The Relationship Between Accounting Information and Stock Price in Listed Service Companies in Nigeria

Linda Chinwe Victor-Akpan

Department of Accounting, Faculty of Management Sciences, University of Uyo, Uyo, Nigeria
email: lindavictorakpan@gmail.com

Abstract: *This study examined the relationship between accounting information and stock price of listed service companies in Nigeria for a period of 10 years from 2011 to 2020. The dependent variable being stock price while the independent variables are earnings per share, firm size and acid test ratio. This study adopted an ex-post facto research design as it relies on secondary data extracted from the annual reports of 10 listed service companies in Nigeria. The daily stock prices for these companies were sourced from the Nigerian Exchange Group for the stated period. Pearson product moment correlation and descriptive statistics was used as the method of data analysis, with the aid of Statistical Package for Social Sciences (SPSS). The study revealed that earnings per share, firm size and acid-test ratio have significant positive relationship with stock price of listed service companies in Nigeria.   Based on the findings of the study, it is concluded that accounting information have a positive significant relationship with the stock price of listed service companies in Nigeria. It was therefore recommended that since accounting information has been found as one of the causes of stock price volatility, it is therefore the responsibility of management to ensure proper preparation and presentation of accounting information to enable potential investors make economic and investment decisions. It is also recommended that proper regulations of accounting information should be put in place and strictly followed as accounting information has the ability to cause either an increase or decrease in the stock prices of listed service companies in Nigeria.*

Keywords: accounting information, listed service companies, stock price

INTRODUCTION

The importance of accounting information to every investor cannot be overlooked. Reliable accounting information is needed by the investors to make essential decisions concerning investments into any company. The main aim of any investor trading on the stock market is to make gains. This is why every intelligent investor takes time to study the stock market before investing. The efficiency of the stock market in any economy serves as a catalyst to economic growth and development. The Nigerian Exchange Group formerly known as Nigerian Stock Exchange (NSE) was established in 1961 to facilitate the improvement of the capital market (Maku & Atanda, 2010). Accounting information obtained from the financial

statement is expected to provide relevant and reliable information. Beisland (2009) opined that one of the major objectives of financial reporting is to provide investors with information relevant for estimating company value.

Stock prices are relevant measurement of the returns accruing to the stakeholders; therefore, the value attached to shares serves as a major boost to both existing and prospective investors in the capital market (Glezakos, et al, 2012). In the capital market, share prices are influenced by variety of factors. These factors could be accounting or non-accounting information. Some use non-financial information in order to make investment decisions; conventional investors give more weight to financial information. In Nigeria section 296 of companies and allied matters act 1990 (as amended) mandates all public limited companies to make public the financial status of the firm within a specific accounting period. Management is responsible for the preparation of financial statement based on the accounting records of the organization which reflects the nature and operations of the entity and expected to be in conformity with Generally Accepted Accounting Principles (GAAP).

However, according to the International Accounting Standard Board (IASB), general purpose financial reports are not designed to show the value of a reporting entity; but they provide information to help existing and potential investors, lenders and other creditors to examine the value of the reporting entity. Investors and other users of financial reports rely on models derived from financial theories to make investment decisions. There are a number of theories relating to the decision-making process of equity investors this include capital asset pricing model and fundamental analysis models among others.

Although accounting information provides a basis by which users of financial information can make economic, financial and investment decisions, one will like to know if there is a relationship between accounting information and stock price in listed service company in Nigeria. Also, despite the fact that the Nigerian government through the Central Bank of Nigeria and the Security and Exchange Commission has been playing their roles in creating a stable market for investors, one would like to know if the accounting information presented on the financial statements is responsible for the stock price volatility in the listed service companies in Nigeria. Again, the observation of investors and finance managers on the effect of accounting variables on stock prices has necessitated the study of listed service companies in Nigeria.

The main aim of the study is to examine the relationship between accounting information and stock price in listed service companies in Nigeria. The specific objectives of the study are to determine the level to which earning per share has a relationship with stock price in listed service companies in Nigeria; to examine the extent to which firm size has a relationship with stock price in listed service companies in Nigeria; and to ascertain the level to which acid test ratio has a relationship with stock price in Listed Service companies in Nigeria;

The research is structured as follows section one shows the introduction, section two reviews the suitable literature, section three present hypotheses research models, section four sets out a discussion of the findings, and section five shows key conclusion and recommendations.

