

IMPACT OF INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS) ON INVENTORY VALUATION OF FIRMS IN NIGERIA

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Abstract

The study examined impact of IFRS on inventory valuation of firms in Nigeria. The study specifically ascertained the impact of FIFO method on inventory of firms in Nigeria, the effect of weighted average method on inventory of firms in Nigeria and also evaluated the effect of standard cost method of inventory values of firms in Nigeria. This research work adopted ex-post facto research design. The study made use of secondary data from annual financial statements covering 2011-2020 of the selected Brewing firms in Nigeria. The study use a multiple regressions method to analyze and test the hypotheses raised. Result of analysis shows that FIFO method of inventory has significant effect on inventory value of firms in Nigeria. It was also observed that Weighted Average of valuation has positive and significant impact on inventory values of firms in Nigeria. The study further revealed that standard cost method of inventory has positive and significant impact on inventory values of firms in Nigeria. The implication of the findings of this work is that the FIFO method of valuation gives accurate measure of stock record and therefore measures the closing stock value and other stock value right and gives proper measurement of performance of the business especially in profit and loss calculation. The study recommends that all corporate firms should adopt the IFRS in their firms for better reporting of information.

Key Words: firms, impact, IFRS, inventory, valuation.

INTRODUCTION

Impact of international financial Reporting Standard on Inventory Valuation of firms in Nigeria is a crucial issue of discussion among managers of firms. International financial reporting standard is a single standard that has brought significant change in accounting and financial reporting in recent times, this is facilitated by a convergent support of about one hundred (100) countries around the global standards. Quite touching is the effect of international standard is having on the inventory valuation of many firms in Nigeria.

It is already known that our country Nigeria attaches significant interest in business activities. Virtual every firm in Nigeria undertakes inventory especially at their financial year ending. Osisioma (2014) states the general point which need to be noted About International Financial Reporting Standard (IFRS): any opined that any entity claiming compliance with IFRS must comply with all standard and aspects of the IFRS standards and interpretations, including disclosure requirements and must make a statement of explicit and unreserved compliance with IFRS.

IFRS do not apply to items that are not material and transactions must be accounted for in accordance with their substance rather than their legal form. Transaction with shareholders in their capacity as shareholders must be recognized directly in equity. An entity should present a statement of financial position, statement of comprehensive income, statement of change in equity, statement of cash flows and note, to the accounts as well as the accounting policies in use.

Comparative information is required of for proceeding period only, but additional period and information may be presented. In addition when an entity restates comparative information following a change in accounting policy, a correction of an error or a reclassification of items in the financial statement, a statement, a statement of financial position as at the beginning of the earliest comparative period should be presented. Comparative information must include numerical information in respect of the previous period; and relevant narrative and descriptive information. Fair presentation requires that the following aspect be specifically addressed with regards to compliance with the IFRS: compliance with the IFRS.

1.1 Objectives of the study

The broad objective of the study was to examine the impact of international financial reporting standards On Inventory Valuation of firms in Nigeria.

The specific objectives of the study are to:-

- (i) Examine the impact of FIFO method of inventory valuation on inventory values of firms in Nigeria
- (ii) Ascertain the impact of Weighted Average of valuation on inventory values of firms in Nigeria.
- (iii) Evaluate the impact of standard cost method of inventory on inventory values of firms in Nigeria

1.2 Statement of Hypothesis

- (i) FIFO method of inventory valuation has no impact on the inventory value of firms in Nigeria
- (ii) Weighted average method has no impact on the inventory values of firms in Nigeria.
- (iii) Standard cost method of inventory has no impact on the inventory valuation of firms in Nigeria.

REVIEW OF RELATED LITERATURE

2.1 Conceptual Review

This work studies the effect of International Financial Reporting Standard the independent variable on the inventory valuation of firms (dependent variables) in Nigeria. International finance Reporting Standards are Accounting Standard set up by the International Accounting Standards Boards (IASB) to regulate accounting globally.

International Financial Reporting Standards (IFRS) according to Onyekwelu (2019) are global standards propounded by International Accounting Standards Board (IASB) formerly known as IASC for the reporting of financial information to business. Onyekwelu (2019) defined accounting standard as bench marks, thresholds and basis for measuring the quality of a phenomenon. She quickly added that the main purpose of accounting standards is to reduce or eliminate variations in accounting practice and to introduce a degree of uniformity into financial reporting. She further states that accounting standards usually set out requirements with regard to the recognition. Measurement, presentation and other items in financial statements.

