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APPLICATION OF HISTORICAL COST ACCOUNTING AND FAIR VALUE MEASUREMENT, VERSUS INFLATION ACCOUNTING: EVIDENCE OF LISTED MANUFACTURING FIRMS IN NIGERIA



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Abstract

This mixed research is an application of historical cost, fair value measurement and inflation accounting on the listed manufacturing firms in Nigeria. The study collected data from both primary and secondary sources. The data obtained was analysed using inflation accounting adjustments and chi-square. The chi-square was used for questionnaire response and to test the hypotheses formulated. The findings suggest that if historical cost accounting, fair value measurement and inflation adjusted accounting are adopted together, they are effective for quality reporting and best practice. The paper strongly recommends that both the historical cost accounting and inflation adjusted accounting should be adopted together for effective quality reporting. More so, ignoring general price level changes in financial reporting creates distortion in financial statements. The paper strongly suggests for a speedy implementation of all the recommendations made to ensure multidisciplinary assessment, compliance to global best practices and sustainable development.

Keywords: *Application of Historical Cost, Fair and Value Measurement Accounting*

Background to the Study

The concept of historical cost accounting and inflation accounting has been a source of concern in financial reporting. Globally, china has more prominent trend of domestic price rise where as china corporate accounting is mainly based on historical cost Ahmad (2003). In the United States, the financial accounting standard board in 1979, issued statement of financial accounting standard board in 1979, issued statement of financial accounting standard No.33 (SFAS33) term 'financial reporting and changing prices' Zaid (2011.) According to him, this was later replaced by statement of financial accounting standard No.86 (SFAS89) in 1986, titled "financial reporting and changing prices". In United Kingdom also, there was the accounting for stewardship in a period of inflation, published in 1968 by the research foundation of the Institute of Chartered

Accountants of England and Wales (ICAEW). In Nigeria, he also reported that the Financial Reporting Council of Nigeria (FRCN) which replaces the Nigerian Accounting Standard Board (NASB) has not issued any standard in relation to this concern. Also, they have neither called for compliance with IAS29 on hyper inflation and the measurement despite the persistent hyper inflationary environments, in which entities operate in the country. Also, the conflicting financial result on the relevance of inflation accounting is in contrast with historical cost. The harsh operating environment hampered the performance of most companies as shown in the quarterly results of quoted companies in Nigeria. NSE (2011)

Traditionally, there have been two main reasons for the preparation of accounts. The first is to fulfill the needs of the owners of a business. Today it is normal that the control of a business is divorced from its ownership. The directors of a company who manage its day-to-day affairs are required by law to provide the shareholders with stewardship accounts. These are intended to help the shareholders assess the effectiveness with which their investment is being managed. The main objective of financial reporting is to provide information of an organisation to its varied users. However, the issue in question is to determine what type of reporting method that should be adopted. It is a well known fact that a financial statement should reflect a true and fair view of the business affairs of an organisation. Research on inflation accounting has made great strides in past years. The bone of contention is that the historical cost principle does not make provisions for adjustments that have to do with price changes. In this method, selling price is stated at current price while the costly assets are stated at actual or historical cost. This normally gives rise to over-statement of profit as well as over payment of tax and dividend.

(Ezejelue, 1990) puts it that for many years, the conventional historic cost basis of financial reporting has been under sharp attack for its failure to recognize the impact of changes in the business environment, especially the effect of price level changes due to inflation and deflation. He stressed that in a period of inflation the value of money falls as such, money buys less in terms of goods and services. He also emphasized that in period of deflation the value of money rises and purchases more in terms of goods and services. Therefore, it is assumed that accounting systems are supposed to measure and report accurately financial activities that leads to rational decisions during periods of rising or falling prices.

Hence, historic accounting may make it difficult to realize this aims during periods of inflation. It is generally accepted that the historic accounting has not helped Nigeria as a nation since the Nigerian economy has over the years, especially from 1992 to 1996, experienced hyper inflationary trend; Fodio and Salaudeen (2012). Although, the information needs of internal and external users may differ considerably, it has become increasingly clear that they both rely on the same accounts which are usually prepared on a conventional historic cost basis which in other

words is referred to as historical cost accounting. Despite the campaign in some quarters in recent times for financial statements to be prepared using other accounting basis – current value and general price changes, it is important to note that historical cost accounting basis still enjoys superiority over the others.

Several researches conducted have been on comparative analysis of the relevance of historical cost accounting and inflation adjusted accounting. Zaid, 2011, argued that in Nigeria, no amount of effort could be seen from the regulatory authorities in addressing the effect of inflation on financial reporting. According to him, the Nigerian Accounting Standard Board (NASB) now Financial Reporting Council of Nigeria (FRCN) has not issued any standard in compliance with IAS 29, not minding the persistent hyper inflationary environments, in which entities operate in Nigeria. However, there is no recent research study on the impact of historical cost accounting and inflation accounting disclosures on the listed manufacturing firms in Nigeria, linking it with compliance to the most recent international financial reporting standard. (IFRS).

Generally, different firms may use different accounting principles in making comparison among firms even within the industry. Nevertheless, in as much as fair value accounting seems to result in a situation where comparability and consistency are more compromised than in the traditional accounting model, the major objective of any business organisation is to make profit. However, the method of accounting they use in reporting their profit may make the objective unrealistic during inflationary period. This raises the basic question about the reality of using the financial statements prepared on historical cost for effective quality reporting.

