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Article

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Financial ratios as performance measure: A comparison of IFRS and Nigerian GAAP

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Abstract: This study examines the effect of IFRS adoption on the performance evaluation of a case firm using some financial ratios selected from four major categories of financial ratios. The study was conducted through comparison of the ratios that were computed from IFRS based financial statements and Nigerian GAAP based financial statements. A One-Sample Kolmogorov-Smirnov Test was conducted to test for data normality. Mann-Whitney U test was employed in testing whether significant difference exists between the pair of ratios when the normality test showed a non-normal distribution of the data set. The result of the Mann-Whitney U test showed that there is no significant difference between the pair of ratios at 5% level of significance. It was concluded that the disclosure of IFRS compliant set of financial statements was not attributable to higher performance evaluation, through ratios, of the case firm. Rather, such disclosure could have been motivated by the capital needs theory or signaling theory.

Keywords: IFRS, financial ratios, Nigerian GAAP, capital needs theory, signaling theory

JEL codes: M41

1. Introduction

Based on the premise that organizations exist to maximize profits (in the short-term) or wealth (in the long-term), any decision taken by organizations' drivers or agents are expected to enhance shareholders' wealth in the long-term. Wealth maximization does not imply maximizing shareholders' wealth alone; it extends to maximising the stakes of other financial claimants like the debt and warrant holders

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(Jensen, 2001). According to Jensen (2001), an organization must not only have a score card, it must also make clear the way to measure ‘better’ as against ‘worse’. The benchmark for measuring ‘better’ as against ‘worse’ is the increase in the stockholders’ wealth (Jensen, 2001). It is in the light of the foregoing assertion that the adoption of IFRS in any jurisdiction is expected to create either in the long-term or short-term, an increase in stockholders’ wealth. Hence the common benefits ascribed to international harmonization and adoption of a single set of accounting standards (IFRS).

The benefits ascribed to the adoption of IFRS are many and have been continually debated by several scholars of accounting. The adoption of IFRS arguably leads to “more accurate, comprehensive and timely financial statement information” (Ball, 2006: 11); reduction in adverse selection arising from information access differential among users of financial statements that may likely spur reduction in the cost of equity; better comparability of financial statements and much more, transparency in reporting; reduction in information processing cost leading to market efficiency; removal of barriers to cross-border acquisitions and divestitures, leading to increased takeover premiums; finally, better accounting quality and value relevant information resulting from less earnings management and more timely loss recognition (see Daske & Gebhardt, 2005; Ball, 2006; Barth *et al.*, 2008; Chua & Taylor, 2008; Gebhardt & Novotny-Farkas, 2010; Lee *et al.*, 2013). “The change from local standards to IFRS causes a change in the accounting representation of the firm’s financial position and performance that may cause investors to revalue the equity of the firm” (Wang & Welker, 2010: 257).

In the light of these benefits, we seek to locate whether such benefits of IFRS adoption extend to a higher performance assessment of the case firm. Analysis of financial ratios from financial statements prepared based on IFRS and Nigeria GAAP is made and the results compared over seven years. The details of financial statement items used have been obtained from the firm’s financial statement prepared from 2005 to 2012.

The objectives this study seeks to achieve are in three folds. First, given that the case company is not the only company to be listed on a foreign stock exchange (for example, Guaranty Trust Bank Plc., Diamond Bank and Afren Plc. are some of Nigerian companies listed on the London Stock Exchange), the voluntary publication of IFRS-based financial statements as far back as the year 2004 has aroused our interest to advance some theoretical explanations for the case firm’s earlier disclosure of IFRS-based financial statements. Secondly, we also investigate whether significant difference exists among financial ratios prepared from IFRS financial statement and Nigeria GAAP financial statement of the case firm in order to ascertain whether financial ratios prepared from IFRS financial statement show higher performance than those prepared from Nigeria GAAP. These will help confirm whether significant change in the financial statement variables impacts on

the performance assessment (using financial ratios) of the company. The study searches to answer the following research questions: (i) What theoretical explanations exist for the case firm's earlier disclosure of IFRS compliant financial statements?; (ii) Is there a significant difference among financial ratios prepared from IFRS financial statement and Nigerian GAAP of the case firm?; (iii) Do financial ratios prepared from IFRS financial statement show higher performance than those prepared from Nigerian GAAP?

2. Literature review

2.1 Theoretical framework

This paper adopts the value maximization theory for situating the study. The value maximization theory holds that the single objective of a firm's existence is to maximize profits in the short run and maximize shareholders wealth in the long run (Friedman, 1970; Jensen, 2001). The theory therefore explains that all the activities of organization, even when they seem eleemosynary, are profit-seeking. The theory explains further that the long run wealth maximization does not portend the maximization of shareholders' wealth alone but also the maximization of other financial claimants like debt and warrant holders. Therefore, we argue that the essence of the case firm's disclosure of IFRS compliant financial statements is to maximize firm's value. This assertion is further explained by the theories we explain herein in the next paragraphs and equally provides an answer to our research question one.

