## Journal of Accounting, Business and Finance Research

ISSN: 2521-3830 Vol. 2, No. 2, pp. 79-90 DOI: 10.20448/2002.22.79.90

Does International Financial Reporting Standards (IFRS) Impact Profitability Ratios of Listed Banks in Nigeria?

Olayinka Erin<sup>18</sup>
Foluke Oduwole<sup>2</sup>
Paul Olojede<sup>3</sup>
Jonah Arumona<sup>4</sup>

- ♣1,2,3Department of Accounting, Covenant University, Ota, Nigeria
- Email: erinolayinka@yahoo.com
- <sup>2</sup>Email: folukeabodunrin@gmail.com
- <sup>3</sup>Email: polojede@yohoo.co.uk
- <sup>4</sup> Department of Accounting, Bingham University, Abuja, Nigeria
- \*Email: jonaharumona@yahoo.com

#### **Abstract**

This study provides an empirical analysis of the impact of IFRS on profitability ratios of eleven (11) banks in Nigeria. The study addresses the research hypotheses by comparing the key profitability ratios computed under the Pre-IFRS for three year period from 2009-2011 and three year period from 2013-2015 under the Post-IFRS regime. The study used Wilcoxon Signed Rank test and Normality test as a statistical method to analyze the data. The findings revealed that IFRS adoption has not produced any meaningful impact on the profitability ratios (PAT-EBIT, NPM, and OPM) at 5% level of significance. The finding implies that the adoption of IFRS does not have significant effects on profitability ratios of listed banks in Nigeria. The study recommends that investors and financial analyst should pay particular attention to all profitability ratios under this IFRS regime. Also, investors should not base their investment decisions on banks' profitability in the short term but rather the long-term viability and performance should be taken into cognizance. This study provides original insight into the relevance of IFRS in determining the viability or otherwise of profitability ratios of listed banks in Nigeria.

#### Keywords:

IFRS
Listed banks in Nigeria
Net profit margin
Operating profit margin
Profitability ratios.

JEL Classification: G21, M41, M49

## Licensed:

This work is licensed under a Creative Commons Attribution 4.0 License.

## Publisher:

Scientific Publishing Institute

## 1. Introduction

The introduction of IFRS has an impact on the way financial statements are interpreted, thereby enabling more effective use by various stakeholders ranging from shareholders, investors, creditors, banks, governmental agencies to employees, to mention but few (Erin, Olojede and Ogundele, 2017). The interpretation of annual reports of banks prepared under the IFRS regime has a significant impact as stakeholders have access to more financial information as provided by the ratio analysis. A number of indicators, among which are profitability ratios, long-term solvency and stability ratios, shareholders' ratios and liquidity ratios are measurement tools for determining banks' periodic performance.

There are enormous benefits of adopting International Financial Reporting Standards (IFRS). Many professionals, experts, and scholars, especially in developing economies like Nigeria, show apprehension and confusion upon request to replace the traditional standards, Generally Accepted Accounting Principles (GAAP) with IFRS. The adoption is believed to result in capital flight from third world economies to developed economies. Developing countries have an unreported financial outflow of between US\$1.26 trillion to US\$1.44 trillion (N230.1 trillion) in the form of capital flight each passing year (Firoz, Anzari, and Akhtar, 2011; Adegbaju and Olokoyo, 2008). Even with this capital flight issues, the robustness of IFRS in terms of preparation and presentation of more detailed financial statements is presumed to result in more accurate

financial data analysis through the computation of ratios to measure business performance. The result of such performance measurement serves as decision-making tools in the hands of the stakeholders.

Before the convergence, the Nigerian Accounting Standards Board (NASB) was responsible for developing and issuing standards known as Statements of Accounting Standards (SAS). The Financial Reporting Council of Nigeria (FRCN) came into existence when a new FRCN Act (2011) came to repeal the old Nigerian Accounting Standards Board (NASB) Act, as the regulatory body overseeing the adoption and implementation of IFRS. Consequently, Nigeria joined the rest of the world on January 1, 2012, as the effective date for the convergence of NGAAP with International Financial Reporting Standards (IFRS) (Masud, 2013).

Past studies on IFRS and bank profitability ratios in Nigeria (Tanko, 2012; Matthew, 2015; Muhammed, 2012; Onipe, Musa and Isah, 2015; Okoye, Okoye and Ezejiofor, 2015; Emeni, Uwuigbe, Uwuigbe and Erin, 2016; Eriki, Okoye, Modebe and Erin, 2017) only focused on Return on Assets (ROA) and Return on Capital Employed (ROCE) in measuring profitability ratios. However, there are several profitability ratios that could be used to analyze investment decisions. This study is consummated to examine the effect of IFRS adoption on the profitability ratios of the listed banks in Nigeria by looking at other profitability ratios apart from ROA and ROCE as contained in the financial statements of banks during the pre-adoption period and post-adoption period of IFRS in Nigeria. This study will be of significant importance to users of financial statements of banks who will need it for investment decision-making.

There had been a number of studies on financial ratios, however very few have specifically focused on profitability ratios thereby creating a gap that this research work intends to fill. Also, the results from previous studies have provided mixed findings thereby creating a gap in the literature, hence the motivation for the study to analyze the effect of IFRS adoption on the profitability of Nigerian banks using profitability ratios. Additionally, this study intends to find out if there is any significant difference between profitability ratios computed under the NGAAP and those computed under IFRS, with the need to identify if the adoption has brought about increase or decrease in profitability of Nigerian banks.

