# DIGITALES ARCHIV

ZBW – Leibniz-Informationszentrum Wirtschaft ZBW – Leibniz Information Centre for Economics

Uniamikogbo, E.; Ezennwa, E. O.; Bennee, E.

#### Article Influence of accounting information on stock price volatility in Nigeria

Accounting and taxation review

**Provided in Cooperation with:** University of Benin, Benin City, Nigeria

*Reference:* Uniamikogbo, E./Ezennwa, E. O. et. al. (2018). Influence of accounting information on stock price volatility in Nigeria. In: Accounting and taxation review 2 (4), S. 113 - 124.

This Version is available at: http://hdl.handle.net/11159/4412

Kontakt/Contact ZBW – Leibniz-Informationszentrum Wirtschaft/Leibniz Information Centre for Economics Düsternbrooker Weg 120 24105 Kiel (Germany) E-Mail: *rights[at]zbw.eu* https://www.zbw.eu/

#### Standard-Nutzungsbedingungen:

Dieses Dokument darf zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden. Sie dürfen dieses Dokument nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, aufführen, vertreiben oder anderweitig nutzen. Sofern für das Dokument eine Open-Content-Lizenz verwendet wurde, so gelten abweichend von diesen Nutzungsbedingungen die in der Lizenz gewährten Nutzungsrechte. Alle auf diesem Vorblatt angegebenen Informationen einschließlich der Rechteinformationen (z.B. Nennung einer Creative Commons Lizenz) wurden automatisch generiert und müssen durch Nutzer:innen vor einer Nachnutzung sorgfältig überprüft werden. Die Lizenzangaben stammen aus Publikationsmetadaten und können Fehler oder Ungenauigkeiten enthalten.



ζRM

https://savearchive.zbw.eu/termsofuse

#### Terms of use:

This document may be saved and copied for your personal and scholarly purposes. You are not to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute or otherwise use the document in public. If the document is made available under a Creative Commons Licence you may exercise further usage rights as specified in the licence. All information provided on this publication cover sheet, including copyright details (e.g. indication of a Creative Commons license), was automatically generated and must be carefully reviewed by users prior to reuse. The license information is derived from publication metadata and may contain errors or inaccuracies.





#### ISSN: 2635-2966 (Print), ISSN: 2635-2958 (Online).

©International Accounting and Taxation Research Group, Faculty of Management Sciences, University of Benin, Benin City, Nigeria. Available online at <u>http://www.atreview.org</u>

#### Original Research Article

# Influence of Accounting Information on Stock Price Volatility in Nigeria

E. Uniamikogbo<sup>1</sup>, E. O. Ezennwa<sup>2</sup> & E. Bennee<sup>3</sup>

<sup>1</sup>Department of Accounting, Rhema University, Aba, Abia State, Nigeria

<sup>2</sup>Bursary Department, Rhema University Aba, Abia State, Nigeria

<sup>3</sup>Department of Accounting, Nnamdi Azikiwe University, Awka, Anambra State, Nigeria

\*For correspondence, email: emmasunny4u@gmail.com

Received: 05/11/2018

Accepted: 31/12/2018

#### Abstract

This study investigates the influence of accounting information on stock price volatility in Nigeria. The cross-sectional research design technique was adopted in the study. The population of the study consists of 186 companies listed on the Nigerian Stock Exchange as at 31<sup>st</sup> December, 2017, from which a sample size of twenty two (22) companies was determined judgmentally and selected using the simple random sampling technique. The secondary source of data collection method was used to generate data from the twenty two (22) annual reports and accounts of the sampled companies for a period of five years (2013-2017). Data generated from the annual reports and accounts were analyzed using descriptive statistic and Ordinary Least Square (OLS) regression. Our findings revealed that earnings per share and dividend per share have a negative and significant effect on stock prices while book value per share has a positive and significant effect on stock prices in Nigeria. The study therefore recommends that corporate accounting information disclosure should be more transparent, timely, and informative for investors' to have improved confidence in accounting information presented by management for informed decision making.

**Keywords:** Accounting information, stock price, volatility, value relevance, earnings per share.

#### JEL Classification Codes: G12, G14, G21, G24

This is an open access article that uses a funding model which does not charge readers or their institutions for access and is distributed under the terms of the Creative Commons Attribution License. (http://creativecommons.org/licenses/by/4.0) and the Budapest Open Access Initiative (http://www.budapestopenaccessinitiative.org/read), which permit unrestricted use, distribution, and reproduction in any medium, provided the original work is properly credited.