Capital needs theory holds that companies that have some growth opportunities in the capital market seek external financing opportunities from the capital market (Core, 2001). This, they achieve by issuing more share or borrowing from external parties. "Therefore, such finance requires some kind of competition among these companies in order to obtain corporate capital as cost-effectively as possible under the conditions of uncertainty by disclosing more information to outside investors in order to inform them about the corporate position and to increase the certainty of their future cash flow" (Alberti-Alhtaybat, Hutaibat & Al-Htaybat, 2012: 81). This theory perhaps, explains the reason for the case firm's disclosure of IFRS financial statement together with the Nigeria GAAP financial statement when the former was not even mandatory. This can further be justified from the growth of the company's debt and equity over the seven years examined in this study. The firm's equity grew from \$2,162,000USD in 2004 to \$2,896,000USD in 2006, to \$3,541,000USD in 2008, to \$3,542,000USD in 2009 and to \$6,586,000USD in 2010. Equally, the firm's debt increased from \$312,316,000USD in 2004 to \$457,645,000USD in 2005, to \$550,998,000USD in 2006, to \$1,027,133,000USD in 2007, to \$1,870,315,000USD in 2008, to \$1,795,435,000USD in 2009, and to

\$1,568,058,000USD in 2010. These increases in the company's capital are pointers to the fact that the disclosure of IFRS compliant financial statements by the case firm may be explained by this theory in that they are able to distinguish themselves from other companies that are listed on foreign exchanges by reporting IFRS-based financial statements which has reduced the information gap on the side of the investors. Thus, answering our research question one.

Furthermore, signaling theory holds that buyers of companies' shares are not in a position to distinguish between the quality of various products (companies' stock) if all firms choose to disclose standard and mandatory information alone. Hence sellers may provide additional voluntary information to show their betterment with respect to other firms in the market (see Akelof, 1970; Strong & Walker, 1987). This theory may also explain the reason for the case firm's disclosure of IFRS compliant financial statements. Thus, providing a second answer to our research question one.

2.2. Conceptual and empirical framework

Performance measure entails comparing actual results with an established standard. For example, the comparison of actual results with standards as in variance analysis or actual results with budgets as in budgetary control system or comparison of a company's financial ratios with the industry average as in ratio analysis or comparing a company's performance with best practices as in benchmarking. Ratios have been used as a measure of performance in various instances. Altman (1968) developed a model that uses ratios for bankruptcy prediction of firms. Prior to Altman, there was Beaver (1966) who also employed financial ratio in predicting the financial health of firms. Subsequently Beaver (1966) and Altman's (1968) study were followed by other researches in predicting firms' bankruptcy (for example; Charitou *et al.*, 2004; Beaver *et al.*, 2005; Dewaelheyns & Van Hulle, 2006). All these studies have equally adopted financial ratios in predicting the financial health of the sampled firms. The use of financial ratios in measuring performance is not limited to bankruptcy prediction. Rather, they have been employed in various other contexts. Liu and O'Farrell (2009) employed financial ratios in comparing the strengths and weaknesses of US firms and China firms. Prior to Liu and O'Farrell (2009), other studies have equally adopted financial ratios in just a similar context, for example Fuglister (1997). Hagigi and Sponza (1990) equally adopted financial ratios in comparing the strengths and weaknesses of US firms and Italian firms and Lui and Wei (2008), compared the financial ratios of Chinese firms and Japanese companies.

In the context of adopting ratio for examining the effects of IFRS adoption on various variables, a number of studies have also been carried out. Blanchette *et al.* (2011) compared 26 ratios computed from IFRS financial statements and Canada

GAAP financial statements. Nine firms were used and the data were extracted from the financial statements prepared for under each accounting standard during the transition years. Their findings show that “IFRS’s impact on financial ratios is driven by fundamental differences in application of fair value accounting and consolidation under IFRS and pre-changeover Canadian GAAP” (p. 7), “differences between IFRS and pre-changeover Canadian GAAP do not affect cash flows and most of the financial ratios under IFRS present a significantly higher volatility than those computed under pre-changeover Canadian GAAP” (p. 8). In the same vein, Lantto and Sahlstrom (2009) assessed the economic consequences of the adoption of IFRS in Finland. This was achieved by calculating ratios from sampled 91 firms’ on Helsinki Stock Exchange. The result shows that after the adoption of IFRS, profitability ratios increased, liquidity ratios decreased and there was a decrease observed in a market based financial ratio- the PE ratio. Callao *et al.* (2007) examined the effect of IFRS on the comparability and relevance of financial reporting in Spain. Using IBEX-35 companies, they compared the accounting figures and the financial ratios under the IFRS and Spain GAAP to test whether a significant difference exist between the two groups of ratios. They found that comparability of accounts worsens when IFRS and local GAAP are used together in a country at the same time.

