



INVESTIGATION OF NIGERIAN CAPITAL MARKET AND ACCOUNTING INFORMATION SYSTEM: A CASE OF DEPOSIT MONEY BANKS

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ABSTRACT

A huge losses by investors as a result of Nigeria stock market bubble created a doubt on the value relevance of accounting information system. The study investigate the ability of information contained in the financial statements of Nigeria Deposit Money Banks (DMBs) to reflect the market value of its equity using ex-post facto research design. The data in the study were obtained from the annual published accounts of listed DMBs for the period of 2012 to 2018. Descriptive statistics and panel data regression analysis were used to analyzed the data. The findings revealed that earnings per share bank capital efficiency and liquidity of listed DMBs are value relevant, but book value per share is not value relevant. The study recommended that potential investors should pay more credence to earnings per share, equity and liquidity in making decisions to invest in DMBs. Investors should depend on accounting information to make financial decisions regarding their prospects.

Keywords: *Accounting information, Capital Market, Deposit money banks, Book value or equity per share, Earnings per share.*

Background of the Study

The stock market relies on information to succeed. This is based on the crucial role information plays in offsetting challenges faced by investors in the capital market. Information assists investors in evaluating investment

opportunities and assists investors monitor how effectively their investment is managed. Capital markets' which lack adequate and regular information create advantages to more informed investors. As a result of the important role, information plays in the stock markets across the world, stock exchanges such as the Nigerian stock exchange (NSE) set listing and post-listing requirements for companies seeking quotation. In Nigeria, the NSE emphasizes on the timely release of financial information. As a result, firms listed on the NSE are required to publish information about their operations in the form of quarterly, half-yearly and yearly financial statements. The main goal of an organization is the maximization of the price of its stock. As a result, the value of a firm is determined by the perception of its performance by potential investors. Value relevance affirms the usefulness of accounting data in the process of decision-making by investors. Hellstrom (2005) suggests that the extent of value relevance is dependent on the development of accounting regulation. The goal of accounting standards is for the information contained in financial statements to fulfill the needs of the capital market (IASB, 1994). IFRS was adopted in Nigeria in 2012. The timeline for the adoption was such that all types of business entities had to prepare and publish a financial statement according to the principles of IFRS by 2014. Quoted first-tier companies had a deadline of January 2012, all other non-first tier companies of public interest had a deadline of January 2013 and all small and medium scale entities had a deadline of January 2014. When the performance of business organizations is considered, financial statements summarize business transactions and other significant events. Financial statements are also used by public companies as a means of communication with their stakeholders. This has led to an unending task by stock market regulators to enhance the quality of financial statements to create transparency (Vishnani & Shah, 2008).

Statement of the Problem

The Nigerian stock market bubble of 2008 and 2009 resulted in the reduction of total capitalization from a peak of N13.295 trillion in 2007 to N7.03 trillion in 2009. The banking sector was one of the most affected sectors with a total loss of 91.08 billion by 2009 in spite of its strict regulations (Siyabola, Ogbola, & Masoyi, 2015). The huge losses by investors as a result of the bubble created doubt on the value relevance of accounting information disclosure in Nigeria.

Objective of the Study

To investigate the extent to which accounting information summarizes stock prices of DMBs in Nigeria market.

Review of Related Literature

Conceptual Framework

Earning Per Share (EPS) and Book Value of Equity (BVEs)

Earnings per share (EPS) and the book value of equity (BVPS) are commonly used accounting variables in the investigation of the value relevance of financial statements. EPS measures the utilization of a firm's resources while book value provides a measure of the value of the firm's resources not considering the current usage of the firm's resources. The EPS is required to be disclosed by companies quoted or about to be quoted in the Nigerian stock exchange. IAS 33 states that an entity must present basic EPS and diluted EPS in the statement of comprehensive income. The BVPS of the firm measures the value of its net assets. Feltham and Ohlson (1995) suggest that the market value of a firm can be expressed also as the weighted average book value of equity and earnings when certain conditions are met. This has motivated other value relevance of accounting numbers studies such as Barth et al. (1998) and Kwon (2009).

