THE VALUE RELEVANCE OF ACCOUNTING INFORMATION ON SHARE PRICE: EVIDENCE FROM NIGERIAN LISTED COMPANIES

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ABSTRACT

The loss of investors' confidence after the occurrence of 2008 financial crisis has become an issue of concern coupled with the issue of contradictory findings of prior researchers. Therefore, the aim of this study is to investigate the value relevance of accounting information on share price among listed companies in Nigeria, where, 68 listed companies in NSE were used as the sample of the study over the period of 6 years (2009-2014). The study used pooled OLS model to analyze the data extracted from Thompson Reuters online data stream. Furthermore, the study found that accounting information of listed companies in Nigeria to be value relevant on share price using the Ohlson model where, both book value of equity and earnings are positively and significantly related to market value of equity. The study also recommends future researchers to use the return model for further analysis.

Keywords: value relevance, accounting information, Ohlson model, NSE

1.0 INTRODUCTION

Provision of highly qualitative financial information has been the ultimate aim of International Accounting Standard Board (IASB) and Financial Accounting Standard Board (FASB). Of course, qualitative financial information is not only required by users of financial statement but for a vibrant economy as well as strong capital market asserted by (Svenssor& Larsson 2009). Financial reporting is about providing report or statement revealing the financial condition of an entity. It is only when an entity revealed its financial condition that investors or users will be able to make sound economic decision. The preparer of such report are expected to out sketch the true financial position of an entity. Although there exit no ideal condition in real life, as

such there is nothing as "perfect or true and fair" financial statements. As an alternative, accountants should try to prepare statements that are most useful to users (Konstantinos 2011).

However, Dandago and Hassan (2013) further identified three items to be well thought-out in preparing financial report. The users, information needed by the users and the preparers. In the opinion of Konstantinos (2011) users of accounting information are categorized into two. External users comprise of users that are outside the organization as; investors, government, lawyers, standard setters, external auditors and general public. Internal users are those within the organization for example; managers, directors, employees to mention but a few. Even though, Svenssor and Larsson (2009) opined whenever the information need of investors are met, then, it is considered that the need of other users of financial statement will also be met. This is because investors are among the most important users of financial statement.

Ideally, financial statements should reveal arrangement of recorded details, accounting principles, concepts and conventions, personal judgments and estimates. A consolidated financial statement is a statement that is expected to picture out the financial affairs of an economic entity comprising of more than one business entity. These statements are governed by accounting rules and standards in order to provide accurate accounting information needed by users. Accounting information contained in financial statements is expected to be useful to users. This is only possible when such accounting information is said to have possess certain qualities as relevance, reliability, comparability, timeliness, accuracy, flexibility to mention but a few.

Customarily, it is the responsibility of Financial Reporting Council (FRC) of every country to present and monitor accounting, valuation and auditing standard. In Nigeria however, it is the Nigerian Accounting Standard Board (NASB) that issue and regulate the accounting and auditing standard. The board does so through the Company and Allied Matters Act (CAMA 1990). CAMA is in charged with the responsibility of prescribing format and details of company financial statement regarding the issue of necessary disclosure and auditing.

However, poor reporting system in Nigeria as compared to the developed countries made investors to perceive more risk in investing. This made the foreign direct investment in Nigeria to drop from US\$6.9 billion in the year 2007 to US\$3.94 in 2010 as lamented by Titilayo (2011). Secondly, Sanusi (2010) pinpointed that lack of co-ordination among the Financial Statement Regulation Council Committee (FSRCC) was also a contributing factor worsening the reporting system in Nigeria. He also mentioned that the council has not meet for two years as at 2010.

Today, value relevance as a field of study has been growing rapidly and gaining attention globally. This field of study is diverse and comprehensive. In the opinion of Nilsson (2003) value relevance study only differs on accounting perspective used; either information or measurement perspective. It also differ on the type of market assumption either the market is efficient or inefficient. So also in the model used either Feltham and Olhson model (price model) or the Eastern and Harris model (return model). Therefore, this study is using the measurement perspective, the market is considered as efficient and this study adopts the price model.

Several streams of studies have been undergone on the effect of value relevance in securities exchange market of various countries where they came out with contradictory findings. See for example, Poland, Indonesia, Egypt, Sri Lanka, Australia, United Arab Emirates (UAE), Sweden, Taiwan and United Kingdom, France, Pakistan to mention but a few (Azim, 2010; Bao, 2004; Barth & Beaver 2000; Camodeca, Almici, & Brivio, 2014; Chiha, Trabelsi, & Hamza, 2013; Hassan, Romilly, Giorgioni, & Power, 2009; Kargin 2013; Klimczak, 2011; Khanagha 2011; Kousenidis, Ladas & Negakis 2010; Shehzad, & Ismail, 2014; Ragab, A & omran, 2012; Svensson & Larsson, 2009; Titilayo, 2011; Vijitha & Nimalathasan, 2014; Mohammed & Lode 2015). Contradictory findings of prior researchers and the loss of confidence by investors due to the financial crises of 2008 has become an issue of concern. Therefore, this study wants to examine value relevance of accounting information on share price among the listed companies in Nigeria.