Adejola (2012) define inventories as items of value held for or use or for sale by enterprise and usually comprise of raw materials and supplies and used in production work in progress and finished goods. He said that inventories are in the form of materials or supplies to be consumed in the production process, form of materials or supplies to be consumed or distributed in the rendering of services, assets held for sale or distribution in the ordinary course of operations, or in the process of production for sale or distribution.

IFRS ORIGIN

International financial reporting standard is described as the single most important change to take place in accounting and financial reporting in years. More so with the

convergence by over 100 countries around these global standards. The IFRS are globally accepted set of accounting standards and interpretations adopted by the International Accounting Standard Board (IASB) and its interpretative body (IFRIC), prescribing how certain transactions and events should be reported in financial statements. They are essentially principals – based, investor oriented standards principally designed for, and used by, listed “for profit” corporations, and which allows corporate management a wide latitude of discretion and flexibility in the preparation of a company’s financials.

The idea for an international convergence of accounting standard first arose in the late 1950s in response to the post world war II economic integration and related increase in cross border transactions (cited by Ambily, 2013). “the 1950s began a period of rapid growth of international trade and foreign direct investment, and companies began to expand their reach beyond their borders” (Zeff 808, cited by Ambily, 2013). With each country having its own proper accounting practice or Generally Accepted Accounting Principals, meaningful comparisons of financial statements from one country to the next was very challenging (Zeff 808). Initial efforts were focused more on reducing the differences among the accounting principals used in major capital markets around the world but by the 1990s, the concept of convergence came about. The notion of convergence calls for the development of a single set of international accounting standards that would be used in at least all of the major capitals markets around the world (Ambily, 2013).

In 1973, the first international standard – setting body, the International Accounting Standards committee (IASC) was established with a mission to “formulate and publish in the public interest, basic standards to be observed in the presentation of audited accounts and financial statements and to promote their world-wide acceptance” (Ambily,2013). However, until 2002, the IASC standard were only adopted by a few countries that lacked their own standard-setting infrastructure.

By late 1980s, there was a heightened interest in the development of in may 2000, the IOSCO recommended some core IASC standards to its regulator- members. Between late 1990s to early 200s, concerted efforts were made to reduce difference in the application of accounting principles all over the world. And so in 2001, in response to calls for improvements in the governance, funding and independence of IASC, it was reconstituted into the IASB. This heralded the birth of the IFRS regime. In 2002, the European union became the first major capital market to adopt IFRS regulation and requires that listed companies prepare financial statements using IFRS as from 2005.

The IASB is an independent accounting standard – setting body, based in London. It consists of 15 members from nine countries including the United States. The IASB began operations in 2001 when it succeeded the International Accounting Standard Committee. One of the IASB's preoccupation has been the process of mutual convergence both with the American Financial Accounting Standard Board (FASB), and other major standard – setting jurisdictions, to facilitate the process of attaining one global accounting language. Together with the IASB, FASB sought to work out a new and enhanced framework that would facilitate converged global standards. Between 1978 and 2000, the FASB had issued seven statements of financial accounting concepts. Meanwhile, the International Accounting Standard Committee (IASC) had also developed a framework for the preparation and presentation of financial statements. The IASC framework was adopted by the IASB in April 2001 to pave the way for the emergence of the new drive international best practices.

In October, 2004, the joint conceptual framework project was embarked upon between the IASB and the FASB, to develop an improved common conceptual framework that will serve as the foundation for development of accounting standards. The idea was not to have a fundamental rethink of existing framework but to make up for omission in the original framework, and put together concepts applicable to private sector entities.

The IASB in regard to IFRS has four stated goals accounting standards requiring transparency, comparability and high quality in financial statements to encourage global accounting standards; and to converge various national accounting standards with global accounting standards (Dumont, 2012).

2.1.1 Inventory Valuation

The International Accounting Standard Board through IAS 2 approved two methods of inventory valuation. They are:

- First in First out (FIFO)
- weighted average method;

Other basis of valuation methods that are approved by IFRS as stated in IAS 2 includes Net realizable value, retail method; gross profit method; fair value; standard cost method; Net realizable value.

2.1.2 First in First out (FIFO): The FIFO method assumes that the first goods purchased will be the first goods to be used or sold regardless of the actual physical flow. Epitein and Jermakowicz (2010) argue that the strength of the cost flow assumption lies in the inventory amount reported in the statement of financial position.