© 2018. The authors. This work is licensed under the Creative Commons Attribution 4.0 International License

*Citation:* Uniamikogbo, E., Ezennwa, E.O., & Bennee, E. (2018). Influence of accounting information on stock price volatility in Nigeria. Accounting and Taxation Review, 2(4), 113-124

#### **1.0 INTRODUCTION**

For over four decades, a lot have been said and written about the relationship between accounting information and stock prices. The stream of researches investigating this relationship has been termed "value relevance" of accounting information. Thus value relevance represents the association between the information impounded in the accounts and the information impounded by the market. Dahmash, Durand, and Watson (2009) posit that value relevance measures the joint response of earnings or some other measures of the accounting and market returns to information arrival.

Nilsson (2003)defines accounting information from four perspectives: Firstly, the predictive view of value relevance posits that accounting number is relevant if it can be used to predict future earnings, dividends, or future cash flows. Secondly, the information view of value relevance sees value relevance as measured in terms of market reactions to new information. Thirdly, the fundamental analysis view of value relevance posits that accounting information is relevant in valuation if portfolios formed on the basis of accounting information are associated with abnormal returns and fourthly, the measurement view of value relevance posits that accounting information is value relevant if it has the ability to capture or summarise information that affects equity values. The predictive effect of accounting information can be measured by the statistical relations between information that financial statements present and stock market values or returns (Suadiye, 2012).

Accounting information disclosed in public accounting reports is critical to the analysis of temporal liquidity positions of equity Disclosure markets. of accounting information arguably reduces information asymmetries among investors (Amihud & Mendelson, 1986). Black (2000) and Ball (2001)that timely financial argue accounting disclosure system is a prerequisite to the very existence of efficient stock markets in which stock prices to a considerable extent reflects all public information and incorporates private information as well as communicate the information set to managers, current and potential investors.

However, Otavio and Luis (2009) posit that several disclosing methods are available and the most common methods are the following: Formal financial statements, information between parentheses, supplementary explanatory notes. statements and exhibits, Audit report, Annual administration report and management discussion and analysis reports. Several reasons have been adduced to why an increase in disclosure of accounting information may reduce stock prices. Accounting information disclosure helps in mitigating uncertainty in the stock price by reducing the magnitude of the impact of news about a firm's performance, which would reduce stock price volatility (Lang & Lundholm, 1993; Bushee & Noe, 2000). The market microstructure theory also suggests that increasing the amount of public information disclosure is likely to reduce information asymmetries in the market that result in pronounced price changes in response to changes in demand for the stock (Diamond & Verrecchia, 1991). Recently, there were criticisms at the level on whether global accounting information has value relevance on stock prices. Numerous studies in developed countries have shown that accounting information and numbers have lost their value relevance (Dontoh, Radhakrishnan & Ronen, 2000; Core, Guay & Buskirk, 2003). The levelled criticisms are based on the following; the transformation in firm's structure and activities, fraud, window dressing of financial report and rapidly changing business environment.

In Nigeria, after the global financial crisis that hit the stock market with a massive decline in stock prices, it has been difficult for the market to bounce back to the precrisis period where investors were much more involved in the stock market going by the value of market capitalization and the all share index for that period. It is believed a declining investors' there is that confidence in accounting numbers due to of fraudulent financial several cases reporting recently witnessed in the Nigerian Banking sector. Several studies (Jeong & Kimberly, 2014; Adaramola & Oyerinde, 2014; Abayadeera, 2010; Abubakar, 2010; Black & White, 2003) have examined the challenge of the continual relevance of accounting information, though their findings have been mixed and inconclusive. It is against this backdrop that this study seeks to examine the relationship between accounting information and stock prices in the post-financial crisis period in Nigeria. The inconclusive research evidence necessitates the need for the study.

The key objective of this study is to examine the relationship between accounting information and stock prices in the post-financial crisis period in Nigeria using the Residual Income Model (RIM) by Ohlson (1995) in examining the link between accounting numbers and stock prices.

However, the precise objectives are to: examine the effect of accounting information on earnings per share on stock price; determine the effect of accounting information on dividend per share on stock price; and investigate the effect of accounting information on book value per share on stock price.

