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Fair Value Accounting and Earnings Predictability of Listed Deposit Money Banks in Nigeria

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Abstract: The study examined the effect of fair value accounting on predictive power of earnings of listed Deposit Money banks (DMBs) in Nigeria. Fair value accounting has been a subject of serious concern in corporate finance and accounting literature following the adoption of International Financial Reporting standards. Data were collected from all the fifteen DMBs listed on the Nigerian stock exchange between 1st January 2011 and 31st December 2015. In analyzing the collected data, the study adopted descriptive statistics, correlation analysis and a panel multiple regression analysis to identify the possible effects of fair value accounting on predictive power of earnings. The results revealed that fair value accounting significantly enhances earnings predictability. The results further established that where as fair value hierarchy level one does not significantly enhance earnings predictability of listed DMBs in Nigeria, level two and three was found to be negatively and significantly influencing earnings predictability. This implies that level two and three significantly reduces earnings predictability of listed DMBs in Nigeria. Therefore, it is recommended that Financial Reporting Council of Nigeria should develop valuation guidelines that must be followed enhance reliability of fair value measurement in Nigeria.

Keywords: Earnings predictability; Fair value accounting; Fair value level one; Fair value level 2&3; IFRS adoption.

1. Introduction

International Financial Reporting Standards (IFRS) was adopted in Nigeria to ensure that entities produce comparable, understandable, reliable and decision-relevant financial statements with a view to gaining local and international community of investors' confidence. An important attribute of IFRS is the shift from historical cost to fair value based measurements of certain assets and liabilities. IFRS brought a lot of changes in the way and manner the information contained in the company's financial statement is reported. For instance, the introduction of fair value principle, which is regarded as the most important implication of IFRS. Fair value principle attracts and provokes researchers and generates several debates on the adoption of the standards. Literature suggests that fair value accounting results in financial statements that are more informative and of higher quality. By higher quality we mean less earnings manipulation, timely recognition of losses and more relevant accounting figures *Barth et al. (2008)*. There is an ongoing debate about the usefulness of fair value in predicting accounting earnings numbers of entities. The International Accounting Standards Board (IASB) believe that in many cases fair value measurement basis meets the conceptual framework criteria better than other measurement bases *Barth et al. (2008)*.

Proponents of fair value assert that it is appropriate for financial assessment and provide three main arguments connecting fair values to future financial performance: firstly, fair values sum up the present value of likely future cash flows and provide information about the riskiness and timing of its future realisation and foretell performance (*CFA Institute, 2005*). Secondly, the unrealised gains and losses on certain financial instruments measured at fair values (for instance, debt securities classified as available-for-sale securities), can be converted to realized gains and losses through the timing of asset sales (*Evans et al., 2013*), thereby establishing a linkage between the fair values of financial instruments and measures of future performance. Thirdly, fair value accounting leads to increased informativeness about future performance measures (*Dechow et al., 2010; Karaoglu, 2005*). On the other hand critics opined that accounting estimates that relied on fair values are more volatile than those that used amortized or historical cost estimates (*Barth, 1994*). The effect of fair value on earnings can be evaluated by examining how fair value intensity and fair value hierarchy levels affect the predictive power of earnings.

Fair value intensity is a measure of the extent to which the financial statement of an entity is exposed to fair value based financial estimates. Daifei *et al.* (2015) document that the more exposed the financial statement of a bank is to fair value estimates the more its earnings are able to predict future earnings. The reliability of fair value measurement depends on inputs used in arriving at the estimate. IFRS 13 requires the maximum use of observable inputs while minimising unobservable inputs to conditions where active market information is not reasonably available.

Fair value measurement is categorised into three measurement hierarchy levels depending on how observable the inputs are. Level one is the most replicable and involves value estimates resulting from unadjusted observable (active market information) inputs. Levels two and three involve some adjustments on observable inputs as well as the use of unobservable inputs in fair value measurement.

