



Accounting Measurement and Profitability: Comparative Analysis between Fair Value Regime and Historical Cost Regime

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Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT

This study examined the effect of accounting measurement on profitability of selected consumer goods companies in Nigeria during historical cost regime and fair value regime. Accounting measurement was measured with revenue, cost of sales and operating cost while profitability was measured with net profit margin and return on equity. The data were generated from the annual reports of ten (10) selected consumer goods companies listed on the Nigeria stock exchange from 2008-2010 (representing historical cost regimes) and 2019-2021 (representing fair value regimes). The consumer goods companies used for this study included Dangote Sugar, Nigeria Breweries, Nestle, Guinness, Cadbury, Unilever, Nascon, Pz Cursors, Floor Mill and Honeywell. Hausman test was conducted and the result led to the use of fixed effect estimation technique for testing the hypotheses. Regression result showed that cost of sale and operating cost have negative effect on net profit margin both on both historical cost and fair value regime while revenue has

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significant positive effect on net profit margin both on historical cost and fair value regime. Furthermore, cost of sales and operating cost have negative significant effect on return on equity both on historical cost and fair value while revenue has significant positive effect on return on equity both on historical cost and fair value.

The study concluded that both fair value and historical cost measurement have positive significant effect on net profit margin and return on equity. This implies that profitability is not a function of either fair value or historical cost accounting measurement. The study recommended that fair value accounting basis should be adopted in order to ensure a more realistic measure of profitability than under historical cost basis.

Keywords: Accounting measurement; fair value; historical value; profitability.

1. INTRODUCTION

In the midst of erratic economic conditions, organizations' profitability is subject to constant fluctuations [39]. This implies that economic situations affect profitability. Numerous businesses deal with difficulties like high operational costs, currency volatility, and political unrest that can have an impact on their profitability. Nonetheless, a number of research [1,2] have suggested that some of these issues may be related to the lack of accounting measurement techniques.

The process of determining the monetary value of an asset, liability, or transaction is referred to as accounting measurement. This entails giving various financial objects a numerical value using a set of rules and criteria. This shows that there are rules that guide accounting measurement. Historical cost is the most widely used measuring technique in accounting [40]. It determines an asset's worth by looking at the cost at which it was purchased. Fair value is an unbiased and rational estimate of the likely market price of a good, asset or service. Since measurement enables companies to precisely track and report their financial situation and performance, it is a crucial component of financial reporting [1,57]. Research has shown that improper use of these accounting measurements has resulted in low profitability in the areas of declining sales, increased interest rates, return on equity, and return on [3,4].

Accounting measurement deficiencies, according to [5,48] are a business concern that can be linked to a number of things, such as differences in accounting standards, growing financial reporting complexity, use of non-GAAP measures, the influence of technology, and a lack of flexibility in the face of abrupt changes. These and numerous other factors have impacted the earnings of numerous

organizations both in the US and the UK [6,55]. The use of various accounting standards and frameworks, subjectivity in estimating certain items, complexity in accounting for financial instruments and derivatives, the need for timely and accurate data, the difficulty of aligning accounting measurements with economic reality, and challenges in measuring intangibles like goodwill, brand value, and others are some of the measurement issues facing accounting in the United Kingdom [7,46]. The majority of European firms are facing severe shortcomings as a result of their struggles with sales, revenue, and overall profit. Furthermore, because of the problems with the improper application of accounting metrics, analysts, shareholders, and other stakeholders find it challenging to assess and gauge the company's capacity to bring in enough revenue to pay for its operating expenses [41]. To prevent financial reporting fraud and scandals that could impair management's and other users' ability to make informed decisions, accounting measures are drafted by national standards, corporate governance, and professional ethics [8,47].

Several academics have identified some of the common problems with accounting measurement in Australia [8,9]. Researchers' concerns have turned their attention to the fair value measurement of financial instruments, as [10] pointed out. Accounting measurement, according to [9], improves financial reporting and decision-making, increases accountability and transparency, allows for more flexibility in accounting for business transactions, improves risk management, boosts investor confidence, and facilitates better access to capital [8,10]. Organizations still struggle with profit maximization despite the many benefits of accounting measurement and the capacity to provide accurate and trustworthy financial information that stakeholders can use to make informed decisions [9,49].