This paper seeks to consider the issue of lack of reliability of using fair value and historical cost accounting instead of inflation accounting as an appropriate basis for effective quality reporting disclosures in Nigerian listed manufacturing firms. The study examines both historical cost accounting and inflation accounting. The paper is divided into four sections. Section one deals with introduction and definition of key terms, section two deals with review of related literature, section three deals with the methodology of the research. The fourth and final section deals with summary, conclusion and recommendations.

Review of Related Literature

Conceptual Framework of Historical Cost and Inflation Accounting

a. Concept of Accounting

Accounting concepts and conventions are used in accountancy as the principles, rules and guidelines by which the accountants live. Individuals and groups of person have provided several definitions for accounting depending on how they viewed it.

Agboroh (1999) defined accounting as “the application of book-keeping principles and techniques in recording, classifying and summarizing financial transactions and interpreting the result thereof to various users of information”. Accounting could also be defined as the art of recording classifying and summarizing in a significant manner in terms of money, transactions and events which are in part atleast, of a financial character and interpreting the result thereof (AICPA). In another perspective, it could be seen as the language of business or commerce. It could be considered as a system, an activity, a technique or as a discipline of study. It could also be defined as the process of identifying measuring and communicating economic information to permit informed judgments and decisions by users of the information (AAA). Accounting is different from book-keeping. The latter means the recording of business activities called transactions. It is the record-making phase of accounting. Thus it is a subset of accounting since accounting extends to the analysis and interpretation of records. The historical cost account convention is an accounting technique that values an asset for balance sheet purposes at the price paid for the asset at the time of its purchase. The historical cost accounting is the situation in which accountings record revenue, expenditure and asset acquisition and sale at historical or actual cost. It requires all financial statement items to be based on original cost

b. Historical Cost

This is the original monetary value of an economic item (Wikipedia). It could also be seen as a generally accepted accounting principle requiring all financial statement items to be based on original cost. Original cost means what it cost the company for the item. In other words it is the actual amount of money or money's worth, received or paid to complete the transaction (Duncan, 2003)

c. Historical Cost Accounting

This is the situation in which the reporting accountant and/or management use historical cost in recognizing, measuring and valuing an item of revenue, expense, gain, loss, asset or liability. In other words it is the actual amount of money whether paid or unpaid at the time of the transaction that is used in the recording, classifying and summarizing of the financial transactions.

Methodology of historical cost accounting under the historical cost accounting cost is the basis for initial accounting recognition of all assets acquisition, services rendered, creditors and owners interest (Ola, 2001) historical cost accounting operates based on two principal assumptions. Firstly, it assumes that assets purchased many years ago, still cost the same amount today secondly, it assumes that inventories have a constant price irrespective of the time when they are to be replaced in the store. The two principal assumptions have generated a lot of criticisms against the historical cost accounting basis in recent times. The greatest limitations of the historical cost accounting concepts have stemmed from its inability to reflect the effects of changing price levels.

But before delving into the details of those limitations, let us first consider the advantages of historical cost accounting.

1. Advantages of Historical Cost Accounting

Safeguard the integrity of accounting data: Historical cost accounting system enables both accountants and management to guard the integrity of their data against internal modifications. The idea of using current cost or exit price as advocated under the other systems open room for manipulation of these numbers by management. The integrity of the data is always maintained because of the fact that the data is supported by evidence such as invoices, receipts, etc. This can only be achieved under the historical cost accounting system.

2. *Provides Significant Range of Alternatives for Measuring Accounting Data:* The historical cost accounting system provides reporting accountants and managers with a significant range of alternatives in recognizing, reporting and measuring accounting data. The various methods, for instance, for the valuation of stock or for the calculation of annual depreciation, all provide the reporting accountant with a wide range of alternatives to choose from. Under such a situation, all that the reporting accountant needs to bear at the back of his/her mind is to be consistent with the alternative adopted. And where there is a need to change the alternative, adequate explanations should be provided for.

3. *Basic Cost Data Provide the Basis to Forecast Future Operational Costs:* Historical cost accounting system assist managers to plan and forecast future operational costs. The ability of a manager to make authentic forecast is often based on previous experience and past actual cost data. Records based on historical cost accounting system enable accountants and management to set standards and prepare budgets which consequently promote efficiency in the management of the company's resources. The basic function of historical cost accounting is to tell an accounting information user "the cost of a thing". Without knowing the original costs future projects might be hampered.

Provides reliable and verifiable data: Historical cost accounting play an important role here by providing reliable accounting information since its principles are based on recording original or actual costs, it therefore does not only provide a record of actual transactions but also figures that are objective, reliable, verifiable and most often credible.

General usefulness and acceptability of financial statements: Financial statements based on historical cost accounting system have over time gain wide recognition and acceptability. Empirical evidence indicates that various interest groups, for instance, government, lenders, etc

find the conventional financial statements more useful than those prepared under the dreamt modern accounting systems. The general acceptability may not be unconnected with the fact that in all the various accounting system that is guarded by legal rules, concepts and conventions (within the framework of generally accepted accounting practice).

