

COMPARATIVE ANALYSIS OF VALUE RELEVANCE OF ACCOUNTING INFORMATION AND SHARE PRICE IN NIGERIAN COMPANIES

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ABSTRACT

The objective of this study is to –investigate the relationship between value relevance of accounting information and share prices, and their effect in three sectors (construction and real estate, healthcare and information communication technology (ICT) of the Nigerian economy. This study was motivated on the assumption that value relevance of accounting information and share prices variation cannot be “one-fit-all” issue, that is, the same accounting numbers are equally relevant. *Ex-post facto* research design was adopted using time series accounting and stock prices data from three sectors for the period 2015 to 2021 in panel model. Descriptive and inferential statistics and Hausman test were employed in the analysis involving ANOVA, mean, minimum, maximum, standard deviation, t-values, R² and P-Values.. The results revealed that value relevance of accounting information vary in different sectors, but that all sectors share prices are influenced by accounting numbers. It was concluded that investors in the construction and real estate and healthcare firms should rely mostly on data from the statement of profit or loss and other comprehensive income and statement of cash flows than statement of financial position and ICT firms investors on statement of financial position when making investments decisions.

Keywords: Value Relevance, Accounting Information, Book Value per Share, Cash flow from Operations and Earnings per Share

1. INTRODUCTION

Investment decisions require financial statement analysis of companies that an investor intends to commit funds to with a view to generating returns and accretion. It is an act that involves evaluating a company's economic prospects, risks, analyzing its business environment, its strategies, and its financial position and performance. The financial reports prepared by management must therefore have value relevance to all interested parties in the reports and particularly, the stockholders who are to decide when to "buy", "hold" or "sell" equity shares. Normally, the financial statement available publicly might not be directly usable in decision making. In order to bring their information content to light, they need to be analyzed, compared, decoded, and interpreted, about the business transactions.

Business is about transforming resources into something valuable (product or service, tangible or intangible) that will meet a customer's expectation and create profit in doing so. Hence, diverse sector of the economy exists (construction/ real estate, consumer goods, healthcare and pharmaceutical, ICT, industrial goods, oil and gas, services, etc.). While each company irrespective of the sector is required to prepare and present financial statements, the value relevance of the accounting data may differ. In other words, what constitutes value relevance to one party may not be to another as their objectives and focus might be diverse.

Accounting information is described and seen as relevant when it influences the users' decisions to form an opinion (Uwuigbe *et al.*, 2015), having the quality of impacting the economic decisions of users by helping them evaluate past, present, or future events or either confirming or correcting, past evaluations (Stolowy & Lebas, 2006). Value relevance of information anchor on reliability. To be useful, information in financial statements must present faithfully the financial position, financial performance, and cash flow of the entity, reflect, the economic substance of transaction, other events and conditions and not merely the legal form, are neutral, prudent and complete in all material respects. The value of accounting information can be evaluated by examining the connection between the market value of equity (share price) with accounting data such as book value of equity, earnings per share and return on investment (Beisland, 2009). This study takes a swift on these variables looking at three (3) sub-sectors in the Nigerian economy.

1.2. Research problem and objectives of the study

Theoretically, and from empirical literature, it is posited that accounting information drives the prices of shares in capital markets. While this may be

assumed true, empirical results give conflicting outcomes with some findings supporting or confirming the assertion, and others refuting the position. Also, it is commonplace to find out that while some stock prices in the same market are rising, others are falling, yet some elements of information in both situations may be derived from accounting data as a basis for decision making.

In another view, most research used pooled or aggregated data of various companies to assess the value relevance of accounting data and share prices relationship. This study involves disaggregated data for three sub-sectors (construction/real estate, health care, and ICT) on a panel basis to evaluate the value relevance of accounting information and share prices at the different sectors with a view to find out if a uniform or single accounting data is relevant to all sectors of the Nigerian Economy. Therefore, this study attempts a comparative analysis of the value relevance of accounting information and share prices of listed construction/real estate, health care and ICT sectors in Nigeria from 2015 to 2021. The specific objectives are to:

- i) determine the relationship between value relevance variables and share prices of firms in three (3) sectors listed on the Nigerian Stock Exchange from 2015 to 2021, and
- ii) ascertain influence of the different value relevance variables on share prices of firms in three (3) sectors listed on the Nigerian Stock Exchange from 2015 to 2021.

1.3. Share prices

Price is the amount paid for the value of an item. Share price, therefore, is the lowest amount that the share goes for or the highest amount an investor is willing to pay for it. Afolabi and Dada (2014) opine that the price of the stock moves up or down depending on the supply and demand for the stock at any point in time. The supply and demand represent the quantity of the shares that investors are ready to buy or sell at a point in time. It is the price the market designates to the company's shares or stock. The market price of a share can be measured on daily, average monthly, average quarterly, yearly average, or closing price during the financial year-end. Whatever form it takes, the price movement is a function of relevant information mostly derived from accounting reports.

