

Effect of Non-Current Assets on Profitability of Quoted Healthcare Manufacturing Firms in Nigeria: 2015 - 2022

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Abstract

Research Purpose: With healthcare expenditure rising globally, understanding the drivers of profitability in the pharmaceutical industry is crucial. This study investigates the impact of non-current assets on the profitability of quoted healthcare manufacturing firms in Nigeria, a rapidly growing market with a significant unmet healthcare demand.

Methodology: An ex-post-facto research design was employed, utilising cross-sectional data sourced from the financial statements of selected healthcare manufacturing firms between 2015 and 2022. Profit after tax served as the proxy for profitability, while investment in property, plant and equipment, intangible assets, and investment in subsidiaries represented non-current assets. Multiple regressions using the Ordinary Least Squares method were conducted for data analysis.

Findings: The results revealed a positive relationship between property, plant and equipment and investment in subsidiaries with profit after tax for the selected healthcare firms. Conversely, investment in intangible assets demonstrated a negative relationship with return on assets.

Conclusion: The findings suggest that property, plant and equipment and investment in subsidiaries have a positive effect on profitability, while investment in intangible assets has a negative impact.

Recommendations: Managers should prioritise the effective management, evaluation, and investment in property, plant and equipment. Additionally, a positive approach towards intangible asset disclosure is recommended to accurately reflect their value within organisations. Policies should be implemented to guide the management of investment in intangible assets. Furthermore, proper accounting policies should be adopted for the valuation of intangible assets in healthcare firms, and managers should ensure the efficient management of subsidiary investments in the Nigerian healthcare manufacturing sector.

Key words: Non-current Assets, Profitability, Health-care Firms and Nigeria.

1.0 INTRODUCTION

Manufacturing companies all over the world depend on the structure of their assets. These assets measure the ability of a firm to survive and compete with other firms and consist of two types; non-current and current assets. Non-current assets are a company's long-term investment for which the full value will not be realised within the accounting year (Kenton 2020). They are assets that have a useful life of more than one year (Nickolas, 2018). These assets include property, plant and equipment (PPE), land buildings, automobiles and furniture among others. They are not only purchased for the purpose of resale, but also for the firm's operation. Property, plant and equipment (PPE) also known as tangible fixed assets, represents the non-current, physical, illiquid assets that are expected to generate long-term economic benefit for a firm including land, building and machinery (The Nigerian Stock Exchange Firms Annual Report & Accounts, 2018).

The Nigerian economy is fast growing with firms and organisations struggling to survive and keep up with the high competition in their industries. Economist considers that the main feature of this new economic environment is the essential role played by intangible assets such as goodwill, patents, trademarks, copyrights, brand, research and development etc as a fundamental determinant of value creation in business companies. Intangible assets have become the focus of companies, hence financial analysts, investors, accountants and regulators alike have initiated attempts to understand and narrow the gap between companies' book and market value of intangible assets as the most important and considered having economic value that drives the profitability and sustainability of a company.

It is also observed that firms and organisations in Nigeria prepare financial statements at the end of their accounting year. In preparing these financial statements, assets and liabilities are reported at their net book values (fair values based on IFRS provision) to determine the profitability and position of the firm and ultimately, the net worth is the reporting of intangible assets (Okoye, Offor & Manukaji, 2019).

Firms can expand through investment in subsidiaries. A subsidiary company is a company owned and controlled by another company known as the parent company. A subsidiary's parent company may be the sole owners. If a parent company or holding owns 100% of another company, that company is called a wholly-owned subsidiary. A parent company is simply a company that runs a business and that owns another business – the subsidiary. The parent company has operations of its own, and the subsidiary may carry on a related business. From an accounting standpoint, a subsidiary is a separate company, so it would keep its own financial records, bank accounts, assets and liabilities. Any transactions between the parent company and the subsidiary must be recorded (Murray, 2019). Therefore, investing in subsidiaries has a major role to play in the financial profitability of manufacturing firms.