The ability of listed Deposit Money Banks (DMBs) to perform financial intermediation role is a function of investors and creditors' willingness to make surplus funds available. This depends on their perception of a bank's ability to generate future cash flow and earnings to guarantee the required return of and on investment. As a result accounting measures that enhances earning predictability is extremely relevant. More so the core activities of listed DMBs revolve around financial instruments exposing them to fluctuations in the values of these instruments. IAS 32, IAS39 IFRS 7 and IFRS 9 require entities to measure, recognise and disclose these instruments at their fair values in the financial statement. This study is therefore motivated by the objective of general purpose financial reporting as stated by the IASB in the conceptual framework which is to provide decision-relevant information to current and would-be investors, lenders and other creditors.

A number of studies have been carried out relating to fair value accounting and earnings predictability with mixed findings. For instance, whereas Ahmad and Aladwan (2015), Ehalaiye (2014), Evans *et al.* (2014), Frankel and Litov (2009), among other find that fair value accounting enhances earnings predictability, scholars like Hodder *et al.* (2006); Chisnall (2001) document no association between fair value accounting and earnings predictability creating a need for further study to confirm the effect of fair value accounting on earnings predictability. Also, Listed DMBs in developing countries like Nigeria with respect to the implementation of fair value accounting are faced with the challenges of inactive market for most financial instruments, high cost of fair value estimation, weak regulatory environment, and fair value assessment knowledge gap (PWC, 2015). In view of the foregoing, a study on the effect of fair value accounting on earnings predictability of listed DMBs in Nigeria becomes imperative to provide empirical evidence on the effect of fair value accounting on earnings predictability of listed DMBs in Nigeria to cover the study gap.

The main objective of this study is to empirically examine the effect of fair value accounting on earnings predictability of listed DMBs in Nigeria. Specifically, this study aims to establish the extent to which: Fair value intensity, fair value hierarchy level one, fair value hierarchy levels two and three enhances the predictive ability of earnings of listed DMBs in Nigeria. In line with the objective of this study we hypothesise that fair value intensity, fair value level one and fair value levels two and three have no significant effect on earnings predictability of listed DMBs in Nigeria.

The study covers the period between 2011 and 2015 because the variables required for the study became available from 2012 audited financial statement of banks.

Understanding the effect of fair value accounting on earnings predictability will keep management of listed DMBs better informed and enable them come up with relevant business models that will optimize their financial instrument mix. It is also believed that fair value accounting provides stronger and timelier signal of likely future down turn to managers, Regulators (Financial Reporting Council of Nigeria, Central Bank of Nigeria, Security and Exchange Commission etc) prompting timely intervention. The academia will also benefit from this study's contribution to the local literature.

The remaining part of this paper will include review of empirical literature, methodology, data presentation and analysis, interpretation of results, summaries and recommendations.

2. Literature Stance & Theoretical Framework

This section presents the review of literatures that are relevant to the study on the effect of fair value accounting on earnings predictability.

2.1. Earnings Predictability

Earnings predictability can be defined as the ability of past earnings to predict future earnings (Lipe, 1990). Earnings predictability is the capability of earnings to predict itself. It is the ability to use current earnings information to predict stock returns (Frankel and Litov, 2009). Earnings predictability provides more information about the features of a firm's financial performance that is relevant to decision making. It is conditional on the decision-relevance of the information. The quality of a reported earnings number depends on whether it is informative about the firm's financial performance, many aspects of which are unobservable. Since fair value estimates shows the present value of future expected cash flows, they are reliable measures of the values of asset and liabilities, as such, future performance should reflect fair value changes (i.e. unrealized fair value gains and losses). This study views earnings predictability as the extent to which future performance can be projected based on current or past earnings numbers.

