

Property, Plant and Equipment Measurement and Financial Reporting Quality of Manufacturing Firms in Nigeria

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ABSTRACT

The quality of financial information in Nigeria regarding property, plant and equipment, particularly in the manufacturing sector, remains a significant concern. In view of this, this present study examined the relationship between property, plant and equipment measurement and financial reporting quality of manufacturing firms in Nigeria. The specific objectives were to ascertain the effect of PPE measurement using cost model on faithful representation of financial information of manufacturing firms in Nigeria and to assess the effect of PPE measurement using revaluation model on faithful representation of financial information of manufacturing firms in Nigeria. This study adopted a survey research design with data collected through the administration of a five-point Likert Scale questionnaire to a sample of 360 accounting staff across selected manufacturing firms in Nigeria. The data collected were analyzed using descriptive statistics tools and Pearson product moment correlation analysis via SPSS 25.0 statistical package. The study findings revealed that PPE measurement using cost model has an insignificant positive relationship ($r= 0.039\{p=0.468>0.05\}$) with faithful representation of financial information of manufacturing firms in Nigeria while PPE measurement using revaluation model has a significant positive relationship ($r= 0.733\{p=0.000<0.05\}$) with faithful representation of financial information of manufacturing firms in Nigeria. It was thus concluded that the use of the revaluation model for PPE measurement leads to more accurate and reliable financial information, which enhances the credibility of financial statements and increase stakeholder trust. The study recommended, amongst others, that regulatory bodies in Nigeria should consider mandating the use of the revaluation model for PPE measurement in financial reporting to enhance the credibility of financial information at all times.

Keywords: Property, plant and equipment measurement, cost model, revaluation model, financial reporting quality, faithful representation

INTRODUCTION

The accurate measurement of property, plant, and equipment (PPE) is a vital component of financial reporting in Nigeria, as it significantly impacts the reliability and transparency of financial statements (Nnadi & Okwu, 2022). Property, Plant and Equipment are tangible assets that are held for use in the production or supply of goods or services, for rental to others, for administrative purposes and are expected to be used during more than one period. In fact, the majority of non-current assets of a company comprise PPE. IAS 16 provides a comprehensive framework for the recognition, measurement, and disclosure of PPE, which is mandatory for Nigerian companies. Initially, PPE should be measured at cost, encompassing all expenses necessary to bring the asset to its intended working condition. This includes costs such as purchase price, site preparation, delivery, and installation costs (Ofoegbu & Chijoke, 2022). Subsequent measurement can be done using either the cost model or the revaluation model. However, the revaluation model is rarely used in Nigeria due to the lack of reliable market data and the complexity of determining fair value (Nnadi & Okwu, 2022). Consequently, most Nigerian companies rely on the cost model, which may result in PPE being carried at a value significantly different from

its current market value, leading to misleading financial statements (Ofoegbu & Chijoke, 2022). IAS 16 also requires companies to disclose essential information about their PPE, such as the basis for measuring carrying amount, depreciation method, useful lives, and gross carrying amount (IASB, 2018). This information is crucial for users of financial statements to make informed decisions (Ahmed & Jaiyeoba, 2017). Unfortunately, many Nigerian companies fail to provide adequate disclosure of their PPE, making it challenging for users to understand the financial position and performance of the company as argued by Nnadi and Okwu (2022).