The objective of preparing a company's financial statement is to make known the company's profitability to the various stakeholders which includes shareholders, creditors, staff, regulators etc. specifically, it provides information about a company's financial profitability,

financial position and cash flow. Financial profitability refers to a firm's ability to generate new resources from day to day operations over a period of time (Bora, 2008). It involves enhancing shareholders wealth and profit making which are among the major objectives of a firm (Pandey, 2005). Various indicators have been used to measure the financial profitability of the firm by various scholars. The study by Okwo et al. (2018) measured financial profitability of firms in the brewery sector in terms of operating profit margin. Similarly, a study by (Zhensherg & Nuozi 2017) measured the business profitability in terms of operating revenue in an effort to determine the optimal allocation of assets structure on financial profitability. Olatunji (2019) used net profit of the commercial banks as the measure of their financial profitability. Further, a study by Wamugo et al (2014), on the relationship between capital structure and profitability of non- financial listed firms used Return on Assets (ROA) and Return on Equity (ROE) as the indicators of firm profitability. The main objective of profitability measurement is to determine the efficiency and profitability of an economic unit's management, as reflected in the financial record and reports (Amalenda, 2020).

The effect of non-current assets on the financial profitability is one of the major problems suspected by the researcher in the selected healthcare firms in Nigeria. Healthcare firms owners strive to optimise their financial resources on non-current assets in order to achieve satisfactory financial profitability but in most cases were disappointed in not meeting the targets. This situation has necessitated few academics to research on this sensitive and critical area to identify factors and variables that are responsible for this unsatisfactory return on profitability as regards healthcare firms in Nigeria.

Some of these companies are still shaking in spite of them being quoted on the Nigerian stock exchange. It is in the light of this crisis that the researchers had deemed it necessary to examine the effect of non-current assets on profitability of selected listed healthcare manufacturing firms in Nigeria from 2015 to 2022.

It can therefore be argued that despite the strategic importance of non-current assets in healthcare manufacturing firms in Nigeria, comprehensive studies on non-current assets are lacking hence the necessity of the study. Thus, the researcher examined the effect of non-current assets on the profitability of listed healthcare manufacturing firms looking at the extent to which property, plant and equipment, intangible assets and investment in subsidiaries affect profitability. The study will be of primary importance and benefit to health care manufacturing companies, government, policy makers, stakeholders of the companies, potential investors in manufacturing sectors in Nigeria. Another importance of the study is its contribution to knowledge. It would be useful to other researchers and anyone who may be interested in the effect of non-current assets on profitability of all the manufacturing sectors in Nigeria.

It did not cover all the profitability indicators which should have included the other financial performance measures. It only utilised the main accounting performance indicator popularly

engaged by analysts which is the return-on-assets (ROA) that is precisely related to assets employed to generate-profit due to availability of data.

Research Hypotheses

- Ho₁: Property, plant and equipment have no effect on the financial profitability of listed manufacturing healthcare firms in Nigeria
- Ho₂: Intangible assets have no effect on the financial profitability of listed manufacturing healthcare firms in Nigeria.
- Ho₃: Investment in subsidiaries has no effect on the financial profitability of listed manufacturing healthcare firms in Nigeria.

2.0 REVIEW OF RELATED LITERATURE

Non – current Assets

Non-current assets are a company's long-term investment for which the full value will not be realised within the accounting year (Kenton, 2020). Examples of noncurrent assets include investments in other companies, intellectual property (e.g patents), and property plant and equipment. Non-current assets are also referred to as long-term assets, fixed assets or hard assets Non-current assets are capitalised rather than expensed, meaning that the company allocates the cost of the entire cost to the accounting year in which the assets were purchased. He said depending on the type of asset, it may be depreciated, amortised or depleted.

Nickolas (2018) stated that non-current assets are company's long-term investments or assets that have a useful life of more than one year. Typically, non-current assets last for many years and are considered illiquid meaning they cannot be easily liquidated into cash. He listed some example of non-current assets as:

- i. Property, plant and equipment
- ii. Intangible assets which include goodwill, patents, brand, copyrights, trademarks, trade secrets, permits, corporate intellectual property etc.
- iii. Long-term investment which includes investment in bonds, subsidiaries etc.

Non-current assets are very important to firms for expansion, launch of new product line, tax reduction in terms of subsidiaries and also to investors in case there is business valuation.

