MEASURABILITY OF FAIR VALUE ACCOUNTING AND THE REALITY OF IFRS

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ABSTRACT

This study focuses on Fair value accounting and measurability so as to know how realistic is International Financial Reporting Standards (IFRS. The main objective of the paper is to examine how realistic is IFRS vis-avis the influence of fair value Accounting and measurability on profitability. The study employs content-analysis research method to review literature relevant to International Financial Reporting Standard (IFRS) 13. The data generated were analyzed using the OLS regression technique. The study concluded that financial reporting measurements – of performance and financial position – affect almost everyone. They help to determine the allocation of capital across countries, economic sectors and companies and within individual businesses. They may well determine whether a business is regarded as a failure or a success, whether its employees earn a bonus, whether they keep their jobs, what dividends investors receive, and how much tax the business pays.

Key Words: Fair Value, Measurability

INTRODUCTION

Fair value measurement is a contemporary way of measuring assets and liabilities, it has its long history tied to the new era just after the World War II. Modern way of financial reporting has been shifting towards fair value accounting which has been gradually replacing traditional historical cost accounting model. The term **"fair value"** can be found firstly in the pronouncement of the Financial Accounting Standard Board (FASB)'s predecessors. For example, a notion of fair value occurred more than 20 times in ARB 43 *Restatement and Revision of Accounting Research Bulletins* issued in 1953. Accounting Principle Board (APB) worked also with fair value concept, e.g. in APB 16 *Business Combination* (1970) or APB 29

Accounting for Nonmonetary Transaction (1973). The fair value concept was subsequently adopted by FASB. SFAS 12 *Accounting for Certain Marketable Securities (1975)* and SFAS 13 *Accounting for Leases* (1976) are the first major FASB standard requiring measurement of certain elements of financial statements at their fair value. Nevertheless, the usage of fair value as a measurement attribute (especially at the reporting date) was marginal until the end of 1980's.

The turning point, which resulted in a widespread application of fair value measurement, was issuance of FAS 107: *Disclosures about Fair Value of Financial Instruments* in 1991. Since then fair value is employed as a primary measurement attribute of most financial instruments not only at initial measurement, but also at the reporting standards. This tendency is supported by FASB's attitude I n SFAC 7:*Using Cash Flow Information and Present Value in Accounting Measurement* (2000). SFAC 7.7 states the following: *"In recent years, the Board has identified fair value as the objectives for most measurement at initial recognition and fresh-starts measurements' in subsequent periods,"*

Growing controversy surrounds the question of measurement in financial reporting –mainly because of a perceived movement away from the traditional basis of measurement (historical cost) towards a new basis (fair value). Financial reporting standard-setters are also raising the question of measurement as one of the general principle.

- In November 2005 the International Accounting Standards Board (IASB) issued a discussion paper, Measurement Bases for Financial Accounting – Measurement on Initial Recognition.
- The IASB and the US Financial Accounting Standards Board (FASB) agreed in 2005 to tackle 'initial and subsequent measurement' as Phase C in their eight-phase project to prepare a common conceptual framework.

Any resulting changes in the basis of measurement could be far-reaching in their effects.

Nor would the effects be restricted to publicly listed companies – the primary users ofIASB and FASB standards. If there are changes, there will also be pressures for smaller, privately-owned companies to move in the same direction.

While there is growing controversy, the question of measurement in financial reporting has not generated the interest it deserves, perhaps because many of those affected by it –both within the accountancy profession and the broader business community – wouldnot regard themselves as sufficiently well briefed on the issues involved. This report's first Purpose is to improve understanding of how different financial reporting measurement bases work, their reliability, and their relevance, and to promote and shape debate.

Each basis of measurement in financial reporting has its supporters, and their views are often strongly held. This is not a new phenomenon. The Sandilands Committee, which considered the basis of measurement in the inflationary UK economy of the 1970s, noted that:

'A good deal of the evidence put to us was concerned with the definition of profit. We have been surprised at the vehemence of the debate and at the extent to which entrenched positions have been taken up in support of one concept or another.'

Current measurement practices are complex, diverse and apparently inconsistent. There is clearly at least a case for something more consistent and, presumably, simpler. In the context of measurement, the aspiration expressed by Sir David Tweedie, the Chairman of the IASB is an appealing one:

'The real objective is to have one single set of accounting standards, so it doesn't matter whether a transaction takes place in Brisbane or Beijing or Brussels or Boston,

We'll account for it the same way.' An impassioned approach to measurement that concludes that there is a demonstrably better way of doing things, and that everybody should adopt it, has its attractions. Although this report is skeptical, it would probably be unrealistic to expect this or any other report to persuade anyone with impassioned views on measurement to abandon them. But this report's second purpose is to identify key points in the arguments for and against each basis of measurement, which can be tested and examined, so as to help an

impartial observer form a view on the merits of different bases. The challenge of how to choose between competing bases for particular measurements is in some ways a more difficult one than that of understanding how the bases themselves work and the arguments for and against them. Therefore, a third purpose of this report is to set out proposals for how standard-setters' decisions on financial reporting measurement might best be made.

