BOARD ATTRIBUTES, IFRS ADOPTION, AND TIMELINESS OF FINANCIAL REPORTS AMONG NIGERIAN LISTED FIRMS

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ABSTRACT
This study examines the relationship between the board attributes and timeliness of financial reports upon International Financial Reporting Standard (IFRS) adoption in Nigeria. The study compares the pre and post-IFRS relationship between board attributes and the timeliness of financial information, proxy by Audit Report Lag (ARL), among Nigerian listed companies. An ex-post facto research design and the estimation technique of Panel Generalized Least square (PGLS) were used to analyze the secondary data sourced from the audited published annual financial reports of 57 sample firms, purposively selected across all sectors of the NSE from 2006 to 2018. The population of the study was comprised of all firms listed firms on the Nigerian Stock Exchange (NSE) as of December 2019, totaling 165. The study found that IFRS is a dummy variable that distinguishes the two periods: the pre- IFRS period of 2006-2011 and the post-IFRS of 2013-2018. The coefficient of IFRS being statistically significant suggests that IFRS adoption seems to be more effective in the relationship between the board attributes and the timeliness of financial reports in the post-IFRS period. Board attributes, particularly board independence and board gender diversity, also increased ARL post-IFRS. The study suggested a holistic review of the board requirements by the regulatory body, SEC, among others.

Keyword: Board Attributes, Financial Reports, IFRS Adoption, Timeliness.

JEL Classification: G30, G34, M42, M48

1. INTRODUCTION
Many standard-setting bodies, including the International Accounting Standard Board (IASB) and the Financial Reporting Council of Nigeria (FRCN) have acknowledged the timely provision of appropriate financial information as one of the primary objectives of financial reports. However, accounting information came under pressure following the poor performance of Nigerian commercial banks between 2013 and 2017 (Kenechukwu & Okechukwu, 2019). They noted that the poor performance and reporting by the commercial banks was probably due to the accounting standard in use then. Ologun, Isenmila, Okuns and Alade (2020) opined that the International Financial Reporting Standard (IFRS) possesses inherent benefits such as the issuance of high-quality financial reports, universal capital market integration, among others (AICPA IFRS News Archive, 2021).

The timeliness of financial reports has been identified as an essential attribute of corporate
governance by the OECD and World Bank (McGee & Yuan, 2008). However, IFRS adoption may require more accounting information disclosure which may cause a delay in timely financial reporting (Alade, 2018). Therefore, the timeliness of the financial report may have been redesigned by IFRS adoption even though IFRS is expected to improve the quality of the financial information (Fodio, Obas, Olukoju, & Zik-rullah, 2015). To this extent, IFRS adoption is thought to have affected the timeliness of financial reports.

IFRS adoption may have also affected the relationship between the board and the timeliness of financial information. Therefore, there is a need to investigate the relationship between the board and the timeliness of financial reports consequent upon adopting IFRS. These interconnected concerns informed the basis for this study. Extant literature document inconsistencies concerning the association between board attributes and the timeliness of corporate financial reporting. Azubike and Aggreh (2014), Ezat and El-Masry (2008) observed a negative association between board size, board independence, and audit report lag, while Al Daoud, Ku Ismail, and Lode (2015) observed a positive link between Management Reporting Lag (MRL) and large board size and board diligence. Also, while Kao and Wei (2014) and Fodio et al. (2015) observed that IFRS adoption improves the timeliness of the accounting information, McGee (2006) found that using IFRS takes a longer period than using U.S. Financial Accounting Standard Board (FASB)’s Standards. These conflicting results, coupled with the need to observe the situation even after IFRS adoption, also underpinned this study. This study, therefore, provides an answer to the question of 'what effect have board attributes on the timeliness of financial reports among Nigerian listed firms in the pre and post IFRS adoption?'

2. LITERATURE REVIEW
2.1. Timeliness of Financial Report
Carslaw and Kaplan (1991) noted that timeliness is an important qualitative attribute of accounting information that ensures its users' prompt release to preempt privileged insider use of such information. Timelier financial information is considered more valuable. Modugu, Eragbhe, and Ikhatua (2012) also opined that the relevance and value of accounting information contents are impaired when the reporting lag increases. The reporting lags form the basis for determining the timeliness of financial reports (Modugu, Eragbhe & Ikhatua, 2012). Oladipupo and Izedonmi (2013b) defined the Audit Report Lag (ARL) as the period between the last day of the accounting year, i.e., the statement of financial position date and the date the auditor signs the audit report. This study adopts the latter to represent the timeliness of the financial report, assuming the board has no significant control over the audit report lag (ARL). Unlike the management reporting lag (MRL), which the board may significantly influence. Odo (2018) opined that IFRS adoption might reduce the cost of information processing among countries of a common standard. Also, over time, it becomes easier for auditors to get accustomed to the common standard than each country's local standard (Odo, 2018).

2.2. IFRS Adoption
IFRS came into being following agitations for a unified standard among member countries. IASB, at its formation in 2001, promulgated the International Financial Reporting Standards (IFRS) as a single set of high quality, understandable, enforceable, and globally acceptable financial reporting standards based on clearly articulated principles (AICPA IFRS News Archive,
IFRS also focused on reducing information asymmetry between the managers of corporate resources and other financial report users (Odo, 2018).

2.3. IFRS adoption in Nigeria

IFRS was approved for use in Nigeria following the approval of the Federal Executive Council (FEC) of Nigeria on 28th July 2010. FEC also approved its phased implementation with 1st January 2012 as the take-off date for convergence of the Nigerian Accounting Standard with IFRS (Odo, 2018). The erstwhile Nigerian accounting standard regulatory body, Nigerian Accounting Standard Board (NASB), was transformed to the Financial Reporting Council of Nigeria (FRCN) through the enactment of the FRCN Act, 2011, and the old NASB Act of 2003 was repealed (www.frcn.org). Alade (2018) noted that IFRS has more disclosure demands than the erstwhile Nigerian SASs enacted by NASB. This improved disclosure demand could suggest an elongation of the time taken for issuance of accounting information (covering preparation and auditing) under IFRS than under the Nigerian Generally Accepted Accounting Principles (GAAP) (Alade, 2018).