Property, Plant and Equipment (PPE)

The major form of assets in the statement of financial position of most industries is tangible non-current assets. These assets are referred to property, plant and equipment under International Accounting Standards (IAS) number 16, and are used for the production or supply of goods and services, for rental to others, or for administration purposes. Property, plant and equipment are expected to be used for more than one accounting period, and are

capital intensive in nature. In many cases they account for as much as 80% or more of the total assets value of manufacturing companies. The extent to which the investment in property, plant and equipment relate to the total asset value of a firm (i.e the ratio of property plant and equipment to total assets value) is sometimes regarded as asset tangibility (Chukwu & Egbuhfor, 2017).

The stock of tangible assets available to many non-financial firms determines how well their products can satisfy desired objectives. For many firms, tangible non-current assets constitute more than 50% of their asset structure, and contribute substantially to the revenue earning capacity of the firms. The strength of an entity's tangible non-current assets is also an indicator of the borrowing capacity of the firm since in the event of liquidation these assets can be realised to settle creditors. Accordingly the quality and quantity of tangible assets acquired by firms in certain industries indicate the competitive strength of the firm. Given the huge investment in tangible non- current assets, it is reasonable to evaluate the return from these investments periodically (Chukwu, 2017).

Intangible Assets

The Nigeria stock exchange Firm's Annual Report and Accounts (2018) define intangible assets as an asset that is not physical in nature. Goodwill, brand recognition and intellectual property, such as patents, trademarks and copyrights are all intangible assets.

Ocak & Findx (2019) stated that there are many types of intangible assets such as patents, copyright, trademarks design, mineral exploration, brand, software, formula, trade secrets, capitalised research and development, goodwill, database, domain human capital, motion picture, consumer loyalty, licence, market share and marketing rights.

Baroch (2021) averred that one important feature of the new economy is that intangible factors are playing an increasingly dominant role in business wealth creation. The changing economy of the 1990s aligned to a large merger wave, thereby increasing the amount of goodwill on the company's audited financial statements. As a result, the goodwill which is likely to be an excess price paid over the sum of identifiable net assets of the acquired company gained increased attention with the growing importance of intangibles in company operations. He further stated that firms offer intangible products in the form of services to customers

The debate on the recognition of intangibles is upcoming and heated. According to Zeghal & Maaloul (2019), the lack of recognition of intangibles has affected the value relevance of financial information. As such, if financial statements must become value relevant in this modern time, recognition of intangibles in the statements must be of essence. Similarly, Kapange (2018) asserted that the increasing importance of intangibles can be attributed to the information age, and age where information is what drives profitability and not just the possession of physical assets. Thus, the significance of intangible assets as well as its appropriate recognition and measurement for the purpose of adequate financial reporting is of

paramount necessity. Furthermore, Lee (2021) asserts that a measure aimed at improving financial reporting is the adoption of fair value estimates in the measurement of intangibles. Thus the understanding of the concept of intangibles is of immense importance.

Investment in Subsidiaries

Growing businesses usually establish or purchase controlling stake in existing companies since this gives them the benefit of expanding their business at minimal risk. The parent subsidiary relationship helps in locking the liabilities and credit claims of the subsidiary company structure, keeping the parent's assets safe. There could also be other specific synergies benefitting parents, for example, increased tax benefits, diversified risk or assets like earnings, equipment or property. The subsidiary, in turn, benefits from the brand reputation of the parent company or valuable resources.

Although the two companies are considered separate legal entities for liability purposes, they are considered as a single entity for reporting financials. In case the holding is 80%, the parent can gain valuable tax benefits and offset profits in one business with losses in another.

According to Sullivan (2014) there are several reasons for a company to have subsidiaries.

Profitability

The most important part of an organisation is the profitability, where profitability is viewed as the success of an organisation in achieving a valuable outcome, such as high return (Memon &Tahir, 2012). Smith & Recce (2020) viewed profitability is defined as the organisation's ability to meet the desired result as determined by the company's major shareholders. On the other hand, it is to determine whether the actual output of an organisation is as what has been targeted (Aloudah et al. 2014). Thus to achieve high business profitability, organisations need to attain and sustain competitive advantages. Consequently, the measurement of business profitability has captured the attention of many scholars due to its complicity (Matsoso & Benedicts, 2019).

