EFFECT OF ASSET STRUCTURE ON FINANCIAL STABILITY: MODERATING ROLE OF FIRM SIZE OF CONSTRUCTION FIRMS IN NIGERIA.

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Abstract

The study examined the moderating effect of firm size on the nexus of asset structure and financial stability of quoted construction firms in Nigeria. Financial stability was used as dependent variable while property plant and equipment, long term investment, current assets and intangible were used as independent variables and while log of total assets which captures firm size was used as the moderating variable. A sample of 7 construction firms were used for the period of ten years spanning 2012 to 2021. The study employed ex-post facto and longitudinal research design. The secondary sources of data were collected from annual reports of the selected companies and four (4) specific objectives and hypotheses were subjected to some preliminary data tests like descriptive statistics, Pearson correlation analysis and Variance Inflation factor (VIF) and were analyzed using panel regression analysis. Using a sample of 70 firm-year observations, the result revealed that firm size has a positive moderation effect on the effect of Property, Plant and Equipment and long term investment on firm stability of construction firms in Nigeria which were statistically significant at 1% and 5% levels of significance respectively. However, firm size had a negative moderation effect on the nexus of Current Assets on firm stability of construction firms while a positive moderation effect on the nexus of intangible assets on firm stability of construction firms were documented. The study therefore recommends that management of construction firms to achieve better stability and performance should consider the appropriate combination of property, plant, equipment with log of total assets and long term investment as this would positively and significantly affects the financial stability of their firms.

Keywords: Asset Structure, Property Plant and Equipment, Current Assets, Long-term Investment, Intangible Assets Financial Stability.

1.1 Introduction

The prevailing economic activities experienced in Nigeria following the insecurity, high exchange rate, and economic recession have increased the level of uncertainty surrounding business operations, their ability to achieve high profit and long run survival. Assets composition has been viewed from various aspects by different scholars. According to Zheng and Nuo, (2013). Asset structure is the allocation of the resources diversely, it can be broken down into three components namely; turnover assets, production assets and wasting assets. Asset structure is a wealth or economic resources owned by a company expected to provide benefits in the future consisting of non- current assets, intangible assets, current assets, and financial or investment assets.

On the other hand, Mawih (2014) studied the assets structure conceptualizing as a component of assets and current assets. Empirical evidence has concluded that the study of asset structure is significant to the business organizations. Zheng and Nuo (2013) contends that the research of assets structure has more practical value and universal significance than capital structure as they are the main source of creating corporate value and avoid risks. Assets structure has also

been widely reported by corporate finance literature to significantly affect financial structure of firm (Koralun, 2013).

Corporate stability deals with the ability of a company to withstand temporary economic challenges. The stability plans of business include the investment in assets with present and future value (Dun & Bradstreets, 2011). A stable corporate system is capable of efficiently allocating resources, assessing and managing financial risks, maintaining its human capital as much as possible. In stability, the system is built to absorb any adverse shocks primarily through its internal capabilities and developed mechanisms, thereby preventing adverse negative effects that could lead to disruption of the real economy. Firms operate as part of the larger system, it sources its raw material from the society and pushes it finished product back into the society, its complies with policies and reflect the changes in societal taste, demand pattern, income and government micro and macroeconomic policy. Unfavorable policy could lead cause shock to firms and lead to serious instability challenges.

Researchers have shown that firm stability is associated to assets composition. Kabiru, Ibrahim, and Ibrahim (2019) believed that corporate stability is a key factor in determining the resource distribution, which leads to standardization, coordination, and speeding up of operations. Stable firms are said to be effective in resource distribution than firm under distress. The quality of the assets can be a key factor considered by lender and investor. According to Mwaniki and Omagwa (2017), Ocak, and Findik (2019) having quality assets allows businesses to borrow at low rate using their assets as collateral in order to acquire loan facilities to meet obligations. This enhances the possibility of ensuring stability of the firm.

Assets as resources used in the production process, help to generate inflow that can be used to secure favorable funding. However, excess investment in assets can tie down the capital, affect working capital and give rise to high maintenance cost. Inadequate investment on the other hand can lead to low production of output and may not generate the required fund to meet demands as at when due and ultimately affect the profitability of the firm, therefore, having the appropriate mix of those assets enables the management achieve competitive edge and better performance, which in turn, enhances the stability of the firm. The problem statement here is, what constitutes the appropriate mix and to what extent does it impact on the stability of manufacturing firms? This has not been exhaustively researched on.

Numerous researchers have studied the effect of asset composition on corporate performance and firm stability. For example, Hong Kong, Li and Wang (2014) used descriptive and regression for data analysis, Okwo, Ugwunta and Nweze (2012) used ex-post facto design and multiple regression analysis. Ngunya and Mwangi (2018) and Mwaniki and Omagwa (2017) utilized binary analysis, but Anas and Mohammad (2015) employed a descriptive design and used multiple regression without adjusting for cross section or fixed effect in their work. Although these variables have been widely studied, the empirical evidence that associated asset structure with firm financial stability in the post-recession era is lacking in Nigeria. The uniqueness of this research over other prior studies is the introduction of moderating effect of firm size variable. To the best of our knowledge, there is no indigenous study that has combined these variables, using firm size as a moderating role on the effect of asset structure on firm stability. In addition, most of the literature covered between two to six years to explain the effect of asset structure on firm performance, but this current research extended the period to 10 years' period spanning from 2012 to 2021. Given the gap poised by the above empirical studies, this study seeks to fill the existing research gap by ascertaining the current data on the effect of assets structure on the firm financial stability of a construction firms in Nigeria. The specific objectives of the study are to:

1. Determined the moderating role of firm size on the effect of property, plant and equipment on firm financial stability of construction firms in Nigeria.

2. Investigate the moderating role of firm size on the effect of Long Term Investment on firm financial stability of construction firms in Nigeria.

3. Verify the moderating role of firm size on the effect of current assets on firm financial stability of construction firms in Nigeria.

4. Investigate the moderating role of firm size on the effect of intangible assets on firm financial stability of construction firms in Nigeria.

2.0 Conceptual Review

2.1 Assets Structure

According to (IAS 1), Assets are present economic resources controlled by the reporting entity as a result of past events. For assets to exist the following three criteria must all exist; present economic resources, control, and past events. United States Financial Accounting Standards Board Concepts Statement 6, defined assets as "probable future economic benefits obtained or controlled by a particular entity as a result of past transactions or events. Assets are resources used in the production process, help to generate inflow that can be used to secure favorable funding, these assets are, Noncurrent assets, Current assets, Financial or investment assets and Intangible assets. Assets Structure is defined as those items that are acquired presently that will bring returns in the future. Also, the United States Institute of Management Accountants defined assets as "any owned physical object (tangible) or right (intangible) having economic value to its owners; an item or source of wealth with continuing benefits for future periods, expressed, for accounting purposes, in terms of its cost, or other value, such as current replacement cost"

Koralun (2013) defined asset structure as the combination of the various asset components which were identified as: non-current assets, financial assets, intangible assets, current assets and current investments and cash in hand and at bank. A similar approach is taken by Schmidt (2014) where asset structure is described in terms of; current assets, long term investments and funds, property, plant and equipment, intangible assets, and other assets. Asset structure is the allocation of the resources diversely, it can be broken down into three components namely; turnover assets, production assets and wasting assets. On the other hand, Mawih (2014). Studied the assets structure conceptualizing it as a component of assets and current assets. Empirical evidence has concluded that the study of asset structure is significant to the business organizations. Zheng and Nuo (2013) contends that the research of assets structure has more practical value and universal significance than capital structure as they are the main source of creating corporate value and avoid risks. Assets structure has also been widely reported by corporate finance literature to significantly affect financial structure of firm (Koralun, 2013).

2.1.2 Property Plant and Equipment

Property plant and equipment are assets which cannot be easily converted into cash. They constitute major portion of total assets of manufacturing firms. The quality of it can help determine the quality of product and the long run survival plan of the firm. Investment in property, plant and equipment assets help build up affirms balance sheet and stripping them can be a veritable source of finance to firm when all other sources fails. In the study of Ibam (2008), a company's investment in noncurrent assets is dependent to a large extent on its line of business. This hold true as some businesses operates in capital intensive industry like oil and

gas than others operate in industries with less capital concentration. Most firms operating in oil and gas or other natural resources sector need large and technology driven noncurrent assets than firms in service sector whose assets is majorly intangible in nature.