According to Ahmed and Jaiyeoba (2017), compliance with IAS 16 enhances transparency and accountability across Nigerian companies, leading to better decision-making by investors and other stakeholders. Therefore, it is essential for these firms to comply with the requirements of IAS 16 in measuring their property, plant and equipment. The quality of financial information in Nigeria, particularly in the manufacturing sector, remains a significant concern. Investors and analysts have limited access to reliable financial data, hindering informed decision-making and efficient market growth. Unlike advanced jurisdictions, Nigeria's regulatory environment and corporate governance structures are less developed, leading to lower scrutiny and compliance with accounting standards. Several extant studies have consistently shown that accurate PPE measurement is essential for high-quality financial reporting (Ahmed & Jaiyeoba, 2017; Owolabi & Olanipekun, 2020). The revaluation model has been found to be more suitable for Nigerian manufacturing firms (Owolabi & Olanipekun, 2020; Nnadi & Okwu, 2020). However, other studies have noted that the choice of measurement model depends on the specific circumstances of the company (Nemanja et al., 2020). In the context of investment properties, the fair value model has been found to be more relevant for decision-making (Samson & Agwor, 2020). Despite the existing literature on property, plant and equipment measurement and financial reporting quality, there is a gap in the literature on the specific context of Nigerian manufacturing firms as the question of 'which is better?' still remains answered in extant literature. This study is significant to various critical stakeholders, including investors and lenders, regulatory bodies, management of manufacturing firms, auditors and financial analysts and researchers. In view of this, the main objective of this study was to examine the relationship between property, plant and equipment measurement and financial reporting quality of manufacturing firms in Nigeria. The specific objectives were to:

1. Ascertain the effect of PPE measurement using cost model on faithful representation of financial information of manufacturing firms in Nigeria.
2. Assess the effect of PPE measurement using revaluation model on faithful representation of financial information of manufacturing firms in Nigeria.

This study sought to provide reliable answers to the following questions;

1. To what extent does the use of the cost model for property, plant, and equipment (PPE) measurement impact the faithful representation of financial information of manufacturing firms in Nigeria?
2. How does the application of the revaluation model for property, plant, and equipment (PPE) measurement affect the faithful representation of financial information of manufacturing firms in Nigeria?

REVIEW OF RELATED LITERATURE

Conceptual Framework

The conceptual relationships among the variables are as shown in figure 2.1 below

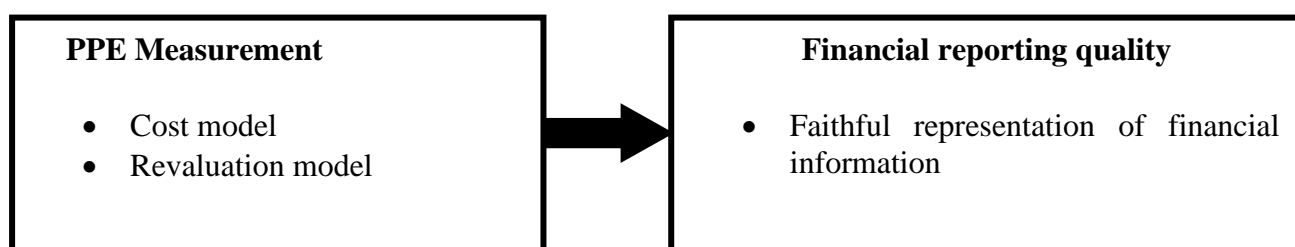


Fig 2.1: Conceptual framework of variables

Source: Researcher's compilation (2024)

Property, Plant and Equipment Measurement

IAS 16 sets out the accounting requirements for property, plant, and equipment, but allows for differing accounting treatments if specified by other standards. For instance, assets held for sale are accounted for under IFRS 5, while biological assets related to agricultural activity are accounted for under IAS 41. IFRS 6, on the other hand, applies to exploration and evaluation assets. Proper accounting treatments for property, plant, and equipment are crucial, as they significantly impact financial reporting quality (Zhang, 2022; Iacobucci, 2020). In fact, studies (Osanyinbi, et. al., 2023; Ahmed & Jaiyeoba, 2017; Owolabi & Olanipekun, 2020; Nnadi & Okwu, 2020; Nemanja et al., 2020; Samson & Agwor, 2020) have shown that accurate accounting for property, plant, and equipment can improve financial reporting transparency and credibility. Furthermore, proper accounting treatments can also enhance decision-making and reduce the risk of material misstatements as opined by Zhang (2022).

Initial measurement

An item of property, plant and equipment is often initially measured at cost (IAS 16.15).