This paper is structured into five sections. Following the introduction, section two discusses the literature review under three sub-heads as: conceptual frameworks. frameworks empirical theoretical and studies. Section three harps on the methodology. This is followed by section four which focuses on estimation results and discussion of findings, and finally, section five presents the conclusion, and recommendations.

#### 2.0 LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

## Conceptual Framework on Accounting Numbers

The demand for accounting numbers is represented by the user's needs and the pressure they exert on the accounting system. The offer of the accounting information represents all the information obtained within the accounting system, as well as the types and ways of disseminating of such information. Due to the increasingly important role that the financial accounting numbers play today as "social good", accounting has consolidated its central place within the information system of any entity, be it public or private, clearly bringing its "contributions in an area of complex social, multilateral and multidimensional relations. In principle, the objectives of the financial accounting numbers are directly correlated with the users' information decision-making requirements (Toma, 2001). The coverage of the users' needs represents the main conditioned factor that must be taken into account when setting the targets of any information system, given that the exposure of the accounting information goals and the users' needs are always in close relation. On hand, the users require mainly one information to guide their own decision processes, which in turn serve to exercise effective control over the fulfillment of the legal obligations and the efficient management of the resources.

Obtaining accounting information takes place after processing and interpreting the data based on certain accounting principles and concepts, using a variety of methods and accounting policies to reflect an entity's economic reality. The accounting numbers are produced by expert accountants based on the rules and regulations in force. Both demand and supply of accounting numbers are subject to a number of factors such as: normalisation of the accounting system, the quantity and quality of the accounting information, as well as the costs of production, dissemination and processing of the numbers. In order to meet its mission and users' needs, financial accounting numbers must meet two fundamental qualitative characteristics: relevance and the exact representation. Relevance considers the fact that the information is necessary to the users in order to sustain the economic decisions, so it must be significant and have the ability to generate a difference in the users' decisions. The financial information presented by the annual financial statements should be able to generate a difference in making decisions that have predictive value. confirmatory value or both. Financial information is significant if its omission or misstatement could influence the users' economic decisions, based on the financial statements. Therefore, the materiality threshold is very important, and it represents a limit below which the information is no longer relevant. То be an exact representation, a financial accounting piece of information must be complete, neutral and free from errors. A complete description includes all the information and explanations necessary for a user to understand the phenomenon described. A neutral description is one that cannot bear influences in selecting and presenting the financial information. An error-free description is one in which there are no errors or omissions in describing the phenomena and the procedures used to generate the information reported was selected and applied without error in the Besides these fundamental process. qualitative characteristics is other enhancing qualitative characteristics such as comparability, verifiability, timeliness and understandability which are also considered as they are qualitative features that enhance the faithful representation and relevance of accounting information (Mbobo & Ekpo, 2016; Zheng, 2010).

#### **Stock Price**

A share price is the price of a single share of a company's stock. However, share prices in a publicly traded company are usually determined by market forces of demand and supply. Share price may be volatile because of its dependence on the expectations of buyers and sellers.

#### **Review of Theories**

#### **Signaling Theory**

The Signaling theory was propounded by Andrew Michael Spence in 1973. The signaling theory took root in the idea of asymmetric information (a deviation from perfect information), which says that in some economic transactions, inequalities in access to information upset the normal market for the exchange of goods and services. Spence (1973) proposed that two parties could get around the problem of asymmetric information by having one party send a signal that would reveal some piece of relevant information to the other party. That party would then interpret the signal and adjust her purchasing behaviour accordingly; usually by offering a higher price than if he/she had not received the signal. Signaling theory is useful for describing behavior when two parties (individuals or organizations) have access to different information. Typically, one party, the sender, must choose whether and how to communicate (or signal) that information, and the other party, the receiver, must choose how to interpret the signal.

Signaling theory refers to the information content hypothesis. Corporate announcements are hypothesised to have information content. Indeed. firms communicate to display who they are. For example, managers use cash dividend announcement to signal changes in their expectation about the future prospect of the company when the markets are imperfect. The investments and financing decisions of a firm are made at the management's discretion. It is argued that managers of companies use earnings as a signaling tool to convey information about the prospects of their companies, and that like dividends, if earnings convey useful information, this will be reflected in stock price changes immediately following а public announcement (Melisa, 2013). An increase in shares issued by the company reduces the price of its shares; Stock splits cause an increase in the number of shares issued and a reduction in share price while issuing more debt instruments leads to price increase actions. Stock splits are corporate actions which affect the number of shares outstanding of publicly traded companies and the range of their market price, but do not affect the market capitalization of the company or the wealth of the existing stockholders. Thus. bv stock split companies increase the number of shares outstanding by a certain ratio and consequently the price per share drops at the ratio of increased number of shares. The most usual stock split is 2 for 1 (2:1), which means that the number of shares is doubled and the price per share is reduced for 50% so that the total market value of stockholders remains the same.