2.4. Board Attributes

Dwekat, Seguí-Mas, Tormo-Carbó, & Carmona (2020) observed that the effective management of a firm's operations to the satisfaction of its shareholders is primarily the board's responsibility. The board also ensures the firm meets its obligations to the employees and other stakeholders. In performing its duty, the board ensures that the firm's operations are carried out in compliance with the firm's articles and memorandum of association and the existing laws in the industry (SEC Code of Corporate Governance, 2011).

Abdullah (2007) argued that board composition is consistent with the argument that a properly constituted board of directors and audit committee would lead to effective corporate governance. This argument is also consistent with the work of Beasley (1996). Onoura, Egbunike and Gunardi (2018) opined that board composition affects the timeliness of corporate financial reports. They noted that other board attributes that may influence the timeliness of financial reports include; board size, board meeting, board independence, and board gender diversity. The role of the board has been the focus of corporate governance guidelines. The board ensures that managers keep proper firms' accounts and get the accounts audited and issued timely to the public members (Fama & Jensen, 1983). To this extent, the timeliness of financial information is directly linked to the quality of the board. The quality of the board can be greatly influenced by some of its attributes, including board size, board meeting, board independence, board gender diversity, among others.

The FRCN Corporate Governance Code (2018), and the SEC Code of Corporate Governance (2011) placed largely, the responsibility for good corporate governance in a firm on the board. Brennan (2006) also noted that the effectiveness of the board of directors' oversight function is influenced by factors like board size, board composition, board diversity, board culture, and information asymmetries, among others. This study focuses on four board attributes: board size, board meeting, board independence, and board gender diversity.

2.4.1. Board Size

Board size is the total number of directors serving on a company's board (FRCN Corporate
Governance Code, 2018). Singh and Harianto (1989) noted that a larger board size ensures effective and efficient management monitoring, reduces the CEO's power on the corporate board, and enhances firm performance. The corporate governance code (2018) allows the board to weigh the benefits and implications when deciding the board size. The code also recommends an appropriate combination of the executive, non-executive, and independent non-executive members on the board, such that non-executive directors form the majority on the board. The code further specifies the eligibility of members that can serve on the board's committees, among others. Hashim and Rahman (2010) posited that the number of additional directorships could reflect a director's prominent reputation and ability to monitor the firms effectively. They further noted that consistent with the resource-based theory; the internal resources aid the firm to be more prosperous or outperform others. The firm's internal resources are its board of directors' skills, experience, and knowledge. These internal resources should produce high-quality and reliable financial reports. Thus, the auditor can rely more on the firm's high-quality financial report, spend less time on the audit work, and consequently reduce audit report lag.

2.4.2. Board Meeting
The board of directors meets to decide on matters affecting the company. Therefore, the board meeting is an avenue for making important decisions (Kakanda, Salim, & Chandren, 2016). In addition, the corporate governance code (2018) stipulates a minimum number of four meetings in a year. Kakanda (2017) further posited that frequent board meeting has a significant positive relationship with the firm performance.

2.4.3. Board Independence
The independence of the board is measured by the number of non-executive directors to executive directors on the board and at least one independent director (corporate governance code, 2018). An independent director is a non-executive director of a company who is not a substantial shareholder and does not represent a majority shareholder (corporate governance code, 2018). A majority shareholder can control or significantly influence the management of the company. Also, an independent director's shareholding, directly or indirectly, shall not exceed 0.1% of the paid-up capital of the company, among others (corporate governance code, 2018).

Beekes, Pope, and Young (2004) argued that the proportion of outside directors on the board is associated with the possibility of timelier recognition of ‘bad news, which may improve accounting quality. An independent board would likely be more transparent in its dealings and promote effective internal control. An effective internal control system also enables the firm to prepare its financial report timelier than a firm that lacks a proper and adequate internal control system (Fama & Jensen, 1983).

2.4.4. Board Gender Diversity
Gender diversity of the board is the number of female members on the board to the total number of members. A board comprising a minimum number of five members should at least have a female member. A good female representation on the board allows for a more robust deliberation on gender-based matters affecting the firm and conforms with global best practices. It also aids gender-balanced decisions, particularly on matters affecting human relations. The extent of the
The relationship between board gender diversity and timeliness of financial information is not sufficiently known; however, it is expected to improve the timeliness of financial reports.

Extant literature have sufficiently established the relationship between the board and timeliness of financial report but not the moderating effect of IFRS adoption on this relationship. Hence, the crux of this study.

2.5. Agency Theory

Agency theory explains and resolves issues in the relationship between the principal and its agent. The theory is often used to describe the relationship between the firm's shareholders and the firm's managers. The managers act on behalf of the shareholders (Jensen & Meckling, 1976). The board has the responsibility of ensuring firm managers always act in the best interest of the shareholders. The board addresses such issues that might lead to a conflict of interest. IFRS seeks to ensure shareholders' protection through proper disclosure of financial information; hence compliance with IFRS demands becomes crucial for firm managers. The board ensures that firm managers comply with IFRS-based financial reports. The board's effectiveness in carrying out its responsibilities explains the significance of the board attributes examined in this study. Agency theory is therefore considered appropriate for this study as it explains the role IFRS adoption played in the relationship between each board attribute and the timeliness of financial reports. Ologun (2021) employed agency theory in a related study.

2.6. Empirical Review

Agyei-Mensah (2018) observed the effects of board size, board independence, board gender diversity, audit committee independence, institutional ownership, block ownership concentration, and audit report lag on a firm's financial performance using return on asset and equity among Ghanaian listed firms. Data for ninety (90) firm-year observations were obtained from thirty (30) firms for three (3) years, i.e., 2012 to 2014. The descriptive statistics and the regression analysis technique found that financial reporting lag has a statistically significant negative relationship with firm performance. The study also found that the minimum, maximum and average audit report lag was 55, 173, and 86 days, respectively. However, the study merely examined audit reporting lag and board attributes with respect to financial performance with no reference to IFRS adoption and its effect on the firm's performance. Therefore, IFRS adoption and its implications on firm performance cannot be overlooked and tend to constrain their study. Besides, the sample is considered relatively small for a generalized opinion.