LITERATURE REVIEW

Accounting information can be defined as any information that is sourced from the accounting system of a particular firm and can be shown in a specified report. Accounting information are the quantitative information presented in financial statements (Oyerinde, 2011). The financial statements include the statement of financial position, statement of comprehensive income, statement of changes in equity and statement of cash flow. Share price is the price of a single share of a number of saleable stocks of a company, derivative or other financial assets. Market share price is the price at which market assigns to the company's stock. Residual income valuation models of Edwards and Bell (1961) and Ohlson (1995) explain the relationship between accounting information and market price. Ohlson (1995) claims that under certain conditions share price can be expressed as a weighted average of book value of earnings. Ohlson's clean surplus theory shows that the market value of the firm can be expressed in terms of income statement and financial position items. The model has important implication for this study as it specifies the relation between equity values and accounting variables such as earnings.

The relationship between accounting information and stock price have received a lot of attention. Ball and Brown (1968) originally researched the correlation between accounting information and stock price, they found that a company had excess earnings and investors can get abnormal returns. They asserted that the company's financial reporting and accounting information could influence stock price. Hendricks (1976) asserts that the main reason for which accounting information is generated is to facilitate decision making. However, for financial reporting to be effective among other requirements, it should be relevant, complete and reliable. These qualitative characteristics require that the information must not be unfair. Thus, accounting information should give a decision maker the ability to predict future action. Francis and Schipper (1999) define market value relevance as a statistical association between prices or returns and financial information. McLean & Zhao, 2014 asserted that accounting-based measures explain market prices in a good way, under the efficient market assumption that pricing reflects available information.

In general, the relationship between accounting information in the financial statements and the stock returns have been significantly examined on a global scale. Lip et al. (1998) indicates that a non-linear relationship between stock returns and accounting earnings, the difference between losses and gains and the difference among firms. Dimitropoulos and Asteriou (2009) focused on the relationship between accounting information on financial statements and financial indicators or stock prices of listed firms in Greek stock exchange. In Australia, researches on this issue have been done adopting different models. In particular, Abayadeera's study (2010) is merely based on Ohlson's (1995) price model. The study concluded that book value is the most significant factor and earnings are the least significant factor in determining share prices. Nayeri (2012) examined the factors affecting the value relevance of accounting information for the investors in the Tehran Stock Exchange over the period of six years using the Ohlson model. The study discovered that company size, earnings stability and company growth influence the value relevance of accounting information. Swart & Negash (2009) examined the Ohlson (1995) model using data for 129 firms on the Johannesburg Securities Exchange over twelve-year period. However, the cross-sectional results indicate that the model does not establish a significant relationship share price and accounting information. Meanwhile, Tran et all. (2015) applied the Easton and Harris model (1991), but the correlation was weak and only implemented on 108 firms on Hanoi stock exchange (HOSE). Ramadhani et al (2022) assessed the effect of accounting information and stock returns in Indonesia Stock Exchange using error correction model. The results showed that earnings per share had a positive and significant relationship with stock returns.

Abiodun (2012) investigated the value relevance of accounting information in Nigeria and found that earnings is more value relevant than book values. Olugboyega & Atanda (2014) conducted research to examine the value relevance of accounting information in Nigeria. The study revealed that accounting information of quoted companies in Nigeria is value relevant. Oyerinde (2011) investigated the value relevance of accounting data in the Nigerian Exchange Group   with the view of determining whether accounting information has the ability to capture data that affect share prices. The findings showed that there is a significant relationship between accounting information (earnings, book value of shares and divided) and share prices. Edoka & Ijeoma (2024) examined the effect of accounting information on stock price fluctuations of listed service firms in Nigeria. The results indicate that return on assets has a negative and statistically significant effect on share price. In contrast, earnings per share was found to have a positive and significant effect on share price while operating cash flow did not show a significant impact on share price. According to findings in the literature, there is evidence of the relationship between accounting information and stock returns. However, these studies are mainly based on different theories, models and data collection methods. Hence a need for this study.

METHODOLOGY

The ex-post facto research design was adopted in this study. This research design was desirable for this study because it permits the use of data determined by pre-existing conditions and events that cannot be manipulated. The population of this study consist all listed service companies quoted on the floor of the Nigerian Exchange Group (NGX) as at 2021 financial year. The sample for this study was drawn using purposive sampling technique. By this the researcher rely on his/her judgment in choosing the sample size of 10. The sample size was drawn based on the availability of information from the population used for the study. The data used for this study were obtained from secondary data and it was gotten from published financial statements of the companies under review for the period of ten (10) years from 2011 to 2020. The models used in this study were as follows:

$$SP \quad = \quad f(AI) \quad\text{-}\quad\text{-}\quad\text{-}\quad\text{-}\quad\text{-}\quad\text{-}\quad (i)$$

Where:

SP   =   Stock Price

AI   =   Accounting Information

SP is measured by the share prices of the companies while AI is proxied by Earnings Per Share (EPS), Firm Size (FMSZ) and Acid test ratio (ACTR.

