

Research article

AN ASSESSMENT OF COMPLIANCE WITH DISCLOSURE REQUIREMENTS OF IAS 16 BY LISTED AGRICULTURAL FIRMS IN NIGERIA

Siyanbola, Akeem Adetunji

(Corresponding Author)

Department of Accounting, Faculty of Humanities, Management and Social Sciences,
Federal University Wukari, Taraba State, Nigeria
+2348053400587
E-mail: Kmsiyanbola5@gmail.com

Musa, Usman Mamuda

Department of Accounting,
Faculty of Humanities, Management and Social Sciences,
Federal University Wukari, Taraba State, Nigeria
+2347068836388
E-mail: ummi197405@gmail.com

Wula, Tyavbee James

Department of Accounting,
Faculty of Humanities, Management and Social Sciences,
Federal University Wukari, Taraba State, Nigeria
+2347062663959
E-mail: jameswula12@yahoo.com



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

ABSTRACT

This study examines the extent of disclosure compliance with IAS 16 by companies listed on the Nigerian Stock Exchange (NSE) for the years (2002-2011). The data for the study were obtained from the published financial statements of the sampled listed agricultural firms on the Nigerian Stock Exchange for the period under review from which compliance index was developed. The tools of analysis used were the compliance index and the 2 way ANOVA purposely to test the hypotheses proposed. The study observed that at present Nigerian companies are far from achieving the disclosure requirements of IFRS going by poor level of compliance with the International Accounting Standard (IAS) 16. This was not unconnected with the fact that the statements of accounting standard operational in Nigeria in the period under review have little disclosure requirements relative to the International Accounting Standards which conformsto the global best of practice. Based on the findings the study recommends among others that the newly established Financial Reporting Council of Nigeria should learn from the mistakes of its predecessor and ensure effective monitoring of firms in order to enforce strict compliance with the disclosure requirements of IFRS. **Copyright © IJEBF, all rights reserved.**

Keywords: compliance index; plant and machinery; derecognition; accounting standard

Introduction

Balance sheet is an important component of financial statements. It is one of those items that must be presented in the financial information of any reporting entity in compliance with the provisions of statutory and regulatory framework. However, as good and purposeful a balance sheet is, it is inconsequential if items of property, plant and equipment is not included. To underscore its importance, the Financial Reporting Council of Nigeria (FRCN) as well as other standard setting bodies around the world issued at one time or the other various accounting standards on property, plant and equipment to strengthen the reporting practice on the use of property, plant and equipment and simultaneously provide a uniform reporting practice on fixed assets.

Corporate image can be measured and enhanced by the quality and quantity as well as timeliness of information it discloses in its financial report. Accurate, relevant and reliable disclosures are seen as means of enhancing corporate image, reducing cost of capital, and magnifying market value of the reporting entity's shares. High-quality accounting information facilitates the acquisition of short and long term fund and also enables management to properly account for the resources put in their care. Thus, it acts as a significant spur to the growth and development of money and capital markets, which are fundamental to the smooth running of any economy. Meek et al (1995) submit that effective functioning of capital markets, however, significantly depends on the effective flow of information between the company and its stakeholders.

In the Nigerian context, comprehensive studies of Nigerian listed companies have been conducted by World Bank Group. It is observed that the Nigerian financial reporting practices are deficient (World Bank, 2004). Aside the studies carried by the World Bank, disclosure practices by Nigerian companies have been empirically investigated by Kantudu and Tanko (2008), Kantudu (2008), Isa (2004). Their observation is quite similar in that they all found the Nigerian corporate reporting practices to be weak in the sense that generally Nigerian companies do not comply fully with the disclosure requirements of Accounting Standards.

Contrary to this view are the studies conducted by Barde, (2009), Yahaya et al (2012) and Nyor 2010. All of them in their studies concluded that Nigerian companies are complying substantially with the provisions of Nigerian Accounting Standards issued by the Nigerian Accounting Standards Board (NASB) now the Financial Reporting Council of Nigeria (FRCN).

In view of conclusions reached by the research work enumerated above and lack of prior studies on compliance with the provisions of International Accounting Standard 16, the researcher is compelled to conduct this study which has primary objective of ascertaining Nigerian companies compliance with the provisions of statement of accounting standards issued with particular emphasis on the Nigerian listed agricultural firms. Consequently, the paper is to determine whether the listed firms in the agriculture sector of Nigerian Stock Exchange (NSE) are complying with IAS 16. This paper is divided into five distinct sections. Section one above deals with introduction, section two deals with literature review, section three covers the methodology. Section four dwells on results and discussion and ultimately section five is about conclusions and recommendations.

Literature Review

The following concepts are reviewed for better understanding of the research work:

Concept of Property, Plant and Equipment

Assets generally are properties belonging to individuals and organizations, held solely for the purpose of income generation. In term of duration of benefit accruable to asset holder, assets can be divided into current and fixed assets. Fixed asset is synonymous with property, plant and equipment or tangible asset. These are primarily items with monetary value, acquired by reporting entity usable for an extended period of time usually more than one accounting period. Property, plant and equipment according to IASB (2005) are assets whose future economic benefit is probable to flow in to the entity and the cost must be ascertainable in a reliable manner. According to IASB (2010) property, plant and equipment are tangible assets that are held for use in the production of good or other services for rental to others or for administrative purposes and are expected to be useful for the entity for more than one accounting period. A comprehensive definition is the one by Friedrich, Friedrich & Spector (2011) who defines property, plant and equipment as items of value which the organization has bought and will use for an extended period of time. It normally include items such as land and buildings, motor vehicles, furniture, office equipment, computers, fixtures and fittings, and plant and machinery.

From the definition above it can be deduced that property, plant and equipment are concrete assets with monetary value, available for use by the entity, acquired for the purpose of the business, do not form part of the organisation's inventory, have more than one year useful life and cannot be easily liquidated in the course of carrying out the normal operations of the entity. It can equally be inferred that it can be acquired by all form of organization profit making, non- profit making, large enterprise, and public as well as private companies.