While the arguments supporting fair value accounting are not based on any formal analytical models that we are aware of, the intuition underlying support seems to be the following. The current market values of a firm's assets and liabilities are much more descriptive of a firm's financial position/wealth than their historical acquisition cost. Therefore, the assessment and recording of fair values will better inform outside stakeholders who make decisions whose payoffs depend at least partially upon the firm's true wealth. Also, fair value information is obviously relevant to valuation and fair values are used as inputs into analytical models of valuation. Empirically it has been found that changes in fair values seem to be reflected in capital market assessments of debt and equity values. Thus the provision of fair value information would make markets more "efficient" and capital market valuations would be more consistent with the fundamentals of the firm. It is believed that these arguments are so obvious and compelling that any formal analysis is unnecessary. Although the financial crises of 2007-09 raised significant concern that the accounting principle of mark-to-market was aggravating and prolonging the downward economic spiral, supporters of fair value accounting argue that bank regulators, rather than the accounting numbers, were at fault.

But the above intuitive arguments supporting fair value accounting are drawn from a Robinson Crusoe economy where the firm's wealth (financial position) is treated as a state of Nature, and the interaction between decisions and wealth is entirely one –sided. In such settings more information (in the Blackwell sense) is always preferred to less. Thus, since fair value accounting ostensibly provides incremental information about a firm's wealth, Blackwell's theorem would

imply that fair value accounting is strictly preferred to historical cost accounting in any decision setting where the firm's wealth is payoff relevant to decision makers.

Statement of the Problem

The move to fair value accounting is arguably the most radical shift in accounting standards during the past decade. Under fair value accounting a firm's assets and liabilities are marked to market at each reporting date rather than maintained at their original acquisition cost (less some mechanical adjustment for depreciation). The gains and losses arising from such revaluations are reported as part of a firm's comprehensive income. There is widespread support among regulators and academics for fair value accounting. The only concerns that have been expressed are those stemming from the difficulty of determining fair market values in settings where markets are thin or missing. There isn't much skepticism, which is surprising because not enough is known about important questions such as: What are the equilibrium economic consequences of fair value accounting? Who benefits and why? it becomes imperative to examine fair value measurement in determination of manufacturing firms' profitability, since we are moving from known (historical cost convention) to unknown (fair 20 value measurement), now that the phases of IFRS adoption in Nigeria is still on-going, with the first and second phase implemented.

Objective

The objective of this paper is to examine how realistic is the IFRS vis-a-vis the relationship between fair value measurement and historical cost convention in determining profitability of manufacturing firms in Nigeria.

Research Questions

The study was carried out in such a way that it was able to answer the following questions:

I. How does reported profit differ using fair value measurement and historical cost convention?
II. To what extent does inventory impact the reported profit of manufacturing firms under the fair value and historical cost?
III. To what extent does depreciation influence profitability of the manufacturing firms under the fair value and historical cost convention?
IV. What is the relationship between tax volume and reported profit of manufacturing firms under the fair value and historical cost convention?

Research Hypotheses:

The research hypotheses that the researcher focused on to achieve the above stated objective are:
I. The reported profit is the same using fair value measurement and historical cost

convention.

II. Inventory has no significant positive impact on reported profit of manufacturing company under fair value regime and historical cost regime.

III. Depreciation has no significant positive impact on profitability of manufacturing firms under the fair value measurement and historical cost convention;

IV. The tax volume has no significant positive relationship with reported profit of manufacturing firms under the fair value measurement and historical cost.

Scope of the Study

It became necessary that we concentrated our investigation on the companies listed in Beverages subsection of the Consumer Goods sector of the Stock Exchange. Companies in this subsector are directly associated with the three variables of our interest (i.e. depreciation, inventory and taxation) and have prepared their annual report in consonance with the recommendation of IFRS as directed by the Roadmap Committee. More so, they are directly affected by the reclassification of Returnable Packaging Materials (RPMs) recommended by the provisions of IFRS on Property, Plant and Equipment (IAS 16) as it affect bottles, which may in return affect Inventory (Stock). Also these companies have complied with the recommendation of the Road map Committee by preparing it financial statement in line with the dictates of IFRS. They are:

- Cadbury Nig. PLC;

- Nestles Nigeria PLC;

- International Breweries PLC;

- Nigerian Breweries PLC; and

- 7-Up Bottling Company PLC.

Literature Review

For many years, accounting discourse has been concerned with the measurement of attributes

of accounting events. The concept of measurement forms one of the central pillars on which

the preparation of financial statements is based. For example, financial statements can only be prepared if economic events meet the definition of an element of the financial statements and have a cost or value that can be measured with reliability. This has created the belief that accounting practices are practices of measurement (Musvoto, 2008a).

SFAS 157.18 stipulates three approaches or valuation techniques that are consistent with and applicable for fair measurement:

- The market approach operates with prices and other relevant information based on market transactions involving identical or comparable assets or liabilities.
- The income approach utilizes valuation methods that discount one or more future financial amounts to a single present amount. The valuation process applies expectations about future development by market subjects embodied in their action.
- The cost approach correspond to the amount that currently would be required to replace the service potential of an asset taking into account the obsolescence of an asset.

In order to increase consistency and comparability across entities, the FASB prefers distinguishing the fair value measurement into three-level hierarchy in respect to the inputs involved in such measurements.