Different researchers have different ways to measure profitability. Mandy (2016) summarised in his view that the best way to evaluate profitability is by effectiveness, growth, productivity, efficiency, individual employee sales, the value of exports, organisation total assets and operating profit ratio as a measurement. Researchers like (Mandy, 2016) measured profitability using financial indicators. Financial measure is done by measuring the sales, market share, number of employees, return on capital employed, inventory turnover, return on investment, growth and profit. In this study financial profitability is measure by property, plant and equipment, intangible assets, investment in subsidiary and profit after tax

Empirical Review

Hoarg and Balird (2022) on investment in subsidiaries, joint ventures, affiliates on first growth: Evidence from Vietnam. Using both static and dynamic Panel data models with a sample data set of 2.056 firms-year observations on Vietnam's stock market from 2008-2015.

The study finds that increasing affiliate investment in prior periods had a significantly positive impact on asset growth and net income growth (but not sales growth) of the firms in subsequent periods. In addition, the study finds new empirical evidence that private controlled firms are more efficient than movement controlled firms in terms of affiliate investment.

Okoye, Offor & Manukaji (2022) examine the effect of intangible assets on profitability on quoted companies in Nigeria using time series data from 2008 to 2017. The data used in this study were sourced from annual reports and statements of accounts of the selected firms. Employee benefit expenses, research and development cost and goodwill as the independent variable while return on capital employed was employed as the dependent variable. Descriptive statistics, correlation analysis and ordinary least square regression were employed in analysing the data. The study also found that employee benefit expenses have no significant effect on return on capital employed of quoted companies in Nigeria. The study further found that research and development cost has a significant effect on return on capital employed of quoted companies in Nigeria. Finally the study revealed that goodwill has a significant effect on return on capital employed of quoted companies in Nigeria. The study concluded that intangible assets have a significant effect on profitability of quoted companies in Nigeria. The study recommends that management should have a positive disposition towards intangible assets disclosure in order to project the real value of intangible assets in their organisation.

Chukwu & Egbuhuzor (2021) investigated the effect of tangible assets on the corporate profitability of manufacturing firms in Nigeria. The study used financial statement data from ten manufacturing companies listed on the stock exchange, and measured corporate profitability using return on equity. The independent variables comprise plant and machinery as well as land and building, and the model used in the study controlled for board size and board independence. Results from multiple regression analysis reveal a significant positive relationship between return on assets and plant and machinery, but the relationship between return on assets and land and buildings is negative. The result is also consistent with respect to the relationship between return on equity and the independent variables, leading to the conclusion that investment in tangible non-current assets affects the profitability of firms.

Nnado & Ozouli (2020) ascertained the impact of total intangible assets on the financial profitability of manufacturing firms publicly listed on the Nigerian Stock Exchange (NSE). The study made use of secondary data collected and collated from 46 manufacturing firms audited annual reports. Both descriptive and inferential statistics were employed in data analysis. Findings indicate that there is a perfect positive relationship between EVA and ROA at $P = 0.000$. These results explain the behaviour of firms in minimising the value of intangible assets given that the relationship between intangible assets and financial profitability proxied by EVA is very significant and negative.

Olatunji & Tajudeen (2020) also examined the effect of investment in property, plant and equipment on profitability of listed firms in Nigeria. The study used data obtained from annual reports and accounts of thirteen selected Nigerian commercial Banks for the period

from 2000-2012, and found that the relationship between the dependent variable (net profit) and independent variables (building, land, fixtures and fitting and investment in computers) was positive and significant. The study concluded that investments in fixed assets had a strong and positive statistical impact on the profitability of the banking sector in Nigeria.

Theoretical Framework

This study is anchored on Resource Based Theory (RBT) as propounded by Jay Barney (1991). The theory states that the possession of strategic resources provide an organisation with an opportunity to develop competitive advantages over its rivals. These competitive advantages in turn can help the organisation achieve enduring profitability (Barney, 1991). Porter (1991) asserted that the value of a resource is in its ability to provide a firm useful advantage in given markets. The usefulness of a firm resource is an important consideration within the resource based theory. This theory is important to this study since the utilisation of the non-current assets will boost profitability of the firm.

3.0 METHODOLOGY

The research designs employed for the study are *ex-post facto* research designs as it used observations that occurred prior to the study. This is because according to Onwumere (2009) *ex-post facto* involves events that have already taken place. The records that were observed are from 2015 – 2022, a period of nine years. It is correlation because the study sought to find the relationship between independent and dependent variables.

