Effect of Mandatory Adoption of IFRS on Earnings Predictability of Firms in the Financial Services Sector

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Authors’ contributions

This work was carried out in collaboration among all authors. Author GIE designed the study and wrote the first draft of the manuscript. Author LOND managed the literature searches and data collection. Author GJC and performed the analysis of the study. All authors read and approved the final manuscript.

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ABSTRACT

Aims: The paper empirically investigated the effect of mandatory adoption of International Financial Reporting Standards on earnings predictability of deposit money banks and insurance firms.

Study Design: It adopted ex post facto research design.

Place and Duration of Study: The study was conducted in Nigeria and covered the period 2008 to 2014.

Methodology: The study used 196 firm-year observations obtained from annual reports of the deposit money banks and insurance firms quoted on the Nigerian Stock Exchange. It formulated two hypotheses and tested the hypotheses using random effect model of Generalized Least Square Method.

Results: The regression results revealed that the mandatory adoption of IFRS did not improve earnings predictability of firms in the services sector, based on earnings and cash flows. The results

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also showed that the earnings predictability in the post mandatory IFRS adoption period was not significantly different between DMBs and insurance firms.

**Conclusions:** Nigeria has relatively short IFRS experience and preparers are still contending with several evolving issues. The paper recommends sustained training for both the preparers, users and regulators so as to improve financial reporting and consequently enhance earnings predictability.

**Keywords:** Earnings predictability; international financial reporting standard; financial services sector; Nigerian stock exchange.

### 1. INTRODUCTION

Since the mandatory adoption of International Financial Reporting Standards in the European Union in 2005, there has been a steady rise in the number of countries and jurisdictions that either adopt or permit the use of IFRS as the preferred accounting regime. As at 2017, IASPlus [1] reports that 130 countries and jurisdictions adopt or permit the use of IFRS. One of such countries is Nigeria which enacted the Financial Reporting Council Act of 2011 and began a mandatory adoption of IFRS in 2012.

Soderstrom and Sun [2] argue that the accounting standard implemented affects accounting quality. Consistent with the above argument, a large stream of empirical research has examined the effect of change from local accounting standards to IFRS on accounting quality [e.g. 3,4,5,6,7,8,9,10,11,12]. Results from these studies are mixed. It is argued that the effect of adoption of IFRS on accounting quality is contingent on country- or firm-specific characteristics. Specifically, Byard et al. [7] and Daske et al. [12], for example, suggest that enforcement of accounting standards, which usually varies across countries [13], is pivotal for realizing the potential benefits of the introduction of IFRS. Nigeria is a country that suffers from institutional weakness with a corresponding weakness in enforcement of accounting standards [14,15,16]. This therefore provides one motivation for this study.

This study focuses on earnings predictability of firms in the financial services sector. Earnings predictability is the ability of earnings to explain themselves [17]. In other words, earnings predictability deals with how past earnings can explain current earnings. Schiemann & Guenther [18] state that "if past earnings are a good estimates of current earnings, then predictability is said to be high".

We focus on earnings predictability for a number of reasons. First, earnings predictability plays critical role in firm valuation [19] and in determining analysts’ forecast accuracy and earnings-response coefficients [20]. Second, empirical evidence shows that changes in earnings are associated with changes in firm value [21]. Investors therefore have strong economic incentives to predict earnings in making their investment decisions. Third, earnings predictability is a major concern for top managers. Graham, Harvey, and Rajgopal [22] present survey evidence that top managers tend to believe that less predictable earnings commands a risk premium in the capital markets. Fourth, prior studies find that companies with more predictable earnings have lower costs of equity, more favorable loan terms, such as lower interest rates, longer maturities, and fewer covenants and collateral requirements [23,24,25].

There is scanty empirical study of the effect of adoption of IFRS on earnings quality in the financial services sector in Nigeria and indeed globally [26,27,28,29] despite the critical role of the sector in the national economy. The above studies focus on only the banking sector. This paper therefore extends the literature on the effect of mandatory adoption of IFRS on accounting quality by examining the differential effect on firms in Nigerian financial services sector.