Chukwu and Egbuhuzor (2017), define property, plant and equipment (land, building, plant and machinery) as immovable assets which are expected to be used for more than one accounting year, they are capital intensive in nature and cannot be easily converted into cash without loss of stability. International Accounting Standard (IAS) 16, differentiate property, plant and equipment from other class of assets and are expected to be used for more than one accounting year. The investment in property, plant and equipment account for the highest proportion of the total assets of a firm. This is measured as the ratio of property, plant and equipment to total assets. According to Mawih (2014) property, plant and equipment are immovable assets which cannot be easily converted into cash. They constitute major portion of total assets of firms especially firms in the manufacturing sector. The quality of it can help determine the quality of product and the long run survival plan of the firm. Investment in tangible noncurrent assets help build up a firm's statement of financial position and stripping them can be a veritable source of finance to firm when all other sources fails.

2.1.3   Long-Term Investment

Definition: Investments account for future prospects. Long-term investments are based on discounting future anticipations. Socially Responsible Investments (SRIs) were historically focused on long-term considerations. In general, socio-psychological motives may drive the demand for SRIs besides the intention to maximize profits. Altruism as a concern for the societal well-being, the need for innovation and entrepreneurship, strategic leadership advantages through social status elevation, utility derived from transparency and information disclosure but also self-enhancement through identification and self-consistency, the expression of social values but also long-term considerations are socio-psychological drives of SRI (Puaschunder, forthcoming b). These non-financial criteria seem to play a major role in the decision to invest with a long-term focus. Long-term investment holds socio-psychological and leadership advantages, such as altruism benefits and first-mover gains. In the age of global warming, attention for intergenerational aspects of future investments has gained unprecedented momentum. Political divestiture with a long-term investment view is one of the most recent trends in investment policies, as, for instance, practiced in carbon divestiture. Future research may integrate social, environmental and intergenerational aspects in long-term financial discounting calculus.

2.1.4   Current Assets

Current assets are assets which can be converted into cash during the same financial year without suffering a major loss in value. Current assets commonly found in the financial report of manufacturing firms includes; Cash/bank balance, receivables, raw material inventory, work-in-process inventory, finished products inventory, and items held for resale This is especially true given that the primary function of the firm's finance management is to spend a significant amount of time managing current assets and current liabilities. According to Deloof, (2003), it is the duty of the financial manager to arrange for short term funds, negotiates for credit terms that was favorable to the firm, monitor the usage of fund top ensure is in line with the purpose for raising it, manage the accounts receivable and watch over the inventory movement.

Current assets are assets that can be easily and quickly converted into cash or other liquid assets. The investment in current assets involves investment in accounts receivable, cash and inventory which are non-interest bearing assets. Current asset management has gained

increased prominence as firms began to be aware of the difference between profitability and liquidity. It's possible for a firm to avoid purchasing capital assets like land, but it's impossible for a business to run without the provision of adequate current assets. This is particularly true as the major role of the financial manager of firm is to spend a great deal of their time managing current assets and current liabilities.

2.1.5 Intangible Assets

The Standard (IAS 38) defined intangible asset as an identifiable, nonmonetary asset without physical substance held for use in production or supply of goods or services or rental or other administrative purpose by organization. IAS 38 requires that for an asset to be recognized as intangible asset it should be identifiable in a way that it is possible to distinguish it from goodwill. In addition, the enterprise should have sufficient control of the asset. Zambon (2003) classified intangible assets into two using their source of cash inflow to the firm: those that internally generated revenue for the firm (research and development, goodwill) and those that externally generated revenue for the firm (patent, brand name, copy right, trade mark, royalty).

One of the unique attributes of intangible assets in their non-physical nature and non-tradability, which differentiates them from other assets. They may not be traded in an active and open market. For instance, goodwill, they are difficult to be traded in active and open market, this may be due to lack of detailed information which is usually not available to the public resulting to information asymmetries between their owners and investor/outsiders. Ngunya and Mwangi (2018) further classified intangible assets as patent, trademark, copy right royalty etc. as skill or competence; it includes expertise, distributors, suppliers corporate culture. Lev and Daum (2004) give two reasons for this. First, on a stand-alone basis, intangibles are inert, they can neither create value nor generate growth and need to be combined with other production factors to do so. Secondly, the components of intangibles are intertwined making them difficult to isolate and quantify.

2.1.6 Firm Financial Stability

According to Yasir and Harjan (2020) the firm financial stability of any company is an essential prerequisite for facing financial crises and implementing the companies 'development strategy. It also generates sustainability for investments that provide financial security for companies. As the company is financially stable when two conditions are met, which are the first condition: the company's solvency is the description of the company's financial condition, through which payment is made in a timely manner. To ensure solvency, cash flow must be effectively guaranteed. The second condition: to achieve financial stability is the availability of financial resources to develop the company and finance investments in the long term (Lassoued, 2018)

Firm stability is the ability of companies to sustain the level of production and operation in the nearest future. Firm stability strategy focuses on maintaining its present product and market in order to guarantee future performance and avoid risk. Firm stability deals with the ability of a company to withstand temporary economic challenges. Such as a decrease in sales, lack of capital or loss of a key staff or customer. The stability plans of business include the investment in assets with present and future value. Assets like human resource, noncurrent assets and long term financial security. (Dun & Bradstreets, 2011).

2.1.7 Firm Size

The firm size is considered as one of the basic restrictive things in both small and big firms at the local and foreign levels when taking decisions relating to financial leverage, tangible and intangible assets and other fixed assets and current assets (inventory, receivable and other

current assets). For determining the firm size, the natural logarithm of the total assets will be used. (Aggarwal & Padhan, 2017). Usually, the big firms are more diversified and less risky and the earning per share is connected with size and is positively connected with the ratio of the market value to the book value, a lot of researches have revealed that the relationship between size and financial earnings are similar concerning financial and non-financial firm. (Liow, 2010). Firm size is a scale in which companies can be classified according to various ways, including total assets, log size, the market value of shares, and others. According to Suwito (2005), firm size is only divided into three categories, namely: "large firms, medium-sized companies, and small firms." Determination of the size of the company is based on the company's total asset. The total assets of the company determined the size of the company in this study. The following formula measured the firm size: Firm size = Log Natural (Ln) of total asset

2.2   Theoretical Framework

2.2.1   Resource Based Theory

This study is anchored on the theory of resource based theory. The theory is propounded by Penrose (1950). The evolution of the resource based view originates from Penrose's Pioneering idea presented in the 1950s in her book 'The theory of growth of a firm' where a firm is described as a pool of resources that should be organized into their best uses in order to create grounds for firm success, (Penrose, 1995). The RBV is based on the fact that tangible and intangible resources and the capability to coordinate those assets or inputs of production in a strategically successful way (Helfat & Peteraf 2003) from the grounds for competitiveness in the dynamic business environment (Brown & Blackmon, 2005). The role of company managers is crucial to firm-level competitiveness, since their perceptions of the environmental circumstances dictate the selection of resources (Fahy, 2002) to be exploited, developed and protected (Dierick & Cool, 1989). In addition, in structuring the firm level resource portfolio, managers should also be able to make successful decisions on strategic resource investments (Sirmon et al 2007). The theory argues that one of the ways which the firm can compete favorable and achieve competitive advantage is to deploy its unique assets. Those one-of-a-kind assets are exclusive to the company and cannot be replicated. It is believed that the company has some distinguishing characteristics that offer it a competitive advantage.

2.4   Empirical Review

Ndumia and Jagongo (2022), investigate a critical review of literature on asset structure and profitability of firms listed under manufacturing and allied sector at the Nairobi securities exchange, Kenya. The study sought to carry out a critical review of literature on asset structure and profitability of the manufacturing and allied firms listed in Nairobi Securities Exchange, Kenya. The study recommends that rather that focus on financial performance, profitability which is a narrow and key aspect of financial performance can be explored. Moderation effects of inflation on the relationship between asset structure and profitability can be considered while focusing on manufacturing and allied firms listed at the Nairobi Securities Exchange, Kenya.

