Fair Value Accounting and Reporting, and Firm Value: Evidence from Quoted Deposit Money Banks in Nigeria

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Authors' contributions

This work was carried out in collaboration among all authors. Authors AMFC, UFN and EOMR designed the study, wrote the protocol, wrote the manuscript and managed the literature searches. Author OTO performed the statistical analysis. Authors UFN and OTO managed the analyses of the study. All authors read and approved the final manuscript.

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ABSTRACT

The study evaluated the effect of fair value reporting on financial profitability and firm value with focus on deposit money banks listed on the Nigerian Stock Exchange Using a sample of 13 banks quoted on the Exchange, the study employed secondary data gathered from published annual reports of eight years (four years pre-IFRS, historical value measurement and four years post-IFRS fair value measurement) 2008 to 2015. The study was anchored on the agency theory while descriptive analysis was employed to summarize data collected while SPSS Version 23 software and regression analysis were used to analyze data. The result support the hypothesis that fair value reporting does not significantly affect reported profitability. Fair value was however found to affect firm valuation. Overall, this study suggests that he study concludes that in order to effectively evaluate financial performance and position, knowledge of fair value is not enough. Users also need to know the historical cost of the investment. Therefore, companies should adopt a hybrid form of measurement (measurements which entail both fair and historical values) in reporting their activities to reflect actual value creation.

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1. INTRODUCTION

Fair value accounting measurement has become applicable in Nigeria in the determination of firm value and profitability of listed firms in Nigeria following the adoption of the International Financial Reporting Standard (IFRS) by the Federal Executive Council (FEC) of Nigeria on July 28, 2010. The adoption of IFRS in Nigeria was premised on the recommendation of the Federal Executive Council (FEC) in 2010, which required publicly listed companies to adopt IFRS in 2012 [1]. The essence of the adoption was to promote higher quality of financial reporting information, and to improve comparability and transparency of financial reports in Nigeria. International Accounting Standard (IAS) 40 – *Investment Property* permits organizations to make a choice between the use of cost model and the fair value model. According to the standard, investment properties are initially measured at cost and, with some exceptions may be subsequently measured using a cost model or fair value model, with changes in the fair value under the fair value model being recognized in profit or loss.

Adegboyegun, Ben-Caleb, Ademola, Madugba and Eluyela [2] defined fair value as the price obtained or amounts paid for selling an asset or for transferring of liability between market participants in an orderly transaction at a particular date. Fair value accounting involves the valuing of assets and liabilities at their current market price as though the business is at liquidation and trying to realize its assets and dispose of its liabilities [3]. In the views of Ijeoma [4], fair values reflect the most current and complete expectation and estimation of the value of assets or obligations, including the amounts, timing, and riskiness of the future cash flows attributable to assets or obligations. As such expectations lie at the heart of all transactions, which add to the belief that market efficiency would be enhanced if the information upon which such decisions are made is reported in the financial statements at the fair value. However, Nordlund and Persson [5] identified that certain problems arise with the use of fair value accounting and valuations, including the feasible accuracy of valuations and cyclical movements in values over time.

The International Accounting Standard Board (IASB) [6] in the third chapter of the IASB Conceptual Framework identified two fundamental qualitative characteristics and four enhancing qualitative characteristics of financial statements, which includes: relevance and faithful representation, comparability, verifiability, timeliness and understandability. These characteristics, Enahoro and Jayeoba [7] stated, are the bedrock on which accounting theories are formulated since it is important to prepare and present financial statement with a view to meeting its objectives. The move towards meeting these qualitative characteristics led to the development of historical cost accounting. The historical cost accounting recognizes gains and losses only when actually realized. It works with the matching principle where expenses are offset against the revenues they support. The historical cost accounting was believed to have fulfilled the consistency characteristic of financial reporting over the years. However, in recent times, investors, financial analysts, shareholders, creditors, employees, and communities, nevertheless, believe that historical cost financial statements have lost the characteristic of relevance and this has led to the development of Fair Value Accounting [8]. With the application of fair value measurement, book earning is brought closer to financial earnings which are considered a positive outcome for the efficient functionary of the market and for the use of accounting information in the valuation of companies [9].