In the light of these researches, this study compares the financial ratios of a firm computed from its IFRS compliant financial statements and the Nigerian GAAP based financial statements’ over seven years. The essence is to ascertain whether a significant difference exists and whether such difference, if any, is better for the company by increasing stakeholders’ assessment of the company’s performance thus increasing its value.

2.3. Accounting profession in Nigeria

The erstwhile issuer of the Statement of Accounting Standard (SAS) in Nigeria, the Nigerian Accounting Standard Board (NASB) gave the first unified and professional outlook to the regulation of accounting profession in Nigeria in 1982 when it was constituted as a board. The NASB, hitherto set up under the auspices of the Institute of Chartered Accountants of Nigeria (ICAN) was thence brought under government supervision by making it a component of the then Federal Ministry of Trade and Tourism in 1992 (ICAN, 2006). As a faction of a government parastatal, The NASB issued some standards which though, were not wholeheartedly followed by all players; serve effectively in providing a uniform basis for locally based companies and preparers of financial statements. The major setback of the NASB was the refusal of multinational companies to adopt the SASs as they considered it mere codifications of the extant International Accounting Standards (Nigeria’s Financial Hub, 2011).

In May 2003, the NASB act was enacted into Nigerian law to make the NASB an independent body charged with the responsibility, among others, of regulating the accounting profession in Nigeria (Abdullahi, 2010). The act was to serve as a constitution that governs the operation of the NASB. This, it does by issuing accounting standards to be compulsorily adopted by preparers of financial statement in Nigeria (NASB Act, 2003). Although the standards were criticized as mere codification of existing international accounting standards (Nigerias Financial Hub, 2011), they cut across various industries and were applauded by users as elaborate and extensive set of standards. Until the NASB act was repealed in 2011, it had 31 SASs in operation (FRCN, 2014). Notwithstanding the oversight role of the NASB, plethora of sharp practices among accountants brought about disdain to the revered profession of accounting in Nigeria (Sanusi, 2010; Otusanya & Lauwo, 2012). Continual public outcry as well as the urgent need to adopt IFRS therefore necessitated the need for the enactment of the Financial Reporting Council of Nigeria (FRCN) in 2011.

In an effort to place Accounting and Financial Reporting Practices in Nigeria on the same footing as that of the world's best practices, the "FRCN Act" was enacted on 2011. In the presentation of a paper in 2012 at a retreat with Accounting Lecturers in Nigerian University, the Director of the council, Jim Obazee Osaynade noted that the "council will require management assessment of internal controls, including Information Systems Controls with independent attestation" (p. 25). He stated further that as part of the FRC oversight of professionals, "the FRC requires a good code of ethics for financial officers and certification of financial statements by chief executive officers and chief financial officers" (Osayande, 2012 p. 23) of reporting entities. More so, the council will reinvigorate efforts in restoring public confidence in financial reporting as it "issues code of corporate governance and guidelines, and develop a mechanism for periodic assessment of the codes and the guidelines" (Osayande, 2012 p. 23). Arguing further for the enactment of the FRCN act, Anao (2012) "considers that the development is timely as "it expands the scope of financial regulation beyond traditional spheres of accounting and financial reporting and also spans auditing and corporate governance" (p. 5). The increased involvement of government in financial reporting presents a picture that is ardently passionate about the public interest. Perhaps, because of the plethora of bank fraud exposures recorded in recent times in Nigeria and the urgent need to align with international best practices. The Financial Reporting Council of Nigeria therefore operates to enable the strict adoption of International Financial Reporting Standards, majority of which is embedded with fair value accounting (Ball, 2005). Further to that, the Nigeria's Federal Executive Council approved January 1 2012 as the effective date for the convergence of SAS with IFRS in Nigeria and charged the FRCN to swing into action by designing a conversion roadmap for all concerned entities (Robert, 2012).

2.4. IFRS and accounting quality

According to Chua and Taylor (2008), evidence regarding the accounting quality emanating from the adoption of IFRS is mixed. Accounting quality may be conceptualized in three major contexts: “on capital market effects (e.g., cost of equity capital or measures of liquidity); on attributes of analysts’ forecasts (e.g., dispersion and accuracy); or on the extent of institutional ownership” (Chua and Taylor, 2008: 466). Barth *et al.* (2008) observe that 21 countries adopting IAS evidence less earnings management, more timely loss recognition, and more value relevance of accounting amounts than matched firms adopting non-US domestic standards. Thus they conclude that firms adopting IAS evidence an improvement in accounting quality. However they caution that their findings may not be attributable to a change in reporting system but rather “to changes in firms’ incentives and the economic environment” (p. 467).