Therefore, the model is restated as follows:

$$SP_{i,t} \quad = \beta_o + \beta_1 EPS_{i,t} + + e_{i,t} \quad\text{-}\quad\text{-}\quad (ii)$$
$$SP_{i,t} \quad = \beta_o + \beta_1 FMSZ_{i,t} + e_{i,t} \quad\text{-}\quad\text{-}\quad (iii)$$
$$SP_{i,t} \quad = \beta_o + \beta_1 ACTR_{i,t} + e_{i,t} \quad\text{-}\quad\text{-}\quad (iv)$$

Where:

β_o = Constant, β_1 = Coefficient of variables,   e = Error term, t   = Current period

$EPS_{i,t}$ =   Earnings Per Share of firm i in period t

$FMSZ_{i,t}$ = Firm Size of firm i in period t

$ACTR_{i,t}$ = Acid Test Ratio of firm i in period t

Descriptive statistics and Pearson Product Moment Correlation (PPMC) was used to analyze the data of the study. These techniques will help to ascertain the nature and pattern of the relationship between the independent and dependent variables. This analysis was carried out using Statistical Packages for Social Sciences (SPSS).

Table 1:Summary of Description of Variables

Variables	Type	Measurement	Apriori Expectation
Stock Price (SP)	Dependent	Tobin's q model	
Earnings Per Share (EPS),	Independent	ROA = Net Income divided by Total Assets	Positive relationship
Firm Size (FMSZ)	Independent	Total debt divided by Total Assets	Positive relationship
Acid test ratio (ACTR)	Independent	Current Assets less Inventory divided by Current Liabilities	Positive relationship

Source: Researcher's Compilation, (2025)

The independent variables used in this study are: Earnings per Share (EPS), Firm Size (FMSZ), and Acid test ratio (ACTR). Stock Price (SP) is the dependent variable. The description of variables is summarized in Table 1. The decision rule for this study states that the null hypothesis will be accepted if the p-value is greater than 0.05 ($p>0.05$). Otherwise, the reject the null hypothesis when the p-value is less than 0.05 and accepts the alternate hypothesis.

DATA PRESENTATION, ANALYSIS AND FINDINGS

Table 2. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
STOCK PRICE	100	.1200	6.9500	1.914000	1.6344622
EARNINGS PER SHARE	100	-3.6110	.8315	-.077575	.6664355
FIRM SIZE	100	.2534	3.4540	1.628753	.6919037
ACID TEST RATIO	100	.0800	2.9900	.958800	.6746391
Valid N (listwise)	100				

Source: Researcher's Computation, 2022

Descriptive statistics describe patterns and general trends in a data set. It is used to examine variables at a time. Results of the descriptive statistics shown in Table 2, it includes minimum value, maximum value, means and standard deviation. The stock price had the mean of ₦1.9, with standard deviation of ₦1.6 for the companies during the years under review. The minimum stock price was ₦0.12; with the maximum of ₦6.95. Earnings per share had the mean of -0.077%, with standard deviation of 0.66%. It also showed the

minimum and maximum of -3.61% and 0.83% respectively. The descriptive statistics for firm size had the mean value of 1.62; with the minimum and maximum of 0.25 and 3.45 respectively. The descriptive statistics for acid test ratio, as shown in revealed the mean of 0.96. The minimum and maximum for acid test ratio were 0.08 and 2.99 respectively.

Table 3: Coefficients

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	EARNINGS PER SHARE	0.734728228	1.361047
	FIRM SIZE	0.739964688	1.351416
	ACID TEST RATIO	0.653887919	1.529314

a. Dependent Variable:
Stock Price

Source: Researcher's Computation, 2022

In evaluating multicollinearity, tolerance and the variance inflation factor (VIF) were computed (Table 3). Higher value of VIF adversely affects the results of the regression analysis, while lower value is the desirable. This test helps to check if the correlation among the independent variable is high or not. Tolerance indicates the unexplained variability among the independent variables. A smaller value (less than .10) indicates that the multiple correlation with other variables is high, suggesting the possibility of multicollinearity. Variance inflation factor (VIF) is the inverse of the Tolerance value (1 divided by Tolerance). VIF values above 10 would be of concern, indicating multicollinearity. The test conducted in Table 3 indicates the absence of violations of the assumption of multicollinearity on all the variables used in the study (that is, VIF values <10 and Tolerance >0.10). The hypotheses formulated for the study was tested in this section, as guided by the decision rule.