2.1.3. The Weighted Average Cost: inventory valuation under the revised IAS 2 involves averaging. Here the cost of goods available for sale (opening inventory plus net purchases) is divided by the unit available for sale to obtain a weighted average unit cost. Closing inventory and cost of goods sold are then valued/price at the average cost determined.

The basic principle of weighted average cost application is illustrated in table 2 below:
Note: The weighted average cost = Actual Total cost divided by the units available.
Thus $N87,160/227 = 383.96$ per bag

Therefore the closing inventory is 227 bags @ $N383.96/\text{bag} = N87,158.92$
Cost of goods as sold 130 bags @ $N383.96/\text{bag} = N49,914.80$ when the weighted average assumption is applied to a perpetual inventory system the average assumption is applied to a perpetual inventory system, the average cost is recomputed after each sale, this method is known as moving average. Sales are computed at the most recent average.

2.1.4 Standard Cost Method

These are predetermined unit cost used by many firms especially manufacturing firms for planning and control purposes. These costs are often incorporated into the accounts and materials, work in process and finished goods inventories.

IAS 2 requires firms to make the following disclosure on their inventory valuation method:

- i. The accounting policies adopted in measuring inventory including the costing method employed.
- ii. The total carrying amount of inventories and the carrying amount in classifications appropriate to the entity.
- iii. The carrying amount of inventory carried at fair value less costs to sell.
- iv. The amount of inventories recognized as expense during the period.
- v. The amount of any write-down of inventories recognized as an expense in the periods.
- vi. The amount of any reversal of any previous write-down that is recognized in profit or loss for the period.

- vii. The circumstances or events that led to reversal of a write-down of inventories to net realizable value.
- viii. The carrying amount of inventories pledge as security for liabilities.

2.2 Theoretical Framework

2.2.1 Stakeholders' Theory

This study is underpinned in the stake holders theory. The stake holders theory was founded in early 20th century by Milton Friedman. The adoption of IFRS .has proved our acknowledgement and acceptance of the importance of the accounting profession and its role in providing useful financial information to both the government and stakeholders of firms and the general public.

It will be seen or noticed that the savings in cost and increase in profit is the value arising from inventory taxation valuation under IFRS taxation. Researchers have and will continue to provide insightful empirical evidence on the necessity and importance of IFRS adoption for the purpose of its regulatory role on inventory valuation of firms. The constant demand by stakeholders for quality information and more necessity for disclosures is one of the major factors for adoption of the stake holders theory for this study.

Loffmann and Zulch (2014). The stakeholders' theory recognizes the environment of the firms, including customers, suppliers, employees, other segments of the society. A goggle scholar asserted that accounting regulation has high degree quality information about economic activities of firms while at the same time reporting back to them (firms) in such a way that improves stakeholders financial decisions in any economy.

2.3: Empirical Review

Aondoakaa, Lorpev and Kwanum (2011), evaluated IFRS and its characteristics of voluntary adopters and non adopters. Their findings was that IFRS adoption in Nigeria is driven by internationality (Cross Listing) of banks. Their findings did not reveal either the importance of a particular method of IFRS. It rather saw the advantage of IFRS as promoting uniformity or friendliness with other parts of the world (e.g through cross listing such as those of banks. However we can conclude from their findings that IFRS is a welcome initiative as it brings together people in different places (Internationally). Therefore they support the need for JFRS as an improvement and growth of business

thereby supporting the general objective and specific objectives of the study. The researchers applied the correlation method in their study.

The research work of Augustine and Agu (2013) on IFRS Inventory valuation method and cost reduction clearly upholds the first and second specific objectives of this study. They pointed out that the use of IFRS methods of valuation can be achieved by considering the characteristics of the inventory and thereby simplifying the pricing procedure. In other words, by looking at the characteristics of the inventory the firm can choose the best method to apply in the inventory valuation. It is in line with this that firms can choose whether to adopt FIFO or weighted average method, depending on the changes within the cost prices during the period etc. This will also help in reducing costs. The researchers used the chi square method of analysis in their work.

Boundless (2016) reviewed cost of inventories and their contents. They stated that the cost of inventory should comprise of purchase costs, conversion costs and other costs incurred to bring the inventory to its current state and location. It is clear that it is the cost of inventories for instance that will help firms determine whether to use FIFO or weighted average methods in their valuation of inventories since these costs are not static or stable; hence they will decide the best method to take. The study can be aligned to the first and second objectives of this research work.