Accounting Information System

Accounting information results from corporate accounting reporting systems that measure audited financial information representing the performance of public enterprises. Accounting information is considered as information from the accounting system contained in a complete or partial financial report. It aids in facilitating decision making by managers within organizations and decision making on the part of external investors. The audited financial statements utilize accounting tools to provide useful accounting information. According to the IFRS (2018) accounting information is only relevant when users such as managers and investors can assess past, present or future events in taking economic decisions. Investors depend on accounting information to make financial decisions regarding their prospects.

Empirical Review

Oyerinde (2009) investigated the value relevance of accounting data in the Nigerian stock market. Regression analysis Ordinary Least Squared (OLS), Random Effects Model (REM), Fixed Effects Model (FEM) and Independent

- Samples t-Test was used for statistical analysis. The study found that there is a significant positive relationship between share prices and earnings for the period 2001 to 2004.

Babalola (2012) investigated examined the value relevance of accounting information in corporate Nigeria. The study covered the period between 1999 and 2009 and taking 40 companies from various sectors of the Nigerian economy as samples. The price regression model, Logarithmic Regression and returns regression were adopted for this research. The study found that earnings are more value relevant than book values.

Siyanbola et al. (2015) investigated the value relevance of accounting information of listed DMBs in Nigeria over eight years (2005-2012). The sample consisted of 15 deposit money banks. Regression analysis was employed in the analysis. The result shows that earnings, book value of equity and dividends have a relationship with share price. However, only book value of equity and dividends are statistically significant.

Olowolaju and Ogunsan (2016) assessed the value-relevance of accounting information in determining the share prices of quoted DMBs in Nigeria. A sample of 12 listed DMBs on the Nigeria Stock Exchange was used for the study. The analysis of data was done using panel data regression. The result indicates that book value per share and dividend per share can significantly predict share price.

Uwuigbe et al. (2016) investigated the effects of value relevance of financial statements on firms' share price in Nigeria. The study covered a period of 2010 to 2014 with a sample of 15 DMBs. The study adopted the use of both descriptive statistics and the use of the Fixed Effects Panel data method of data analysis. Findings from the study showed that a significant positive relationship existed between earnings per share and share price.

Umoren et al. (2018) investigated the value relevance of book-value and earnings on the market price of shares before and after the adoption of IFRS. The study adopted a judgemental sampling approach in obtaining a sample of 10 quoted Nigerian Banks for 10 years (2007 – 2016). Ordinary least square (OLS) regression was used as a statistical tool. Results indicate the book value per share and earnings per share of banks do have a weak relationship with share price however, that relationship is not statistically significant pre and post IFRS adoption.

Research Methodology

Correlational research designed was used in the study to examine the statistical relationship between accounting information and share price of

listed DMBs in Nigeria. The population of the study comprises 21 DMBs. The sample size consists of 12 quoted DMBs. Data was extracted from annual published accounts of listed DMBs for the period of 2012 – 2018.

Data Analysis

A panel data regression analysis Random Effects Model (REM), and Fixed Effects Model (FEM) was constructed to analyze the relationship of share price (dependent variable) and EPS, LIQ, BCE, and BVPS (independent variables).

Model specification:

The model specification for this study suggests that the share price is a function of two independent variables which include: EPS, BVPS, BCE, and LIQ. The equation is represented as, $Share_price_{it} = f(EPS, BVPS)$ with the linear expression: $Share_price_{it} = \beta_0 + \beta_1 EPS_{it} + \beta_2 BVPS_{it} + BCE_{it} + LIQ_{it} + e_{it}$.

Discussion of Result and Interpretation

Descriptive Statistics

	Share	EPS	BVPS	BCE	LIQUIDITY
Mean	7.550595	1.525238	9.464916	0.100588	0.433489
Median	3.745000	0.760000	9.215506	0.131142	0.444557
Maximum	45.00000	13.03000	26.17037	0.244376	0.563612
Minimum	0.500000	-	-	-	0.057238
Std Dev.	8.935993	2.249964	6.053193	0.225619	0.097500
Probability	0.000000	0.000000	0.538242	0.000000	0.000000