2.2. Fair Value Accounting and Earnings Predictability

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between willing and knowledgeable market participants at the measurement date (IFRS 13). Fair value accounting therefore is a financial reporting technique in which entities are required or allowed to measure and report certain assets and liabilities on an ongoing basis at estimates of the prices they would receive to sell the assets or would pay to transfer the liabilities in an orderly transaction between market participants at the measurement date. Increasingly, financial reporting globally is becoming fair value oriented as the IASB continues to issue more standards requiring its recognition and disclosure. However, scholars, practitioners and regulators have continued to debate its merits and usefulness in predicting future earnings. Daifei *et al.* (2015) assessed the usefulness of fair values in improving the predictive ability of earnings: Evidence from international banks; based on a sample of international (non-U.S.) banks from 24 countries during 2009-2012, they examined the usefulness of fair values in improving the predictive ability of earnings and found that increasing use of fair values on financial instruments improves the capability of current earnings to predict future earnings and cash flows. They also provide evidence that the fair value hierarchy classification choices affect earnings' ability to predict future cash flows and future earnings and that the non-discretionary fair value component (Level one assets) improves current earnings' predictability whereas the discretionary fair value components (Level two and Level three assets) reduces earnings' predictive power.

Also, Ehalaiye (2014) evaluated the predictive value of bank fair values in United States of America with a total of 1,150 firm years between 1996 and 2005 applying multivariate linear regression model and find that current exposure of banks financial statement to fair value possesses positive and significant relationship with future earnings. In a related study by Ahmad and Aladwan (2015) the relevance of fair value was tested by studying the effect of fair value measurement applications for investment properties on the financial performance of Jordanian firms, the study also examined the effect of unrealized gains and losses on financial statements using Ohlson (1999) theoretical frameworks, sample of Jordanian firms (consisting of 41 real estate companies) listed in the Amman stock exchange during the 2008–2011 period analysed via multiple regression. It was found that whereas financial performance of Jordanian real estate companies is significantly and positively related to investment properties at fair values, the book value incremental information content is greater than information content of the net income and the unrealized gain and losses included in equity increases.

In Nigerian environment active market prices for large proportion of financial instruments may not be available, thus fair values are likely to be more mark-to-model based than market price based. Although managers could use such opportunities for discretion to reduce information asymmetry and improve earnings predictive ability, they are more likely to act opportunistically in a weak shareholder protection environment (Ehalaiye, 2014). Chen *et al.* (2006) argued that with the absence of intentional misrepresentation by managers, the unobservable nature of mark-to-model fair value estimates potentially leads to greater estimation error. However this study predicts that higher fair value accounting will positively relate to earnings predictability of listed DMBs in Nigeria.

2.3. Fair Value Intensity (Exposure) and Earnings Predictability

Bratten *et al.* (2016) conceptualises fair value intensity as the proportion of an entity's assets that is fair valued (total fair valued assets/total assets) and included or disclosed in the financial statement. It is the extent to which the financial statement of an entity is exposed to fair value estimates. The concept of fair value intensity is new in literature and was coined in this study to represent total fair valued financial assets divided by total assets in order to measure fair valued assets ability to predict future earnings.

Bratten *et al.* (2016) used two approaches to measure the level of banks' exposure to fair value accounting namely: balance sheet and income approach. Following Nissim and Penman (2007) they measured banks fair value accounting exposure as the summation of assets and liabilities recognized at fair values scaled by total assets from a sample of 1068 observations between 1992 and 2006 and document that information embedded in the fair value estimates of balance sheet measure of fair value exposure can help predict future interest revenue from trading securities, realized gains and losses on settlement of derivatives, realized income from available for sale securities etc thereby making earnings from more fair value accounting exposed banks to be better predictors of future cash flows and earnings. Considering that the study covers a period to 2006, extending the study to 2015 may result in a different finding because of events in the past few years –financial crises-.

Daifei *et al.* (2015) tested the usefulness of fair values in improving the predictive ability of earnings from a sample of two hundred non-US banks from twenty four countries between 2009 and 2012. They utilized regression and document that more fair values on balance-sheet financial instruments enhances the ability of current earnings to predict future earnings and cash flow. Replicating this study in a developing country like Nigeria could reveal to different findings.