Similar to Defund (2011) study is the finding and study made by Crawford and Exantance (2012) on IFRS and its determinants of decision usefulness of firms. Their findings were that IFRS would place small firms in many competitively disadvantageous situations. These findings may however be caused by failure of small firms to adhere to the principles of IFRS which eventually would lead to failure to achieve positive results by the--small firms using IFRS. The researchers used correlation method in their study.

Nosiru (2015) is in line with objectives of this study when in their study of the method of determining the inventory valuation method for obtaining value of unsold goods, sold goods and other transactions like inventory, they made the statement (findings) that the cost of goods sold, cost of unsold goods and value of other transactions like inventory should be reported in the financial statements at the accounting year end. This finding is clearly the effect of adopting IFRS inventory valuation methods which helps in discovering those cost items mentioned.

2.4 SUMMARY OF EMPIRICAL REVIEW

Table: 2.1.5: Summary of Empirical Review

Author	Year of study	Title of the study	Methodology	Findings
Aondoakaa, Lorpev and Kwanum	2011	IFRS and its characteristics that voluntary adopters and non adopters	Correlation method	IFRS adoption in Nigeria is driven by Internationality (Cross Listing) of banks.
Barth et al	2011	IFRS as determinant growth of firms	t-test	They discovered that there was lower cost of capital among other findings.
Defond et al	2011	Voluntary adoption of International financial reporting standard (IFRS) as determinants	Correlation	They suggested that a mere switch/adoption to a common set of accounting standard does not necessarily bring about the anticipated improvement in earnings, comparability and enhance information quality
Crawford, Extance, Hellia	2011	IFRS and its determinant of decision usefulness of firms	Correlation	Their findings were negative, that the standard IFRS would place smaller companies in a much competitively disadvantages situations.
Augustine and Agu	2013	IFRS inventory valuation method and cost reduction.	Chi Square	Cost reduction using IFRS valuation method can be achieved simply by considering the characteristics of the inventory and thereby simplifying the pricing procedure and reduce the cost to some degree.
Lan	(2013)	Choice of inventory method by firms.	Chi-Square	He discovered that majority of enterprises use FIFO method and weighted average method by considering the characteristics of inventory itself.
Odia, and Eriabie	(2013)	On determinants and decision usefulness of IFRS 8 on segment disclosures	They used the t-test for the analysis.	The result of their work suggests that there was a 10% increase in the segment disclosures after IFRS 8 adoption.

Source: Author's compilation, 2021

METHODOLOGY

3.1 Research Design

This research work adopted *ex-post facto* research design. *Ex-post facto* research design seeks to find out the factors that are associated with certain occurrences,

conditions, events or behavior by analyzing past events or already existing data for possible causal factors. According to Aneke E., Ex-post research provides a platform to enable the researcher to develop hypotheses for solution of current problem and also a greater appreciation of the role current events can play in the progress of society. The researchers made use of secondary data from quoted firms in Nigeria for the period 2011-2020.

3.2 Area of Study

The geographical area covered by the study is the whole country Nigeria. The Brewing firms that are quoted on the Nigerian exchange group as at the time of the research 2011 to 2020.

3.3 Sources of Data

The study made use of secondary data from annual financial statements covering 2011-2020 of Brewing firms in Nigeria, Journals of accounting and other related disciplines, textbooks and internet websites.

3.4 Population

In this study the population is made up of five Brewing firms in Nigeria as at 31st December, 2020 quoted in the Nigerian Stock Exchange. They are Nigeria Breweries Plc. Guinness Nigeria plc, Champion Breweries, International Brewery Plc and Golden Guinea Plc.

3.5 Sample size

The sample of the study was arrived at through a non-probabilistic sampling technique with purposive sampling technique while particularly relying on the data availability criterion. Purposive sampling is also known as judgment, selective or subjective sampling. The sample size of the study is made up of three (3) Brewery firms viz; Nigerian Breweries Plc, Guinness Nigeria Plc, and Champion Breweries based on the number of share they control in the sector.