Azubike and Aggreh (2014) also investigated the determinants of timely audit reports among manufacturing companies listed on the Nigerian Stock Exchange (NSE), focusing on profitability, board size, board independence, and audit firm type. Secondary data were obtained from three years of published annual reports of sample firms for three years, i.e., 2010 to 2012. Using Ordinary Least Square (OLS) regression analysis technique, the study found a statistically significant relationship between board size, board independence, and audit report lag. However, the relationship between audit firm type and audit report lag was not statistically significant. The study also observed that the approved time frame by the Securities and Exchange Commission (SEC) for companies to publish their financial reports was much and perhaps responsible for the delay in the timely arrival of financial reports to the public. The study also failed to consider IFRS...
adoption and its implications, more so that the study covered a pre-IFRS adoption period.

Al Daoud, Ku Ismail, and Lode (2015) also investigated the effect of board diligence, board financial expertise, board independence, the board size, CEO duality, audit committee presence, and sector type on the timeliness of financial reports among one hundred and twelve (112) Jordanian firms listed on the Amman stock exchange for years 2012 and 2013. The timeliness of financial reports was proxy by the audit report lag (ARL) and the management report lag (MRL). The technique of multiple regression analysis used found that firms with more frequent board meetings and more non-executive/independent board members (captured as board diligence) have shorter ARL. At the same time, firms with CEO and Chairman duality (where the board chairman also functions as the CEO) have shorter MRL. The study further revealed that MRL has a significant positive relationship with large board size, board diligence but a negative relationship with audit committee presence.

Bakare, Taofiq, and Jimoh (2018) examined the influence of board attributes on the timeliness of financial reports using correlational research design and Generalised Least Square (GLS) multiple regression techniques. They obtained panel data for ninety (90) firm-year observations from published annual financial statements of fifteen (15) insurance companies listed on the Nigerian Stock Exchange. The study, which covered five years, i.e., 2011 to 2016, found that board size and board meetings have a statistically significant positive and negative relationship with the timeliness of financial reporting. The descriptive analysis also revealed that the insurance firms require 150 days to publish their financial reports. The minimum and the maximum number of days also required by the firms were 29 days and 453 days, respectively. However, the predictability of the findings was stalled by its failure to observe gaussianity and other linear regression assumptions. In addition, the study also covered only a sector of the economy.

Fodio et al. (2015) examined the relationship between firm traits and audit timeliness upon IFRS adoption in Nigeria. Using the panel regression analysis technique, the study covered Nigerian deposit money banks from 2010 to 2013. The study assumed that IFRS adoption could complicate the auditors' work and cause a delay in the audit reports. The study's findings revealed that IFRS adoption has a significant positive effect on audit timeliness. The variables of firm; age, size, and auditor firm type also significantly affect audit timeliness among Nigerian deposit money banks.

Ezat and El-Masry (2008) also investigated the effect of corporate governance variables and firm attributes on the Timeliness of Corporate Internet Reporting (CIR) using an eleven-item disclosure checklist. Data were obtained from thirty-seven (37) firms listed on the Cairo and Alexandria Stock Exchange. The study found a significant relationship between timeliness of CIR and board composition, the board size, firm size, liquidity, ownership structure, and industry type. The study also found that large firms in the service sector record a timelier disclosure of information on their websites. Large firms were described as firms with high liquidity, a high proportion of independent directors, a large number of board members, and a high free float. The study, however, focused on only a few most active Egyptian firms. In contrast, the direction of other non-CIR firms, which represented a higher percentage of the stock market, could not be ascertained. The study also neglected the possible effect of IFRS adoption.

Kao and Wei (2014) examined the association between information asymmetry, ownership structure, directors' pledges, and quality of accounting information under different accounting standards to know whether IFRS improved the quality of financial reports by reducing the effects...
of information asymmetry. Secondary data were obtained for eight years, i.e., from 2002 to 2009, from forty-two (42) firms listed on the Shenzhen Stock Exchange and forty-four (44) firms listed on the Shanghai Stock Exchange, China. The study found that IFRS improved the predictive value of the accounting information and the timeliness of the accounting information. IFRS, however, reduced information asymmetry of financial information. The study also found that firms employed corporate governance measures to enhance the quality of accounting information. Nothing was, however, said on the effect of corporate governance on the timeliness of financial information.

Mohammed and Ahmad (2016) investigated the effect of corporate governance features on audit report lag of fourteen (14) listed deposit money banks in Nigeria between 2008 and 2012. The study, which used a robust ordinary least squares model to analyze the panel data, found that being audited by the Big-4 firms, board meetings, board size, total assets, and board gender have statistically significant associations with audit report lag. However, there was no significant relationship between board expertise, risk committee size, audit committee size, and audit report lag. The strength of this study was constrained by its failure to build its findings on classical linear regression model assumptions. Also, the study investigated for five years only and did not capture the possible implications of IFRS adoption on the relationship that existed between corporate governance measures and timeliness of financial reports, consistent with the position of Fodio et al. (2015).

Ologun, Isenmila, Okuns, and Alade (2020) examined the effect of corporate governance on the timeliness of financial reports using multivariate panel least square regression analysis. Using a judgmental sampling technique, the study employed a sample size of 70 firms listed on the Nigerian stock exchange. The study found an average ARL of 123 days in the post-IFRS period. The study also found that the board attributes have a significant negative relationship with IFRS adoption in the pre-IFRS period. However, the constraint of their study was that none of the variables was statistically significant in the post-IFRS adoption period suggesting that the model may not appropriately fit the data statistically.

Furthermore, their study employed only the board attributes to represent corporate governance. This study addressed the non-fitness of their model by first employing pre-estimation techniques to analyze the variables' characteristics and the appropriateness of the estimation model. This study also updated its data to the year 2018 while excluding the 2012 data to provide even platforms for firms with different accounting year-end dates. Hence, having other migration dates in 2012, being the year of convergence to IFRS adoption. Also, the corporate governance code (2018) stipulates such measures of corporate governance to include other factors like assurance and risk, relationship with shareholders, and sustainability, among others. The role of the board in corporate governance, though germane, may not be a representation of the whole corporate governance.