Accounting Standard

Accounting Standard is defined by Izedonmi (2001) as cited in Yahaya (2011) as an information system through which financial and monetized information is generated for economic, social and political decisions. They are documents developed by standard setting bodies locally and internationally to ensure a high degree of standardization, uniformity and comparability in published financial statements. They have proved to be effective in providing necessary guides on how accounting information should be prepared and presented in order to enhance the value of its contents and facilitate its thorough understanding. Accounting standards are guidelines which define how companies have to display transactions and events in their financial statements; they are not purely technical rules but the outcome of highly political processes.

The implications of this is that there are different actors who come into contacts with or are influenced by accounting standards – e.g. preparers, managers, accounting firms, auditors, financial analysts, political office holders, legal practitioners and employees. All these actors naturally have divergent views, perception, expectations, options and interests about what an accurate and useful accounting standard is and therefore might have different incentives in the production and diffusion of accounting standards. Thus, the quality of financial information according to Kothari (2000) is a function of both the quality of accounting standards and the regulatory enforcement or corporate application of the standards. Absence of adequate enforcement, therefore, renders the best accounting standards useless, ineffective and inconsequential. (Financial Reporting Council Act, 2011)

Until 2003, when the Nigerian Accounting Standards Board Act was enacted - which now makes it mandatory for accountants preparing corporate reports to adhere strictly to the provisions of all issued accounting standards, the NASB now FRCN is now the only body recognized by law for the development, issuance and review of accounting standards for preparers and users of financial statements. However, with the successful promulgation of Financial Reporting Council of Nigeria Act, 2011, the new Council has been strengthened with provisions such as powers to do all things necessary for or in connection with the performance of its functions, the power to enforce and approve enforcement of compliance with accounting, auditing, corporate governance and financial reporting standards in Nigeria.

It is imperative therefore that in applying accounting standards it is important to be guided by the spirit and reasoning behind their issuance. However, if in exceptional circumstances compliance with the requirements of an accounting standard is inconsistent with the requirement to give a true and fair view, the requirements of the accounting standard departure from the standard could be permissible to the extent necessary to give a true and fair view. In such cases informed and unbiased judgment should be used to devise an appropriate alternative treatment, which should be consistent with the economic and commercial characteristics of the circumstances concerned. Particulars of any material departure from an accounting standard, the reasons for it and its financial effects should be disclosed in the financial statements.

According to Dandago (2001) as cited in Barde (2009) accounting standard setting process by the Nigerian Accounting Standards Board involves the following procedures: (a) choice of topic for standardization; (b) setting up of technical committee of experts; (c) preparation of working paper or 'point outline' paper by the secretariat and submission to the technical committee after council's approval; (d) Preparation, publication and circulation of exposure draft based on the technical committee's recommendation; (e) Collation of response to the exposure draft and conduct of public hearing if need arises; and (f) Issuance of accounting standard.

IAS 16 (Property, Plant and Equipment)

This is the standard that outlines the treatment of accounting for property, plant and equipment in accordance with the historical cost concept and simultaneously treats issues relating to the revaluation of specific items of property, plant and equipment. It was released in March 1982 by the defunct International Accounting Standard Committee (IASC) with 83 distinct paragraphs and eight sections. It was issued in 1982, revised as part of the comparability of Financial Statements' project in December 1993, revised by IAS 36 (Impairment of Assets) in 1998, revised in 1998 and reissued in 2003 (Salendrez, 2006). Its primary objective as contained in the standard is to prescribe the accounting treatment for property, plant, and equipment thus users of financial statements may know information about the investment that the institution has in its property and equipment as well as the changes that have occurred in that investment. It equally addresses principal issues such as defining the scope of the standard, determination of appropriate time to recognise item as assets, initial measurement, the determination of their carrying amounts, derecognition of items of property, plant and equipment and the depreciation charges and impairment losses to be recognised in relation to them (Tracy, 2013).

Beside the specific objective just like all accounting standards it has a broader objective which is to remove variations or disparities in the treatment of several accounting items and guaranteeing standardization in presentation. Unlike the Nigerian accounting standards issued by the FRCN predecessor NASB, IAS 16 was subjected to thorough revisions in 1993 and 1998 before it was reissued by the IASB in 2003. The essence of the revisions is to ensure that the standard is up to date and reflects all socio-cultural and economic development as they manifest with the passing of days. The scope of the standard is aptly captured in paragraph 2 of the standard which states that it addresses all issues relating to accounting for property, plant and equipment, apart from cases when another standard requires or permits a different accounting treatment. It does not apply to livestock or other assets that are accounted for in accordance with IAS 41 (Agriculture) or to property, plant and equipment classified as held for sale in accordance with IFRS 5 (Non-current Assets Held for Sale and Discontinued Operations). However, with respect to property being constructed or developed for future use as investment property, IAS 16 limited application ceases at the point where construction is complete and the asset satisfies the definition of an investment property which is regulated by IAS 40 (Investment Property).

The industry (Nigerian agricultural sector) has a lot of investment in property, plant and equipment. For instance Livestock Feeds Plc, Okomo Oil Palm Company, PrescoPlc and Ellah lakes who are the major players in the industry have total investment in property, Plant and equipment worth N0.4bn, N3.3bn, N7.5bn and N1bn respectively as at 31st December, 2011. The best way to derive maximum benefit from this investment is to ensure that they are guided by the IAS 16 and all other accounting standards relevant for the preparation of accounting reports. It is then that they can be in investors' good book for a rational investor is interested in entities where the investment is safe and this is guaranteed if and only if the financial statements conform to regulations.