2.4. Fair Value Measurement Hierarchy Level one and Earnings Predictability

IASB conceptualizes fair value measurement hierarchy level one as the use of observable inputs in the estimation of the fair values of an asset or liability at a measurement date. The hierarchy classifies the valuation inputs into three levels. Highest priority is given to (unadjusted) quoted prices observable in active markets for identical assets or liabilities (IFRS 13:72). Where an asset or liability held by an entity is traded in an active market, the fair value of such assets or liabilities is measured within Level one as the product of the quantity held and the

quoted price of the units of the assets or liability regardless of whether or not the daily trading capacity of the market can absorb the quantity held. It does not matter whether or not the price will be affected by placing orders to sell the assets in one transaction (IFRS 13:80).

Ehalaiye (2014), investigated the predictive power of bank fair value using a sample of 5,730 U.S Banks quarters between 2008 and 2010. He used multivariate regression to predict earnings one to three quarters ahead and document evidence that a predictive association exist between Level one fair value measurements hierarchy and future operating earnings of banks. Song *et al.* (2010) examined the value relevance of fair value hierarchy information with a sample of 512 US banks' 2008 quarterly report and find that Level one fair values hierarchy enhances predictive value of earnings of banks. Their study opines that Level two and three valuations are far less dependable than Level one valuation hierarchy. The study covers only one year. A study over a longer period may produce a different result.

2.5. Fair Value Measurement Hierarchy Levels two and three and Earnings Predictability

Level two fair value measurement hierarchies requires inputs other than quoted market prices considered within Level one for the valuation of asset or liability. (IFRS 13:81). They include: quoted prices for similar assets or liabilities traded in active markets, identical or similar assets or liabilities quoted prices in markets that are not active, observable inputs other than quoted prices for the asset or liability including observable interest rates and yield curves commonly quoted at intervals, implied upheavals, credit spreads, market corroborated observable by correlation or other means. Level 3 inputs are unobservable inputs for the asset or liability (IFRS 13:86).

Daifei *et al.* (2015), evaluated the usefulness of fair value in improving the predictive ability of earnings, with a sample of 138 non U.S banks between 2009 and 2012, the result of regression shows that level two and three assets fair values weakens the predictive ability of earnings. This finding could be as a result of the financial crises during the period of study

Also, Song *et al.* (2010) examined the value relevance of fair value hierarchy information with a sample of 512 US banks' 2008 quarterly report and find that Level two and three fair values hierarchy weakens predictive value of earnings of banks. Evaluating the effect of level two and three fair value measurement to 2015 in a different economic space may result in different findings.

2.6. Theoretical Framework

The study adopts signaling theory and agency theory to underpin the study. Agency theory explains the association that exists where the principal delegates work to the agent to carry out a given assignment. This association is described by Jensen and Meckling (1976) as a treaty where the owners engage managers to run the firms operations efficiently and effectively. Information asymmetry may result between the contracting parties as managers may be in possession of superior information about the present and expected future performance of the entity than the owners. This may incentivize managers to portray a favorable picture of the entity for their personal benefit. Debatably, bank managers could have incentive to manipulate fair value estimates that promote their interest leading to biases in the information presented in the entity's financial statement. Ehalaiye (2014) asserts that when accounting information is subjective and managers discretion allowed, intentional biases in the accounting aggregate estimates is very likely.

Signalling theory is also used to underpin this study as it is interested in understanding why particular signals are reliable whereas others are not. It examines how signals relate to the values they represent and those elements of the signal or its surroundings that keeps it credible and how much unreliability can be accepted before it becomes nonsensical. The use of signalling theory in management literature has gained acceptance in recent years as scholars have lengthened the range of probable signals and the contexts in which signalling occurs. Financial instrument's fair value signals the expected future cash flow and the difference thereon signals potential earnings. Signalling theory therefore provides a good explanation of fair value ability to predict future earnings.

