

FIRMS' ATTRIBUTES AND FINANCIAL PERFORMANCE OF QUOTED COMPANIES: EVIDENCE FROM NIGERIA

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Abstract

The survival, stability, sustenance and going concern objectives of corporate entities in competitive business environment are driven by uniquely formulated financial performance strategy to drive the achievement of consistent and positive growth. However, firms' improper utilization of internal attributes has given rise to stunted corporate growth rate, declining net profit margin and negative capital employed performance among listed firms in Nigeria. This study investigates the effect of firms' attributes on financial performance measures of selected listed companies in Nigeria. The study adopted ex-post facto research design. The population of the study comprised 161 listed companies in Nigeria as at 31st December 2020. A sample size of 111 was purposively determined for the study. Multistage techniques (stratification and quota) were utilized in selecting the 111 firms studied. Secondary data extracted from the published audited financial statements for 10-year period (2011–2020) were used for the study. Descriptive and inferential (multiple regression) statistics were employed to analyze the data. Findings revealed that firms' attributes had joint significant effect on Net Profit Margin (Adj. $R^2 = 0.0073$, $F(3, 1106) = 6.45$, $p < 0.05$) and on Capital Employed Performance (Adj. $R^2 = 0.018$, $F(3, 1106) = 31.18$, $p < 0.05$). The study concludes that firms' attributes drive the achievement of optimal corporate financial performance. The study recommends that firms should continue to use their varied firms' attributes to deepen their financial performance growth.

Keywords: Capital employed performance, Financial Performance, Financial strategy, Firms' attributes, Net profit margin

1.0 Introduction

Corporate financial performance is the bedrock of sustainable business growth. It is an analytic tool for the measurement of the revenue generated from the use of organization's assets (Ravichandran & Subramanian, 2016). Analysis of financial performance reports are used to assess the status of enterprise financial strength, stability and strategy in preventing business failure. Thus, financial performance measures the quantity, robustness and sturdiness of a firm's revenue generation growth and financial health (Fischer, & Himme, 2017). The historical data for the measurement of performance growth of a business, is usually

documented and communicated through quality financial reporting to all stakeholders in order to enable the investors to evaluate the consistent growth levels of their investment (Adegbe, Nwaobia & Kwarbai, 2019). Sound financial performance therefore, is critical for the survival, sustenance and sturdiness of the business firm (Saddam, 2021). The imperativeness of achieving healthy financial performance is very crucial to firms' stakeholders, capital market development and the national economic growth. Even in the era of development of business disruptive technologies, innovations and inventions, strong corporate financial performance takes a center stage to prevent business failure (Enyi & Ajibade, 2021).

Financial strategic plan provides direction and serves as a road map to guide organization's activities towards achievement of superlative performance. This aids continued business growth in value creation, returns and sustainable profitability (Elbanna, Andrews, & Pollanen, 2016). Implementation of business firm's financial strategy is meant to create market value to all stakeholders and performance growth consistently (Adegbe & Akenroye, 2020). Growth in a firm's financial performance indicators is key to achieving sustainable results. Analyzing the health status of financial performance of a business firm is fundamental to its growth (Okoye, Erin, Ado, & Isibor, 2017). Properly configured and managed firms' strategies through the development of its unique resource capability, deepens its growth, competitive positioning and capacity to achieve impeccable going-concern objective (Ndegwa, Kilika & Muathe, 2018). Utilization of firms' attributes enables the firms to maintain both internal and external competences, sustain their strategic positioning and drive their financial performance (Kabue & Kilika, 2016). Firms require the development, deployment and utilization of their own peculiar attributes and contingencies in order to maintain a steady growth of their business operations and performance.