This study looks at three (3) such accounting variables – Book Value per Share (BVPS), Earnings Per Share (EPS), and Cash flow from Operations (CFO), each derived from the three commonly prepared and presented financial reports

(statement of financial position, statement of profit or loss and other comprehensive income and statement of cash flow).

Research shows that many factors influence the relationship between accounting earnings and share prices. These include company factors such as risk, size, leverage, and variability factors such as earnings growth and persistence that increase their impact. Our analysis focus on those influences that impact the value relevance of accounting information, while other variables are accounted for by the error term of the model.

1.4. Value relevance

Value is used to describe the worth, usefulness, or importance of a thing, while relevance from an accounting perspective is when the information generated by an accounting system is having the ability to impact the decision making of someone perusing the information. It implies that value relevance is the worth, usefulness, or importance of the information generated by an accounting system to assist decision makers relying on such information to make decisions. Value relevance of information might be assessed from the feedback value for revising or confirming investors' beliefs. The perspective holds that accounting information is value relevant if it triggers changes in the share price trends through its intrinsic value in a similar way and in the same direction as market prices (Oshodin & Mgbame, 2014).

The rest of the paper is discussed the prior literature and hypotheses development, methodology, results and findings, conclusions and recommendations.

2. PRIOR LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

The efficient market hypothesis (EMH) developed by Fama is the theory this study hub on. The hypothesis deals with the reaction of market prices to financial and other information.

There are three common forms of EMH. The weak form EMH asserts that prices reflect fully information contained in historical price movements. The semi-strong form EMH asserts that prices reflect fully all publicly available information. The strong form of EMH asserts that prices reflect all information including inside information. Whatever form of the market, accounting information constitutes a key component of the informational content required for informed decisions of investors and analysts.

Some empirical research reviewed in this study are summarized in a tabular format in Table 1.

2.1. Summary of empirical research

Table 1: Summary of empirical review

S/N	AUTHOR(S) AND YEAR	TITLE	METHOD OF DATA ANALYSIS	FINDINGS
1	Karunaratne and Rajapakse (2010)	Value relevance of earnings and cash flow in determining share prices	Return model and price model	Earnings per share was found to be more value relevant.
2	Pathirawasam (2010)	Value relevance of accounting information: evidence from Sri Lanka	Cross-sectional regression analysis	Earnings, book value and return on equity have positive value relevance on market value of securities.
3	Abayadeera (2010)	Value relevance of information in hi- tech industries in Australia; accounting information and intangible asset disclosure	Regression analysis	Book values are the most significant variable in deciding share prices in hi-tech industries in Australia.
4	Abubakar (2010)	Values relevance of accounting information of listed new economy firms in Nigeria: an empirical investigation using Ohlson model	Regression analysis	Accounting information of firms in Nigeria had no significant value relevance to users of the information.
5	Oyerinde (2011).	Values relevance of accounting information in Nigeria state market.	Regression analysis	There exists a significant relationship between accounting information (earnings, book value, and dividends) and the share prices of firms listed on the NSE.
6	Nayeri_ Ghayoumi and Bidari (2012).	Factors affecting the values relevance of accounting information	Cumulative regression analysis	Company size, earnings stability, and company growth influence the value relevance of accounting information for investors in the Terhran stock exchange.
7	Huffman (2013).	Value relevant asset measurement and asset use: Evidence from IAS41	Regression analysis	Book values and earnings information are significantly more value relevant in the regression of stock prices
8.	Pervana and Marijana (2014).	Values relevance of accounting information: Evidence from South, Eastern European countries.	Regression analysis	Accounting information is valued relevant in all the observed markets.
9.	Ragab and Omran (2016).	Accounting information, values relevance, and investors behavior in the Egyptian equity market.	Regression analysis	Stock prices in Egypt are less information relevant about the future values of the firm than accounting information.
10.	Svenson and Larsson (2019).	Values relevance of accounting information: a Swedish perspective.	Regression analysis	Earnings are values relevant and earnings can explain 9.3 percent of the market returns in Sweden.
11.	Swart and Negash (2019).	An_ empirical examination of Ohlson 1995 model	Cross-sectional multiple regression	No significant relationship between year-end hare prices and accrual accounting information.

Source: Researchers' Computation (2022)

2.2. Gap in the literature

Sizeable empirical investigations have been carried out on the value relevance of accounting information on stock prices. From the empirical review, there is no consistency in the independent variables used for accounting information, hence the inconsistent results recorded with some findings showing significant positive relationships, and others negatives or no relationship. The study is a departure from previous studies by using the same proxies for accounting information to examine the value relevance across three (3) different sectors of the Nigerian economy comparatively.