Consequently, the purpose of this study is to determine the impact of IFRS adoption on profitability ratios of Nigerian banks. The other objectives of this study include (i) To establish the influence of the adoption of IFRS on Profit after Tax to Earnings before Interest and Tax (PAT-EBIT) of Banks in Nigeria. (ii) To find out if the adoption of IFRS has any significant impact on Net Profit Margin (NPM) (iii) To determine the influence of IFRS on the Operating Profit Margin (OPM) among Banks in Nigeria.

## 2. Literature Review

## 2.1. IFRS Adoption in Nigeria

The adoption of IFRS in Nigeria requires standards setters to understand the different regulatory and commercial environments in the country. A roadmap for the adoption of IFRS (Issued by the International Accounting Standards Board) was used as a guideline for the preparation of statutory financial statements in Nigeria (Madawaki, 2012). The roadmap also outlines specific milestones that if realized, could lead to the adoption of IFRS in three phases as follows: (i) Public Listed Entities and Significant Public Interest Entities in Nigeria by 2012, (ii) Other public Interest Entities by 2013, and (iii) Small and Medium-sized Entities by 2014. The Roadmap explains various areas for consideration by stakeholders in order to ensure smooth and effective adoption of IFRS in Nigeria. The rapid growth in international trade and investment has brought to lamplight adoption of International Financial Reporting Standards (IFRS) by both the developed and developing countries. A number of African countries including Nigeria, Ghana, Sierra Leone, South Africa, Kenya, Zimbabwe, and Tunisia among others have adopted International Financial Reporting Standards (IFRS) (Owolabi and Iyoha, 2012).

Nigeria, in a bid to take her own share of the benefits of using a set of accounting standards that not only allows for but also enhance the comparability of financial reports across many geographical frontiers, accepted the recommendation of the Committee on the Roadmap for the Adoption of IFRS in Nigeria. It would be in the interest of the Nigerian economy for reporting entities in Nigeria to adopt globally accepted, high-quality accounting standards by fully adopting the International Financial Reporting Standards (IFRS) in a phased transition (Fashina and Adegbite, 2014). In December 2010, following the approval of the Federal Executive Council, the Nigerian Accounting Standards Board (NASB), (now designated as Financial Reporting Council of Nigeria (FRCN)) issued an implementation roadmap for Nigerian's adoption of IFRS which set a January 2012 date for compliance for publicly quoted companies and banks in Nigeria.

## 2.2. IFRS and Firm Profitability

As it is generally believed that profit (short-run) and wealth (long-run) maximization are the basic reasons behind organizations' existence; Jensen (2001) opined that in maximizing shareholders' wealth, other stakeholders'/financial claimants' such as debt and warrant holders wealth are also maximized. Also posited by Jensen (2001), organizations must have a way of measuring 'better' as against 'worse'; this can be achieved by increasing stockholders' wealth which serves as a benchmark for measuring performance. This, argued by

several researchers and scholars is the common benefit among several others ascribed to IFRS adoption as a single set of accounting standards in any jurisdiction.

## 2.3. Profitability as an Objective of Banks

Profitability is the ability of an organization to generate profit from all its activities (Owolabi and Obida, 2012). It measures management competence in using the organizational means of adding value to the business. Profitability may be viewed as a relative term measurable in terms of profit and its relation with other basics that can directly affect the profit. According to Ahmed (2011), profitability is the variance between the cost of providing goods or services and the revenue derived from the sale. A firm's profitability is seen as very important as traditionalist economists among others believe that profit maximization is the sole objective of an organization. Besides an organization earning profit to survive and grow, sustain its operations and contribute towards social overheads for the welfare of its society, other stakeholders like the creditors and shareholders among others are also interested in an organization's profitability.

Profitability in relation to a bank is very important as banks play the role of intermediary between the surplus and the deficit sides of a society, banks need to make a profit in other to gain the confidence of depositors (whose money they lend out) so as to know if their deposits will be safe and repayable. Okoye, Adetiloye, Erin, and Evbuomwan (2017) opined that shareholders will want to know if there is reasonable return on their investment, creditors would want to ascertain the earned interest on repayment of their principal amount, government would like to know banks performance in order to collect reasonable tax for provision of social amenities, society would be interested in banks performance so that the bank will be able to fulfil their social responsibilities, employees so as to rest assured of their remunerations etc.

Profitability, according to Sanni (2006) is a condition where the income made in a given period surpasses the expenditures incurred in the same length of time for the solitary purpose of generating income. Brunilda and Elvana (2015) also defined bank profitability as the ability of a bank to create revenue in excess of cost, in relation to the bank's capital base. They further asserted that a rigorous and lucrative banking sector is better able to survive negative tremors and add to the stability of the financial system. Although variously, authors have given a different definition, basically it is about sustaining the ability to have excess income over expenses. Profitability is therefore important because it is the main (purpose) of business.

## 2.4. Empirical Review

A number of researchers have been conducted studies on IFRS adoption and its effects on financial ratios. Tsalavoutas (2009) tested financial statement effects on compliance level of IFRS and changes in the value relevance of accounting information afore and after IFRS obligatory application by making a disclosure index covering all the disclosure items required by the IFRS. He opined that Greek listed companies' financial statements were affected significantly by the adoption of IFRS; also, that average level of compliance approximates 80%, impact on net income and shareholders' equity. Bruggemann, Daske, Homburg and Pope (2011) studied IFRS adoption on cross-border equity investments by individual investors using the open market segment of the Frankfurt Stock Exchange designed for German individual investors to trade foreign stocks with a sample of 4,869 firms from 31 countries. The study found that stocks experience increase with IFRS adoption and conclude that the effect of IFRS on stewardship usefulness of financial reporting is an under-researched area.