A study by [11] claims that there are a number of issues with accounting measurement in Africa related to a lack of standardization. The disparate accounting standards among African nations make cross-national financial statement comparisons challenging [50,58,59]. Furthermore, the lack of resources in many African nations makes it challenging to establish and uphold accounting standards and measurements. According to [9], these issues have an impact on organizations and render some of them unprofitable and insolvent. One other significant issue with accounting measurement in Africa is limited access to financial markets. Due to their restricted access to financial markets, many African nations find it challenging for businesses to turn a profit [11].

Although there are specific concerns with the application of accounting measurements in various industries, this terminology is not new in Nigeria. [12] claim that the lack of resources in many Nigerian industries makes it challenging to adopt and uphold accounting standards. The same study found that it is challenging to gather and distribute financial data due to the deficiency of infrastructure in many Nigerian industries, including inadequate transportation and telecommunications. Inadequate accounting measurement can take many different forms in Nigerian businesses. The disregard for International Financial Reporting Standards (IFRS) and Generally Accepted Accounting Principles (GAAP) is one problem [51]. Many Nigerian businesses lack the means or know-how to put these standards into practice, which can result in inconsistent and inaccurate financial reporting [13]. According to [11], these problems have an impact on the organizations' profitability because they lead to fabricated reports and an inability to adhere to specified accounting standards [10]. The absence of accountability and transparency in Nigerian businesses is another problem. There is frequently a lack of oversight and regulation to guarantee that financial reporting is truthful and accurate, and many businesses do not disclose comprehensive information about their financial performance [14]. Furthermore, Nigeria lacks trustworthy financial data, which can make it challenging for businesses to assess and disclose their financial performance [56]. This may be the result of things like personnel shortages and restricted access to information technology [5]. This study therefore examines the effect of accounting measurement on profitability of consumer goods

companies in Nigeria during historical cost regime and fair value regime.

2. LITERATURE REVIEW

2.1 Accounting Measurement

The process of estimating the monetary value of an economic event or transaction and methodically and consistently recording it is known as accounting measurement [42]. In order to measure and report different types of financial information, including assets, liabilities, revenues, and expenses, generally accepted accounting principles (GAAP) and other pertinent accounting standards are applied. Providing accurate and trustworthy financial data to stakeholders, including creditors, investors, and regulators, so they can make well-informed decisions is the aim of accounting measurement [15]. Accounting measurement, according to [16] is the process of figuring out how much money an economic event is worth and recording it in a methodical and consistent way.

Accounting measurement also refers to the process of giving monetary values to events and transactions in line with generally accepted accounting principles and other authoritative guidance for the purpose of financial reporting [17,61]. Moreover, accounting measurement is the process of figuring out how much an economic event is worth and recording it in the financial statements in a consistent and comparable way. It is the process of giving monetary values to events and transactions in line with established accounting principles and guidelines for the purpose of financial reporting [18]. It entails applying accounting principles, standards, and guidelines to measure and report financial information [19].

2.2 Fair Value Approach

"The amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (i.e., an exit price) is what is meant to be considered fair value according to the international financial reporting standard (IFRS)" [20]. "Fair value is emphasized in this definition as a measurement based on the market. The assumptions that market assets or liabilities are subject to current market conditions, including assumptions regarding risk, are used when calculating fair versus entity [60]. As a result, when determining fair value, the retention

of an asset or the discharge of a liability are irrelevant" [21].

According to [3,55] "there are several standards that address the fair value guidance under the current International Financial Reporting Standards (IFRS)". "The International Accounting Standard Board (IASB) has released a new standard for accounting that establishes a uniform framework for measuring fair value in situations where it is mandated or recognized by IFRS" [22]. The following are exempt from the IFRS measurement and disclosure requirements under this framework:

- i. Share-based payment transactions inside the scope of IFRS 2 share-based payment.
- ii. Leasing expenditures in the scope of IAS 17
- iii. Such measurements as net-realized value in IAS2 inventions or value utilized in IAS 36 impairment of assets that have some resemblance to fair value but are not fair value.

Also, the following do not require the disclosures required by the IFRS [37]:

- i. Plan assets measured at fair value in agreement with IAS 19 employee Benefits.
- ii. Investments pertaining to Retirement benefit plan estimated at fair value in agreement with IAS 26 Accounting and reporting by plans of Retirement Benefit.
- iii. Recoverable amount of assets has lesser cost in fair value of disposal in agreement with IAS 36.

