Effect of Clean Surplus Model on Financial Information: Evidence from Nigerian Deposit Money Banks

Emmanuel C. Ezenwafor PhD Department of Accountancy Federal Polytechnic, Oko Email: <u>emmancee2004@gmail.com</u>

Abstract: This study determined the effect of clean surplus model on accounting information on Nigerian Deposit Money Banks. This study adopted Ex-Post Facto research design for the purpose of this research. The study covered eight years annual reports and accounts of these Nigerian deposit money banks from 2011 to 2019. The data collected for the study were analyzed using financial ratios and the formulated hypotheses were tested using regression analysis with the aid of statistical package for social sciences (SPSS) 20.0. The study revealed that market price is relevant in determining book value per share of Nigerian deposit money banks. Another finding is that market price is relevant in determining earnings per share of Nigerian deposit money banks. The study recommended among others that due to the importance of earnings and book value in investment decisions, the study recommends that all Nigerian Deposit Money Banks on the Nigerian Stock Exchange should prepare Simplified Investor's Summary Accounts (SISA) with emphasis on the most widely used accounting information.

Key words: Clean Surplus, Accounting information, Book value per Share and Earnings per share

1.0 Introduction

Clean-surplus valuation model is the basis for a large empirical literature that aims to estimate the cost of capital from data on observed prices and the variables included in the right-hand-side in the clean-surplus valuation formula such as earnings, book value, dividends and cash flows, accruals, and relevance of financial statements. The literature (mostly based on U.S. data for the period of 1979-1998) are rather mixed with studies suggesting varying degrees of risk premia embodied in the derived cost of capital more than the risk-free interest rate (O' Hanlon & Steele, 2000). Hess and Lüders (2001) stated that residual income valuation derives the fair value of stocks in terms of accounting information, more especially the income adjusted for the cost of capital. This technique is based on the assumption which the Clean Surplus Relation (CSR) valuation model holds. This accounting information states that the change in book value of equity is caused solely by stated earnings and dividends (Ohlson, 2000). The reported book value is noticeably lower than the value expected (clean surplus principles) from income statement. The implication of this is the headline earnings component of income reported in the profit and loss part of the Statement of Comprehensive Income has for many years provided, and is still providing, users of financial statements with an unrealistically optimistic picture of the financial performance of Compustat firms (Mahmood, Willett, Shantapriyan & Jidin, 2018) This has implications to securities exchanges, in using the Q statistic, to assess the earnings quality of firms over time. Triggers could be

102

set so that exchange commission monitor any firm's earnings quality over time. Our derivation of Q also has implications for investment analysts on their commentary on earnings quality as well as reliance on earnings for investment decisions.

Building on their initial clean-surplus valuation model, Feltham and Ohlson (1999) emphasize the role of risk in the Clean Surplus Valuation Model and pointed out that equity values should price as fundamental risk which is the non-diversifiable (systematic) variability inherent in expected future abnormal earnings. They demonstrate analytically that one can incorporate risk in clean-surplus valuation model by reducing expected future abnormal earnings to certainty equivalents based on investors' risk aversion across all possible events and dates. In this demonstration,

However, the Discounted Cash Flow (DCF) model is popularly a technique of equity valuation, which is used to estimate the attractiveness of an investment opportunity. However, all approaches of equity valuation are significantly affected by the investor's required rate of return on the common stock because this rate becomes the discount rate or to be a main component of the discount rate. That is possible to derive prosperously the intrinsic value above or below current market prices on the estimated discount rate and the measurement of cash flows or dividends (Phansawadhi, 2013). Risk plays a fundamental but not yet well understood role in the clean-surplus valuation model. However, it is not clear exactly how one should incorporate risk into empirical tests or practical applications of the clean-surplus valuation model. Consequently, empirical researchers have used different procedures for examining the impact of risk in empirical applications of the clean surplus valuation model (Spilioti & Karathanassis, 2010).