Measurement subsequent to initial recognition

IAS 16 permits two accounting models. The cost model and revaluation model

Cost model

According to IAS 16, property, plant, and equipment are initially measured at cost, subsequently measured using the cost model or revaluation model, and depreciated to allocate their depreciable amount on a systematic basis over their useful life (IAS 16). The cost of an asset includes all costs necessary to bring it to working condition for its intended use, such as site preparation, delivery, installation, professional fees, and estimated dismantling and removal costs (Zhang, 2022). Proceeds from selling items produced while bringing an asset to its intended location and condition are recognized in profit or loss, not deducted from the asset's cost (Iacobucci, 2020). Deferred payment for an asset requires recognition or imputation of interest at a market rate (Radford, 2016). Assets acquired in exchange for another asset are measured at fair value unless the transaction lacks commercial substance or fair value is not reliably measurable (Yoon, 2019). Studies (Zhang, 2022; Iacobucci, 2020; Radford, 2016; Yoon, 2019; Iacobucci, 2020; Zhang, 2022; Needles, 2021; Walcott, 2020) have emphasized the importance of proper accounting treatments for property, plant, and equipment, as it significantly impacts financial reporting quality.

Revaluation model

The revaluation model as stipulated in IAS 16 allows for assets to be carried at their fair value, provided it can be measured reliably (IAS 16.31). Regular revaluations are necessary to ensure the carrying amount does not differ materially from the asset's fair value at the reporting date (IAS 16.36). When an asset is revalued, the entire class of assets must be revalued (IAS 16.36). Revalued assets are depreciated similarly to the cost model (IAS 16.39). Revaluation increases are credited to other comprehensive income and accumulated in equity as a revaluation surplus, unless it is a reversal of a previous decrease, then it is recognized in profit or loss (IAS 16.39). Decreases are recognized as expenses, exceeding any previous revaluation surplus (IAS 16.40). Upon disposal, the revaluation surplus can be transferred directly to retained earnings or left in equity (IAS 16.41). Studies have shown that the revaluation model is commonly used in industries with significant property, plant, and equipment assets (Zhang, 2022; Needles, 2021; Walcott, 2020).

As such, proper application of the revaluation model can improve financial reporting quality as documented by Iacobucci (2020) and Yoon (2019). However, challenges may arise in determining fair value, particularly in industries with unique or specialized assets (Radford, 2016; Nobes, 2018). Additionally, extant studies (Henderson, 2019; Mardoni, 2020) have highlighted the importance of considering the asset's residual value and useful life in the revaluation process.

Concept of financial reporting quality

Financial reporting quality (FRQ) refers to the ability of financial information to faithfully represent a company's economic performance and position (Iacobucci, 2020). High-quality financial information provides stakeholders with accurate, reliable, and relevant information, enabling them to make informed decisions (Yoon, 2019). FRQ is crucial for maintaining investor confidence, reducing information asymmetry, and promoting capital market efficiency (Zhang, 2022). FRQ encompasses various attributes, including accuracy, completeness, neutrality, and timeliness (Needles, 2021). Accurate financial information reflects the economic substance of transactions and events, while complete reports disclose all necessary information (Walcott, 2020). Neutral reports present information without bias, and timely reports are issued promptly to facilitate decision-making (Henderson, 2019). Moreover, FRQ is influenced by factors such as corporate governance, auditor quality, and financial reporting standards (Mardoni, 2020). Extant studies shown that FRQ has a significant impact on capital markets and investor decisions (Nobes, 2018). High FRQ reduces the cost of capital, increases inventory prices, and enhances liquidity (Radford, 2016). Conversely, low FRQ leads to information asymmetry, increasing the risk of financial misstatements and fraud (Iacobucci, 2020). Regulators and standard setters have implemented various measures to enhance FRQ, including the adoption of international financial reporting standards (IFRS) and the implementation of auditing standards (IAS Plus, 2021).