Nissam and Penman [10] stated that there have been changes in standards that govern accounting practice over the past decade particularly with regard to the increasing emphasis placed on reporting assets at fair value (predominantly the current market price of an asset). [11] stated that a fundamental conceptual issue that is confronting standard setters is the extent to which the standards should move away from traditional cost-based accounting to marking assets and liabilities to market, euphemistically referred to as 'fair value' accounting. [10] also lend credence to this statement stating that the adoption of fair value accounting is arguably the most important and controversial issue facing regulators and accounting standard setters today. There is, without doubt, considerable momentum to move toward fair value methodologies, but there are also significant questions about the practical and useful application of that approach to both internal and external users.

A lot of controversies has risen on the helpfulness of Fair Value Accounting in providing transparency and whether it leads to undesirable actions on the part of firms. In as much as investors want fair value information to better determine the true value of their investments, they also wish to see the historical cost information that provides a measure of cash flows and aids forecasting of financial performance and position. An argument against fair value accounting is the induced volatility of earnings if changes in fair values are reported in earnings. Some researchers believe that this volatility of earnings may not correlate to management's performance, as such, making it more difficult for users to predict future performance. Benston [12] gave credence to this stating that Enron's use of fair-value accounting was substantially responsible for its demise. [13] also remarked that the Enron case highlights the problems a company may face after applying fair value because it complicates the situation and makes managerial fraud hard to detect. The application of fair value accounting pads the financial statements with unrealized gains and losses that impairs income statement and thus understates or overstates performance.

Therefore, it is the objective of this paper to investigate the effect of fair value reporting on firm value and profitability. Specifically, the paper will investigate the effect of fair value reporting on reported firm profitability and ascertain the effect of fair value reporting on firm value.

2. LITERATURE REVIEW

In this section, we examine relevant extant literature on fair value reporting and firm value and profitability. The relationship subsisting between fair value reporting and profitability and value of firms are brought to fore.

2.1 Fair Value Accounting and Reporting

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (i.e. an exit price) [14]. The definitions of fair value emphasize fair value as market-based measurement, not an entity-specific measurement [3]. When measuring fair value, an entity uses the assumptions that market participants would use when pricing the asset or liability under current market conditions, including assumptions about risk. As a result, an entity's

intention to hold an asset or to settle a liability is not relevant when measuring fair value [15]. Fair value accounting in its ideal state, satisfies the shareholder reporting objective by accounting for assets and liabilities in the financial statements at fair value (to shareholders) unlike historical cost accounting.

The traditional accounting method, historical cost accounting has the quality of hardness: in other words, easy verification and low degree of susceptibility to assumptions and judgments. It as well ensures the objectivity principle is followed in that it provides verifiable records for past performance. However, it does not satisfy the information needs of investors (i.e. shareholders and debt-holders) who seek relevant information that can help predict firms' futuristic performance in the dynamic business environment.

Gautam, and Arjun, [16] posit that the historical cost accounting method is considered to be more conservative and reliable, however, fair value accounting information is becoming more relevant as a result of the following features:

a. Investors' rising concerns with current value as against cost,
b. Fair value effects are not entity specific
c. Historical prices do not consider the time value of money which becomes irrelevant in assessing an entity's current financial position.
d. Fair value accounting reports assets and liabilities in the way that an economist would look at them.
e. Fair value considers the market risk and updates the prices of financial instruments.

IFRS 13- Fair Value Measurement [14] is the extent standard on fair value measurement. The standard sets out the definitions, measurement criteria and disclosure requirements for organizations applying fair value methods. In applying fair value accounting in financial reporting, IFRS 13 requires an entity to determine:

a) The particular asset or liability being measured
b) For a non-financial asset, the highest and best use of the asset and whether the asset is used in combination with other assets or on a stand-alone basis

c) The market in which an orderly transaction would take place for the asset or liability; and

d) The appropriate valuation technique to use when measuring fair value.

The valuation technique used should maximize the use of relevant observable inputs and minimize unobservable inputs. Those inputs should also be consistent with the inputs that a market participant would use when pricing the asset or liability [7,17].