To establish the significance of risk in equity price valuation, there is not a widely accepted methodology for determining the intrinsic value of equities based on the clean-surplus valuation model within a risky model. Indeed, the question for the clean-surplus valuation model has not been addressed fully by the literature, with the exception of recent study by (Nerkasov & Shroff, 2009). Researchers used different procedures for examining the impact of risk in applications of the clean surplus valuation model. Few studies had tested the validity of clean-surplus valuation model on information provided by financial statement such as book value of equity, dividend per share, cash flow, earnings per share in determining the stock price directly. As a matter of fact, most of these studies were carried out in developed countries earlier before now, such like; (Lev and Zarowin, 1999; Francis and Schipper, 1999; Ben Naceur, and Nachi's, 2007; Beisland, Hamberg and Navak, 2010), carried out in UK, united State, Tunisian, Colombo. Among all, studies that have explored the subject of clean-surplus valuation model of accounting information in Nigeria context are very few.

1.1 Objectives of Study

This study therefore determines the effect of clean surplus model of accounting information on Nigerian deposit money banks.

The specific objectives are:

- 1. To determine the relevance of market prices on book value of equity of Nigerian deposit money banks.
- 2. To ascertain the relevance of market prices on earnings per share of Nigerian deposit money banks.

2.1 Conceptual Review

Clean Surplus Accounting

Clean surplus accounting means the changes in the shareholder equity which is not the consequence of transaction with shareholders such as share repurchase, dividends, etc as shown in the income statement. The clean surplus accounting method offers elements of a forecasting model which gives price as a function of change in book value, earnings and expected returns. The clean-surplus valuation model is the basis for a large empirical literature that aims to estimate the cost of capital from data on observed prices and the variables included in the right-hand-side in the clean-surplus valuation formula. The empirical findings of this literature (mostly based on U.S. data for the period of 1979-1998) are rather mixed with studies suggesting varying degrees of risk premia embodied in the derived cost of capital more than the risk-free interest rate (for example, O' Hanlon and Steele (2000); Claus and Thomas (2001); Gebhardt Lee, and Swaminathan (2001); Easton, Taylor, Botosan and Plumlee (2002).

According to the standard clean-surplus valuation model, it was expecting the coefficients of both explanatory variables i.e. book value per share and abnormal earnings per share to be positive and statistically significant (i.e. 1, 2 > 0). Similarly, the same formal description and coefficients restrictions of the explanatory variables (book value per share and risk-adjusted abnormal earnings per share) apply to the hypotheses regarding the estimation of the risk adjusted valuation model. The standard clean surplus relation requires that the book value of equity, Bt, at the end of period t differs from the previous period's book value only by period t's earnings Xt and dividends Dt (L"ucke 1955 or Ohlson 1995): Bt = Bt/1 + Xt/Dt

This relation assumes that all items, besides dividends, which affect the book value of equity must pass through the profit and loss statement. However, this relation rarely holds since the statement of shareholders' equity contains a variety of other items. These items can be classified into two groups. The first group can be seen as adjustments to dividends Dt. Items falling into the second group augment stated earnings Xt.

In addition to these common and obvious financing activities, stock-based compensation includes capital inflows to the firm as well. Although they represent an injection of new funds, these offerings are not public since participation is restricted to (selected) employees. Other items which can be interpreted as adjustments to stated earnings and not as dividend substitutes are collected in the term *Olt*. Again, these items affect the book value of equity but do not pass through the profit and loss statement. Basically, these are 'unrealized gains (losses) on investments' and 'foreign currency translation adjustments' which are usually included in the so-called 'other comprehensive income' (Hess & Lüders, 2001).

Relevance of Accounting Information

Relevance of accounting information is defined as the ability of accounting numbers contained in the financial statements to explain the stock market measures (Beisland, 2009). In other words, value relevance is being defined as the ability of information disclosed by financial statements to capture and summarize firm value. Value relevance can be measured through the statistical relations between information presented by financial statements and stock market values (returns). Vishnani and Shah, (2008) value relevance" implies ability of the financial information contained in the financial statements to explain the stock market measures. A value relevant variable is that data or amount in the financial statement that guide investors in their pricing of shares. Investment decision, therefore, centres on the association between stock returns or share price and accounting related information such as earnings, cash flows, book value of equity, firm's size.