Level 1 inputs in Fair Value Hierarchy "*are quoted prices (unadjusted) in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date. An active market for the asset or liability is a market in which transaction for the asset or liability occurs with sufficient frequency and volume to provide pricing information on an ongoing basis.*" Quoted prices in an active market are of the highest priority and provide users with the most reliable evidence of fair value. Therefore, quoted process shall be used to measure fair value attribute of an asset or liability whenever available.

Level 2 inputs are inputs that do not qualify for Level 1 inputs and are observable for the asset or liability, either directly or indirectly, e.g.:

- Quoted prices for similar assets or liabilities in active markets;
- Quoted process for identical or similar assets or liabilities in markets that are not active;
- Inputs other than quoted process that are observable for the asset or liability;
- Inputs that are derived principally from or corroborated by observable market data by correlation or other means.

Level 3 inputs are unobservable inputs that shall be used to measure fair value to the extent to which observable inputs are not available (i.e. when there is little, if any, market activity for the asset or liability at the measurement date). Unobservable inputs shall reflect the reporting entity's own assumptions about the assumptions that market participants would use in pricing the asset or liability. Therefore, fair value shall represent an exit price from the perspective of a market participant that holds the asset or owes the liability.

International Financial Reporting Standards

Fair value definitions within IFRS

Definitions of fair value and guidance on measuring fair value are dispersed throughout the IFRS. Neither definitions, nor guidance have been always the same and consistent. Alexander (2013) made the list of fair value definitions and the historic development of fair value

definitions across the IASB pronouncements; Dvorakova (2016) carried out the analysis of methods for measuring fair value.

IAS 2.6, IAS 17.4, IAS 19.7, IAS 21.8, IAS 32.11, IAS 39.9 and IAS 41.8 define fair value as "*the amount for which an asset could be exchanged, or a liability settled between knowledgeable, willing parties in an arm's length transaction."*

IAS 20.3 defines fair value as "*the amount for which an asset could be exchanged between a knowledgeable, willing buyer and a knowledgeable, willing seller in an arm's length transaction."*

IAS 36.3 sets up a measurement basis, which is denoted as fair value costs to sell. "*Fair value less costs to sell is the amount obtainable from the sale of an asset or cash generating unit in an arm's length transaction between knowledgeable, willing parties, less the cost of disposal."*

IAS 38.8 defines fair value of an asset, which is "*the amount for which an asset could be exchanged between knowledgeable, willing parties in an arm's length transaction."*

Except for IAS 36, the definition of fair value under the IFRS corresponds with the interferences of Nobes (2001) who argue that fair value is a mid price because "*as precisely defined in the standards, fair value is neither an offer price nor a bid price; and buying costs have not been added on nor selling costs deducted."* This neutral characteristic of fair value under the IFRS matches neither the definition of fair value in SFAC 7, nor the definition in SFAC 157.

Guidance on Fair Value Measurement within the IFRS

Guidance on measuring fair value comprises usually an integral part of a particular standard. Comprehensive fair value measurement considerations can be found in IAS 39. The provisions of IAS 39 governing the measurement by fair value are intended for financial assets and liabilities. However, the guidance in IAS 39 provides deeper insight into the nature of fair value measurement and its usefulness, relevant and reliability for users of financial statements.

According to IAS 39.48A, the best evidence of fair value is quoted prices in an active market. An active market is such a one where "*quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis"* (IAS 39.AG&71). As an active market for some assets or liabilities may not exist, the entity should apply an alternative approach to measure fair value by using a valuation technique, i.e.:

- Recent arm's length market transactions between knowledgeable, willing parties;
- Reference to the current fair value of another instrument that is substantially the same;
- Discounted cash flow analysis;
- Option pricing models.

The selected valuation technique should use as much as possible market inputs and should rely as little as possible on entity-specify inputs. Moreover, the entity should take into account all factors that markets participants would consider in setting a price. Whenever quoted process in an active market is not available and the entity uses a valuation technique to measure fair value, it should follow the main objective of surrogate fair value measurement. A valuation technique can be employed in the way ensuring that the estimated fair value equals the transaction price that would have been on the measurement date in an arm's length exchange transaction by normal business considerations.

Theoretical Review

Theory of Measurement in Accounting:

Accounting measure a business entity's assets, liabilities, and stockholders' equity and any changes that occur in them, by assigning the effects of these changes to particular time periods (periodicity), they can find the net income or net loss of the accounting entity for those periods. They measure some changes in assets and liabilities, such as the acquisition of an asset on credit and the payment of a liability. Other changes in assets and liabilities, such as those recorded in adjusting entries, are more difficult to measure because they often involve estimates and/or calculations. The accountant must determine when a change has taken place and the amount of the change. These decisions involve matching revenues and expenses (Hermanson, Edwards, & Maher, 1998). Hermanson, et al (1998) further notes that, 'a unit of exchange and measurement is necessary to account for the transactions of business enterprises in a uniform manner. The common denominator chosen in accounting is the 32 monetary unit. Money is the common denominator in terms of which the exchangeability of goods and services, including labour, natural resources, and capital, are measured. Money measurement postulate holds that accounting is a measurement and communication process of the firm that are measurable in monetary terms. By implication, financial statements should indicate the money used'. Mock and Grove, (1979), posits that a measuring system varies, depending on events and/or object, and may be defined as a specified set of procedures that assigns numbers to objects and events with the objectives of providing valid, reliable, relevant, and economical information for decision maker. There are four key aspects to this definition. First, the measures are expected to be valid, i.e. to be representative of actual attributes of the organisations or entities of interest. The second factor is the reliability of a measurement and measurement information, i.e. the information from measurement should not be quick change.