Business firms are required to have the capability to maintain operational stability to achieve sound financial performance in consonance with their specific attributes in order to drive their financial growth metrics (Osazefua, 2019). The peculiar attributes of firms are usually deployed in managing the firm's multi-faceted strategic resources towards the achievement of strong financial performance in operating efficiency, optimization of a firm's growth and value creation to all stakeholders (Margaretha & Supartika, 2016). However, improper utilization of firms' internal attributes has given rise to suboptimal corporate growth, declining net profit margin and negative capital employed performance among listed firms in Nigeria. Poor financial performance is the bane of business failure that erode stakeholders' investment, interest, capital and anticipated returns (Enyi, 2021). The fundamental question to be addressed therefore, is do firms' attributes have any significant effect on financial performance of listed firms in Nigeria? Thus, this study investigates the effect of firms' attributes on financial performance of selected companies quoted on the Nigerian Stock Exchange.

1.1 Research Objective and Hypothesis Development

1.1.1 Research Objective

The main objective of the study was to determine the effect of firms' attributes on financial performance of selected quoted companies in Nigeria and the specific objectives were to:

- i. determine the effect of firms' attributes on net profit margin of selected quoted companies in Nigeria;
- ii. ascertain the effect of firms' attributes on capital employed performance of selected listed companies in Nigeria;

1.1.2 Hypothesis Development

The study tested the following hypotheses:

H₀1: There is no significant effect of firms' attributes on net profit margin of selected quoted companies in Nigeria.

H₀2: Firms' attributes do not significantly affect capital employed performance of selected quoted companies in Nigeria.

2.0 Review of Extant Literature

2.1. Conceptual Review

2.1.1 Concept of Financial Performance

Ravichandran and Subramanian (2016) defined it as "a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues". FP measures the quantity, robustness and sturdiness of a firm's revenue generation growth. Thus, financial performance, as a business concept, is a dynamic analytic tool employed by business firms to measure the progressive revenue growth, productivity and marginal rate of returns generated by the organization for the creation of long-term value (Gulati, Mikhail, Morgan, & Sittig, 2016). In the opinion of Ricci and Civitillo (2018), financial performance is defined as the measurement of the level of achievement of a firm's economic and financial objectives periodically. Financial performance deals with the measurement and analysis of the extent to which the set financial objectives of the firm have been achieved (Arena, Azzone, & Bengo, 2015). It gauges and analyzes a firm's operating outcomes and growth in monetary terms, based on the underlying strategic plans, policies and programme of operations (Post, & Byron, 2015). It showcases the status of a firm's financial stability that reveals its overall financial health condition periodically (Mahtani, & Garg, 2018). The analysis on the measurement of a firm's financial performance may be assessed through various financial metrics (Jaba, Robu, & Balan, 2017). The measurement of a firm's financial performance reveals the company's healthy standing and status (Sadalia, Daulay, Marlina, & Muda, 2019).

2.1.2. Concept of Net Profit Margin

Financial performance is a concept partly anchored on a firm's ability to make steady profit that guarantees the maintenance of the firm's going-concern objective for sustainable growth (Akintoye, 2016). Net profit margin (NPM), as a measure of a firm's efficient income

generation status, is an index of a company's growth profile measurement (Nariswari & Nugraha, 2020). It is a measure of a firm's profitability from sales and other operating activities after taking into consideration all operating costs and corporate taxes (Kusmayadi, Rahman & Abdullah, 2018; Gitman, 2012). Umobong (2015) had argued that the continuous survival of the firm is largely dependent of its ability to make continual and periodic profitability. Applying the appropriate financial strategies, the firm's market value can be boosted through robust net profit margin thereby increasing its growth (Cornell, & Shapiro 1988).

The net profit margin (NPM) is a metric used to gauge the size of net income that a firm generates annually. It is a financial ratio that a firm uses to measure the percentage of its profit that is produced by its total net revenue (Misund, 2017). It is the ratio of net profits to revenues for a business firm (Hakim & Abbas, 2019). The NPM is a ratio that measures the portion of net income that can be apportioned from the firm's net sales revenue to the residual owners of the company, either in form of retained earnings or distributed as dividend (Bustani, Kurniaty & Widyanti, 2021). The ratio is a strategic tool that management uses to drive down operating costs, monitor and implement short, medium and long-term planning for competitive organic growth.

