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The Value Relevance of Asset and Liabilities after Adoption of IFRS among Nigerian Financial Institutions

Muhammad Yusuf Alkali[1*] Asma Nor Lode [2]
1. Waziri Umaru Federal Polytechnic P.O.Box 81 Birnin Kebbi, Nigeria
2. Univesity Utara Malaysia, Sintok 06010 Kedah State Malaysia

Abstract
This study discusses and examined the value relevance of assets, liabilities and non-performing loans among Nigerian banks after the adoption of IFRS. Nigerian government mandated all listed firms to adopted IFRS effective January 1, 2012. Nigerian banks were in financial crisis during the period of 2008 to 2009 because of poor accounting reporting, non-performing loans and non-disclosure of accounting information. Ohlson 1985 model has been adopted for the study. Nigerian been emerging market with a lot of imperfections in the market has provide a value relevance results of accounting numbers. The three variables total assets and liabilities and non-performing loans have been found to have association with share prices. The study shows that total assets and non-performing loans to have a positive relationship with share price and provide more value relevance after the adoption of IFRS. However, total liabilities provide a significant negative relationship with value relevance of accounting information after the adoption of IFRS. This study provides readers with detail picture of value relevance in emerging market like Nigeria and contributes to the emerging markets study on capital markets. This paper has demonstrated that emerging countries in African can provides explanations on the association between accounting numbers and stock prices.
Keywords: Value relevance, disclosures, financial institutions, IFRS, capital market

1.0 Introduction

Demand for relevant accounting disclosures by users is increasing due to the growing complexity of business environments worldwide. Businesses continue to grow with more people participating in the stock market (Kasum & Standards, 1929) and comparing financial information between firms of different countries has become significant issue to the investors (Tarca, 2004). The financial sector is the most flourishing sector of the economy that makes a significant contribution to the stock market (Hossain & Baser, 2011). Banking sector is described as a heavily regulated industry due to its different business nature of performing money intermediaries of surplus and deficit components within the economy (Dimitropoulos, Asteriou & Koumanakos, 2010). Hence, accounting disclosures in this industry seem to be relevant for capital markets to function effectively

The Nigerian economic sector and accounting practice have experienced widespread collapse, non-functional social infrastructure, poor accounting reporting and economic structure in early 2004 through to 2009, especially in the financial institutions (Mohammed & Lode, 2012). Therefore, the government of Nigeria in 2010 asked the World Bank (ROSC) to make an assessment of the financial system of Nigeria with the aim to improve on it. The report of the committee suggested for the adoption of IFRS in Nigeria as domestic accounting reporting. Adoption of IFRS would enhance the efficiency and effectiveness of international stock markets that will lead lower firm capital cost (Jeanjean & Stolowy, 2008) and stimulate investigation on the effectiveness of the adoption of IFRS to improve relevance of financial reporting). Thus, several empirical studies explore if the adoption of IFRS affected the relevance of providing accounting information (Konstantinos, 2011).

Accounting information is relevant only when it explains “stock prices” movement, evaluates the past and the future and makes presentation without any bias (Prather-kinsey, 2006). Furthermore, accounting disclosures should be able to summarise stock prices in the capital market, to the extent the relevance of accounting information will indicate the statistical association that exists between accounting numbers and prices or returns (Francis and Schipper, 1999). Hence, ability of one or more numbers to explain variation in stock prices is referred to as value relevance (Francis, Olsson, & Schippers, 2006). One of the basic attribute of financial statement quality is value relevance (Vijitha & Nimalathasan, 2014)

Several studies have been conducted on the association between accounting disclosures (book value, earnings, net income, other comprehensive income and cash flows) with stock prices or returns in developed markets (e.g., Amir, Harris & Venuti 1993; Dechow 1994; Aboody & Lev, 1998; Francis & Schipper, 1999; Barth & Beaver, William & Landsman, 2000), and emerging markets (Chen, Charles, Chen and Su, 2001; Alali and Foote, 2012; Tharmila and Nimalathasan, 2013). Similarly, a few value relevance studies have been conducted in Nigeria (e.g., Abubakar, 2012; Titilayo, 2011; Abiodun, 2012). These studies provide evidence on the value relevance research of accounting disclosures in Nigeria, although they indicate conflicting results. However, they were conducted before the adoption of IFRS and they do not cover banking sector (Mohammed & Lode, 2015).