Tendeloo and Vanstraelen (2005), using a sample of 636 firm-year observations of German listed companies adopting IFRS within the periods 1999-2001, observed that “IFRS-adopters do not present different earnings management behavior compared to companies reporting under German GAAP” (p. 155). In furtherance, Christensen *et al.* (2008) in their research found voluntary adoption of IFRS is associated with decreased earnings management and more timely loss recognition. However, they admit that such findings cannot be extended to firms that were forced to adopt IFRS. Jeanjean and Stolowy (2008) examined the effect of mandatory introduction of IFRS on earnings management in Australia, France and UK. They found that earnings management did not reduce in the sampled countries after the adoption of IFRS rather it increased in France.

Rainsbury *et al.* (2010) examined the effect of IFRS on adoption of New Zealand listed firms between 2005 and 2007. They found that the “adoption of IFRS resulted in statistically significant increases in earnings, assets and liabilities” (p. 1). They however submitted that “IFRS adoption did not improve the value relevance of the accounting numbers” (p. 1). Daske *et al.* (2013), examined the effect of voluntary and mandatory adoption of IFRS on liquidity and cost of capital. To test this, they split the sampled firms into ‘label’ and ‘serious’ adopters. By label adopters, they meant firms that may adopt IFRS only in name and just make few changes to their reports. On the other hand, serious adopters are those firms that adopt IFRS as a “strategy to increase their commitment to transparency” (p. 495). Their findings are summarized below:

While on average liquidity and cost of capital often do not change around voluntary IAS/IFRS adoptions, we find considerable heterogeneity: “Serious” adoptions are associated with an increase in liquidity and a decline in cost of capital, whereas “label” adoptions are not. We obtain similar results when classifying firms around mandatory IFRS adoption (p. 496).

Devalle *et al.* (2010) investigated whether the value relevance of accounting data increased as a result of the adoption of IFRS. They sampled 3,721 firms on five European stock exchanges- Frankfurt, Madrid, Paris, London, and Milan. Their findings revealed a mixed evidence of an increase in value relevance of accounting data. While the influence on earnings on share price increased upon the adoption of IFRS in Germany, France and United Kingdom, the influence of book value of equity decreased except for the UK. Chen *et al.* (2010) also examined an increase in accounting quality around IFRS adoption of publicly listed companies in 15 member states of the EU. Using five proxies of accounting quality, they found that less of earnings management, lower magnitude of absolute discretionary accruals, and higher accruals quality are attributable to IFRS adoption. However, they equally found that “firms engage in more earnings smoothing and recognize large losses in a less timely manner in post-IFRS periods” (p. 221).

Ozkan *et al.* (2012) examined the impact of a mandatory adoption of IFRS in continental Europe on the contractual usefulness of accounting information in executive compensation based on pay-performance sensitivity (PPS) and relative performance evaluation. They found that “higher earnings quality and comparability brought by the adoption of IFRS facilitate executive compensation contracting” (p. 1078). Gebhardt and Novotny-Farkas (2011) assessed the implication of mandatory adoption of IFRS on accounting quality in 12 European banks. Their findings indicate that the recognition of incurred losses under IAS 39 reduces income smoothing. However they analyzed further that this result is less pronounced in banks with stricter supervision, widely spread ownership and in EU banks that are cross-listed in the US. Secondly they submit that the incurred loss approach under IAS 39 lead to less timely loan loss recognition.

Daske (2006) examined the impact of IFRS on the cost of equity of a set of German firms from 1993-2002. He found out that IFRS did not reduce the cost of equity of the sampled firms. The cost of equity, according to his findings rather increased.

Daske and Gebhardt (2006) examined the impact of IFRS adoption on accounting quality in three European countries- Austria, Germany and Switzerland. Using the annual reports of companies with annual report ratings by independent accounting scholars in these countries, they found that accounting quality significantly increased in the sampled companies that mandatorily and voluntarily adopted IFRS. Christensen, Lee and Walker (2008), examined the impact of incentives to adopt IFRS on accounting quality – earnings management and timely loss recognition- around IFRS adoption. They submit that improvement in accounting quality experienced around IFRS adoption can be isolated as being attributable to firms with incentives to adopt the IFRS.

3. Research methodology

This study adopts a case study research approach. This method is informed by the nature of data sourced and examined in this study. Obviously, compliance with IFRS by Nigerian firms has only been recently made compulsory in the year 2013. Thus only the case company has produced a pair of financial statements that comply with both IFRS and the domestic GAAP. The years observed are between 2004 and 2010 as there are no data produced for the later years by the company. The preliminary analysis of the data revealed that the values of the variable under study were not normally distributed as shown by the One-Sample Kolmogorov-Smirnov Test in Table 1. Consequently, the Mann-Whitney test statistics was employed to test whether a significant difference exists among the ratios calculated from the pair of financial statements. The result of the test was used to test the hypothesis generated from research question two and to provide an answer to research question three while a theoretical explanation was adopted to advance reasons for the earlier disclosure of IFRS compliant financial statements by the firm, thus answering research question one. This theoretical explanation is made in the next section under the theoretical framework. The hypothesis generated from the first research question and the second research question was answered in section three. In total, twelve ratios were examined under four categories with each category having three ratios each in order to have a holistic view of the case company's performance. The proposition tested in this study, derived from literature, is that there is no significant difference among financial ratios prepared from IFRS financial statement and Nigerian GAAP of the case firm.