Punda (2011) examined IFRS effects on key financial ratios of UK listed companies; the study found that a substantial change in the KPIs of the companies post IFRS adoption as operating profit margin increased by 10.8%, return on investment by 11.4% and return on equity by 27%. However, current ratio and price to earnings ratios showed not much significant change. Brochet, Jagolinzer, and Riedl (2013) examined the effects of compulsory IFRS adoption on the capital market via improved financial statement comparability. The study examined the changes to information asymmetry for firms domiciled in the UK isolating changes to the information setting concerning IFRS adoption which may likely reflect changes in comparability versus information quality. The study found that abnormal returns to insider purchases decreased with IFRS adoption.

Tanko (2012) tested the impact of IFRS adoption on profitability, growth, leverage and liquidity performance applying multiple logit regression and t-test analysis, he found that variability of earnings decreased, this suggested that there exists low erraticism in earnings in the IFRS adoption period. On the issue of timely loss recognition, the study found large negative net income to be positive which indicates that IFRS firms recognize losses more often. The study recognized that accounting quality improved after IFRS, firms exhibit higher values on profitability measure in the area of earnings per share.

Blanchette, et al. (2011) argued that IFRS is the new central set of accounting standards but the shift to the new regime may be fairly disruptive for users of financial statements. He compared accounting figures and financial ratios under CGAAP with IFRS testing them empirically and established that IFRS adoption does not significantly alter the central values that define the financial position and performance of Canadian companies reported in financial statements. Testing IFRS impact on financial statements and some significant ratios with the use of a case study, Bhargava, and Shikha (2013) compared financial statements prepared under

IFRS with those prepared using GAAP; they reported variations in total assets and liabilities owing to reclassification amongst equity and liabilities and because of the change in the idea of revenue recognition. Also, Hung and Subramanyam (2007) took a sample of German firms to examine the financial statement effects of IFRS adoption for a period of 1998 to 2006 and found out that total assets, book value of equity and erraticism of book value as well as income are significantly higher under IAS than under German GAAP showing that book value and income are more value relevant under IAS.

150 companies listed on the Toronto Stock Exchange were taken as a sample to exam the impact of IFRS adoption on financial statements by Certified General Accountants Association of Canada in 2013 and they reported that although at the cumulative level, IFRS have a dominant value that described the financial position and performance of Canadian companies. Similarly, variances between separate IFRS and CGAAP values are more significant and the examination of the separate variances showed that assets and liabilities are higher under IFRS. Sales and operating revenues reduced, profit increased while other comprehensive income adjustments are predominantly negative (losses).

Zayyad, Ahmad, and Mubaraq (2014) also examined IFRS adoption on performance evaluation with financial ratios using a case study of manufacturing firms in Nigeria. They compared ratios computed under IFRS with those computed under Nigerian GAAP, testing for normality with One-Sample Kolmogorov-Smirnov Test and adopting Mann-Whitney U Test for significant difference. They found that there exists no significant difference between the pair of ratios and established that the disclosure of IFRS compliant statements was not attributable to higher performance evaluation but could have been driven by capital needs theory or signaling theory, though a mixed result was gotten for the cost of capital. Daske, Hail, Leuz, and Verdi (2008) established that firms which adopt IFRS in the year it became mandatory experience large increases in market liquidity.

## 2.5. Hypothesis Development

It can, therefore, be said that the application of IFRS will advance the reporting excellence of Nigerian financial statements as several creative accounting practices were expected to be abridged with the implementation of IFRS. It is believed that IFRS implementation has not shown any significant impact on the financial ratios of manufacturing firms in Nigeria (Zayyad et al., 2014; Erin, Eriki & Olojede, 2017). This finding is contrary to the studies of (Blanchette et al., 2011; Agca and Aktas, 2007) which reveal that IFRS adoption has a significant impact on the financial ratios of firms sampled. The studies on IFRS and financial has produced mixed results. In view of this inconsistent and mixed result, thus, this study hypothesized that:

Ho: IFRS adoption has no significant impact on PAT-EBIT of Banks in Nigeria

Ho2: The adoption of IFRS has no significant impact on NPM of banks in Nigeria

Hos: IFRS adoption has not influenced a change in OPM of Banks in Nigeria

## 2.6. Theoretical Framework

## 2.6.1. Capital Needs Theory

Capital needs theory suggests that firms that have growth prospects in the capital market strive for outward sponsorship prospects from the capital market (Core, Guay and Van Buskirk, 2001). They do this by allotting more shares or by borrowing from outward sources. External financing entails some form of competition among companies in order to acquire corporate capital in the best effective way possible. The competition for external financing in one way or the other requires companies seeking finance to know the kind of information they disclose. That is, it is only reasonable that such companies will want to disclose information that will make the providers of the finance have confidence in them. For example, companies seeking external finance will choose to disclose higher profit so that the providers will be assured of their future cash flows. This theory suggests that companies will be more willing to adopt IFRS if it will increase their profitability and the information about which they will be very much willing to disclose to the public.

## 3. Research Methods

This research investigates empirically the impact of IFRS on the profitability ratios of listed banks in Nigeria. This was done by comparing the financial ratio computed under NGAAP with those computed under IFRS for three years' period under each regime, from 2009 to 2011 under NGAAP regime and three year period from 2013 to 2015 under IFRS regime. The population under study are 15 listed banks in Nigeria as at the end of 2015 (Nigerian Stock Exchange Factsheet, 2015). The sample size consists of 11 banks which were derived from Taro Yamane formula.