Oshodin and Ikhatua (2018) also observed the effect of IFRS adoption on the timeliness of financial information in Nigeria. The study assumed that IFRS would lead to a delay in preparing financial statements. The study, which employed time lag as a proxy for the timeliness, described time lag as the period between the accounting year-end and the date the auditor finally signed the financial report. The study used the ordinary least square regression technique to analyze earnings per share, firm size, leverage, IFRS, and return on assets of thirty (30) purposively selected sample firms for eight years, i.e., 2009 to 2016. The study found that IFRS adoption improved the
timeliness of financial reports, though marginally. There were also different associations between the variables and the timeliness of financial reports before and after adopting IFRS. The limitation of the study was the small sample size and the absence of any corporate governance measure as part of its variables.

Arising from the conceptual and empirical reviews, there exists a significant relationship between the board attributes and the timeliness of financial reports, which may be affected by IFRS adoption. Akande, Moses and Tewari (2020) however noted that empirically, corporate governance and firm value have varied relationship based on the corporate governance attributes employed. Prior studies seem not to have addressed the relationship between the board attributes, timeliness of financial reports, and IFRS adoption. Furthermore, IFRS adoption in Nigeria requires firms to comply with the IFRS reporting format. Firms are also expected to comply with corporate governance demands. Hence, they are left to continue to identify ways to ensure that these compliances do not mitigate the timeliness of financial reports, noting that there are sanctions for non-compliance and a delay in the financial report. An effective board would be helpful as companies would be better informed on how corporate governance could enhance the timely arrival of their financial reports to users, even with the IFRS adoption. These gaps are what this study is conceived to fill.

3. METHODOLOGY
3.1. Research Design
This study employed an ex-post facto research design to know whether or not IFRS adoption affects the relationship between board attributes and the timeliness of financial reports and the extent of this variation.

3.2. Population of the Study
The study population was 165, comprised of Nigerian listed firms as of December 2019 (The Nigerian Stock Exchange, 2019).

3.3. Sample Size and Sampling Technique
The study considered a purposively selected sample size of fifty-seven (57) based on two criteria. First, the firms must have operated on the stock exchange all through the period under observation, i.e., the year 2006 to 2018, and that year 2012 must be the year of convergence to IFRS. A total of twelve years, broken into six years pre- and six years post- IFRS periods, were investigated. The period covers years 2013 to 2018, with 2012 taken as the year of convergence and therefore excluded. Among the board attributes stipulated in the Corporate Governance Code (2018), the board attributes employed for this study include; board size, board meeting, board independence, and board gender diversity. The timeliness of financial reports was proxy by the audit report lag (Ologun, Isenmila, Okuns & Alade, 2020).

3.4. Measurement and Operationalisation of Variables
The following variable were obtained from published annual reports of the sample firms. The audit report lag (proxy for timeliness), board size, board meeting, board independence, board gender diversity, and IFRS. The measurement of the variables and the authors who have used the
variables are listed in the accompanying table 3.1

Table 3.1: Operationalization of Variables

| S/ N | Variable Name | Abbreviation | Measurement | Source | Author who used the variables / similar variables |
|------|---------------|--------------|-------------|--------|---------------------------------------------------|
| 1    | Audit Report Lag | ARL | The number of days between the firm’s financial year-end and the date of the auditor’s report. | Published annual financial reports | Oladipupo & Izedonmi (2013b); Ologun, Isenmila, Okuns & Alade (2020); Ologun (2021). |
| 2    | Board Size | BSize | The number of members of the board. | Published annual financial reports | Azubike & Aggreh (2014); Ologun, Isenmila, Okuns & Alade (2020) |
| 3    | Board Meetings | BMeet | The number of meetings held by the board in a financial year | Published annual financial reports | Mohammed & Ahmad (2016); Bakare, Taofiq, & Jimoh (2018); Ologun, Isenmila, Okuns & Alade (2020) |
| 4    | Board Independence | BIndep | The number of non-executive to executive directors on the board. | Published annual financial reports | Ezat & El-Masry, (2008); Fodio et al. (2015); Ologun, Isenmila, Okuns & Alade (2020) |
| 5    | Board Gender Diversity | BGenDiv | The proportion of female gender on the board | Published annual financial reports | Ezat & El-Masry (2008); Fodio et al. (2015); Ologun, Isenmila, Okuns & Alade (2020) |
| 6    | IFRS | IFRS | Dummy variable of 1 if IFRS period, 0 | Published annual financial reports | Ologun, Isenmila, Okuns & Alade (2020); Ologun |
3.5. Data Estimation Technique
This study adopted the Panel Generalized Least Square technique (PGLS) of regression analysis. The technique allows us to determine the effects of a change in a policy variable, like the change from Statement of Accounting Standard (SAS) to IFRS.: the descriptive analysis, the correlation analysis, the pre-estimation analysis of multicollinearity, heteroskedasticity and the serial correlation tests to determine the appropriateness of the regression analysis technique. The Hausman test, and the PGLS regression analysis test were also conducted. Similar works were done by Mohammed and Ahmad (2016), Ologun, Isenmila, Okuns and Alade (2020), and Ologun (2021).