2.0 LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1 The Concept of Value Relevance

The concept of value relevance has been defined in several ways by different scholars. For example Mohammed and Lode, (2015); Vijitha and Nimalathasan, (2014) define value relevance as the ability of accounting numbers to capture the information underlying the share price where Vijitha and Nimalathasan, (2014) went further by positing value relevance as having statistical relationship between financial information with share return. Value relevance was also viewed as degree/level of association between accounting information and market value (Titilayo, 2011). In another vein, Barth and Beaver, (2000) value relevance refers to association existing between accounting information and securities market value. Therefore, value relevance is all about explaining the statistical relationship existing between accounting information and share price.

Moreover, value relevance is a matured field of study or area under Market Based Accounting Research (MBAR) since 1960s. MBAR is a research field that is very broad covering wide areas. Among the MBAR areas are; Feltham-Olhson modeling, analyst's behavior, market efficiency. However, the main reason of MBAR is for determining the accounting information's value relevance for investors in market (market participant).

2.2 Evolution of value relevance research

Value relevance studies can be traced back from late 1960s (Hellström, 2005 & Titilayo, 2011). Although (Titilayo, 2011) opined that during this period, investigations were based on stock market and accounting information with less emphases about firm value. For example, Ball and Brown study in 1969. Book value of equity was later instituted in the middle of 1990s where several authors used valuation frame work so as to express share price in relation to book value of equity and earning inclusive (Kargin, 2013; Kousenidis, Ladas, & Negakis, 2010; Oscar, 2014 & Pathirawasam, 2013) to mention but a few. Frameworks commonly used for valuation are mostly are: Ohlson and Feltham, Easton and Harris (Kargin, 2013; Kousenidis et al., 2010 & Titilayo, 2011).

2.3 Accounting Information

Accounting information as viewed by Scott (2012), to be a commodity, which is expected to provide ultimate satisfaction to users (both internal and external). There are a number of factors to be considered before accounting information is recognized as a qualitative one among which are relevance, reliable, timeliness, accuracy, comparability, verifiability (Kargin, 2013). Several authors consider relevance and reliability as the most valuable ingredient to be found in accounting information (Kargin, 2013; khanagha, 2011; Nayeri & Bidari, 2012; Scott, 2012). Additionally, Nayeri and Bidari, (2012) further asserted that these two qualities (relevance and reliability) one must not be used at the expenses of the other as doing this will make the accounting information to less useful to users. Relevance and reliable are items that cannot be quantifiable as no any criteria that will statistically explain them which give room for value relevance as to incorporate the two. In fact, Svenssor and Larsson (2009) were of the view that value relevant happens to be more important than conservatism and or timeliness.

2.4 Nigerian Stock Exchange

The Nigeria stock exchange (NSE) is a market which has been in existence since 1960 as Lagos stock exchange where it commenced operation in 1961 with nineteen (19) listed securities worth 80million Naira (Titilayo 2011). It was in 1977 that the name

Nigeria stock exchange was later changed. As at May 2009, Titilayo (2011) asserted that, the number of listed securities had rose to 294 securities; which comprised of 86 Government Stocks making a total of market capitalization of N9.45 trillion. However, in 2014 the market capitalization increased to N13.544 trillion with share index of 41017.49 points and market turnover of 12.253 billion shares (daily trust newspaper). The stock prices are quoted in the stock market. Stock market exchange report the results of trading each day that the market is open.

2.5 Prior Empirical Studies

Value relevance has been a matured area of study that has undergone series of research and investigation by many scholars for over two decades. In addition to this, Andriantomo and Yudianti (2013) went further to examine the value relevance of accounting information in Indonesia, for a period of 2000-2009. They found that earnings and book value to be significant in explaining the share price but that of book value of equity are more relevant in explaining the share price than the earnings.

Moreover, value relevance in banking sector has not been ignored. Shehzad and Ismail (2014) investigated the value relevance of accounting information and its impact on stock prices within the banking sector of Pakistan (case study of Karachi stock exchange). The authors used a sample of 19 commercial banks over a period of 2008 to 2012. They make use of pooled regression analysis to arrive at their findings. The found that accounting information is value relevant as it assist users in making decision as it help them to evaluate the past, present and future. This means that, they found earning per share of been more value relevant than book value.