2.3. Hypotheses of the study

The following hypotheses are formulated:

- Ho₁: There is no significant relationship between value relevance variables and the share prices of firms in three (3) sectors listed on the Nigerian Stock Exchange from 2015 to 2021.
- Ho₂: The value relevance variables do not significantly affect the share prices of firms in three (3) sectors listed on the Nigerian Stock Exchange from 2015 to 2021.

3. METHODOLOGY

The research design, population and sample of the study, method of data collection, model specification and measurement of variables as well as the method of data analysis are discussed in this section of the paper.

3.1. Research design

Ex-post-facto research design is adapted in the study involving the use of secondary data gathered from the published annual financial statement of the selected companies and publication of the Nigeria Stock Exchange (NSE) for various years.

3.2. Population and sample size

All the listed companies in the Construction/real estate, Health Care, and ICT sectors of the Nigerian Stock Exchange, between the years 2015 and 2021. The number of companies are: Construction/real estate 9, Health Care 10, and ICT 9.

The sample size selected purposively was based on companies with up-to-date information regarding the study focus. Consequently, seven (7) companies were selected from Construction/real estate, eight (8) from Health Care, and seven (7) from ICT, to constitute the sample size of the study.

3.3. Data collection

Data used for the study were secondary data obtained from the annual reports of selected companies listed on the floor of the Nigerian Stock Exchange (NSE) during the relevant period of the study by extracting the relevant content.

3.4. Model specification and measurement of variables

The model specification is carried out in two phases conceptually and empirically. The conceptual model was shown as Figure 1:

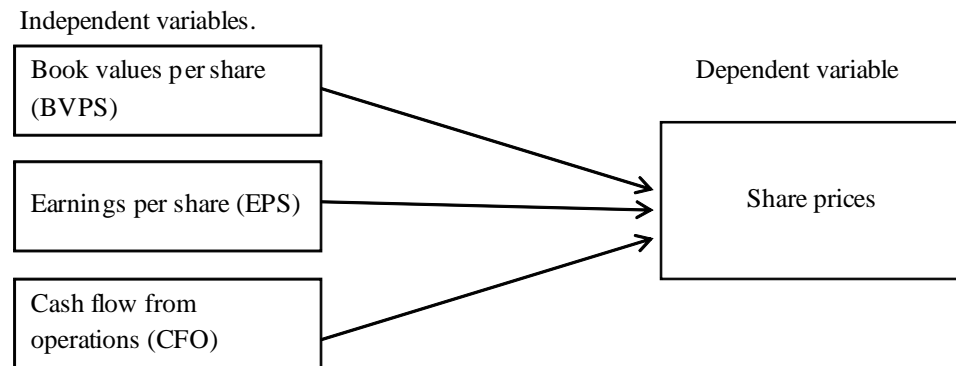


Figure 1: Conceptual model of the study

Source: Researchers’ Conceptualization (2022)

Empirically, the model is stated in a multiple regression form.

$$SP_{it} = f(BVP, EPS, (FO) \tag{Model 1.1}$$

$$SP_{it} = \alpha_0 + \alpha_1 Bvps_{it} + \alpha_2 EPS_{it} + \alpha_3 CFO_{it} + \mu \tag{Model 1.2}$$

where,

SP_{it} = Share price for firm i at the end of the third month after year t

$BVPS_{it}$ = Book values of equity per share for firm i at the end of the year t

EPS_{it} = Earnings before ordinary items per share for firm i at the end of the year t

CFO_{it} = Cash flow from operations for firm i at the end of the year t

α_0 = Regression intercept

α_1 — α_3 = Coefficients of independent variables

μ = Stochastic error term

The *apriori* expectation was that BVPS, EPS and CFO would have positive value relevance on share price.

3.5. Measurement variables of value relevance of accounting information

Various measures have been employed as measurement variables of value relevance of accounting information in particular the investors or market ratios. These include EPS, BVPS, P/E ratio, DPS, D/P, and D/Y. For this study, we select one variable each from the main financial statements. There are Book Values Per Share (BVPS), Earnings Per Share (EPS), and Cash Flow from Operation computed from the statement of financial position, (SOFP), statement of profit or loss, and other comprehensive income (SOPLOCI), and Statement of Cash Flow (SCF).