From the explanation of international financial reporting standards (IFRS), the followings are required for an entity needed in fair value measurement

- i. The use of asset in the highest and best way and to ascertain if the asset is used singly or jointly with other assets.
- ii. The measurement of a particular asset or liability.
- iii. The market in which an orderly transaction would take place for the asset or liability.
- iv. "The suitable techniques for fair value evaluation. The utilization of relevant observable inputs and unobservable inputs should be capable of being

maximized and minimized respectively by the technique(s) evaluation technique (s) used. Those inputs should be in conformity with inputs a participant in the market would use while pricing the asset or liability" [22].

2.3 Historical Cost Approach

When using the historical cost approach, depreciation and impairment are subtracted from the original cost of assets and liabilities to determine their current value [38]. This methodology is widely employed in the accounting field and is regarded as the most dependable and impartial approach to measurement [34]. According to [23,52] the historical cost approach is a technique used in accounting measurement that determines the monetary value of an asset or liability by taking into account the item's initial cost. This method is predicated on the idea that an asset's or liability's value ought to be determined by the purchase price.

2.4 Historical Cost versus Fair Value

According to [24,53] historical cost accounting was thought to have satisfied the consistency requirements of financial reporting; however, over time, companies have begun to prepare financial statements based on accounting periodicity. It is commonly known that historical costing has been adopted in traditional accounting [43]. For many years, the historical cost method—which involves offsetting expenses against revenue—was supported by the matching principle. The need for more objective measurement criteria stems from the growing concern in recent times about the objectivity of gains and losses. Fair Value Accounting (FVA) was developed as a result of the belief held by investors, financial analysts, shareholders, creditors, employees, and communities that the historical cost concept no longer has the same relevance [36, 45].

"According to estimates of the prices that can be obtained for assets or paid in offsetting liabilities, assets and liabilities are continuously rated at fair value" [25,63]. Derivatives, debt securities, shares traded on an exchange, and many other financial instruments are measured and reported at fair value. For instance, measures of shareholders' wealth concentrate on the firm's stock price performance and try to determine how much the wealth of the shareholders increases over time based on the dividends they

receive and the rise in the stock price. Essentially, such trading based performance measures assesses how well an investor would have done if he or she had purchased a share of stock at the beginning of the period or sold it at the expiration of the period.

3. THEORETICAL REVIEW

3.1 Schumpeter Theory of Profitability (1934)

In contrast to Clark's static state model, Schumpeter created the circular flow model in 1934. According to Schumpeter, an entrepreneur is an innovator who can separate himself from the competition, gain a temporary monopoly that allows him to make money until his rivals catch up, and then proceed to innovate in other areas before they do. [10,44] noted, however, that Schumpeter considered the reward of the entrepreneur to be a functional reward associated with his capacity for innovation rather than a surplus. He listed the following five ways that Schumpeter recognized that innovation will result in profit generation:

- i. Introduction of new products or improvement of existing ones.
- ii. Introduction of production methods.
- iii. Penetration into new markets.
- iv. Discovery of new sources of raw materials.
- v. Changes in organizational structure, such as creation of monopoly.

Assumption of the Theory

According to Schumpeter, "Profit is the Reward for Successful Innovation," or the Innovation Theory of Profit: Profit, according to Schumpeter, is the prize for initiative and creativity. According to him, the entrepreneur brings about innovation in the company, and the reward for his success is profit [54].

Criticisms of the Theory

Schumpeter's innovation theory has been criticised on the following grounds:

- i. Schumpeter has never considered Profit as the reward for risk-taking: He is of this opinion that risk-taking is the function of the capitalist and not of the entrepreneur. It is the shareholders who undertake risks and thus earn profits [35].
- ii. There is no place of uncertainty in Schumpeter's innovation theory: Profit is

not the reward of uncertainty it is simply the wages of management.

- iii. This theory is incomplete: Profit accrues to the entrepreneur for his organisational ability and nothing else. Therefore, this theory has been called as an incomplete explanation of the emergence of profits

Relevance of Schumpeter Theory of Profitability to the Study

"In line with the above theory, the introduction of new accounting standards represents an innovation, which reflects changes in production method; with implications on probability. Thus, the shift in accounting treatment from historical cost to fair value will affect the profit of firms, such as manufacturing companies in Nigeria. Thus, the need to examine the nature of such an impact on their profit" [22].