3.6 Model Specification

In order to evaluate the financial factors that determine movements in equity share in Nigeria stock exchange a multiple regression model was formed and it was specified as follows:

$$TINV_t = B_0 + B_1FMSV_t + B_2WMSV_t + B_3SCMSV_t + e_t \dots \dots \dots (1)$$

Where

TINV = Total Inventory

FMSV	=	FIFO Method of Stock valuation
WMSV	=	Weighted Average Method of Stock valuation
B ₀	=	Constant or intercept
B ₁ – B ₃	=	Coefficient for independent variables
t	=	Current Period
e	=	The error term

The multiple regression analysis was used in the study. The effect exhibited by the independent variables included in the study upon total inventory (TINV) was measured through regression coefficient.

The study also involved test of significance of parameter estimates by using t-statistics at 5% level. This enable us compare the probability of computed t-statistics at various situation of empirical analysis with the critical value at 5% to establish significance.

3.7 Description of the Variables

Type	Name	Proxy	Sign
Dependent Variable	Total Inventory	Stock	TINV
Independent variable	FIFO Method of Stock	Method of Stock Valuation	FMSV
Independent variable	Weighted Average Method of stock Valuation	Method of stock valuation	WMSV
Independent variable	Standard cost method Of Stock valuation	method of stock valuation	SCMSV

3.8: Method of Data Analysis

To test the hypothesis, multiple regression analysis was used. Regression analysis, in essence provides a procedure for determining the regression line which is defined as the best straight line or linear approximation of the effect of independent variable on dependent variable.

The research variables are structured into independent variables and dependent variable for the purpose of the analysis. The independent variables of the study are; FIFO Method of Stock valuation, Weighted Average Method of Stock valuation and Standard Cost Method of Stock valuation, while the dependent variable is total inventory.

4.1 DATA PRESENTATION**TABLE 4.1.1: RAW DATA OBTAINED FROM THE FIRMS**

Years	Company	Raw Material	Product in Progress	Finished Good	Inventory
2011	NBL	6342610	2119747	2124554	22110205
2012		6700165	2025254	5232002	24652723
2013		5876313	2508735	3313792	28478459
2014		9379180	3474714	3398261	28478459
2015		7798779	2629563	5823896	28409703
2016		8789652	3169263	3928616	31244703
2017		17561707	2377722	7667094	42728862
2018		8360987	1494235	6959190	32506824
2019		8479575	3267503	8051546	38520328
2020		91561707	2377722	7667094	42728862
2011	Guinness	1554751	815689	5182370	17381132
2012		2667228	810704	6407505	21998519
2013		2166660	1124622	5805227	12400102
2014		4929607	1270493	6039501	13469248
2015		2600261	1311086	5658267	10750598
2016		4974805	1473953	3853411	13021248
2017		7905986	1546382	9183617	23094499
2018		5940818	2548548	6868838	19032362
2019		9626135	1509742	9354634	25180431
2020		1023366	1440815	8880468	26426253
2011	Champions	106276	25187	3054	321348
2012		34910	7441	13431	235879
2013		41753	5799	3811	305631
2014		10700	36671	296	354286
2015		47445	40684	3406	350133
2016		51766	38079	28946	530410
2017		103086	48517	44664	592767
2018		92441	46187	49714	739277
2019		65040	80725	81990	702810
2020		68533	53090	27150	725449

Source: Firms Annual Reports 2011-2020

TABLE 4.1.2: LOG RESULT OF THE DATA OBTAINED FROM THE SAMPLED FIRMS

Years	Company	Raw Mater	Product in Progr	Finished Good	Inventory
2011	NBL	6.802268	6.326284	6.327268	7.344593
2012		6.826085	6.306479	6.718668	7.391865
2013		6.769105	6.399455	6.520325	7.454516
2014		6.972165	6.540919	6.531257	7.454516
2015		6.892027	6.419884	6.765214	7.453467
2016		6.943972	6.500958	6.59424	7.494776
2017		7.244567	6.376161	6.884631	7.630721
2018		6.922258	6.174419	6.842559	7.511975
2019		6.928374	6.514216	6.905879	7.58569
2020		7.961714	6.376161	6.884631	7.630721
2011	Guinness	6.191661	5.911525	6.714528	7.2400721
2012		6.42606	5.908862	6.806689	7.342393
2013		6.335791	6.051007	6.763819	7.093425
2014		6.692812	6.103972	6.781001	7.129343
2015		6.415017	6.117631	6.752683	7.031433
2016		6.696776	6.168484	6.585845	7.114653
2017		6.897956	6.189317	6.963014	7.363509
2018		6.773846	6.406293	6.971027	6.836883
2019		6.983452	6.178903	6.971027	7.401063
2020		6.010031	6.158608`	6.948436	7.422036
2011	Champions	5.026435	4.401176	3.484869	5.506976
2012		4.54295	3.871631	4.128108	5.372689
2013		4.620688	3.763353	3.581039	5.485197
2014		4.029384	4.564323	2.471292	5.549354
2015		4.67619	4.609424	3.532245	5.544233
2016		4.714045	4.580686	4.461569	5.724612
2017		5.0132	4.685894	4.649958	5.772884
2018		4.965865	4.66452	4.696479	5.868807
2019		4.813181	4.907008	4.913761	5.846838
2020		4.8359	4.725013	4.43377	5.860607