The book value per share (BVPS) was computed as:

$$BVPS = \frac{\text{Total Share Holders' Equity} - \text{Preference Equity}}{\text{Total outstanding shares}}$$

The Earnings per share (EPS) were computed as:

$$EPS = \frac{\text{Net income} - \text{Dividend on Preference Shares}}{\text{Average outstanding shares}}$$

The cash flow operating (CFO) was computed as:

$$CFO = \frac{\text{Net Cash Flow from Operating Activities}}{\text{Total Asset of the Firm}}$$

3.6. Method of data analysis

Descriptive and inferential statistical techniques were applied to data analysis. Measures of dispersion, multicollinearity test, unit root, Hausman tests, ANOVA, and ordinary least squares (OLS) were all applied to the data in drawing conclusions from the findings. Hypotheses were tested at the 0.05 level of significance.

4. RESULTS AND FINDINGS

The results of the data analysis are presented and discussed in this section.

4.1. Descriptive statistics

The descriptive statistics of the variables of the study are presented based on the three different sectors for ease of comparison. The descriptive statistics are mean, minimum and maximum values, and standard deviation are presented in Table 2.

Table 2: Descriptive statistics for construction and real estate

<i>Variables</i>	<i>Mean</i>	<i>Maximum</i>	<i>Minimum</i>	<i>Std.dev.</i>	<i>Obser.</i>
Share prices	34.08024	100.0000	0.440000	35.62411	49
BVPS	5.827691	26.13000	-8.92328	8.595022	49
CFO	0.064038	0.490000	-0.06	0.093340	49
EPS	5.108175	232.2800	-112.667	52.82553	49

Source: Researchers' Computation (2022).

Table 2 presented 49 firm-year observations for 7 companies spanning seven years from 2015 to 2021. From the results, the mean value for the share price is ₦34.08 and the second largest variation in the minimum and maximum variables (min.=44kobo and max.=₦100) with a standard deviation of 35.62 Book Value Per Share (BVPS) ranged from -8.92 to 26.13 with a standard deviation of 8.59 and mean value of 5.83. The cash flow from operating activities (CFO) variable averaged 0.06 with a standard deviation of 0.09, EPS average of 511 kobos indicating that all companies within the sector had a share that earned at least 511 kobo profit, minimum value -112.667 and maximum 232.28 with a standard deviation of 52.83.

Table 3: Descriptive statistics for health care sector

<i>Variables</i>	<i>Mean</i>	<i>Maximum</i>	<i>Minimum</i>	<i>Std.dev.</i>	<i>Obser.</i>
Share prices	6.071786	70.00000	0.500000	13.06990	56
BVPS	4.658964	17.85000	-0.25	4.202320	56
CFO	0.046929	0.24000	-0.34	0.121445	56
EPS	0.373512	24.7500	-29.57	5.742703	56

Source: Researchers' computation (2022)

The accounting information variables for the healthcare sector for the period 2015-2021 give an annual time series of 56 observations. The results presented in Table 3 reveal that on average, share prices in the healthcare sector are ₦6.07

and maximum of ₦70.00, and a standard deviation of 13.06. The BVPS had a mean value of ₦4.66, a minimum value of -0.25 kobo, a maximum value of ₦17.85, and a standard deviation of 4.20. CFO, the average was 0.04, the minimum value of -0.34, maximum value 0.24, and a standard deviation of 0.12. EPS with a mean of 0.37, minimum value -29.57, maximum value 24.75, and standard deviation of 5.74.

Table 4: Descriptive statistics for ICT sector

<i>Variables</i>	<i>Mean</i>	<i>Maximum</i>	<i>Minimum</i>	<i>Std.dev.</i>	<i>Obser.</i>
Share prices	3.906905	22.54000	0.2400000	5.121401	42
BVPS	6.239524	94.76000	0.040000	19.66499	42
CFO	0.070238	0.280000	-0.13	0.088055	42
EPS	1.412857	8.940000	-0.75	2.677532	42

Sources: Researchers' Computation (2022)

The descriptive statistics, from Table 4, show the mean value for the share price of ₦3.90, the minimum value of 20kobo, the maximum value of ₦22.54, and the standard deviation of 5.12. The BVPS ranged from 0.04 to 94.76, mean of 6.23, and a standard deviation of 19.67. CFO values are mean of 0.07, maximum of 28.25, minimum of -0.13, and standard deviation of 0.088. EPS mean value was 141 kobo indicating that firms within the ICT sub-sectors have share earnings of at least 141 kobos. The minimum value was -6.16, the maximum values 28.25, and the standard deviation of 5.30.

4.2. Statistical analysis of data

In the sequel to panel data analysis, multicollinearity and unit root tests were performed.

4.2.1. Multicollinearity test

Linear models are often associated with multicollinearity which occurs when there is a high correlation between variables within a particular model indicating that the variables are perfect or near-perfect replications of themselves. This has to be addressed to avoid unreliable and unstable estimates from the regression coefficients. To assess the presence or otherwise of multicollinearity, the variance inflation factor (VIF) was computed for each of the sectors studied.