Market Price Per Share (MPS): Price is the arithmetic average of monthly average closing equity prices. Some authors may prefer to use share prices prevailing on the day immediately following the cross-section year. The share price of public traded company which is determined by the forces of market supply and demand is highly volatile due to its dependent on the expectations of the buyers and sellers (Menaje, 2012). O' Hara, Lazdowski, Moldovean and Samuelson (2000) find that earnings as well as dividend declared by firm is related to market prices of share, Chin & Hong (2008) posit that dividend yield is a good predictor of stock return. Irrespective of these accounting numbers that can be adopted to predict the market price, if those numbers contain some new information, reaction will always be expected in the market over the market price of share; this reaction evidence in share price is found to continually drift in the same direction as that of the initial information.

Book value per share (BV): BV is the owners' equity over the number of shares in circulation. Furthermore, Ohlson (1995) and Feltham and Ohlson (1995) show that under certain condition, market value of a firm can be expressed as the weighted average of book value and earnings. This form the bases of the studies conducted on the value relevance of accounting numbers. Studies in this area of research have shown that the book value of equity in addition to earnings is associated with the market value of firms. While the fundamental role of earnings in value relevance is a long settled issue in accounting literature, this cannot be said of the book value of equity (Subramanyam & Wild, 2000).

Book value per share is just one of the methods for comparison in valuing of a company. Enterprise value, or firm value, market value, market capitalization, and other methods may be used in different circumstances or compared to one another for contrast. For example, enterprise value would look at the market value of the company's equity plus its debt, whereas book value per share only looks at the equity on the balance sheet. Conceptually, book value per share is similar to net worth, meaning it is assets minus debt, and may be looked at as though what would occur if operations were to cease. One must consider that the balance sheet may not reflect with certain accuracy, what would actually occur if a company did sell all of their assets

Earnings Per Share

Earnings per share considered as the most frequently used accounting information in value relevance studies used in examining its significant relationship with share price. By using the formula given by them earnings per share calculated by taking earnings after tax, interest and depreciation divided by the total number of outstanding shares. Moreover, Earning is a fundamental and prominent accounting variable when it comes to the investigation of the value relevance of accounting information. This is due to its superiority over cash flow in this regard. However, the market will look out for both cash flow and net book value if the earnings numbers are perceived to be inadequate (Abiodun, 2012). The earnings per share which is a parameter that can be used to measure the earnings ability of firms is required to be disclosed by companies quoted or about to be quoted in the public security market (Valix & Peralta, 2009). The non-public enterprises to the extent that it would enhance their financial report comparability, are encouraged to present their EPS on the face of their income statements (Menaje, 2012).