3.6. Theoretical Framework and Model Specification
This study assumed the agency theory in considering the effect of board attributes on timelines of financial reports upon IFRS adoption. The timely release of annual reports is the expected role of the board as stipulated in the year 2018 corporate governance code. Therefore, upon the adoption of IFRS, there is a need to establish how well the board has effectively performed its role of timely release of financial reports to the public. In other words, IFRS adoption can moderate the association between board attributes and the timeliness of the financial reports. In this instance, board attributes are assumed to improve the timeliness of financial reports. The moderating effect of IFRS adoption is also examined. The theoretical relationship between board attributes, i.e., the board size, board meeting, board independence and board gender diversity; and the timeliness of financial reports is described in the model below:

\[ ARL_{it} = \mu_0 + \mu_1BSize_{it} + \mu_2BMeet_{it} + \mu_3BIndep_{it} + \mu_4BGenDiv_{it} + \varepsilon_{it} \]  
\[ \text{(Eqn. 1)} \]

Reflecting the moderating effect of IFRS adoption, the equation is adjusted as:

\[ ARL_{it} = \mu_0 + \mu_1BSize_{it} + \mu_2BMeet_{it} + \mu_3BIndep_{it} + \mu_4BGenDiv_{it} + \mu_5IFRS + \mu_6IFRS*BSize_{it} + \mu_7IFRS*BMeet_{it} + \mu_8IFRS*BIndep_{it} + \mu_9IFRS*BGenDiv_{it} + \varepsilon_{it} \]  
\[ \text{(Eq. 2)} \]

Where: ARL is the Audit Report Lag of firm \( i \) at time \( t \);
\( \mu \) is the slope and coefficient of each variable;
BSize means Board Size of firm \( i \) at time \( t \);
BMeet stands for Board Meetings of firm \( i \) at time \( t \);
BIndep stands for Board Independence of firm \( i \) at time \( t \);
BGenDiv implies Board Gender Diversity of firm \( i \) at time \( t \);
\( t \) stands for year 2006, 2007... 2011 (for pre-IFRS period) and 2013, 2014... 2018 (for post-IFRS period).

3.7. Apriori Expectation
The apriori expectation is shown in Table 3.2.
Table 3.2: Variables & their Apriori Expectation

| Objective Statement                                                                 | Variables      | Apriori Expectation |
|-------------------------------------------------------------------------------------|----------------|---------------------|
| Examine the effect of board attributes on timeliness of financial reports upon IFRS adoption. | 1. BSize       | 1. $\pm (t \geq 2)$ |
|                                                                                    | 2. BMeetT      | 2. $\pm (t \geq 2)$ |
|                                                                                    | 3. BIndep      | 3. $\pm (t \geq 2)$ |
|                                                                                    | 4 BGenDiv      | 4. $\pm (t \geq 2)$ |

4.DIscussion of Results
4.1. Descriptive Statistics of the Variables
The descriptive statistics of the variables include the mean, median, maximum, minimum, among others. Table 4.1 shows the descriptive statistics of the variables under investigation.

Table 4.1. Descriptive Statistics

|                  | Mean  | Median | Maximum | Minimum | Std. Dev. | Skewness | Kurtosis | Jarque-Bera | Prob  |
|------------------|-------|--------|---------|---------|-----------|----------|----------|-------------|-------|
| ARL              | 133.93| 90.000 | 934.000 | 28.000  | 100.26    | 2.890    | 15.360   | 4851.110    | 0.00  |
| BGENDIV          | 9.420 | 10.000 | 50.000  | 0.000   | 0.080     | 0.98     | 3.630    | 119.950     | 0.00  |
| BINDEP           | 66.770| 69.230 | 94.440  | 0.000   | 16.067    | -0.79    | 4.090    | 102.220     | 0.00  |
| BMEET            | 4.560 | 4.000  | 10.000  | 1.000   | 1.060     | 1.68     | 7.160    | 809.560     | 0.00  |
| BSIZE            | 9.040 | 9.000  | 19.000  | 3.000   | 2.690     | 0.65     | 3.400    | 52.420      | 0.00  |
| IFRS             | 0.480 | 0.000  | 1.000   | 0.000   | 0.500     | 0.04     | 1.000    | 114.000     | 0.00  |

Source: Author’s computation (2021).

ARL has an average (mean) of 133 days, median of 90 days, maximum of 934 days and minimum of 28 days. BGENDIV has a mean of 9, and median of 10. BINDEP has a mean of 66 and median of 69. BMEET has a mean of 5 and median of 4 while Bsize has a mean of 9 and median of 9. The average ARL of 133 days suggest that many firms are yet to comply with the statutory 90 days they are required to publish their financial reports. The variables also exhibited low degree of dispersion having reported negligible difference between mean and median. Kurtosis reveals the size combination of two tails distribution. Kurtosis value of more than 3 indicates that the variable displays heavier tails than a normal distribution, while kurtosis value of less than 3 reveals that the variable displays lighter tails than a normal distribution. The statistics revealed that the variables
of BGENDIV, BINDEP, BMEET and BSIZE have kurtosis more than 3, suggesting that the variables exhibit heavier tails than normal distribution. The Jarque-Bera statistics report whether or not the variables are normally distributed. A variable is normally distributed when the p-value of the Jarque-Bera statistic is greater than 0.05. All the variables have p-values less than 0.05, hence they are not normally distributed, perhaps due to the panel nature of the variables which combined different cross sectional firms. The study also assumed either a fixed or random effect.

4.2. Unit Root test result

The unit root test otherwise known as the order of integration test is done to avoid spurious estimation. Panel data could be ‘non-stationary’ and lead to spurious estimates. Panel regression are only appropriate to estimate models that have variables integrated of order zero I(0), that is, stationary at level. The result of the unit root test for this study is shown in Table 4.2.

Table 4.2: Panel Unit Root Test

| Variable  | LLC (Levin, Lin & Chu t*) | Order of Integration| Remarks              |
|-----------|--------------------------|---------------------|----------------------|
| AR1       | -36.9498                 | 0.0000              | I(0)                 | Stationary at level |
| BGENDIV   | -2.67065                 | 0.0038              | I(0)                 | Stationary at level |
| BINDEP    | -7.72377                 | 0.0000              | I(0)                 | Stationary at level |
| BMEET     | -4.43174                 | 0.0000              | I(0)                 | Stationary at level |
| BSIZE     | -11.8668                 | 0.0000              | I(0)                 | Stationary at level |

Source: Author’s computation (2021).

The unit root test results show that all the variables were stationary at level, suggesting that common unit process does not exist among the variables. Panel least square with an option of fixed or random effect is therefore appropriate to estimate the model.

4.3. Test of Hypothesis

The hypothesis stated in the null form, assumed that board attributes have no significant effect on the timeliness of financial reports, upon IFRS-adoption. Table 4.3. shows the results of the tests for the heteroskedasticity, serial correlation, Table 4.4 shows the redundant fixed effects, and Table 4.5 shows the results of the Hausman test.