Table 5: Collinearity statistics for construction and Real Estate sector

collinearity statistics		
<i>Variables</i>	<i>Tolerance</i>	<i>Variance inflation factor (VIP)</i>
BVPS	0.442645	1.498426
CFO	3785.383	1.522773
EPS	0.011770	1.033000

Source: Researchers' Computation (2022)

Table 5 indicates that the VIF of the three prediction variables is less than 10 which is a good value. There is no multicollinearity among the variables in the model.

Table 6: Collinearity Statistics for Healthcare Sector

collinearity statistics		
<i>Variables</i>	<i>Tolerance</i>	<i>Variance inflation factor (VIP)</i>
BVPS	0.109832	2.306516
CFO	129.4401	1.161638
EPS	0.058777	1.028219

Source: Researchers' computation (2022)

The results in Table 6 of the multicollinearity test show that there is no collinearity among the independent variables since the coefficients of the VIF for all predictors are less than 10.

Table 7: Collnearity statistics for ICT sector

collinearity statistics		
<i>Variables</i>	<i>Tolerance</i>	<i>Variance inflation factor (VIP)</i>
BVPS	0.000997	1.109109
CFO	50.45848	1.685001
EPS	0.054792	1.316363

Source: Researchers' computation (2022)

The result (Table 7) of the test indicates that all the VIF values are less than 10 implying that the estimated coefficients are stable, and unbiased.

4.2.2. Unit Root Test

The Levin, Lin, and the Chu, ADF-Fisher Chi-square, and PP-Fisher Chi-square unit root tests were conducted to ascertain the times series properties of each variable in the model based on the Akaike Information Criterion (AIC). The tests were conducted with intercept and are presented in Table 8.

Table 8: Unit root tests for construction and real estate

Variables	Levin, Lin and Chu		ADF Fisher Chi-square,		PP-fisher Chi square t^*	
	Statistics	Prob**	Statistic	Prob**	Statistic	Prob**
Share prices	-6.78695	0.0000	17.9129	0.0565	23.6968	0.0084
BVPS	0.52061	0.6987	0.71339	0.7622	3.20389	0.9762
CFO	-5.24170	0.0000	17.8546	0.1202	34.1113	0.0006
EPS	-4.91368	0.0000	0.46414	0.3212	15.0215	0.2403

*significant at 5% level

**significant at 10% level

Source: Researchers' Computation (2022)

The findings of the stationary tests, the ADF-Fisher Chi square unit root test fails to reject the null unit root hypothesis of a unit root for all the variables: the PP-Fisher Chi-square unit root test fails to reject the null hypothesis for BVPS and EPS while it rejects the hypothesis of a unit root for share prices and CFO. On the other hand, the Levin, Lin, and Chi unit root test strongly reject the null hypothesis supporting the alternative hypothesis of stationary for share prices CFO, and EPS.

Table 9: Unit root test for health care

Variables	Levin, Lin and Chu		ADF Fisher Chi-square,		PP-fisher Chi square t^*	
	Statistics	Prob**	Statistic	Prob**	Statistic	Prob**
Share prices	-6.78695	0.0000	17.9129	0.0565	23.6968	0.0084
BVPS	0.52061	0.6987	0.71339	0.7622	3.20389	0.9762
CFO	-5.24170	0.0000	17.8546	0.1202	34.1113	0.0006
EPS	-4.91368	0.0000	0.46414	0.3212	15.0215	0.2403

*significant at 5% level

**significant at 10% level

Source: Researchers' Computation (2022)

From the result in Table 9, the ADF-Fisher Chi-square unit root test fails to reject the null unit root hypothesis of a unit root for all the variables, and the

PP-Fisher Chi-square unit root test fails to reject the null hypothesis for BVPS and EPS while it rejects the hypothesis of a unit for share prices and CFO. Inversely, the Levin, Lin, and Chi unit root test strongly rejects the null hypothesis supporting the alternative hypothesis of stationary for share prices CFO, and EPS.