3. Methodology

The research adopts correlation research design. The design is sufficient and suitable for determining the relationship that exists between fair value accounting and earnings predictability of DMBs in Nigeria. The study focuses on fair value accounting represented by fair value intensity, level one and levels two and three measurement hierarchies.

The data is extracted from the audited financial statement of listed DMBs from 2011 to 2014 and used to predict earnings of listed DMBs for the years 2012 to 2015. Data were extracted from the entire listed DMBs financial statement. We rely on audited financial statement for this study data because of the credibility audit excise adds to financial statements. This study uses panel data multiple regression for data analysis. The technique was used to account for heterogeneity of population in determining the effect of fair value accounting on earnings predictive ability of listed DMBs in Nigeria. Earnings before tax one year ahead is the dependent variable for the study while fair value intensity, level one and sum of levels two and three are the independent variables controlled by size and current year earnings before tax.

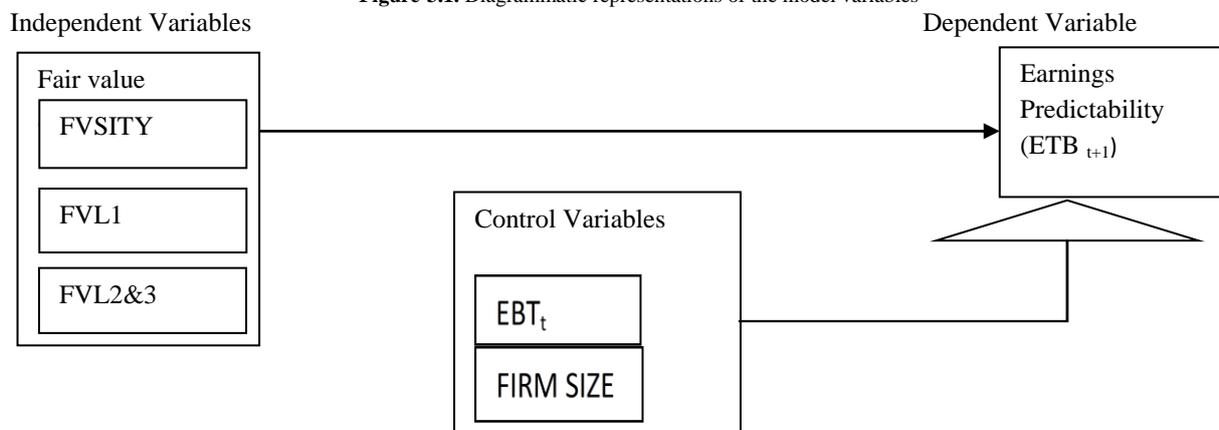
The population of the study consists of all the fifteen listed DMBs in Nigeria quoted on the Nigeria Stock Exchange as at 31st December, 2015.

Table-3.1. Variables measurement

S/N	Proxy	Variable	Measurement	Source
1	Earnings Predictability	Dependent Variable	Earnings before tax one year ahead divided by total assets	Daifei, Majella, Jenny and Fang (2015)
2	Fair Value Intensity	Independent Variable	Total fair valued assets divided by total assets	Daifei, Majella, Jenny and Fang (2015)
3	Fair Value Level one	Independent Variable	Level one fair value assets divided by total assets	Ehalaiye (2014)
4	Level two	Independent and three Variable	Sum of level two and three fair value assets divided by total assets	Daifei, Majella, Jenny and Fang (2015)
5	Earnings Control	Variable before tax	Earnings before tax divided by total assets at the beginning of the period	Ehalaiye (2014)
6	Firm size	Control Variable	Log of total assets	Shehu (2014)

Source: Compiled by the author, (2017)

Figure-3.1. Diagrammatic representations of the model variables



3.1. Model Specification

This study follows the model of Daifei Majella, Jenny and Fang (2015), and Kanagaretnam, Lim and Lobo (2011) to test the predictive ability of fair value based earnings with respect to future earnings as follows:

$$EBT_{t+1} = \alpha_{it} + \beta_1 FVSITY_{it} + \beta_2 FVL1_{it} + \beta_3 FVL2\&3_{it} + \beta_4 EBT_{it} + \beta_5 SIZE_{it} + \epsilon_{it}$$

Where:

EBT_{t+1} = Earnings before tax of the respective banks one year ahead.