Table 4.3: Panel Cross-section Heteroskedasticity and Serial Correlation Tests

|                         | Likelihood Ratio LR Test | Degree of Freedom | P-Value> Chi2(57) | Serial correlation test |
|-------------------------|--------------------------|-------------------|-------------------|-------------------------|
| Likelihood Ratio LR Test| 6.15252                  | 57                | 0.3801            | -0.3862                 |

http://ijbmer.org/
In Table 4.3, the p-values of both tests are greater than 0.05, hence, the model is free from the problems of heteroskedasticity and serial correlation.

| Table 4.4: Redundant Fixed Effects Tests |
|-----------------------------------------|
| **Equation: Untitled**                  |
| **Test period fixed effects**           |
| **Effects Test**                        |
| **Statistic**                           |
| **d.f.**                                |
| **Prob.**                               |
| Period F                                |
| 2.821485                                |
| (11,613)                                |
| 0.0013                                  |
| Period Chi-square                       |
| 31.264000                               |
| 11                                      |
| 0.0010                                  |

Probability level (p) is significant at p<0.05.

In Table 4.4, the redundant fixed effect was estimated to determine the more appropriate model between the fixed effect and the pooled OLS. The result of the test reveals that (31.264000, p<0.05) significant effect exist in the model and therefore fixed effect is better than OLS. There is need to further ascertain the appropriate model between fixed effect and random effect using the Hausman test.

| Table 4.5: Correlated Random Effects - Hausman Test |
|-----------------------------------------------------|
| **Equation: Untitled**                             |
| **Test cross-section random effects**              |
| **Test Summary**                                   |
| **Chi-Sq. Statistic**                             |
| **Chi-Sq. d.f.**                                   |
| **Prob.**                                          |
| Cross-section random                               |
| 13.230464                                           |
| 8                                                   |
| 0.1042                                              |

In Table 4.5, the result of the Hausman test (X2=13.2304, p>0.05) suggests that random effect is more appropriate since the p-value is greater than 0.05. For a null hypothesis, when the p-value of the Hausman test is greater than 0.05, the model tends to follow random effect assumption. In this instance, random effects (RE) is preferred under the null hypothesis. Therefore, in estimating the parsimonious model of the variables, cross sectional random effect, as shown in Table 4.6., will be the appropriate assumption.

| Table 4.6: The effect of board attributes on timeliness of financial reports upon adoption of IFRS |
|-------------------------------------------------------|
| **Eq Name:**                                          |
| **OLS**                                               |
| **FIXED**                                             |
| **RANDOM**                                            |
| **Method:**                                           |
| LS                                                    |
| LS                                                    |
| LS                                                    |
| **Dep. Var:**                                         |
| ARL                                                   |
| ARL                                                   |
| ARL                                                   |
| **BGENDIV_**                                          |
| 0.3684                                                |
| 0.3663                                                |
| 0.3684                                                |

Source: author’s computation (2021).
Table 4.6 shows the result of the analysis. Timeliness serves as the dependent variable proxy by ARL, while the explanatory variables comprise of BSize (Board Size), BMeet (Board Meetings), BIndep (Board Independence), and BGENDIV (Board Gender Diversity) and the interactive term of IFRS and the variables.

IFRS is a dummy variable that distinguishes the two periods, pre and post-IFRS- adoption. If the coefficient of IFRS is statistically significant, the post-IFRS adoption seems to be more effective than the pre-IFRS adoption and vice-versa. IFRS with a coefficient of 160.02 (t=4.5138, p<0.05) implied that IFRS adoption enhances the effect of board attributes on the ARL of the firm in the post-IFRS-adoption period. The interactive term of board gender diversity (BGENDIV) and IFRS show that board gender diversity contributes significantly to the ARL of the firm in the post-IFRS adoption era with the coefficient of 1.4589(t=2.9806, p<0.05). Also, the interactive term of board independence and IFRS shows that after the adoption of IFRS, board independence enhanced ARL of the firm by 0.9004 (t=2.9975, p<0.05). Though increased ARL in the pre-IFRS period, the variable of board independence has more effect in the post-IFRS period by increasing ARL from 67% in the pre-IFRS to 90% in the post-IFRS. This result suggests that board independence further delayed the timely arrival of financial reports to users in the post-IFRS adoption period.

|                | [0.3300] | [1.1261] | [1.0117] |
|----------------|---------|---------|---------|
| BINDEP         | -0.6704 | -0.5833 | 0.6704  |
|                | [-1.2697] | [-3.9521]** | [3.9448]** |
| BMEET          | -4.5615 | -3.6426 | 4.5615  |
|                | [-0.7858] | [-1.1091] | [-1.6779] |
| BSIZE          | -7.6524 | -7.9157 | 7.6524  |
|                | [-2.4613]* | [-3.3245]** | [3.2726]** |
| IFRS           | -160.0239 | -136.2413 | 160.0239 |
|                | [-3.0550]** | [-4.5397]** | [4.5138]** |
| BGENDIV_IFRS   | -1.4589 | -1.3035 | 1.4589  |
|                | [-1.2526] | [-2.9501]** | [2.9806]** |
| BINDEP_IFRS    | 0.9004  | 1.1967  | 0.9004  |
|                | [1.5436] | [3.5167]** | [2.9975]** |
| BMEET_IFRS     | 7.2862  | 5.4804  | 7.2862  |
|                | [0.8724] | [1.1713] | [1.6399] |
| BSIZE_IFRS     | 5.9368  | 5.7126  | 5.9368  |
|                | [1.6775] | [1.5908] | [1.6584] |
| C              | 277.9342 | 252.4828 | 277.9342 |
|                | [4.8405]** | [11.4460]** | [10.8735]** |

**Observations:** 633  
**R-squared:** 0.0611  
**F-statistic:** 4.5017  
**Prob(F-stat):** 0.0000

Source: Author’s computation (2021).
4.4. Discussion of Findings
The descriptive analysis results show that audit report lag reduced from 148 days in the pre-IFRS era to 133 days in the post-IFRS era. Bakare, Taofeeq, and Jimoh (2018) reported that the average number of days firms take to publish their annual financial reports was 150 compared to 133 reported by this study. These results suggest a reduced ARL in the post-IFRS period. This study also reported that firms take a minimum of 33 and 28 days in the pre-and post-IFRS periods, respectively, suggesting an improved ARL. However, the maximum number of days firms require to publish their annual reports moved from 473 days in the pre-IFRS adoption period to 934 days in the post-IFRS adoption period, perhaps owing to the compliance demands of IFRS and corporate governance.