Table 10: Unit root test for ICT

<i>Variables</i>	<i>Levin, Lin and Chu</i>		<i>ADF Fisher Chi-square,</i>		<i>PP-fisher Chi square t*</i>	
	<i>Statistics</i>	<i>Prob**</i>	<i>Statistic</i>	<i>Prob**</i>	<i>Statistic</i>	<i>Prob**</i>
Share prices	-5.62322	0.0000	11.0333	0.3549	8.51370	0.5788
BVPS	-153.199	0.0000	29.8770	0.0029	16.3594	0.1753
CFO	3.22650	0.9994	19.4340	0.0786	20.3875	0.0601
EPS	-8.40431	0.0000	24.5768	0.0170	15.1312	0.2343

* Significant at 5% level

**Significant at 10% level

Source: Researchers' Computation (2022)

Based on the findings shown in Table 10, Levin, Lin, and Chi t^* test is less than 0.05 for all the variables except CFO, which rejects the null hypothesis of the presence of a common unit root, at a 5% significant level. However, ADF-fisher Chi-square statistics in the case of individual unit root rejected the null hypothesis of the presence of individual unit root, at a 5% significant level in respect of all the variables except CFO which was found to be stationary at a 5% level in respect of all the variable except for share price PP-Fisher Chi-Square Unit root test fails to reject the null hypothesis for all variable except CFO which was found to be stationary at 5% level.

4.3. Test of Hypotheses

The hypotheses of the study are tested in this section

Hypothesis One

H_{01} : There is no significant relationship between value relevance variables and the share prices of firms in three (3) sectors listed on the Nigerian Stock Exchange from 2015 to 2021

To examine the relationship between the dependent and independent variables, the Pearson's correlation coefficient (r) which shows the level of

relationship between two variables in this case share prices and each of the independent variables in the model, that is BVPS, CFO, and EPS was used in the analysis.

Table 11: Correlation coefficient for construction and real estate

<i>Variables</i>	<i>BVPS</i>	<i>CFO</i>	<i>EPS</i>	<i>Share prices</i>
BVPS	1	-.091	.129	.061
CFO	-.091	1	-.111	-.191
EPS	.129	-.111	1	.042
Share prices	.061	-.191	.042	1

Source: Researchers' Computation (2022)

Results from Table 11 show a positive relationship between share prices, BVPS ($r=0.061$, $P>0.05$), and EPS ($r=0.042$, $P<0.05$) while a negative relationship was established between share prices and CFO ($r=-0.191$, $P>0.05$). Specifically, changes in BVPS and EPS by 10% induce changes in share price by 0.61 percent and 0.42 percent respectively, while if CFO changes by 10% share prices are reduced by 0.91 percent. These relationships were, however, found to be statistically insignificant at the 0.05 level of significance. It was concluded that accounting information value relevance variables do not have a significant relationship with share prices.

Table 12: Correlation coefficient for health care sector

<i>Variables</i>	<i>BVPS</i>	<i>CFO</i>	<i>EPS</i>	<i>Share prices</i>
BVPS	1	.138	.057	.094
CFO	.138	1	-.62	.619**
EPS	.057	.062	1	.161
Share prices	.094	.619**	.161	1

Source: Researchers' Computation (2022)

From the result (Table 12), a positive relationship subsists between share prices and BVPS ($r=0.094$, $P>0.05$), CFO ($r=0.619$, $P<0.05$) and EPS ($r=0.161$, $P>0.05$). This signifies that the higher the firm's BVPS, CFO, and EPS the higher the share prices. In specific terms, a change in BVPS, CFO and EPS by 10% will cause share prices to move in the same direction by 0.94, 6.19, and 1.61 percent respectively. However, the result showed that only CFO was found to be statistically significant at the 5% level of significance. It is concluded that

value relevance variables have a positive and significant relationship with share prices during the period of the study.

Table 13: Correlation coefficient for ICT sector

<i>Variables</i>	<i>BVPS</i>	<i>CFO</i>	<i>EPS</i>	<i>Share prices</i>
BVPS	1	-.070	.139	.010
CFO	-.070	1	-.031	585**
EPS	.139	-.031	1	.301
Share prices	.010	585**	.301	1

Source: Researchers' Computation (2022)

The result (Table 13) of the analysis shares a positive relationship between share prices and CFO ($r=0.585$, $P<0.05$), EPS ($r=0.301$, $P>0.05$) while a negative relationship subsists between share prices and BVPS ($r=-0.010$, $P>0.05$). Specifically, changes in CFO and EPS by 10% induce changes in share prices by 5.85 percent and 3.01 percent. On the other hand, if BVPS changes by 10% share prices reduce by 0.10 percent.

Hypothesis Two

Ho₂: the value relevance variables do not significantly affect the share prices of the firms in the three (3) Sectors listed on the Nigerian Stock Exchange from 2015 to 2021.