Oando plc is one of Nigeria's leading Oil Company involving oil exploration and production (Upstream); energy services; gas and power (Midstream); marketing, supply and trading and Oando terminalling (Downstream). Founded in 1994 as Ocean and Oil limited to supply and trade petroleum products in Nigeria, it was incorporated as a Joint Venture between Oando Plc & and Ocean & Oil Services in 2004 after having acquired 60% stake in Unipetrol plc (oandopl.com). The merger of Unipetrol and Agip in 2003 evolved Oando as the 2nd largest downstream oil and gas company in Nigeria with a market share of 15.64% in 2003(oandopl.com).

With the company's involvement in a large-scale export and import of petroleum products and being a leading supplier of petroleum products to Nigeria, it "emerged to an integrated Energy group with varied interests and assets spanning the entire Oil and Gas Energy Value Chain" (Oandonews p.1). It is the first indigenous group to attain this height and has been growing until it won the battle for the acquisition of CononcoPhilips Nigerian Assets in a deal worth \$1.79billion in 2012 (nigeriaoilandgasintelligence.com).

Oando's revenue grew from N336.8Million to N378.9Million between 2009 and 2010 amounting to 12.5% increase while its profits after tax in 2010 was

N14.4million, a 42% increase on 2009 as shown in Nigerian GAAP denominated financial statement. The company is the first (in Nigeria) to present the financial report of its operation covering the periods of 2005 accounting year to date denominated both in IFRS and Nigeria's GAAP. In 2005, the company was listed on the Johannesburg Stock Exchange (JSE) and by January 17, 2014, the company became listed on the Toronto Stock Exchange with a Market Capitalization of \$184 Million. Meanwhile, the financial reports as presented on IFRS basis show a growth of 11.5% as opposed to 12.5% depicted under Nigerian GAAP. Thence, the need for a comparative evaluation of financial reports presented under the Nigeria's GAAP and those presented under IFRS.

4. Data presentation and analysis

Table 1 presents the One-Sample Kolmogorov-Smirnov Test of the distribution of the twenty four (24) financial ratios computed under both the Nigerian GAAP and IFRS.

Table 1. One-Sample Kolmogorov-Smirnov Test

N	Mean	Std Deviation	K-S Z value	Significant
24	3.9511	10.5315	1.992	0.001

Normality assumption is assumed if the significance level is greater than 0.05. The result as shown in this table indicates that the significant level is less than 0.05 implying that the data set does differ significantly from the normal distribution and therefore the violation of the normality assumption. In this instance, the non-parametric statistical mean should be considered as the best possible option (Abd Rahim, 2009). Consequently, the Mann-Whitney test, an equivalent non parametric test for the independent t test was used to determine whether the mean difference was significant at the 5% level.

Table 2. Summary of Mann-Whitney U test on overall financial ratios prepared from IFRS and Nigeria GAAP financial statements

Standards	N	Mean Rank	Sum of Ranks
Nigerian GAAP	12	13.08	157.00
IFRS	12	11.92	143.00
Total	24		
Test Statistics			
Z	-.404		
Asymp. Sig. (2-tailed)	.686		

Table two is the result of the Mann-Whitney U test. The result shows that there is no significant difference in the distribution of the ratio computed under the Nigerian GAAP and IFRS as the test statistic is 0.686 which is greater than 0.05 (i.e. at 5% level of significance). This result implies that the null hypothesis would not be rejected. Thus we accept that there is no significant difference among the financial ratios computed under Nigerian GAAP and under IFRS.