2.1.3. Concept of Capital Employed Performance

The concept of financial performance connotes that a company must plan and achieve both short, medium and long-term goals with a proficient use of its long-term assets and capital resources that are invested or deployed in the business (Sachs, Woo, Yoshino & Taghizadeh-Hesary, 2019). This should make the firm to consistently grow both organically and externally with steady rewards to internal stakeholders and providing progressive returns to providers of capital (Akintoye, 2016). It is the duty of management to efficiently run the business firm in such a way as to generate appreciable returns to the investors of capital (Shrotriya, 2019). The financial performance of a firm, therefore, will necessarily entail that the capital provided by the investors and employed in the running of the business continually performs efficiently in the long-term with a superior return to the investors.

Capital employed performance of a firm entails that consistent return is regularly generated to the shareholders from the capital invested (Purnamasari, 2015). The employed capital in a firm that does not yield appreciable level of positive returns can therefore be regarded as not performing efficiently. Capital employed performance is used by investors to analyze the level of appreciation that the capital invested in the firm has gained periodically (Camelia, 2013). Generating adequate and consistent profits from the capital employed in a firm is necessarily a pre-requisite for business continuity, sustainability and going concern. This is usually done using the analytical measurement of Return on capital employed (ROCE) ratio (Barros, Guedes, Santos & Sarmiento, 2021). Hence, the ROCE ratio is computed to aid both operational, tactical and strategical decision-making by corporate Managers of the firm.

The above shows that the application of ROCE is of great interest to providers of capital, as it shows the size of returns that invested capital can yield to investors and equity holders of the

firm (Shrotriya, 2019). This means that ROCE measures how efficiently a business firm is using its invested capital to generate returns (Arkan, 2016). In other words, ROCE is an analytical financial tool used to measure the capital investment performance of a firm. Also, investors do use the ROCE ratio to forecast business resources growth and performance, especially to quantify the efficiency in performance and gauge the profitability generated from the invested capital in the firm. The use of the above ratio for the computation of ROCE have been adopted by scholars, including Idekwulim (2014), Abubakar, Sulaiman and Haruna (2018), Murtala, Ibrahim, Lawal and Abdullahi (2018) and Lisek, Luty and Zioło (2020) in their previous studies. ROCE is therefore a financial metric used to quantify a firm's performance in terms of efficiency or profitability generated from the deployment of investors' capital. Return on capital employed provides an indication that shows the level of returns generated by the capital provided by the both the equity holders and debt providers periodically (Ayuba, Bambale, Ibrahim & Sulaiman, 2019).

2.1.4 Concept of Firms' Attributes

Firm's attributes are the specific features that define and differentiate an individual firm in terms of the uniqueness of its resources being utilized in its operations from other corporate entities. These attributes include: firm age, firm size and leverage (Kwaltommai, Enemali, Duna & Ahmed, 2019). This implies that firms' attributes are those unique individualities that set a business firm apart from its peers which relatively are the strategic drivers of the firm's decision-making processes and performance parameters both endogenously and exogenously. But Farouk, Magaji and Egga (2019) differently viewed firms' attributes as structural elements that may either be controllable or uncontrollable factors, which may be internal or external to the company's strategic decision. Such structural attributes include size, leverage and age.

In the opinion of Schmalensee (1985), firms' attributes are firm's differentiating factors within an industry that determines the firm's business units across the specific industry (Rumelt, 1991). This implies that firms' attributes are business specific attributes that drive corporate income generation. According to Irom, Joshua, Ahmed and Emmanuel (2018), firms' attributes are the specific firm factors that either negatively or positively affect the operations of a firm. Such attributes include: leverage, market share, liquidity, firm age, firm size, capital and dividend. And similarly, Siyanbola, Sanyaolu, Ogbemor and Adegbe (2020) viewed firms' attributes as those attributes that are typical to a business firm, which include: profitability, size and age. Firms' attributes are identified internal structure, unique strategies and distinctive profiles of organizations, which are resource-based, that affect the performance and success of the business firm (Oluwatayo, Amole & Alagbe, 2019). Hence, firms' unique attributes are important dynamics or elements that are used to influence firms' level of profitability and going concern. It deals with qualitative nature of firms' performance, but which are measured with the use of quantitative metrics.