Using 196 firm-year observations of deposit money banks (DMBs) and insurance firms listed on the Nigerian Stock Exchange in the period 2009 to 2014, the paper examines if the mandatory adoption of IFRS by Nigeria improves earnings predictability in the Nigerian financial services sector. It also investigates if the effect is different between DMBs and insurance firms.

The rest of the paper is structured as follows: Section 2 discusses Institutional background, prior research and hypotheses development. This is followed by the Research Methodology in Section 3. The empirical result is presented in Section 4 while Conclusion is in Section 5.
2. INSTITUTIONAL BACKGROUND, PRIOR RESEARCH AND HYPOTHESES DEVELOPMENT

2.1 Financial Services Sector

The financial services sector is composed of banks and insurance firms which act as financial intermediaries. They promote the culture of savings and fund mobilization thereby facilitating the socio-economic development of the country. Ebirien and Nwanyanwu [30] note that, while insurance companies promote socio-economic activities through risk transfer and indemnification for companies and individuals, banks provide platform for payment in addition to mobilization of deposits for onward lending.

The history of banking in Nigeria dates back to 1892 when the first bank in Nigeria - African Banking Corporation - was established. Similarly, insurance activities in Nigeria formally began in the colonial days [31] with the Royal Exchange Assurance Agency in 1918 [32]. As at December 31, 2014 there were fifty insurance firms and twenty four insured deposit money banks in Nigeria. Twenty eight insurance companies and eighteen insured DMBs were listed on the Nigerian Stock Exchange.

The financial services sector is highly regulated because of its critical significance to the economy. One of the most important regulations is the Insurance Act, 2003 which provides for the establishment of the National Insurance Commission as the apex regulator of the industry. The Banks and Other Financial Institutions Act 1991 as amended makes the Central Bank of Nigeria the apex regulator of the banking sector. Under the Acts, banks and insurance firms are to comply with the industry financial reporting requirements in addition to the provisions of the Companies and Allied Matters Act and the Listing Rules of the Nigerian Stock Exchange for listed entities.

2.2 Mandatory Adoption of IFRS

Until 2011, corporate financial reporting in Nigeria was guided mainly by Statements of Accounting Standards issued by the Nigerian Accounting Standards Board. From inception in 1982 to 2011, the Nigerian Accounting Standards Board issued 30 Statements of Accounting Standards (SAS). Unfortunately the SAS did not cover all issues found in the International Accounting Standards issued by the International Accounting Standards Board. This implies significant divergence between SAS and IFRS.


2.3 Literature Review

The theoretical framework of this study is the Conceptual Framework issued by the International Standards Board (IASB). According to the IASB Conceptual Framework, financial reports should help present and potential investors and stakeholders to make informed investment decisions about the timing and uncertainty of the reporting entity cash inflows and cash outflows. This is possible if earnings are predictable. One of the issues canvassed by IASB and its proponents is that IFRS enhances accounting quality.

Soderstrom and Sun [2] argue that the accounting standard being followed affects accounting quality. This implies that the introduction of a new accounting standard should affect the accounting quality of the reporting entities. Ball [4] and Chen, Tang, Jiang and Lin [33] argue that IFRS, being of higher quality than local GAAP, restrict or reduce alternative accounting choices, reduce the ambiguity and inconsistence of local standards, as it is easier to interpret and implement, changes managerial incentives which are influenced by economic and political systems for which accounting standards form an integral part.