2.1 Review of Empirical Studies

The clean-surplus valuation model is the basis for a large empirical literature that aims to estimate the cost of capital from data on observed prices and the variables included in the right-hand-side in the clean-surplus valuation formula. Ali, Mahmoud, Manouchehre and Taha (2011) investigated empirically the value relevance of accounting information to domestic investors in Tehran stock exchange from 1999 to 2006. The study considered the impacts of two factors - Positive vs. Negative earnings and the firm size on share prices. Results depicted that accounting information is value-relevance to domestic investors in Tehran Stock Exchange. Pushpa and Sumangala (2012) ascertained the impact of Earnings per share (EPS) on the market value of an equity share in the Indian context. The study is based on data of 50 companies over a period of 5 years. The 50 companies that have been selected are the first 50 companies in the list of India's most valuable companies as per the Business Today Survey of 2010. The study concluded that EPS have impact on the market value of an equity share in the Indian context. Hussain and Mustafa, (2012) used the panel data approach for 270 Malaysian Shariah-compliant companies over the period of three years from 2007 to 2009 to examine the relationship between some board of directors characteristics represented in the board of directors size, number of independent non-executive directors in the board, the CEO duality, and the number of Muslim directors in the board and Value relevance of accounting information. Sibel, (2013) investigated the value relevance of accounting information in pre- and post-financial periods of International Financial Reporting Standards' (IFRS) adoption for Turkish listed firms from 1998 to 2011. The results show that value relevance of book values has improved in the post-IFRS period (2005-2011) while such improvements was not been observed in value relevance of earnings. Ivica and Marijana, (2014) analyzed value relevance of accounting information based on a sample of 97 corporations listed the following capital markets: Ljubljana Stock Exchange, Zagreb Stock Exchange, Sarajevo Stock Exchange, Banja Luka Stock Exchange and Belgrade Stock Exchange. The study revealed that accounting information is value relevant on all the observed markets. Manisha, (2014) analyzed the combined, individual and incremental value relevance of accounting information produced by firms listed on the S&P BSE-500 for the financial year 2006 to 2010 and changes therein over the period. The study found that accounting information is value relevant for BSE-listed firms, earnings per share and book value per share are significantly relevant to share prices of the BSE-listed firms. Abdullah, (2014) empirically estimated excess stock market returns for all the thirty (30) banks listed in Dhaka Stock Exchange for the period of 2007 to 2011. The sample of the study includes all the listed commercial banks on Dhaka Stock Exchange. Panel data and ordinary least square regression approach was for data analysis. The result revealed that while return on equity and retention ratio have positive and significant relationship with stock prices, dividend yield and profit after tax have negative but insignificant relationship with stock prices. Anike, (2014) examined the impact of dividend yield on stock prices of Nigerian banks, the impact of earnings yield on stock prices of Nigeria banks and the impact of payout ratio on stock prices of Nigeria banks. Ordinary Least Square Regression was employed. The result from this study indicates that dividend yield has a negative and significant influence on stock prices of commercial banks in Nigeria, earnings yield had negative and significant impact on stock prices of commercial banks in Nigeria and finally dividend payout ratio had negative and non-significant impact on stock prices of commercial banks in Nigeria. Edward, (2014) sought to find out the impact of dividend payment and its relationship on the share price of some listed companies in the Ghana Stock Exchange (GSE) and how dividend payment influences shareholders decision on whether to maintain or withdraw their investment from one firm

106

and reinvest in another firms. The study make use of questionnaire which was administered on sixty (60) respondents who were shareholders of Eco bank, Cal Bank and AngloGold Ashanti that form the sample of the study. The theoretical and empirical findings of the study confirms that as the dividend of companies increase, the shares price also rises due to the pressure on the shares from increase in demand for the share in the market. Oloidi and Bolade (2015) analyzed the major variables that determine the equity shares prices of listed companies on the Nigerian Stock Exchange using their accounting data as published for the financial year 2011/2012. The result of the study revealed that the prior year share price significantly and positively influenced equity share price at α =0.000, earnings per share was negatively significant at α =0.05 and dividends per shares had positive and significant influence on the equity share price at α =0.014. Collins, (2015) established the relationship between earning per share and dividend per share of companies listed at the Nigeria Stock Exchange. Data analysis of the study was carried out with the use of descriptive statistics, correlation analysis and multiple regression model. It was found that, earnings per share had a positive and significant relationship with dividends per share. Leverage, Liquidity and retained earnings on the other hand were found to have negative but insignificant effects on dividend per share. Olubukola, Uwalomwa, Jimoh, Ebeguki and Olufemi, (2016) examined the value relevance of financial statements on share price of firms in Nigeria by examining the relationship between earnings and share prices of the firms. Findings from the study showed that a significant positive relationship exist between earnings per share (EPS) and share price. Samuel and Pradeep, (2016) sought to found out the firms' factors that determine their share market prices. Based on the objective of their study, fourteen (14) companies listed on the Johannesburg stock exchange from period the 2009-2013 was selected for the study. multiple regression analysis statistical tool was use to analyzed the secondary data collected on the firms., the independent variables for the study were dividend per share, earnings per share, and price-earnings ratio and the dependent variable was the share prices. The study found that dividend per share, earnings per share, and price-earnings ratio account for about 57.8% of share prices changes in the market. Philip and John, (2016) assessed the value-relevance of accounting information on share prices, by determining whether accounting information of banks listed on Nigerian Stock Exchange have the ability to influence the demand and prices of their prices in the Nigeria Sock Market.. Correlation and panel data regression analysis statistic, along with Random Effect Model was used to test the hypothesis developed for the study. Independent variable in the study were; Book Value per share, Dividend per Share and Earnings per Share while the dependent variable is the Market Value per Share (Price per share). The results of the study indicated that book value per share, dividend per share and earnings per influenced the market prices use significantly. Shares prices of banks listed on the Nigeria Stock Exchange were found to have significant positive relationship dividend per Share (DPS), so was earnings (EPS). Mahmood, Willett, Shantapriyan and Jidin (2018) examined the quality of reported book value (earnings) with respect to the Clean Surplus principles over time and in different industries. For this purpose, we model Earnings and Other Income using an Error Correction Model, with data for all active Compustat firms for the period 1963-2014. They devise a quality metric Q which permits comparisons of Earnings quality over time. This metric, Q, offers a means to compare aspects of Earnings quality to investors, regulators, standard setters, credit rating agencies, analysts, accounting researchers, and other participants in the financial reporting process. They find that AOCI is increasingly negative, where losses are accumulated through movements in equity. Abderrahmane (2019) examined the relationship between accounting information and the company's market value. In this article, we discuss the evolution of this research stream from its origins to the