Berhardt, Douglas and Robertson (2005) observed that the markets are rarely in equilibrium, that information has a cost and that it does not reach everyone at the same time. When a firm announces its earnings or dividends, it sends a signal to the investor; and if they react to this signal as expected, this will affect the share prices of the listed company (Melisa, 2013).

#### **Empirical Studies**

Jeong and Kimberly (2014) examined changes in earnings and book values for stock prices and the ability of earnings to predict future operating cash flows in Korea, when there is a substantial change in a country's accounting standards and surrounding business and economic environment. The study tests the value relevance of accounting information consistent with Collins, Maydew and Weiss (1997) and Kim and Kross (2005). Results from the study showed increased combined value relevance of current earnings and book value for stock prices as well as for earning and book value incrementally over 1982 to 2011.

Park (2015) compared the stock price relevance of the Ohlson model and the extended Ohlson model. Park also compares the stock price relevance of those models according to the business cycle and the industry in Korea. The results are as follows; firstly, both the basic model and the extended models prone to have stock price relevance, and the debt ratio affects the stock price in reverse U shape. Secondly, the stock price relevance and the changes in the stock price relevance are different in the industry in both the basic model and the extended model. Thirdly, the significance of coefficients and the stock price relevance changes aren't so different in the business cycle stage. Lestari and Takada (2014) examined the value relevance of accounting information in Indonesian market during International Financial Reporting Standards (IFRSs) convergence process. Specifically, they investigated whether value relevance improves after significant revisions of standards during the period from 2005 to 2012. Using price model and return model, they examined the accounting information value relevance of Indonesia listed firms. As predicted. they found that the value relevance of accounting information increased after the accounting standards change. They further documented some determinants of value relevance, such as the less informative ness of negative earnings and the more value relevance both of large firms and firms with a higher level of good corporate governance before and after accounting standard change.

Shehzad and Ismail (2014) investigated the value relevance of accounting information in the banking sector of Pakistan. The study employed the pooled regression technique on nineteen (19) private banks from the period of 2008 to 2012. Their findings

showed that earning per share is more value relevant than book values, while accounting data explains a high proportion of the stock price. The relevant information is such that it influences the economic decisions of users by helping them evaluate past, present and future events.

In Nigeria, Musa (2013) investigated the value relevance of accounting information in the Nigerian listed conglomerate firms using data obtained from the Nigerian Stock Exchange (N S E) fact book 2011, annual report of the firms for the period 2007-2011, and daily price list on the Cash Craft website. The result reveals that all the explanatory variables statistically and significantly influence the explained variable. This implies that accounting information published by listed conglomerate firms in Nigeria has highvalue relevance to the investors in making their investment decision on the firms. Specifically, earnings have more value relevance than book value. Olugbenga and Atanda (2014) examined the value relevance of accounting information in the Nigerian stock market with a view to determining whether accounting information has the ability to significantly affect share prices of quoted firms. This study used secondary data to investigate the value relevance of accounting data. Findings show that there is relationship significant between а accounting information and share prices of companies listed on the Nigerian Stock Exchange. Information on earnings. dividend, book value and cash flows can be used to predict share prices of quoted firms. This implies that accounting information serves as a guide to investors' investment decisions in Nigeria.

Abiodun (2012) conducted a study on the effect of accounting numbers on stock price in Nigeria using simple descriptive statistics coupled with the logarithmic regression models. The study covered the period between 1999 and 2009, and taking 40 companies from various sectors of the

Nigerian economy as samples. The study revealed that earnings are more value relevant than book values and by extension that, the information contained in the income statements, which is proxied by the earnings, dictates the corporate values of firms in Nigeria more than the information contained in the statement of financial position, proxied by the book values.

As a result of the increasingly important role financial accounting information play today as a social good, accounting has consolidated its central place within the information system of any entity, be it public or private. In principle, the objectives of the financial accounting information are directly correlated with the users' information need for decision-making.The reviewed works lend their weight to the fact that there is a strong influence of accounting information on stock price volatility. The book value per share, earnings per share and dividend per share directly and remotely affect stock prices and returns.