In addition to earnings and book value of equity as having relationship with share price, Vijitha and Nimalathasan (2014) examine value relevance of accounting information and share price taking listed companies in Sri Lanka as their sample. They found earnings per share and return on equity to be significantly associated with share price. while, Santoso (2010) investigated the value relevance of accounting information in Indonesia after using a sample of 2433 firms listed in Indonesian stock exchange over a period of 9years (from 2000-2008). The author found that earnings, book value of equity and cash flow from operations has value relevant as it showed significant and positive coefficient of earnings, book value of equity and cash flow from operation.

Consistence with above findings, Svenssor and Larsson (2009) examined the value relevance of earnings within 30 companies in Sweden for a period ten years (from 1999-2008). After using linear multivariate regression analysis, they came out with

the findings that earnings are value relevant in Sweden and further suggest future researchers to test other accounting numbers.

Also, regarding the issue of corporate value of firms, Abiodun (2012) investigated the significance of value relevance of accounting information on corporate value of Nigerian firm where he concludes based on his findings that earnings are more significant than book value.

Furthermore, Abdul Manaf (2010) asserted that book value of equity and earnings are considered as the most important information that are useful to investors regarding stock price.

Hence, the followings are the proposed hypothesis;

H1a: book value of equity is value relevant

H_{1b}: earnings is value relevant

3.0 METHODOLOGY

The study makes use of organization as a basis of making analysis. The entire companies in Nigeria that are listed in Nigeria stock exchange market are considered as the population of the study. As at 2014, Nigeria Stock Exchange (NSE) has 177 listed companies. Data were collected through secondary source (Annual reports and accounts). The sample size of this study was arrived at as shown below:

Details Number of companies

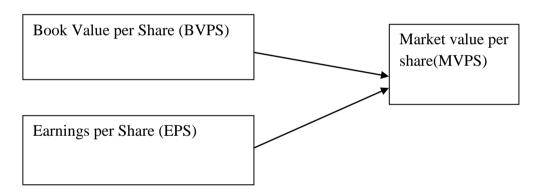
Population	177
Banks, insurance companies and other financial institutions	(52)
Missing/ non availability of data	<u>(47)</u>
Total sample	68

However, Sekaran (2003) agreed that, if a sample size is higher than 30% of the population, it is accepted for quantitative research. This study has a sample size of more than 30%. Therefore, the sample size of this study is in accordance with the provided sample size. The study would also make OLS regression analysis using STATA version 12.

3.2 The Feltham and Olhson Model (1995)

This study uses the Feltham and Ohlson model which is also referred to price model. In Greek, Kousenidis, Ladas and Negakis (2010) opined that this model is an aged one as it was in existence since preinreich (1938). In the same similar vein, Kargin (2013) view Feltham and Olhson model as an adapted price model comprising of two key statements from financial statements (financial reports); balance sheets and income statement. This model (Feltham and Olhson 1995) investigates relationship between market value of equity with respect to two financial reporting variables. These variables are; equity book value per share (from balance sheet statement) and earnings per share (from comprehensive income statement). However, this study will make use of the Feltham and Olhson model.

3.3 Research Model



$$MVPS_{it} = \alpha_0 + \beta_1 BVPS_{it} + \beta_2 EPS_{it} + \mu_{it}$$
 -----(1)

Where;

MVPS represent market value per share.

BVPS represent book value per share.

EPS represent earnings per share.

4.0 RESULT AND DISCUSSION

4.1 Descriptive Statistics

Table 4.1 gives descriptive statistics of dependent variable; market value per share and the independent variables: earnings per share and book value of equity per share. Market value per share (MVPS) with a total observation of 408 has a standard deviation of 90.178 likewise 0.42 and 1050 stands for the minimum and maximum value respectively. It also showed that there is likely a problem of abnormality in data collected which will be remedied further with robust standard error. It is obvious that book value of equity per share (BVPS) have total observation of 408 with an average of 33.114(Naira) meaning Nigerian listed companies have an average book value of equity per share worth that. However, the standard deviation has a value of 63.791, 0.18 and 356.61 are the minimum and maximum value of BVPS respectively. In addition, the study obtained 408 observations as earnings per share (EPS) with an average mean of 2.134 and standard deviation of 4.425 also with range value of -15.93 as minimum and 28.08 as maximum earnings per share.

Table 4.1

Descriptive Statistics of the Variable

Variables	Obs.	Mean	St. dev.	Minimum	Maximum
MVPS	408	30.781	90.178	0.42	1050
BVPS	408	33.114	63.791	0.18	658.31
EPS	408	2.134	4.425	-15.93	28.08

Note: Obs. represents observations, St. dev. is the short form of standard deviation

Source: Researcher's computation

Table 4.2Correlation Analysis

Variables	MVPS	BVPS	EPS
MVPS	1.000		
BVPS	0.324***	1.000	
	(0.000)		
EPS	0.736***	0.419***	1.000
	(0.000)	(0.000)	

Note: *** represents significance level at 1 per cent and values in parenthesis are the p-values.