The average ARL of Nigerian listed firms of 133 days for post-IFRS-period, though an improvement on the pre-IFRS period, but a far cry from 86 days’ average ARL of Ghanian listed firms as reported in the work of Agyei-Mensah (2018). Agyei-Mensah (2018) also reported a minimum ARL and maximum ARL of 55 days and 173 days respectively in the post-IFRS period among Ghanaian firms. Nigerian listed firms are, however, statutorily required to file their annual financial reports and accounts and annual corporate governance returns not later than 90 and 30 days, respectively, from year-end. Non-compliance to these statutorily approved dates attracts a penalty of not less than N1,000,000 and a further penalty of N25,000 per day for the period the violation continues (Securities and Exchange Commission Regulatory filing of Returns, 2020). The level of compliance with these requirements as reported by this study still leaves much to desire and may have been complicated by IFRS adoption.

IFRS is a dummy variable that differentiates the two periods, pre-and post-IFRS. If the coefficient of IFRS is statistically significant, the post-IFRS adoption seems to be more effective than the pre-IFRS adoption and vice versa. IFRS with a coefficient of 160.02 (t=4.5138, p<0.05) implied that adoption of IFRS enhanced the effects of board attributes on the ARL of the firm. The result of the regression showed that board attributes, with specific reference to board independence and board gender diversity, increased ARL in the post-IFRS adoption period. This result is consistent with the work of Mohammed and Ahmad (2016), who observed that board size, board meeting, and board gender diversity have a statistically positive relationship with ARL among Nigerian listed money banks. However, the result is in sharp contrast with the work of Agyei-Mensah (2018), who observed a negative relationship between board size, board independence, and board gender diversity and ARL among Ghanaian listed firms. Also, Al Daoud, Ku Ismail, and Lode (2015) also suggested a reduced ARL with the variables of board size, board independence, and board meeting among Jordanian firms listed on the Amman Stock Exchange; while Bakare, Taofiq, and Jimoh (2018) opined that board size and board meeting increased and reduced ARL respectively, among Nigerian listed insurance firms. These results are suggestive of a divergent position.

5. SUMMARY, CONCLUSION, AND RECOMMENDATIONS.
5.1. Summary of Findings
IFRS is a dummy variable that distinguishes the two periods of the post and pre-adoption of IFRS. If the coefficient of IFRS is statistically significant, the post-adoption of IFRS seems to be more effective than the pre-adoption and vice versa. Also, if the interactive term is statistically
significant, it implies that IFRS well moderated the variable. This study found that board attributes increased ARL upon IFRS adoption. Board independence, representing a higher number of non-executive directors on the board, causes a delay in the time taken to publish the firm's annual reports. This delay, perhaps, maybe due to the independent directors requesting more details before specific necessary actions are taken by the board, thus creating a hiccup. The delay may also be due to the non-involvement of the independent directors in the business's day-to-day running, which may limit their experience and hence throw up more questions for clarifications by management and even the auditor.

The interactive term of Board gender diversity and IFRS adoption also suggested a delay in ARL. Many reasons could be responsible for this. First, a female gender on the board, with full disclosure opportunity availed by IFRS adoption, may likely look at matters from the gender perspective, in addition to the general perspective. Also, she may be concerned about how some of the firm's policies mainly affected the female gender and thus contributed to the robustness and efficiency of the board. This, obviously, may translate to more time for the board to function effectively.

5.2. Conclusion and Recommendation
This study found that board attributes significantly affect the timeliness of financial reports upon IFRS adoption and found that board attributes, with specific attention to board independence and board gender diversity, increased audit report lag and extended the timeliness of financial reports after the adoption of IFRS.

The study recommends that the Nigerian regulatory bodies, that is, the Financial Reporting Council of Nigeria (FRCN), the Nigerian Stock Exchange (NSE), and the Securities and Exchange Commission (SEC), should intensify efforts to ensure more timeliness of financial reports issued by listed firms. The average audit report lag of listed companies in Nigeria after adopting IFRS is 133 days, a far cry from the stipulated 90 days in which companies are expected to turn out their audited financial reports to the public. It is also a far cry from what is obtained in Ghana, which reported an average ARL of 86 days in the post-IFRS period (Agyei-Mensah, 2018). A holistic review of the board attributes could assist in this regard.

The study recommends that future studies be extended to other countries that have adopted IFRS to the impact of IFRS adoption on the timeliness of their financial reports vis-à-vis the compliance demand for corporate governance. The study further gave a reliable insight by resolving the differences between the board performance in pre- and post-IFRS adoption in Nigeria. This clarification aims to resolve the differences in the extant literature on the board's performance within the two periods, i.e., pre- and post-IFRS periods, among others.

REFERENCES
Abdullah, S. (2007). Board composition, audit committee, and timeliness of corporate financial reports in Malaysia. Corporate Ownership and Control, 4(2), 33–45.
Agyei-Mensah, B.K. (2018). Impact of corporate governance attributes and financial reporting lag on corporate financial performance. African Journal of Economic and Management Studies. https://doi.org/10.1108/AJEMS-08-2017-0205
AICPA IFRS News Archive. Available on https://www.IFRS.com/IFRS FAQ. Retrieved online on 4th April 2020, 3.17 pm.
Akande, J. O., Moses, O., & Tewari, D. (2020). Board experience, corporate risk-taking and going concern: Evidence from South Africa. The IUP Journal of Accounting Research & Audit Practices, 1991), 19–52.