Faithful representation of financial information

Faithful representation is a fundamental qualitative characteristic of financial reporting, implying that financial information accurately reflects the economic phenomena it purports to represent (Birt et al., 2020). In other words, financial information should provide a faithful representation of a company's financial position and performance. This characteristic is essential for financial reporting quality, as it enables users to make informed decisions based on accurate and reliable information. Faithful representation encompasses various aspects, including completeness, neutrality, and freedom from error (Birt et al., 2020). Complete financial information discloses all necessary information, while neutral reports present information without bias (Needles, 2021). Error-free reports ensure that financial information is accurate and reliable (Walcott, 2020). Research has shown that faithful representation is a critical proxy for financial reporting quality, influencing investor decisions and capital market efficiency (Zhang, 2022). Studies have emphasized the importance of faithful representation in financial reporting. For instance, a study by Yoon (2019) found that faithful representation is significantly related to financial reporting quality as it instils investors' confidence in firms. Another study by Iacobucci (2020) highlighted the importance of faithful representation in reducing information asymmetry and improving financial reporting quality. These studies underscore the significance of faithful representation as a proxy for financial reporting quality.

Plant, property and equipment measurement and financial reporting quality

The measurement of property, plant, and equipment (PP&E) is a critical aspect of financial reporting, and its correlation with financial reporting quality is a subject of interest in accounting research. In Nigeria, manufacturing firms are significant contributors to the country's economy, and their financial reporting quality is essential for stakeholders' decision-making. The cost model is the most commonly used approach for measuring PP&E, where assets are recorded at their historical cost and depreciated over their useful lives. This approach is simple and easy to apply, but it may not reflect the current value of the assets. In the context of Nigerian manufacturing firms, the cost model may lead to outdated values on the balance sheet, which can result in a misrepresentation of the company's financial position. The cost model has been examined in extant studies such as Ahmed and Jaiyeoba (2017) and Owolabi and Olanipekun (2020), which investigated the impact of property, plant, and equipment measurement on financial reporting quality in Nigerian listed companies and manufacturing firms, respectively.

The revaluation model, on the other hand, allows companies to revalue their PP&E to fair value, reflecting changes in market conditions. This approach provides a more current picture of a company's assets, but it can be complex and may introduce subjectivity. In Nigeria, the revaluation model may be more appropriate for manufacturing firms with significant PP&E, as it can provide a more accurate representation of their assets' value. The revaluation model has been explored in studies like Nnadi and Okwu (2020) and Ofoegbu and

Chijoke (2022).Ofoegbu and Chijoke (2022) stressed that the revaluation model is more relevant for financial reporting quality, can be interpreted as a signal sent by management to stakeholders that the firm is committed to transparency and accuracy in financial reporting.

THEORETICAL FRAMEWORK

Signaling Theory by Spence (1973)

Signaling Theory, propounded by Michael Spence in 1973, posits that individuals or organizations convey information to others through signals, which can influence the perceptions and decisions of the recipients. In the context of financial reporting, signaling theory suggests that management's choices of accounting methods, such as property, plant, and equipment (PPE) measurement models, can convey information to stakeholders about the firm's financial performance and position. The main facets of signaling theory include the concept of information asymmetry, where one party has more information than the other, and the idea that signals can be used to convey information and reduce uncertainty. In the context of PPE measurement, the cost model and revaluation model can be seen as signals sent by management to stakeholders. The cost model, which values assets at their historical cost, may be perceived as a conservative approach, signaling that management is cautious and risk-averse (Ahmed & Jaiyeoba, 2017). On the other hand, the revaluation model, which values assets at their fair value, may be viewed as a more aggressive approach, signaling that management is optimistic about the firm's prospects (Nnadi & Okwu, 2020). Management may choose the cost model to signal to stakeholders that the firm is focused on maintaining a stable financial position, whereas the revaluation model may be chosen to signal that the firm is focused on growth and profitability (Hassan & Farouk, 2014). These choices can impact faithful representation of financial information, and that stakeholders may interpret these choices as signals about the firm's financial performance and position, which may affect the financial reporting quality of the firms as opined by Lawal et al. (2022).The use of the revaluation model may also signal to stakeholders that the firm is willing to invest in high-quality financial reporting, which can lead to increased trust and confidence in the firm's financial statements. This suggests that management's choice of PPE measurement model can impact financial reporting quality, and that stakeholders may interpret these choices as signals about the firm's financial performance and position.