One of the great features of IFRS is the greater use of fair value relative to SAS which are mainly based on historical cost model. This can be seen in IFRS 3 Business Combinations, IFRS 7: Financial Instruments: Disclosures, IFRS 9: Financial Instrument: Classification and Measurement, IFRS 13: Fair Value Measurement, IAS 19: Employee Benefits, amongst others. These standards are quite applicable to the firms in the financial services sector since financial instruments constitute the majority of assets and liabilities of such firms.
Proponents of fair value assert that fair values are relevant for financial decision making because fair value gives a better representation of the underlying economic reality for firms since it utilizes up-to-date market conditions [34,35,36,37,38,39,40,41]. The useful and reliable financial information helps investors to assess the amounts, timing and uncertainty of the entity’s future cash flows. However, the opponents of fair value accounting argue that fair value accounting introduces volatility in earnings especially when capital market is illiquid. Earnings volatility affects earnings predictability [42]. In their survey and interview of over 400 CFOs, Graham et al., [22] document that managers believe that volatile earnings command premium in the capital market thereby giving managers incentives to manage earnings opportunistically.

Chen et al., [33] examine the accounting quality of publicly listed companies in 15 EU member states before and after the IFRS adoption in 2005. They find evidence that accounting quality in the EU is higher in the IFRS adoption period (2005 – 2007) than in the pre-adoption period (2000 – 2004).

Using samples comprising 58,832 firm-year observations drawn from 33 countries from 2002 through 2008, Atwood, Drake, Myers and Myers [43] fail to document difference in earnings and cash flow predictability between industrial firms reporting under IFRS regime and US GAAP and non-US domestic GAAP. It is contended that IFRS afford managers more flexibility and managers can therefore use their discretion to convey more information about future earnings and cash flows.

Uwuigbe et al. [3] examine the impact of IFRS adoption on earnings predictability of 11 listed banks in Nigeria and find a decrease in the ability of current earnings to predict future earnings after the adoption period. The authors attribute the result to banks’ overreliance on fair value and lax enforcement. However, we believe the result was also driven by the small size of the firm year observations.

As discussed above, IFRS is heavily oriented to fair value accounting for classes of assets such as financial assets and liabilities (for example financial instruments). Therefore the potential effect of mandatory adoption of IFRS on accounting quality is likely to be greater for firms with higher proportion of financial assets. Indeed, Yao, Percy, Stewart, and Hu, [44] provide international evidence that banks that report a greater proportion of their financial instruments at fair value exhibit a stronger earnings predictability. A casual look of the financial statements shows that DMBs hold more financial assets than insurance firms since they are bigger with more branches. Insurance firms suffer reputational problems as investors hold negative perceptions about insurance [45,46].

3. RESEARCH METHODOLOGY

3.1 Research Design

The study adopted an ex-post facto research design using cross sectional data of quoted deposit money banks and insurance firms in Nigeria over a period of six years (2009 - 2014). The study considers the period adequate because it covers the period before and after the mandatory IFRS adoption by Nigeria. The study obtained secondary data from the annual reports of the quoted DMBs and insurance firms.

3.2 Population and Sample

The population of interest to the study is the existing eighteen DMBs and twenty eight insurance firms quoted on the Nigerian Stock Exchange. The sample size for the study is fourteen DMBs and twenty six insurance firms. To qualify for inclusion, firms must have complete data for each sample year. We exclude DMBs taken over by the Central Banks of Nigeria since their operations are constrained. Accordingly we exclude Afribank Plc, Bank PHB Plc and Spring Bank Plc. Table 1 presents the sample selection criteria.

3.3 Empirical Model

In the light of Section 2.3, literature review, we formulate our hypotheses thus.

Ho1: The earnings predictability of firms in the Nigerian financial services sector is not greater in the mandatory IFRS adoption period than in the period before the mandatory IFRS adoption.

H1: The earnings predictability of firms in the Nigerian financial services sector is not greater in the mandatory IFRS adoption period than in the period before the mandatory IFRS adoption.
Ho2: The earnings predictability of firms in the Nigerian financial services sector in the post mandatory IFRS adoption is not different between DMBs and Insurance firms.

H2: The earnings predictability of firms in the Nigerian financial services sector in the post mandatory IFRS adoption is not different between DMBs and Insurance firms.