A panel data research design was used to carry out the study of IFRS adoption on profitability ratios of the sampled population as this research design allows for data to be collected at a particular point in time and data for quoted companies in Nigeria are kept annually. So, the data for this study were collected over a period of six years (2009-2011 and 2013-2015). The population of the study is the banking sector of Nigeria which is believed to play vital roles in the growth and social-economic development of the country through its intermediary roles of bridging the gap between the surplus and deficit economic divisions, therefore, motivating and encouraging investments and economic growth and development, the banking sector

comprises of fifteen banks operating in Nigeria presently as at the time of this study. The choice of the banking sector was selected because the sector was the first to fully adopt IFRS in Nigerian starting from January 1, 2012.

The sample size of this study is 11 banks out of the 15 listed banks in Nigeria. The 4 banks not selected lacked the certain information required for this study, hence, were excluded from the sample. The banks sampled for this study includes First Bank Plc., Guaranty Trust Bank, Zenith Bank, Access Bank, Diamond Bank, First City Monument Bank, Stanbic IBTC, Sterling Bank, Union Bank, Fidelity Bank, and United Bank of Africa. Data were sourced from audited annual reports, NSE fact Book, websites of the banks and other publications of government, company reports, and Central Bank of Nigeria reports.

## 3.1. Method of Data Analysis

To achieve the objective of this study, we adopted the ex-post facto, that is, causal-comparative research design since this study involves ascertaining the effect of past events/factor(s) on the present event or situation. The choice of the ex-post facto (causal comparative) is due to the fact that is the most suitable research design to use when it is not always conceivable to control and influence all or any of the independent variables or when laboratory control would be unpractical, expensive or morally doubtful (Brigham and Houston, 2011).

Accounting figures were first extracted from the financial statements of the sampled banks to compute profitability ratios and then normality test was carried out to test whether the data are normally distributed or not. Descriptive statistics and Wilcoxon Signed Ranks test were adopted to analyze the profitability ratios obtained using 2009, 2010 and 2011 as the pre-adoption years and comparing it with 2013, 2014 and 2015 used as post-adoption years. The year 2012 was the adoption period; therefore, the year was not tested because most banks were experimenting at this period. The choice of the method of analysis was borne out of the fact that it is unbiased and does not allow for data manipulation. Also, it is the best instrument used in measuring the difference between a pre and post effect of an event when it is believed that data are not normally distributed. That is, the Wilcoxon Signed Ranks test is better in measuring the effects of the adoption of IFRS without the assumption of normality in the distribution of data.

Table-1. Measurement of Variables

| Variables   | Description             | Formula                          |
|-------------|-------------------------|----------------------------------|
| Dependent   | PAT to EBIT Ratio       | PAT / EBIT                       |
|             | Net Profit Margin       | PAT / Gross Earnings             |
|             | Operating Profit Margin | operating profit / Gross Earning |
| Independent | IFRS: Dummy Variable    | 0 for Pre-IFRS Period            |
| •           | ·                       | 1 for Post-IFRS Period           |
| Control     | Leverage                | Total Liabilities / Total Assets |
|             | Firm Size               | In (Total Assets)                |

Source: Computed by Researcher (2017)

## 4. Results and Discussion

The descriptive and inferential results obtained from the study were presented in this section; findings from the results are also discussed on the basis of the literature.

Table-2. Summary of Descriptive Statistics

|                   | N  | Mean      | Std. Deviation | Minimum | Maximum |
|-------------------|----|-----------|----------------|---------|---------|
| PRE-IFRS PAT-EBIT | 33 | 2.102136  | 0.839111       | 0.7471  | 3.7996  |
| PRE-IFRS NPM      | 33 | 0.243173  | 0.7043124      | -1.6438 | 1.2600  |
| PREIFRS OPM       | 33 | 1.977255  | 0.5600577      | 0.5323  | 2.7259  |
| PREIFRS LEV       | 33 | 2.366473  | 0.6550224      | 0.5784  | 3.2156  |
| PREIFRS SIZ       | 33 | 51.139409 | 9.7150024      | 38.7441 | 61.4021 |
| POSTIFRS PAT-EBIT | 33 | 2.595491  | 0.5788924      | 0.985   | 3.1311  |
| POSTIFRS NPM      | 33 | 0.859982  | 0.9372373      | 0.1167  | 2.7665  |
| POSTIFRS OPM      | 33 | 1.828518  | 0.6301238      | 0.3611  | 3.0000  |
| POSTIFRS LEV      | 33 | 2.225073  | 0.8865148      | 0.0964  | 2.7553  |
| POSTIFRS SIZ      | 33 | 51.832209 | 10.8884726     | 33.6563 | 64.0907 |

Source: Authors Computation (2017)

In summary, for all the 11 banks used in this research work, it was observed that PAT-EBIT mean value increased from 2.102136 to 2.595491 with a minimum of 0.7471 in the PRE-IFRS period and 0.9850 in POSTIFRS, maximum level of 3.7996 during the PRE-IFRS period and 3.1311 during the POSTIFRS period while NPM mean value increased from 0.243173 to 0.859982 with a minimum of -1.6438 in the PRE-IFRS period and 0.1167 in the POSTIFRS, maximum level of 1.2600 during the PRE-IFRS period and 2.7665

during the POSTIFRS period. OPM mean value decreased from 1.977255 to 1.828518 with a minimum of 0.5323 in the PREIFRS period and 0.3611 in the POSTIFRS, maximum level of 2.7259 during the PREIFRS period and 3.0 during the POSTIFRS period, LEV mean value reduced from 2.366473 to 2.225073 with a minimum of 0.5784 in the PREIFRS period and 0.0964 in the POSTIFRS, maximum level of 3.2156 during the PREIFRS period and 2.7553 during the POSTIFRS period and FIRM SIZE mean value increased from 51.139409 to 51.832209 with a minimum of 38.7441 in the PREIFRS period and 33.6563 in the POSTIFRS, maximum level of 61.4021 during the PREIFRS period and 64.0907 during the POSTIFRS period.