Despite the fact that accounting information is very important for capital market growth little or no

study has been conducted on the value relevance of accounting information among Nigerian banks. Therefore, this study is aimed to find out the association between accounting numbers (assets and liabilities) with stock prices. This study will be useful to investors, policy makers and regulators on the value relevance of accounting information for before and after the adoption of IFRS.

Furthermore, the paper is divided into five sections. Section 2.0 is the history of Nigerian financial reporting. Next is section 3.0 the capital market research. While section 4.0, is the literature review. Section 5.0 is the research methodology. Lastly, section 6.0 conclusion of the study.

2.0 History of Nigerian Financial Reporting

The accounting reporting in Nigeria has a close link and approach with the IAS and has a small link to auditing and accounting practice of USA. The accounting system adopted by the regulators and professionals in Nigeria is a private sector driven practices and concepts from UK and US. These concepts and principles adopted by the professionals namely; double entry method, reporting in financial statement especially the balance sheet are private sector activities. There was an application of British system of accounting practice by the professionals in Nigeria without modification needed in practice (Jageti & Nwadike, 2011).

Business Nigeria is becoming globally complex and growing rapidly which requires quality accounting reporting for the users. Nigerian stock market has about 216 listed companies that have a greater percentage of about US$35billion as at 30th January, 2010. With this statistic the growth of the stock market is still low, compared to other emerging market in developing countries like South Africa and Mexico. The collapsed of the capital market in the country in 2008 especially banks brought about a changing rule of financial reporting in Nigeria. Despite the fact that Nigeria offered a good opportunity for the investors to come into the country, they still perceive the capital market to be risky (NASB, 2010). This market risk can only be eliminated with the harmonization of accounting information with international best practice.

The first-accounting standards issued by NASB were in 1984 as SAS 1 disclosure of accounting policies, SAS 2 for information to be disclosed in financial statement and SAS3 accounting for property, plant and equipment. From the increasing number of businesses in the country and demand for more local regulation, the NASB issues 32 SAS from 1986 to 2011 for firms operating in Nigeria. These standards are for regulations and financial reporting settings (NASB, 2005). The requirements of the standards have the same standards requirement with IAS. The benefit of using IAS is to reduce training cost in the accounting profession as most of the professionals were trained from UK (ICAN, 2000). At the same time businesses operating in the country were from UK and USA (e.g. Shell, Chevron and Mobil oil companies).

The Nigerian Accounting Standards Board issued two-accounting standards for financial institutions as; (i) SAS 10 Part 1 referred as “banks and non-banks financial institutions” in 1990 for banks disclosures of accounting information; and (ii) SAS 15 Part 2 also referred as “banks and non-banks financial institutions” in 1997 for other financial institutions. However, SAS 10 part 1 requirements are substantially in line with the disclosure requirements of IAS 30 Disclosures in the Financial Statements of Banks and Similar Financial Institutions. SAS 10 Part 1 disclosures were issued to Nigerian national banking industry to provide direction for accounting method and policies that they should follow in preparing their financial statements because, (i) the significance of the industry and economic development of the nation, (ii) non-reliability of accounting reporting with greater inconsistency from their financial reporting, (iii) assumptions of issuing overstated profit (creative accounting), (iv) banks need to survive from troubles, (v) improvement on transparency, and (vi) sustenance of shareholders confidence in banking sector. The statement has been designed to focus on three areas of reporting financial disclosures namely, (i) income recognition, (ii) Loss recognition and balance sheet recognition. Furthermore, this statement is not designed to cover all aspect of the neither activities of banking nor financial institutions activities not covered by banking act of 1969.