The third factor is that measures must be relevant to the decision problem. Finally, measures

are expected to be economical, i.e. their benefits to the decision maker should outweigh their

costs. The concept of objectivity is fundamental to all measurements. Horgren, Sundem and Elliot, (1996) notes that measurement should be objective in its communities of discussion; it must be made in the same way by all the individuals in a specific community of

reference. By implication, measurements are socially constructed. Luce, Krantz, Suppes and Tversky(1971) notes that the empirical relational structure and its associated empirical properties formulated as axioms should be invariant. They contend that a set of axioms leading to the representational and uniqueness theorems of fundamental measurement may be regarded as a set of qualitative (that is, non-quantitative) empirical laws. It can be inferred from this that the objects of measurement themselves should be viewed in the same way by all individuals, irrespective of their frame of reference. This also means that, given the structure of physical attributes, any physical law that is defined in terms of these attributes must also be invariant. Numerical representations of objects of measurement must therefore be objective in the same way as the underlying object of measurement. However, given that there is consensus the accounting discipline has not succeeded in creating a theory of accounting measurement from the observation of accounting practices of measurement, it can be inferred that the objectivity of the accounting concept of measurement is questionable (Mustovo, 2008b). 33 Money measurement postulate implies two limitations of accounting. First, accounting is limited to the production of information expressed in terms of a monetary unit; it does not record and communicate other relevant but non-monetary information, i.e. accounting does not record or communicate the state of Chairman's health, nor the attitude of the employees, nor the relative advantage of competitive product. Accounting therefore does not give a complete account of the happenings in a business oran accurate picture of the condition of the business. Accounting information is perceived as essentially monetary and quantified, while non-accounting information is non-monetary and not quantified. Although accounting is a discipline concerned with measurement and communication of monetary activities, it has been expanding into areas previously viewed as qualitative in nature. In fact, a number of empirical studies refer to the relevance of non-accounting information compared with accounting information. Secondly, the monetary unit postulate concerns the limitations of the monetary unit itself as a unit of measure. The primary characteristic of the monetary unit – i.e. purchasing power, or the quantity of goods or services that money can acquire – is of great concern. Traditionally, accounting theory has dealt with this problem by stating that the unit of measure postulate is also a "stable monetary postulate" in the sense that the postulate assumes either that the purchasing power of the monetary unit is stable over time or that the changes are not significant. While still accepted for financial reporting, the stable monetary unit postulate is the object of continuous and persistent criticisms (ROHTAK, 2004). This has given rise to different methods of valuation that could possibly address the changes in theory of measurement in accounting as purchasing power of money changes in response to time and inflation or deflation (price level changes).

Theory of Valuation in Accounting:

The process of attaching money measurement to accounting events and items is essentially a process of valuation. Valuation enters into accounting measurements in two senses. First, the money standard of measurement is affected by changes over time. I.e. one Pound today does not have value as one Pound yesterday, neither one Pound tomorrow, particularly where the

purchasing power of money over commodities changes. Second, the use of money measurements in accounting implies a choice between one of several different valuation bases. It is possible to represent the original cost of acquisition of an asset by the enterprise as a representation of a past financial effort. Equally, it is possible to represent the value of an asset to the enterprise in terms of the future net benefits it represents (Glautier, Underdown, & 34 Morris, 2011). Also, it is possible to represent the value of an asset to the enterprise in terms of its current market value or fair value; this forms the theoretical underpinning of this study. Glautier, et al, (2011) observed further, that accounting for changes in the value of money is a subject which has long occupied the attention of accounting researchers. The Sandilands Report of 1975 triggered response from accountant generally. The ensuing lively debate illustrated the problem of producing a convergence regarding the best method of dealing with price level changes, one of the reasons being that a consensus on the fundamental objective of financial reports can not be reached by accountants. As traditional accounting measurement has emphasized only physical and monetary measures, the contemporary accounting measurement is beginning to consider a variety of measurement problems. For instance, the following decisions needs are generating a demand for corresponding measurement techniques (Mock & Grove, 1979):

Fair Value and its economic features

Traditionally, income based on money capital maintenance reporting. Conventional historical cost model serves as an initial foundation for evaluation of stewardship. The introduction of fair value changed the perception and content of traditional accounting income. Despite the fact that fair value has not been mentioned by any of the famous accounting theoreticians, it could serve as a single basis for measurement of all accounting elements – at least on the theoretical level.

The measurement basis, which could be denoted for purposes of this paper as "*fair value or something like that"* is a concept with long history. Richards (2002) showed that a special kind of fair value valuation was introduced by the German and French legislation in 19th century with the impact on accounting practice until beginning of the 20th century. Born bright (1937) worked out the concept of deprival value that encompasses some features of fair value. Of more importance in this period is a MacNeal's work from 1939, in which he preferred measurement of all accounting elements by the economic value.