#### **3.0 METHODOLOGY**

The study adopted the cross-sectional research design. The secondary source of data collection method was used to generate data from the annual reports and accounts of the sampled companies in Nigeria. The population of study consists of 186 companies listed on the Nigerian Stock Exchange as at 31<sup>st</sup> December, 2017. A sample size of Twenty-two firms for a period of five years was judgmentally determined. This was based on the firms' financial strength, capital base. and availability of data from firms that have obligations finished its in delivering accessible annual reports for the year ended 2013 to 2017. The simple random sampling technique was used to select the sample of Twenty-two listed firms that form the unit of analysis of the study from the population. Data generated from the annual reports and accounts were analyzed using descriptive statistic. The statistical tool employed is the Ordinary Least Square (OLS) regression.

Two models were specified and estimated in this study. The first model investigates the controlling relationship without for heteroskedasticity in stock prices series as contemporary researchers (such as Jeong & Kimberly, 2014; Suadiye, 2012; Abubakar, 2010) in finance have shown that returns of stocks exhibit kurtosis and conditional heteroskedasticity. The second model takes consideration conditional into heteroskedasticity.

The models are specified below as thus;

$$\sigma_{t}^{2} = \Pi_{0} + \Pi_{1} \mathcal{E}_{t-1}^{2} + \Pi_{2} \sigma_{t-1}^{2} + \Pi_{3t} + \Pi_{4} EPS_{it}$$
  
+ $\Pi_{5} DPS_{it} + \Pi_{6} BVPS_{it} + u_{t}$  ...... Model 2

Where  $\omega$  = is a constant term.  $\mathcal{E}_{t-1}^2$  = the ARCH term  $\sigma_{t-1}^2$  = the GARCH term. EPS = Earnings per share DPS = Dividends per share BVPS = Book value per share  $\eta_0 - \eta_6$  = Slope coefficients.  $u_t$  = error term.

### 4. ESTIMATION RESULTS AND DISCUSSION OF FINDINGS

	BVPS	DPS	SP	EPS	
Mean	1571.490	231.4400	39.98590	485.2800	
Median	634.0000	97.50000	17.25000	157.5000	
Maximum	14293.00	2200.000	248.6200	8400.000	
Minimum	-844.0000	0.000000	0.000000	-43.00000	
Std. Dev.	2588.541	315.1293	51.60424	1215.260	
Jarque-Bera	498.7157	951.0916	96.38479	4002.139	
Probability	0.000000	0.000000	0.000000	0.000000	

**Table 1: Descriptive Statistics** 

Where: BVPS = Book value per share, DPS = Dividend per share, SP = Share price, EPS = Earnings per share.

Table I presents the result for the descriptive statistics for the variables. As observed, BVPS has a mean value of 1571.490 and a standard deviation of 2588.541. The maximum and minimum values stood at 14293.00 and -844.00 respectively. The Jarque-Bera statistic value of 498.72 and pvalue of 0.00 confirms the normality of the data and suitability for generalisation. It also indicates the absence of outliers in the data. The mean value for DPS stood at 123.44 with a standard deviation of 315.1293. The maximum and minimum values of OPS for the period under review were 2200.00 and 0.00 respectively. The Jarque-Bera statistic value 951.09 and p-value of 0.00 confirms the normality of the data and suitability for generalization. It also indicates the absence of outliers in the data. The mean value for SP stood at 39.98 and the standard deviation stood at 51.604. The maximum and minimum values were 248 and 0.00 respectively while the Jarque-Bera statistic value of 96.384 and p-value of 0.00 also confirms the normality of the data and suitability for generalization. It also indicates the absence of outliers in the data. Finally, EPS was observed to have a mean value of 485.280 and a standard deviation 1215.260. The maximum and minimum values were 8400 and -43.00 respectively while the Jarque-Bera statistic value of 4002 and p-value of 0.00 also confirms the normality of the series and suitability for generalization. It also indicates the absence of outliers in the data.

