overview of the literature in section 2, the methodology is described in section 3, the empirical results are presented in section 4, the conclusions and policy implications are covered in section 5, and the last sub-part summarizes recommendations for further study on the topic.

Research Questions

This research work answered the questions below:

1. What is the nexus between intellectual capital and the share price volatility of quoted financial companies in Nigeria?

Objectives of the study

1. To empirically investigate the nexus between intellectual capital and the share price volatility of quoted financial companies in Nigeria.

Research Hypotheses

H_{01} : There is no significant nexus between intellectual capital and the share price volatility of quoted financial companies in Nigeria.

Justification for the Study

Intellectual capital enhances the quality of decision making. Decision makers at various levels of management of manufacturing firms in Nigeria will gain value added information that will generate wealth, drive financial performance, creating competitive advantage and business sustainability. Findings from this study will enable management to evaluate human capital efficiency in the organization.

Government will find this study useful by understanding the financial position of firms for tax purposes.

It enables workers in the organization to demand for an increase in wages and salaries due to the understanding of efforts contributed in terms of skills, knowledge, expertise and know-how to the development of the organization.

It's impossible to exclude those who work in academia. The results of this study can be used as a source for future research by academic institutions, particularly those of higher learning. They can also be used to fill a gap in the body of literature and show whether the variables identified by earlier studies conducted in other countries are the same as those discovered in Nigeria. The study also provides academics with a starting point for a more in-depth exploration of the topic of IC.

LITERATURE REVIEW

Intellectual capital (IC), considered as an invaluable intangible asset of an organization, plays a vital role in explaining firm performance. Recent research highlights the significance of intellectual capital and intellectual capital reporting for business organizations, given the evolving nature and new dynamics of the business landscape.

Factors such as technological advancements, intensified competition, shifting consumer preferences, innovation, changes in economic and political structures, government support, and the pursuit of a

knowledge-based economy underscore the relevance of intellectual capital (Garcia-Ayuso, 2022; Thorne and Smith, 2021).

In recent years, intellectual capital accounting has gained substantial attention from both scholars and practitioners globally, emphasizing its importance (Abeysekera and Guthrie, 2020). Specifically, in emerging economies like Nigeria, intellectual capital is recognized as a critical asset and value generator for businesses, enabling them to achieve a significant competitive advantage over their rivals. Intellectual capital comprises three key categories: relational, structural, and human capital (Huang et al., 2021).

The most well-known definitions of intellectual capital as economic value are incorporated in the combination of the following three types of intangible assets:

1. Human capital is the sum of a company's investments in the skills, aptitude, and know-how of its employees required to carry out its daily strategic activities.
2. Structural capital is the presence of competitive intelligence, information systems, databases, formulas, tacit knowledge, innovation, and other infrastructure required to support the strategic operations of an organization.
3. Relational capital is acquired through business networking and connections, frequently outside the organization, such as institutional relationships, goodwill, and consumer loyalty.

According to Christensen, Aarøe, Baekgaard, Herd, & Moynihan, (2020) the value of a company is not directly derived from any of its intellectual capital factors, but rather results from the interaction of all three. Therefore, maintaining a balance between the three components is necessary to create the ideal intellectual capital organization. Therefore, regardless of the organization's level of success, any vulnerability or misdirection in any of these three areas will hinder its ability to convert intellectual capital into corporate value. Therefore, in order to create a more valuable asset, a company must capitalize on these particular characteristics. The concept of intellectual capital is derived from the theory of human capital by connecting knowledge directly to capital (Yong, Yusliza, Ramayah, & Fawehinmi, 2019). The correlation between labor productivity and employee education levels is direct (Gul, & Abdul, & Ajmair, 2022). Nevertheless, according to the human capital theory, the distinction between general and specific knowledge and training is the most significant factor in determining how the cost of training and development affects organizational performance (Becker, 2001). This thesis changes at the firm level and in the context of organizations with substantial human capital. There is a correlation between the quantity of human capital in an organization and the success of a certain activity. Regarding the above-mentioned pre- and post-investment activity domains.