[10] wrote that accounting like any product should be demand-driven. The only difference is that for products, you have customers while accounting has users in perspective. Different users may demand different accounting reports, and confusion reigns if issues are discussed at cross purposes. For example, a shareholder might see a gain from a fall in the value of a liability item while a creditor pictures the same fall as a deterioration in creditworthiness. Bank shareholders might wish to see bank deposits at fair value, but not the depositors (who might be startled by a drop in the book value of their claim). A bank regulator might also be concerned about reporting deposits at less than face value if such reporting affected depositors' confidence in the banking system. While an investor might welcome the information about volatility that fair value accounting reveals, not so a central banker who might be concerned about feedback effects on systematic risk. The bank regulator might also be concerned about marking up banks' capital during speculative times with the resulting incentive for profligate lending [18].

From the fore going, this paper therefore will test the following hypothesis:

> H_{O1}: Fair value reporting does not significantly affect reported profitability.

2.2 Fair Value Accounting and Firm Value

Barth, Beaver and Landsman [19] opined that accounting information is considered value-relevant if it has the predicted association with market-value of equity. Song, Thomas and Han [20] also stated that value-relevant accounting information is both relevant to investors and reliable enough to be reflected in share prices. Armstrong, Guay and Weber [21] opined that financial reporting using fair value provides relevant information to debt holders regarding the downside risk and evaluation of firm collateral, as

well as information useful in assessing the timing and riskiness of firms expected future cash flows from existing projects and anticipated investments.

Nordlund and Persson [5] in their study of accounting for investment property at fair value according to IAS 40 fair value model, identified that certain problems arise with the use of fair value accounting and valuations, including the feasible accuracy of valuations and cyclical movements in values over time. They concluded that fair value accounting for investment property will result in a reduction in the significance of previous key accounting principles of realization and prudence concepts in favor of a nominally correct wealth measurement in financial statements. Cyclical movements in values over time may have considerable implications for reported earnings and reported equity. Furthermore, the uncertainty of property valuations is probably of such a magnitude that the consistency of both the income statement and statement of financial position might be questioned to a certain extent as a result of the application of the fair value model.

In the work of Yuan and Liu [22] fair value accounting was found to be embedded with two categorical flaws: its non-complete existence which refers to the very fact that the required fair value might not exist under certain conditions; and the self-expansionist tendencies of fair value accounting. This, they conclude will lead to using fair value accounting to create a fair value even when it does not exist, which may expand much larger than normal net income and create a price bubble in the market.

From the fore going, we hypothesize therefore that:

> H_{O2}: Fair value reporting does not have a significant effect on firm value.

3. THEORETICAL FRAMEWORK

3.1 Agency Theory

According to Egbunike and Abiahu [23], "Agency theory has been widely used in literature to investigate the information asymmetry between principals (shareholders) and agent (management)". Jensen and Meckling [24] describe the agency theory as constituting a contract where the shareholders (the principal) engage the managers (the agent) to manage the

firm's operations in an efficient and effective way. A major problem that can result from this agency relationship is the problem of information asymmetry between the managers and shareholders, as managers may possess superior information about the current and expected future performance of the firm when compared to the information available to shareholders. Arnold and Lange (2004) cited in Okaro, Okafor and Okoye [25] stated that two agency problems exist in an information asymmetry situation. First, adverse selection where the principal cannot determine if the agent is performing the work for which he/she is paid, and secondly, moral hazard where the principal is unsure as to whether the agent has performed their work to their ability. When the interests and functions of the self-serving agents coincide with those of the principals, agency problem will not arise. However, when there is divergence, agency costs are incurred by the principals because the agents will want to maximize their own utility at the expense of the principals [26].

3.2 Empirical Review

Okafor and Ogiedu [27] found that improves business performance management and impacts on other business functions apart from financial reporting. Ijeoma [28] observed that the implementation of Fair Value measurements gives sufficient precision in assessing a firm's financial position and earning. Akpaka [29] found very weak value relevance of post-IFRS financial information and post IFRS financial information has no relative value relevance over pre- IFRS financial information. Sanyaola, Iyoha and Ojeka [30] found a significant and positive relationship between IFRS adoption and EPS of quoted banks in Nigeria.

Ibidunnia and Okere [31] examined the association between fair value accounting and reliability of accounting information. Using a survey of 161 users of accounting information represented by corporate investment analysts and corporate portfolio managers, and the Pearson product moment correlation technique and the Statistical Package for Social Science (SPSS) to test and analyze the data collected, the study disclosed a significant association between fair value accounting and reliability of accounting information of the firms in Nigeria.