Test of Hypothesis One

H_{o1}:   Earnings per share has no relationship with stock price of listed service companies in Nigeria.

Table 4. Correlation of earnings per share and stock price

		Stock Price	Earnings Per Share
Stock Price	Pearson Correlation	1	.376[**]
	Sig. (2-tailed)		.000
	N	100	100
Earnings Per Share	Pearson Correlation	.376[**]	1
	Sig. (2-tailed)	.000	
	N	100	100

Source: Researcher's Computation, 2022

The result in Table 4 revealed the correlation coefficient of 0.376 and the p-value of 0.000 for changes in EPS. Based on the decision rule, the p-value is less than 0.05, implying that earnings per share have a relationship with stock price of listed service companies in Nigeria. Hence, the null hypothesis one is rejected.

Test of Hypothesis Two

H_{o2}:   Firm size has no relationship with stock price of listed service companies in Nigeria.

Table 5: Correlations of firm size and stock price

		Stock Price	FIRM SIZE
Stock Price	Pearson Correlation	1	.317**
	Sig. (2-tailed)		.001
	N	100	100
FIRM SIZE	Pearson Correlation	.317**	1
	Sig. (2-tailed)	.001	
	N	100	100

Source: Researcher's Computation, 2022

The result in Table 5 revealed the correlation coefficient of 0.317 and the p-value of 0.001 for firm size. Based on the decision rule, the p-value is less than 0.05, implying that firm size has a significant relationship with stock price of listed service companies in Nigeria. Hence, the null hypothesis one is rejected.

Test of Hypothesis Three

Ho3:   Acid test ratio has no relationship with stock price of listed service companies in Nigeria.

Table 6: Correlations of acid test ratio and stock price

		Stock Price	Acid Test Ratio
Stock Price	Pearson Correlation	1	.481**
	Sig. (2-tailed)		.000
	N	100	100
Acid Test Ratio	Pearson Correlation	.481**	1
	Sig. (2-tailed)	.000	
	N	100	100

Source: Researcher's Computation, 2022

The result in Table 6 revealed the correlation coefficient of 0.481 and the p-value of 0.000 for acid test ratio. Based on the decision rule, the p-value is less than 0.05, implying that acid test ratio has a significant

Publication of the European Centre for Research Training and Development-UK

relationship with stock price of listed service companies in Nigeria. Hence, the null hypothesis one is rejected.

DISCUSSION OF FINDINGS

Table 7: Correlations of accounting information and share price

		Stock Price	AI
Stock Price	Pearson Correlation	1	.491[**]
	Sig. (2-tailed)		.000
	N	100	100
AI	Pearson Correlation	.491[**]	1
	Sig. (2-tailed)	.000	
	N	100	100

Source: Researcher's Computation, 2022

The result in Table 7 revealed that accounting information has a significant relationship with stock price of listed service companies in Nigeria. This can be further explained that the application of accounting information lead to an increase in the value of the company. In analyzing the coefficient of determination, it helps how the extent one variable is explained by another variable. From the coefficient of determination figure ($r^2 = 0.24$), it is explained that 24% change in the companies' stock price is caused by accounting information.

The findings revealed that changes in EPS have a positive relationship with the stock price of listed service companies in Nigeria; having the coefficient of 0.376 and the p-value of 0.000. This can be explained that profitability of service companies as measured in the profit for the year is reflected with a corresponded increase in the companies' value. This is in line with the studies of Oyerinde (2011), Ramadhani et al. (2022) and Edoka (2024). The study also revealed that firm size has significant and positive relationship with the stock price of listed service companies in Nigeria. This is in line with the studies of Nayeri (2012). This implies that as the value of the firm increases, it is reflected in the share price of the companies in the stock market. It was further revealed that acid test ratio has a significant positive relationship with stock price of listed service companies in Nigeria; having correlation coefficients of 0.481 and the p-value of 0.000. This revealed that there is a moderate and significant relationship. This implies that the liquidity of the companies has a connection with the value of the shares in the market.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

The objective of this study was to determine the relationship between stock price and accounting information of listed service companies in Nigeria. Ex-post facto research design was used for the study. The data used for this study was from secondary sources. Pearson Product Moment Correlation and Descriptive Statistics was used as the method of data analysis, with the aid of Statistical Package for Social Sciences (SPSS). The findings of the study are summarized thus:

    i.   Earnings per share have a positive relationship with the stock price of listed service companies in Nigeria.

ii.   Firm size has significant and positive relationship with the stock price of listed service companies in Nigeria.

iii.   Acid test ratio has a significant positive relationship with stock price of listed service companies in Nigeria.