MacNeal inclines to the economic concept of income, which he defines as a surplus of capital value at the end of the period after the capital was maintained or costs were recovered. As MacNeal prefers the using of market values for measurement of balance sheets elements and calls for the inclusion of all changes (even unrealized) in the value of asset and liabilities in profit and loss, its approach to income determination corresponds to the physical

Methodology

This study employs the content-analysis research method to review literature relevant to International Financial Reporting Standard (IFRS) 13. This is a qualitative analytical research

involving the analysis of documents. These documents are the sources of secondary data, enabling explanation and interpretation of facts. The data generated were analyzed

Data Analysis Result and Discursion of Findings

Dependent Variable:

Profitability forms the dependent variable of this study. Profitability is the primary goal of all business ventures (Unamka and Ewurum, 1995). Without profitability the business will not survive in the long run. It is the return on 'capital employed' or 'investment' or 'equity' (ICAN, 2009). In the context of this work, we shall be taking profitability to be 'Profit after Interest and Taxation'. The reason being that 'Profit after Interest and Tax' is free from encumbrances i.e. all indebtedness associated with the running of the business has been taken care of, except for dividend and retained earnings and other indebtedness which the company wishes to defer payment, which is absolutely the discretion of the directors of the company.

Independent Variables:

The explanatory variables used in this study were: the actual depreciation charged for the year; taxation due for the year under review excluding deferred tax and other taxes not associated with the year under consideration; and inventory traded for the realisation of the said profit and other random (stochastic) variables like dividend, capital allowance, the market size.

Model and Technique for Analysis

The researcher used simple least square regression technique to test hypothesis (i) and (ii),

The justification for adopting this analytical technique rest on fact that the ordinary least square is assumed to be the best linear unbiased estimator (Gujarati and Porter, 2009; Koutsoyiannis, 1977) and it has minimum variance (Onwumere, 2009); related works in other jurisdiction adopted a similar technique in their study. The simple regression model is stated thus:

$$Y = \beta_1 + \beta_2 X + e_i$$

Where: Y = dependent variable

  X = explanatory variable

β_1 = intercept of Y

β_2 = slope coefficients

e_i = stochastic variables. (Gujarati and Porter, 2009;Onwumere, 2009;Ujunwa, 2008)

Hypothesis I

Starting with our first hypothesis which states that, "depreciation has no significant positive impact on profitability of the manufacturing firms under the fair value measurement and historical cost convention".

$RPHC = \beta1 + \beta2DEPHC + ei$.. 1a

$RPFV = \beta1 + \beta2DEPFV + ei$..1b

Hypothesis II

Inventory has no significant positive impact on the reported profit of manufacturing firms under fair value regime and historical cost regime.

$RPHC = \beta1 + \beta2INV_{HC} + ei$.. 2a

$RPFV = \beta1 + \beta2INVFV + ei$..2b

DATA GATHERING:

Data gathered is a reflection of balances in the financial statements; the annual report of International Beverage for 2012 was prepared to reflect financial period of fifteen (15) months (i.e. from the end of 2011 financial year, the report was written for a period of 15

months, ending 31stMarch, 2013). We assumed that the transactions/profits for 2012 financial year happened uniformly to enable us prorate the transactions visa vis the profit to reflect 12 calendar months.

It was observed that not all the companies prepared their annual reports on IFRS as prescribed by the Road Map for the adoption of IFRS. Figures from annual reports prepared with IFRS are asterisked in the tables below.

Table 4.2   Depreciations (DEP) (independent variable) of the five companies

Year Company	PRE-IFRS				POST-IFRS
	2008 □'000,000	2009 □'000,000	2010 □'000,000	2011 □'000,000	2012 □'000,000
CBPlc	496.48	448.51	449.15	774.65	*782.13
GBPlc	3,125.95	3,565.32	4,053.30	4,499.17	5,393.84
IBPlc	48.57	208.26	533.04	938.24	*1,033.46
NBPlc	5,764.62	6,794.66	7,000.83	8,108.66	*16,840.78
7-up BCPlc	1,694.86	2,076.62	2,621.45	2,877.09	*4,254.16

Source: Annual reports of the companies for the stated years

Table 4.3   Inventory (INV) (independent variable) of the five companies.

Year Company	PRE-IFRS				POST-IFRS
	2008 □'000,000	2009 □'000,000	2010 □'000,000	2011 □'000,000	2012 □'000,000
CBPlc	1,395.22	1,192.54	1,591.57	2,169.12	*2,251.72
GBPlc	35,611.02	46,509.60	61,672.05	68,619.52	70,088.25
IBPlc	545.44	1,099.33	3,030.37	6,785.01	*7,749.92
NBPlc	74,561.95	88,734.44	98,694.86	117,151.71	*127,222.07
7-up BCPlc	18,058.65	20,631.99	24,008.84	31,894.10	*38,116.60

Source: Annual reports of the companies for the stated years

Table 4.4   Taxation (TAX) (independent variable) of the five companies.