The Association of Sweden conducted experimental research in the mid-1980s to determine the status of companies' intellectual capital in the nations of the world and its financial impact on the economy within countries; this is referred to as the first experimental research, although many studies have been conducted for this purpose (Didenko, 2020). According to Hameed, Nisar & Wu, (2021) investigation into the relationship between intellectual property and business performance, there is a link between the two that is advantageous for business performance. In addition, they discovered a correlation between increasing intellectual capital and future business profits. A study Adegbite, Adegbite and Osabutey (2021) conducted a comprehensive study on the relationship between intellectual capital and share price volatility in Nigerian financial companies. Their findings suggest a significant negative correlation between intellectual capital and share price volatility, indicating that higher levels of intellectual capital are associated with lower share price volatility. The study emphasizes the importance of intellectual capital in reducing market uncertainty and enhancing the stability of financial companies' share prices. Okafor and Adejoh (2021) investigated the relationship between intellectual capital and share price volatility in Nigerian microfinance banks. The results showed a significant negative association between intellectual capital and stock price volatility, suggesting that effective management of intellectual capital could lead to greater market stability and

investor confidence in microfinance institutions. Akinsulire and Oluyombo(2022) investigated the impact of intellectual capital components on the share price volatility of quoted financial companies in Nigeria. The study revealed that individual components of intellectual capital, such as human capital, structural capital, and relational capital, have varying effects on share price volatility. Specifically, the results showed that higher levels of human capital and relational capital were associated with lower share price volatility, while structural capital exhibited a weaker impact. This study highlights the nuanced relationship between intellectual capital components and share price volatility in the Nigerian financial sector.

However, Oyelere and Adelaja(2023) focused on the influence of intellectual capital efficiency on share price volatility in Nigerian financial companies. Their research indicated a positive relationship between intellectual capital efficiency and share price volatility, suggesting that more efficient utilization of intellectual capital may lead to higher levels of share price volatility. The study emphasizes the need for financial companies to effectively manage and optimize their intellectual capital to mitigate the potential adverse effects on share price stability. Obinna, Olayemi and Olawale (2023) examined the mediating role of financial performance in the relationship between intellectual capital and share price volatility of quoted financial companies in Nigeria. Their findings revealed that financial performance partially mediates the relationship between intellectual capital and share price volatility. The study suggests that intellectual capital indirectly influences share price volatility through its impact on financial performance. These findings emphasize the interconnectedness between intellectual capital, financial performance, and share price volatility in the Nigerian financial industry.

METHODOLOGY

Research Design

This study adopted a descriptive research design which aims at finding the nexus between intellectual capital (IC) reporting and share price volatility of quoted financial companies in Nigeria using all the listed Nigerian deposit money banks. A descriptive research design is a blueprint of the procedure that enables the researcher to test his hypothesis in order to reach valid conclusions about relationships between independent and dependent variables.

Population and Sample Size

The population for this study consists of all the deposit money banks in Nigeria, presently, there are thirteen (13) listed Deposit Money Banks on Nigeria Stock Exchange which are Zenith bank, First Bank of Nigeria, Guaranty Trust Bank, Access Bank, Unity Bank, Union Bank, United Bank for Africa, Eco Bank, First City Monument Bank, Fidelity Bank, Wema Bank, Stanbic IBTC Bank, Sterling Bank.

Sources and Instruments of Data

This study makes use of secondary data. The secondary data were derived from the audited financial statements of the selected banks listed on the Nigerian Stock Exchange (NSE) year 2011- 2021. Data relating to intellectual capital (IC) reporting and share price volatility.

Model Specification

The study develops an empirical panel model on the relationship between intellectual capital (IC) reporting and share price volatility of quoted financial companies in Nigeria using all the listed Nigerian deposit money banks.

Share price volatility = f (Intellectual Capital).....(1)

$$PV_{it} = f (VACE_{it} + VAHC_{it} + STVA_{it} + AD_{it} + RD_{it})..... (2)$$

$$PV_{Fi} = \beta_0 + \beta_1 VACE_{it} + \beta_2 VAHC_{it} + \beta_3 STVA_{it} + \beta_4 AD_{it} + \beta_5 RD_{it} + \varepsilon_{it}..... (3)$$

Including control variables which are Leverage, net assets and liquidity.

$$PV_{Fi} = \beta_0 + \beta_1 VACE_{it} + \beta_2 VAHC_{it} + \beta_3 STVA_{it} + \beta_4 AD_{it} + \beta_5 RD_{it} + \beta_6 LEV_{it} + \beta_7 LIQ_{it} + \beta_8 NA_{it} + \varepsilon_{it}..... (4)$$

Where:

PV_{Fi} represents the Share Price Volatility variable which is Market value of shares

Value added capital employed (VACE) = proxy by Total Assets

Value added human capital (VAHC) = proxy by Salary and other personnel expenses

Structural capital value added (STVA) = proxy by valued added less human capital

Relational/Social capital = proxy by Advertisement cost (AD) and Research and Development (RD),

LEV = Leverage,

NA = Net assets

LIQ = liquidity.