Limitations of historical cost accounting

Despite the advantages of historical cost accounting system as discussed in section three of this paper, critics have identified flaws in its operation. The flaws identified as limitations include, among others, the following. Fixed Asset Values are Unrealistic: Historical cost accounting system, over a period of time has been subject to many criticisms, especially as it considers the acquisition cost of assets and does not recognize the current market value. Historical cost accounting is only interested in cost allocations and not in the value of asset. While it tells the user the acquisition cost of an asset and its depreciation, it ignores possibility that the current market value of that asset may be higher or lower than it suggests. The assumption that assets purchased many years ago, still cost the same amount today is hardly a reflection of reality. For instance, while capital items are valued at historical cost, items related to the year in which the accounts are prepared such as raw materials, wages and salaries are valued at current prices. Thus the matching of historical costs such as depreciation of fixed assets with current revenue (in current prices) may result in inflated profits which might be paid out in form of dividends. The balance sheet value of the assets especially fixed assets are understated in relation to their current market value. Thus return on capital employed may be overstated hence the performance of the company is exaggerated (Ola 2001).

Depreciation is inadequate to finance the replacement of fixed assets

This criterion is generally well understood and, you will appreciate, that what is important is not the replacement of one asset by an identical new one (something that rarely happens) but the replacement of the operating capability represented by the old asset. Another criterion of historic cost depreciation is that it does not fully reflect the value of the asset consumed during the accounting year. The understated depreciation, overheads and cost of sales result into overstated profits. The national profits could then be distributed as dividends, which may eventually lead to capital erosion.

Holding gains on stocks are included in profit

During a period of high inflation the monetary value of stocks held may increase significantly while they are being processed. The conventions of historical cost accounting lead to the realized part of this holding gain known as stock appreciation) being included in the profit of the year. It is estimated that in recent years nearly half the declared profits of companies were due to stock appreciation. Consequently, since the reported profit includes this holding gain, the tax that the company will eventually pay to the government may be in excess of what it should have paid.

Profits or losses on holdings of net monetary items are not shown

In periods of inflation the purchasing power, and thus the value of money fall. It follows therefore, that an investment in money will have a lower real value at the end of a period of time than it did at the beginning. Indeed a loss has been made. Similarly, the real value of a monetary liability will reduce over a period of time and a gain will be made under the historical cost accounting system neither the losses nor the gains on these items are shown in the financial statements.

The true effect of inflation on capital maintenance is not shown

To a large extent this follows from the points already mentioned. It is a widely held principle that distributable profits should only be recognized after full allowance has been made for any erosion in the capital value of a business. In historical cost accounts, although capital is maintained in nominal money terms, it may not be in real terms. In other words, profits may be distributed to the detriment of the long term viability of the business. This criticism may be made by those who advocate capital maintenance as measure by naira of current purchasing power.

Comparisons over time are unrealistic

Historical cost accounting information tends to create an exaggeration of growth over time. For example, if a company's profit I 1981 is N2, 000,000 and in 2001 N5, 000,000, a shareholder's initial reaction might be that the company had done rather well. If however, it was then revealed that with N1, 000,000 in 1981 he could buy exactly the same goods as with N5, 000,000 in 2001, the apparent growth would seem less impressive.

Concept of Inflation Accounting

Inflation accounting is a term describing a range of accounting systems designed to correct problems arising from historical cost accounting in the midst of inflation or rising prices Wikipedia (2013). Therefore inflation accounting is used in countries experiencing hyper inflation IFRS 13 formerly IAS depicting the standard developed by International Accounting Standard Board, requires such countries corporate financial statements to reflect adjustments for changes in purchasing power using a price index.

Sandilands reports (1975) defined inflation accounting as used in countries experiencing high inflation or higher inflation. Financial dictionary defined inflation accounting as a term describing a range of accounting systems designed to correct problems arising from historical cost accounting.

Assessing the Relevance of Historical Cost Accounting and Inflation Accounting Disclosure: Compliance with IFRS in Nigerian Firms

In the midst of inflation, inflation arises due to price level changes or due to fall in purchasing power of money. According to Perrymason, the conventional historic method of accounting was designed for periods of stable price levels. An increase in the general level of prices implies a decrease in the purchasing power of the currency. Therefore increases in the price level normally erode the value of money. In judging the effect of price level changes on the actual costs, Solomon (1997) argued that accounting practice of which reporting of profit is foundermental is motivated by and responds to development that enhances the power of accounting to represent neutrally, a given economic reality. This is basically the reason, for assessing the impact of inflation in measurement of financial performance based on reported financial statements Perymason in Ezejelue (1990) noted that without adjustment of figures the income statement suffers from price level changes by lack of comparability of the accounting figures, from failure of depreciation and similar costs to reflect the current price level therefore to be comparable with the current revenue figures, and from the resulting diminished significance of the reported net income. The current IFRS certifies three basic accounting models:

- 1 **Current Cost Accounting**
By virtue of the contents of the conceptual frame work, under physical capital maintenance at all levels of inflation and inflation, under the historical cost paradigm as well as the capital maintenance in units of constant purchasing power (CPP).
- 2 **Financial Capital Maintenance in Nominal Monetary Units**
This has to do with globally implemented historical cost accounting during low inflation and deflation only under the historical cost.
- 3 **Financial capital maintenance in units of constant purchasing power**
This method adopts computations in terms of a daily consumer price index or daily purchasing price index.