Year Company	PRE-IFRS				POST-IFRS
	2008 □'000,000	2009 □'000,000	2010 □'000,000	2011 □'000,000	2012 □'000,000
CBPlc	0.00	(.69)	0.00	(576.21)	*(592.17)
GBPlc	5,232.07	5,450.57	6,252.37	8,249.03	6,403.76
IBPlc	0.00	0.00	0.00	42.99	*70.34
NBPlc	11,818.52	13,489.70	14,548.13	18,709.19	*17,581.65
7-up BCPlc	871.89	693.76	743.01	247.53	*859.98

Source: Annual reports of the companies for the stated years

At the proposal stage of this work, we proposed using a time series figure data from the relevant years (i.e. three years pre-IFRS and two years post-IFRS). We had expected that the financial statement would be prepared in 2011 to comply with IFRS, to aid the transition in 2012, thus bringing the number of years of compliance to IFRS to 2 years. But it wasn't so. Along the line it was also researched that 3 and 2 observations for pre and post IFRS respectively might not be enough for regression. Asa result of this, a cross-section data of the companies of our consideration (see 3.4) for 2011 and 2012 to reflect pre-IFRS and postIFRS were used as the data for this study.

4.5 DATA PRESENTATION

Table 4.5 Pre-IFRS (2011) data of the dependent and independent variables

	PRE-IFRS (Historical Cost Accounting)			
	RP_{HC}	DEP_{HC}	INV_{HC}	TAX_{HC}
	□'000,000	□'000,000	□'000,000	□'000,000
CBPlc	-1,825.76	774.65	2,169.12	-576.21
GBPlc	17,927.93	4,499.17	68,619.52	8,249.03
IBPlc	147.35	938.24	6,785.01	42.99
NBplc	38,408.85	8,108.66	117,151.71	18,709.20
7upBCPlc	11,387.18	2,877.09	31,894.10	247.54

Source: Annual report of the companies for the stated year

The table above displays the respective balances of reported profit, depreciation, inventory and taxation for the pre-IFRS period of 2011.

Table 4.6 Post-IFRS (2012) data of the dependent and independent variables

	Post-IFRS (Fair Value)			
	RP_{FA}	DEP_{FA}	INV_{FA}	TAX_{FA}
	□'000,000	□'000,000	□'000,000	□'000,000
CBPlc	-1,336.69	782.13	2,251.73	-592.18
GBPlc (dummy)	0.00	0.00	0.00	0.00
IBPlc	2,917.41	1,033.46	7,749.92	70.35
NBPlc	38,042.71	16,840.78	127,222.07	17,581.65
7upBCPlc	2,068.53	4,254.16	38,116.60	859.98

Source: Annual report of the companies for the stated year

The table above display the respective balances of reported profit, depreciation, inventory and taxation for the post-IFRS period of 2012.

DESCRIPTIVE STATISTICS

Table 4.7 Descriptive Statistics Result (Historical cost)

	RP_{HC}	DEP_{HC}	INV_{HC}	TAX_{HC}
Mean	13209.11	3439.562	45323.89	5334.510
Median	11387.18	2877.090	31894.10	247.5400
Maximum	38408.85	8108.660	117151.7	18709.20
Minimum	-1825.760	774.6500	2169.120	-576.2100
Std. Dev.	16257.85	3024.814	48036.08	8309.495
Skewness	0.681300	0.689037	0.613246	0.940682
Kurtosis	2.164797	2.113619	1.914477	2.277440
Jarque-Bera	0.532134	0.559325	0.558884	0.846171
Probability	0.766388	0.756039	0.756206	0.655023
Observations	5	5	5	5

Source: Eviews estimation output window

Table 4.8 Descriptive Statistics Result (Fair Value)

	RP_{FV}	DEP_{FV}	INV_{FV}	TAX_{FV}
Mean	8338.392	4582.106	35068.06	3583.960
Median	2068.530	1033.460	7749.920	70.35000
Maximum	38042.71	16840.78	127222.1	17581.65
Minimum	-1336.690	0.000000	0.000000	-592.1800
Std. Dev.	16689.67	7042.923	53746.20	7841.967
Skewness	1.462126	1.317240	1.231029	1.483855
Kurtosis	3.200184	2.970833	2.821877	3.228220
Jarque-Bera	1.789859	1.446112	1.269471	1.845705
Probability	0.408636	0.485267	0.530076	0.397384
Observations	5	5	5	5

Source: Eviews estimation output window

Tables 4.7 and 4.8 displayed the outcomes of the descriptive statistics of the two sets of data, when the companies used historical cost convention, and fair value measurement, as a basis of valuing its assets. Comparing the mean RP_{FV} (₦8,338.39m) with the mean RP_{HC} (₦13,209.11m), it was observed that the mean RP_{HC} is higher in value than the RP_{FV}; meanwhile, the mean inventory that generated the mean reported profit, INV_{HC} (₦45,323.89m) is higher than INV_{FV} (₦35,068.06m). On the hand, in the wear and tear (depreciation) of the long term non-current assets that generated the inventories and as well