3.2 Empirical Review

[26] investigated the connection between Nigerian manufacturing companies' performance and fair value accounting. Multiple regression analysis, quasi-experimental design, and descriptive statistics were used in the study. Data were taken from the annual financial statements of ten manufacturing companies. Additionally, the historical cost regimes from 2008 to 2010 and the fair value regime from 2014 to 2016 were covered by the study. Fair value accounting significantly and favorably affects the profitability of Nigerian manufacturing companies, according to empirical analysis. Therefore, the study suggested that Nigerian manufacturing companies switch to fair value accounting.

In their research, [27] used panel data from the financial reports of manufacturing companies quoted on the Nigerian stock exchange for the conversion periods 2011, 2012, and 2013, as appropriate, to examine fair value measurement, depreciation, and profitability of listed manufacturing companies in Nigeria. The analysis was conducted using the t-statistic and the ordinary least square regression technique. The study found that International Financial Reporting Standards (IFRS) have a small but positive effect on reported profit and depreciation when fair value and historical cost convention are applied.

An empirical investigation was conducted by [28] to examine the impact of accounting estimates on the profitability of quoted firms operating in the consumer goods sector of Nigeria. The study

used estimates for depreciation, current tax, deferred tax, and pension liabilities as dimensions of accounting estimates and operating profit margin (OPM) as a measure of profitability to assess the impact of accounting estimates on profitability. The analyses' findings show that estimates of depreciation provisions, current tax provisions, deferred tax provisions, and pension liabilities have a strong, negative, and significant relationship with operating profit margin. Additionally, the measures of the independent variables explained 97.7% of changes in operating profit margin, and consequently, the profitability of companies quoted in Nigeria's consumer goods sector.

[29,62] investigated how estimates affected Kenyan microfinance companies' performance. It was discovered that accounting estimates significantly improved the financial performance of microfinance organizations. The study also discovered that financial performance was significantly but inversely impacted by estimates for the useful life of NCA. The impact of accounting estimates on information misstatements in the financial reports of Small and Medium Enterprises in Nigeria was investigated by [30]. The study's findings suggested that inaccurate estimations could result in financial report misstatements. [31] evaluated the connection between Nigerian banks' financial reporting quality and accounting estimates. According to the study, the quality of financial reports will be greatly enhanced by harmonizing accounting policies and procedures for determining accounting estimates [32]. employed positive accounting theory and investigated factors that determine accounting choices for noncurrent assets in Nigeria firms by adopting IFSR. The study collected data from thirty firms within the study population and it was found that firms' size and ownership concentration are found as predictors of accounting choice for non-current assets.

4. METHODOLOGY

This study adopted the ex-post facto research design to examine the effect of accounting measurement on the profitability of consumer goods in Nigeria. The population for the purpose of this study consists of all consumer goods companies listed on the Nigerian Stock Exchange. The study is focused on consumer goods companies because the sector is profit oriented and thus makes high use of accounting measurement. The consumer goods companies used for this study include Dangote Sugar,

Nigeria Breweries, Nestle, Guinness, Cadbury, Unilever, Nascon, PZ Cursors, Floor Mill and Honeywell.

Profitability is measured using net profit margin (NPM) and return on equity (ROE). Accounting measurement is measured using revenue (REV), cost of sales (COS) and operating expenses (OPE). The variables are adopted from the work of Chukwu and Akpekon [18]. The data to be employed in the study will be generated from the annual reports of ten (10) selected consumer goods companies listed on the Nigeria Stock Exchange from 2008-2010 (representing historical cost regimes) and 2019-2021 (representing fair value regimes).The model adopted in this study expresses profitability as a function of revenue, cost of sales and operating expenses, as follows:

$$\begin{aligned} \text{NPM} &= f(\text{REV}, \text{COS}, \text{OPE}) & 1 \\ \text{ROE} &= f(\text{REV}, \text{COS}, \text{OPE}) & 2 \end{aligned}$$