Table 3. Descriptive analysis of financial ratios prepared from IFRS and Nigeria GAAP financial statements

Variables	Nigerian GAAP					IFRS			
	Obs	Mean	Max	Min	Std. Dev.	Mean	Max	Min	Std. Dev.
Profitability									
Gross Profit Margin	7	0.1157	0.14	0.09	0.0172	0.1157	0.17	0.07	0.0341
Net Profit Margin	7	0.0214	0.04	0.01	0.0122	0.0229	0.03	0.01	0.0095
Return On Capital	7	0.0414	0.07	0.03	0.0135	0.0429	0.06	0.02	0.0125
Overall Mean		0.0595				0.0605			
Short-term solvency									
Current Ratio	7	0.8714	1.01	0.61	0.1264	0.8586	1.04	0.59	0.1399
Acid Test Ratio	7	0.7114	0.86	0.57	0.0886	0.6914	0.82	0.54	0.091
CRA	7	0.1657	0.26	0.09	0.0702	0.1643	0.26	0.09	0.0608
Overall mean		0.5828				0.5714			
Long Term solvency									
Debt Ratio	7	0.7514	0.88	0.66	0.0788	0.7514	0.85	0.66	0.0669
Gearing Ratio	7	0.5004	168.71	5.42	61.0653	0.3429	0.93	0.01	0.3784
Cash Flow Ratio	7	0.0729	0.2	-0.04	0.0793	0.0471	0.2	-0.12	0.1350
Overall mean		0.4296				0.3805			
Investment ratio									
Earnings Per Share	7	13.3229	22.31	5.14	6.3152	12.9243	21.24	4.22	6.9250

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Dividend Per Share	7	4.3371	6.67	2.34	1.6067	7.34	13.37	4	3.6688
Dividend Payout	7	0.4129	0.78	0.15	0.2487	0.6626	1.23	0.24	0.3179
Overall Mean		6.0243				6.9756			

Table 3 above summarizes the seven-year mean of the sampled ratio under each category of ratios. The individual as well as the overall profitability ratios depict fairly similar results for the financial statements of the duo. Although, the gross profit margins are the same under the IFRS and the GAAP, the net profit margin and the return on capital are higher under the IFRS.

The overall ratios of both the short and long term solvency indicate higher liquidity for GAAP denominated financial statement than the IFRS. All the individual ratios under the short-term and long-term solvency ratios are higher under GAAP than IFRS however; the debt ratio is the same under the two regimes. Inferring from this, financial ratios computed for solvency portray higher liquidity under GAAP than the IFRS.

The investment ratios present a mixed result as the GAAP has higher EPS than the IFRS while the DPS and the dividend payout ratios are higher under IFRS than the Nigerian GAAP.

Conclusively, the above comparison of ratios conveys to us that neither the Nigerian GAAP nor the IFRS has depicted a higher performance in terms of ratios as the results are mixed. Thus we can conveniently answer our research question three that the ratios under the IFRS do not depict a higher performance than the ratios under the Nigerian GAAP except for the profitability ratios and the investment ratios where the IFRS has two of the ratios under each category to be higher than the Nigerian GAAP.

Finally, to examine whether these differences are significant, we present the Mann-Whitney test for each category in the next table below.

Table 4: Summary of Mann-Whitney U test on each category of financial ratios prepared from IFRS and Nigeria GAAP financial statement

Ratios	Standards	N	Mean Rank	Sum of Ranks	Z statistics	Sig
Profitability	GAAP	3	4.67	14.00		
	IFRS	3	2.33	7.00	-1.528	0.127
Short term	GAAP	3	4.00	12.00		
	IFRS	3	3.00	9.00	-0.655	0.513

Long term	GAAP	3	4.33	13.00		
	IFRS	3	2.67	8.00	-1.091	0.275
Investment	GAAP	3	3.33	10.00		
	IFRS	3	3.67	11.00	-0.218	0.827

Preliminary analysis of the data revealed that in general, except some of the investment ratio and some of the profitability ratios, ratios computed under Nigerian GAAP have a higher mean scores than those computed under IFRS as indicated by the mean ranks of the groups of ratios in table 4 above. However the reason for the exception of the investment ratio may be attributable to the treatment of dividend under the different accounting standard regime. Typically, proposed dividends are treated as liability under Nigerian GAAP while they are not treated as liability under IAS. Overall, Nigerian GAAP shows higher mean rank (13.08- see table 2) than IFRS (11.92- see table 2). Thus, it can be inferred from this that IFRS does not show a higher performance in terms ratios comparison than Nigerian GAAP as none of the ratios has shown a significant difference, at all reasonable levels of significance, between the two ratios under each category.

5. Conclusions

While some studies have shown a significant difference in the financial ratios of the respective local GAAPs and IFRS (Blanchette *et al.*, 2011; Lantto & Sahlstrom, 2009), our result does not show a significant difference. The reason might perhaps be attributed to the fact that such local GAAPs were independently developed by the respective local Accounting Standards Setting bodies. Nigerian GAAP has always been an adaptation of IASs (now IFRS). This is evident in standards issued by the defunct Nigeria Accounting Standard Board (NASB) which had a section detailing the compliance of each Nigerian standard with IAS (NASB, 2009). Furthermore, the non-existence of a significant difference between Nigerian GAAP and IFRS based financial ratios implies that the company's disclosure of IFRS compliant set of financial statements may not be attributable to a short-term performance evaluation of the company's achievement using a number of financial ratios computed from IFRS rather, the theoretical inclinations of the firm may be to the capital needs theory and the signaling theory as discussed under the review of literature. Conclusively our result adds to the body of literatures that have examined the impact of IFRS on various financial ratios in different spheres.