The primary aim of measuring business income in accounting is to provide useful information to those who are interested in providing quality financial reports. These various methods in include.

Historical Cost Method

This method depends on the matching concept of accounting. Income here is determined by taking away the actual operating costs of the period from the revenue as they are earned or incurred, not as money received or paid. The main problem with this method is not it does not show the effect of inflation on the figures either for investors or managers. Another criticism is that

transactions are recorded in monetary terms as at the date of the actual transactions and movements in price levels are overlooked.

Replacement Cost Method

Under this method firm's asset (including stocks) are valued at their replacement costs or prices. Hence costs of sales are equally valued at replacement costs. John and Shirish (1978) that differences arising from substituting replacement for historical cost of stocks are generally small. They however suggested that the differences arising in the case of fixed assets can be substantial for capital intensive industries than own old plants and equipment. Replacement cost method is based on some adjustments using general consumer price index, general purchasing price index or specific price index. The concern raised by (FASB, 1980) in Effiong and Kekung (2012) highlighted that the usefulness of accounting information about an enterprise increase greatly if it can be compared with similar information about other enterprises. Hence in as much as fair value accounting seems to result in a situation where comparability and consistency are more compromised than in the traditional accounting model, the method of accounting an organisation can use in reporting profit may make the profit objective unrealistic during inflationary period.

Resale Price/ Net Realisable Value Method

The proponents of this method advocate that inventories and other assets should be valued at their net realisable values. That is, precedes less expense of sales. This means that revenues are recognized at an earlier date before sales, that is, at the date the net realisable values were placed on the assets concerned. Therefore, during falling prices, low income or great losses are reported using this method of measurement because the actual historical costs are higher than the net realisable value. Advocates of this method believe that it provides on a regular basis the "current cash equivalents" of assets and presumably of the company itself for the purpose of decisions regarding possible adaptations. Depreciation charges under this method are calculated by working back from the latest valuation and it is the difference between the latest net realisable value of the asset and the one that applied at the beginning of the period. The depreciation charges also affect the reported net income for the period. Some critics of this method have argued that problems do arise where the assets have no market value due to obsolescence. There are also problems when obsolete assets which have been written off the firm's record are still use. These problems make the use of this method very difficult. Its use also increases risk and creates great variation in reported income.

Economic Value/Net Present Value Method

Under this method, the value of each asset is the present value of the net cash flows the asset is expected to generate in the future. This value is estimated by deducting the discounted ye-to-be-

incurred costs from the discounted expected future returns from the assets. Depreciation expense in this case is the difference between the latest net present value and that calculated at the beginning of the period after adjusting for any movement in price index. There is an element of subjectivity in this method since the selection of the discounting factor is done arbitrarily; problems do arise also in the estimation of the expected future cash flows associated with the assets. These deficiencies make the practical application of this method very difficult.

Current Purchasing Power (CPP) Method

The former statement of standard accounting practices (SSAP) 7 recommended the adjustment of historical financial statements to reflect the effects of inflation on the current purchasing power of money. The general (retail) price index is used for such adjustments. Under this method, net income is defined as the amount left over after maintaining the purchasing power of capital. The industrial sectors tend to do badly on the net income and loss conversion, chiefly, because of their large holdings of non monetary assets (plant and buildings) whose current depreciation charges have to be recalculated in current purchasing power term. Also the elimination of the inflationary element in the valuation of closing stocks under this method reduces the net reported income. The critics of this method have argued that the retail price index on which CPP is based obviously measures the average of certain retail prices but not all and that the CPP converted incomes figures do not represent values at all, rather they merely represent amounts. Also, increased CPP net income, for instance, in no way increase the sum value of description of shareholder. Furthermore, the discrepancy between the retail price index used for the CPP conversion and the actual replacement costs of many companies fixed assets and raw material stock, has become greater than ever due to the international crises in commodities, fuel and currency conversion rates.

Current Cost Accounting (CCA) Method

SSAP 16, IAS 15 and 29 requires the presentation of an annual supplementary financial statement to reflect the current costs of transactions carried out during the period. This involves the adjustment of the historical costs using the relevant price index. In CCA, net income is what is left over after charging against revenue the current value of the physical assets consumed during the period. This is based on the promise that, in inflationary conditions, historical cost method does not observe the matching concept correctly – it matches historical costs against current revenues. The depreciation and cost of sales adjustments are made in order to charge against current year's operating income, the current cost of fixed assets, stocks and work-in-progress consumed within the year.

The critics of this method have argued that it is unrealistic because it bases the value of assets on present day costs of similar but not necessarily identical assets which organisations do not own and might never acquire. Also during falling prices, the historical pressure of inflation will become

irrelevant and thus, render the CCA method inappropriate for measuring income. Other critics contend that the outsider can not know what relative indices to use and that since these indices are not available to analysts, this method can not be used as a forecasting tool for investment purposes. In addition, the discretionary nature and subjective element in this method do not make for healthy comparison, particularly where different indices were used by different but similar companies.