α_{it} = Constant per bank year

$FVSITY_{it}$ = Fair value intensity per bank year

$FVL1_{it}$ = Fair value level one per bank year

$FVL2\&3_{it}$ = Fair value level two and three per bank year

$SIZE_{it}$ = Bank size per bank year

ϵ_{it} = Error term per bank year

4. Results and Discussions

This section presents the analysis of results obtained from the data collected for the study. The results in table 4.1 Provide of the descriptive statistics analysis of variables, where the minimum, maximum, mean, standard deviations, skewness and kurtosis of the data are fully presented.

Table-4.1. Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max	Skewness	Kurtosis
EBT_{t+1}	60	1.846	0.396	1.000	2.868	0.213	0.956
EBT	60	0.291	0.132	0.010	0.747	0.291	0.036
FVSITY	60	0.471	0.159	0.089	0.900	0.874	0.316
FVL1	56	0.162	0.015	0.140	0.196	0.181	0.646
FVL2&3	56	4.476	0.739	3.042	6.093	0.983	0.379
SIZE	60	6.059	0.305	5.345	6.616	0.336	0.541

Source: STATA output. (2017)

Table 4.1 indicates that the mean of earnings before tax one year ahead (EBT_{t+1}) is 1.85, minimum 1, maximum 2.87 and a 40% standard deviation meaning that listed DMBs predicted profits is widely dispersed. Also, current

earnings before tax with a standard deviation of 13%, 0.29 mean, .75 maximum indicates a listed DMBs current performance is not widely dispersed. Skewness of 0.21 and Kurtosis of 0.96 indicate normal distribution of the data relating to earnings before tax one year ahead. The closer skewness is to zero the more symmetrical the data. Also kurtosis value of not more than three indicates normality of data distribution.

Table 4.1 also shows that the mean of fair value intensity is 0.47 with a standard deviation of 15.89% meaning that on average, 47% of listed DMBs' total assets are fair valued financial assets and that it is fairly dispersed. This variable is normally distributed as indicated by the skewness and kurtosis of 0.29 and 0.04 respectively. In addition table 4.1 shows that the mean of financial assets classified under fair value hierarchy level one is 16% of total assets with the minimum and maximum of 14% and 20% respectively showing that the average proportion of assets that falls under this classification among the listed DMBs is 16%. The standard deviation of 1.6% indicates close dispersion of fair value intensity among listed DMBs during the period under review. Also the skewness and kurtosis of 0.87 and 0.32 shows normal distribution of the data.

Also, from table 4.1, we can see that fair value level one with a mean value of 1.62, minimum value of 0.14, maximum of 0.20 and standard deviation of 1.5% is not widely dispersed. This means that on the average 20% of listed DMBs' assets in Nigeria falls under level one measurement hierarchy. The skewness and Kurtosis 0.18 and 0.65 signifies normal data distribution.

Furthermore, Table 4.1 showed that the mean of fair valued assets estimates classified under levels two and three measurement hierarchies is 4.5 with a standard deviation of 0.74 indicating a wide dispersion. This is not surprising at all giving paucity of active markets for most financial instruments and the high cost of fair value estimation forcing listed DMBs to use more of the adjusted observable or unobservable inputs in fair values estimates. The skewness and kurtosis of 0.98 and 0.38 respectively depicts normal data distribution.