The extant literature shows different measure of earnings predictability amongst which are analysts’ absolute forecast error and analysts’ forecast dispersion [e.g. 19,23,47] as well as the slope coefficient from a baseline regression between future earnings and current earnings as well as future cash flows and current earnings [17,24,46]. Since there is no public data on analyst forecasting in Nigeria as is the case in the US and Europe, this study adopts the slope coefficient from a baseline regression forecasting in Nigeria as is the case in the Nigerian financial services sector.

Where: 

\[ PBT_{it} +1 = \alpha_0 + \alpha_1 PBT_{it} + \alpha_2 POST_{it} + \epsilon_{it} \] (Eq. 1)

\[ CFO_{it} +1 = \beta_0 + \beta_1 PBT_{it} + \epsilon_{it} \] (Eq. 2)

Where:

- \( PBT_{it} +1 \) = profit before tax and extraordinary items for firm \( i \) in year \( t +1 \) divided by the opening balance of total assets.
- \( CFO_{it} +1 \) = net cash flows from operation for firm \( i \) in year \( t +1 \) divided by the opening balance of total assets.
- \( PBT_{it} \) = profit before tax and extraordinary items for firm \( i \) in year \( t \) divided by the beginning of total assets.
- \( \epsilon_{it} \) = error term to capture all other variables likely to influence earnings predictability but not explicitly included in the model.
- \( \alpha_0, \beta_0 \) = intercepts
- \( \alpha_1, \beta_1 \) = regression parameters

A positive and significant sign for \( \alpha_1 \) and \( \beta_1 \) respectively implies more predictive earnings, whereas a negative and significant sign for \( \alpha_1 \) and \( \beta_1 \) implies less predictive earnings. To assess the effect of mandatory adoption of IFRS, we expand regressions 1 and 2 above thus:

\[ PBT_{it} +1 = \alpha_0 + \alpha_1 PBT_{it} + \alpha_2 POST_{it} + \alpha_3 POST^*PBT_{it} + \epsilon_{it} \] (Eq. 3)

\[ CFO_{it} +1 = \beta_0 + \beta_1 PBT_{it} + \beta_2 POST_{it} + \beta_3 POST^*PBT_{it} + \epsilon_{it} \] (Eq. 4)

Where:

- \( POST_{it} \) = a dummy variable code 1 if the observation falls in the mandatory adoption period, (2012 to 2014) and 0 otherwise.
- \( POST^*PBT_{it} \) = interaction of \( POST \) with \( PBT \)

All other variables are as defined earlier.

The interaction of \( POST \) with \( PBT \) captures the incremental effect of mandatory adoption of IFRS on earnings predictability. Therefore a positive and significant sign on \( \alpha_3 \) and \( \beta_3 \) indicates the mandatory adoption of IFRS enhances earnings predictability while a negative sign suggests otherwise.

To test if the effect of mandatory adoption of IFRS on earnings predictability is different for DMBs and insurance firms, the authors introduce the variable \( FIRM \) into the models thereby generating new models thus:

\[ PBT_{it} +1 = \alpha_0 + \alpha_1 PBT_{it} + \alpha_2 POST_{it} + \alpha_3 POST^*PBT_{it} + \alpha_4 FIRM_{it} + \epsilon_{it} \] (Eq. 5)

\[ CFO_{it} +1 = \beta_0 + \beta_1 PBT_{it} + \beta_2 POST_{it} + \beta_3 POST^*PBT_{it} + \beta_4 FIRM_{it} + \epsilon_{it} \] (Eq. 6)

Where:

- \( FIRM_{it} \) = A dummy variable code 1 if the firm \( i \) in year \( t \) is a DMB and 0 otherwise.
- \( FIRM*.POST^*PBT_{it} \) = Interaction of \( FIRM \) with \( PBT \) in the mandatory adoption period.

All other variables are as defined earlier.