The study used only secondary data from Nigerian Stock Exchange and firms Annual Reports & Accounts 2015-2022. Data were collated for the analysis from annual reports and accounts of the selected Healthcare sector for a period of 2015-2022. The study firms consist of three selected healthcare manufacturing firms; Fidson Healthcare Plc, Glaxosmithkline Consumers Nig. Plc and May & Baker Nig. Plc

Model Specification

Given the dynamic nature of the time series data that were used in the study and in line with Salawu and Adedeji (2017), the study adopted a linear relationship between profitability and the explanatory variables which are non-current assets that potentially explain variations in return on assets as proxy for profitability. Relationships were established between return on assets and noncurrent assets. Thus, the model was expressed functionally as: $P = f(NCA) \dots (i)$

To linearize the model with the specific objective variables, mode (i), was modified to be;

$$P = f(PPE, IA \text{ \& } IS) \dots \dots 2$$

Thus, the baseline equation that captures the main non-current assets and return on assets of health-care manufacturing firms in Nigeria was econometrically expressed thus;

$$ROA = \beta_0 + \beta_1 PPE + \beta_2 IA + \beta_3 IS + \mu \dots \dots 3$$

Where;

ROA= Return on Assets. It is measured as profit after tax (PAT) divided by the total assets.

β_0 = The intercept or autonomous parameter estimate

β_1 - β_3 = are the slopes of the coefficients of the independent variables to be determined

μ = Error term (or stochastic term).

From the above specified multiple regression equation, we regressed dependent variable on the explanatory variables and they are operationally and mathematically described as represented below;

FP = Financial profitability proxy and measured by log of profit after tax of the health care firms

PPE = Property, plants and equipment proxy and measured by log of investment in Property, plants and equipment

IA = Intangible assets proxy and measured by log of investment in intangible assets

IS = Investment in subsidiaries proxy and measured by log of investment in subsidiaries

ε_{it} = Error term

The panel time series data gathered were analytically estimated using the multiple regression involving Ordinary Least Square (OLS) techniques with the aid of E-view 9.0 econometric software and the hypotheses were tested to establish the effect of non-current assets on profitability of health-care manufacturing firms in Nigeria while, the descriptive statistical tools were used to examine and analyse the characteristics of the collected data (the dependent and independent variables).

A-prior Expectation of the Result

The explanatory variables are expected to have positive and direct effects on the dependent variables. That is, a unit increase in any of the variables is expected to increase profitability of the health care firms. This can be expressed mathematically as; $a_1, a_2, a_3 > 0$.

4.0 RESULTS

This section presents research results and interpretation made from the study on the effects of non-current assets on profitability of quoted manufacturing healthcare firms.

Data Analysis

Table 1: Effect Results of Non-Current Assets and Profitability of Quoted Manufacturing Firms in Nigeria

Variable	Coefficient	Std. Error	t-Statistic	Prob.
PPE	0.508045	0.010328	4.778931	0.0000
IA	-0.610052	0.013757	-2.730660	0.0074
IS	0.012277	0.013441	0.913417	0.3641
C	0.533211	0.142478	3.742397	0.0004

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.744183	Mean dependent var	0.461222
Adjusted R-squared	0.557885	S.D. dependent var	0.030552
S.E. of regression	0.093136	Akaike info criterion	-1.732663
Sum squared resid	0.624546	Schwarz criterion	-1.232702
Log likelihood	95.96986	Hannan-Quinn criter.	-1.531049
F-statistic	3.713538	Durbin-Watson stat	2.358110
Prob(F-statistic)	0.00151		

Source: Researchers computation using E-view 9.0, 2023

The results presented in the table above, reveal the effect of non-current assets on the financial profitability of three quoted health care manufacturing firms in Nigeria, evidence from the above analysis result which shows that the independent variables can explain 74.4 and 55.7 percent variation on profit after tax of the three selected health care firms. The F-statistics and the probability value justifies that the model is significant. The Durbin Watson statistics justifies the absence of serial autocorrelation in the model. However, the β coefficient of the variables shows that property, plant and equipment and investment in subsidiaries have positive relationship with profit after tax of the three health care firms while investment in intangible assets have negative relationship with profit after tax.