107

present by outlining the main conclusions. We also review research on the assessment of the company value through accounting determinants. In particular, we examine Ohlson's Clean Surplus valuation model, discussing its strengths and limitations. The analysis of the conclusions of this research stream provides insights into company valuation through accounting data that are likely to be useful to financial market participants and accounting standard setters. Petros, Sotiria, Spyros and Constantin (2020) investigated the effect of R & D reported information on the value relevance of the accounting information of firms' financial statements using Ohlson's equation, of firms on the Athens Stock Exchange in order to explore whether R & D expenses are value relevant, in a market which has been affected for a long period by the global economic crisis of 2007. Moreover, the panel data analysis employed in the paper overcomes common methodological problems (such as autocorrelation, multicollinearity, and heteroscedasticity) and allows the estimation of unbiased and efficient estimators. They observe that the reported R & D expenses do not have any significant influence on the investors' choices, in contrast to expectations based on the prior literature.

There are few studies testing the validity of clean-surplus, most of studies on this topic were carried out in developed countries. There have been a number of studies on this topic in developed countries. Studies that have explored clean-surplus of accounting information in Nigeria are limited and none of the prior studies has testing the validity of clean-surplus accounting information on insurance companies. This however has created a gap on which makes this study significant.

3.0 Methodology

3.1 Research Design

Ex-Post Facto research design which is the aspect of statistic that involves the various techniques of describing data collections was adopted for the purpose of this research. The population of this study consist sixteen (16) deposit money banks quoted on the Nigerian Stock Exchange. The study covered nine years annual reports and accounts of these banks from 2011 to 2019, the years after the financial crisis in Nigeria.

3.2 Method of Data Analysis

The data to be collected for the study was analyzed using financial ratios and the formulated hypotheses were tested with regression analysis with the aid of statistical package for social sciences (SPSS) 20.0

Decision Rule

The decision for the hypotheses is to accept the alternative hypotheses if the f-value of the test statistic is greater than the sig-value and to reject the alternative hypotheses if the f-value of the test statistic is less than the sig-value. The hypotheses will be tested at 5% significance level.

3.3 Model Specification

The study modified the Ohlson (1995), concerning the standard clean-surplus valuation model. The estimated model takes the following form:

$\mathbf{MP}_{it} = \mathbf{a}_0 + \boldsymbol{\mu}_i + \beta_1 \mathbf{BVPS}_{it + \sum_{it}} \dots $
$\mathbf{MP}_{it} = a_0 + \mu_i + \beta_2 EPS_{it} + \sum_{it} \dots \dots$
Where:
The dependent variable: market price (MP) and
The Independent variables:
BVPS = Book value of equity
EPS = Earnings per share

 $a_0 =$ slope of the model

 β_I , β_2 , = coefficient of parameters.

i for the financial year ending at year *t*.

 μ = Mean of population

4. Data Presentation and Analysis

Descriptive Statistics								
	Ν	Minimum	Maximum	Mean	Std. Deviation			
MP	176	.16	8.63	2.6639	1.86016			
BVPS	176	.06	9.66	2.6239	1.84350			
EPS	176	.09	10.53	1.8716	1.59449			
Valid N (listwise)	176							

From the descriptive statistics of the variables as shown that the mean MP is 2.66 maximum and minimum values of 8.63 and 0.16 respectively. The standard deviation stood at 1.86. The mean value for BVPS is 2.62 with maximum and minimum values of 9.66 and 0.06 respectively while the standard deviation is 1.84. The mean value for EPS is 1.87 with maximum and minimum values of 10.53 and 0.09 respectively while the standard deviation is 1.59.