Zimny (2022) studied impact of asset structure on a company's financial results stability: The study examined the impact of asset structure on the stability of financial results of companies. The study verifies two hypotheses: high share of non-current assets in total assets results in high volatility of profitability over time. And high share of PPE (Property, Plant & Equipment) in total assets results in high volatility of profitability over time. The study covered the aggregated data of Polish non-financial enterprises employing 10 persons or more keeping accounting ledgers, data for years 2009–2020 (first dataset) and annual financial data of 115 companies from 13 WSE industry sub-sectors for years 2009–2021. The analysis of the asset

structure and the volatility of profitability in the research sample indicated industries with large and small values of these parameters. Then, the hypotheses were tested; the results for the second dataset showed that there is a positive and weak, but statistically significant (p value ≤ 0.005) correlation between non-current asset structure ratio and both, ROS and ROS adjusted ratios, and there is a weak, but negative correlation between PPE structure ratio and ROS and ROS adjusted ratios (with p value of 0.021 and 0.076, respectively). On this basis, hypothesis 1 was considered as verified positively, and hypothesis 2 was rejected.

Temuhale, and Ighoroje (2021), studied asset structure, capital structure and performance of quoted industrial goods firms in Nigeria; This study examined the effect of asset structure and capital structure on the performance of quoted industrial goods firms in Nigeria within 2011-2019. The study was structured into two models with property, plant, and equipment (PPE), other fixed assets (OFA), and current assets (CAS) as explanatory variables for the asset structure model; long term debt to total equity (LTDTEQ), long term debt to total asset (LTDTAS), long term debt to long term capital (lTDTLC) as explanatory variables for the capital structure model while performance was represented in each model by return on asset (ROA). Findings showed that while all the asset structure variables had a positive but insignificant effect, capital structure variables viz; ratio of long term debt to total equity, ratio of long term debt to total asset each had positive and significant effect and ratio of long term debt to total long term capital had an inverse and significant effect on return on assets of industrial goods firms in Nigeria. The study therefore concluded that while asset structure does not meaningfully affect the performance of industrial goods firms, capital structure has a positive effect. The study encouraged the firms to consider acquiring more long term debts to finance their operations and avoid investing too much on fixed assets.

Olonite and Okoro (2021), Studied Impact of Assets Structure on Financial Performance of Quoted Construction Firms in Nigeria; this study examined the relationship between asset structure and financial performance. The study used the secondary data from the retrieved from the various websites of the quoted construction firms in Nigeria from 2012 to 2018. The results of the study indicated that fixed asset have a positive and significant impact on return on asset. Also, the study found that current asset has positive and significant impact on earnings per share. The study recommends that the construction firms should limit debtors as it greatly affects the current asset, invest more money in fixed assets as this will also increase the profitability of the firms and will in the long run maximize the return on asset (ROA) and Earnings per Share (EPS) and firms should avoid keeping non-performing funds.

Iltaş and Demirgüneş (2020), Asset Tangibility and Financial Performance: A Time Series Evidence; analyzes the effect of asset tangibility on financial performance of Turkish manufacturing sector covering. The stationarity of series and the co integration relationship among them are tested, and Zivot and Andrews (1992), unit root tests, and one-break Gregory and Hansen (1996) co integration test. Long-run coefficients estimated by Stock and Watson (1993)'s DOLS methodology posit that asset tangibility, financial leverage, liquidity and operating efficiency have significant and positive effects on financial performance till (and including) the break date. However, from this break date on, they affect financial performance negatively.

Yasir and Harjan (2020) studied impact of financial structure on the financial stability: an empirical study in a sample of Iraqi companies. In order to achieve the aims of the study and answer its questions, the study tested a sample of the industrial companies contributing, using that data published on the website of the Iraq Stock Exchange for the period (2010-2018). The sample includes (11) industrial companies listed on the Iraq Stock Exchange. The most important finding of the results is that financing the right of ownership in the book value to the

total assets has a role in achieving financial stability for the industrial sample companies. In other words, the high percentage of financing the right to ownership in the book value to the total assets can increase the financial stability of companies through its impact on the cost of financing in general. The research concludes that it is necessary to keep the ownership rights high because that enables companies to obtain the necessary financing at the lowest costs, and reduce dependence on debt financing, which leads to financial stability.

Qureshi and Siddiqui (2020), studied effect of Intangible Assets on Financial Performance, Financial Policies, and Market Value of Technology Firms: the study examine the degree to which intangible assets effect financial performance. The results from Multi group Analysis (MGA) revealed that there are differences in the significance of the impact of Assets on the criterion variable between a few countries for instance Asset's impact on ROIC is significantly different between Russia & China and USA.

Zaher (2020), studied impact of Financial Leverage, Size and Assets Structure on Firm Value: Evidence from Industrial Sector, Jordan; the study used the analytical method approach for a sample of 13 firms from the mining and extraction industry sector listed on the Amman stock exchange for the period 2010-2018. The model of simple linear regression was used for testing the hypotheses of the study by using both programs of (E-views, STATA) in addition to both programs of unit root test and variance inflation factor to ensure data stability. The study concluded the non-existence of the impact of financial leverage on the firm value and the relationship between the financial leverage and Tobin's q scale was negative. However, there was an impact of each size and asset structure on firm value and the relationship between the natural logarithm of size and asset structure was positive with Tobin's q. The study recommends that Companies must achieve an optimal mixture of debt and equity, for long-term survival and hence the growth of the company.

Okoye, Ofor and Manukaji (2019), examine the effect of intangible assets on performance of quoted companies in Nigeria; using time series data from 2008 to 2017. Relevant conceptual, theoretical and empirical literatures were examined. The study is anchored on signaling theory and agency theory. Ex post facto research design was employed. The study found that employee benefit expenses has 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. Based on the foregoing, the study concludes that intangible assets have significant effect on performance of quoted companies in Nigeria. The study recommends that management should have positive disposition towards intangible assets disclosure in order to project the real value of intangible assets in their organization.

Thenmozhi, Saravanan and Sasidharan (2019), Studied Impact of Excess Cash on Earnings Management and Firm Value: Evidence from China; the study examines how excess cash drives earnings management and firm value in China. Using a fixed effect panel regression on a sample of 12,629 observations covering 300 firms listed in the Shanghai Stock Exchange, we find that excess cash has a positive impact on firm value confirming pecking order theory. Our results show that earnings management has a negative impact on firm value in China, which supports the efficient earnings management view. We find that managers in Chinese firms are less likely to use excess cash for manipulating earnings. We provide empirical evidence that firms with excess cash seem to use it more for precautionary purpose than earnings management and the excess corporate liquidity of Chinese firms is used for value-enhancing activities. The test of robustness using the Instrumental Variable (IV) model confirms the results of the study. Our study merges two areas of corporate finance by incorporating agency problems concerning earnings management and cash holdings.

Mmbasa, Chebet and Kitheka (2019), studied effects of inventory management system on firm performance. The researcher used an empirical evidence to analyze the findings. The study established that systematic application and production in data processing affect performance of organization. The study concluded that Economic order quantity should be continuously reviewed were by inventory control system is closely monitored at all time to make it more effective. On recommendations, the first recommendation made was that since SAP was found to be significantly affects firm performance, organizations should appropriately use the SAP technology in managing their procurement for an efficient operation. The second recommendation was based on EOQ. Since EOQ was found to be an important technique in inventory management, firms should ensure to order the recommended lot size as determined by the EOQ.

Husna and Satria (2019), investigate effects of Return on Asset, Debt to Asset Ratio, Current Ratio, Firm Size, and Dividend Payout Ratio on Firm Value; the study determines the effect of return on assets, debt to asset ratio (DAR), current ratio (CR), firm size, and dividend payout ratio (DPR) to the firm value of manufacturing companies listed in Indonesia Stock Exchange for the period 2013-2016. The sampling method was purposive sampling techniques and obtained from 32 samples out of 138 firms that met the criteria. The analysis technique applied was a multiple regression analysis. The research found that the return on asset and firm size have effects on firm value, DAR, CR, and DPR, but do not affect firm value. This paper shows that return on asset has an effect firm value, DAR does not affect firm value, firm size has an effect firm value, and payout ratio has no effect on firm value.