Empirical Review

Osanyinbi, et. al. (2023) examined the concept of fair value measurement as well as determine its influence on the financial reporting quality of items in the financial statement of insurance companies. The study used survey method and questionnaire as research instrument to elicit data from professional accountants in selected listed insurance companies in Lagos state, using conveniency sampling technique. The data collected were analyzed with the aid of SPSS. The study revealed that there is significant relationship between fair value measurement and the financial reporting quality and that the fair value measurement has significant influence on financial reporting quality at each level of the hierarchies. The study, therefore, concluded that the observance of the financial reporting qualities in the process of the fair value measurement would facilitate the production of corporate financial report useful to analysts in assessing a company's performance and prospects.

Nnadi and Okwu (2022) investigated the effects of different PPE measurement models on financial performance and reporting quality in Nigerian manufacturing firms. Their sample consisted of 30 manufacturing firms, and they collected data from their financial statements. Using a descriptive research design and regression analysis, they found that the revaluation model is more suitable for Nigerian manufacturing firms and that accurate PPE measurement significantly improves financial reporting quality.

Iacobucci (2020) highlighted the importance of faithful representation in financial reporting, emphasizing its role in reducing information asymmetry and improving reporting quality. The study analyzed data from 15 listed companies in Nigeria using descriptive statistics and correlation analysis, finding a significant relationship between faithful representation and financial reporting quality. The study also found that faithful representation is essential for high-quality financial reporting in Nigerian listed companies.

Nemanja, Vladimir and Jasmina (2020) examined the behavior of financial statement preparers in the Republic

of Serbia, a developing and transition country, when choosing between the historical cost and fair value valuation models for subsequent measurement of property, plant, and equipment. The analysis revealed that companies in Serbia preferred the historical cost model over the revaluation model for owner-occupied properties and plant and equipment, while opting for the fair value model for investment properties. The willingness to use the revaluation model varied across different company categories, with a statistically significant relationship found between the legal form of the company and the likelihood of using the revaluation model. Additionally, the study found that a significant number of companies in Serbia failed to disclose adequate information on the subsequent measurement model used in their financial statements, despite this information being required by applicable financial reporting standards

Samson and Agwor (2020) investigated the relationship between investment property measurements and financial reporting quality of Real Estate companies in Nigeria. The study population consisted of Real Estate companies in Nigeria that accounted for investment property in their financial statements. The researchers examined how both initial and subsequent measurement of investment property influenced the financial reporting quality of Real Estate Companies in Nigeria. They employed Pearson product moment correlation as the statistical tool and used SPSS version 20.0 for analysis. The study found that subsequent measurement of investment properties at cost model enhanced comparability and reliability but lacked relevance, as investors preferred the fair value model due to the volatile nature of investment property markets. The analysis revealed a significant relationship between investment property measurement and financial reporting quality of Real Estate Companies in Nigeria. The study also found that most Real Estate companies, for which investment property was a significant part of their business, adopted the fair value model for measuring investment properties, as it reflected the true financial position of the company and was relevant for decision-making.

Owolabi and Olanipekun (2020) examined the impact of PPE measurement on financial reporting quality in Nigerian manufacturing firms. The study employed a descriptive research design, using secondary data collected from the annual reports of 30 manufacturing firms in Nigeria. The data was analyzed using descriptive statistics and regression analysis, which revealed that accurate PPE measurement significantly improves financial reporting quality. The study also found that the revaluation model is more suitable for Nigerian manufacturing firms.

Nnadi and Okwu (2020) analyzed the effects of different PPE measurement models on financial performance and reporting quality in Nigerian manufacturing firms. The study employed a descriptive research design, using secondary data collected from the annual reports of 25 manufacturing firms in Nigeria. The data was analyzed using descriptive statistics and regression analysis, which showed that the revaluation model positively impacts both financial performance and reporting quality. The study also found that the revaluation model is more suitable for Nigerian manufacturing firms.

Ahmed and Jaiyeoba (2017) conducted a study to investigate the impact of property, plant, and equipment (PPE) measurement on financial reporting quality in Nigerian listed companies. The study employed a descriptive research design, using secondary data collected from the annual reports of 50 listed companies in Nigeria. The data was analyzed using descriptive statistics and correlation analysis, which revealed a strong positive relationship between PPE measurement and financial reporting quality. The findings suggest that accurate PPE measurement is essential for high-quality financial reporting in Nigerian listed companies.