Opportunity Value Method

The proponents of this method advocate that assets should be valued based on their opportunity costs. That is, the value they would have in their best alternative use. The alternative use could be a different pattern of employment of the assets within the firm. This value is determined by discounting the quasi-rent expected to be earned in that use. This method is therefore subjective. The opportunity value method can only be objective if the alternative is to dispose of the assets. There is a problem of whether to use the entry or exit value of the assets. This exit value approach has been criticized because it leads to the anticipation of operating profit before sale by valuing stock in excess of the current costs incurred in their production.

Theoretical Framework

The theory that surrounds this study is the concept of historical cost basis and inflation accounting in financial statements. Fair value accounting (also known as replacement cost accounting or current cost accounting) was widely used in the 19th and early 20th centuries, but historical cost accounting became imminent and widespread after values overstated during the 1920s were reversed during the great depression of 1930's Wikipedia (2013). According to this report, most principles of historical cost accounting were developed after the wall street crash of 1929, including the presumption of a stable currency. (Epslem, Barry; Eva and Jerma Koiweiz (2007). Over the years accounting bodies have introduced relatively a good number of alternative accounting methods to historical cost accounting. Opportunity costs are normally used in economics and have little or no value here. However, accounting bodies have developed several methods of accounting incorporating the current asset value as opposed to the conventional acquisition cost. Replacement cost could also be used as an alternative cost method. Kevin (2007) defined replacement cost as the estimated amount that would have to be paid in order to replace the asset as at the date of valuation. Replacement cost focuses on the services the asset will provide rather than the physical asset itself.

History of Inflation Accounting

Accountants in the United Kingdom and the United States have discussed the effect of inflation on financial statements since the early 1900s, beginning with index number theory and purchasing power. Irving Fisher's 1911 book *The Purchasing Power of Money* was used as a source by Henry

W. Sweeney in his 1936 book *Stabilized Accounting*, which was about Constant Purchasing Power Accounting. This model by Sweeney was used by the American Institute of Certified Public Accountants for their 1963 research study (ARS6) *Reporting the Financial Effects of Price-Level Changes*, and later used by the Accounting Principles Board (USA), the Financial Standards Board (USA), and the Accounting Standards Steering Committee (UK). Sweeney advocated using a price index that covers everything in the gross national product. In March 1979, the Financial Accounting Standards Board (FASB) wrote *Constant Dollar Accounting*, which advocated using the Consumer Price Index for all Urban Consumers (CPI-U) to adjust accounts because it is calculated every month.

During the Great Depression, some corporations restated their financial statements to reflect inflation. At times during the past 50 years standard-setting organizations have encouraged companies to supplement cost-based financial statements with price-level adjusted statements. During a period of high inflation in the 1970s, the FASB was reviewing a draft proposal for price-level adjusted statements when the Securities and Exchange Commission (SEC) issued ASR 190, which required approximately 1,000 of the largest US corporations to provide supplemental information based on replacement cost. The FASB withdrew the draft proposal. Inflation accounting is no fair value accounting. Inflation accounting, also called price level accounting is similar to converting financial statements into another currency using an exchange rate. Under some (not all) inflation accounting models, historical costs are converted to price-level adjusted costs using general or specific price indexes.

International Financial Reporting Standard

International standard for hyperinflationary accounting: the International Accounting Standards Board defines hyperinflation in IAS 29: “the cumulative inflation rate over the three years is approaching, or exceeds, 100%”. Companies are required to restate their historical cost financial reports in terms of the period end hyperinflation rate in order to make these financial reports more meaningful. The restatement of historical cost financial statements in terms of IAS 29 and IFRS 13 does not signify the abolishment of the historical cost model. This is confirmed by Price water house Coopers: “Inflation-adjusted financial statements are an extension to, not a departure from, historical cost accounting”.

Review of Empirical Literature

Overtime there have been studies on the relevance, effect and conclusion of historical cost accounting and inflation adjusted accounting on the quality of corporate entities financial information. (Zaid, 2011) opined that some studies investigated the strength of historical cost figures and inflation adjusted numbers on stock returns. While some focused on examining the predictive abilities of inflation adjusted data in formed decision.

Sweeney (1922) conducted a study on the effects of inflation on financial statement, the study posited the use of index to adjust financial statement from historical cost based to inflationary based. Matolesy (1984) conducted a study on the joint and marginal information content of inflation adjusted accounting income numbers on U.S Firms. This study came out with a conclusion that there should be support for the joint information content of both historical and inflation adjusted accounting numbers but adequate evidence was not provided for the marginal content of the caller Bernard and Ruland (1987) assessed the incremental information content of historical cost and current cost income numbers using time series analysis. Their study found evidence of incremental information content in current cost income for a small subset of industries whose correlation between historical cost income and current cost income is low. This study suffered from sampling problems due to selection based on data availability resulting into few firms comprising the sample size.

Brayshaw and Miro (1985) investigated the information content of inflation adjusted financial statements and found lack of evidence in support of a market response to disclosure of current cost adjustments. Also Kirlenlall and Balsari (2009) in Zaid (2011) investigated the importance of inflation accounting application in investment decision making as well as the effect of inflation accounting on stock returns. He made use of regression model or techniques and found that, investors who take earnings and inflation adjusted ratios into consideration when making investment decisions have slightly more predictive power for stock returns than inflation non-adjusted results.