Omondi (2018), investigate effect of current assets on financial performance while focusing on listed firms in the NSE, Kenya. The study used lifecycle theory, agency theory to explain the relationship between asset structure and financial performance. Financial performance was measured using ROE and ROA while current asset turnover was the independent variable. 17 firm cutting across commercial and service sector and energy and petroleum sectors were covered for the time frame 2011 to 2017. Current asset was established to exert significant in effect on financial performance of listed firms at NSE. The study recommended that companies should employ cash for purposes of meeting their intended obligations while and ensure smooth operations. Diligence is needed in spending resources towards economic benefits.

Ngunya and Mwangi (2018), analyzed asset structure and financial performance relationships for the case of listed manufacturing and allied Companies in Kenya. Casual research design was used and a census of eight (8) companies was done. Panel data was used which was analyzed using multiple panel regression model. While using panel regression (random effect) analysis, it was found that tangible fixed assets had negative insignificant effect on financial performance. It was established that intangible fixed assets had positive insignificant effect on performance. Out of the different asset classes, the study concluded that performance in the context of manufacturing and allied sector in Kenya is dependent on the current assets. The study recommended managers to reconsider their holdings of fixed and current assets.

Ariyani, Pangestuti and Raharjo (2018), Also studied the effect of asset structure, profitability, company size, and company growth on capital structure; the study examine the effect of asset structure, profitability, firm size and company growth on the capital structure of manufacturing companies listed on the Indonesia Stock Exchange in 2013 – 2017. The analysis of asset structure has a positive effect on the capital structure and not significant to the capital structure, profitability has a negative and significant effect on the capital structure, the size of the company has a positive and significant effect on the capital structure, and the company's growth has a negative and significant effect on the capital structure.

Atnafu and Balda (2018), examine the impact of inventory management practice on firms' competitiveness and organizational performance; Data for the study were collected from 188 micro and small enterprises (MSEs) operating in the manufacturing sub-sector and the relationships and hypothesis proposed in the conceptual framework were tested using structural equation modeling (SEM). The results indicate that higher levels of inventory management practice can lead to an enhanced competitive advantage and improved organizational performance. Also, competitive advantage can have a direct, positive impact on organizational performance. Therefore, it is recommended that policy makers, universities, NGOs and any concerned party who are engaged in supporting of MSEs need to work on providing the necessary training and resource to promote the inventory management practice of MSEs which will result in increasing their competitiveness and organizational performance. That would enhance their contribution to the economic development of the country. Note that, the conclusion obtained from this study may not be used to generalize to large and medium scale as well as overall sectors since its focus is only from the MSEs' manufacturing sub-sector points of view.

Saleh (2018), studied impacts of tangible and intangible asset investment on value of manufacturing companies listed on the Indonesia stock exchange; 51 companies were used, using the purposive sampling method with 255 observations during the period 2012-2016. The result of the analysis showed that FEM is more precise in predicting the influence of independent variable to dependent variable, because the probability value of Cho-test and Hausman test is smaller than $\alpha = 0.05$. The result of data analysis using FEM showed that from the two independent variables used, only the tangible asset variable and the other three control variables, namely, current ratio (CR), earnings per share (EPS), and net profit margin (NPM) have significant effect on firm value.

Setiadharma and Machali (2017), Studied the effect of asset structure and firm size on firm value with capital structure as intervening variable, this study is to analyze the direct and indirect effect of asset structure and firm size on the firm value. The samples for this study were thirty-four property and real estate firms registered in Indonesia Stock Exchange in the period 2010-2014. The result of this study shows that there is a direct effect of asset structure on the firm value. There is no indirect effect of asset structure on the firm value with capital structure as intervening variable, there is no direct effect of firm size on the firm value, and there is no indirect effect of firm size on the firm value with capital structure as intervening variable. Thus, it can be concluded that capital structure as intervening variable cannot mediate the relationship between asset structure and firm size on the firm value.

Mwaniki and Omagwa (2017), examined asset structure and financial performance: a case of firms quoted under commercial and services sector at the Nairobi securities exchange, Kenya. The results of the study indicate that asset structure had a significant statistical effect on the financial performance. In particular, the study found that: Property, Plants and Equipment, and long-term investments and funds have a statistically significant effect on financial performance, while current assets and intangible assets do not have statistical significance on financial performance. This study concluded that the firms should increase the allocation of resources towards long term investments and funds, and utilize available resources in terms of the Property, Plant and Equipment effectively.

Adusei (2017), studied Account Receivables Management: Insight and Challenges, the study investigates how Zoomlion Company Limited manages its accounts receivables. Based on multiple linear regression analysis, Kendall coefficient of concordance and one sample t-test, the result shows effective credit control systems by the company. However, poor monitoring and lack of effective follow up measures were the key challenges to debt management. The

paper recommends stricter adherence to the credit policy and vigorously pursued effective recovery strategies and further prescribed best practices in accounts receivables management.

Nyamasege, Okibo, Nyang'au, Sang'ania, Omosa, and Momanyi (2014), examined the effect of asset structure on value of a firm; this research sought to establish the effect of capital structure on value of the firm through the determinant of asset structure. The findings confirmed that the asset structure determines the firm's value to a high extent. Firms did not seem to consider appropriately all elements before making decisions on the composition and alteration of their capital structures thus affecting their values negatively. Management of companies should initiate regular capital structure monitoring and control mechanisms to ensure that any change made adds value to their firms in the long run.

Mawih (2014), studied the effect of assets structure (based on current assets and fixed assets) on financial performances of listed manufacturing companies in Muscat Securities Market (MSM). The period 2008 to 2012 was covered where asset structure was assessed using current assets turnover and fixed assets turnover. The indicators for financial performance were return on assets and return on equity. In overall, it was found that asset structure had insignificant effects on profitability (ROE). Only fixed assets had significant on ROE unlike ROA. Findings show that in the petro-chemical sector, asset structure had significant impact on ROE.

3.0   Methodology

This study makes used of *ex-post facto* research design. *Ex-post facto* research design is used due to its special characteristics which are the event that has already occurred hence there is no need for manipulation or alteration and it is also less costly and less time consuming. The study was conducted in Nigeria, focusing on quoted construction firms in Nigeria Exchange Limited. The study used is secondary data that covered the period of ten (10) years from 2012 - 2021. The study collected the data from the published financial statement of quoted constructions firms for the various years to be covered by the study. The population of this study is made up of all the eight (8) construction firms that are listed on the floor of the Nigerian Exchange Limited up to December, 2021. The study adopted purposive sampling techniques and it was used to select 7 firms out of the total population and the reason for this is that their financial statements were made available.

Operationalization of Variables

Variables	Measurements/Proxy	Sources
Moderating Variable		
Firm Size	the natural logarithm of the total assets	Riyono and Ndarti (2019)
Dependent variable		
Firm financial stability (FS)	Total Cash / Total Assets.	Yasir and Harjan (2020)
Independent Variables		
Property, Plant and Equipment (PPE)	Property, plant and Equipment/Total Assets	Mwaniki and Omagwa (2017)
Long term Investment	Long-term Investments/Funds	Mwaniki and Omagwa J (2017)
Current Assets	Total Current Assets/Total Sales	Mwaniki and Omagwa J (2017)
Intangible Assets	Total Intangible Assets/Total Sales	Anichebe and Agu, (2013)

Source: Empirical Survey (2023)

Model Specification

This study adapted the model from the study of Mwaniki and Omagwa (2017) on the Asset Structure and Financial Performance: A case of Firms Quoted under Commercial and Service Sector at the Nairobi Securities Exchange, Kenya. The model is expressed as follows

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \mu$$

The model was modified to suit the variables to be used. Hence the model for the study was anchored on the objectives.