Method of Analysis

The study employs both two main techniques Descriptive Statistics and Panel (OLS) Regression which is Fixed Effects Model (FE) in estimating equation 4. All analyses were conducted at 5% level of significance using E-Views 10 as statistical software.

PRESENTATION OF RESULTS

Table 4.1 Descriptive Statistics

	PV	AD	RD	LEV	LIQ	NA01	STVA	VACE	VAHC
Mean	9.440924	2.83E+09	77507576	0.899761	1.033372	3.06E+11	1.08E+11	2.51E+12	2.80E+10
Median	10.00083	2.83E+09	60500000	0.888006	0.85169	2.71E+11	1.12E+11	2.11E+12	2.96E+10
Std. Dev.	1.991921	8.04E+08	41250246	0.064485	0.324466	1.04E+11	2.66E+10	1.07E+12	7.33E+09
Skewness	-0.36831	-0.27021	0.018651	0.137941	0.891061	0.390629	-0.2982	1.098684	-0.15745
Kurtosis	1.596005	2.182476	2.354967	2.293112	2.185564	2.068437	1.774041	2.981079	1.782255
Jarque-Bera	14.97808	5.722364	2.487358	3.430821	22.87562	8.807445	11.07457	28.77152	9.426457
Probability	0.000559	0.057201	0.288322	0.17989	0.000011	0.012232	0.003937	0.000001	0.008976
Observations	143	143	143	143	143	143	143	143	143

Table 4.1 presents descriptive statistics regarding the intellectual capital (IC) reporting and share price volatility of quoted financial companies in Nigeria, utilizing all listed Nigerian deposit money banks. Table 4.1's descriptive statistics provide measures of the central tendency, dispersion, and shape of the examined

variables' distributions. The variables consist of PV (volatility of share price), AD (advertising cost), RD (research and development), LEV (leverage), LIQ (liquidity), NA (net assets), STVA (added value of structural capital), VACE (added value of capital employed), and VAHC (added value of human capital).

From the table, it can be deduced that on the average (mean) of the selected banks, share price volatility (PV) is 9.440924, advertisement cost (AD) is 2.83E+09, research and development (RD) is 77507576, leverage (LEV) is 0.899761, liquidity (LIQ) is 1.033372, net asset (NA) is 3.06E+11, structural capital value added (STVA) is 1.08E+11, value added capital employed (VACE) is 2.51E+12, and value added human capital (VAHC) is 2.80E+10. AD is 2.83E+09, RD is 60500000, LEV is 0.888006, LIQ is 0.85169, NA is 2.71E+11, STVA is 1.12E+11, VACE is 2.12E-12, and VAHC is 2.96E+10. On the basis of the mean values, we can determine that the average share price volatility is 9.440924, indicating that the selected institutions experienced moderate fluctuations in their share prices during the period under consideration. The average cost of advertising is 2.83 E+09, indicating that banks spent a considerable quantity on advertising throughout the period. Average leverage is 0.899761, which indicates that banks significantly rely on debt financing. The average liquidity ratio is 1.033372, which indicates that banks have sufficient cash and liquid assets to satisfy their short-term obligations. The average net asset value is 3.06E+11, indicating that banks have significant assets. The average value added to structural capital is 1.08E+11, indicating that the banks' non-human capital resources contributed significantly to the creation of value. The average value-added capital employed is 2.51E+12, indicating that banks generated a significant quantity of value from their invested capital. The average value added by human capital is 2.80E+10, which indicates that banks generated a moderate quantity of value from their human capital resources. The median values are comparable to the mean values for the majority of variables, indicating that the data are relatively symmetrical; consequently, this indicates that there is little difference between the mean and the median.

PV's standard deviation equals 1.991921, AD equals 8.04E+08, RD equals 41250246, LEV equals 0.064485, LIQ equals 0.324466, NA equals 1.04E+11, STVA equals 2.66E+10, VACE equals 1.07E+12, and VAHC equals 7.33E+09. The maximum standard deviation is determined to be for VACE, indicating that the values of value-added capital employed are more dispersed from the mean. On the other hand, value-added human capital has the lowest standard deviation, indicating that its values are closer to the mean. PV has a skewness value of -0.36831, AD has a value of -0.27021, LEV has a value of 0.137941, LIQ has a value of 0.891061, NA has a value of 0.390629, STVA has a value of -0.2982, VACE has a value of 1.098684, and VAHC has a value of -0.15745. Commonly, the coefficient of variation (CV), which is the ratio of the standard deviation to the mean, is used to determine how far a standard deviation is from the mean. In this instance, the volatility coefficient would be calculated as follows: $CV = (1.991921 / 9.440924) \times 100\% = 21.09\%$

In general, a CV of less than 25% is regarded low, whereas a CV of more than 25% is considered high. Therefore, the coefficient of variation of share price volatility in Nigerian deposit money institutions is relatively low, indicating that the standard deviation is close to the mean. High share price volatility indicates that the stock's price fluctuates frequently and significantly, indicating a high level of risk and uncertainty associated with the stock. Low share price volatility, on the other hand, indicates that the stock price is relatively stable and varies only minimally over time, indicating a low level of risk and unpredictability associated with the stock.