Test of Hypotheses

H_{01} : Property, plant and equipment has no significant effect on the financial profitability of listed manufacturing firms in Nigeria

Null Hypotheses; H_0 : $P = 0$, (Statistically not significant)

Alternate Hypotheses; H_1 : $P \neq 0$. (Statistically Significant)

The decision rule states that “null hypothesis” should be rejected when P-Value is greater than 0.05. But when the P-Value is lower than 0.05, the “alternate hypothesis” is accepted with its conclusion

Table 2: Test of hypothesis I

	R^2	0.744183
Adjusted	R^2	0.557885
Probability		0.0000
Significant level		5%
D.W		2.358110
No of observation		24

Source: Researchers computer using E-view 9.0, 2023

Decision

With a critical probability of 0.0000 less than 0.05 (5%) level of significance, the researcher therefore rejects the null hypothesis and accepts the alternative which says that Property, plant and equipment has significant effect on the financial profitability of listed manufacturing firms in Nigeria.

Ho₂: Intangible assets have no significant effect on the financial profitability of listed manufacturing firms in Nigeria.

Null Hypotheses; H₀: P = 0, (Statistically not significant)

Alternate Hypotheses; H₁: P ≠ 0. (Statistically Significant)

And the decision rule states that “null hypothesis” should be rejected when P-Value is greater than 0.05. But when the P-Value is lower than 0.05, the “alternate hypothesis” is accepted with its conclusion.

Table 3: Test of hypothesis II

	R^2	0.744183
Adjusted	R^2	0.557885
Probability		0.0074
Significant level		5%
D.W		2.358110
No of observation		24

Source: Researchers computer using 9.0, 2023

Decision

With a critical probability of 0.0074 less than 0.05 (5%) level of significance, the researcher therefore rejects the null hypothesis and accepts the alternative which says that intangible

assets have a significant effect on the financial profitability of listed manufacturing firms in Nigeria.

Ho₃: Investment in subsidiaries has no significant effect on the financial profitability of listed manufacturing firms in Nigeria.

Null Hypotheses; H₀: P = 0, (Statistically not significant)

Alternate Hypotheses; H₁: P ≠ 0. (Statistically Significant)

And the decision rule states that “null hypothesis” should be rejected when P-Value is greater than 0.05. But when the P-Value is lower than 0.05, the “alternate hypothesis” is accepted with its conclusion.

Table 4: Test of hypothesis III

	R^2	0.744183
<i>Adjusted</i>	R^2	0.557885
<i>Probability</i>		0.3641
<i>Significant level</i>		5%
<i>D.W</i>		2.358110
<i>No of observation</i>		24

Source: Researchers computer using 9.0, 2023

The probability coefficient is selected from table 2 because based on the Hausman test results, the fixed regression results are most appropriate.

Decision

With critical probability of 0.3641 greater than 0.05 (5%) level of significant, the researcher therefore reject the null hypothesis and accept the alternate which says that Investment in subsidiaries has no significant effect on the financial profitability of listed manufacturing firms in Nigeria

Discussion of Findings

This study examined the effect of non-current assets on the financial profitability of three quoted healthcare manufacturing firms in Nigeria. The estimated regression model produced an R-square of 0.744183 and 0.557885 which implies that 74.4 and 55.6 percent variation on profit after tax of the health care firms can be explained by variation in non-current assets of the healthcare firms. This means that 23.6 percent is explained by factors not captured in the models. The estimated regression model is statistically significant with the value of f-statistics and f-probability less than 0.05.

Hypothesis I, which examines the effect of property, plant and equipment on the financial profitability of the healthcare firms, proved that property, plant and equipment have positive

and significant effect on the financial profitability of the three healthcare firms. The estimated coefficient of 0.508045 and 0.0000 indicates that a unit increase on property, plant and equipment will lead to 5.0 percent increase on the financial profitability of the healthcare firms. The positive effect of property, plant and equipment on financial profitability of the firms confirms the a-priori expectations of the study and resource base theory formulated by Barney (1991) which contends that the possession of strategic resources provides an organisation with an opportunity to develop competitive advantages over its rivals. The findings confirm the empirical findings of Chukwu & Egbuhfor, (2021) that there is an association between non-current assets and firms profitability, the findings of Olatunji & Tajudeen (2020) that the relationship between the dependent variable (net profit) and independent variables (building, land, fixtures and fitting and investment in computers) were positive and significant, the findings of Matsoso & Benedict (2019) that upward revaluation of intangible non-current assets are positively and significantly associated with future profitability of firms, measured by cash flow from operations and operating income and the findings of Baroch (2021) that firms with a higher level of fixed assets holding and overhead expenses and covered by preferential tax policies in china are found to be associated with however risk-adjusted profitability.