Bello (2009) investigated the relevance of inflation adjusted accounts on the quality of financial reporting of cement manufacturing companies in Nigeria. It covered only the cement companies. Also his test of relative absolute value relevance revealed no evidence of additional relevance on individual basis by both Current Cost Accounting (CCA) and monetary cost (MCC) extending beyond the traditional Historical Cost Accounting Model (HCA).

Effects of Inflation

An increase in the general level of prices causes a decreased in the purchasing power of currency. This means that when the general level of prices rises, each monetary unit buys fewer goods and services. However, the effect of inflation is not distributed evenly in the economy, showing it there are hidden costs to some an advantage to others from this reduction in the purchasing power of money. Increase in the price level (inflation brings down the real value of more. Nevertheless, inflation has no effect on the real value of non-monetary items such as good s and commodities gold and real estate.

Taylor (2008) state that with high inflation, purchasing power is redistributed from those on fixed nominal incomes, such as some pensioner whose pensions are not indexed to the price level, towards those with variable earnings whose income speedily keep pace with inflationary trends. IFRS 13 defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction in the principal (or most advantageous) market at the measurement date under current market conditions. Fair value under IFRS 13 is an exit price regardless of whether that price is directly observable or estimated using another valuation technique. Also, IFRS 13 includes extensive disclosure requirements.

IFRS 13 requires prospective application from 1 January 2013. In addition, specific transitional provisions were given to entities such that they need not apply the disclosure requirements set out in the standard in comparative information provided for periods before the initial application of the standard. In accordance with these transitional provisions, the Dangote Group has not made any new disclosures required by IFRS 13 for the 2012 comparative period other than the additional disclosures; the application of IFRS 13 has not had any material impact on the amounts recognized in the consolidated financial statements.

Recommended Adjustments under Current Cost Adjustment (CCA) (IAS 29)

Four major adjustments are recommended to be made to the Historic cost profit to arrive at a current cost operating profit. These are depreciation, cost of sales, monetary working capital and gearing adjustments.

a. Depreciation Adjustment

This is an adjustment meant for the difference which occurs between the current cost of fixed assets and the depreciation charged in computing the historical cost result. This difference will basically be deducted from the historic cost profit. The impact is to allow the effect of inflation when computing the charge against income for the part of the fixed assets used up within the period.

b. Cost of Sales Adjustment (COSA)

This adjustment is created for the difference between the current cost of stock at the date of sale and the amount charged in computing the historical cost profit. it also aids in effecting inflation adjustment.

c. Monetary Working Capital Adjustment (MWCA)

This emanates from the need to maintain the real value of the monetary assets in the business. Monetary working capital is expressed as the aggregate of trade debtors and prepayments, stock

not subject to COSA less trade creditors, accruals and any aspect of bank balance (or overdraft) arising from fluctuations in the volume of stocks, trade debtors, and trade creditors Rowe (1980) in Osisioma (1990). This is because if sales are made on credit, it is bound to finance any inflationary price changes which occurred during the credit period.

d. Gearing Adjustment: This adjustment believes that the use of historic cost not only overstate current profits, under state fixed asset values but fails to make provision for the reduction in owners equity caused by holding of monetary assets such as cash, bank and other trade creditors.

Methodology

The population of the study is made up of the sixty four owned manufacturing firms in the Nigerian stock exchange fact book as at 31st December, 2012. A total sample of four manufacturing firms was selected using convenience sampling to test compliance to IFRS 13 and IAS 29. The study adopts a survey and descriptive method. The manufacturing firms selected are Cadbury Nig. Plc, RT Briscoe, Adswitch Plc and Dangote Sugar Refinery Plc; the period under review is for five years from 2008 - 2012. The basis of filtering depends on the availability of data for any of the five years.

The instruments used for data collection were the questionnaire. Documentary and secondary data were also collected from annual reports of selected listed manufacturing firms, using convenience sampling based on the availability of data. For the primary data the population included 100 Accountants selected conveniently from the three quoted manufacturing firms. Responses were sought from these hundred accountants. Their responses were analysed and chi-square was used for testing the Hypotheses.

Dangote Sugar Plc
Statement of Financial Position as At 31st December, 2013

Company 2012 N'000	Group 2013 N'000	Company 2012 N'000
Equity share capital 1,564,594	1,565,187	1,564,594
Share premium 11,517,941	11,543,821	11,517,941
Other reserves 3,380,688	3,436,348	3,435,975
Share based payment Reserve 13,884	35,201	13,884
Retained earnings 5,296,780	7,414,374	3,514,579
21,773,887	23,994,931	20,046,973
Non - Controlling Interest 21,773,887	23,994,931	(7617) 20,039,356
Long term liabilities 3,118,332	4,790,912	3,211,728
Current liabilities 14,919,196	14,386,781	16,905,424
Fixed Assets 12,964,243	16,929,458	13,937,517
Inventory 6,810,778	1,880,654	2,043,855
Monetary Assets 6,356,741	11,844,687	9,258,931

Data Presentation and Analysis
 Income Statement and General Price Level Adjustment

On the income statement, depreciation is adjusted for changes in general price levels based on a general price index.