To analyze the effect of the value relevance variables of the study on the share prices of the listed companies, we subjected the data to the Hausman test to determine which of the panel method was most appropriate for use in the analysis. The result of the Hausman test is presented in Table 14 as follows:

Table 14: Result of Hausman test

<i>S/N</i>	<i>Sector</i>	<i>Chi-square Statistic</i>	<i>Prob</i>	<i>Summary</i>
1.	Construction and real estate	0.279486	0.9638	Random effect model
2.	Health care	1.426074	0.6994	Random effect model
3.	ICT	32.144408	0.0000	Fixed effect model

Source: Researchers' computation (2022)

The Hausman test is based on the hypothesis that the difference between the coefficient for the fixed and random model is not significant. This is because

the probability of the Chi-square of the Hausman test is greater or less than 0.05. If the probability is not significant, we accept the alternative and reject the null, and accept the fixed effects model, otherwise, the random effects model is used. From the result, the random effects model was used for construction and Real Estate, and Healthcare, and the fixed effects model for ICT sectors.

Table 15: Result of Regression analysis for construction and real estate

<i>Independent variables</i>	<i>Dependent variables –share prices</i>		
	<i>Coefficient</i>	<i>t-state</i>	<i>Prob.</i>
C	30.03470	13.16125	0.0000
BVPS	0.180022	0.510038	0.6134
CFO	42.79735	4.2005598**	0.0002
EPS	0.050073	3.028837**	0.0047
R ²	0.976559		
N	42		
F*	214.5130		
P>F	0.00000		
Hausman Test	0.279486	0.9638	

Source: Researchers' Computation (2022)

The regression analysis for the Construction and Real Estate (Table 15) shows an adjusted coefficient of determination (R^2) of 0.9766 which implies that the three explanatory variables (BVPS, CFO, and EPS) explained about 98 percent of the variation in share prices in the construction and real estate sector of the Nigerian economy. The P-value of the F-statistic ($F^*=214.5130$, $P=0.0000$, <0.05) shows that it is statistically significant, indicating the joint validity of all the variables used for the construction and real estate sector model. The coefficient of the variables reveals that BVPS ($\beta=0.180$, $t\text{-cal}=0.510$, $P=0.6134$, >0.05), CFO ($\beta=42.797$, $t\text{-cal}=4.205$, $P=0.0002$, <0.05) and EPS ($\beta=0.50$, $t\text{-cal}=3.0288$, $P=0.0047$, <0.05) shows a positive influence on share prices, indicating that as BVPS, CFO and EPS change by 1 percent, share prices will change by 0.18, 42.79 and 0.05 unit magnitude respectively. However, only CFO and EPS were statistically significant at the 0.05 level.

Utilizing the random effect model, the panel result shows (Table 16) that BVPS ($\beta=1.1205$, $t\text{-cal}=1.7682$, $P=0.0838$, <0.10) and CFO ($\beta=18.82$, $t\text{-cal}$

Table 16: Result of regression analysis for healthcare sector.

<i>Independent variables</i>	<i>Dependent variables –share prices</i>		
	<i>Coefficient</i>	<i>t-state</i>	<i>Prob.</i>
C	-0.2412	-0.007436	0.9941
BVPS	1.120518	1.768267*	0.0838
CFO	18.82453	1.860096*	0.0694
EPS	-0.021299	-0.123058	0.9026
R ²	0.695572		
N	56		
F*	13.6667		
P>F	0.00000		
Hausman Test	1.4260074	0.6994	

Source: Researchers' computation (2022)

=1.8600, P=0.0694, <0.10) has a positive and significant influence on share prices. In specific terms, the coefficient of 1.12 and 18.82 reveals that when BVPS and CFO increase by 1 percent, share prices in the healthcare sector increase by 1.12 and 18.82 percent unit point respectively. Conversely, EPS ($\beta = 0.21$, t-cal -0.123, P=0.9026, >0.10) was established to have a negative relationship with share prices, which is statistically insignificant at the 10% level. The adjusted R² shows that 69.56 percent of changes in share prices of companies in the healthcare sector are accounted for by accounting information. The P-value of the F-statistic indicates that the variables are significant determinants of share prices within the sector.

Table 17: Result of Regression analysis for ICT sector

<i>Independent variables</i>	<i>Dependent variables –share prices</i>		
	<i>Coefficient</i>	<i>t-state</i>	<i>Prob.</i>
C	2.959966	4.088099	0.0003
BVPS	0.092706	3.308375**	0.0023
CFO	11.75805	2.052383**	0.0481
EPS	-0.323715	-1.313699	0.1980
R ²	0.656773		
N	42		
F*	10.80679		
P>F	0.00000		
Hausman Test			

Source: Researchers' Computation (2022)

The regression result (Table 17) shows that BVPS ($\beta=0.092$, $t\text{-cal}=3.3083$, $P=0.0023$, <0.05) and CFO ($\beta=11.75$, $t\text{-cal}=2.052$, $P=0.0481$, <0.05) has a positive and significant influence on share prices. Specifically, the coefficient of 0.09 and 11.75 reveal that when BVPS and CFO increase by 1 percent, share prices in the ICT sector increase by 0.09 and 11.75 percent respectively. EPS ($\beta=-0.323$, $t\text{-cal}=-1.1313$, $P=0.1980$, >0.05) had a negative and statistically insignificant influence on share prices. The adjusted R^2 showed that the value relevance of accounting information in the ICT sector accounts for 65.67 percent of changes in share prices in the sector. The P-value of the F-statistic ($F^*=10.80679$, $P=0.0000$) showed that the variables are statistically significant determinants of share prices within the sector.