A significant and positive sign on the coefficients \( \alpha_3 \) and \( \beta_3 \) suggest the effect of mandatory IFRS on earnings predictability is more pronounced on the DMBs than on the insurance firms.
Prior studies show that some variables exert considerable influence on earnings predictability. These include board independence and leverage. An independent board has been found to be effective in monitoring management and the financial reporting system [49,50,51]. The inclusion of leverage is to address creditors concern about the financial health of the firm since highly levered and troubled firms have the incentive to manage earnings to avoid debt covenant violation [52,53,54]. Highly levered firms manage earnings by smoothing earnings. These variables are therefore added to models 5 and 6 as controls variables. Models 5 and 6 are expanded thus:

\[
P_{\text{Bt}+1} = \alpha_0 + \alpha_1P_{\text{Bt}} + \alpha_2P_{\text{St}+it} + \alpha_3F_{\text{Im}i} + \epsilon_{\text{Bt}+1} \quad \text{(Eq. 7)}
\]

\[
C_{\text{FOt}+1} = \beta_0 + \beta_1P_{\text{Bt}+it} + \beta_2P_{\text{St}+it} + \beta_3F_{\text{Im}i} + \epsilon_{\text{CFOt}+1} \quad \text{(Eq. 8)}
\]

Where:

\[
\text{BODIN}_{it} = \text{board independence measured as the proportion of non-executive directors on the board of the firm } i \text{ in year } t
\]

\[
\text{LEV}_{it} = \text{leverage computed as total liabilities divided by total assets of the firm } i \text{ in year } t
\]

**4. EMPIRICAL RESULTS**

**4.1 Descriptive Statistics**

Table 2 sets forth the descriptive statistics of the variables used in this study. Table 2 shows the mean profit before tax (PBT) of DMBs is 0.0093 compared to 0.0330 for insurance firms. This is not significant. However, the one-year ahead profit before tax and one-year ahead cash flow from operations for both DMBs and insurance firms are significantly different at the 10% level.

As shown in Table 2, the average leverage of 0.8715678 for DMBs is higher than 0.4402714 for insurance firms and this is overwhelmingly significant. This suggests more scrutiny of the financial reporting system of DMBs by the creditors to improve earnings predictability. Similarly, on the average, DMBs clearly possess more independent boards than insurance firms.

The study reports the correlation matrix of the dependent and independent variables in Table 3. Current earnings are positively correlated with future earnings as well as cash flows. The correlation is not significant. This provides preliminary basis for the acceptance of the hypotheses formulated in this study. The control variables – board independence (BODIN) and leverage (LEV) - exhibit negative correlation with future earnings and cash flows. While BODIN shows significant correlation at the 5% level, LEV reveals insignificant correlation with future cash flows.

**4.2 Regression Results**

The study ran both fixed effect and random effect models but reported the results of random effect model in Table 4c. To determine which of the models is preferred, we conducted Hausman specification tests.

Test: \(H_0: \text{Difference in coefficients not systematic} \)

\[
\text{chi2}(5) = (b-B)((V_b-V_B)^{-1})(b-B) = 7.17
\]

<table>
<thead>
<tr>
<th>Table 1. Sample selection criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Listed firms as at 31&lt;sup&gt;st&lt;/sup&gt; December 2014</td>
</tr>
<tr>
<td>Less Bridge DMBs</td>
</tr>
<tr>
<td>Less firms with incomplete data</td>
</tr>
<tr>
<td>Less observations with incomplete data</td>
</tr>
<tr>
<td>Final sample size</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
### Table 2. Descriptive statistics

<table>
<thead>
<tr>
<th>Variables</th>
<th>DMBS</th>
<th>Insurance firms</th>
<th>Test for difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Obs</td>
<td>Mean</td>
<td>Std.</td>
</tr>
<tr>
<td>PBT +1</td>
<td>84</td>
<td>.0152</td>
<td>.0759</td>
</tr>
<tr>
<td>CFO +1</td>
<td>84</td>
<td>.0102</td>
<td>.1635</td>
</tr>
<tr>
<td>PBT</td>
<td>84</td>
<td>.0093</td>
<td>.0648</td>
</tr>
<tr>
<td>BODIN</td>
<td>84</td>
<td>.6222</td>
<td>.0908</td>
</tr>
<tr>
<td>LEV</td>
<td>84</td>
<td>.8715</td>
<td>.0943</td>
</tr>
</tbody>
</table>