The model is transformed into stochastic form

$$\begin{aligned} \text{ROE}_{it} &= \alpha_{it} + \beta_1 \ln \text{REV}_{it} + \beta_2 \ln \text{COS}_{it} + \beta_3 \ln \text{OPE}_{it} + \mu_{it} & 3 \\ \text{NPM}_{it} &= \alpha_{it} + \beta_1 \ln \text{REV}_{it} + \beta_2 \ln \text{COS}_{it} + \beta_3 \ln \text{OPE}_{it} + \mu_{it} & 4 \end{aligned}$$

Where:

- ROE = return on equity
- NPM = net profit margin
- lnREV = log of revenue
- lnCOS = log of Cost of sales
- lnOPE = log of operating cost
- α_0 = intercept
- $\beta_1 - \beta_3$ = Slope of the equations
- μ = error term
- i = company
- t = time

4.1 A Priori Expectations

Table.1. Summary Table of the A Priori Expectations

Equation of the Hypothesized Relationship	Parameter and the Expected Sign
$\text{NPM} = \alpha_0 + \alpha_1 \text{REV} + \mu$	$\alpha_1 > 0$: Positive (+)
$\text{NPM} = \alpha_0 + \alpha_2 \text{COS} + \mu$	$\alpha_2 < 0$: Negative (-)
$\text{NPM} = \alpha_0 + \alpha_3 \text{OPE} + \mu$	$\alpha_3 < 0$: Negative (-)
$\text{ROE} = \alpha_0 + \alpha_1 \text{REV} + \mu$	$\alpha_1 > 0$: Positive (+)
$\text{ROE} = \alpha_0 + \alpha_2 \text{COS} + \mu$	$\alpha_2 < 0$: Negative (-)
$\text{ROE} = \alpha_0 + \alpha_3 \text{OPE} + \mu$	$\alpha_3 < 0$: Negative (-)
$\text{NPM}; \text{ROE} = \alpha_0$	$\alpha_0 > 0$: Positive (+)

Source: Researcher's hypothesized relationships (2023)

5. RESULTS AND DISCUSSION

5.2. Descriptive Statistics

5.1 Trend Analysis

Fig. 1. Trend for accounting measurement under fair value regime in consumer goods companies in Nigeria from 2019-2021.

Fig. 2 Trend for accounting measurement under historical cost regime in consumer goods companies in Nigeria from 2008-2010

From the results descriptive statistics at table 1, there is evidence of significant variation in the trends of the variables within the period of consideration. This is shown by the differences between the maximum and the minimum of all the variables. The result also shows a total of 30 observations because the panel data were derived from ten (10) consumer goods companies for a period of three (3) years each.