From the above submissions, firms' specific factors or attributes are the various resource-based corporate elements that drives the operations, performances and level of a firm's efficiency, value creation capability and consistence of returns being generated periodically. Firms' attributes are specific factors that exert controlling influence on the performance of the firm both in the short, medium and long-term of the business organizations. Hence, firms' attributes are specific internal resource-based corporate elements, factors, elements, traits, peculiarities and features that enhance a firm's smooth functioning, operations, performances and growth sustainably thereby differentiating a firm from the other across industries.

2.2 Theoretical Review

2.2.1. Agency theory

One of the oldest theories underpinning modern corporate management is the agency theory. According to Means (2017), the main epical work on the development of the agency theory was originally attributed to Berle and Means (1932) in their classical documentary on "The Modern Corporation & Private Property". Subsequently, the theory was later expanded and brought to the fore by Stephen Ross and Barry Mitnick in 1973 (Mitnick, 2019, 2021). However, in 1976, the agency theory was widely popularized by Michael Jensen and Wiliam Meckling. Hence, the generally-accepted proponent of modern agency theory is attributed to Jensen and Meckling (1976). The foundation on which the agency theory was hinged upon is on the business entity concept that recognizes the separation of a company's legal entity form, in which the life of the owners of the business entity is distinctively separated from governance of the entity (Macey, 2019). Agency theory is derived from a business arrangement whenever there is a dichotomy and divergent of interests between equity holders and corporate managers in the governance of an incorporated business entity (Panda & Leepsa, 2017). Hence, under the agency arrangement, the shareholders (the principal) relinquish their authority to the managers (the appointed agent) being delegated to act on its behalf in making relevant governance decisions for the smooth running of the business (Parker, Dressel, Chevers & Zeppetella, 2018).

This dichotomous separation of interests between the contracting parties in the agency relationship continues to abound to the present dispensation even in the midst of contemporary advent of scientific disruptive technologies that are meaningfully influencing the interaction of humans with the corporate world thereby posing futuristic challenge to the aged-long belief of artificial legal personality of body corporate (Solaiman, 2017; Watson, 2021; Godwin, Lee & Langford, 2021; Tjio, Lee & Koh, 2021; Buchheit, Diehl, Finck, Foley, Fromberger, Godwin ... & Wöckener, 2019). The Principle of agency in contemporary business organization's governance is inherent with conflicts of interest (Li, 2018). This is what Jensen and Meckling (1976) argued and entrenched in their explanation of the agency cost theory within the purview of corporate management. Hence, to achieve the objective of the organization under the agency theory, the agent is consequently monitored (Parker, Dressel, Chevers & Zeppetella, 2018). Although, the agent uses it discretion to carry out its role in this arrangement, Jensen and

Meckling (1976) posited that monitoring role is instituted to reduce the level of information dysfunctionality that may exist between the equity holders and the management.

According to Zogning (2017), the principle of agency is premised on dual behavioural premises: the first is that parties mainly pursue their selfish interest to exploit and optimize their benefit or utility in the relationship; and the second is that the contracting parties are probably driven by ulterior motive in order to maximally gain from the inconclusiveness of the legally enforceable agreement and relationship in the union. The assumptions underlining agency theory include: that both parties (the agent and the principal) are driven by self-centeredness that causes conflict of interests between them (Payne & Petrenko, 2019); that the agent individualistically pursue in his decision making while the principal is opportunistic in its manner of behavior (Wagner, 2019); that the principal is engrossed with wealth maximization orientation through optimization of corporate value (Goshen & Squire, 2017); and the existence of high agency loss that is inherent in the relationship resulting into information asymmetry (De-Villiers, Venter, & Hsiao, 2017) coupled with the existence of bounded rationality and moral hazard (Kotlar & Sieger, 2019).