However, with the new development in the financial sector after issuance of IFRS 10 part 1 for bank, there was an urgent need to develop and issue another accounting standard that will cover those aspects of financial institutions. In view of that SAS 15 Part 2, was issued to cover those banking aspect that has not been covered by the SAS 10 Part 1 and to extend it coverage to non-bank financial institutions. The standard pursues to offer a guide on the accounting method and policies required by non-flank financial institutions as, (i) Bureaux de-change, (ii) stock brokerage firms, (iii) finance houses or firms, (iv) discount houses, and (v) other capital market operators. The standard is also designed to disclose three main areas of concern, namely, (a) income recognition, (b) classification and disclosures in financial statements, (c) loss recognition.

In order to get the benefits of globalization several economic reforms need to be undertaken by the emerging markets (Holthausen, 2009). Therefore, for Nigeria to meet with the global trend adopted the fourth phase of economic reforms commenced in 2004 with the development of real sector and banking industry, being the most important sector of the economy. The first major review of the economic reform was made by the World Bank group and Nigerian professionals in 2004 (Report on the Observance of Standards and Codes (ROSC) to provide assessment on the accounting and auditing framework that will ensure quality accounting

reporting. In the findings of the committee, the Nigerian Accounting Standards (SAS) adopted from International Accounting Standard (IAS), has not been updated like IAS. There were no National Auditing Standard for practitioners in the country and that the auditing practice has not been in line with the best practice in the world. These factors, with poor accounting education and training on the regulators and practitioner, have significantly contributed to weaknesses of the accounting information and auditing regime, which in turn reduce quality reporting in the country (ROSC, 2010)

As a result of the weaknesses of regulation and financial system in 2008-2009, Nigeria experience capital market and banking failures. Even though the crisis was a global phenomenon, but it has made the review of existing rules and laws in financial industry in line with the best international practice and new financial reporting (Sanusi, 2010). In 2009 the CBN made a review of the financial sector and found out there was significant number of insider trade, non-performing loans, market abuse and creative accounting in the sector. The Government of Nigeria requested the World Bank group in 2010 to conduct a second phase of ROSC accounting and auditing in order to examine the implementation status of the 2004 report and explore ways in which Nigerian financial system will be strengthen. They were also mandated to identify ways in which to strengthen the Nigerian financial system to meet with the international best practices.

3.0 Capital market Research

The earliest researches on the association between usefulness of accounting information and market returns were carried out by Brown and Ball (1968). In their study, they established that: (i) capital markets information is both sufficient and unbiased in developing capital assets price; relevant information to investors will assist market adjustment in assets prices from the given information as quickly as possible and will not give any chance for further abnormal gains; and (ii) variation of stock returns in capital market margin is generated from the release of relevant accounting information from concerned firms (Ball & Brown, 1968). Their studies have significantly contributed to the study on the association between accounting numbers and stock prices or returns in the capital market.

A number of studies has been carried out on the association of accounting numbers and stock prices, such as Bernard (1994), Francis & Schipper (1999), Landsman (2007), Holthausen and Watts (2001), Kotharin (2001) and Kargin (2013) which also significantly contribute to value relevance studies. From the period 1995 to this period, several scholars used the Ohlson model to test significant association of accounting numbers in various countries' capital market data. Researches on the importance of information in efficient functioning capital markets has long been studied by many scholars (Dung, 2010).