Summary of Empirical Review and Gap in Literature

Previous studies have consistently shown that accurate property, plant, and equipment (PPE) measurement is essential for high-quality financial reporting quality. Some studies considered revaluation model to be more suitable for Nigerian manufacturing firms (Osanyinbi, et, al., 2023; Owolabi & Olanipekun, 2020; Ahmed & Jaiyeoba, 2017). However, other studies, for instance, Nemanja, et al. (2020) have noted that the choice of measurement model depends on the specific circumstances of the company. In the context of investment properties, the fair value model has been found to be more relevant for decision-making (Samson & Agwor, 2020). Despite the existing literature on PPE measurement and financial reporting, there is a gap in the literature (Osanyinbi, et, al., 2023; Ahmed & Jaiyeoba, 2017; Owolabi & Olanipekun, 2020; Nnadi & Okwu, 2020; Nemanja et al., 2020; Samson & Agwor, 2020) on the specific context of Nigerian manufacturing firms, leaving

the question of which measurement model is better unanswered. This study aims to investigate the relationship between PPE measurement and financial reporting quality in Nigerian manufacturing firms, which is crucial for various stakeholders, including investors, regulatory bodies, management, auditors, financial analysts, and researchers.

METHODOLOGY

This study adopted a survey research design. This involved the systematic collection of information through the use of structured questionnaires or interviews. Purposively, a sample of 360 accounting staff across selected manufacturing firms in Nigeria was adopted in order to attain the study objectives. Convenience sampling technique was however adopted in administering the research questionnaires.

The questionnaire was a structured five-point Likert Scale type questionnaire which consists of two sections, section A and section B. Section A contained information in the demographic characteristics of the respondents, while section B contained statement on the 5-point Likert scale requiring the respondent to indicate the level of agreement to the statements provided. The following four Likert scale was adopted: Strongly Agree (SA)- 5 Points, Agree (A) - 4 Points, Neutral (N) - 3 Points, Disagree (D) - 2 Points and Strongly Disagree (SD) – 1 Point. However, 98.3% response rate was achieved indicating that a total number of 354 questionnaires were retrieved and in useable form.

The data collected were analyzed using descriptive statistics tools and Pearson product moment correlation analysis via SPSS 25.0 statistical package. The decision was based on 5% level of significance. The null hypothesis (H_0) was accepted if probability value (i.e. P-value or Sig.) is greater than or equals to (\geq) stated 5% level of significance (α); otherwise, reject and accept alternate hypothesis (H_1), if p-value or sig calculated is less than 5% level of significance.

DATA ANALYSIS AND DISCUSSION OF FINDINGS

Data Analysis

Questionnaire administration

Table 4.1 below shows a summary of questionnaires administered in the course of the study to respondents.

Table 4.1: Summary of questionnaires administered

Questionnaire	Number of Questionnaires	Percentage (%)
Administered	360	100
Completed and returned	354	98.33
Not completed and returned	4	1.11
Rejected	2	0.56
Total	360	100

Source: Field survey (2024)

Table 4.1 shows that a total of 360 questionnaires were administered to accounting staff across listed manufacturing firms in Nigeria. Out of this, 354(98.33%) were correctly completed and returned, 4(1.11%) were not completed and returned while 2(0.56%) were not correctly filled, hence, were rejected.