Cadbury Nig Plc
Annual Reports and Accounts for 2012

	2011 ,000	Historical 2012 ,000	Price level adjustment
Revenue	34,110,547	33,550,501	
Depreciation	1,420,009	1,527,165 (a)	1,491,000
Operating income	3,670,555	3,454,991	
Purchasing powerless		107,156 (b)	71,091 (c)
Net Income	3,670,555	215,564	

a. = $1,420,009 \times 105/100 = 1,491,100$

b. $(1,420,009 \times 105/100) - 1,420,009 = 71,091$

Inflation Accounting Adjustments (IAS 29)

RT Biscoe NIG PLC Annual Report and Financial Statements for 2010

Historical Cost Data

	N'000
Opening inventory (2009)	3,662,499
Add purchases	13,316,930
	16,979,429
Deduct closing inventory	<3,376,377>
Cost of sales (Historical cost basis)	13,603,052

Recommended Adjustments under CCA

Index Numbers for Cost of Inventory

Beginning of year	100
End of year	120
Average for year	110

a. Revision of Opening and closing to average current cost for the year:

	N'0 00
Opening Inventory	(3,662,499 X 110/100)
4,028,749	
Closing Inventory	(3,376,377 x 110/100)
3,714,015	

b. Computation of current cost of sales using revised amounts for opening and closing inventory.

	N'000
Opening Inventory	4,028,749
Add purchases	13,316,930
	17,345,679
Deduct closing inventory	<3,714,015>
Cost of sales (current cost basis)	13,631,664

c. Calculation of cost of (COSA)

	N'000
Sales adjustment:	
Cost of sales (current cost basis)	13,631,664
Deduct: Cost of sales (Historical cost basis)	13,603,052
Cost of sales adjustment	28,612

Historical Cost under Accounting and Fair Value

For the year ended 31st December, 2013

In thousands of naira

Company		Company	Group
2012	Note	2013	2012
Continuing operations			
Revenue	5	35,760,753	33,550,501
31,231,751		(22,660,657)	(22,558,080)
(19,869,403)		13,100,096	10,992,421
Gross profit			
11,362,348			
Other income	6	59,032	116,398
116,398			
Selling and distribution expenses		(5,970,810)	(5,030,985)
(5,030,985)			
Administrative expenses		(1,467,631)	(2,219,274)
(2,016,059)			
Results from operation activities		5,720,687	3,858,560
1,431,702			
Finance income	7	1,770,124	1,646,298
1,843,520			
Finance cost	7	(69,334)	(143,166)
Net finance income		1,700,790	1,503,132
1,843,520			
Profit before income tax		7,421,477	5,361,132
6,275,222			
Income tax expense	10	(1,398,258)	(2,011,579)
(1,987,443)			
Profit for the year		(6,023,219)	3,350,113
4,287,779			

Other comprehensive income		
Items that will never be reclassified to profit or loss:		
Defined benefit plans actuarial		
(losses)/ gains, net of tax 21 (e)	(524,368)	104,878
114,128		
Total comprehensive income for the year	5,498,851	3,454,991
4,401,907		
Profit/loss attributable to		
Owners of the Company	6,023,219	3,356,457
4,287,779		
Non - controlling interest	-	(6,344)
Profit for the year	6,023,219	3,350,113
4,287,779		
Total comprehensive attributable to:		
Owners of the Company	6,023,219	3,356,457
4,287,779		
Non - controlling interest	-	(6,344)
Total comprehensive income for the year	5,498,851	3,461,335
4,401,907		
Earnings per share		
Basic earnings per share (kobo)	11 (a)	
137	192	107
Diluted earnings per share (kobo)	11 (b)	
137	192	107
Calculation of Gearing Adjustments		
a. Net balance of	N'000	N'000
N'000		
Monetary liabilities:		
Long term liabilities	4,790,912	3,211,728
3,118,332		
Current liability	14,386,781	16,905,424
14,919,916		
Total liabilities	19,177,683	20,117,152
18,038,248		
Deduct:		
Monetary Assets	<11,844,687>	<9,258,931>
<6,356,741>		
Net balance of monetary		
Liability	7,333,006	10,858,221
11,681,507		

b. Calculation of net balance of monetary liabilities plus the equity share capital plus reserves:

Net balance of monetary liabilities N'000	N'000	N'000
	7,333,006	10,858,221
11,681,507		
Add: Equity share capital + reserves 21,773,887	23,994,931	20,039,356
	31,327,937	30,897,577
33,455,394		

c. Calculating of gearing proportion:

= Net balance of monetary liabilities divided by net balance of monetary liabilities plus equity share capital and reserves

Company 2012	Company 2013	Group 2012
11,681,507	7,333,006	10,858,221
33,455,394	31,327,937	30,897,577
=	=	=
34.92%	23.40%	35.14%