Similarly, Kothari (2001), in reviewing the relationship between financial information and capital markets, provides a significant viewpoint of the ideas used in the accounting literature, that gives higher influence to the accounting future in the area of capital market research. In order to improve on capital market research, Beaver (2002) supports five areas of capital market research: value relevance, market efficiency, discretionary behaviour, Feltham-Ohlson Modeling, and analyst behavior, in his study. However, Beaver (2002) states two areas: market efficiency and Feltham-Ohlson model, as the basic platform which will permit researchers to organise the role of accounting information in capital markets. For example, investors use financial statements as accounting information for capital market decisions. These accounting information offer investors the needed information to evaluate firms' economic situation and thereafter allow them to invest in profitable investment opportunities (Zeghal & Mhedhbi, 2012).

Landsman (2007) also reviewed the extent to which capital market research examines how fair value accounting information significantly affects investors. The review shows that fair value for disclosed and recognised assets and liabilities are informative to investors; however, the level of informativeness of the disclosures is affected by the measurement errors as well as source of the estimates – external or management appraisers

4.0 Literature Review

Several studies have been conducted on the value relevance of accounting information, including accounting information prepared under pre- and post-adoption (Alali & Foote, 2012). Most of the value relevance studies conducted under pre- and post-IFRS in emerging markets measured book value and earnings with firm market value (Eng, Sun & Vichitsarawong, 2013; Kargin, 2013; Alali & Foote, 2012; Kwong, 2010; Oliveira, Rodrigues & Craig, 2010), because they are both summary measures of balance sheet and earnings (Barth, Beaver & Landsman, 1998). Li, Shroff, Venkataraman and Zhang (2011) document loss of value relevance to be significant under the new regime. In studies on market-based accounting research, different valuation model has been employed to determine the value relevance of accounting information (i.e., Francis & Schipper, 1999; Francis, LaFond, Olsson & Schipper, 2005; Cornett *et al.*(1996) with a lot of inconsistancy in the findings of these studies. Many reasons have been found to be the reasons for this inconsitancy, such as background and context of different countries(Kadri, Aziz, & Ibrahim, 2009).

This inconsistency has been found in many studies as a result of country background and context. For instance, Eng *et al.* (2013) examined the value relevance of book value and earnings of firms in five Asian countries (Hong Kong, China, Singapore, Japan and Korea) that are reporting under US-GAAP, IFRS and domestic standards and listed across US American Depositary Receipts (ADRs) for the period 2002 to 2011. For domestic samples, book value and earnings had significant association with the capital market, even though book value had higher incremental value relevance content than earnings. Nevertheless, both firms from the five Asian countries operated in a different business environment, but consistent result was documented for IAS-based accounting (Singapore and Hong Kong) and domestic accounting reporting (Korea, Japan and China). In addition, samples listed under ADRs had high informative content in book value than earnings under US GAAP. In contrast, after the adoption of IFRS, earnings were found to be more value relevant than book value; however, a higher incremental value relevance of book value was reported to be with US GAAP users.

Value relevance studies have been categorized into three classifications by Holthausen and Watts (2001). The first classification is the *relative association studies* that describe the increase or decrease on the association between stock prices with substitutive bottom-line measures. For instance, Amir *et al.* (1993) compared value relevance of accounting information between US and Non-US GAAP adopting relative association. Secondly, *incremental association studies,* which examine whether long period accounting numbers of interest can be helpful in explaining market returns or values when other specified variables are given. For example, Holthausen *et al.* (2001) cited in Ventachelun (1996), investigated incremental relationship in a value risk management derivative using regressions in equity market values from different on and off-balance sheet items. Lastly, the *marginal information studies*, where accounting numbers are examined as to whether they improve on the information set accessible to investors using event studies to decide if accounting numbers have any relationship with value changes.

Value relevance is the "association between accounting amounts and security values" (Barth & Beaver, 2000). The ability for financial reporting information to summarize and capture information that affects share values has been empirically tested as a statistical association between accounting and market values" and mapping from financial statements to "intrinsic" value (Aboody, Hughes & Liu, 2002; Hellström, 2006; Tharmila & Nimalathasan, 2013). Similarly, value relevance of financial information can be predictive and statistically measured through the relationship between stock market values or returns from the information reported by the financial statement (Barth *et al.*, 2001), with the ability of the disclosed information in financial statement to capture and summarizes firm value (Beisland, 2009; Kargin, 2013).