Source: Firms Annual Reports 2011-2020

4.2 Data Analysis

The data obtained from the company's annual reports were analyzed using panel least squares regression analysis and the results presented in tables 4.2.1 to 4.3.8.

4.2.1 Descriptive Statistics

The summary of the descriptive statistics of the variables are presented in table 4.2.1

	LOG INVENTORY	LOG_FMSV	LOG_WMSV	LOG_SMSV
Mean	36447135	9652258	17667913	214419.8
Median	20577993			
Maximum	1.44E+08	3.05E+08	3.00E+08	95965273
Minimum	1367509	-3.57E+08	-60343331	-1.47E+08
Std. Dev.	38912112	80388527	50375454	26798280
Skewness	1.293406	-0.856710	3.807895	-2-321985
Kurtosis	3.488839	13.77806	21.29811	22.72156
Jarque Bera	14.43867	248.1299	818.3773	855.2214
Probability	0.000732	0.000000	0.000000	0.000000
Sum	1.82E+09	4.83E+08	8.83E+08	10720992
Sum Sq. Dev.	7.42E+16	3.17E+17	1.24E+17	3.52E+16
Observations	30	30	30	30

Source: Review 110., Output 2021

The descriptive statistics in the table above presents the statistical characteristics of all the observations. These include measures of central tendency the mean and median. Dispersions in the series are also indicated using the standard deviation.

From table 4.1.2, results show the mean of the variables are: NGN 36447135, NGN 9652258, NGN 17667913, NGN 214419.8 and NGN6694839 with standard deviation of NGN3891211, NGN80388527, NGN50375454 and NGN 26798280 for Total Inventory, FIFO Method of Stock valuation, Weighted Average Method of Stock valuation and standard Cost Method of Stock valuation respectively.

The table also reveals of FIFO and standard costing method have skewness value less than one while inventory and inventory and weighted average are in excess of one. The kurtosis coefficient of all the variables are greater than one which are significantly higher than the kurtosis of a normal distribution.

4.3 Test of Hypotheses

The four null hypotheses formulated for the study were tested using panel least square analysis. The decision rules for the test of hypotheses were based on the significances of the t-statistics which are represented by the p-values. The following steps were taken in arriving at a decision concerning each hypotheses:

- i. Each hypotheses was restated in the null forms.
- ii. The decision criterion or criteria were stated,
- iii. The Eview results were presented in a tabular form
- iv. The null hypothesis is rejected or accepted based on the decision criterion or criteria.

Test of Hypothesis One

Restatement of Hypothesis: FIFO method of valuation had no effect on the inventory value of firms in Nigeria.

Decision rule: Accept H_0 if the probability of independent variable is less significance level (that is, if prob < 0.05) otherwise reject the H_0 .

Table 4.3.1 Panel Regression Result

Dependent Variable: LOG-TINV Method: Panel

Least Squares Date: 10/25/21 Time: 12:05

Sample: 20:05

Sample 2011 2020

Periods included: 10

Cross-sections included: 3

Total panel (balanced) observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	36964168	1649883.	22.40411	0.0000
LOG_FMSV	0.053566	0.023326	2.296363	0.0278
Effects Specification				
Cross-section fixed (dummy variables)				
Period fixed (dummy variables)				
R-squared	0.936989	Mean dependent var	36447135	
Adjusted	0.911785	S.D. dependent var	38912112	
R-squared	11557293	Akaike info criterion	35.60686	
S.E. of regression	4.67E+15	Schwarz criterion Hannan-Quinn criter.	36.18046	
Sum squared resid	875.1714	Durbin-Watson stat	35.82529	
Log likelihood	0.000000		1.642146	
F-statistic				
Prob(F-statistic)				

Source: Eview 11.0, Output 2021.