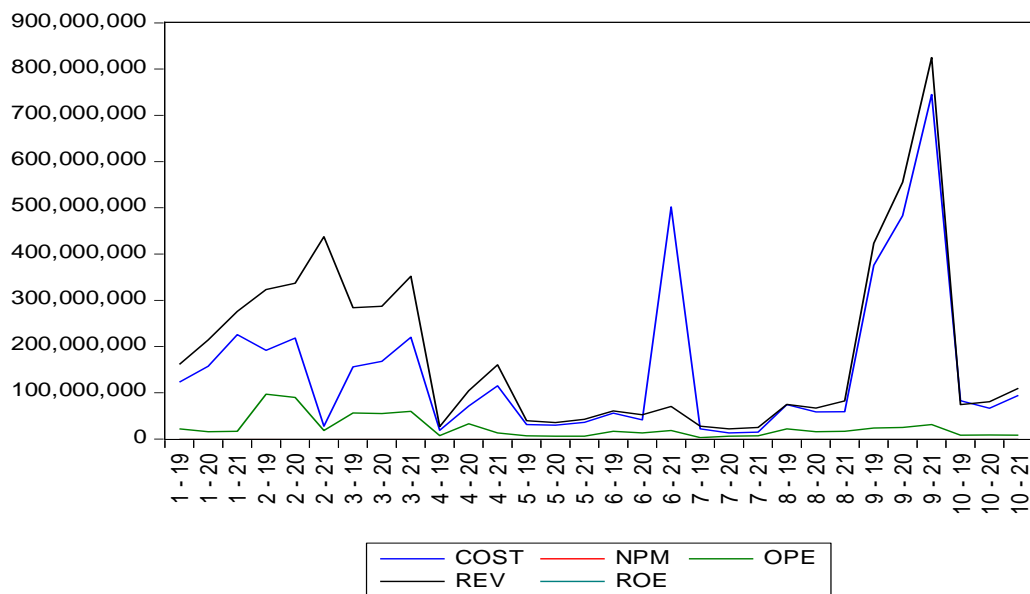


Fig..1. Trend analysis for fair value

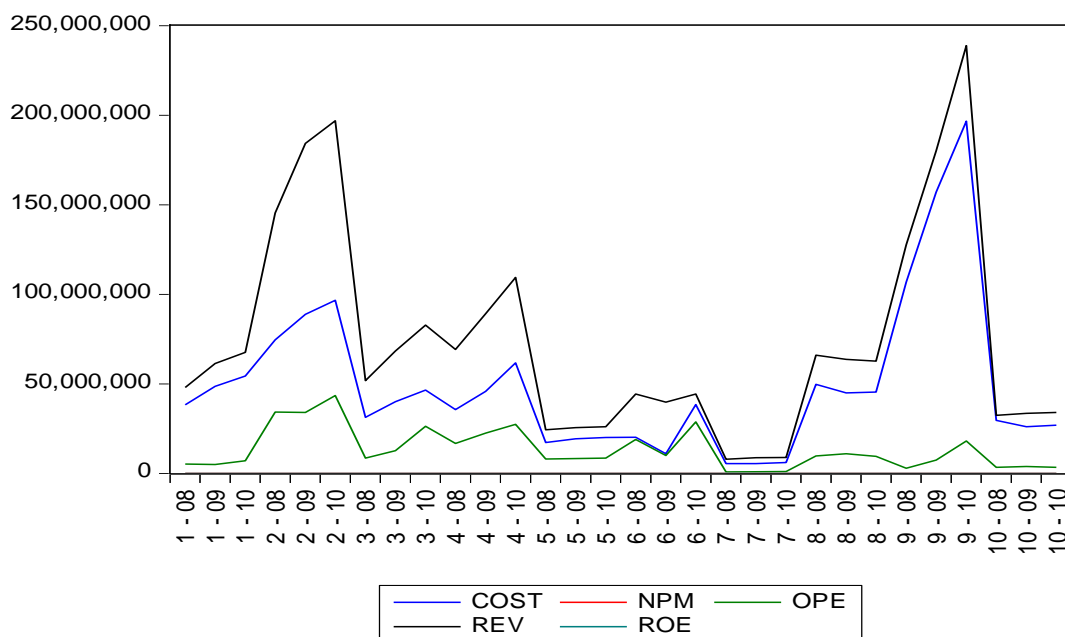


Fig. 2. Trend analysis for Historical Cost

Table 2. Descriptive statistics (Fair value)

	COST	NPM	OPE	REV	ROE
Mean	1.49E+08	0.127135	24127069	1.88E+08	0.266988
Median	78617970	0.058496	16324953	93380082	0.095035
Maximum	7.45E+08	1.080651	97050643	8.25E+08	1.872808
Minimum	12911430	0.003363	2952141.	21872590	0.004176
Std.Dev.	1.71E+08	0.226530	24014694	1.90E+08	0.425394
Observations	30	30	30	30	30

Table 3. Descriptive statistics (historical cost)

	COST	NPM	OPE	REV	ROE
Mean	49593510	0.100887	13246300	74751985	0.369880
Median	39164508	0.086422	9020069.	62027987	0.376097
Maximum	1.97E+08	0.210137	43458739	2.39E+08	0.617661
Minimum	5392533.	0.021613	839830.0	7888276.	0.123990
Std. Dev.	43293776	0.055643	11356954	60110415	0.146233
Observations	30	30	30	30	30

Table 4. Hausman Test for model One (Accounting measurement and Net profit margin)

Panel A: Faire value			
Test Summary	Chi-Square	Chi- Sqaure D.F	Probability
Cross Sectional Random	4.380129	3	0.2232
Panel B: Historical Cost			
Test Summary	Chi-Square	Chi- Sqaure D.F	Probability
Cross Sectional Random	6.170363	3	0.1036

Table 5. Hausman Test for model Two (Accounting measurement and return on equity)

Panel A: Faire value			
Test Summary	Chi-Square	Chi- Sqaure D.F	Probability
Cross Sectional Random	2.010945	3	0.5701
Panel B: Historical Cost			
Test Summary	Chi-Square	Chi- Sqaure D.F	Probability
Cross Sectional Random	0.339524	3	0.9524

5.3 Hausman Test

The table shows that the result of the Hausman test at panel A and B show that the probability of Chi-sq statistics is statistically insignificant at 5% significant level, hence we reject the null hypothesis which says that random effect is the appropriate estimation technique for the model and thus the analysis for the both models were done using fixed effect.