Beisland (2009) reports that value relevance researches are associated with market efficiency as they can provide the relationship between accounting numbers and stock prices. In many studies, Ohlson model (1995) has been employed to explore associations between the market value of equities and main financial information disclosed variables, such as book value per share (as balance sheet) and earnings per share (as income statement), other comprehensive income and cash flows.

Other studies on value relevance support historical cost to be more value relevance than fair value. Early value relevance literature on financial instruments investigated whether fair value disclosed can provide incremental value information to either recognized fair value or historical cost. Majority of these studies provide supporting proof, for e.g., Barth *et al.* (1995) and Eccher, Ramesh and Ramu (1996). In addition, Barth, Landsman and Wahlen (1995) prove that fair value in earnings is more value relevant than historical cost earnings with no reflection of share prices in the incremental volatility in banks. They provide evidence of violation of regulatory requirements of banks under fair value compared to historical cost. In other words, fair value in banks assists in predicting capital violation regulations. Furthermore, Khurana and Kim (2003) in their study on value relevance of fair value disclosure, validate the hypothesis that there is more in formativeness in fair value than historical cost in accounting reporting for financial instruments. The study used SFAS No. 17 and 115 on fair value disclosures by bank holding firms over the period of 1995–1998. Furthermore, they state that historical cost estimates on deposit and loans have more value relevance that fair values. However, loans and deposits are more actively traded and are usually involved subjectively in respect to the assumption and methods used in fair value estimations.

Additionally, Aboody and Lev (1998) support value relevance of R&D capitalization as variables for software assets. They conclude that tangible assets are value relevant and significantly associated with the market variables and future earnings. However, Venkatachalam (1996) found that reported fair values of financial derivatives in balance sheet to be value relevant. Furthermore, Oliveira, Rodrigues and Craig (2010) report both net earnings, other intangibles assets and reported goodwill to have a highly significant positive association with stock prices in the Portuguese stock market after adoption of IFRS.

The International Accounting Standards Committee (IASC) 1989 reported the role of accounting information to be both confirmatory and predictive to market values and accounting numbers as well as interrelated to each other. Thus, the IASB in 2010 stated that, "Financial information needs to be predictive or forecasted to have predictive value; financial report with predictive value is used by users in making their

predictions". Ebaid (2012) studied influence of accounting-based methods on market returns and prices and their predictive values to be considered as the value relevance of accounting disclosures. Thus, generally book value is value relevant when it can determine stock prices (Kargin, 2013). Similarly, Vishnani & Shah (2008) report that, "Value relevance" denotes power of the financial information stated in the financial reports to explain the stock market price measures.

The conceptual framework of financial reporting of IASB 2010 addresses two key operational dimensions of financial reporting as relevance and reliability in presenting accounting numbers. Financial statement represents economic phenomena in measures and words, but for it to have relevance it should be presented without bias (IASB, 2010). For the context of this study, on value relevance of accounting numbers and stock prices contrary to the views of Barth *et al.* (2000), relevance of accounting information to accounting numbers should be significant and reliable enough to investors, as well as to be reflected in the share prices. For example, Barth *et al*. (2000) identify relevance as predictive value, feedback value and timeliness, while reliability includes faithful representation, neutrality and verifiability. Relevance and reliability of accounting information form the two main characteristics of accounting information (Kommunuri, 2008).

Thus value relevance of assets and liabilities can increase or decrease as a result of new accounting regulations depending on the complexity of the number of several factors. But the most fundamental consideration is if the net benefit from having more disclosure could be positive or negative specifically using IFRS for financial instruments.

Hence, hypotheses for this study are as follows:

H1a: Assets and liabilities disclosed under IFRS 7 are more value relevant than assets and liabilities disclosed under SAS 10 among Nigerian financial institutions.