The coefficient of determination (R^2) indicates that about 94% of change in inventory is accounted for by the FIFO method of stock valuation while the adjusted R-squared of 91% further justifies this effect. It is safe to say that the model has a "good" predictor of inventory of Nigerian firms is known.

The results in Table 4.3.1 shows that FIFO method of stock valuation has a statistically significant positive effect on the inventory of Nigerian firms. This is indicated by the coefficient of 0.053566 which is positive and significant at 0.05 level of significance (that is, P-value 0.02780.05). Based on this, the study rejects the null hypothesis, which states that, FIFO method of valuation has no effect on the inventory value of firms in Nigeria.

Test of Hypothesis Two

Restatement of Hypothesis: Weighted average method has no effect on the inventory value of firms in Nigeria.

Decision rule: Accept H_0 if the probability of independent variable is less than 0.05 significance level (that is, if prob < 0.05) otherwise reject the H_0 .

Table 4.3.2 Panel Regression Result

Dependent Variable: LGGJTINV

Method: Panel Least Squares

Date: 10/25/21 Time: 12:05

Sample: 2011 2020

Periods included: 10

Cross-sections included: 3

Total panel (balanced) observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	34708762	1781195,	T9.48623	0-0000
LOG_WMSV	0.098391	0.041191	2,388691	0.0224
Effects Specification				
Cross-section fixed (dummy variables)				
Period fixed (dummy variables)				
R-squared	0.937659	Mean dependent var		36447135
Adjusted R-squared	0.912722	S.D. dependent var		38912112
S.E- of regression	11495722	Akaike info criterion		35.59617
Sum squared resid	4.63E+15	Schwarz criterion		36.16978
Log likelihood	-874.9043	Hannan-Quinn criter.		35.81461
F-statistic	37.60191	Durbin-Watson stat		1.721058
Prob(F-statistic)	0.000000			

Source: Eview 11.0, Output 2021.

The coefficient of determination (R^2) indicates that about 94% of the change in the inventory value of firms in Nigeria accounted for by weighted average method while

the adjusted R-squared of 91% further justifies this effect. Therefore, it is safe to say that the model has a "good" predictor of weighted average method is known.

The results in Table 4.3.2 shows that weighted average method has significant effect on the inventory value of firms in Nigeria, considering the coefficient of 0.098391 which is significant at 0.05 level of significance. That is the probability value is less than 0.05 level of significance (ie, 0.02240.05). That is, weighted average method has significant effect on the inventory value of firms in Nigeria. In the light of these, the study hereby rejects the null hypothesis which states that weighted average method has no effect on the inventory value of firms in Nigeria.

Test of Hypothesis Three

Restatement of Hypothesis: Standard cost method of inventory valuation has no effect on the inventory valuation of firms in Nigeria.

Decision rule: Accept H_0 if the probability of independent variable is less than 0.05 significance level (that is. if prob < 0.05) otherwise reject the H_0 .

Table 4.3.5 Panel Regression Result

Dependent Variable: LOG_SMSV					
Method: Panel EGLS (Two-way random effects)					
Date: 10/25/21 Time: 12:05					
Sample: 2011 2020					
Periods included: 10					
Cross-sections included: 3					
Total panel (balanced) observations: 10					
Swamy and Arora estimator of component variances					
Variable	Coefficient	Std. Error	t-Statistic	Prob.	
C	36492812	16549243	2.205105	0.0213026	0.0323
LOG_SMSV	0.056927	3.742126			0.0005
Effects Specification S.D.					Rho
Cross-section random			37068936		0.9225
Period random			0.000000		0.0000
Idiosyncratic random			10740868		0.0775
Weighted Statistics					
R-squared	0.225850	Mean dependent var			3325655.
Adjusted R-squared	0.209722	S.D. dependent var	10677676		12011212
S.E. of regression		Sum squared resid	14.00351	Durbin-	5.47E+15
F-statistic		Watson stat	0.000487		1.442248
Prob(F-statistic)					
Unweighted Statistics					
R-squared	0.023947	Mean dependent var	7.24E+16		36447135
Sum squared resid		Durbin-Watson stat			0.108992

Source: Eview 11.0, Output 2021.