It can be deduced from the above analysis that almost all the profitability ratios increased except for Operating Profit Margin but it should be noted that the Leverage ratio of the banks reduced during the POSTIFRS period while the Firm Size had increased. This is to say that, the increment or rise in the profitability of these banks, as shown above, may not be ascribed to the adoption of IFRS; it may be due to the enlargement of the firms or the reduction in the leverage ratio of the banks.

The result of this analysis shows that there is a change in the profitability of banks after the adoption of IFRS and for most of the measures of profitability except for Operating Profit Margin, the difference is positive.

| Table-3. Test of Normality |          |                                 |    |       |              |    |       |
|----------------------------|----------|---------------------------------|----|-------|--------------|----|-------|
|                            | IEDC     | Kolmogorov-Smirnov <sup>a</sup> |    |       | Shapiro-Wilk |    |       |
|                            | IFRS     | Statistic                       | Df | Sig.  | Statistic    | Df | Sig.  |
| PAT-                       | PREIFRS  | 0.27                            | 33 | 0.000 | 0.734        | 33 | 0.000 |
| EBIT                       | POSTIFRS | 0.318                           | 33 | 0.000 | 0.456        | 33 | 0.000 |
| NPM                        | PREIFRS  | 0.297                           | 33 | 0.000 | 0.685        | 33 | 0.000 |
|                            | POSTIFRS | 0.315                           | 33 | 0.000 | 0.758        | 33 | 0.000 |
| OPM                        | PREIFRS  | 0.246                           | 33 | 0.000 | 0.607        | 33 | 0.000 |
|                            | POSTIFRS | 0.199                           | 33 | 0.002 | 0.915        | 33 | 0.013 |
| LEV                        | PREIFRS  | 0.376                           | 33 | 0.000 | 0.414        | 33 | 0.000 |
|                            | POSTIFRS | 0.393                           | 33 | 0.000 | 0.558        | 33 | 0.000 |
| FIRM                       | PREIFRS  | 0.262                           | 33 | 0.000 | 0.788        | 33 | 0.000 |
| SIZE                       | POSTIFRS | 0.204                           | 33 | 0.001 | 0.865        | 33 | 0.001 |

a. Lilliefors Significance Correction

It can be observed from the above result that the data are not normally distributed as the sig. under the Shapiro-Wilk are all less than 0.05 and the test for normality assume that for any data to be normally distributed the sig. must be greater than 0.05 (the diagonal line shows a clear non-linear figure with the data points straying from the diagonal line) (See Appendix 1-6). So, the need to use Wilcoxon Signed Rank Test to carry out the analysis as it is the best method of analysis for data that are not normally distributed.

## 4.1. Wilcoxon Signed Ranks Test

Wilcoxon Signed Ranks Test seeks to determine the effect/impact of an introduced event on a particular population when normality is violated. For the purpose of this study, it is used to determine the effect of the adoption of IFRS on the profitability of banks by comparing the profitability ratios before IFRS adoption to the profitability ratios after IFRS adoption.

Table-4. Wilcoxon Signed Rank Test Statistics

|                        | POSTIFRS PAT-<br>EBIT - PREIFRS<br>PAT-EBIT | POSTIFRS<br>NPM<br>PREIFRS<br>NPM | POSTIFRS OPM PREIFRS OPM | POSTIFRS<br>LEV -<br>PREIFRS<br>LEV | POSTIFRS<br>SIZ -<br>PREIFRS<br>SIZ |
|------------------------|---------------------------------------------|-----------------------------------|--------------------------|-------------------------------------|-------------------------------------|
| Z                      | -1.156 <sup>b</sup>                         | <b>-</b> 1.245 <sup>b</sup>       | -1.067°                  | 178 <sup>b</sup>                    | <b>-</b> 1.245 <sup>b</sup>         |
| Asymp. Sig. (2-tailed) | 0.248                                       | 0.213                             | 0.286                    | 0.859                               | 0.213                               |

a. Wilcoxon Signed Ranks Test

Table 4 analysis reveals that none of the variables are significant assuming the significance level of 0.05 as the Asymp. Sig (2-tailed). The p-value for PAT-EBIT showed 0.248, p-value for NPM revealed 0.213, p-value for OPM is 0.286, p-value for LEV is 0.859 and p-value for FIRM SIZE is 0.213. The result shows that the difference in the profitability ratios of banks following the adoption of IFRS is not significant.

b. Based on negative ranks.

c. Based on positive ranks.

## 4.2. Restatement of Hypothesis and Discussion

Ho: IFRS adoption has not influenced PAT-EBIT of Banks in Nigeria

Ho2: The adoption of IFRS has no significant impact on NPM of banks in Nigeria

Hos: IFRS adoption has not influenced a change in OPM of Banks in Nigeria

## 4.3. Testing of Hypothesis One

It was assumed in the first hypothesis that the adoption of IFRS has not brought any significant impact on PAT-EBIT of listed banks in Nigeria. Based on the results of the descriptive analysis, PAT-EBIT during the POSTIFRS period increased to 2.596491 from 2.102136. This increase was due to a reduction in leverage and large firm size but using the Wilcoxon Signed Rank Test analysis; the p-value of 0.248 results in higher value than 0.05, therefore, PAT-EBIT is not significant at this level. Therefore, the null hypothesis is accepted.