Note. 10% Level of significance in two tailed test is indicated by * and 1% by ***

### Table 3. Correlation matrix

<table>
<thead>
<tr>
<th></th>
<th>PBT+1</th>
<th>CFO+1</th>
<th>PBT</th>
<th>POST</th>
<th>FIRM</th>
<th>POST*FIRM</th>
<th>FIRM<em>POST</em>PBT</th>
<th>BODIN</th>
<th>LEV</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBT+1</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CFO+1</td>
<td>0.6046*</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PBT</td>
<td>0.0892</td>
<td>0.0392</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POST</td>
<td>0.1349</td>
<td>0.0832</td>
<td>0.1696*</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FIRM</td>
<td>-0.1620*</td>
<td>-0.1823*</td>
<td>-0.1324</td>
<td>-0.0709</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POST*FIRM</td>
<td>0.0057</td>
<td>0.0131</td>
<td>0.5427*</td>
<td>0.3713*</td>
<td>-0.1565*</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FIRM<em>POST</em>PBT</td>
<td>-0.0079</td>
<td>-0.0650</td>
<td>0.1045</td>
<td>0.2892*</td>
<td>0.3624*</td>
<td>0.2070*</td>
<td>1.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BODIN</td>
<td>-0.2107*</td>
<td>-0.2495*</td>
<td>-0.0427</td>
<td>-0.5413*</td>
<td>0.2668*</td>
<td>-0.2180*</td>
<td>0.0679</td>
<td>1.0000</td>
<td></td>
</tr>
<tr>
<td>LEV</td>
<td>-0.1735*</td>
<td>-0.1165</td>
<td>-0.1380</td>
<td>0.1065</td>
<td>0.8051*</td>
<td>-0.0478</td>
<td>0.2677*</td>
<td>-0.0272</td>
<td>1.0000</td>
</tr>
</tbody>
</table>

Note. 10% Level of significance in two tailed test is indicated by * and 1% by ***
Prob>chi2 = 0.2080

Test: Ho: Difference in coefficients not systematic

\[ \chi^2(5) = (b-B)'[(V_b-V_B)^{-1}](b-B) \]

= 6.73

Prob>chi2 = 0.2415

The null hypothesis of the Hausman specification test is that the random effect model is the preferred model. The random effect model is preferred if the probability value of the chi square obtained from the Hausman test is not significant [55]. The results of the Hausman tests in Table 4a and Table 4b show the random effect model as the preferred model [\( \chi^2(5) = 7.17, P = 0.2080 \)] and [\( \chi^2(5) = 6.73 \)].

The regression results are displayed in Table 4c.

Panel A of Table 4c reports the panel regression in which PBT +1 is the dependent variable while Panel B of Table 4c has CFO + 1 as its dependent variable. Table 4c shows the models fit the data very well. However, Panel A exhibits a better fit (\( P = 0.0092 \)) than Panel B (\( P = 0.0293 \)).

Table 5 shows that the coefficient of PBT is positive (\( \alpha_1 = 0.1106425 \)). This result indicates that for a one percent increase in current earnings, current earnings can predict approximately 11% increase in earnings one-year ahead. However, this result is not significant at any of the conventional level (\( P = 0.248 \)). In Panel B of Table 4c, the coefficient on PBT is positive (\( \beta_1 = 0.0380749 \)) but this is insignificant (\( P = 0.844 \)). The positive coefficient implies that for a 1% increase in current earnings, cash flow from operations in one year’s time is predicted to increase by approximately 4%. This shows that the predictive ability of earnings is sensitive to the dependent variables.

In respect of H1, Panel A of Table 4c shows that for a 1% increase in current earnings, earnings one-year ahead in the post mandatory IFRS adoption period declines by approximately 26%. The p-value of 0.169 indicates the relationship is insignificant, suggesting that the adoption of IFRS by firms in the financial services sector listed on the Nigerian Stock Exchange did not improve earnings predictability. In Panel B of Table 4c, for a 1% increase in current earnings, the ability of current earnings to predict cash flow from operations one-year ahead declines by approximately 30% in the post mandatory IFRS adoption period. This predictive ability of current earnings again lacks statistical significance (\( P = 0.429 \)). Based on the results, H1 is not rejected.