Source: Eviews10 computation 2020

The mean of the share price is N7.55, the minimum and maximum are 0.50k and N45 respectively. The standard deviation for the share price is 8.935993 suggesting the dispersion in values for market share price from the mean across the sample companies. In terms of EPS, the mean value is N1.53 with maximum and minimum values of N13.03 and -0.59k respectively. The standard deviation of EPS is 2.249964. BVPS has a mean of N9.46 and maximum and minimum values of N26.17 and N2.28 respectively. BVPS has a standard deviation of 6.053193. The mean of bank capital efficiency is 0.10 the minimum and maximum is -1.55 and 0.24 respectively. The standard deviation for BCE is 0.226. The mean of liquidity is 0.43 the minimum and maximum are 0.06 and 0.56 respectively. The standard deviation for liquidity is 0.098.

Result of Regression and Coefficient

Estimator	Fixed Effects		Random Effects	
	Coef	Prob	Coef	Prob
EPS	1.595452	0.0046	2.424914	0.0000
BVPS	0.234494	0.1731	0.330577	0.0215
BCE	16.81890	0.0023	23.48177	0.0000
LIQ	-12.57606	0.0404	-11.92982	0.0374
Constant	6.657242	0.0204	3.532357	0.2090
R2	0.884962		0.414828	
Adj R2	0.859586		0.385199	
Prob (F statistic)	0.000000		0.000000	
Durbin Watson Test	1.796801		1.437808	
Hausman Test				0.0065
Total Observations	84			

Source: Eviews computation 2020

The above table presents the results of the FE and RE model for the Nigerian stock market reaction to Accounting Earnings, bank capital efficiency ratio, liquidity, and Book Value of Equity of DMBs. The estimated FE model above has an R2 and Adjusted R2 88.5% and 85.9% respectively as its coefficient of variation. This indicates that the majority of the variations or changes in the share price of quoted DMBs in Nigeria are largely determined by EPS, BVPS, BCE, and LIQ. The P-value shows that the overall model is statistically significant at the 5% level. The Durbin-Watson statistic of 1.79 indicates a tolerable level of serial correlation within the period of the study. The overall model is statistically significant. The results of the correlations reveal that DMBs EPS, BVPS, and BCE have a positive relationship with share price while LIQ has a negative relationship. However, only EPS, BCE and LIQ are statistically significant. On the other hand, the estimated RE model above has an R2 and Adjusted R2 41.4% and 38.5% respectively as its coefficient of variation. The F statistic of 0.000 shows that the overall model is statistically significant at the 5% level. The RE model has a Durbin- Watson statistic of 1.438. The overall model is statistically significant. While EPS BCE and BVPS are positively related to share-price, LIQ is negatively related. Except for BVPS, all variables used in the study are statistically significant. The result from the Hausman test enables the selection of the FE model since the chi2 value of 0.0065 is less than 0.05.

EPS is found in the income statements suggesting that information found in the income statement is value relevant. BVPS also has a positive relationship with the share price.

Conclusion

Information assists investors in evaluating investment opportunities and assists investors monitor how effectively their investment is managed. Capital markets' which lack adequate and regular information create advantages to more informed investors. As a result of the important role, information plays in the stock markets across the world, stock exchanges such as the Nigerian stock exchange (NSE) set listing and post-listing requirements for companies seeking quotation. In Nigeria, the NSE emphasizes on the timely release of financial information. As a result, firms listed on the NSE are required to publish information about their operations in the form of quarterly, half-yearly and yearly financial statements. The main goal of an organization is the maximization of the price of its stock. As a result, the value of a firm is determined by the perception of its performance by potential investors. Value relevance affirms the usefulness of accounting data in the process of decision-making by investors. Accounting information results from corporate accounting reporting systems that measure audited financial information representing the performance of public enterprises. It aids in facilitating decision making by managers within organizations and decision making on the part of external investors.

Recommendations

The study hereby proffered the following recommendations; Investors should depend on accounting information to make financial decision regarding their prospects. Potential investors should pay more credence to earnings per share , equity and liquidity in making decisions to invest in DMBs. The value of accounting information represents a possible means of assessing how financial information disclosed in the financial reports of quoted firms represents the share prices quoted on the Nigeria stock exchange.

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