However, the model for this study is stated as

Model 1   Asset Structure and Financial Stability Nexus

FMST = f(PPE, LOTI, CUAS, INTA) ---1

This can be econometrically expressed as

$FMST_{it} = \beta_0 + \beta_1 PPE_{it} + \beta_2 LOTI_{it} + \beta_3 CUAS_{it} + \beta_4 INTA_{it} + \mu$………………………...1

Model 2   Moderating role of Firm Size on Asset Structure and Financial Stability Nexus

 This is expressed in the functional form of the Moderated Regression Specification as

FMST= f(PPE*logFSZ, LOTI*logFSZ, CUAS*logFSZ, INTA*logFSZ)

This can be econometrically expressed as

$FMST_{it} = \beta_0 + \beta_1 PPE_{it}$ *FSZ+ $\beta_2 LOTI_{it}$ *FSZ+ $\beta_3 CUAS_{it}$ *FSZ+ $\beta_4 INTA_{it}$ *FSZ + μ------2

Equation 1 and 2 are the linear regression model used in testing the null hypotheses.

Where:

FMST =	Firm Financial Stability
PPE =	Property, Plant and Equipment
LOTI =	Long-term Investment
CUAS =	Current Assets
INTA =	Intangible Assets
FSZ=	Firm Size (The Moderator)
β_1--- β_5, =	are the coefficient of the regression equation
μ =	Error term
i =	is the cross section of firms used
t =	is year (time series)

4.0   Data Analysis

4.1   Descriptive Statistics

Table 1:Descriptive Statistics Result

	FMST	LOGFSZ	PPE	LOTI	CUAS	INTA
Mean	0.121509	16.06959	0.298429	0.477574	2.390794	0.561702
Median	0.059940	16.34580	0.143336	0.595878	1.611404	0.185350
Maximum	3.873020	19.98350	7.484930	1.449300	12.98654	9.747060
Minimum	-0.041560	11.59000	0.000789	-3.499700	0.048980	-4.044341
Std. Dev.	0.468188	2.307009	0.919303	0.729393	2.199268	1.870831
Skewness	7.848039	-0.386501	7.294127	-2.614513	2.118420	3.551865
Kurtosis	63.40772	2.481397	57.45524	14.77562	9.533109	18.36901
Jarque-Bera	10874.83	2.418923	8872.448	463.4391	169.2653	800.2853
Probability	0.000000	0.298358	0.000000	0.000000	0.000000	0.000000
Sum	8.141103	1076.663	19.99473	31.99747	160.1832	37.63401
Sum Sq. Dev.	14.46718	351.2712	55.77782	35.11292	319.2276	231.0005
Observations	67	67	67	67	67	67

Source: Researcher's summary of Overall descriptive result (2023) using E-view 12

*Note: *1% level of significance, **5% level of significance, ***10% level of significance.*

The descriptive statistics result in Table 1 above shows the mean values for each of the variables, their maximum values, minimum values, standard deviation and Jarque-Bera values which show the normality and nature of the data. The study used data from 7 quoted construction firms in Nigeria for a period of ten years from 2012 to 2021. The result provides some insight into the nature of the selected construction firms that were used in the study. The researcher sought to establish the central tendency and distribution of assets structure components and financial stability among the selected construction firms in Nigeria. Financial stability which was the dependent variable was measured using total cash divided by total assets.

Firstly, it was observed that over the period under review, the sampled firms have average positive firm financial stability. Within the period under review, the construction firms have maximum value of financial stability of 3.87 while the minimum value of financial stability was -0.041. The large difference between the maximum and minimum values of financial stability indicates that the stability of the construction firms differs greatly among the firms selected and over the period under review, this shows that the firms are not heterogeneous in nature. This extreme large value of firm financial stability implies that some firms in the sample are more stable while some are having instability problems when compared to the average value. This therefore means that construction firms with mean value of firm financial stability higher or equal to 12.15 are highly stable firms with average total cash to total assets equal 12.15 while construction firms with the value below 12.15 are low stable firms or are having instability problems. Hence, it can be argued that Nigeria construction firms had been efficient enough to generate a higher rate of cash out of their assets when scaled to paid up capital. The mean value total cash to total assets which proxy firm financial stability of the sampled construction firms was 12.15 while their median value was 5.99 respectively. This therefore means that firms with FMST of 12.15 and above are classified as above average stable firms while those with their FMST value below 12.15 were classified as below average in their stability. Firm financial stability (FMST) shows the ability of construction firms in Nigeria to generate profit and more liquid cash from their assets and reflect how well construction firms'

real investments resources and assets structure to generate profits from an accounting perspective.

Property, Plant and Equipment (PPE) which shows the extent of capital assets possessed and used in the production process by a company. The result shows a mean value of 0.2984, maximum value of 7.484 and minimum value of 0.0007. This reveals that construction firms in Nigeria on the average, holds about 0.2984 percent of their total assets in the form of property, plant and equipment (PPE). Though some construction firms hold as high as 7.484 percent of their assets in the form of property, plant and equipment. Holding high proportion of assets in form of property, plant and equipment would result to high level of depreciation and maintenance cost however, it can be useful tool in leverage financing. Also, if effectively and efficiently used can enhance production process stability. The standard deviation for PPE was 0.919 demonstrating that the PPE was spread around the mean with about 0.919 deviations around the mean. The skewness for PPE was 7.294 meaning it was positive, implying that most values on PPE were bunched to the left. The kurtosis for PPE was 57.455 which is above 3, hence, the distribution is said to be leptokurtic having few outliers but it satisfies normality test.

The result of the long term assets reveals that on the average, construction firms invest about 0.4775 percent of their assets in long term investment form, while some construction companies maintain about 1.449 percent of long term investment on maximum value while other maintain minimum long term investment of -3.499 percent which means that little or nothing is being invested out of their funds. The difference in the long term investment shows that most of the companies held little of their assets in long term investment forms. As the level of uncertainty in the business environment increases, most companies would prefer to hold part of their resources in near cash form. The standard deviation for LOTI was 0.729 demonstrating that the LOTI was spread around the mean with about 0.729 deviations around the mean. The skewness for LOTI was -2.614 meaning it was negative, implying that most values on long term investment were bunched to the right. The kurtosis for LOTI was 14.77 which is above 3, hence, the distribution is said to be leptokurtic having few outliers but it satisfies normality test.

The result of the current assets reveals that on the average, construction firms maintain about 2.390 percent of their assets as current assets, while some companies maintain maximum current assets of 12.98 percent others maintain minimum current assets of about 0.048 percent of total assets. The difference in the current assets' maximum value, mean value and minimum value reveals the investment preference of management of construction firms in Nigeria. This indicates the level of liquidity of construction firms in Nigeria. The standard deviation for current asset was 2.199 demonstrating that out of the 7 construction firms studied, current asset spread around the mean with about 2.199 of total assets structure comprising of current asset. The skewness was 2.118 implying that data about current assets was positively skewed with most values bunched to the left. The value of kurtosis was 9.533 implying that the data about current asset was distributed with kurtosis greater than 3 hence said to be leptokurtic and having few outliers.

The result of the intangible assets reveals that on the average, construction firms maintain about 0.561 percent of their assets in intangible form, while some companies maintain maximum intangible assets of 9.747 percent other maintain minimum intangible assets of -4.044 percent. The difference in the average intangible assets, maximum and minimum value reveals the premium attached to intangible assets by management of construction firms in Nigeria. As the level of technological advancement in the business environment increases the rate most assets become obsolete due to rapid change in technology. Most firms hold their assets in the intangible form. The result shows that while some firms maintain high level of intangible assets

when compared with other class of assets, some maintain minimum level. The standard deviation for intangible assets was 1.870 demonstrating that out of the 7 construction firms studied, intangible assets deviation spread around the mean with about 1.870 investment in intangible assets. The skewness was 3.5518 implying that data about intangible assets was positively skewed with most values bunched to the left. The value of kurtosis was 18.36 implying that the data about intangible asset was distributed with kurtosis greater than 3 hence said to be leptokurtic and having few outliers. Last but not the least, it was discovered that the moderating variable which is the log of total assets which captured firm size showed a mean value of #16.069 million with a maximum and minimum values of 19.98 and 11.59 million respectively.

Generally, the JB Probability values of 0.0000 shows that all the variables are normally distributed at 1% level of significance with exception of firm size, our moderating variable which was not normally distributed. This indicates that the variables follow the Gaussian standard distribution. This is an indication that all variables are approximately normally distributed. This further implied that there are no variables with outlier, even if there are, they are not likely to distort the conclusion and are therefore reliable for drawing generalization. This also justifies the use panel regression estimation techniques. Hence, any recommendations made to a very large extent would represent the characteristics of the true population of study.