Consequently it can be inferred that accounting standards are issued to harmonize divergent accounting treatment, bases, methods and policies followed by the preparer in the presentation of financial statement principally to promote inter firm comparison. Methods adopted to compute these amounts as well the organizations policies must be firmly disclosed.

Several studies have been conducted to determine compliance with disclosure requirements of accounting standards within and outside Nigeria. Some concludes that firms comply with the standards while others conclude otherwise. Though it was evidently clear that none of the studies produce a 100% compliance index and this is a pointer to the fact that compliance with Accounting Standards has not been total. Prominent among the previous studies are:

Wallace et al.(1994),who examine the impact of firm characteristics on disclosure in annual reports and accounts of Spanish firms purposely to know whether the company attributes relevant for disclosure practices in studies elsewhere do affect Spanish firms or not. The study investigates 50 Spanish firms (20 unlisted and 30 listed) for the year 1991 with the aid of a self-constructed disclosure index of mandatory items representing disclosure quality for each sampled firm. The result of regression analysis reveals that the index of disclosure varies significantly positive with firm size and that liquidity is found to be significantly negative, which implies that the Spanish firms with low liquidity disclose less information. The study' main weakness result from the fact that it uses only one year as the period of study and in studies of this type 1 year is too negligible to permit informed decision. It is equally limited because it considers only 16 disclosure items, a study with higher number of disclosure items might result in different outcome.

Abdelrahim, Hewaidy&Mostafa (1997) investigated the extent to which 22 listed companies in the Kuwaiti Stock Exchange complied with IASs for the financial year 1995. Three standards relating to fixed assets were examined. They are IAS 16, IAS 20 and IAS 23 andforty-four items were developed to investigate whether the companies complied with these standards. The study finds that the extent of compliance with the disclosure requirements is not uniform among the items. For some items there is complete compliance, whereas for the other items the index value is less than 20%, which signifies that none of the companies complied fully with all requirements of the three standards. One of the standards that experienced least compliance in the study is IAS 16 with disclosure index of 35% and this is a pointer to the fact that more studies on the standard are desirable.

Tower, Hancock &Taplin (1999) examined the extent of compliance with IASs in six Asia-Pacific countries comprised of a developed country - Australia and developing countries - Hong Kong, Malaysia, Philippines, Singapore and Thailand and evaluated the influence of leverage, company size, profitability and industry type. It used a sample of 10 listed companies' 1997 annual reports in each of the six countries, and a self-constructed compliance index which measures the level of compliance with IASs. They find that the overall level of compliance is 91% and found out that all company characteristics were not significant determinant of compliance. Street & Bryant (2000) go further to examine the overall level of disclosure and the level of compliance of companies preparing IAS based financial statements. The study used financial reports of 82 sampled companies for 1998. They utilise the methodology adopted by Cooke (1989, 1992) and develop hypothesis based on prior literature. Their findings reveal the overall level of compliance for the entire sample is less than or equal to 75% of several IASs. For IAS 17, 71% is observed, for IAS 19, Employee benefits, 69% is observed, for IAS 14, Segment reporting 60% is observed while 50% is observed for IAS 23 Borrowing Costs and IAS 29 Financial Reporting for Hyperinflationary economies. It is discovered that the overall level of disclosure is greater for companies with U.S. listings. Additionally, higher level of compliance is associated with an audit opinion that states the financial statements are in accordance with IASs and the accounting policies footnote that specifically states that the financial statements are prepared in accordance with IASs.

Glaum& Street (2003) examines compliance with both International Accounting Standards (IAS) and United States Generally Accepted Accounting Principles (US GAAP) for companies listed on Germany's New Market by a sample of 100 firms that apply IAS and 100 that apply US GAAP for the financial year 2000. The study also relate the level of mandatory disclosure compliance to a number of company characteristics; namely company size, type of auditor, listing status, industry, profitability, internationality, ownership diffusion and company age. The study finds compliance levels range from 100% to 41.6%, with an average of 83.7%. The average compliance level is significantly lower for companies that apply IAS as compared to companies applying US GAAP. They find that the average mandatory compliance level for companies that applied IASs is 81%.

Karim & Ahmed (2005) examine empirically the level of disclosure of financial information upon adoption of International Accounting Standards (IASs) in Bangladesh and the association between a number of corporate attributes and levels of disclosure in corporate annual reports in Bangladesh. An unweighted disclosure index comprising 411 items of which 13 relate to IAS 16 was prepared and applied to 188 corporate annual reports for years ending between January and December 2003. The study is silent on the population of study hence relationship between the population and sample cannot be independently verified. The distribution of the index items into different parts of annual report is highly subjective because it does not align the items with applicable IAS.

Al-Shammary, Brown & Tarca (2008) investigate the level of compliance with IASs in the GCC member states-Bahrain, Oman, Kuwait, Qatar, Saudi Arabia and the United Arab Emirates over the period from 1996 to 2002. The study investigated the level of compliance with standards applicable in the GCC based on a sample of 137 companies (436 company-years), reported that the level of mandatory compliance (measurement and disclosure) with the 14 IASs, averaged over all companies and all years was 75%. The mean level of disclosure compliance and that the level of compliance averaged over all companies' increases over time, from 68% in 1996 to 82% in 2002, this point to the fact that compliance with IASs has been improving in the region though no company in any year within the study period fully complied with all relevant IASs. The study's main weakness is that it reports downwardly biased measures of improvement in compliance due to the fact that it did not take changes made to some IASs during the period into consideration. This is important because the IASC Comparability Project had made some standards more prescriptive.

Hodgdon, Tondkar, Adhikari & Harless (2009) investigated the extent of disclosure compliance by companies from developed countries with non US listings that claim to have complied with IASs in 1999 and 2000. They also sought to determine the impact of a number of company characteristics on the extent of compliance. The study reveals that the level of compliance from a sample of 101 companies selected from 13 countries (Austria, China, Czech Republic, Denmark, Finland, Germany, Hong Kong, Hungary, Italy, Netherlands, South Africa, Sweden and Switzerland) is 58% and 64% in 1999 and 2000 respectively.