Finally, table 4.1 shows that the mean of the log of total assets of listed DMBs is 6.1 a minimum of 5.3 and maximum of 6.6 with a 30% standard deviation. This means that the size of the biggest listed DMB in Nigeria is greater than that of the average industry size by 30%. Again, the skewness and kurtosis of 0.34 and 0.54 indicates normal distribution of data.

4.2. Correlation Matrix

Correlation matrix indicates the association between each pairs of variable in the model. The association between the dependent variable and each of the independent variables is expected to be strong whiles that among the independent variables themselves is expected to be low.

Table-4.2. Correlation Matrix

Variables	EBT _{t+1}	EBT	FVSITY	FVL1	FVL2&3	SIZE
EBT _{t+1}	1.0000					
EBT	0.2785	1.0000				
FVSITY	0.2861	0.0170	1.0000			
FVL1	0.1950	0.2547	-0.3127	1.0000		
FVL2&3	-0.0664	-0.0977	0.3569	-0.4824	1.0000	
SIZE	-0.1688	-0.2236	0.3686	-0.7314	0.2850	1.0000

Source: STATA output (2017)

Table 4.2 reveals a correlation coefficient of 0.28 between earnings before tax one year ahead (EBT_{t+1}) and current earnings before tax (EBT). This implies that current earnings before tax is positively related to future performance by of listed DMBs in Nigeria. This is in line with the argument that strong association exist between current earnings and future performance.

The correlation matrix shows that the relationship between fair value intensity (FVSITY) and EBT_{t+1} is 0.27. This shows that there is a positive relationship between current fair value intensity and future performance of listed DMBs in Nigeria. This is in line with the expectation of IASB that fair value accounting provides decision useful information to users of financial statement.

Table 4.2 indicates that the fair value measurement hierarchy level one assets is positively associated with EBT_{t+1} by 12.6%. This means that the relationship between fair value level one and future performance of listed DMBs in Nigeria is positive. The correlation matrix show that the coefficient of correlation between fair value measurement hierarchy levels two and three and EBT_{t+1} is -0.066 indicating a negative and association between fair value level two and three and future performance. A close look at the correlation matrix also revealed that no two explanatory variables were perfectly correlated. The results of multicollinearity tests conducted indicate a variance inflation factor that is consistently smaller than 10 and the tolerance values were consistently smaller than 1.00. This means that there is the absence of multicollinearity problem in our model. Multicollinearity between explanatory variables may result to wrong signs or implausible magnitudes in the estimated model coefficients, and the bias of the standard errors of the coefficients.

4.3. Regression Result

The results of Generalized Least Square regression (Cross-sectional fixed effects) are shown in the Tables below.

Table-4.3. Fixed-Effects Regression Result

ebtt1	Coef.	Std. Err.	t	P> t
EBT	-0.8840	0.3580	-2.47	0.018
FVSITY	1.5003	0.4803	3.12	0.003
FVL1	9.2070	6.4264	1.43	0.160
FVL2&3	-0.1464	0.0701	-2.08	0.044
SIZE	0.6119	0.6346	0.96	0.341
CONSTANT	-3.1686	4.3245	-0.73	0.468
R-Square:	0.4920			
F-Statistic	7.17			
Prob > F	0.0001			

Source: Regression result output form STATA

The F-statistic value is 7.17 and P-value is 0.0001 shows that the model is fit. The R-square indicates the level at which the independent variables explains the dependent variable. From table 4.3, the R-square is 0.4920 meaning that all the explanatory variables in this study explain earnings predictability of DMBs in Nigeria up to 49.20%. This result is in line with Daifei *et al.* (2015) who document that exposure of banks financial statements to fair value accounting enhances earnings predictability and provides information about the features of a firm's financial performance. It is also in line with signaling theory which is primarily concerned with dipping information asymmetry by providing better information about future performance.