Multicollineraity test: Variance Inflation factor					
Variable	Coefficient Variance	Centered VIF			
С	987.351	NA			
EPS	9.248847	3.800395			
DPS	0.00015	1.23329			
BVPS	4.559218	1.805242			
Heteroskedasticity Test: ARCH					
F-statistic = 0.768	Prob. F(1,292)	0.3814			
Obs*R-squared = 0.778	Prob. Chi-Square(1)	0.3797			
Breusch-Godfrey Serial Correlation LM Test:					
F-statistic = 0.12504	Prob. F(1,292)	0.1939			
Obs*R-squared=2.559647	Prob. Chi-Square(2)	0.2281			
Ramsey Reset Test					
t- statistics=0.620	Df = 294	0.5354			
f-statistics = 0.385	Prob. F(1,294)	0.5354			

 Table 2. Regression Assumptions Test

Source: Researchers Computation (2017)

Table 2 shows the regression assumptions test for the model. As observed, the variance inflation factor (VIF) shows how much of the variance of a coefficient estimate of a regressor has been inflated due to collinearity with the other regressors. Basically, VIFs above 10 are seen as a cause of concern (Landau and Everitt, 2004). As observed, none of the variables have VIF's values exceeding 10 and hence none give serious indication of multicollineraity. The ARCH test for heteroskedasticity was performed on the residuals as a precaution. The results showed probabilities in excess

of 0.05, which leads us to reject the				
presence of heteroskedasticity in the				
residuals. The Lagrange Multiplier (LM)				
test for higher order autocorrelation reveals				
that the hypotheses of zero autocorrelation				
in the residuals were not rejected. This was				
because the probabilities (Prob. F, Prob.				
Chi-Square) were greater than 0.05. The				
LM test did not therefore reveal serial				
correlation problems for the model. The				
performance of the Ramsey RESET test				
showed high probability values that were				
greater than 0.05, meaning that there was no				
significant evidence of miss-specification.				

Table3. Regression Result	
---------------------------	--

Panel 1					
Method: Least Squares					
Variable	Coefficient	Std. Error	t-Statistic	Prob.	
С	-22.75175	31.42214	-0.72407	0.4696	
EPS	2.960311	3.041192	0.973405	0.3312	
DPS	-0.011018	0.012256	-0.89898	0.3694	
BVPS	0.495168	2.135233	0.231903	0.8168	
AR(1)	0.190668	0.149007	1.279586	0.2017	
R-squared	0.41573	Durbin-Wats	Durbin-Watson stat = 2.0501		
Adjusted R-squared	0.35048	F-statistic = 2	F-statistic = 2.5158		
S.E. of regression	18.6675	Prob(F-statist	Prob(F-statistic) = 0.0299		

Panel 2				
Method: ML - ARCH (Marquardt) - Normal distribution				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	43.12192	1.462386	29.48736	0.000*
EPS	-2.20597	0.190439	-11.5836	0.000*
DPS	-4.10378	0.154972	-26.4808	0.000*
BVPS	0.414783	0.19577	2.118721	0.034*
AR(1)-GARCH(1, 1) ARCH effect (φ)	3.336608	0.212749	15.6833	0*
GARCH effect (I])	-0.00014	9.75E-05	-1.41808	0.1562
R-squared	0.63573	Durbin-Watson stat = 1.80501		
Adjusted R-squared	0.54048	F-statistic= 11.7158		
S.E. of regression	18.6675	Prob (F-statistic) = 0.00		
S.E. of regression	18.6675	Prob (F-statistic) = 0.00		

Researcher's Computation (2017) \* Sig at 5%

In conducting the regression analysis for this study, the ordinary least squares regression technique was utilized. However, contemporary researchers in finance have shown that returns of stocks exhibits kurtosis and conditional heteroskedasticity. To take this properly into consideration in conditional heteroskedasticity we estimate a simple GARCH (1,1) model. Hence two estimations are conducted; i) a model which does not take into account the problem of conditional heteroskedasticity; ii) a GARCH (1,1) model which takes into account the problem of heteroskedasticity. Using the ordinary least squares regression, it is observed, the  $R^2$  and coefficient of determination is 0.41 which indicates that the model explains about 41% of the systematic variations in the dependent variable. The Adjusted  $R^2$  which controls for the effect of inclusion of successive explanatory variables on the degrees of freedom stood at 0.35. The F-stat value of 2.5158 and the associated p-value of 0.0299 indicate that the hypothesis of a joint statistical significance of the model cannot be rejected at 5% and the linearized specification of the model is not inappropriate. The evaluation of the slope coefficients of the explanatory variables reveals the existence of positive relationship between EPS and stock price as depicted by the slope coefficient of 2.9603. The relationship was however observed to be insignificant at 5% (p-value =0.3312>0.05). The results also indicate that there is a negative relationship between DPS and stock price as indicated by the slope coefficient (-0.011). The relationship was however observed to be insignificant at 5% (p-value = 0.3694 > 0.05). The relationship between BVPS and stock price appeared to be positive as depicted by the slope coefficient (0.495). The relationship was however observed to be insignificant at 5% (p-value =0.8168>0.05).