Al Mutawaa & Hewaidy (2010) investigates the extent of disclosure of Kuwaiti listed companies with 12 IAS/IFRSs namely IAS 1: Presentation of financial statements; IAS 10: Events after balance sheet date; IAS 14: Segment reporting; IAS 16: Property, Plant and Equipment; IAS 18: Revenues; IAS 21: Foreign operations; IAS 23: Borrowing costs; IAS 24: Related party disclosure; IAS 27: Consolidated financial statements and accounting for subsidiaries; IAS 28: Accounting for investments in associates; IAS 32 : Financial instruments; and IAS 34: Earning per share disclosure requirements using mandatory item. The study uses a sample of 48 companies listed on the Kuwaiti Stock Exchange at the end of 2006 representing the investment, real estate service and manufacturing sectors of Kuwaiti economy. Using unweighted disclosure index the result of the analysis reveals that Kuwaiti listed companies do not fully comply with the disclosure requirements of IAS/IFRSs, all sampled companies in all industrial sectors were found to have at least 50% compliance level while the highest level of compliance is 95% for standard related to revenues (IAS18). It is noteworthy that compliance with IAS 10, 18, 27, 28, 34 was more than 80%, this is an indication of the fact compliance level varies across standards. While compliance with standards such as IAS 1, 16, 24, 32 ranges between 60% and 70%, disclosure for (IAS 14) was reported to be low at 54%.

Al-Shammary (2011) evaluated the extent of compliance with disclosure requirements of international financial reporting standards (IFRSs) by 168 companies listed on the Kuwaiti Stock Exchange in 2008 using a self-disclosure compliance index and multivariate regression analysis to test the relationship between the level of disclosure compliance with IFRSs and nine company characteristics. The results showed that the level of compliance by

sampled firms is 82%. The findings suffer limitations because the model was able to explain only 40% of the compliance variation coupled with the fact that it is based on assumption that compliance items have the same weight and that companies that are disclosing the most information would have selected the most important information.

Galani, Alexandridis & Stavropoulos (2011) assess the level of disclosure in the annual reports of non-financial Greek firms and simultaneously empirically investigate the hypothesized impact of several firm characteristics on the extent of mandatory disclosure. A disclosure checklist consisting of 100 mandatory items was developed to assess the level of disclosure in the 2009 annual reports of 43 Greek companies representing 50% of firms listed on the Athens stock exchange. The observed level of disclosure which ranges between 70% and 97% reveals that Greek companies on general are responding adequately to the mandatory disclosure requirements of the regulatory bodies. The outcome of this study though limited in application because it is a single year single country study. Equally noteworthy is the sample size which is just 50% of listed firms whereas a higher proportion of samples will like yield a different result.

Al-Jabri & Hussain (2012) assessed the level of disclosure in the annual reports of 94 manufacturing and service firms listed on Muscat Securities Market (MSM) in Oman. A disclosure checklist consisting of 66 mandatory items was developed to assess the level of disclosure in the 2003 annual reports of the sampled firms to investigate the level of compliance with eight standards namely IAS 1 – presentation of financial statements; IAS 2 – Inventories; IAS 10 – events after the balance sheet date; IAS 16 – property, plant and equipment; IAS 21 – the effects of changes in foreign exchange rates; IAS 24 – related party disclosures; IAS 28 – accounting for investments in associates and IAS 33 – earnings per share were selected with 138 disclosure items to measure compliance with the standards. The study reveals that the mean level of compliance by all the sampled firms was 79% while the minimum compliance level observed was 41%. Disclosure with IAS 16 shows that it enjoys mean level of compliance of 83%, while item by item analysis reveals a maximum and minimum level of compliance of 100% and 23% respectively. Equally significant from the study is the existence of considerable variation between individual companies in terms of the level of compliance with international accounting standards. The study's finding may not be applicable totally to the current study because of the duration of the study and different legal and regulatory framework.

Umoren, (2009) empirically investigates the extent of compliance of the listed financial and non-financial Nigerian companies with the disclosure requirements of SASs, IAS/IFRS, determine the factors influencing the extent of information disclosure in the annual reports of listed companies in Nigeria. The study obtains primary data mainly from questionnaires administered on 1000 concerned respondents across the 6 geopolitical zones in Nigeria and secondary data extracted from annual reports of 90 companies which represent 48% of quoted companies with year-end between January 2006 and December 2006 listed on the Nigerian Stock Exchange (NSE). The study built a disclosure index using a researcher-developed checklist containing 165 information disclosure items (SAS 82 items; IFRS 73 items, voluntary 10 items). Company attributes examined are size, profitability, company listing age, leverage, auditor type, industry and multinationality. The study observes that 54 out of sampled 90 companies comply with the disclosure requirements of IAS 16. A very strong weakness in the study is that rather than using all disclosure items in IAS 16, it concentrated on requirements relating to paragraph 74 and excluded other paragraphs specifically 73 and 77.

Methodology

This work studies the level of compliance of quoted companies on the Nigerian stock exchange (NSE) under the Agricultural sector with the provisions of IAS 16 Property, Plant and Equipment. It employs secondary data which is basically sourced from the published financial statements of the firms listed in the sector. The population of study comprises of five listed companies as contained in the NSE fact book 2012/2013. They are Ellah Lakes PLC, FTN cocoa processing PLC, Okomo Oil Palm PLC, Livestock Feeds PLC and Presco PLC. Of the five listed above, three of them namely Okomo Oil Palm PLC, Livestock Feeds PLC and Presco PLC were selected as samples after due consideration of their performance in the period under review. The basic criteria for sample selection are that the sample firms must be active for the period of the study which is made up of ten consecutive years 2002-2011.