4.2 Pearson Correlation Matrix

Table 2: **Correlation Analysis Result**

	FMST	LOGFSZ	PPE	LOTI	CUAS	INTA
FMST	1.000000					
LOGFSZ	-0.075149	1.000000				
PPE	0.470279	-0.055781	1.000000			
LOTI	-0.005095	-0.447108	-0.008906	1.000000		
CUAS	0.237392	0.072138	0.258578	0.054607	1.000000	
INTA	0.000563	0.036160	-0.002627	0.012788	-0.126456	1.000000

Source: researcher's summary of correlation result (2023) using E-view 12

The result of the correlation coefficient showed mixed correlation. This association identified buttresses the point that our variables have a linear relationship. Furthermore, the strength of the relationship between variables measured by the Pairwise correlation showed that the association between the variables is relatively small and was below the threshold of 0.80, suggesting the absence of the problem of multicollinearity in the predictor variables. In this section we present and discuss the Pairwise correlations among the variables of assets structure components and financial stability. Table 2 shows that most of the correlation coefficients between the study's variables are relatively low, nevertheless there are still some relatively high correlations between some of those variables. The above results show that there exists a positive and a very weak association between financial stability and intangible assets (FMST and INTA = 0.00056). It was discovered that a negative and very weak association exists between financial stability, long-term investment and the moderator (firm size) (FMST/ LOTI and LOGFSZ = -0.0050 and -0.075) while a positive but very strong relationship exists between financial stability and property, plant and equipment and current assets (FMST/PPE and CUAS = 0.470 and 0.237).

Going by the association between other explanatory variables, we discovered that there exists a direct and positive relationship between property, plant and equipment and current asset (PPE and CUAS = 0.258). In the same vein, long term investment recorded a direct correlation with all other explanatory variables while PPE documented a negative but very weak association with long term investment and intangible (PPE/LOTI and INTA = -0.0089 and -0.0026). Therefore, in checking for multi-colinearity, the study noticed from the correlation table that no two explanatory variables were perfectly correlated. This indicates the absence of multi-colinearity problem in the model used for the analysis. This

correlation matrix will not serve as a basis for generalization on the actual relationship between asset structure and financial stability as correlation matrix only gives a mere degree of relationship between the dependent and the independent variables themselves, this also justifies the use of the panel least regression.

4.3   Regression Analysis

Table 4 3:   Fixed Effects Regression Result

Dependent Variable: FMST
Method: Panel Least Squares
Date: 07/03/23   Time: 06:10
Sample: 2012 2021
Periods included: 10
Cross-sections included: 7
Total panel (unbalanced) observations: 67

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.602675	0.844661	1.897419	0.0641
LOGFSZ	-0.099763	0.051534	-1.935880	0.0590
PPE	0.538425	0.018151	29.66381	0.0000
LOTI	-0.020626	0.030246	-0.681931	0.4987
CUAS	-0.011294	0.010681	-1.057415	0.2958
INTA	-0.003293	0.008689	-0.378968	0.7065

	Effects Specification		

Cross-section fixed (dummy variables)
Period fixed (dummy variables)

Root MSE	0.084647	R-squared	0.966817
Mean dependent var	0.121509	Adjusted R-squared	0.952390
S.D. dependent var	0.468188	S.E. of regression	0.102157
Akaike info criterion	-1.473790	Sum squared resid	0.480062
Schwarz criterion	-0.782767	Log likelihood	70.37197
Hannan-Quinn criter.	-1.200350	F-statistic	67.01294
Durbin-Watson stat	1.935731	Prob(F-statistic)	0.000000

Source: Researchers' Random Regression result (2023) from Eview 12

The table 3 above shows the panel regression analysis of 7 construction firms in Nigeria. From the table above, the F-statistics value of 67.0129 and their P-value of 0.0000 showed that the fixed regression analysis of our variables in the regression model was generally significant at 1% level of significance and it shows that the model was well specified in explaining financial stability of 7 construction firms in Nigeria. From the result above, the study observed that the R. squared value was 0.9668 (97%) approximately and R-squared adjusted value was 0.9523 (95%). The value of R- squared which is the coefficient of determination stood at 97% which implies that 97% of the systematic variations in individual dependent variables were explained in the model while about 3% were unexplained thereby captured by the stochastic error term. Again, the adjusted R-squared which stood at 95% indicates that all the independent variables jointly explain about 95% of the system variation in financial stability of our sampled firms in over the 10years period while about 5% of the total variations were unaccounted for, hence captured by the stochastic error term. This reveals that about 97% financial stability via total cash to total assets can be attributable to the components of assets structure selected for the study while about 3% were unexplained thus captured by other factors that are likely to improve financial stability but were not included in the model. Moreover, the F-statistics value of 67.012

and its probability value of 0.000 shows that the assets structure and firm's financial stability model used for the analysis were statistically significant at 1% level. This confirms the appropriateness of our model used for the analysis. The Durbin Watson statistics value of 2.2351 showed that the model is well spread since the value equals 2 and that there have not been self or auto correlation problem and that error are independent of each other.

The analysis result of the effect of Property, plant and equipment on company financial stability shows coefficient stability of 0.538. This indicates that Property, plant and equipment positively affect the level of financial stability of construction firms quoted in Nigeria Exchange Group. The probability value of 0.000 shows that the positive effect of property, plant and equipment on financial stability of construction firms is statistically significant at 1% percent level. The result reveals that increasing the level of Property, plant and equipment can positively impact on financial stability of construction companies in Nigeria. Based on the result, the study rejects the null hypothesis and accepted the alternate hypothesis and conclude that property, plant and equipment has positive and statistically significant effect on financial stability of construction firms which was statistically significant at 1% level of significance.

We also discovered that before moderation with firm size, long term investment showed a negative and insignificant effect in sustaining financial stability of construction firms in Nigeria. By implication this means that when excess money is diverted towards long term investment, it will tie the resources down thereby affecting the financial stability of firms and makes their assets structure to be more illiquid. The probability value of 0.4987 showed that the negative effect of long term investment on the financial stability of construction firms in Nigeria is insignificant. This shows that increasing the long term investment of construction firms cannot sustain the stability of construction firms in Nigeria. Based on the result, the study accepts the alternate hypothesis and concludes that long term investment has negative and no significant effect on financial stability of construction firms in Nigeria.

Similarly, current assets documented a negative and insignificant effect on financial stability of construction firms in Nigeria. The analysis result shows negative coefficient value of -0.011 and probability value of 0.2958. The negative coefficient value indicates that investing so much on current assets inversely affect the stability of quoted construction firms in Nigeria Exchange Group. The probability value of 0.2958 showed that the negative effect of current assets on the stability of construction firms in Nigeria is statistically insignificant. This shows that increasing the current assets of construction firms cannot significantly drive financial stability of construction companies in Nigeria. Based on the result, the study accepts the null hypothesis and concludes that current assets negatively affect the financial stability of construction firms in Nigeria.

The analysis result of the effect of Intangible assets on financial stability of construction firms in Nigerian shows a negative coefficient value of -0.0032 and probability value of 0.7065. The coefficient value indicates that intangible assets negatively affect financial stability of quoted construction firms in Nigeria Exchange Group. The probability value of 0.7065 shows that the negative effect of intangible assets is insignificant on the financial stability of construction companies quoted in Nigeria. The result shows that increasing the level of intangible asset would negatively affect the financial stability of construction firms and the negative effect is not significant to drive the companies' financial stability in Nigeria. Based on the result, the study rejects the alternate hypothesis and concludes that the effect of intangible assets on firm financial stability is insignificant.