We acknowledge the fact that, as it is common with most case study research, our findings' generalizability is hampered as we have only examined a company from which we could only source for data. Nonetheless, this study gives an insight into the likely outcome of future research covering a wider spectrum.

References

- Abd Rahim M. N. (2009) *Statistical Methods for Research*, Prentice Hall, Selangor Malaysia
- Abdullahi, N. A. (2010) "Celebrating 50 years of accounting profession in Nigeria", *The Certified National Accountants*, pp. 23-36
- Akerlof, G. (1970) "The market for "lemons": quality uncertainty and the market mechanism", *The Quarterly Journal of Economics*, vol. 84: 488-500
- Alberti-Alhtaybat, L., Hutaibat, K. & Al-Htaybat, K. (2012) "Mapping corporate disclosure theories", *Journal of Financial Reporting & Accounting*, vol. 10 (1): 73-94
- Altman, E. I. (1968) "Financial Ratios, discriminant analysis and the prediction of corporate bankruptcy", *The Journal of Finance*, vol. 23 (4), 589-609
- Anao, R. A. (2012) FRC Act and Nigeria Roadmap to IFRS - implication for accounting education in Nigeria", Abuja: Financial Reporting Council of Nigeria
- Ball, R. (2006) "International Financial Reporting Standards (IFRS): Pros and cons for investors", *Accounting & Business Research, International Accounting Policy Forum*, pp. 5-27
- Ball, R. (2009) "Market and political/regulatory perspectives on the recent accounting scandal", Retrieved from DOI:10.1111/j.1475-679x.2009.00325.x (Accessed on April 20, 2012)
- Barth, M. E., Landsman, M. H. & Lang, W. R. (2008) "International Accounting Standards and accounting quality", *Journal of Accounting Research*, vol. 46 (3): 467-498
- Beaver, W. H. (1966) "Financial ratios as predictors of failure", *Journal of Accounting Research*, vol. 4: 71-111
- Beaver, W. H., McNichols, M. F. & Rhie, J. W. (2005) "Have financial statements become less informative? evidence from the ability of financial ratios to predict bankruptcy", *Review of Accounting Studies*, vol. 10: 93-122
- Blanchette, M., Racicot, F. E. & Girard, J. Y. (2011) *The Effects of IFRS on Financial Ratios: Early Evidence in Canada*, Ottawa; Certified General Accountants Association of Canada
- Callao, S. Jarne, J. I. & Lamez, J. A. (2007) "Adoption of IFRS in Spain: Effect on the comparability and relevance of financial reporting", *Journal of International Accounting, Auditing and Taxation*, vol. 16: 148-178
- Charitou, A., Neophytou, E. & Charalambous, C. (2004) "Predicting corporate failure: Empirical evidence for the UK", *European Accounting Review*, vol. 13 (3): 465 - 497
- Chen, H., Tang, Q., Jiang, Y. & Lin, Z. (2010) "The Role of International Financial Reporting Standards in accounting quality: Evidence from the European Union", *Journal of International Financial Management and Accounting*, vol. 21(3): 220-278

- Chua, W. F. & Taylor, S. L. (2008) "The rise and rise of IFRS: An examination of IFRS diffusion", *Journal of Accounting and Public Policy*, vol. 27: 462–473
- Core, J.E. (2001) "A review of the empirical disclosure literature: discussion", *Journal of Accounting and Economics*, vol. 31: 441-456
- Daske, H. (2006) "Economic benefits of adopting IFRS or US-GAAP – Have the expected cost of equity capital really decreased?", *Journal of Business Finance & Accounting*, vol. 33(3) & (4): 329–373
- Daske, H. & Gebhardt, G. (2005) "International Financial Reporting Standards and experts' perceptions of disclosure quality", *Abacus*, vol. 42: 461-498
- Daske, H., Hail, L., Leuz, C. & Verdi, R. (2013) "Adopting a label: heterogeneity in the economic consequences around IAS/IFRS adoptions", *Journal of Accounting Research*, vol. 51(3): 495-547
- Devalle, A., Onali, E. & Magarini, R. (2010) "Assessing the value relevance of accounting data after the introduction of IFRS in Europe", *Journal of International Financial Management and Accounting*, vol. 21 (2): 85-119
- Dewaelheyns, N. & Van Hulle, C. (2006) "Corporate failure prediction modeling: distorted by business groups' internal capital markets?", *Journal of Business Finance & Accounting*, vol. 33(5) & (6): 909–931
- FRCN Act (2011) Financial Reporting Council of Nigeria Act, *Federal Republic of Nigerian Official Gazette*. Lagos: Federal Government Printer.
- FRCN (2014) *Financial Reporting Countil of Nigeria*, Retrieved February 13, 2014, from <http://www.financialreportingcouncil.gov.ng/>.
- Friedman, M. (1970) "The social responsibility of business is to increase its profits", *The New York Times Magazine*, September 13
- Fuglister, J. (1997) "A comparative ratio analysis between Chinese and US firms", *Advances in International Accounting*, vol. 10: 185-206
- Gebhardt, G. & Novotny-Farkas, Z. (2010) "The effects of IFRS adoption on the financial reporting quality of European banks", *Marie Curie Research Training Network; the IFRS Revolution: Compliance, Consequences and Policy Lessons*
- Gebhardt, G. & Novotny-Farkas, Z. (2011) "Mandatory IFRS adoption and accounting quality of European Banks", *Journal of Business Finance & Accounting*, vol. 38(3) & (4): 289–333
- Hagigi, M. & Sponza, A. (1990) "Financial statement analysis of Italian companies: accounting practices, environmental factors, and international corporate performance comparisons", *The International Journal of Accounting*, vol. 25: 234-251
- ICAN (2006) *Financial Reporting and Audit Practice*. Lagos: VI Publishing ltd.
- Jensen, M .C. (2001) "Value maximisation, stakeholder theory and the corporate objective function", *European Financial management*, vol. 7(3): 297-317
- Lantto, A. M. & Sahlstrom, P. (2009) "Impact of International Financial Reporting Standard adoption on key financial ratio", *Accounting and Finance*, vol. 48 (2): 341-361