Qualitative grading using a compliance index and ANOVA Statistics were utilised in the data analysis. To determine compliance with the requirements of IAS qualitative grading using a compliance index similar to Barde (2009) was adopted. A total of 11 requirements were developed from the statement of accounting standard while 21 requirements were developed from the international accounting standard based on a critical review of relevant literatures.

The total compliance index was constructed by comparing requirements of the standard against the information disclosed in the financial reports of listed firms. For clarity in presentation and analysis, each of the requirements was assigned a number; r1 for example means requirement one and so on. Similar to prior studies such as Barde (2009) and Bashir (2012) on compliance, this study adopted a scoring system of scoring system of assigning 1 in the event a requirement is complied with and 0 otherwise. The criteria utilised for assessing the overall level of compliance with the requirements of SAS in financial reporting by construction firms are set out in Table 1.

Table 1: Criteria for grading compliance with requirements of SAS 3 and IAS 16 by listed agricultural firms in Nigeria.

| S/No | Percentage Score | Points | General Remarks |
|------|------------------|--------|-----------------------|
| 1. | 70-100% | 7-10 | Strongly Applied |
| 2. | 50 -69% | 5-6.9 | Semi Strongly Applied |
| 3. | 40 – 49% | 4-4.9 | Weakly Applied |
| 4. | 20-39% | 2-3.9 | Very Weakly Applied |
| 5. | 0-19% | 0-1.9 | Non Application |

Source: Adopted with modification from Barde (2009)

The criterion set out in table 1 above provides the decision rule to which the computed compliance index will be lead to acceptance or rejection of the hypothesis of the study. The computed compliance index to which the decision rule will be applied is the average level of compliance with the standard (IAS 16).

Hypotheses

H_{01} : Nigerian agricultural companies do not comply with the disclosure requirements of IAS 16; and

H_{02} : There is no significant difference in the level of compliance with IAS 16 disclosure requirements by listed agricultural firms in Nigeria.

The disclosure requirements of IAS 16 as stated in the relevant sections or paragraphs of the standards are clearly arranged in table 2 below. This is to facilitate ease of comparison with the financial statements, awarding scores appropriately and ultimately provide data for analysis using the chi-square method.

Table 2: Disclosure requirements of IAS 16

| Variable representing | Disclosure requirements |
|------------------------------|---|
| r1 | Disclosure of basis for measuring carrying amount of property, plant and equipment |
| r2 | Disclosure of depreciation method(s) used |
| r3 | Disclosure of useful lives or depreciation rates used |
| r4 | Disclosure of gross carrying amount and accumulated depreciation and impairment losses |
| r5 | Disclosure of additions in the reporting period |
| r6 | Disclosure of disposals made in the reporting period |
| r7 | Disclosure of acquisitions through business combinations |
| r8 | Disclosure of revaluation increases or decreases |
| r9 | Disclosure of impairment losses |
| r10 | Disclosure of reversals of impairment losses |
| r11 | Disclosure of depreciation charge for the period |
| r12 | Disclosure of net foreign exchange differences on translation |
| r13 | Disclosure of other movements in property, plant and equipment |
| r14 | Disclosure of restrictions on title |
| r15 | Disclosure of expenditures to construct property, plant, and equipment during the period |
| r16 | Disclosure of contractual commitments to acquire property, plant, and equipment |
| r17 | Disclosure of the effective date of revaluation of revalued items |
| r18 | Disclosure of whether an independent valuer was involved |
| r19 | Disclosure of the methods and significant assumptions used in estimating fair values |
| r20 | Disclosure of the extent to which fair values were determined directly by reference to observable prices in an active market or recent market transactions on arm's length terms or were estimated using other valuation techniques |
| r21 | Disclosure of the revaluation surplus, including changes during the period and any restrictions on the distribution of the balance to shareholders |

Source: Researcher's Field Work, 2013

Table 2 above highlights the disclosure requirements of IAS 16 as it relates to issues that must be addressed in the preparation of financial statements by reporting entities globally. The requirements are twenty one all together and for clarity sake each of the requirements is represented by variables r1, r2 ... r21.

Discussions of Findings

This section presents the data gathered for the purpose of this study below. The approach adopted for data presentation and analysis is in tandem with Nyor, (2010) in the study to determine level of compliance by Nigerian banks with the disclosure requirements of Nigerian accounting standards. The sample companies are three namely Livestock Plc, Okomo Oil Plc and Presco Plc.

Table 4 below is the tabular presentation level of compliance with the requirement of IAS 16 by the sampled agricultural firms. It is equally important to note that while only one firm disclosed information relating to revaluation of items of property, plant and equipment none of them comply with the disclosure provisions relating to contingent capital gains and deferred tax attributable to revaluation surplus. This could be attributable to ignorance

on the part of the management responsible for the preparation of the financial statements or weak enforcement on the part of the Board.

Table 3: Summary of scores of compliance with IAS 16 by Nigerian Agricultural Firms

| Year | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | Total |
|----------------|---------|--------|--------|---------|--------|---------|---------|---------|---------|---------|--------|
| r1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 30 |
| r2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 30 |
| r3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 30 |
| r4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 20 |
| r5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 30 |
| r6 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 30 |
| r7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| r8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| r9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| r10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| r11 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 29 |
| r12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| r13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| r14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| r15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| r16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| r17 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 |
| r18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| r19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| r20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| r21 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 |
| Total Observed | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 21 | 22 | 22 | 219 |
| Total Expected | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 630 |
| Percentage | 34.92 % | 34.92% | 34.92% | 34.92 % | 34.92% | 34.92 % | 34.92 % | 33.33 % | 34.92 % | 34.92 % | 34.76% |