Model 2   Moderating role of Firm Size on Asset Structure and Financial Stability

$$FMST_{it} = \beta_0 + \beta_1 PPE_{it} * FSZ + \beta_2 LOTI_{it} * FSZ + \beta_3 CUAS_{it} * FSZ + \beta_4 INTA_{it} * FSZ + \mu \text{------} 2$$

Table 4:   Moderated Regression Result

Dependent Variable: FMST
Method: Panel Least Squares
Date: 07/03/23   Time: 18:20
Sample: 2012 2021
Periods included: 10
Cross-sections included: 7
Total panel (unbalanced) observations: 67

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.031721	0.025022	-1.267755	0.2096
LOGFSZ*PPE	0.033507	0.001181	28.37764	0.0000
LOGFSZ*LOTI	9.98E-05	0.001428	2.069905	0.0445
LOGFSZ*CUAS	-0.000112	0.000438	-0.256908	0.7981
LOGFSZ*INTA	1.26E-05	0.000483	0.025974	0.9794

Root MSE	0.121853	R-squared	0.931236
Mean dependent var	0.121509	Adjusted R-squared	0.926800
S.D. dependent var	0.468188	S.E. of regression	0.126671
Akaike info criterion	-1.222757	Sum squared resid	0.994818
Schwarz criterion	-1.058228	Log likelihood	45.96235
Hannan-Quinn criter.	-1.157652	F-statistic	209.9092
Durbin-Watson stat	1.500897	Prob(F-statistic)	0.000000

Source: Researchers' Random Regression result (2023) from Eview 12

The moderated regression result above shows that assets structure components when combined with firm size gives an adjusted R-square of 93% approximately which implies that 93% of the systematic variations in individual dependent variables were explained in the model while about 7% were unexplained thereby captured by the stochastic error term. This implies that asset structure cannot be 100 per cent explained by all the selected independent variables in the model. The Adjusted R-squared is often preferred to account for sample size adjustments, the figure showed a value of 0.9268 which can be attributed to the exclusion of other independent variables that can impact financial stability but outside the scope of this study. The adjusted R-squared which stood at 93% indicates that all the independent variables jointly explain about 93% of the system variation in financial stability of our sampled firms over the 10years period while about 7% of the total variations were unaccounted for, hence captured by the stochastic error term. This reveals that about 93% financial stability of construction firms via total cash over total assets can be attributable to the assets structure especially when combined with firm assets selected for the study while about 7% were unexplained thus captured by other factors that are likely to improve firm's financial stability but were not included in the model. Moreover, the F-statistics value of 209.909 and its probability value of 0.000 shows that the financial stability model used for the analysis were statistically significant at 1% level. This confirms the appropriateness of our model used for the analysis. The Durbin Watson statistics value of 1.500 showed that the model is well spread since the value is approximately 2 and that there have not been self or auto correlation problem and that error are independent of each other. In testing our hypotheses, we provide the below specific analysis for each of the independent variables as follows:

4.4   Discussion of Findings

H$_{01}$: Firm size has no significant moderating role on the effect of Property, Plant and Equipment on firm stability of construction firms in Nigeria.

Firm size has a significant (positive) moderating role on the effect of Property, Plant and Equipment on firm stability of construction firms in Nigeria. The result above shows that when Property, plant, equipment is moderated with firm size gives a coefficient value of 0.033, and probability value of 0.000. The coefficient and probability value indicates that the combination of property, plant, equipment and firm size positively and significantly affect the financial stability of construction firms in Nigeria. This, therefore, implies that an increase in PPE will cause an increase in FMST. This implies that property plant and equipment when combined together directly and significantly improves firm's financial stability. This indicates that, increasing the investment in property, plant and equipment can significantly impact on financial stability of companies in Nigeria. The result is in line with the finding from the study of Mwanik and Job (2018) in Kenya who evaluates the effect of asset structure on performance of firms quoted under the manufacturing sector of Nairobi securities exchange but contrary to the finding from the study of Ocak, and Fındık (2019) whose finding shows a negative but insignificant relationship between tangible property, plant and equipment and firm performance. This evidence, therefore, leads to a rejection of the null hypothesis and acceptance of the alternate; thus, firm size has a significant moderating role on the effect of Property, Plant and Equipment on firm stability of construction firms in Nigeria which was statistically significant at 1% level of significance.

H$_{02}$: Firm size has no significant moderating role on the effect of Long Term Investment on firm stability of construction firms in Nigeria.

Firm size has positive and significant moderating role on the effect of Long Term Investment on the firm stability of construction firms in Nigeria. This, therefore, implies that an increase in LOTI will cause a significant increase in Firm Financial Stability. The regression coefficient associated with LOGFSZ*LOTI is 9.98 suggesting that each one-unit increase in combination of both long term assets and firm size is associated with a 9.98unit increase in Firm Financial Stability. The association between LOGFSZ*LOTI and firm financial stability is also statistically significant at 5% level of significance (p=0.0445). This is in consonance with the study of Zimny (2022) who showed that there is a positive and statistically significant correlation between the non-current asset structure ratio and both, ROS and ROS adjusted ratios. Our study also agreed with the study of Olonite and Okoro (2021), who studied the impact of asset structure on the financial performance of quoted construction firms in Nigeria and discovered that fixed assets have a positive and significant impact on return on assets. This evidence, therefore, leads to a rejection of the second null hypothesis and acceptance of the alternate one; thus, firm size has a positive and significant moderating role on the effect of Long Term Investment on the firm stability of construction firms in Nigeria which was statistically significant at 5% level of significance.

H$_{03}$: Firm size has no significant moderating role on the effect of current assets on firm

stability of construction firms in Nigeria.

Firm size has a non -significant and negative moderating role in the effect of Current Assets on firm stability of construction firms in Nigeria. This finding indicates that when firm size is moderated with current assets, it decreases the investment level in current assets which negatively affects the financial stability of construction firms in Nigeria. Thus, increasing the investment in current assets can adversely decrease the stability of construction firms in Nigeria. CUAS as an independent variable to

Firm Financial Stability appears to have a negative (i.e., -0.000112) and insignificant effect on FMST. This, therefore, implies that an increase in CUAS will cause a decrease in FMST. The regression coefficient associated with LOGFSZ*CUAS is -0.000112 suggesting that each one-unit decrease in LOGFSZ*CUAS is associated with a unit increase in Firm Financial Stability. The finding from the study is in line with the findings from similar study carried out in Kenya by Nyamasege, Okibo, Nyang'au, Sang'ania, Omosa, and Momanyi, (2014) on the nexus capital structure, asset's structure and firm performance among manufacturing quoted in Nairobi Stock exchange. But the finding was contrary to that from the study of Mwanik and Job (2018) Mwaniki and Omagwa (2017) in Kenya, on the effect of asset structure on the firm performance of firms quoted under the manufacturing sector of Nairobi securities exchange Kenya. This evidence, therefore, leads to a rejection of the third null hypothesis and acceptance of the alternate; thus, we conclude that firm size has a non-significant moderating role on the effect of current assets on the firm stability of construction firms in Nigeria.

H04: Firm size has no Significant moderating role on the effect of intangible assets on firm stability of construction firms in Nigeria.

Firm size has a non-significant but positive moderating role in the effect of Intangible Assets on the firm stability of construction firms in Nigeria. **The result implies that:** FMST is predicted of expected firm financial stability. The regression coefficient associated with LOGFSZ*INTA is 1.26 suggesting that each one-unit increase in LOGFSZ*INTA is associated with a 1.26-unit increase in Firm Financial Stability. The association between LOGFSZ*INTA and firm financial stability is positive but statistically insignificant. INTA as an independent variable to FMST appears to have a positive (i.e., 1.26) and a non-significant influence on FMST. The study finds that Intangible assets has positive impact on the financial stability of construction firms in Nigeria however, the effect is insignificant. This means that intangible assets though positively affect financial stability of quoted construction firms in Nigeria, the effect is insignificant to drive/cause a major change. This, therefore, implies that an increase in INTA will cause an increase in FMST. This is consistent with the study by Temuhale, and Ighoroje (2021), who studied asset structure and performance of quoted industrial goods firms in Nigeria between 2011-2019 and showed that the asset structure variables had a positive but insignificant effect on the return on assets of industrial goods firms in Nigeria. But our study disagrees with the study of Iltaş and Demirgüneş (2020), who studied asset tangibility and financial performance using time series data from the Turkish manufacturing sector and discovered that asset tangibility has significant and positive effects on financial performance till (and including) the break date. This evidence, therefore, leads to a rejection of the alternate hypothesis. Thus, firm size has a non-significant moderating role on the effect of intangible assets on the financial stability of construction firms in Nigeria.