Based on the findings of the study, it is concluded that accounting information has a positive relationship with the stock price of listed service companies in Nigeria. The researcher hereby recommends that since accounting information has been found as one of the causes of stock price volatility, it is therefore the responsibility of management to ensure proper preparation and presentation of accounting information to enable potential investors make economic and investment decisions. It is also recommended that proper regulations of accounting information should be put in place and strictly followed as accounting information has the ability to cause either an increase or decrease in the stock prices of listed service companies in Nigeria

REFERENCES

Abayaddeera (2010). Value relevance of information in hi-tech industries in Australia: Accounting information and intangible assets disclosures, *Global review of Accounting and Finance*, 1 (1),77-99

Abiodun, B.Y. (2012). Significance of accounting information on corporate value of firms in Nigeria. *Research Journal of Organizational Psychology & Educational Studies*, 1 (2), 105-113

Ball, R. & Brown, P. (1968), An empirical evaluation of accounting income numbers. *Journal of Accounting Research,* 6(2), 159-17

Beisland, L.A. (2009), A review of the value relevance literature. *The Open Journal*, 2, 7-27.

Dimitropoulous, P.E & Asteriou, D. (2009). The value relevance of financial statements and their impact on stock prices, *Managerial Auditing Journal*, 24 (3), 248-265

Edoka, B.C. & Ijeoma, N.B. (2024). Accounting information and stock price fluctuations among listed service firms in Nigeria, *Journal of Global Accounting,* 10(3): 220-245

Edwards , E.O. & Bell, P.W (1961). *The theory and measurement of business income*, University of Califonia Press, Berkeley and Los Angeles.

Easton, P. D. and T. S. Harris (1991), Earnings as an explanatory Variable for Returns, *Journal of Accounting Research*, 29(1), pp. 19-36.

Francis, J., &Schipper, K. (1999). Have financial statements lost their relevance? *Journal of Accounting Research Supplement*, 37(12).

Glezakos, M., Mylonakis, J., & Kafouros, C. (2012). The impact of accounting information on stock prices: evidence from the Athens stock exchange. *International Journal of Economics and Finance*, 4(2), 56–68.

Maku, O. E & Atanda A. A. (2010). Determinants of stock market performance in Nigeria: Long-run Analysis. *Journal of Management and Organizational Behavior*, 1(3), 1-16

McLean, R.D., & Zhao, M. (2014).The business cycle, investor sentiment and costly external finance. *The Journal of Finance*, 69(3)

Nayeri, M.D., Ghayoumi, A.F & Bidari, M.A (2012). Factors affecting the value relevance of accounting information. International *Journal of Academic Research in Accounting, Finance and Management Sciences,* 22 (2), 76-84

Hendrick, J.A. (1976). The impact of human resource accounting information on stock investment decisions: an empirical study. *The Accounting Review*, 51(2)

Lipe, R. C., Bryant, L., & Widener, S. K. (1998). Do nonlinearity, firm-specific coefficients, and losses represent distinct factors in the relation between stock returns and accounting earnings? *Journal of Accounting and Economics,* 25(2), 195-214. https://doi.org/10.1016/S0165-4101(98)00022-6

Ohlson, J. A (1995). Earnings, book values and dividends in equity valuation, *Contemporary Accounting Research,* 11, spring

Olugboyega, A.A. & Atanda, O.A. (2014). Value relevance of financial accounting information of quoted companies in Nigeria: A trend analysis. *Research Journal of Finance and Accounting*, 5 (8)

Oyerinde, D.T. (2011). Value relevance of accounting information in the Nigeria stock market. Ph.D Thesis, Covenant University, Ota, Nigeria.

Ramadhani, R., Habbe, A.U. & Damayanti, R. A. (2022), Analysis the effect of accounting information on stock returns using the error correction model (ECM), *Journal of Research in Business and Management*, 10 (10): 72-76

Swart, G. & Negash, M. (2009). An empirical examination of Ohlson (1995) model. School of Accountancy, University of the Witwatersrand, Johannesburg.

Tran, T.T.H., Nguyen, N.D., & Ho, Q,B.(2015). The relationship between accounting information reported in financial statements and stock returns - empirical evidence from Vietnam. *International Journal of Accounting and Financial Reporting,* 5(1)