The coefficient of determination (R^2) indicates that about 23% of change in inventory valuation of firms in Nigeria is accounted for by standard cost method of inventory valuation while the adjusted R-squared of 21% further justifies this effect. From this result, it is not safe to say that standard cost method of inventory valuation is a "good" measure of inventory.

On the contrary, the results from the table 4.3.5 show that standard cost method of inventory valuation has positive and significant effect on the inventory valuation of firms in Nigeria. Given that the coefficient of Standard cost method of inventory valuation is 0.213026 which is significant at 0.05 level of significance (from the p-value of 0.0005). In view of this, the study hereby rejects the null hypothesis three which states that standard cost method of inventory valuation has no effect on the inventory valuation of firms in Nigeria.

4.4 Discussion of Findings

Null hypothesis one was rejected because FIFO method of valuation has significant effect on the inventory value of firms in Nigeria (P-value $0.0278 < 0.05$). Table 4.3.1 also indicates that the coefficient of independent variable in the panel regression model is positive (0.053566), suggesting that FIFO method of valuation has positive and significant effect on the inventory value of firms in Nigeria. This is in line with the study of study conducted by Aondoakaa, Lorpev and Kwanum (2011) in IFRS and its characteristics of voluntary adopters and non adopters.

Null hypothesis two was also rejected because weighted average method has significant effect on the inventory value of firms in Nigeria (P-value $0.0224 < 0.05$). Table 4.3.3 the coefficient of the independent variable in the panel regression model is positive (0.098391), indicating that weighted average method has significant and positive effect on the inventory value of firms in Nigeria. This is in agreement with the study of Lan (2013) on choice of inventory method by firms discovered that majority of firms use FIFO and weighted average methods in their inventory valuation by considering the characteristics of inventory its.

Null hypothesis three was equally rejected because standard cost method of inventory valuation has significant effect on the inventory valuation of firms in Nigeria (P-value $0.0005 < 0.05$). Table 4.3.5 also disclosed that the coefficient of independent variable in the panel regression model is positive (0.213026), suggesting that standard cost method of inventory valuation has positive and significant effect on the inventory valuation of firms in Nigeria. This result is in agreement with the findings of Zelinschi, Levant,

Berland (2012) on IFRS on segment Report to ascertain the effect of the stand on segment reporting, understanding of companies with very different activities and operating in very different locating using correlation method.

5.1 Summary of Findings

Having carried out extensive study on this study on the effect of International Financial Reporting Standards on Inventory Valuation of firms in Nigeria. The study found out that;

- (i) FIFO method of inventory has significant effect on inventory values of firms in Nigeria,
- (ii) It was also observed that Weighted Average of valuation has positive and significant effect on inventory values of firms in Nigeria.
- (iii) The study further revealed that standard cost method of inventory has positive and significant effect on inventory values of firms in Nigeria.

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5.2 Conclusion

Under GAAP, inventory is recorded as the lesser of cost or net asset value (NAV) under FIFO. According to the Financial Accounting Standards Board (FASB), the organization responsible for interpreting and modifying GAAP, as of 2017 this method should be used instead of using replacement cost. This study has reviewed the effect of IFRS adoption on basis for inventory valuation and financial reporting in Nigeria. The study reveals that the International Reporting Standards through the IAS 2 adopted basically the First in First Out and the-weighted average method as methods of inventory valuation. It has also permitted other methods like the Net Realizable value, the retail price and standard cost. The FIFO method has The FIFO method provides the same results under either periodic or perpetual system which is not achievable under any other method. The weighted average method values inventory using the averaging method.

The IFRS lays down slightly different costing rules. It states that inventory is measured as the lesser of cost or net realizable value. This is a subtle distinction because both entities use the phrase "net realizable value" to mean slightly different things. The IFRS's definition of net realizable value is equal to the estimated selling price minus any reasonable costs associated with a sale. For GAAP, net realizable value is the best approximation of how much "inventories are expected to realize,"

The IASB through the IAS 2 approve the FIFO and Weighted Average Method as basics for valuing inventory. The International Financial Reporting Standard also included some disclosures that are necessary for the adoption of any of the methods as these would ensure better information asymmetry of financial reports.

5.3 Recommendations

Following the above study the researcher recommends that corporate business in Nigeria should adopt the IAS 2 in inventory valuation to enable a symmetry of financial information. Adoption of IAS will also ensure comparability and help in reliability of financial information to various stakeholders.

The findings of this study are utmost important to economic policymakers, investors, and Standard Setters.

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