5.0   Conclusion

This study concludes that asset structure affects firm stability and how firm size influences it in Nigerian construction firms. The study employs data from construction firms quoted on the Nigerian Exchange Group (NGX) from 2012 to 2021 to analyze the moderating effect of firm size on the nexus of asset structure and financial stability of quoted construction firms in Nigeria. After regressing for a fixed random regression non-moderated effects, the data were examined using descriptive statistics such as the mean, median, maximum, and minimum, and the multiple firm size moderated regression model was used to test the hypotheses. According to the study, firm size has a positive moderation effect on the effect of Property, Plant and Equipment and long term investment on firm stability of construction firms in Nigeria which were statistically significant at 1% and 5% levels of significance respectively. However, firm size had a negative moderation effect on the nexus of Current Assets on firm stability of construction firms while a positive moderation effect on the nexus of intangible assets on firm stability of construction firms were documented. The study therefore recommends that management of construction firms to achieve better stability and performance should consider

the appropriate combination of property, plant, equipment with log of total assets and long term investment as this would positively and significantly affects the financial stability of their firms.

5.1   Recommendation

On the basis of the findings and conclusions of this dissertation, the study makes the following recommendations:

1. The study recommends that management of construction companies in Nigeria should formulate policy that will enhance their investment in property plant and equipment as this will increase the financial stability of their companies and enable them achieve shareholders wealth maximization objective.
2. The management of construction firms in their effort to enhance the financial stability of their firms should increase the level of their long term investment in combination with firm size.
3. Emphasis on combining current assets with other total assets should be minimized and ignored since it has insignificant effect in maintaining financial stability of firms.
4. Increasing the investment in intangible assets should be ignored as a result of insignificant effect it displayed in maintaining financial stability of firms.

References

Adusei, C. (2017). Accounts Receivables Management: insight and challenges, *Journal of Finance & Banking Studies* 6(1), 101-112.

Aggarwal, D., & Padhan, P.C. (2017). Impact of capital structure on firm value: evidence from Indian hospitality industry. *Theoretical Economics Letters*, 7, 982-1000.

Antwi S., AttaMills E.F., & Zhao, X. (2012). Capital structure and firm value: empirical evidence from Ghana; *International Journal of Business and Social Science*, 3. 12-22.

Anichebe N.A., & Agu, O.A. (2013). Effect of inventory management on organizational effectiveness; *Information and Knowledge Management*   2224-896.3,   .8.

Atnafu, D., & Balda, A. (2018). The impact of inventory management practice on firms' competitiveness and organizational performance*; Cogent Business & Management*, 5: 1503219.

Ariyani, H.F., Pangestuti I.R.D., & Raharjo, S.T. (2018). The effect of asset structure, profitability, company size, and company growth on capital structure; *Journal Business Strategy 27 2, 123 – 136.*

Brigham, E.F., & Houston, J.F. (2007). Fundamentals of financial management, eleventh edition, southwestern: Thomson learning Inc.

Campello, M., & Grambona, E. (2013). Real assets and capital structure, Journal of Finance and   Investment Analysis 4(4) 11-22.

Chebet, E., & Kitheka, S. (2019). Effects of inventory management system on firm Performance*; International Journal of Innovative Science and Research Technology* : -2456-2165, 4, 9,

Chukwu, N. & Egbuhuzor, C (2017). Asset structure and financial performance of quoted manufacturing and allied companies in Kenya. *Research Acies International Journal of business and management studies* 2(2), 11-20

Dun, N. & Bradstreets, N (2011). Company characteristics, capital structure and operational performance: A Vietnamese study, I in proc. The APEA 2011 conference, Busan, 2011.

Fumani, M.A., & Moghadam, A. (2015). The effect of capital structure on firm value, the rate of return on equity and earnings per share of listed companies in Tehran stock exchange; *Research Journal of Finance and Accounting* 2222-2847 .6, .15.

Filbeck, G. & Kruegar, T. (2005). An analysis of working capital management. Results across industries. American journal of business 20(2) 11-20

Ibom, B (2008). Effect of assets on profitability of Hong Kong listed information technology companies, *international journal of finance and account* 6(2), 33-49

Kabiru, S., Ibrahim, A., & Ibrahim M.A. (2019). Company attributes and company value of listed consumer goods companies in Nigeria. *Journal of Research in Humanities and Social Science* 7(5). 40-99

Koralun, B.J. (2013). How does asset structure correlate with capital structure? – Cross-industry and cross-size analysis of the EU countries. *Universal Journal of Accounting and Finance* 1(1), 19 – 2.

Lassoued, M. (2018). Corporate governance and financial stability in Islamic banking. managerial finance.

Lev, E. & Daum, N. (2004). Innovation more than research and development. *Journal of finance and economics* 3(2) 154-187.

Mawih, K. (2014). Effects of assets structure on the financial performance; *Journal of US-China Public Administration,* 11, 2, 170-179.

Martina H. (2015). The relationship between tangible assets and capital structure of small and medium sized companies in Croatia 658-1454

Murat O. & Derya F. (2019). The impact of intangible assets and sub-components of intangible assets on sustainable growth and firm value: evidence from Turkish listed firms. sustainable article.

Mwaniki, G., & Omagwa, O. (2017). Asset structure and financial performance: a case of firms quoted under commercial and services sector at the Nairobi securities exchange, Kenya; *Research Journal of Finance and Accounting* 2222-2847 .8,

Ndumia, M.I., & Jagongo, A. (2022). A critical review of literature on asset structure and profitability of firms listed under manufacturing and allied sector at the Nairobi securities exchange, Kenya; *International Journal of Management and Commerce Innovations* 9, 2, (27-33),

Nyamasege, N., Okigbo, W.B., Nyang'au, A.S., Sang'ania, P.O., Omosa, H., & Momanyi, C. (2014). Effect of asset structure on value of a firm: a case of companies listed in

Nairobi securities exchange; *Research Journal of Finance and Accounting*, 2222-28 .5,7,

Husna, A., & Satria, I. (2019), Effects of return on asset, debt to asset ratio, current ratio, firm size, and dividend payout ratio on firm value*; International Journal of Economics and Financial:* 2146-4138

Ocak, K. & Findik, E. (2019). Impact of intangible assets on firm value of Hong Kong listed information technology companies: Macrothink institute: Hong Kong 6(2) 231-243

Okwo, I.M., Ugwunta, D.O., Nweze, A.U. (2012*). European Journal of Business and Management*, 2222-2839, 4, 20,

Okoye, P.V.C., Offor, N., & Manukaji, I.J. (2019). Effect of intangible assets on performance of quoted companies in Nigeria, *International Journal of Innovative Finance and Economics Research* 7(3):58-66,

Olonite, O.A., & Okoro, C.N. (2021). Impact of assets structure on financial performance of quoted construction firms in Nigeria; *International Journal of research in academic* world, 1, 1, 22-26.

Thavikulwat, P. (2014). Determining the value of a firm; developments in business simulation and experiential learning, 31,

Pandy, I.M. (2007). Financial management (9th ed.) New Delhi: Vikas publishing house ltd

Penrose, E.G. (1959). The theory of the growth of the company. New York: Wiley

Qureshi, M.J., & Siddiqui, D.A. (2020). The effect of intangible assets on financial performance, financial policies, and market value of technology firms: a global comparative Analysis; *Asian Journal of Finance & Accounting* 1946-052X 2020, 12, 1.

Saleh, M. (2018). Impacts of tangible and intangible asset investment on value of manufacturing companies listed on the Indonesia stock exchange. *Archives of Business Research,* 6(10), 402-414.

Setiadharma, S., & Machali, M. (2017). The effect of asset structure and firm size on firm value with capital structure as intervening variable; Bus Fin Aff 6: 29

Schmidt M. (2014) Business case essentials. 4th edition: solution matrix limited. eBook

Temuhale, J., Ighoroje, E.J. (2021). Asset structure, capital structure and performance of quoted industrial goods firms in Nigeria; *Quest Journals Journal of Research in Business and Management 9* ~ 1, 40-51

Tudor, A.T., Ştefana, D., Dima, B., & Raţiu, R. (2014). The linkage between intangibles and profitability*; Annales Universitatis Apulensis Series Oeconomica*, 16(1), 2014, 283-293