Descriptive statistics

The descriptive statistics analysis was conducted on each of the dependent and independent variables in the

study. The descriptive statistics result is as presented in table 4.2 below;

Table 4.2: Descriptive statistics of variables

Variable	N	Mean	Std. Deviation	Skewness	Kurtosis
Faithful_representation	354	4.2599	0.92909	-1.66	2.925
Cost_model	354	3.6801	0.92545	-0.173	-1.228
Revaluation_model	354	4.2768	0.72245	-1.291	1.371
Valid N (listwise)	354				

Source: Researcher’s computation (2024) using SPSS 25.0

Table 4.2 shows that for the independent variables-PPE measurement using cost model and PPE measurement using revaluation model, the mean values obtained for all the responses were 3.6801 and 4.2768 respectively. This shows the average scores of all the responses regarding these variables. Furthermore, variability of the distribution, these variables were obtained from the standard deviation values of 0.92545 and 0.72245 respectively. This suggests significant variability in the responses, indicating diverse opinions among respondents. Furthermore, these variables were negatively skewed to the left with a skewness value of -0.173 and -1.291 respectively. The kurtosis values were also obtained for these variables as -1.228 and 1.371 respectively indicating that the responses regarding PPE measurement using cost model were platykurtic while that of revaluation model were leptokurtic. For the dependent variable-faithful representation of financial information, the mean value obtained for all the responses was 4.2599. This shows the average score of all the responses regarding this variable. Furthermore, variability of the distribution was obtained from the standard deviation value of 0.92909. This indicates a high level of variability in the scores of the responses for this variable. Also, it was also shown to be negatively skewed with a skewness value of -1.660 and kurtosis value obtained as 2.925 indicating a leptokurtic distribution.

Test of hypotheses

Pearson product moment correlation analysis was thus adopted in testing the research hypotheses. The p-values as revealed were employed at 5% significance level.

H01: PPE measurement using cost model has no significant relationship with faithful representation of financial information of manufacturing firms in Nigeria.

The Pearson product moment correlation analysis results that related to this hypothesis is as shown in table 4.3 below

Table 4.3: Correlations between PPE measurement using cost model and faithful representation of financial information

Representation of Financial Information	FAITHFUL_REPRESENTATION	COST_MODEL
Faithful_representation		
Pearson Correlation	1	0.039
Sig. (2-tailed)		0.468
N	354	354
Cost_model		
Pearson Correlation	0.039	1

Sig. (2-tailed)	0.468	
N	354	354

Source: Researcher’s computation (2024) using SPSS 25.0

Based on the decision rule of the study, the null hypothesis one of this study is accepted and the alternate rejected because the p-value of 0.468 shown in table 4.3 above is greater than 0.05 ($p > 0.05$). In addition, the correlation coefficient (r) of 0.039 indicates a positive relationship between the variables.

Therefore, PPE measurement using cost model has an insignificant positive relationship with faithful representation of financial information of manufacturing firms in Nigeria.

Ho₂: PPE measurement using revaluation model has no significant relationship with faithful representation of financial information of manufacturing firms in Nigeria.

The Pearson product moment correlation analysis results that related to this hypothesis is as shown in table 4.4 below

Table 4.4: Correlations between PPE measurement using revaluation model and faithful representation of financial information

Representation of Financial Information	FAITHFUL_REPRESENTATION	REVALUATION_MODEL
Faithful_representation		
Pearson Correlation	1	0.733*
Sig. (2-tailed)		0
N	354	354
Revaluation_model		
Pearson Correlation	0.733*	1
Sig. (2-tailed)	0	
N	354	354
* Correlation is significant at the 0.05 level (2-tailed).		

Source: Researcher’s computation (2024) using SPSS 25.0

Based on the decision rule of the study, the null hypothesis two of this study is rejected and the alternate accepted because the p-value of 0.000 shown in table 4.4 above is less than 0.05 ($p < 0.05$). Also, the correlation coefficient (r) of 0.733 indicates a positive relationship between the variables.

Therefore, PPE measurement using revaluation model has a significant positive relationship with faithful representation of financial information of manufacturing firms in Nigeria.