Several scholars have opined that the fundamental problem of principal–agent relationship is marred by ulterior incongruent goals between the contracting parties that include the agent’s selfishness in decision making, resulting into sub-optimality due to asymmetric information against the principal (Panda & Leepsa, 2017; Rahmawati, 2018). Some other critics have argued that the concept of agency is sometimes unfitted to societal life, since it is presumed that parties are individualistically self-centered having their behaviours and respective outcomes of their actions thereby subjecting the relationship to some form of controls (Zogning, 2017). Yet some other scholars have contended that agency theory results into the problem of unilateralism (Pouryousefi & Frooman, 2017). This consequently means that agency problems do cause suboptimal corporate performance growth, which is widespread across international boundaries. For instance, corporate managers may undertake managerial overcompensation and overinvestment in projects that will advance managerial perquisite and prestige of their office, but which will not enhance the maximization of the shareholders’ wealth (Moin, Guney & El-Kalak, 2020).

2.2.2. Resource-Based View Theory

The proponent of Resource-Based View (RBV) theory was Birger Wernerfelt who, in 1984, published major works that were anchored on the use of resources as a differentiating performance growth level of the firm. According to Lavie (2008), the RBV is a corporate strategic model employed to analyze and determine the core resource requirements that a firm needs to possess and exploit to drive its operational efficiency in order to achieve comparative and competitive advantage for its perpetual performance. This implies that RBV theory posits that firms have heterogeneous and somewhat dissimilar performance, which necessitates them to possess varied and assorted resources that requires different firms to structure uniquely

dissimilar strategic plans in the development, acquirement and utilization of different mixture of resources in the management of their organization (Tang, 2017).

Wernerfelt (1984) conceptualized that resource-based view of the firm, is a strategic management approach used to analyze the criticality of firm's specific internal resources. This means that firm's specific internal resources occupy a pivotal place in a firm's success factors that enables an entity to achieve competitive advantage. This theory emphasizes the need for firms to look inward within the its endogenous resource variables to drive the achievement of its competitive advantage instead of focusing on competitive exogenous environmental determinants (Radjenović & Krstić, 2017). This means that resource-based theory is a dynamic capability theory of the firm that focuses on the primacy of utilization of internal resource determinants and combinations for sustainable competitive advantage to the benefit of all stakeholders.

The core assumption of RBV theory is that it is based on deploying strategic internal resources of the firm to achieve competitive advantage. These resources can be exploited by the firm through its specific corporate attributes and strategy to attain sustainable comparative advantage. According to Miller (2019), the RBV theory is management theory, which postulates two assumptions: that resources of firms are uniquely heterogeneous and imperfectly immobile across sectorial firms in an industry of an economy. This implies that every business firm has a basket of heterogeneous resource determinants, competences, skills and capabilities that are unique, differentiated, non-substitutable and inimitable by the competitors in order to create value and achieve competitive financial performance effectively (Daft, 1983, 2010). Thus, as Daft (1983) further succinctly asserted, firm's *resources* are "all assets, capabilities, organizational processes, firm attributes, information and knowledge that are controlled by a firm to enable the firm to conceive and implement strategies that improve its efficiency and effectiveness". This definitional perspective of a firm's resources is the underlining foundation on which the concept of uniqueness, heterogeneity and non-substitutability of resource of the RBV theory is hinged upon across sectorial firms in an economy (Miller, 2019).

The resource-based view (RBV) accentuates the role of strategic or unique resources as the basic driver of the firm's competitive advantage, performance and growth. This implies that the RBV is cardinal management approach and tool used to analyze sustainable competitive advantage (Assensoh-Kodua, 2019). Essentially, globalization has made firms to universally contend with one another with the deployment of their unique resources and competences that differentiate them from others in such a way as to grow their operations consistently and maintain high financial performance. The firm's strategy is anchored on the degree of their unique competitive resources and competencies to mutually influence their performance and growth. This means that the firm must leverage on the efficiencies of their respective resources that they possess and utilize to sustainably differentiate the contributions and performances of

the firm for their growth and performance (Donnellan & Rutledge, 2019). Thus, the crucial characteristic of the RBV is that it is an efficiency-based explanation of performance growth determinants that differentiates one firm from the other.