## 4.4. Testing of Hypothesis Two

Also, it was assumed in the second hypothesis that the adoption of IFRS has not impacted NPM of listed banks in Nigeria. The increase in NPM during the POSTIFRS period is not significant though there was an increase to 0.859982 from 0.243173 in the descriptive analysis. As seen in Wilcoxon Signed Rank Test analysis; the p-value of 0.213 is greater than 0.05; this implies that NPM is not significant at this level. Therefore, the null hypothesis is accepted.

## 4.5. Testing of Hypothesis Three

It was assumed in the third hypothesis that IFRS adoption has not influenced a change in OPM of Banks in Nigeria. This assumption is true as OPM figure decreased from 1.977255 to 1.828518; it also showed no level of significance in OPM with a p-value of 0.286 which is higher than the accepted level of significance 0.05. Therefore, the null hypothesis is accepted.

The results of the analyses carried out showed that Profitability ratio is not significantly related to IFRS. We can conclusively say therefore that the implementation of IFRS has not produced a significant impact on the profitability ratios used in this study for Nigerian banks. Therefore, the investigative evidence shows IFRS adoption has not impacted three profitability ratios (PAT-EBIT, NPM, OPM) of Nigerian banks. This is in line with the findings of Tanko (2012); Zayyad et al (2014); Lantto and Sahlstrom (2009); Terzi et al (2013); Kabir et al (2010), Nengih (2015), though it deviates a bit from the findings of Blanchette et al. (2011); Uwuigbe, Erin, Uwuigbe, Peter and Jinadu (2017); Agca and Aktas (2007) and Latridis (2007) who reported a statistically significant difference in profitability ratios measured under POSTIFRS as compared to PREIFRS period. It is however contrary to the findings of Ibiamke and Ateboh-Briggs (2014) which reported a decrease, though not significant in profitability ratios following the adoption of IFRS. It can also be said that leverage has a negative relationship with IFRS as it reduced during POSTIFRS period, the banks might have reduced the level at which the organization is being leveraged.

The comparison of the pre and post-IFRS era showed a positive and significant impact on the financial ratios for studies of Blanchette et al., 2011; Agca and Aktas, 2007; Iatrisdis 2010; this particular study has failed to show any significance in its comparison. The results obtained from this study may be attributed to the fact that banks' performance in Nigeria may not be achieved in the short run using profitability ratios computed from IFRS set of financial statements. The performance of banks may be attributed to theoretical framework underpinning capital needs theory as reviewed in the literature. This suggests that banks' performance should be evaluated on the basis of long-run performance rather than short-term performance evaluation.

## 5. Conclusion and Recommendation

We provide an empirical analysis of IFRS impact on the profitability ratios of Nigeria listed banks. The study employed Wilcoxon Signed Rank Test as the basis of statistical analysis; the overall findings revealed that IFRS adoption has not produced any meaningful impact on the profitability ratios (PAT-EBIT, NPM, and OPM) at 5% level of significance. In conclusion, the adoption of IFRS does not have significant effects on profitability ratios of Nigerian listed banks. This study recommends that investors and financial analyst should pay particular attention to all profitability ratios under the IFRS regime. Also, investors should not base their investment decisions on banks' profitability in the short term but rather the long-term viability and performance should be taken into cognizance. This study contributes to growing literature in the area of financial reporting research in the emerging economies like Nigeria in relation to the impact of IFRS on key profitability ratios. Also, while other studies have used statistical methods like regression analysis, correlation, One-Way ANOVA, and other analytical techniques, this study has used Wilcoxon Signed Rank test to probe the effect of IFRS adoption on the profitability ratios of Nigeria banks. This study only examined the listed banks in Nigeria; future research could cover the entire financial sector in order to gain more insight and provide a robust investigation into the effect of IFRS on profitability ratios in Nigeria. Also, more control variables could be introduced to further provide empirical evidence into the relationship between IFRS and financial ratios in Nigeria.