Hypothesis II, which examines the effect of intangible assets on the financial profitability of the healthcare firms, proved that intangible assets have negative and significant effects on the financial profitability of the three healthcare firms. The estimated coefficient of -0.610052 and 0.0074 indicates that a unit increase on intangible assets will lead to 6.1 percent decrease on the financial profitability of the healthcare firms. The negative effect of intangible assets on financial profitability of the firms contradicts the a-priori expectations of the study and resource base theory formulated by Jay Barney (1991) which contends that the possession of strategic resources provides an organisation with an opportunity to develop competitive advantages over its rivals. The negative effect of intangible assets on the financial profitability of the healthcare firms can be traced to poor valuation of intangible assets such as human capital accounting. The findings contradict the empirical findings of Hoarg & Balird (2022) that there is an association between non-current assets and firms profitability, the findings of Olatunji & Tajudeen (2020) that the relationship between the dependent variable (net profit) and independent variables (building, land, fixtures and fitting and investment in computers) were positive and significant, the findings of Aboody, Barth & Kasznik (1999) that upward revaluation of intangible non-current assets are positively and significantly associated with future profitability of firms, measured by cash flow from operations and operating income and the findings of Nnado & Ozouli, (2020) that firms with a higher level of fixed assets holding and overhead expenses and covered by preferential tax policies in china are found to be associated with however risk-adjusted profitability.

Hypothesis III which examines the effect of investment in subsidiaries on the financial profitability of the healthcare firms proved that investment in subsidiaries have positive and

no significant effect on the financial profitability of the three healthcare firms. The estimated coefficient of 0.012277 and 0.3641 indicates that a unit increase on investment in subsidiaries will lead to 0.1 percent increase on the financial profitability of the healthcare firms. The positive effect of investment in subsidiaries on financial profitability of the firms confirms the a-priori expectations of the study and also confirms resource base theory formulated by Jay Barney (1991) which contends that the possession of strategic resources provides an organisation with an opportunity to develop competitive advantages over its rivals. The findings confirm the empirical findings of Okoye, Offor & Manukaji (2022) that intangible assets have significant effect on profitability of quoted companies in Nigeria, the findings of Nnado & Ozouli (2020) intangible assets given that the relationship between intangible assets and financial profitability proxied by EVA is very significant and negative, the findings of Salawu & Adediji (2017) showed an insignificant relationship between the predictor variables (human resource accounting, intangible assets) and organisational profitability and the findings of Li & Wang (2014) whose result depicted a positive relationship between the independent variables (research and development cost and sale training expense) and ROA.

5.0 SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

Summary of Findings

The findings established that 74.4 and 55.6 percent variation on profit after tax of the health care firms can be explained by variation in non-current assets of the healthcare firms. This means that 23.6 percent is explained by factors not captured in the models. The summary of the results from test of hypotheses showed that:

- i. Property, plant and equipment have a positive and significant effect on the financial profitability of healthcare firms in Nigeria.
- ii. Intangible assets have a negative and significant effect on the financial profitability of healthcare firms in Nigeria.
- iii. Investment in subsidiaries have positive and no significant effect on the financial profitability of healthcare firms in Nigeria.

Conclusion

Based on the data analysis and its subsequent findings, the study established that a significant and positive relationship exists between property, plants and equipment and investment in subsidiaries and profitability in healthcare manufacturing firms in Nigeria. The results of the study support both theoretical and empirical evidence of prior studies that investments in noncurrent assets effect positively on the financial profitability of corporate organisations in Nigeria.

Recommendations

Based on the findings, this study make the following recommendations:

1. That manager should pay more attention to the proper management, evaluations and investment on property, plant and equipment. This may be achieved by setting certain standards that will help to maintain optimal level investment on property, plant and equipment.
2. That management should have a positive disposition towards intangible assets disclosure in order to project the real value of intangible assets in their organisations. Policies should be directed toward management of investment in intangibles assets. Proper accounting policies should be adopted for valuation of intangible assets in the healthcare firms.
3. That management should ensure proper management of subsidiaries investment of the healthcare manufacturing firms in Nigeria since it has a positive influence on their profitability.

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