Source: Researcher's Field Work, 2013

Table 4: Summary compliance index of Nigerian listed agricultural firms IAS 16

| Standard | | IAS 16 | | | |
|---------------------|------|----------------|----------------|------------------|---------------------|
| Company | Year | Total Observed | Total Expected | Compliance Index | Remark |
| Livestock Feeds Plc | 2002 | 9 | 21 | 42.86% | Weakly Applied |
| Livestock Feeds Plc | 2003 | 9 | 21 | 42.86% | Weakly Applied |
| Livestock Feeds Plc | 2004 | 9 | 21 | 42.86% | Weakly Applied |
| Livestock Feeds Plc | 2005 | 9 | 21 | 42.86% | Weakly Applied |
| Livestock Feeds Plc | 2006 | 9 | 21 | 42.86% | Weakly Applied |
| Livestock Feeds Plc | 2007 | 9 | 21 | 42.86% | Weakly Applied |
| Livestock Feeds Plc | 2008 | 9 | 21 | 42.86% | Weakly Applied |
| Livestock Feeds Plc | 2009 | 9 | 21 | 42.86% | Weakly Applied |
| Livestock Feeds Plc | 2010 | 9 | 21 | 42.86% | Weakly Applied |
| Livestock Feeds Plc | 2011 | 9 | 21 | 42.86% | Weakly Applied |
| Sub total | | 90 | 210 | 42.86% | Weakly Applied |
| Okomo Oil Palm Plc | 2002 | 7 | 21 | 33.33% | Very Weakly Applied |
| Okomo Oil Palm Plc | 2003 | 7 | 21 | 33.33% | Very Weakly Applied |
| Okomo Oil Palm Plc | 2004 | 7 | 21 | 33.33% | Very Weakly Applied |
| Okomo Oil Palm Plc | 2005 | 7 | 21 | 33.33% | Very Weakly Applied |
| Okomo Oil Palm Plc | 2006 | 7 | 21 | 33.33% | Very Weakly Applied |
| Okomo Oil Palm Plc | 2007 | 7 | 21 | 33.33% | Very Weakly Applied |
| Okomo Oil Palm Plc | 2008 | 7 | 21 | 33.33% | Very Weakly Applied |
| Okomo Oil Palm Plc | 2009 | 6 | 21 | 28.57% | Very Weakly Applied |
| Okomo Oil Palm Plc | 2010 | 7 | 21 | 33.33% | Very Weakly Applied |
| Okomo Oil Palm Plc | 2011 | 7 | 21 | 33.33% | Very Weakly Applied |
| Sub total | | 69 | 210 | 32.86% | Very Weakly Applied |
| PrescoPlc | 2002 | 6 | 21 | 28.57% | Very Weakly Applied |
| PrescoPlc | 2003 | 6 | 21 | 28.57% | Very Weakly Applied |
| PrescoPlc | 2004 | 6 | 21 | 28.57% | Very Weakly Applied |
| PrescoPlc | 2005 | 6 | 21 | 28.57% | Very Weakly Applied |
| PrescoPlc | 2006 | 6 | 21 | 28.57% | Very Weakly Applied |
| PrescoPlc | 2007 | 6 | 21 | 28.57% | Very Weakly Applied |
| PrescoPlc | 2008 | 6 | 21 | 28.57% | Very Weakly Applied |
| PrescoPlc | 2009 | 6 | 21 | 28.57% | Very Weakly Applied |
| PrescoPlc | 2010 | 6 | 21 | 28.57% | Very Weakly Applied |
| PrescoPlc | 2011 | 6 | 21 | 28.57% | Very Weakly Applied |
| Sub total | | 60 | 210 | 28.57% | Very Weakly Applied |
| Total | | 219 | 630 | 34.76% | Very Weakly Applied |

Source: Researchers fieldwork 2013

Table 3 above displays compliance of sampled Agricultural firms with the disclosure requirements of IAS 16 on requirement by requirement basis. While they exhibit full compliance with r1 (disclosure of basis for measuring carrying amount of property, plant and equipment), r2 (disclosure of depreciation method(s) used), r3 (disclosure of useful lives or depreciation rates used), r5 (disclosure of additions in the reporting period) and r6 (disclosure of disposals made in the reporting period) such was not the case with requirements r4 (disclosure of gross carrying amount and accumulated depreciation and impairment losses), r11 (disclosure of depreciation charge for the period), r17 (disclosure of the effective date of revaluation of revalued items) and r21 (disclosure of the revaluation surplus, including changes during the period and any restrictions on the distribution of the balance to shareholders) with the compliance index of 66.67%, 96.67%, 33.33% and 33.33% respectively. However, it is interesting to note that the firms do not comply with the other disclosure requirements namely r8 (disclosure of revaluation increases or decreases), r9 (disclosure of impairment losses), r10 (disclosure of reversals of impairment losses), r12 (disclosure of net foreign exchange differences on translation), r13 (disclosure of other movements in property, plant and equipment), r14 (disclosure of restrictions on title), r16 (disclosure of contractual commitments to acquire property, plant, and equipment), r18 (disclosure of whether an independent valuer was involved), r19 (disclosure of the methods and significant assumptions used in estimating fair values) and r20 (disclosure of the extent to which fair values were determined directly by reference to observable prices in an active market or recent market transactions on arm's length terms or were estimated using other valuation techniques). A critical look at those requirements reveals that they do not have equivalents in the Nigerian SAS.

This is not unconnected with the fact that while the IAS was reviewed a number of times since it was originally issued the last time in 2003 Nigerian SAS were never reviewed since it was issued in 1983. It is equally interesting to observe that compliance practice of the sampled firms do not vary with the reporting period, this was revealed through the total compliance index of 34.92 observed in nine out of ten years that the study covers. The only year with exception is 2009 and this could be attributable to complete omission of fixed asset schedule in the financial statement of one of the sampled firms.