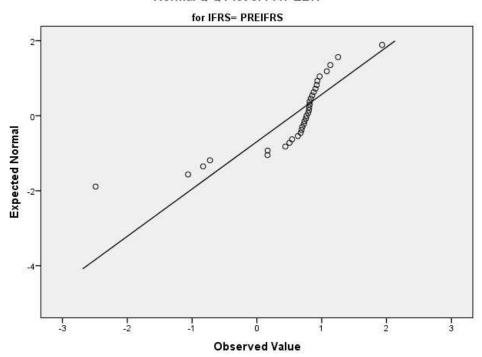
#### References

- Adegbaju, A. A., & Olokoyo, F.O. (2008). Recapitalization and banks' performance: A case study of Nigerian banks. African Economic and Business Review, 6(1): 1 17.
- Agca, A., & Aktas, R. (2007). First time application of IFRS and its impact on financial ratios: a study on Turkish listed firms. Problems and Perspectives in Management, 5(2): 99-112.
- Ahmed, A. A. (2011). Financial performance evaluation of some selected Jordanian commercial banks. International Research Journal of Finance and Economics, 6(4): 50-63.
- Blanchette, M., Racicot, E., & Girard, J. (2011). The effects of IFRS on financial ratios: Early evidence in Canada, Certified General Accountants Association of Canada.
- Bhargava, V., & hikha, D. (2013). The impact of international financial reporting standards on financial statements and ratios.' The International Journal of Management, 2(1): 1-15.
- Brigham, E. F., & Houston, J.F. (2011). Fundamentals of financial management.10th ed., Ohio, USA: Thomson South-Western.
- Brochet, F., Jagolinzer, A., & Riedl, E. (2013). Mandatory IFRS adoption and financial statement comparability. Contemporary Accounting Research, 30(4): 1373-1400.
- Brunilda, D., & Elvana, M. (2015). Factors influencing the bank profitability: Empirical evidence from Albania. Asian Economic and Financial Review, 5(3): 83 -494.
- Brüggemann, U., Hitz, J., & Sellhorn, T. (2011). Intended and Unintended Consequences of Mandatory IFRS Adoption: Extant Evidence and Suggestions for Future Research. Working paper, Lancaster University, 2011.
- Core, J. E., Guay, W.R., & Van Buskirk, A. (2001). Market Valuations in the New Economy: An investigation of what has changed. JAE Boston Conference.
- Daske, H., Luzi, L., & Verdi, R. (2008). Mandatory IFRS reporting around the world: Early evidence on the economic consequences. Journal of Accounting Research, 46(5): 1085-1142.
- Emeni, F., Uwuigbe, O., Uwuigbe, U. & Erin, O. (2016). The value relevance of adopting IFRS in the Nigerian Banking Sector. Review of Economic Studies and Research Virgil Madgearu, 9(2): 49-66.
- Erin, O., Olojede, P., & Ogundele, O. (2017). Value relevance of accounting data in the Pre-and Post-IFRS era: Evidence from Nigeria. International Journal of Finance and Accounting, 7(4): 95-103.
- Erin, O., Eriki, E., & Olojede, P. (2017). IFRS and Key Financial Ratios: Insight from listed banks in Nigeria. International Journal of Accounting Research, 3(3): 52-61.
- Eriki, E., Modebe, N. Okoye, L. & Erin, O. (2017). International Financial Reporting Standard (IFRS) Adoption and the performance of Key Financial Ratios: Evidence from Quoted Deposit Money Banks in Nigeria. Journal of Policy and Development Studies, 11(3): 40-47.
- Fashina, H., & Adegbite, T. (2014). Empirical analysis of the effect of international financial reporting standard (IFRS) adoption on accounting practices in Nigeria, Business Research, 2(2): 1-14.
- Firoz, M., Anzari, A., & Akhtar, K. (2011). IFRS: Impact on Indian banking industry. International Journal of Business and Management, 6(3): 277 283.
- Hung, M., & Subramanyam, K.R., (2007). Financial statement effects of adopting International Accounting Standards: the case of Germany. Review of Accounting Studies, 12(4): 623-657.
- Iatridis, G. (2007). IFRS adoption and financial statement effects: the UK case. International Research Journal of Finance and Economics, 38(2): 165-172.
- Ibiamke, N. A. & Ateboh-Briggs, P.B. (2014). Financial ratios effects of International financial reporting standards (IFRS) adoption in Nigeria. International Journal of Business and Management Intervention, 31(3): 50-59.
- Jensen, M.C. (2001). Value maximization, stakeholder theory, and the corporate objective function. European Financial Management, 7(3): 297-317.
- Kabir, M. H., Laswad, F., &Islam, M.A. (2010). The impact of IFRS in New Zealand on accounts and earnings quality. Australian Accounting Review, 20(4): 343-357.
- Lantto, A. M. & Sahlstrom, P. (2009). Impact of international financial reporting standard adoption on key financial ratios. Journal of Accounting and Finance, 49(1): 341-361.
- Madawaki, A. (2012). Adoption of international financial reporting standards in developing countries: The case of Nigeria. International Journal of Business and Management, 7(3): 152-61.
- Masud, B. (2013). Effects of IFRS adoption on the financial reports of Nigerian listed entities: The case of oil and gas companies. The Macrotheme Review, 2(7): 9-26.
- Matthew, A. A. (2015). The impact of international financial reporting standards (IFRS) adoption on financial reporting practice in the Nigerian banking sector. Journal of Policy and Development Studies, 9(2): 169 184.
- Muhammad, T. (2012). The effect of international financial reporting standards (IFRS) adoption on the performance of firms in Nigeria. Journal of Administrative and Economic Sciences, 5(2): 133 157.
- Nengzih, H. (2015). The adoption of IFRS- Impact on profitability rate and tax income: Evidence from companies listed in Indonesian Stock Exchange. Research Journal of Finance and Accounting, 6(1): 15-30