5.0 Research Methodology

In this study Ohlson (1995) model is used to determine whether there is more value relevance of accounting information after adoption of IFRS among Nigerian financial institutions for the period 2009 to 2013. The period 2009 to 2011 is the pre adoption period while 2012 and 2013 are the period after adoption of IFRS. The study used 53 financial institutions for the pre-and post-adoption of IFRS. The first step is to determine the model appropriateness for the study using pool OLS, fixed and random effects methods. The Breusch and Pegan Lagrangian Multiplier (LM) test was carried out for the purpose of selecting the most appropriate model between random effect and pooled OLS. The second step is to decide between random effects and fixed effect using Hausman test to determine whether the regressors are correlated with the unique errors in the model. Thirdly, Multicollinearity, skewedness and kurtosis test were carried out. Lastly, the value relevance of data from the given period is investigated.

However, a modified stock price model of Ohlson (1995) has been employed to test value relevance of accounting numbers in several studies such as (Harris & Muller, 1999; Amir & Lev, 1996; Hassan, Romilly, Giorgioni, & Power, 2009). For the purpose of this study the model is adopted to examine the relationship that exists between market value and three financial reporting variables, such as assets, liabilities and non-performing loans.

The econometric model to achieve this goal is presented in equations 1 and 2 below;

$$MV_{it} = \alpha_0 + \beta_1 TA_{it} + \beta_2 TL_{it} + \beta_3 NPL_{it} + ?_{it} \quad [1]$$

$$MVPS_{it} = \alpha_0 + \beta_1 TAPS_{it} + \beta_2 TLPS_{it} + \beta_3 NPLPS_{it} + ?_{it} \quad [2]$$

In equation 1. MV_{it} represents market value for the firm i at time t 3 month year end, TA_{it} total asset for firm i at time TL_{it} Total liabilities for the firm i at time t and NPL_{it} non-performing loans.

In equation 2, all the variables are deflated by the number of shares outstanding as in (Barth, 1994; Harris & Muller, 1999). Therefore, $MVPS_{it}$ become market value per share for each entity over time, $TAPS_{it}$ represent total asset per share for firm i at time t, TL_{it} denotes Total liabilities per share for every firm over the period whereas, $NPLPS_{it}$ is the non-performing loans per share for firm i at time t

5.1 Sample Selection and Descriptive Statistics

This Section explains the sources of data from Thompson Reuters data stream and annual reports of banks, whose data is been provided in table 3 below.

Table1 below is the total sample of banks excluding non-banks financial institutions for the year 2009(21), 2010(21), 2011(19) are categorized. Furthermore, the period for the year 2012(15) and 2013(15) is for the adoption of IFRS , IAS 39 for financial instruments. All the financial institutions have adopted IFRS for their

financial reporting in the period of adoption. In addition, all banks have 31st December as their accounting dates.

Table 1 Sample of Financial Institutions

S/No	Year	Banks	total
1	2009	21	62
2	2010	21	62
3	2011	19	56
4	2012	15	56
5	2013	15	59

Source: NSE, 2013

Note: Banks that have not been listed from 2009 through 2013 are exempted from the study. Banks that were delisted during the period have also been removed from the study

5.2 Descriptive Statistics

Before commencement of the analysis, the study describes the dataset. The main aim of the descriptive statistics is to show the average share prices of the series, average mean and, standard deviations, minimum and maximum of the shares of *TA, TL* and *NPL*. This is to provide a clear understanding of dispersion of the data. It further provides more understanding of the growth of the accounting data with the stock prices. In this case the descriptive data of the frequencies is presented in table 2 below:

Table 2: *Descriptive Statistics*

Variable	Obs.	Mean	Std. Dev.	Minimum	Maximum
MVPS	75	381.428	507.803	10	2283
TA	75	51.863	49.034	.037	280.371
TL	75	53.173	45.075	.052	256.476
NPL	75	3.921	6.362	.085	37.650

Notes: The above table reports descriptive statistics of 15 banks with 75 observations for the pre-and post-adoption of IFRS. Variables set out in the above table used for the regression for samples period for before and after the adoption of IFRS. The Nigerian currency (NGN) is adopted for the study. MVPS is the price per share after deflation with outstanding shares. TA is the total assets for the firms per shares, TL is defined as total liabilities per shares and NPL is non-performing loans per share.