In RBV, the firm's comparative and competitive advantage is obtained from firm-specific resources that are unique, inimitable, incomparable and superior in use, as opposed to what other firms possess and deploy in driving their higher performance levels of efficiency, elimination of waste, effective adaptation of methods and creating greater value-addition to stakeholders; otherwise if firm's resources are well managed, the resource that serves as anchor strength today may become obsolete and turn out to be its weakness at other time (Nagano, 2020). RBV therefore provides for a resource-level and firm-level explanation of sustainable performance differential growth among firms. This implies that RBT spotlights the firm's-controlled resources and competences that are unique, which underpin growth levels of performance among firms. According to Hagoug and Abdalla (2021), RBV is a theory that emphasizes the peculiarity of internal performance of a firm with the utilization of firm's unique and inimitable resources for its comparative and competitive advantage.

Therefore, to achieve the required level of financial performance, a firm's resources must be precious, uncommon, unique, incomparable and immobile across firms. The firm must combine both homogeneous and heterogeneous resources in order to develop the firm's uniqueness that makes them irreplaceable as a source of competencies and sustainable competitive advantage. These resources can be exploited by the firm in order to achieve sustainable financial performance. The theoretical framework on which this study was hinged upon is resource-based view (RBV) theory.

2.3 Empirical Review

Empirical search for panacea to the problems of poor financial performance have, triggered previous researchers to have undertaken studies on the effect of firms' specific internal factors and peculiar attributes on forms' financial performance. For instance, Osazefua (2020) observed that the ability of firms to appropriately harness and utilize their specific attributes in providing appropriate corporate strategy to address the challenges of poor financial performance has limited the firms' capacity to improve their financial going-concern status. This situation obviously calls for further empirical investigation on how to identify, configure and utilize relevant resource-based firm's performance to positively drive financial performance of firms quoted on the Nigerian Stock Exchange.

Firms' attributes are multi-faceted and multi-dimensional. As latent variable, the corporate-specific attributes are usually measured by some manifest variables such as capital structure, asset tangibility, firm size, assets' size and growth rate (Al-Singlawi, & Aladwan, 2016; Joshi, 2018; Li & Islam, 2019). Every business firm has own sets of peculiar attributes that differentiate it from other entities both in terms of the quality of its key performance indicators

and the consistency of its growth metrics. One of such unique performance is company size. Company size showcases the strength of a company's increased stability and operational health status especially in providing economic impact towards the attainment of good financial performance.

According to Saragih (2019), firm size has a progressive going concern long effect. Company size has variously been measured and denoted by different proxies, which include total assets, market capitalization, total number of employees and total sales revenue (Dahmash, 2015). However, as applicable to this work, this study adopted the surrogate of market capitalization as a measure of company size. Empirically, the findings from the studies of Dimitrić, Tomas-Žiković and Arbula-Blecich (2019), Murniati (2016), Al-Hayek (2018), Alarussi and Alhaderi (2018), Olawale, Ilo and Lawal (2017), Opeyemi (2019), Nakatani (2019) and Mule, Mukras and Nzioka (2015) that investigated the relationship between company size and net profit margin documented the evidence of strong positive effect between firm size and profitability. However, contrary to this finding, Dahmash (2015), Zhang, Pauwels and Peng (2019) and Ledley, McCoy, Vaughan and Cleary (2020) comparatively investigated the relationship between net profit margin and company size with their findings showing negative relationship between company size and net profit.