To recap H1 states that the earnings predictability of firms in the Nigerian financial services sector is not greater in the mandatory IFRS adoption period than in the period before the mandatory IFRS adoption.

### Table 4a. Results of Hausman test for Eq. 7

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>(b)</th>
<th>(B)</th>
<th>(b-B)</th>
<th>Sqrt (diag(V_b-V_B))</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBT</td>
<td>0.20139</td>
<td>0.110643</td>
<td>0.09075</td>
<td>0.145585</td>
</tr>
<tr>
<td>post</td>
<td>0.014807</td>
<td>0.014251</td>
<td>0.000559</td>
<td>0.0011644</td>
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<tr>
<td>bodin</td>
<td>-0.11266</td>
<td>-0.10733</td>
<td>-0.005318</td>
<td>0.1890575</td>
</tr>
<tr>
<td>Lev</td>
<td>-0.11549</td>
<td>-0.11332</td>
<td>-0.0021674</td>
<td>0.2856113</td>
</tr>
<tr>
<td>postpbt</td>
<td>0.2856113</td>
<td>-0.25454</td>
<td>-0.0159502</td>
<td>0.012711</td>
</tr>
<tr>
<td>firmpostpbt</td>
<td>-0.8419</td>
<td>0.14733</td>
<td>-0.9892336</td>
<td>0.328034</td>
</tr>
</tbody>
</table>

### Table 4b. Results of Hausman test for Eq. 8

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>(b)</th>
<th>(B)</th>
<th>(b-B)</th>
<th>Sqrt (diag(V_b-V_B))</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFO</td>
<td>0.213577</td>
<td>0.038075</td>
<td>0.1755021</td>
<td>0.0899997</td>
</tr>
<tr>
<td>post</td>
<td>-0.01374</td>
<td>-0.01533</td>
<td>0.00159</td>
<td>0.0024208</td>
</tr>
<tr>
<td>bodin</td>
<td>0.001729</td>
<td>-0.00413</td>
<td>0.0008633</td>
<td>0.0092005</td>
</tr>
<tr>
<td>Lev</td>
<td>-0.06023</td>
<td>-0.07789</td>
<td>0.017657</td>
<td>0.1767903</td>
</tr>
<tr>
<td>Post*pbt</td>
<td>0.00237</td>
<td>-0.29713</td>
<td>0.2995012</td>
<td>0.1727646</td>
</tr>
<tr>
<td>Firm<em>post</em>pbt</td>
<td>-0.14571</td>
<td>-0.01195</td>
<td>-0.1337593</td>
<td>0.1876687</td>
</tr>
</tbody>
</table>
Table 4c. Regression results

<table>
<thead>
<tr>
<th></th>
<th>Panel A = Based on current earnings</th>
<th>Panel B = Based on cash flows</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient</td>
<td>Std Error</td>
</tr>
<tr>
<td>PBT_{it}+1</td>
<td>.1106425</td>
<td>.0958324</td>
</tr>
<tr>
<td>PBT_{it}</td>
<td>.0253432</td>
<td>.0304113</td>
</tr>
<tr>
<td>POST_{it}</td>
<td>.0142513</td>
<td>.0187691</td>
</tr>
<tr>
<td>FIRM_{it}</td>
<td>-.2545389</td>
<td>.1851538</td>
</tr>
<tr>
<td>POST*PBT_{it}</td>
<td>.1473297</td>
<td>.5638706</td>
</tr>
<tr>
<td>FIRM<em>POST</em>PBT_{it}</td>
<td>-.010733</td>
<td>.043668</td>
</tr>
<tr>
<td>BODIN_{it}</td>
<td>-.1133241</td>
<td>.0524287</td>
</tr>
<tr>
<td>cons</td>
<td>.1484722</td>
<td>.0417186</td>
</tr>
</tbody>
</table>