Source: Researcher's computations

Table 4.2 above present correlation analysis where it shows how each variable is related to one another. It clearly estimates and shows that book value per share (BVPS) is positively and significantly correlated with market value per share at 32.4% (0.324) at 1% level of significance. So also, earnings per share (EPS) has a strong positive and significant relationship with market value per share (MVPS) at 1% level of confidence of 73.6% (0.736) while at the same time, earning per share (EPS) has a positive and significant relationship with book value per share (BVPS) with coefficient of 41.9% (0.419) at 1% level of significance. Although, the study clearly estimated the relationship between the independent variables and the dependent variable but it is not scientifically proven. We therefore move to present the pooled OLS regression analysis.

Furthermore, Table 4.3 presents the result with robust standard error to tackle any problem of hetrokedasticity been market value per share as the dependent variable. To test hypothesis 1_a that book value of equity is value relevant. The table (Table 4.3) shows that book value has a coefficient of 0.375 meaning, book value has a positive and significant relationship with market value at a confidence level of 1%. The table further expressed that with 1% increase in book value of equity, market value will increase by the coefficient of 0.375 (38%). It can be concluded that, book value of equity is value relevant regarding Nigerian companies.

Therefore, the pooled OLS regression explained that book value of equity has a positive and significant relationship with market value as a result; hypothesis 1_a book value of equity is value relevant is supported. This finding is in support of Titilayo (2011) and Santoso (2010).

To test Hypothesis 1_b that earnings is value relevant, the study used the estimated results of Table 4.3 as par regression result of pooled OLS with robust standard error to tackle problem of hetrokedasticity. Furthermore, the below table (Table 4.3) shows 0.556 as coefficient of earnings per share having a positive and significant relationship with market value of equity at 1% significant level. It explains further that with 1% increase in earnings, market value of equity will increase by that coefficient (0.556). Focusing on the result in Table 4.3 it can be concluded that earnings are value relevant. Moreover, this finding is consistent with the finding of Abiodun (2012); Camodeca (2014); Earnest and Oscar (2014); Shehzah and Ismail (2014) where Earnest and Oscar (2014) concluded that investors tends to consider earnings when determining share price. Therefore, the pooled OLS regression expressed that earnings has a positive and significant relationship with market value as a result; hypothesis 1_b earnings is value relevant is supported.

Conclusively, based on the regression table of Table 4.3, it can also be concluded that earnings and book value are of value relevant. It means that the accounting

information of Nigerian companies' are of value relevant. The study also found earnings and book value of equity jointly explaining about 71% changes in market value of equity per share while the remaining 29% are explained by other variable outside the model.

Table 4.3 Result of the Estimated Regression with MVPS as Dependent Variable $MVPS_{it} = \alpha_0 + \beta_1 BVPS_{it} + \beta_2 EPS_{it} + \mu_{it}$

Variables	Pooled OLS model
Constant	1.303 ***
	(0.000)
BVPS	0.375 ***
	(0.000)
EPS	0.556 ***
	(0.000)
Adjusted R ²	71%
F-statistic	412.11
Prob. F-stat	0.000

Note: *** represents 1% level of confidence and the values in the parenthesis are the p-value.

Source: researcher's computation

5.0 CONCLUSION AND RECOMMENDATION

This study was motivated by the academic curiosity to evaluate, from accounting point of view, those factors that explain the behavior of market value per share MVPS in the Nigerian listed companies. Hence, the aim of this study is to investigate the value relevance of accounting information on share price among Nigerian listed companies. As earlier stated, the population of this study comprised of 177 listed companies in Nigeria with the exclusion of banks, insurance and other financial institutions. This exclusion was due to their differences in reporting approaches. In a nut shell, this study used 68 companies as the sampled companies due to the problem of nonavailability of data. However, data was collected from Thompson Reuter online data stream. The study formulated two hypotheses which were tested. Furthermore, the used Stata software version 12 to analyzed the collected data. The study reports the average mean, standard deviation, minimum and maximum value respectively of each independent variable (book value of equity per share, earnings per share. So also, pooled OLS regression was used in making analysis, showing that all the independent variables (book value of equity per share, earnings per share) were positively and significantly related with market value per share at 1% level of confidence.

5.1 CONCLUSION

Based on the results, discussion and findings the researcher comes up with the following conclusions:

- i. Book values of equity per share have a strong explanatory power of on the variations of market value per share.
- ii. Earnings per share Book value are of value relevant on share price..
- iii. The study also found earnings and book value of equity jointly explaining about 71% changes in market value of equity per share while the remaining 29% are explained by other variable outside the model.

5.2 Recommendations

The study recommends for a larger number of firms and more years to be considered so as to have a concrete generalization of findings. Future researchers should use different model apart from the studied model (to make use of return model, or a combination of both price and return models).

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