DISCUSSION OF FINDINGS

The study findings documented a positive correlation coefficient ($r = 0.039$) between PPE measurement using the cost model and faithful representation of financial information, but it is not statistically significant ($p = 0.468 > 0.05$). This suggests that there is a weak and insignificant relationship between the two variables. Specifically, for every unit increase in PPE measurement using the cost model, faithful representation of financial information

is expected to increase by 0.039 units, but this increase is not reliable due to the insignificant correlation. This finding implies that the use of the cost model for PPE measurement does not have a significant impact on the quality of financial reporting in manufacturing firms in Nigeria. The cost model may not capture the true value of PPE, leading to inaccurate financial reporting. This suggests that manufacturing firms in Nigeria should explore alternative methods for measuring PPE, such as the revaluation model, to improve the accuracy of their financial information. The insignificant relationship between PPE measurement using the cost model and faithful representation of financial information may be attributed to the fact that the cost model does not consider the current market value of PPE, which may lead to outdated and inaccurate values being reported. This can result in a misrepresentation of a company's financial position and performance. Therefore, the study suggests that the cost model may not be a reliable method for measuring PPE in manufacturing firms in Nigeria, and alternative methods should be explored to improve the accuracy of financial reporting. This is in variance with the position of Owolabi and Olanipekun (2020) and that of Ahmed and Jaiyeoba (2017).

The study also showed a significant positive correlation ($r = 0.733$, $p = 0.000 < 0.05$) between PPE measurement using the revaluation model and faithful representation of financial information. This suggests a strong and significant relationship between the two variables. Specifically, for every unit increase in PPE measurement using the revaluation model, faithful representation of financial information is expected to increase by 0.733 units. This implies that the use of the revaluation model for PPE measurement is associated with a higher quality of financial reporting in manufacturing firms in Nigeria. The revaluation model may provide a more accurate representation of PPE value, leading to more faithful representation of financial information.

The significant positive relationship between PPE measurement using the revaluation model and faithful representation of financial information suggests that the revaluation model is a reliable method for measuring PPE in manufacturing firms in Nigeria. This is because the revaluation model considers the current market value of PPE, which provides a more accurate representation of a company's financial position and performance. Therefore, the study recommends the use of the revaluation model for PPE measurement in manufacturing firms in Nigeria to improve the accuracy and quality of financial reporting. This can enhance the credibility of financial information and increase stakeholder trust in the company. This aligns with the position of Osanyinbi, et al. (2023), Ofoegbu and Chijoke (2022) and that of Nnadi and Okwu (2020). These extant studies stressed that the revaluation model is more relevant for financial reporting quality, and can be interpreted as a signal sent by management to stakeholders that the firm is committed to transparency and accuracy in financial reporting.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

In conclusion, this study has provided valuable insights into the relationship between property, plant, and equipment (PPE) measurement and financial reporting quality in manufacturing firms in Nigeria. The findings suggest that the choice of PPE measurement model has a significant impact on the accuracy and reliability of financial information. Specifically, the results show that the cost model, which is widely used in practice, has an insignificant relationship with faithful representation of financial information, whereas the revaluation model has a significant positive relationship. These findings have important implications for financial reporting and auditing practices in Nigeria. The use of the revaluation model for PPE measurement can lead to more accurate and reliable financial information, which can enhance the credibility of financial statements and increase stakeholder trust. On the other hand, the continued use of the cost model may perpetuate inaccurate financial reporting, which can have negative consequences for investors, creditors, and other stakeholders. This study contributes to the existing literature on accounting measurement and financial reporting quality, highlighting the importance of using appropriate measurement models to ensure accurate financial reporting. Based on the findings of this study, the following recommendations should be considered.

1. After initial measurement, manufacturing firms in Nigeria should adopt the revaluation model of measuring PPE to reflect changes in their value over time, providing a more faithful representation of financial information.
2. Regulatory bodies in Nigeria should consider mandating the use of the revaluation model for PPE measurement in financial reporting to enhance the credibility of financial information.
3. Auditors should conduct regular audits and reviews to ensure compliance with accounting standards and to identify areas for improvement in financial reporting practices.

Building on the findings of this study, future researchers are encouraged to conduct:

1. A comparative study on the use of the cost model and revaluation model for PPE measurement in different industries in Nigeria to explore potential variations in the relationships found.
2. An investigation into the impact of PPE measurement models on financial performance metrics, such as return on assets and return on equity, in manufacturing firms in Nigeria.
3. A study examining the relationship between PPE measurement models and audit quality in Nigeria, to explore potential implications for financial reporting reliability.

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