#### **Discussion of Result**

Using the GARCH model to take more properly into consideration conditional heteroskedasticity the best representation for all indices is the GARCH (1, 1) model and TGARCH (1, 1). The GARCH (1, 1) model results presented in panel 2 show that the  $R^2$ and coefficient of determination is 0.63573 which indicates that the model explains about 64% of the systematic variations in the dependent variable. The Adjusted  $R^2$ which controls for the effect of inclusion of successive explanatory variables on the degrees of freedom stood at 0.54048. The Fstat value of 11.7158 and the associated pvalue of 0.000 indicates that the hypothesis of a joint statistical significance of the model cannot be rejected at 5% and the linearised specification of the model is not inappropriate. The evaluation of the slope coefficients of the explanatory variables reveals the existence of negative and significant relationship between EPS and stock price (-2.205, P = 0.00). The results also indicates that there is a negative and significant relationship between DPS and stock price (-4.103, p-value = 0.00). The relationship between BVPS and stock price appeared to be positive and significant (0.4148, p-value = 0.034). The result for the variance equation shows that the coefficient of the ARCH effect  $(\phi)$  is statistically significant at 5% significance level. This indicates that news about volatility from the previous time periods has an explanatory power on current volatility. Similarly, the coefficient of the lagged conditional variance  $(\Pi)$  is significantly different from zero, indicating nonexistence of volatility clustering in stock return series.

#### 5.0 CONCLUSION AND RECOMMENDATIONS

#### Conclusion

Financial reporting is an essential part of disclosure and helps investors to discover investment opportunities. Consequently, accounting numbers indicators constitute the most sought after information by investors on financial markets, because it allows them to make their decision about firm valuation.

The accounting function has grown to become an integral component of the corporate system. Thus, for more than four decades of accounting research especially capital market based research, emphasis has been placed on testing the information content of accounting numbers, in an attempt to determine whether or not accounting information is value relevant and useful for explaining share price movements. It is based on this that this study examined the influence of accounting information on stock price volatility in Nigeria using book value per share, earnings per share and dividend per share as proxies for independent variables while stock prices for a period of five (5) years was used as proxies for the dependent variable. Our findings revealed that earnings per share and dividends per share have a negative and significant effect on stock prices while book value per share has a positive and significant effect on stock prices.

#### Recommendations

The study recommends that accounting information should be disclosed in a timely manner to enable users of this information make informed and timely decision on stock value. Also, corporate financial disclosures should be more transparent and informative so as to improve investors' confidence in accounting information presented by management.

#### REFERENCES

- Abayadeera, N. (2010). Value relevance of information in Hi-tech industries in Australia: Accounting information and intangible asset disclosures. *Global Review of Accounting and Finance*, 1(1), 77-99.
- Abiodun, B. Y. (2012). Significance of accounting information on corporate values, *Journal of Business and Social Science*, 1(2), 105–113.
- Abubakar, S. (2010). Value relevance of accounting information of listed new economy firms in Nigeria: An empirical investigation using Ohlson Model. PhD dissertation submitted to the Department of Accounting, Faculty of Administration, Ahmadu Bello University, Zaria (unpublished).
- Adaramola, A. O., & Oyerinde, A. A. (2014). Value relevance of financial accounting information of quoted companies in Nigeria: A trend analysis.

Research Journal of Finance and Accounting, 5(8), 86-93.