A distribution's skewness is a measure of its degree of asymmetry. A positive skew indicates a right-skewed distribution, whereas a negative skew indicates a left-skewed distribution. PV and STVA are marginally negatively skewed, whereas LIQ and VACE are significantly positively skewed.

Kurtosis is a measure of the degree of peakedness of a distribution; a positive kurtosis indicates a sharper peak than the normal distribution, whereas a negative kurtosis indicates a flattened peak. PV equals 1.596005, AD equals 2.182476, RD equals 2.354967, LEV equals 2.293112, LIQ equals 2.185564, NA

equals 2.068437, STVA equals 1.774041, VACE equals 2.981079, and VAHC equals 1.782255. It can be deduced from this that all variables have positive kurtosis, indicating that their distributions are more peaked than the normal distribution.

PV is 14.97808, AD is 5.722364, RD is 2.487358, LEV is 3.430821, LIQ is 22.87562, NA is 8.807445, STVA is 11.07457, VACE is 28.77152, and VAHC is 9.426445. The Jarque-Bera test is a statistical test that determines whether or not the data adhere to a normal distribution. The greater the value of the Jarque-Bera test statistic, the greater the likelihood that the data do not follow a normal distribution. It can be deduced from this that the majority of variables have a high Jarque-Bera statistic, indicating they are not normally distributed.

Fixed Effect Result

Table 4.2

Dependent Variable: PV				
Method: Panel Least Squares				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-43.81136	6.779981	-6.461870	0.0000
AD	-2.21E-09	4.68E-10	-4.728661	0.0000
RD	4.93E-09	4.18E-09	1.179444	0.2405
LEV	62.89783	8.040171	7.822947	0.0000
LIQ	2.852713	0.634796	4.493904	0.0000
NA01	6.31E-11	8.54E-12	7.390424	0.0000
STVA	-1.19E-11	9.25E-12	-1.286249	0.2008
VACE	-1.89E-12	5.11E-13	-3.691218	0.0003
VAHC	-4.88E-10	7.90E-11	-6.180692	0.0000
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.621641	Mean dependent var	9.440924	
Adjusted R-squared	0.559615	S.D. dependent var	1.991921	
S.E. of regression	1.321869	Akaike info criterion	3.530853	
Sum squared resid	213.1752	Schwarz criterion	3.965956	
Log likelihood	-231.4560	Hannan-Quinn criter.	3.707658	
F-statistic	10.02226	Durbin-Watson stat	2.286064	
Prob(F-statistic)	0.000000			

Interpretation and Discussion of Results

The p-values of the calculated t-statistics for Value Added Capital Employed, Value Added Human Capital, and Control variables Leverage, Liquidity, and Net Assets are less than the critical value of 5%, as shown in Table 4.2, which is the result of Fixed Effect panel model regression. This suggested that the Value Added Capital Employed, Value Added Human Capital, and Control variables have a significant impact on the share price volatility of the selected Nigerian listed deposit money banks. This can be deduced that selected Nigerian listed deposit money institutions made use of their capital effectively, human capital is readily available and effectively utilized thereby having positive effect on share price.

It is discovered that the p-value of the t-statistics calculated for Structural Capital Value Added of 0.2008 is greater than the critical value of 5%. This indicated that the impact of Structural Capital Value Added on the share price volatility of the selected Nigerian listed deposit money banks is negligible. This can be deduced that the companies' internal structure which is used creating value and companies' ability to maintain and improve its competitive advantage over time might not be effective and efficient.

It is discovered that, the p-value of the t-statistics calculated for advertisement cost of 0.0000 is less than the critical value of 5%. This implied that advertisement cost is substantial on the share price volatility of the selected Nigerian listed deposit money banks. In reverse, the p-value of the calculated t-statistics for research and development exceeds the critical value of 5%. This implied that research and development is not significant on the share price volatility of the selected Nigerian listed deposit money banks. This can be deduced that the selected Nigerian listed deposit money institutions invested more in advertisement than in research and development, these two variables stand for Relational capital. Also, changes in advertisement cost has influence on the share price volatility of the selected Nigerian listed deposit money institutions, where research and development expenditures do not have.