d.	Calculation of gearing proportion			
		2013	2012	2012
		N'000	N'000	N'000
	Depreciation Adjustment: Depr	1,527,165	1,679,882	
	Depr Adj.=	1,527,170		
COSA:		Company	Group	Company
	Cost of sales	2013	2012	2012
	(Historical cost basis)	22,660,657	22,558,080	19,869,403
	Index number for cost of			
	Inventory (see above)			
	Opening	1,810,778 x 110/100		
	Closing	1,880,654 x 110/100		
			N'000	
	Opening		1,991,856	
	Closing		2,068,719	
	Current cost of sales		N'000	
	Opening inventory		1,991,856	
	Add purchases		25,414,833	
			27,406,689	
	Deduct closing inventory		<2,068,719>	
	Cost of sales (Current Basis)		<u>25,337,970</u>	
	COSA			
	Cost of sales (current basis)		25,337,970	
	Deduct cost of sales			
	(Historical basis)		<u><22,660,657></u>	
	Cost of sales Adjustment		2,677,313	
iv.	Calculation of gearing		N'000	
	Adjustment:		1,527,170	
	Depreciation Adjustment			
	Cost of sales Adjustment		2,677,313	
			<u>1,150,143</u>	
	Multiply by gearing Proportion			
		Coy (2013)	Group (2012)	Coy (2012)
		236.40%	35.14%	34.92%
		N'000	N'000	N'000
		269,133	404,160	401,630

Presentation of the Accounting Statement under
 Current cost accounting for the year:

Cadbury Plc	N'000	N'000
Turnover		35,760,753
PBT as per historical cost A/Cs		7,421,477
Less Adjustments		
Depreciation	1,527,170	
Cost of sales	2,677,313	
		1,150,143
Operating profit		6,271,334
Less interest payable	-	
		6,271,334
Gearing Adjustment		269,133
Adjusted profit before taxation and Extra - ordinary items		6,540,467
Taxation		<1,398,258>
Minority Interests		5, 142,209
Adjusted profit before extra - ordinary items		5,142,209
Extra ordinary items (Net of taxation and M.I)		<524,368>
Dividends		
Inflation adjusted retained Earnings		4,617,841

In order to justify further the research claims, the hypothesis is restated below

- Ho: Application of inflation Adjusted Accounting does not restrict the usefulness of quality Accounting Report
- H1: Application of Historical Cost Accounting and fair value does restrict the usefulness of quality accounting report.

Table 1: Analysis of Data

Expression of Opinion	Agreed	Strongly agreed	Neutral	Total
Application of historical cost accounting and fair value restricts the usefulness of quality financial accounting reports	36	27	4	67
Application of inflation accounting does not restrict the usefulness of quality financial accounting reports	24	6	3	33
Total	60	33	7	100

Table 2

Agreed	36	24	60
Strongly agreed	27	6	33
Neutral	4	3	7
Total	67	33	100

Table 3

Observed frequencies (O)	Expected frequencies (E)	O - E	(O - E) ²	(O - E) ² E
36	40	4	16	0.4
24	20	4	16	0.8
27	22	5	25	1.136
6	11	-5	25	2.272
4	5	-1	1	0.20
3	2	1	1	0.50
100				5.308

Calculate value of $X^2 = 5.305$

X^2 at 0.05 at 2 d.f = 5.997

Decision Rule: Accept H_0 if $X^2 < 0.05$

Accept H_1 if $X^2 > 0.05$

Result and Interpretation

Since the computed value 5.308 is less than (<) the table value 5.997. We therefore accept the Null Hypothesis that Application of Inflation Adjusted Accounting does not restrict the usefulness of quality accounting reports. This agrees with the findings of the secondary data.

Discussion of Findings

The analysis of data presented from the secondary sources shows that the introduction of cost of sales adjustment (COSA) and gearing adjustment ensures better quality reporting. Thus, this represents the reality than just mere use of historical cost accounting valuation approach.

Summary and Conclusion

The issue of the application of Historical cost accounting, fair value accounting and inflation accounting has been on for several decades. The major area of concern has been on the application of price-level changes, inflation adjusted effect on accounting statements prepared under the historic cost method.

IFRS 13 provides a single source of guidance on how fair value measurement guidance that is currently dispersed throughout IFRS. IFRS 13 became effective for annual periods from 1 January, 2013. It encourages quality reporting which cuts across global best practice for multi-disciplinary assessment and effective reporting. IFRS 13 is applied when fair value measurements or disclosures required or permitted by other IFRSs. Since IFRS 13 is an exit price and includes extensive disclosure requirements. It has more relevance to historical cost accounting than inflation – adjusted accounting. However, inflation-adjusted accounting makes quality accounting reporting more realistic and reliable than the usual historical cost based on the actual cost supported by the annual reports of listed manufacturing firms. Moreover the impact of inflation on the Nigerian economy cannot be over emphasized. The findings of the paper indicate that inflation – adjusted data does not restrict the usefulness of quality reporting like historical cost or fair value accounting. However, there is no reason for comparison as the account inflation adjustment will be of no value without historical cost accounting for Dangote sugar, the group adopted and applied IFRS 13 for the first time last year in their annual reports. Several Nigerian manufacturing firms are yet to apply this standard.

Recommendations

Based on the findings of this research, the following recommendations are proffered:

1. Both historical cost accounting and inflation adjusted should be adopted together for effective quality reporting
2. Ignoring general price level changes in financial reporting creates distortions in financial statements in these areas:
3. Reported profits may exceed the earnings that could be distributed to share holders without impairing the company's ongoing operations.
4. The asset values for inventory equipment and plant do not reflect their economic value to the business
5. Future earnings are not easily predicted from historical earnings
6. The effect of price changes on monetary assets and liabilities is not clear
7. Future capital needs are difficult to forecast and may lead to increased gearing, which hikes the business risk.

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