4.1 Test of Hypotheses

Hypothesis One

Ho: Market price is not relevance on book value of equity of Nigerian deposit money banks.

	ANOVA"							
Mod	lel	Sum of Squares	df	Mean Square	F	Sig.		
	Regression	.117	1	.117	.034	.854 ^b		
1	Residual	590.348	171	3.452				
	Total	590.465	172					

ANOTAR

a. Dependent Variable: MP

b. Predictors: (Constant), BVPS

	Coefficients ^a							
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.		
		В	Std. Error	Beta				
1	(Constant)	2.591	.245		10.568	.000		
1	BVPS	.014	.076	.014	.184	.854		

a. Dependent Variable: MP

If the F-value is greater than Sig-value, we reject the null hypothesis otherwise; we accept the null hypothesis and reject the alternative hypothesis.

Since F calculated value is less than sig. value at 95% confidence interval (0.034 > .854). We therefore reject null hypothesis and accept the alternative hypothesis which says that market price is relevance in determining book value of equity of Nigerian deposit money banks.

4.2 Hypothesis Two

Ho: Market price is not relevance on earnings per share of Nigerian deposit money banks.

	ANOVA						
Mo	odel	Sum of Squares	df	Mean Square	F	Sig.	
	Regression	2.317	1	2.317	.674	.413 ^b	
1	Residual	588.148	171	3.439			
	Total	590.465	172				

a. Dependent Variable: MP

b. Predictors: (Constant), EPS

Coefficients ^a								
Model		Unstandardize	d Coefficients	Standardized Coefficients	t	Sig.		
		В	Std. Error	Beta				
1	(Constant)	2.492	.217		11.480	.000		
1	EPS	.072	.088	.063	.821	.413		
P	1	100						

a. Dependent Variable: MP

If the F-value is greater than Sig-value, we reject the null hypothesis otherwise; we accept the null hypothesis and reject the alternative hypothesis.

Since F calculated value is greater than sig. at 95% confidence interval (,674 >.413). We therefore reject null hypothesis and accept the alternative hypothesis which says that market price is relevance in determining earnings per share of quoted insurance companies in Nigeria.

5.1 Discussion of Findings

The result of the three hypotheses tested indicates that market price is relevance in determining book value per share and earnings per share. These finding are in line with that of Abdullah, (2014) result also revealed that while return on equity and retention ratio have positive and significant relationship with stock prices, dividend yield and profit after tax have negative but insignificant relationship with stock prices. Oloidi and Bolade (2015) revealed that the prior year share price significantly and positively influenced equity share price at α =0.000, earnings per share was negatively significant at α =0.05 and dividends per shares had positive and significant influence on the equity share price at α =0.014Olubukola, Uwalomwa, Jimoh, Ebeguki and Olufemi, (2016) showed that a significant positive relationship exist between earnings per share (EPS) and share price. Philip and John, (2016) results of the study indicated that book value per share, dividend per share and earnings per influenced the market prices use significantly. Shares prices of banks listed on the Nigeria Stock Exchange were found to have significant positive relationship dividend per Share (DPS), so was earnings (EPS). The study recommended that banks in Nigeria should provide quality and reliable accounting information in their financial statements. This will assist existing and prospective investors in taking informed investment decisions.

5.2 Conclusion

The accounting variables or financial information is value relevant. The accounting relevance differs from sector to sector because of the difference in macroeconomic environment, tax structure, accounting body, accounting standards etc. Value relevance of information largely depends on the quality of reported financial information. Therefore, the manipulated earnings (of which dividends are sub-sets) have large effects on share prices. There is a significant negative relationship between negative earnings and share prices of companies listed on the Nigerian Stock Exchange. Since the evidence indicates that accounting information plays a significant role in investment decision making and by implication, stock market development.