- Amihud, Y., & Mendelson, H. (1986). Asset pricing and bid-ask spread. *Journal of Financial Economics*, 17, 223-250.
- Ball, R. (2001). Infrastructure requirements for an economically efficient system of public financial reporting and disclosure, Bookings- Wharton papers on financial services.
- Bernhardt, D., Douglas A., & Robertson, F. (2005). Testing dividend signaling models. *The Journal of Empirical Finance*, 12(3), 77-98.
- Black B. (2000). Legal and institutional preconditions for strong stock market. Working paper, John M Olin Program in Law and Economics, Stanford Law School.
- Black, E. L., & White, J. J. (2003). An international comparison of income statement and balance sheet information: Germany, Japan and the US. *European Accounting Review*, 12(1), 29-46.
- Bushee, B. J., & Noe, C. F. (2000). Corporate disclosure practices, institutional investors and stock return volatility. Journal of Accounting Research, 171-202.
- Collins, W., Maydew, E., & Weiss, I. (1997). Changes in the value-relevance of earnings and book values over the past forty years. *Journal of Accounting and Economics*, 24, 39-67.
- Core, J. E., Guay, W. R., & Burskirt, A. V. (2003) Market valuation in the new economy: an investigation of what has changed. *Journal of Accounting and Economics*, 34(1), 43-67.
- Dahmash, F. N., Durand, R. B., & Watson, J. (2009). The value relevance and reliability of reported goodwill and identifiable intangible assets. *The British Accounting Review*, 41(20), 120-137.
- Diamond, D. W., & Verrecchia, R. E. (1987). Constraints on short selling and asset price adjustment to private information. *Journal of Financial Economics*, 18, 272-311.

- Dontoh, A., Radhakrishnan, S., & Ronen, J. (2004). The declining value-relevance of accounting information and noninformation-based trading: An empirical analysis. *Contemporary Accounting Research*, 21(4), 795-812.
- Jeong, Y. M., & Kimberly, K. (2014). Changes in accounting information value relevance and cash flow predictions: Evidence from Korea. *International Journal of Business and Social Science*, 5(9), 1-11.
- Kim, M., & Kross, W. (2005). The ability of earnings to predict future cash flows has been increasing – not decreasing. *Journal of Accounting Research*, 43(5), 753-780.
- Lang, M., & Lundholm, A. (1993). Crosssectional determinants of analyst ratings of corporate disclosures. *Journal of Accounting Research*, 246-271.
- Landau, S., & Everitt, B. S. (2004). A Handbook of Statistical Analyses using SPSS. London: Chapman & Hall/CRC Press LLC.
- Lestari, T., & Takada, T. (2014). Value relevance of accounting information during IFRS convergence process in Indonesia. Kobe University, Japan. Retrieved from <u>http://www.multiparadigma.lecture.ub.a</u> <u>c.id.</u>
- Mbobo E. M & Ekpo, B. N. (2016). Operationalising the qualitative characteristics of financial reporting. *International Journal of Finance and Accounting*, 5(4), 184-192.
- Melisa, L. A. (2013). Value relevance of accounting information: Evidence from Sri Lanka. *Proceedings of the Third International Symposium*, SEUSL: Oluvil, Sri Lanka.
- Musa, U. M. (2013). Value relevance of accounting information in the Nigeria listed conglomerates firms. Unpublished thesis submitted to Faculty of Humanities, Social and Management Sciences, Federal University, Taraba State, Nigeria.

- Nilsson, H. (2003). Essays on the value relevance of financial statement information. Print & Media.
- Ohlson, J. A. (1995). Earnings, book values, and dividends in equity valuation. *Contemporary Accounting Research*, 11(2), 661-687.
- Olugbenga, A. A., & Atanda, O. A. (2014). The relationship between financial accounting information and market value of quoted firms in Nigeria. *Global Journal of Contemporary Research in Accounting, Auditing and Business Ethics*, 1(1), 22-39.
- Otavio, B., & Luis, A. L. (2009). The growth of Brazil's direct investment abroad and the challenges it faces. Perspectives on topical foreign direct investment issues by the Vale Columbia Center on Sustainable International Investment.
- Park, C. (2015). The stock price relevance of accounting information according to business cycle and industries. *Scientific Cooperation International Journal of*

Finance, Business, Economics, Marketing and Information Systems, 1(1), 41-50.

- Shehzad, K., & Ismail, A. (2014). Value relevance of accounting information and its impacts on stock prices: A case study of listed banks at Karachi Stock Exchange. *Journal of Economics Information*, 3(1), 40-48.
- Spence, M. A. (1973). Job Market Signaling. *Quarterly Journal of Economics*, 87(3), 355 - 374.
- Suadiye, G. (2012). Value relevance of book value & earnings under the local GAAP and IFRS: Evidence from Turkey. *Ege* Academic Review, 12(3), 301-310.
- Toma, R. H. (2001). Empirical research on accounting choice. *Journal of Accounting and Economics*, 31(1-3), 255-307.
- Zheng, X. (2010). Comparative study of financial reporting quality. 6<sup>th</sup> International Scientific Conference May 13–14,pp286-293, Vilnius, Lithuania.