4.4. Discussion of Findings

The discussion on the value relevance of accounting data on share price variation is still common. On the assumption that such value relevance data cannot be one-fit-all, this study was conducted to examine comparatively the value relevance of accounting information on share prices of three (3) sector of the Nigerian economy (Construction and Real Estate, Healthcare, and ICT).

In the construction and real estate sector, the value relevance variable based on the regression results indicate that EPS and CFO information impacts more on the share price of companies in that sector than BVPS. The findings are consistent with that of karunarathne and Rajapakse (2010) and Bismark and Kingsley (2018) who found positive influence and relationship among the variables in their study.

Investors in the Healthcare and ICT sectors would find accounting information presented in the statement of financial position and the statement of cash flows for the investments decision. This is because the regression results of BVPS and CFO indicated positive and significant influence on share prices of companies operating in the sector. This is also affirmed by the studies of Bismark and Kingsley (2018) and Pathirawasam (2010) who found a similar sequence among the variables of their studies. We tabulate our findings in Table 18 as follows.

Table 18: Relevance of sectoral accounting information

<i>S/N</i>	<i>Sector</i>	<i>Accounting variables Relevance</i>	<i>Expected Action</i>
1	Construction and Real Estate	CFO and EPS P-value <0.05 BVPS P-value >0.05	Investors in this sector should rely on the result of statement of profit or loss and other

<i>S/N</i>	<i>Sector</i>	<i>Accounting variables Relevance</i>	<i>Expected Action</i>
2	Healthcare	BVPS and CFO P-value <0.05 EPS P-value>0.05	comprehension income and the Statement of cash flow Investors in this sector should rely on the results of the statement of financial position and statement of cash flow
3	ICT	BVPS and CFO P-value <0.05 EPS P-value>0.05	Investors in this sector should rely on the results of the statement of financial position and the statement of cash flow

Source: Researchers’ Compilation (2022)

Summary of hypotheses and findings are presented in Table 19 as follows:

Table 19: Summary of the hypotheses and findings

<i>Hypothesis</i>	<i>Findings</i>
H ₀₁ : There is no significant relationship between value relevance variables and the share prices of firms in three (3) sectors listed on the Nigerian stock Exchange from 2015 to 2021.	Rejected
H ₀₂ : The value relevance variables do not significantly affect the share prices of firms in three (3) sectors listed in the Nigerian stock Exchange from 2015 to 2021	Rejected

Source: Researchers’ Compilation (2022).

5. CONCLUSIONS

The study was conducted to seek clarification as to whether the value relevance of accounting information on share prices of listed companies is “one –fit All’ issue. That is, the same accounting information would be relevant in influencing share prices for all companies. Three (3) sectors – construction and Real Estate, Healthcare, and ICT were studied using panel data spanning 2015 to 2021.

The results affirm the value relevance of accounting information as a determinant of share prices, but refute ‘One-Fit-All’ assumption. As the summary in Table 4.19 shows, investors in different sectors require different accounting information for their investment decisions.

5.1. Limitations of the study

This study is time-bound and concentrated only on listed companies selected for the study with a clear assumption that other determinants of share prices in the sectors are accounted for by the error term of the model.

As with all historical data, as well as accounting policy choices of management when preparing annual reports, the data used for the study may not be entirely free from bias. However, following the standard procedures required for time-series data treatment, we believed the results and findings are suitable for policy analysis.

5.2. Business implications of the findings

The study provides an insight into the fact that accounting information has value relevance in determinants the share prices of listed companies. Thus, an understanding of which accounting number drives share prices would assist investors in the informed economic decision, which the study findings clearly explained.

5.3. Suggestions for further research

This study was conducted on three (3) sectors of the Nigerian economy (construction, real estate, healthcare, and ICT), further studies can also compare consumer and industrial goods sectors, and oil and gas sectors of the Nigerian economy. Researchers in other countries can replicate the same study in their economy to ensure a clear link between theory and practice is established in accounting, finance, and economics literature.

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Declaration of conflict of interest

There exist no ethical issues bothering the study and sponsorship regarding funding and related issues of contradictions.

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