profits; the mean DEPHC(₦3,439.562m) is lower than DEP_{FV}(₦4,582.11m). In the case of taxation that resulted from the reported profit, TAX_{HC}(₦5,334.51m) is higher than TAX_{FV} (₦3,583.96m). Further analysis of the outcomes of tables 4.7 and 4.8 using simple ratio/percentage revealed the ratio of 'mean-depreciation' to 'mean-inventory' under historical cost convention of 0.08(8%), and 0.13(13%) under fair value. Also, ratio of 'mean-depreciation' to 'mean-profit' of 0.26(26%) under historical cost convention and 0.55(55%) under fair value measurement; both points to the fact that more provision for replacement of existing assets is made under fair value measurement than historical cost convention. The ratio of 'mean-profit' to 'mean inventory' is 0.29(29%) under historical cost and 0.24(24%) under fair value; reflecting that more profit is made and declared using historical cost than when fair value is in use. The consequence is the payment of more tax under historical convention than fair value. This is evidenced in the ratio of 'mean-tax' to 'mean-inventory', which reflect 0.12(12%) under historical costand 0.10(10%) at fair value.

TEST OF HYPOTHESIS ONE

H0: Depreciation has no significant positive impact on profitability of manufacturing

firms under the fair value measurement and under historical cost convention.

H1: Depreciation has significant positive impact on profitability of manufacturing firms

under fair value accounting and under historical cost convention.

Dependent Variable: RP_{FV}
Method: Least Squares
Sample: 1 5
Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DEP_{FV}	2.320442	0.277528	8.361104	0.0036
C	-2294.120	2161.834	-1.061191	0.3665

R-squared	0.958852	Mean dependent var	8338.392
Adjusted R-squared	0.945136	S.D. dependent var	16689.67
S.E. of regression	3909.220	Akaike info criterion	19.66924
Sum squared resid	45845993	Schwarz criterion	19.51301
Log likelihood	-47.17309	F-statistic	69.90805
Durbin-Watson stat	1.274273	Prob(F-statistic)	0.003587

Table 4.9 Regression result on the impact of depreciation on reported profit under fair value regime
Source: EViews estimation output window

Model equation $RP_{FV} = -2294.12 + 2.32DEP_{FV} + e_i$

Dependent Variable: RP$_{HC}$
Method: Least Squares
Sample: 1 5
Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DEP$_{HC}$	5.367050	0.166872	32.16260	0.0001
C	-5251.190	730.2489	-7.190959	0.0055

R-squared	0.997108	Mean dependent var		13209.11
Adjusted R-squared	0.996144	S.D. dependent var		16257.85
S.E. of regression	1009.516	Akaike info criterion		16.96150
Sum squared resid	3057365.	Schwarz criterion		16.80528
Log likelihood	-40.40376	F-statistic		1034.433
Durbin-Watson stat	0.978974	Prob(F-statistic)		0.000066

Table 4.10 Regression result on the impact of depreciation on reported profit under historical cost regime
Source: EViews estimation output window

Model equation $RP_{HC} = -5251.19 + 5.37DEP_{HC} + e_i$

Dependent Variable: RP$_{HC}$
Method: Least Squares
Sample: 1 5
Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INV$_{HC}$	0.335503	0.025731	13.03864	0.0010
C	-1997.213	1606.977	-1.242839	0.3022

R-squared	0.982660	Mean dependent var		13209.11
Adjusted R-squared	0.976879	S.D. dependent var		16257.85
S.E. of regression	2472.079	Akaike info criterion		18.75268
Sum squared resid	18333520	Schwarz criterion		18.59646
Log likelihood	-44.88170	F-statistic		170.0061
Durbin-Watson stat	1.051178	Prob(F-statistic)		0.000974

Table 4.12 Regression result on the impact of Inventory on reported profit under historical cost regime
Source: EViews estimation output window

Model equation $RP_{HC} = -1997.21 + 0.3355INV_{HC} + e_i$

The outcomes displayed in tables 4.9 and 4.10 revealed that depreciation has a positive and significant impact on profitability of manufacturing firms under fair value (R^2=0.959; AR2= 0.945; t-value = 8.36; F-stat = 69.908; DW = 1.274; p-value 0.0036 < 0.05) and under historical cost convention (R^2= 0.997; AR2= 0.996; t-value =32.16; F-stat = 1034.45; DW = 0.979; p-value 0.0066 < 0.05). The t-statistics is the ratio of an estimated coefficient to its standard error, is used to test the hypothesis thata coefficient is equal to zero. To interpret the t-statistic, the critical t-value (tc) is obtained, it is value that separates the "acceptance" region from the "rejection". The hypothesis that the coefficient is zero is rejected at the 5% significance level if the calculated t-value is greater than the critical t-value (Johnson, n.d.). In this case t calculated of 8.36 (FV) and 32.16 (HC) is greater than tcritical 2.31 (df= N+ N-2). The