5.4 Regression Output

Result from table 4. shows that cost of sale and operating cost have negative effect on net profit margin both on historical cost and fair value while revenue has significant positive effect on net profit margin both on historical cost and fair value. From table 6, the result depicts that cost of

sales and operating cost have negative significant effect on return on equity both on historical cost and fair value while revenue has significant positive effect on return on equity both on historical cost and fair value

The findings imply that both fair value and historical cost measurement have positive significant effect on net profit margin and return on equity. This implies that profitability is not a function of either fair value or historical cost accounting measurement. This finding is consistent with Akwu and Ofoegbu [33], who found no significant difference in reported profit using fair value and historical cost conventions. Also Chukwu and Akpeekon [18] in their study found that fair value accounting and historical cost have positive significant on profit after tax and return on assets.

Table 6. Regression Result for Model One (Accounting measurement and Net profit margin)

Panel A: Fair Value				
Variables	Coefficient	Standard Error	T-statistics	Probability
LNCOST	-0.777181	0.113007	-6.877282	0.0026
LNOPE	-0.653846	0.156866	-4.168184	0.0084
LNREV	0.919443	0.181191	5.074440	0.0015
C	1.750744	3.440239	0.508902	0.6174
Dependent Variable: NPM				
R ² = 0.341290, Adjusted R ² = 0.123682 F = 0.734001, p = 0.702974 > 0.05				
Panel B: Historical Cost				
Variables	Coefficient	Standard Error	T-statistics	Probability
LNCOST	-0.198452	0.028889	-6.869486	0.0007
LNOPE	-0.192411	0.024334	-7.907093	0.0000
LNREV	0.350678	0.048704	7.200194	0.0005
C	1.225498	0.657083	1.865059	0.0795
Dependent Variable: NPM				
R ² = 0.923399, Adjusted R ² = 0.869328 F = 17.07748, p = 0.0000 < 0.05				

Table 7. Regression Result for Model Two (Accounting measurement and Return on Equity)

Panel A: Fair Value				
Variables	Coefficient	Standard Error	T-statistics	Probability
LNCOST	-0.558658	0.083793	-6.667127	0.0008
LNOPE	-0.781936	0.116314	-6.722638	0.0007
LNREV	0.675175	0.134351	5.025459	0.0015
C	1.133764	2.550887	0.444459	0.6623
Dependent Variable: ROE				
R ² = 0.897300, Adjusted R ² = 0.824806 F = 12.37760, p = 0.000004 < 0.05				
Panel B: Historical Cost				
Variables	Coefficient	Standard Error	T-statistics	Probability
LNCOST	-0.198452	0.028889	-6.869486	0.0007
LNOPE	-0.192411	0.024334	-7.907093	0.0000
LNREV	0.350678	0.048704	7.200194	0.0005
C	1.225498	0.657083	1.865059	0.0795
Dependent Variable: ROE				
R ² = 0.773377, Adjusted R ² = 0.613407 F = 4.834525, p = 0.001734 < 0.05				

6. CONCLUSION

The general objective of this study was to ascertain the effect of accounting measurement on profitability of consumer goods companies in Nigeria. Ten listed consumer goods companies were chosen while data from 2008-2010 and 2019-2021 were generated in a bid to examine the effect of the two regimes on profitability. The result of the analysis carried out, using fixed effect estimation technique, the result revealed that both fair value and historical cost accounting measurement have positive and significant impact on both net profit margin and return on equity. However, historical cost accounting accounts for more variation in net profit margin than fair value while fair value accounting accounts for more variations in return on equity than historical cost accounting measurement. Therefore the study recommends that fair value accounting basis should be adopted in order to

ensure a more realistic measure of profitability than under historical cost basis.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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