1 (2021) 1

5.3 Recommendations

Following the study findings, these recommendations are presented:

- 1. Due to the importance of earnings and book value in investment decisions, the study recommends that all insurance companies on the Nigerian Stock Exchange should prepare Simplified Investor's Summary Accounts (SISA) with emphasis on the most widely used accounting information.
- 2. Investors should critically and objectively analyze the company's overall characteristics when making investment decisions. This is because accounting information are not the same across the industries. Whether book value or earnings or cash flow is value relevant depends on both the firms (and industry's) overall characteristics and its performance in the particular period.

References

Abderrahmane, D, (2019). Valuation-based Accounting Research: Predominance of the Clean Surplus Valuation Model.

International Journal of Economics and Financial Issues, 9(2), 265-272.

- Abiodun, B., Y., (2012). Significance of accounting information on corporate values of firms in Nigeria. *Research journal in organizational psychology & educational studies* 1(2) 105-113, pp. 105 113.
- Abdullah, A.M. (2014). Dividend policy and its impact on stock price A study on commercial banks listed in Dhaka stock exchange. *Global Disclosure of Economics and Business*, *3*(1), 9-19.
- Ali, F.G., Mahmoud, D.N., Manouchehre, A., & Taha, R. (2011). Value-relevance of Accounting Information: Evidence from Iranian Emerging Stock Exchange World Academy of Science, Engineering and Technology, International Journal of Economics and Management Engineering, 5(6), 2011, 830-835.
- Anike, E.A. (2014). The impact of dividend policy and earnings on stock prices of Nigeria banks. A dissertation submitted to the Department of Banking & Finance, Faculty of Business Administration, University of Nigeria, Nsukka.
- Beisland, L. A. (2009). A Review of the value relevance literature. *The open business journal*, 2(1), 7–27. doi:10.2174/1874915100902010007.
- Ben, N., & Nachi, W. (2007). Does the Tunisian accounting reform improve the value relevance of financial information? *Afro-Asian Journal of Accounting and Finance*, 2 (3).(www.inderscience.com).

Beisland, L. A, Hamberg, M.& Novak, J. (2010). The Value Relevance Across Industries: What Happened to the New Economy? <u>http://www.fma.org/Prague/Papers/Value_Relevance_across_Industries.pdf</u>, retrieved on 20 January, 2010.

- Botosan, C., & Plumlee, M. (2002). Estimating expected cost of equity capital: a theory-based approach, *Working paper*, University of Utah, Salt Lake City.
- Claus, J., & Thomas, J., (2001). Equity premia as low as three percent? Evidence from analysts' earnings forecasts for domestic and International stock markets, *Journal of Finance* 56, 1629-1666.
- Collins, D., Maydew, E. & Weiss, I., (1997). Changes in the value relevance of earnings and book values over the past 40 years, *Journal of Accounting and Economics*, 24, 39-67.
- Collins, C. K. (2015). *The relationship between earnings per share and dividends per share of companies listed at the Nairobi Securities Exchange*. A Research Project Submitted for the Award of the Degree of Master of Science (Finance), School Of Business,
- Edward, Attah-Botchwey (2014). The impact of dividend payment on share price of some selected listed companies on the Ghana Stock Exchange. *International Journal of Humanities and Social Science*, 4, 9(1), 179-190.
- Easton, P., Taylor, G., Shroff, P. & Sougiannis, T., (2000). Using forecasts of earnings to simultaneously estimate growth and the rate of return on equity investment, *Journal of Accounting Research*, 40, 657-676.
- Feltham, G., & Ohlson, J. (1999). Residual earnings valuation with risk and stochastic interest rates, *The Accounting Review* 74, 165-183.
- Feltham, G., & Ohlson, J. (1999). Residual earnings valuation with risk and stochastic interest rates, *The Accounting Review* 74, 165-183.
- Francis, J. & Schipper, K., (1999). Have financial statements lost their relevance? Journal of Accounting Research, 37(2), 319-352.