tstatistic outcome is further backed-up by probability of observing the t-statistic given that the coefficient equals zero. The probability value (p-value/prob./marginal significance level) denotes the probability of drawing a t-statistic asextreme as the one actually observed, under the assumption that the errors are normally distributed, or that the coefficients are asymptotically normally distributed. It represents the probability of making a Type I error if the null hypothesis, that the coefficient is zero, is rejected. The rule is, a p-value lower than significance level of .05 (5%) suggests rejection of the null hypothesis (Markovic, 2002); in this case, the p-value is 0.0036 under fair value and 0.0066 under historical cost convention, the p-value are lower than 0.05, reject the null hypothesis. 72 F-statistic tests the hypothesis that all of the slope coefficients (excluding the constant) are zero. It can be explained by the p-value printed just below the F-statistic in the EViews regression output, denoted Prob(F-statistic), represents the marginal significance level of the F-test. The rule is if the p-value is less than the significance level of 0.05; reject the null hypothesis that all slope coefficients are equal tozero. In this case, p-value (0.003587 at fair value and 0.000066 at historical cost) is less thansignificance level of 0.05; therefore the null hypothesis is rejected. Durbin-Watson (DW) statistic measures the serial correlation in the residuals. The rule is, if the DW is less than 2, there is evidence of positive serial correlation. In this case, DW is 1.274 under historical cost data and 0.979 under fair value data, both are less than 2. R-squared measures the success of the regression to predict the values of the dependent variable within the sample. In standard setting, may be interpreted as the fraction of the variance of the dependant variable explained by the independent variables. The statistic will equal one if the regression fits perfectly, and zero if it fits no better than the simple mean of the dependent variable (Markovic, 2002). R2(0.958852 at fair value and 0.997108 at historica cost) shows a strong ability of the independent variable to predict the dependent variable. Adjusted R-squared penalises for the addition of repressor which do not contribute to the explanatory power of the model. The AR2is never larger than the R2, can decrease as you add repressors and poorly fitted models, may be negative (Markovic, 2002). In this case, AR2(0.945 under fair value and 0.996 under historical)shows the effect of repressor. Therefore, we reject the null hypothesis and acceptthe alternate hypothesis that depreciation has significant positive impact on profitability of manufacturing firms under fair value accounting and under historical cost convention. Hence an increase in depreciation would lead to a significant positive increase in profitability under fair value and under historical cost convention.

Findings Based on Objectives:

4.5.3.1 Objective One:

To ascertain the influence of depreciation on profitability of manufacturing firms in

Nigeria under the fair value and under historical cost convention. The regression results which showed that the relationship between depreciation and reported profit was positive and significant under fair value and under historical cost convention, confirmed that this objective has been met. The results provide a proof that the size of depreciation would

determine the ability of a manufacturing firm to report profit, thereby contributing to the maximization of shareholders wealth other things being equal. The

descriptive statistic revealed that under historical cost accounting manufacturing firms made

lower depreciation to be charged against revenue than in fair value accounting; lower

depreciation could affect negatively, the ability of the firm to replace the asset when the need 77 arises. The finding is consistent with the work of Bessong and Charles (2012), whose analyses showed that the depreciation charged to the revenue using historical cost were low as compared to current cost method thereby making reported profit to be overstated.

Conclusion and Recommendations

Directly or indirectly, financial reporting measurements – of performance and financial position – affect almost everyone. They help to determine the allocation of capital across countries, economic sectors and companies and within individual businesses. They may well determine whether a business is regarded as a failure or a success, whether its employees earn a bonus, whether they keep their jobs, what dividends investors receive, and how much tax the business pays. The main objective of this study is to examine empirically the relation between fair value measurement, and historical cost convention in determining profitability of manufacturing firms using data from the Nigerian jurisdiction. The effort was spurred by the adoption of IFRS as a base for reporting financial activities of publicly and privately owned business entities. Using the OLS simple regression, correlation coefficient and t-statistic, and using reported profit as a proxy for performance, depreciation as a proxy the ability for continuity and expansion, inventory (cost of sales) as a proxy for manager's effort, and taxation as a proxy for return to the society. The empirical findings provide strong support for the proposition that the historical cost convention could in the long run lead to the erosion of shareholders fund and that fair value accounting gives a more conservative view of the activity of an economic entity and as such, should be encouraged. Other key factor as indicated in the results is that profitability is influenced by the wear and tear (depreciation) and cost of sales (inventory) and has relationship with taxation.

Recommendations

In view of the foregoing, the following recommendations were made:

i) Companies should prepare their financial report using fair value measurement since it gives a more conservative view of the financial state such that the accounting principle of prudence is upheld.

ii) Accounting bodies in Nigeria should organise workshops for accountants and

managers of companies to create adequate awareness on international financial

reporting standards vis á vis fair value measurement and the need avoid historical cost

convention particularly during inflationary period.

iii) The local standard setting body i.e. should see to it that compliance to IFRS it total in consonance with the provisions of the road map; already spelt out sanction should be implemented of defaulters. Also subsequent implementation of sensitive issues as this should not be in a hurry. For example, the Road Map Committee sent in their recommendations in 2010 and the first set of compliance was in 2012. Two years is too short for a company with complex systems to comply.

iv) The head of accounting departments of tertiary institutions and other institution where accounting is taught should ensure that illustrations are done using the relevant IFRSs to prepare the students for challenges ahead.

v) The Securities and Exchange Commission of Nigeria should make account prepared

on fair value measurement a precondition for filing annual returns in the commission.

Also, the submission of accounts and financial statements prepared on fair value accounting is made a prerequisite for firms to be listed on the stock market. By this action, the interests of naive and experienced investors alike are protected especially in this period of incessant inflation.

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