Table 2 is showing the descriptive statistics and mean differences of variables to be investigated. This table above suggests that stock prices per share and other accounting numbers variables change across panel. The dependent variable *MVPS* has a mean value of NGN381.43 with an overall standard deviation of NGN507.8026 from average mean and minimum and maximum values of NGN10 and NGN2,283 respectively after the adoption of IFRS. The independent variable *TA*, has overall average mean of NGN51.86 and standard deviation of NGN49.03 from average mean with minimum of NGN0.037 and maximum of 280.37 after the adoption of IFRS. While *TL*, recorded 53.17 overall mean, NGN45.08 standard deviation from average mean and a minimum value of NGN0.52 and maximum figure of NGN256.48 after the adoption of IFRS`. Lastly, *NPL*, shows an average overall mean of NGN3.92, standard deviation of NGN6.36 from average mean and minimum of NGN0.09 and a maximum of NGN37.65 after the adoption of IFRS.

5.3 Correlation matrix

Correlations analysis is employed to explain the level of relationship between one variable and another (Asteriou & Hall, 2007). This study begins by examining the level of association between the dependent and independent variables in the model. The correlation matrix is presented in table 3 below:

Table 3*: Correlation Matrix*

Variable	*MVPS*	*TA*	*TL*	*NPL*
MVPS	1			
TA	0.33(***)	1		
TL	0.40(***)	0.85(***)	1	
NPL	0.12(***)	0.26(***)	0.29(***)	1

*** represent 1% significance level

Note: $MVPS_t$ is highly correlated with total asset per share, total liability per share and non-performing loans per share at (p-value 1%). All other independent variables are correlated to each other at 1% level of significance.

Secondary data is usually not normally distributed. In order to test for the normality of our data, skewedness and kurtosis tests are conducted. The skewedness for *mkt* has been provided to be 0.998, *ta* 0.099, *tl* to be 0.144 and *npl* is 0.040. While the Kurtosis for same variables is reported to be *mkt -0.640*, *ta* 0.174 *tl* to be -0.623 and *npl* is 1.186. Curran, West, & Finch (1996) suggested that variable with less than 2.0 in skewedness

and less than 7.0 in kurtosis is normally distributed. However, skewedness in STATA is regarded to skewed between -1 to +1 and kurtosis -3 to +3. Furthermore, as the data is transformed using log form (ln) the issue of skewedness and kurtosis is removed. Therefore, this data is assumed to be normally distributed. However, all variables are log in order to remove outliers. Normal distribution of data can be achieved by transforming data in its natural log form (ln) (Kadri, Abd Aziz, & Ibrahim, 2010)

Variance Inflation Factor (VIF) test was conducted to examine whether high collinearity exist between the independent variables or not. According to Hair Jr, Anderson, Tatham and William (1995) one of the various methods to check for the existence of the correlation among independent variables is through the test of multicollinearity. This explains the level by which one independent repressor's effect could influence other variable. When mean VIF result of 10 and above reported, then high collinearity exist, which require urgent solution. For the purpose of this study the VIF test result is presented in table 5 below:

Table 4: *Multicollinearity Test using Variance Inflation Factor*

Variable	VIF	1/VIF
TA	4.15	0.24
TL	3.99	0.25
NPL	1.13	0.89
IFRS	1.10	0.91
Mean	2.59	