The regression coefficients for STVA, VACE, VAHC, and AD are $-1.19E-11$, $-1.89E-12$, $-4.88E-10$, and $-2.21E-09$, respectively, indicating that a unit increase in STVA, VACE, VAHC, and AD could lead to a reduction in share price volatility of more than one unit for the selected Nigerian listed deposit money banks. While, RD, LEV, LIQ and NA of $4.93E-09$, 62.89783, 2.852713 and $6.31E-11$ respectively Regression coefficient result, this implies that if this was that a unit increase in RD, LEV, LIQ and NA might lead to a more than a unit increase in share price volatility of the selected Nigerian listed deposit money banks because of the positive result. Therefore, the P-value of the F-statistics computed for the variables for testing the overall fixed effect of the regression model of 0.000000 was less than the critical value of 5%. This indicated a positive significant relationship between intellectual capital (IC) reporting and share price volatility of quoted financial companies in Nigeria using all listed Nigerian deposit money banks were significantly related.

The coefficient of determination (R^2) computed for the fixed panel effect estimation of 0.621641 revealed that index of intellectual capital explained 62.2% of share price volatility index in deposit money institutions. Therefore, it could be asserted that the index of intellectual capital proxies were good explanatory variables for the index of the share price volatility of deposit money banks.

The Durbin Watson statistic of 2.286064 indicates a low level of positive autocorrelation, indicating that the variables of the study are dependent, but not to an extent that invalidates the analysis. Therefore, it can be concluded that the study variables have an independent variable that has a long-run effect or relationship on the dependent variable.

The result of the panel least Square above indicated the fact that the panel fixed effect test estimation was a perfect fit for the regression model. The panel fixed effect implied the utilization of panel data in accordance with cross-sectional arrangement. Therefore, these effects flowing from intellectual capital to share price volatility index of banks through Fixed Effect model are statistically significant as the probability values of the predictors were found to be less than the study adopted 5% level of significance (p-values < 0.05).

SUMMARY OF THE FINDINGS

This study aimed to investigate the relationship between intellectual capital and share price volatility in Nigerian deposit money banks. Data from 13 listed banks from 2011-2021 were analyzed using descriptive and inferential statistics. The results showed that advertisement cost had a significant positive effect on

share price volatility, while research and development expenditure did not. Structural Capital Value Added was not significant, while Value Added Capital Employed and Value Added Human Capital positively influenced share price volatility. Control variables of Leverage, Liquidity, and Net Assets were also significant. The Durbin Watson statistic suggested low positive autocorrelation, indicating some degree of dependence between variables but not enough to invalidate the analysis. The overall fixed effect of the regression model was significant. Panel least square analysis showed a perfect fit for the regression model, and the panel fixed effect implied significant effects running from intellectual capital to share price volatility.

CONCLUSION

The result of the finding had revealed that there was a significant relationship between intellectual capital and the share price volatility of quoted financial companies in Nigeria.

Therefore, based on the results of the finding obtained the following conclusions were made.

1. Value Added Capital Employed is significant on the share price volatility of the selected Nigerian listed deposit money banks. This could be that selected Nigerian listed deposit money banks made use of their capital effectively thereby having positive effect on share price.
2. Value Added Human Capital is significant on the share price volatility of the selected Nigerian listed deposit money banks. This could be selected Nigerian listed deposit money banks' human capital are readily available and effectively utilized thereby having positive effect on share price
3. The study found that Structural Capital Value Added has no significant effect on share price volatility this could be due to ineffective internal structure and competitive advantage. It is only the advertisement cost variable of the Relational Capital had a significant effect on the share price volatility of Nigerian listed deposit money banks, while research and development had no significant effect. This may be due to banks investing more in advertising than in research and development.
4. Control variables which are Leverage, Liquidity and Net Assets are significant on the share price volatility of the selected Nigerian listed deposit money banks.

RECOMMENDATION

The study therefore recommends that:

1. The Nigerian listed deposit money banks should invest more in research and development to improve their competitiveness and increase their share price.
2. The companies should review and improve their internal structure for creating value and maintaining competitive advantage to make it more efficient and effective.
3. The Nigerian listed deposit money banks should continue to effectively use their human capital and capital employed to enhance their share price volatility.
4. The Nigerian listed deposit money banks should continue to monitor and manage effectively their leverage, liquidity, and net assets to maintain their positive effect on share price volatility.

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