- Okoye, P., Okoye, J., & Ezejiofor, R. (2015). The impact of the IFRS adoption on stock market movement in Nigerian corporate organization. International Journal of Research in Business and Social Sciences, 4(9): 202-219.
- Okoye, L., Adetiloye, K., Erin, O. & Evbuomwam, G. (2017). Impact of banking consolidation on the performance of the banking sector in Nigeria. The Journal of Internet Banking and Commerce, 22(1): 1-16.
- Onipe, A. Y., Musa, J.Y. & Isah, S.D. (2015). International financial reporting standards' adoption and financial statement effects: Evidence from listed deposit money banks in Nigeria. Research Journal of Finance and Accounting, 6(2): 107 122.
- Owolabi, A. & Iyoha, F.O. (2012). Adopting International Financial Reporting Standards (IFRS) in Africa: benefits, prospects, and challenges. African Journal Accounting, Auditing, and Finance, 1(1): 77–86.
- Owolabi, S. A & Obida, S.S. (2012). Liquidity management and corporate profitability: A case study of selected manufacturing companies listed on Nigerian Stock Exchange. Business Management Dynamics, 2(2): 10-25.
- Punda P. (2011). The impact of International Financial Reporting Standards (IFRS) adoption on key financial ratios: Evidence from the UK. Aarhus School of Business, Master's Thesis.
- Sanni, M.R. (2006). Consolidated Accounts Made Simple. Ilaro, Ogun State, Nigeria: IPS Educational Press.
- Tanko, M. (2012). The Effect of International Financial Reporting Standards (IFRS) Adoption on the Performance of Firms in Nigeria. Paper presentation, IFRS Conference -Challenges & Opportunities Organized by College of Business & Economics, Qassim University.
- Terzi, S., Oktem, B., & Sen, I.K. (2013). The impact of Adopting International Financial Reporting Standards: Empirical Evidence from Turkey. International Business Research, 6(4): 55-66.
- Tsalavoutas, I. (2009). The adoption of IFRS by Greek listed companies: financial statement effects, the level of compliance and value relevance, Unpublished Doctorate Thesis University of Edinburgh.
- Zayyad, A., Uthman, A., & Sanni, M. (2014). Financial ratios as performance measure: A comparison of IFRS and Nigerian GAAP. Accounting and Management Information Systems, 13(1): 82-97.
- Uwuigbe, O., Erin, O., Uwuigbe, U., Peter, D., & Jinadu, O. (2017), IFRS and stock market behavior: An emerging market experience. Corporate Ownership and Control, 14(4): 93-102.

## **Appendix: Normality Test**

## Normal Q-Q Plot of PAT-EBIT



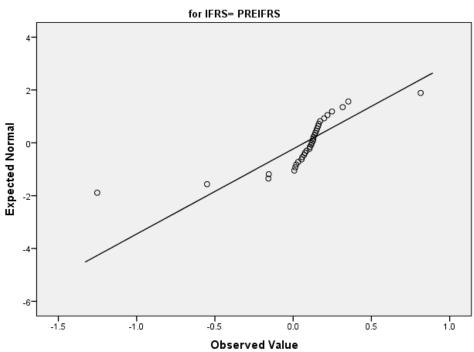
 $\label{eq:Figure-1.} \textbf{Figure-1.} \ \text{Normality Test for PAT-EBIT (PRE-IFRS)} \\ \textbf{Source:} \ \text{SPSS Output } (2017)$ 

)

## Normal Q-Q Plot of PAT-EBIT

 $\label{eq:Figure-2.} \textbf{Figure-2.} \ \ \text{Normality Test for PAT-EBIT (POST-IFRS)} \\ \textbf{Source:} \ \ \text{SPSS Output (2017)}$ 

Normal Q-Q Plot of NPM



 $\label{eq:Figure-3.} \textbf{Figure-3.} \ \text{Normality Test for NPM (PRE-IFRS)} \\ \textbf{Source:} \ \text{SPSS Output (2017)}$ 

# Normal Q-Q Plot of NPM for IFRS= POSTIFRS

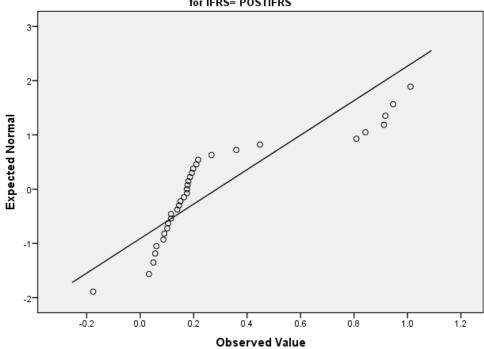


Figure-4. Normality Test for NPM (POST-IFRS)

Source: SPSS Output (2017)

## Normal Q-Q Plot of OPM

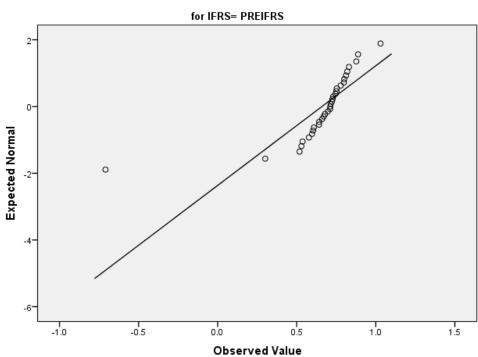
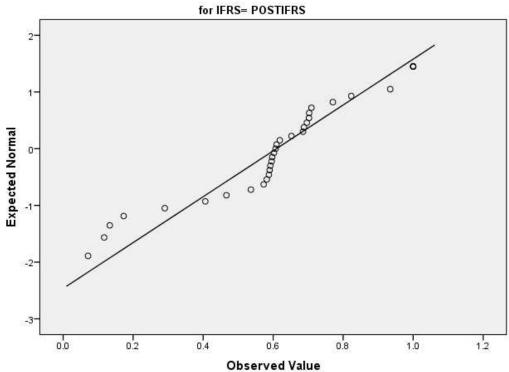


Figure-5. Normality Test for OPM (PRE-IFRS)

Source: SPSS Output (2017)

## Normal Q-Q Plot of OPM



 ${\bf Figure \hbox{-} 6.}\ {\bf Normality}\ {\bf Test}\ {\bf for}\ {\bf OPM}\ ({\bf POST\hbox{-}IFRS})$ 

Source: SPSS Output (2017)