Table 5 above shows the absence of multicollinearity problem since the VIF associated with every independent variable is less than the threshold value of 10, likewise the overall mean VIF value is reported as 2.59 far less than 10. This is in line with previous researches on value relevance (Kadri, Aziz, & Ibrahim, 2009; Anandarajan, Francis, Hasan, & John, 2011). Therefore, the study concludes that each variable is proved to be independent in explaining the deviations in the dependent variable,

5.4 Regression Models

The study carries out Breusch and Pagan Lagrangian multiplier (LM) test for the purpose of selecting the most appropriate model between pooled OLS, fixed and random effects model. The result of the test shows a significant value of the LM test which reject the null hypothesis of constant variance and favored the alternative hypothesis. The alternative hypothesis assumes the existence of entity effect in the model. Furthermore, a comparison test between random and fixed effect is conducted using Hausman test. The test shows that although there exist entity effect but yet the effect in the coefficient is not systematic. The test therefore, favored the random effect model. The robust standard errors are reported to take care of the diagnostic problems and avoid spurious regression and invalid inferences. The estimated regressions results are reported in table 6 below:

Table 5: Estimated Regression results

Variable	Pooled OLS	Fixed Effect	Random Effect	Random Effect, Robust
CONS	504.311*	299.093*	362.013*	362.013*
	(89.660)	(88.003)	(131.326)	(164.843)
TA	1.643	1.966**	1.615***	1.615**
	(2.016)	(1.265)	(1.235)	(0.958)
TL	-7.342*	-3.491**	-4.288*	-4.288*
	(2.337)	(1.510)	(1.442)	(1.83)
NPL	21.963*	22.648*	21.206*	21.206*
	(8.513)	(7.09)	(6.729)	(9.528)
IFRS	240.475**	192.865*	201.315*	201.315*
	(111.287)	(58.221)	(58.207)	(73.09)
R^2	27%	29%	29%	29%
Obs.	75	75	75	75
Number of Id	15	15	15	15

*The value in parenthesis represents the statistic standard errors. ***, **, * represent 10%, 5% and 1% respectively.*

5.5 Results and discussions

From the regression results the robust random effect model shows that the adoption of the international financial reporting standard increases the stock price by 201.315 per share. Furthermore, a unit increase in the total assets and non-performing loans lead to an increase in the stock prices by 1.615 per share and 9.528 per share respectively. However, when total liabilities are raised by one share the stock prices will decrease by 4.288 per shares in the Nigerian context. The regression have shown the impact of independents variables on dependent variable from the adjusted R square of 27% using pool effort 29% for the fixed and random effects model. The robust test of random effect have also shown R square to be at 29%. This has indicates value relevance of

accounting information has a greater impact on share prices. This is in agreement with Cohen (1988) where R square is classified as 0.02, 0.13 and 0.26 to be weak, moderate and strong relationship.

Overall, the study has shown that, value relevance of accounting information for assets and non-performing loans on stock prices increases over the period of IFRS adoption. However, total liabilities shows a decrease in value relevance over same period.

6.0 Conclusions

Study on value relevance on the adoption of IFRS is not new in accounting specifically in Europe, USA and some Asian countries. Nevertheless, value relevance studies in Nigeria are new, considering the fact that IFRS adoption commenced January 1, 2013. However, this study investigates the effect of adoption of IFRS on value relevance of assets, liabilities and non-performing loans and their association with stock prices among Nigerian financial institutions. Market valuation model in relating these associations is employed.

The relationship between accounting numbers and share prices has been examined in the study. Variables such as assets and liabilities and non-performing loans have been found to have association with share prices. The study shown that assets and non-performing loans to have a positive relationship with share price and provide more value relevance after the adoption of IFRS. However, total liabilities provide a significant negative relationship with value relevance of accounting information after the adoption of IFRS. Value relevance is proved with the level of significance on each of the variables. The R^2 has shown to signify that accounting information is more value relevant under IFRS.

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