With reference to hypothesis 1 of this study it can be deduced therefore that the Nigerian listed agricultural industry comply weakly with the provisions of IAS 16. The observed 34.76% compliance with the standard is not satisfactory. This outcome, the study suggests occur as a result of existence of more relevant provisions in the IAS than it exists in the Nigerian SAS. The implication is that we are accepting the null hypothesis which hypothesizes that Nigerian companies do not comply with the disclosure requirements of IAS 16. The level of compliance observed from the test of hypotheses were lower than that observed in other studies on compliance in developed countries as cited by (Al-Shammari, 2011), countries such as Australia (94%; Tower, Hancock and Taplin, 1999), Germany (81%; Glaum and Street, 2003) and Switzerland (Street and Gray, 2001; 74%). This suggests that incentives for compliance are less in Nigeria than in developed countries.

Table 5: ANOVA Result

Test for Equality of Means Between Series

Date: 01/09/14 Time: 07:48

Sample: 2002 2011

Included observations: 10

| Method | df | Value | Probability | F-critical |
|------------------------|---------|------------|-------------|-------------------|
| ANOVA F-test | (2, 27) | 711.0000 | 4.46E-24 | 3.543131 |
| Analysis of Variance | | | | |
| Source of Variation | df | Sum of Sq. | Mean Sq. | |
| Between | 2 | 0.107483 | 0.053741 | |
| Within | 27 | 0.002041 | 7.56E-05 | |
| Total | 29 | 0.109524 | 0.003777 | |
| Category Statistics | | | | |
| Variable | Count | Mean | Std. Dev. | Std. Err. of Mean |
| Livestock Feeds Plc | 10 | 0.428571 | 0.000000 | 0.000000 |
| Okitipupa Oil Palm Plc | 10 | 0.328571 | 0.015058 | 0.004762 |
| PrescoPlc | 10 | 0.285714 | 0.000000 | 0.000000 |
| All | 30 | 0.347619 | 0.061455 | 0.011220 |

Source: Researcher's Field Work, 2013

The result as shown in table 5 above reveals that there is strong evidence that Nigerian agricultural firms do not comply uniformly with the disclosure requirements of IAS 16 in the period under review. The standard ANOVA statistics produce 711.0000 and this is in excess of 40, with probability values less than 0.05. Since the p-value is below 5% we reject the null hypothesis and conclude that there is a statistical significant difference in compliance with the disclosure requirements by listed agricultural firms in Nigeria. Consequently, we are to reject null hypothesis 2 and uphold alternate hypothesis 2 which states that there is significant difference in the level of compliance with IAS 16 disclosure requirements by listed agricultural firms in Nigeria.

5 Conclusions and Recommendations

Using a self-constructed disclosure compliance checklist, the extent of 3 listed companies' listed under the agricultural sector of the Nigerian Stock Exchange compliance with IAS 16 at the end of 2011 were measured. Data was collected manually from annual reports of companies. The results reported that the mean level of disclosure compliance with IAS 16 was 34.76%. This suggests that we have not progressed at desired pace when it comes to regulations. This has resulted in a higher number of disclosure requirements required by IAS 16 when compared to our local SAS and this could be responsible for the failure of our companies to comply with IAS 16 disclosure requirements.

The results also suggest that although a set of enforcement mechanisms to promote compliance is in place, activities of enforcement bodies have been insufficient to ensure compliance and this is what facilitates existence of

compliance gap. Possible reasons for this could be a lack of professional training and poor condition of service to attract sufficiently qualified staff.

Consequent upon the results obtained above, the study hereby recommends thus:

Our firms should strive at all times to comply with all regulatory and statutory framework in the preparation and presentation of financial statements, giving the fact that it is a set of documents that project the performance of the reporting entity. The newly established Financial Reporting Council of Nigeria should learn from the mistakes of its predecessor and ensure effective monitoring of firms in order to enforce strict compliance with the disclosure requirements of IFRS. There is a need to put all machineries in place to ensure full compliance with disclosure requirements of adopted International Financial Reporting Standard by Nigerian firms to be able to compete in a globally economy.

References

- [1] Abdelrahim, A. M., Hewaidy, A. M., & Mostafa, G. N. (1997). The relevance of international accounting standards to the evaluation of fixed assets in Kuwait corporations. *Arab Journal of Administrative Sciences*, 5(1), 53–96.
- [2] Adeyemi, S. (2006). Impact of accounting standards on financial reporting in Nigeria . Department of Accounting, University of Lagos: Unpublished PhD. Thesis .
- [3] Al Mutawaa, A., & Hewaidy, A. M. (2010, May). Disclosure level and compliance with IFRSs: An empirical investigation of Kuwaiti companies. *International Business & Economics Research Journal*, 9(5), 33-50.
- [4] Al-Jabri, H., & Hussain, M. M. (2012). Compliance with international accounting standards requirements among Omani listed companies. *Journal of Administrative and Economic Sciences*, Qassim University, 5(2), 75-105.
- [5] Al-Shammari , B., Brown , P., & Tarca, A. (2008). An Investigation of compliance with international accounting standards by Listed Companies in the Gulf Co-Operation Council member states. *International Journal of Accounting*, 43(4), 425-447.
- [6] Al-Shammari, B. (2011). Factors influencing the extent of mandatory compliance with international financial reporting standards: the case of Kuwaiti listed companies. *Journal of International Business and Economics*. Volume: 11 No 4.
- [7] Barde, I. M. (2009). An evaluation of accounting information disclosure in the Nigerian oil marketing industry. Ph. D. Thesis, Bayero University, Kano, Department of Accounting.
- [8] Bashir, R. A. (2012). Corporate reporting and corporate attributes: An analysis of quoted companies in Nigeria. Unpublished M.Sc Dissertation, Bayero University, Kano.
- [10] Financial Reporting Council of Nigeria . (2011). Financial Reporting Council of Nigeria Act.
- [11] FRCN. (1983). Statement of Accounting Standard 3 on Accounting for Property, Plant and Equipment. Lagos: PAT.
- [12] Friedrich, B., Friedrich, L., & Spector, S. (2011). Pdnet. Retrieved January 03, 2013, from International Accounting Standard (IAS) 16, Property, Plant and Equipment: [http://www.cga-pdnet.org/en-CA/PDResources/Pages/InternationalAccountingStandard16\(IAS16\).aspx](http://www.cga-pdnet.org/en-CA/PDResources/Pages/InternationalAccountingStandard16(IAS16).aspx)