Alade, M.E. (2018). Effect of International Financial Reporting Standards on value relevance of accounting information of Nigerian listed firms (Unpublished Doctoral Thesis). Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya.

Al Daoud, K.A., Ku Ismail, K.N.I., & Lode, N.A. (2015). The impact of internal corporate governance on the timeliness of financial reports of Jordanian Firms: Evidence from using audit and management report lags. Mediterranean Journal of Social Sciences, 6(1), 430–442.

Azubike, J., & Aggreh, M. (2014). Corporate governance and audit delay in Nigerian quoted companies. European Journal of Accounting Auditing and Finance Research, 2(10), 22–33.

Bakare, O.U., Taofiq, A., & Jimoh, J.A. (2018). Effect of board characteristics on timeliness of financial reporting of listed insurance firms in Nigeria. Online Journal of Arts, Management & Social Sciences, 3(1), 126–136.

Beasley, M. S. (1996). An empirical analysis of the relationship between board of director's composition and financial statement fraud. Accounting Review, 71, 443–465.

Beekes, W., Pope, P., & Young, S. (2004). The link between earnings timeliness, earnings conservatism and board composition: evidence from the UK. Corporate Governance: An International Review, 12(1), 47–59.

Brennan, N. (2006). Board of directors and firm performance: Is there an expectations gap? Corporate Governance: An International Review, 14(6), 577–593.

Carslaw, C.A.P.N., & Kaplan, S.E. (1991). An examination of audit delay: further evidence from New Zealand. Accounting and Business Research, Winter, 21–32.

Dwekat, A., Seguí-Mas, E., Tormo-Carbó, G., & Carmona, P. (2020). Corporate governance configuration and corporate social responsibility disclosure: Qualitative comparative analysis of audit committee and board characteristics. Corporate Social Responsibility Environment Management, 1–14. http://dx.doi.org/10.1002/csr.2009

Dzat, A., & El-Masry, A. (2008). The impact of corporate governance on the timeliness of corporate internet reporting by Egyptian listed companies. Managerial Finance, 34(12), 848–867. http://dx.doi.org/10.1108/03074350810915815

Fama, E., & Jensen, M.C. (1983). Separation of ownership and control, Journal of Law and Economics, 26(2), 301–326.

Fodio, M.I., Obas, V.C., Olukoju, A.B., & Zik-rullah, A.A. (2015). IFRS adoption, firm traits and audit timeliness: evidence from Nigeria. ActaUniversitatisDanubius, 11(3), 106–119.

FRCN Code of Corporate Governance, 2018. Available at https://www.financialreportingcouncil.gov.org.

Hashim, U. J., & Rahman, R. A. (2010). Board independence, board diligence, board expertise and impact on audit report lag in Malaysian market. Available at http://ssrn.com/abstract=1717479

Jensen, M. C., & Meckling, W. H. (1976). A theory of the firm: managerial behaviour, agency costs and ownership structure. Journal of Financial Economics, 3(4), 305–360.

Kakanda, M. M. (2017). Corporate governance, risk management disclosure and firm performance: a theoretical and empirical review perspective. Asian Economic and Financial Review, 7(9), 836–845.
Kakanda, M. M., Salim, B., & Chandren, S. (2016). Review of the relationship between board attributes and firm performance. Asian Journal of Finance and Accounting, 8(1), 168–181.
Kao, H., & Wei, T. (2014). The effect of IFRS, information asymmetry and corporate governance on the quality of accounting information. Asian Economic and Financial Review, 4(2), 226–256.
Kenechukwu, O.J., & Okechukwu, O. C. (2019). Influence of accounting standard on financial reporting in the Nigerian banking sector. Advance Journal of Management, Accounting and Finance, 4(10), 12–19.
McGee, R.W. (2006). Corporate governance in Russia: a case study of timeliness of financial reporting in the telecom industry. Value Creation in Multinational Enterprise, 365–390.
McGee, R. W. & Yuan, X. Y. (2008). Corporate governance and the timeliness of financial reporting: An empirical study of the People’s Republic of China. Florida International University Working paper. Available on http://ssrn.com/abstract=1131338
Modugu, P.K., Eragbhe, E., & Ikhatua, O. J. (2012). Determinants of audit delay in Nigerian companies: empirical evidence. Research Journal of Finance and Accounting, 3(6), 46–55.
Mohammed, I. A., & Ahmad, A. C. (2016). Effects of corporate governance characteristics on audit report lags. International Journal of Economics and Financial Issues, 6(7), 159–164.
Odo, O. J. (2018). Adoption of IFRS in Nigeria: challenges and the way forward. International Journal of Academic Research in Business and Social Sciences, 8(8), 426–440.
Oladipupo, A.O., & Izedomi, F.I.O. (2013b). Global demand for timely financial reporting: how prepared are the Nigerian companies? Research Journal of Finance and Accounting, 4(8), 63–75.
Ologun, O. V. (2021). Risk management attributes, International Financial Reporting Standard (IFRS) adoption and timeliness of financial reports among Nigerian listed firms. International Journal of Economics, Business and Management Research, 5(11), 231-247.
Ologun, O.V., Isenmila, P.A., Okuns, O.O., & Alade, M.E. (2020). IFRS adoption, corporate governance and timeliness of financial reports among Nigerian listed firms. Accounting and Taxation Review, 4(2), 33-56.
Oshodin, E., & Ikhatua, J.O. (2018). IFRS adoption, firms' characteristics and timeliness of financial information. Accounting and Taxation Review, 2(1), 92–106.
SEC Code of Corporate Governance 2011 Available at https://www.nse.com.ng. Retrieved online on 19th April, 2020
Securities and Exchange Commission, Regulatory filing of Returns, available at http://sec.gov.ng/wp-content/upload/2017/11. Retrieved online on 19th April, 2020.
Singh, H., & Harianto, F. (1989). Management-Board relations, take over risk and the adoption of golden parachutes. Academy of Management Journal, 32(1), 7–24.
The Nigerian Stock Exchange (2019), Daily official listing as at December, 2019. Retrieved online on 4th April 2020 on http://www.nse.com.ng/issuers/listed-securities/listed-companies?filter=premium+board.