[2] examined the impact of fair value accounting on corporate reporting in Nigeria. They found that fair value accounting has impact on corporate reporting and a moderate strong relationship between the fair value accounting and corporate reporting.

In their study, [32] examined effect of fair value adoption on the value of assets and liabilities and the reported profit disclosed in the financial statement. Using financial information from the audited financial statements for the periods 2009 to 2014, the study revealed that Pre-IFRS adoption strengthens the determinants of reported profits as compared to the reported profit during Post-IFRS.

Lin, Lin, Fornaro and Huang [33] investigated the connotation between accounting restatements and reporting different levels of fair value measurements in financial statement. The study discovered that firms with higher ratios of Level 3 fair value assets (i.e., financial assets which fair values are determined by unobservable, firm-generated inputs) to total assets are more likely to restate their financial statements. They concluded that the use of less reliable fair value measurements reduces financial reporting quality.

Barth and Landsman [34] examined whether fair value accounting should be used in financial reporting given propensity of fair value earnings simply to reflects "shocks" to value. Their study revealed that when fair value earnings are disaggregated into components, it can be used to assess firm value.

4. METHODOLOGY

The descriptive research design was used for this research. Thirteen deposit money banks listed on the Nigerian Stock Exchange (NSE) in 2018 were studied. Secondary data for the study were extracted from the annual reports of 2008 to 2015 financial years. Market capitalization values for the banks were extracted from the Nigerian Stock Exchange Website. The collated data were analyzed using descriptive statistics and the regression analysis. The relevant tests were done on the Statistical Package for Social Sciences (SPSS) Version 23. The hypotheses were accepted or rejected based on the p values derived from the analyses. Probability values greater than 0.05 signify acceptance of null hypotheses while p values less than 0.05 imply acceptance of alternate hypotheses.

Table 1. Descriptive statistics

	N	Minimum Statistic	Maximum Statistic	Mean Statistic	Std. Deviation Statistic
ROI using Historical Value	13	-.1260	.0348	.001818	.0445441
Tobin q using Historical Value	13	.0937	.4566	.220964	.1168242
Return on investment (ROI) using Fair Value	13	.0004	.0519	.020900	.0129016
Tobin q using Fair Value	13	.0365	.3237	.115653	.0828634
Valid N (listwise)	13				

SPSS Version 23

Table 2. Paired samples test

		t	df	Sig. (2-tailed)
Pair 1	Return on investment (ROI) using Historical Value - ROI using Fair Value	-1.862	12	.087
Pair 1	Tobin q using Historical Value – Tobin q using Fair Value	3.429	12	.005

SPSS Version 23

5. DATA ANALYSES

The descriptive results show that the mean value for ROI increased from 0 .18% to 2.09% after the transition to fair value. The paired sample t statistic stood at -1.862 with a probability value of 0.087. A significant difference was not found in the value of reported profitability of banks (p=0.087>0.05). Fair value accounting does not significantly affect reported profitability. This is consistent with the findings of [29].

The average value of Tobin Q measured using historical cost was .220964 and decreased by .105311 in the era of fair value measurement. The paired sample t statistic stood at -1.862 with a probability value of 0.05. The value of firms was found to reduce with fair value accounting significantly (p=0.05). This is in line with the findings of [33,34].

6. CONCLUSION

The popularity of fair value measurement has been on the rise since the move towards global convergence of financial reporting. This has arisen from the adoption of IFRS by different nations of the world. These global standards set to harmonize accounting practices and improve the usefulness of accounting information advocated that items in financial statements are reported fairly. Contradictory views have however risen over time on how much fair value has achieved the purpose of financial statements and the usefulness of accounting information. Based on the results from the analyses of this study, the firm value differs significantly when measured with fair value and historical costs. Profitability was not found to differ significantly. The study, therefore, concludes that in order to effectively evaluate financial performance and position, knowledge of fair value is not enough. Users also need to know the historical cost of the investment.

7. RECOMMENDATIONS

In line with the findings of the study, the following recommendations were made:

1. Companies should adopt a hybrid form of measurement. In other words, measurement should entail both fair and historical values.
2. Auditors should examine financial statements with due care to ensure true and fair reporting by directors.

DISCLAIMER

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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