sigma_u                 | 0.1819052   | .04862789 |
sigma_e                 | .09154837   | .18053159 |
rho                    | .03798152   | .06764646 |
Number of obs           | 196         | 196        |
Group variable: identifier No of groups | 36         | 36        |
R-sq: within            | 0.0284      | 0.0486     |
Obs per group: min      | 3           | 3          |
between                 | 0.3188      | 0.1529     |
Avg                     | 5.4         | 5.4        |
Max                     | 6           | 6          |
Wald chi2(7)            | 18.69       | 15.58      |
Prob > chi2             | 0.0092      | 0.0293     |

H2 tested the differential earnings predictability of DMBs and insurance firms in the post mandatory IFRS adoption period. The variable of interest in Table 4 is the coefficient on FIRM*POST*PBT. Panel A of Table 4c shows FIRM*POST*PBT has a positive coefficient (α5 = 0.14733). This implies that relative to insurance firms, for a one percent increase in current earnings, one-year-ahead earnings in the post mandatory IFRS adoption period for DMBs is predicted to increase by approximately 15%. However, this predictive ability of current earnings is not significant at all (P = 0.794). Panel B of Table 4c reports a negative coefficient on FIRM*POST*PBT (β5 = -0.01195). The implication is that for a 1% increase in current earnings of DMBs relative to insurance firms in the post mandatory IFRS period, the ability of current earnings to predict one-year-ahead cash flow from operation of DMBs declines by approximately 2%. The relationship is statistically insignificant (P = 0.992). Taken together, the results demonstrate that earnings predictability of firms in the Nigerian financial services sector in the post IFRS adoption period is not different between DMBs and insurance firms. Consequently, H2 is not rejected.

4.3 Control Variables

Board independence (BODIN) is a control variable. Table 4c shows that board independence is negatively and statistically associated with earnings predictability. This implies that as board increases its independence, earnings predictability declines. This suggests independent boards intensify monitoring of financial reporting thereby constraining managers from opportunistically smoothing earnings.

Another control variable is leverage (LEV). It has negative coefficients in Table 4c. The negative relationship is statistically significant in Panel A but insignificant in Panel B. This result could be driven by the inability of the creditors and debt providers to monitor accruals since accruals relative to earnings are more difficult to monitor.

5. DISCUSSION

The above result could be because of enhanced surveillance of the financial reporting environment by regulatory authorities especially the Financial Reporting Council of Nigeria. It will
be recalled that Financial Council of Nigeria directed Stanbic-IBTC Plc to restate its 2014 Financial Statements and withheld approval of the 2015 Financial Statements following infractions spotted in the Financial Reports. Also shareholders are beginning to monitor closely the financial reports as evidenced by the recent case of Oando Plc. Before the mandatory adoption of IFRS, banks in Nigeria had carried out massive cleanup of the books following the CBN/NDIC joint special examination that revealed massive cover up in financial reporting. The above results are consistent with some evidence in the literature [31,56]. In examining the effect of IFRS adoption on earnings quality of firms in the non-financial services sector of Nigeria and South Africa, Chukwu and Okoye [56] find that earnings quality measured by timely loss recognition did not improve in the post-IFRS adoption period.

6. CONCLUSION

Earnings predictability is a measure of earnings quality. One of the issues canvassed by IASB and its proponents is that IFRS enhances accounting quality. We used firms in the Nigerian financial services sector (noted for operating in high level of opacity and breach of financial reporting rules) to test the assertion that IFRS accounting regime produces better earnings quality. Findings did not provide evidence that the mandatory adoption of IFRS improves earnings predictability. Also, the effect of IFRS adoption on the earnings predictability of banks is not statistically different from that of insurance firms.

Since IFRS is still evolving to address all issues and Nigeria has relatively short IFRS experience, the paper recommends sustained training for both the preparers, users and regulators so as to improve financial reporting and consequently enhance earnings predictability.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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