- [13] Galani, D., Alexandridis, A., & Stavropoulos, A. (2011). The association between the firm characteristics and corporate mandatory disclosure the case of Greece. *World Academy of Science, Engineering and Technology*, 53, 1048-1054.
- [14] Glaum, M., & Street, D. L. (2003). Compliance with the disclosure requirements of Germany's new market: IAS versus US GAAP. *Journal of International Financial Management and Accounting*, 14(1), 64–1000.
- [15] Hodgdon, C., Tondkar, R. H., Adhikari, A., & Harless, D. W. (2009). Compliance with International Financial Reporting Standards and auditor choice: New evidence on the importance of the statutory audit. *The International Journal of Accounting*, 44, 33–55.
- [16] IASB. (2009). IFRS for SMEs. London: IFRS Foundation.
- [17] Isa, M. A. (2004). An assessment of the level of compliance with the pension cost disclosure requirements by the first generation banks in Nigeria. *Bayero International Journal of Accounting Research*, 1(1), 105–14.
- [18] Kantudu, A. S. (2008). Impact of Nigerian Accounting Standard Board Act 2003 on compliance with accounting standards on employee retirement benefits in Nigeria. Retrieved November 28, 2011, from SSRN: <http://ssrn.com/abstract=1106429>
- [19] Kantudu, A. S., & Tanko, M. (2008). Compliance with the requirements of accounting standard by quoted companies in Nigeria. Retrieved August 11, 2012, from SSRN: <http://ssrn.com/abstract=1150973>
- [20] Karim, A. K., & Ahmed, A. U. (2005). Determinants of IAS disclosure compliance in emerging economies: Evidence from exchange-listed companies in Bangladesh. Retrieved May 02, 2013, from Centre for Accounting, Governance and Taxation Research School of Accounting and Commercial Law Victoria University of Wellington: <http://www.accounting-research.org.nz>
- [21] Kasum, A. S. (2011). The impact of compliance with accounting standards on asset and profitability of Nigerian quoted companies. *The Journal of Commerce*, 3(3), 57-68.
- [22] Kasum, A. S., Osemene, O. F., Olaoye, J. A., Aliu, A. A., & Abdulsalam, T. S. (2011). Sustainable development and performance, financial position and market value of Nigerian quoted companies. *Journal of Economics and Sustainable Development*, 2(4), 20-33.
- [23] Kothari, S. P. (2000). The role of financial reporting in reducing financial risks in the market. In E. S. Rosengren, & J. S. Jordan (Eds.), *Building an infrastructure for financial stability*. Federal Reserve Bank of Boston Conference (Vol. 44). Boston: Federal Reserve Bank of Boston.
- [24] Meek, G. K., Roberts, C. B., & Gray, S. J. (1995). Factors influencing voluntary annual report disclosures by US, UK and continental European multinational corporations. *Journal of International Business Studies*, 26(3), 555-572.
- [25] NSE. (2012). *NSE Factbook 2011/2012*. Lagos: Nigerian Stock Exchange.
- [26] Nyor, T. (2010). Determinants of compliance with the disclosure requirements of accounting standards by Nigerian banks. *Bayero International Journal of Accounting Research*, 4(1), 34 – 48.
- [27] Ofoegbu, G., & Okoye, E. (2006). The relevance of accounting and auditing Standards in corporate financial reporting in Nigeria: Emphasis on compliance. *The Nigerian Accountant*, 39(4), 45-53.

- [28] Salendrez, S. E. (2006). An update on International Accounting Standard (IAS) 16: Property, Plant and Equipment. *Notes on Business Education*, 9(1), 1-6.
- [29] Street, D. L., & Bryant, S. M. (2000). Disclosure level and compliance with IASs: A comparison of compliance with and without U.S. listings and filings. *International Journal of Accounting*, 35(3), 305–329.
- [30] Tower, G., Hancock, P., & Taplin, R. (1999). A regional study of listed companies' compliance with International Accounting Standards. *Accounting Forum*, 23(3), 293-305.
- [31] Tracy, J. A. (2013). *Accounting for dummies* (5th ed.). New Jersey: John Wiley and Sons Ltd.
- [32] Umoren, A. O. (2009). Accounting Disclosures and Corporate Attributes: A Study of Tested Nigerian Companies. Retrieved November 11, 2011, from Covenant University Repository: <http://eprints.covenantuniversity.edu.ng/id/eprint/37>
- [33] Wallace, R. S. (1988). Corporate financial reporting in Nigeria. *Accounting and Business Research*, 18(72), 352-362.
- [34] Wallace, R., Naser, K., & Mora, A. (1994). The relationship between the comprehensiveness of corporate annual reports and firm characteristics in Spain. *Accounting and Business Research*, 25(97), 41-53.
- [35] World Bank. (2004, June 17). Report on the observance and codes (ROSC) Accounting and Auditing. Retrieved November 12, 2011, from The World Bank Group: http://www.worldbank.org/ifa/rosc_aa_nga.pdf
- [36] Yahaya, K. A. (2011). Compliance with Statement of Accounting Standards by Nigerian Quoted Banks. *European Journal of Economics, Finance and Administrative Sciences*(34), 104-112.
- [37] Yahaya, K. A.-M. (2012). Relationship between Level of Compliance with Statement of Accounting Standards and Performance of Nigerian Banks. *International Journal of Business and Management*, 128-136.