Table 4.3 reveals that fair value intensity has a positive coefficient of 1.5, a t-value of 3.12 and p-value of 0.003. This indicate that as more assets of the banks are fair valued, the predictive power of the banks earning are enhanced 1.5 times at 1% level of significance. This is consistent with the findings of Daifei *et al.* (2015), Bratten *et al.* (2016), who document that higher use of fair value based estimates by banks in their financial statements enhances earnings predictability and provides information about the features of a firm's financial performance that is relevant to users. The study has therefore established reasonable evidence to reject the hypothesis that fair value intensity does not significantly affect earnings predictability of listed DMBs in Nigeria.

Table 4.3 shows that fair value measurement hierarchy level one has a positive coefficient of 9.21, a t-value of 1.43 and p-value of 0.16. This means that fair value level one does not enhances earnings predictability of listed DMBs in Nigeria at any significant level. Though this result is at variance with Ehalaiye (2014) who document a significant association between FVL1 and earnings predictability, the result is not surprising because of the current developing nature of Nigerian capital market. Whittington (2008) opined that FVL1 will be misleading when capital market is imperfect or information irregularity exists. Therefore, this study is unable to reject the hypotheses that fair value measurement hierarchy level one has no significant effect on earnings predictability of listed DMBs in Nigeria.

Finally, Table 4.3 shows that fair value measurement hierarchy level two and three (FVL2&3) has a coefficient of -0.15 and t-value of -2.08 and a p-value of 0.044. This means that the use of unobservable input in fair value estimates lowers earnings predictability of listed DMBs in Nigeria significantly at 95% confidence level. This result is consistent with (Daifei *et al.*, 2015). This study has established enough evidence to reject the hypotheses at 5% significance level that fair value level two and three does not significantly affect the predictive ability of earnings of listed DMBs in Nigeria.

4.4. Policy Implication of Findings

The findings of this study will be useful to stakeholders including regulators, investors, the academia and practitioners as it confirms that fair value accounting enhances the earnings predictability of DMBs in Nigeria. Specifically, the findings imply that exposure of banks financial statement to fair value estimates enhances earnings predictability of DMBs in Nigeria.

The findings of this study have vital implications for regulators and standard setter (such as Financial Reporting Council of Nigeria, CBN and NSE) and contribute to the debate on usefulness of fair value accounting. It also supports IASB claims that fair value accounting satisfies the objectives of general purpose financial reporting through providing decision-relevant information. However, our findings also reveal that the predictive ability of fair values is dependent on the reliability of their measurement.

5. Conclusion and Recommendations

This study investigated the effect of fair value accounting (intensity, level one and levels two and three) on earnings predictability of listed DMBs in Nigeria during the period 2011-2015. The data from 2011 to 2014 was use to predict the profit before tax for 2012 to 2015. Based on the findings of the study, the study concludes that a significant statistical relationship exists between fair value accounting and earnings predictability of listed DMBs in

Nigeria. Specifically, the study concludes that fair value intensity has significant influence on earnings predictability during the period; while fair value hierarchy measurement level one has no significant positive effect on earnings predictability of DMBs and unobservable fair value measurement has a significant negative impact on earnings predictability.

From the conclusions, the study recommends that Security and Exchange Commission and Central Bank of Nigeria should create active markets for debt instruments to improve the reliability of fair value measurements and enhance earnings predictability DMBs in Nigeria. Financial Reporting Council of Nigeria should develop valuation guidelines that must be followed to improve reliabilities of fair value measurement in Nigeria. Auditors and regulatory staff of CBN should be adequately trained to detect sharp practices involving fair value measurement. On the hand the study recommends that the CBN should put in place robust supervisory and regulatory policies that ensures reliable measurement of fair values of financial instruments so that signals of financial difficulties are picked up on time from the earnings of DMBs in Nigeria.

This study is limited to a period of five years between 2011 and 2015 when data for measuring fair value accounting can be extracted. The study is also limited to listed DMBs in Nigeria. The findings of this study therefore may not apply to entities outside the banking industry. We recommend that a further study on the effect of fair value accounting be carried out on other sectors of the economy.

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