- Lee, E., Walker, M. & Zeng, C. (2013) *Does IFRS Convergence Affect Financial Reporting Quality in China?* London; Certified Accountants Educational Trust
- Liu, C., & Wei, K. K. (2008) "A comparative ratio analysis of Chinese and Japanese corporations", *Proceedings of the 2008 International Accounting Conference, Shanghai, China, June 6-8*
- Lui, C. & O'Farrell, G. (2009) "China and U.S. financial ratio comparison", *International Journal of Business, Accounting and Finance*, vol. 3 (2): 1-12
- NASB (2009) *NASB Accounting Standards Handbook*. Lagos: Academy Press Plc.
- NASB Act (2003) *Nigerian Accounting Standards Board Act*. Retrieved February 13, 2014, from <http://www.placng.org/lawsofnigeria/node/315>.
- Nigeria's Financial Hub (2011) *History and Facts of the Nigerian Accounting Standard Board (NASB)*. Retrieved February 13, 2014, from <http://www.nigerianaccounting.com/history-and-facts-of-the-nigerian-accounting-standards-board-nasb/>.
- NOGintelligence (2012) *Oando wins Battle for the Acquisition of ConocoPhillips Nigeria Assets*. Retrieved 29, 9, 2013, from <http://www.nigeriaoilandgasintelligence.com/oando-wins-battle-for-acquisition-of-conocophillips-nigerian-assets>.
- Oandopl (2006) Oando signs for OPL278 with NNPC, *Onadonews*, vol. 5 (1): 1-12
- Oandopl (2013) *History of Oando Plc*, Retrieved 29, 9, 2013, from <http://www.oandopl.com/oando-supply-and-trading/history>.
- Osayande, O. J. (2012) "Financial Reporting Council (FRC): A vehicle for improving Corporate Financial Reporting in Nigeria", Abuja, Nigeria: Financial Reporting Council of Nigeria
- Otusanya, J. O., & Lauwo, S. (2012) "The Role of Auditors in the Nigerian Banking Crisis", *Accountancy Business and the Public Interest*, vol. 9: 159-204
- Ozkan, N., Singer, Z. and You, H. (2012) "Mandatory IFRS adoption and the contractual usefulness of accounting information in executive compensation", *Journal of Accounting Research*, vol. 50 (4): 1077-1107
- Rainsbury, E. A., Diego, J. S. & Walker, L. (2010) "Evidence on the impact of International Financial Reporting Standards in New Zealand", A paper presented at the Second Quantitative Accounting Research Symposium 28 May 2010, Massey University, Albany Campus
- Robert, D. (2012) Introduction and Preparation of Financial Statements, *ICAN IFRS Training*
- Sanusi, S. L. (2010) "The Nigerian banking industry: what went wrong and the way forward", pp. 1-23, Kano
- Strong, N. & Walker, M. (1987) *Information and Capital Market*, Basil Blackwell, New York, NY
- Tendeloo, B. V. & Vanstraelen, A. (2008) "Earnings management and audit quality in Europe: Evidence from the private client segment market", *European Accounting Review*, vol. 17(3): 447-469
- Wang, S. & Welker, M. (2010) "Timing equity issuance in response to information asymmetry arising from IFRS adoption in Australia and Europe", *Journal of Accounting Research*, vol. 49 (1): 257-307