- Gebhardt, W., Lee, C. & Swaminathan, B., (2001). Toward an implied cost of capital, *Journal of Accounting Research*, 39, 135-176.
- Hess, D., & uders, E. L. (2001). "Do companies exploit accounting rules for broad-based stock option plans? A case study," Discussion Paper 00-27, Center of Finance and Econometrics, University of Konstanz.
- Hussain, K.H., & Mustafa, M.H. (2012). Board of directors' characteristics and value relevance of accounting information in Malaysian shariah-compliant companies: A panel data analysis. *Economics and Finance Review*, 2(6), 31–44.
- Ivica Pervan & Marijana Bartulović (2014). Value relevance of accounting information: Evidence from South Eastern European countries, *Economic Research-Ekonomska Istraživanja*, 27(1), 181-190, DOI: 10.1080/1331677X.2014.947132.
- Lev, B. & Zarowin, P. (1999). The boundaries of financial reporting and how to extend them. *Journal of* Accounting Research, 37(2), 353-385.
- Petros, K., Sotiria, S., Spyros, M. & Constantin, Z. (2020). The Impact of the Disclosed R & D Expenditure on the Value Relevance of the Accounting Information: Evidence from Greek Listed Firms. *Mathematics* 2020, 8, 730; doi:10.3390/math8050730 www.mdpi.com/journal/mathematics
- Mahmood, J. Willett, R. J., Shantapriyan, P. & Jidin, M. R. M., (2018). Earnings quality and the clean surplus principle earnings quality and the clean surplus principle
- Menaje, P. M. (2012). Impact of selected financial variables on share price of publicly listed firms in Philippines. *American international journal of contemporary research*, 2(9), 98-104.
- Manisha, K. (2014). Value relevance of accounting information: An empirical study of selected Indian firms. International Journal of Scientific and Research Publications, 4(10), 1-6.
- Nekrasov, A., & Shroff P. (2009). Fundamentals-based risk measurement in valuation, accounting review, forthcoming.
- O'Hara, T., Lazdowski, C., Moldovean, C. & Samuelson, S. (2000). Financial Indicators of stock performance: West Haven. *American Business Review*.
- O' Hanlon, J.A. & Steele A. (2000). Estimating the equity risk premium using accounting fundamentals, *Journal of business finance and accounting*, 27, 1051-1083.
- Ohlson, J. (1995). Earnings book values and dividends in security valuation, *Contemporary Accounting Research*, 11, 661-687.
- Ohlson, J. A. (2000). "Residual Income Valuation: The Problems," Discussion paper, New York University, March 2000.
- Olubukola, R. W., Uwalomwa, U., Jimoh, J. Ebeguki, E.I., & Olufemi, A.O. (2016). Value relevance of financial statements and share price: A study of listed banks in Nigeria, Banks and Bank Systems, 11(4),135-143.
- Oloidi, G.A., & Bolade, S. K. (2015). An empirical determinant of equity share price of some quoted companies on the Nigerian stock exchange. *International Journal of*
- Pushpa, B., & Sumangala, J.K. (2012). Impact of Earnings per share on Market Value of an equity share: An Empirical study in Indian Capital Market. *Journal of Finance, Accounting and Management*, 3(2), 1-14
- Phansawadhi, T. (2013). Equity valuation approach based on accounting variables. Journal of Finance and Economics, 2013, Vol. 1, No. 3, 41-48.
- Spilioti, S., & Karathanassis, G. (2010). Traditional versus clean-surplus valuation models: evidence from UK Stocks, *Journal of Investing*, Forthcoming.
- Subramanyam, K. R., & Wild. J. (2000). Going Concern Status, Earnings Persistence, and Informativeness of Earnings. Contemporary accounting research 13: 251-273
- Samuel, T. E., & Pradeep, B. (2016). Determinants of share prices: The case of listed firms on Johannesburg stock exchange. *The Journal of Accounting and Management*, 6(1).
- Sibel, K. (2013). The impact of IFRS on the value relevance of accounting information: Evidence from Turkish firms. *International Journal of Economics and Finance;* 5(4), 71-80.
- Vishnani, S. & Shah B. (2008). International differences in the relation between financial reporting decisions and value relevance of published financial statements- with Special Emphasis on Impact of Cash Flow Reporting, *International Research Journal of Finance and Economics*, 17(1), 1450-2887.
- Valix, C. & Peralta, J. (2009). Financial accounting, Volume 2. Manila: GIC Enterprises & Co.