Similarly, the quality and productive capability of the tangible assets (as a firm attribute) that a company possesses occupy pivotal place in the smooth running of its operations. Tangible assets are mainly non-current assets in the basket of a firm's assets structure (Sacer, Malis & Pavic, 2016). Optimal use of quality and non-deteriorate tangible assets is a crucial driver of company's competitive profitability, shareholder's value maximization, consistent corporate growth and financial performance (Ito, 2014). This implies that through the acquisition and effective use of unimpaired tangible assets, firms are able to generate sustainable net profit margin to maintain its continued going concern status. In relation to firms' performance, Irungu, Muturi, Nasieku and Ngumi (2018), Işık (2017), Nakatani (2019) and Olatunji and Adegbite (2014) investigated the effect of asset tangibility on profitability. These studies found a positive and significant effect between fixed assets tangibility and Net Profit margin. However, the studies of Hakim and Kasenda (2018), Kodongo, Mokoaleli-Mokoteli and Maina (2015) and Khan, Shamim and Goyal (2018) conversely documented the evidence of insignificant effect of asset tangibility and profitability.

Murtala, Ibrahim, Lawal and Abdullahi (2018) conducted empirical investigation into the relationship capital structure (as a proxy of firm's performance) and return on capital employed (ROCE) among construction companies listed in Nigeria. The study documented evidence of negative effect of capital structure on ROCE among the sampled listed construction firms in Nigeria. Similarly, Ayuba, Bambale Ibrahim and Sulaiman (2019) examined the effects of Capital Structure (as a firm-specific attribute) with firm size as moderating variable on firm's value of 27 listed insurance companies in Nigeria for 6-year period of 2012-2017. Finding from the study indicated ROCE to have positive significant effect on firm's value. However,

Musah, Kong and Osei (2019) analyzed the nexus between asset tangibility and firms' financial performance of non-financial firms listed on the Ghana Stock Exchange (GSE) for 10-year period from 2008 to 2017. The finding from the study revealed that there was a significantly negative relationship between asset tangibility and financial performance measured by ROCE. Similarly, the study of Umobong and Agburuga (2019) revealed that there was a nexus between debt ratio and ROCE has a negative relationship between debt ratio and ROCE

3.0 Methodology

3.1 Research Design

This study adopted the *ex-post facto* research design. As an empirical study, it made use of only past data in the form of secondary data extracted from audited financial statements to investigate the effect of firms' attributes on financial performance among selected listed firms in Nigeria.

3.2 Population and Sample Size: The population of the study comprised 161 companies listed on the Nigerian Stock Exchange (NSE) as at 31st December, 2020 for a period of 10 years (2011-2020). However, a total of 111 firms were chosen as sample representative from the 161 listed companies, representing 68.94% of the entire firms listed on the Exchange as at 31 December 2020; thereby translating into 1110 firm-year observations.

3.4 Sampling technique: A sample size of 111 was purposively determined for the study. Multistage techniques (stratification and quota) were utilized in selecting the 111 firms studied.

3.5 Method of Data Analysis: The study adopted descriptive and inferential statistics, employing panel data multiple regression analyses for data analysis.

3.6 Model Specification

The applicable models that were developed under this study essentially consisted of econometric constructs that served as framework for the analysis. The explanatory variable in this study was the firms' attributes measured by: company size status (CSS), firm listing age (FLA) and asset tangibility investment (ATI). However, the regressand variable in this study is financial performance (FP) measured by: net profit margin (NPM) and capital employed performance (CEP). The functional relationship and regression models are as follows

Table 1: Model Specification

Functional Relationships		Regression Models	
NPM = f (CSS, FLA, ATI)	Equation 1	$NPM_{it} = \alpha_0 + \alpha_1 CSS_{it} + \alpha_2 FLA_{it} + \alpha_3 ATI_{it} + \epsilon_{it}$	Model 1
CEP = f (CSS, FLA, ATI)	Equation 2	$CEP_{it} = \beta_0 + \beta_1 CSS_{it} + \beta_2 FLA_{it} + \beta_3 ATI_{it} + \epsilon_{it}$	Model 2

Source: Author's Computation (2022)

The above Table 1 provides the two respective functional relationships and regression models of the study.

4.0 Data Presentation and Analysis

4.1 Descriptive Statistics of the Variables' Results

This section provides a synopsis on the dataset features with a description of their mean, maximum, minimum, and standard deviation of all variables of financial performance measured by net profit margin and capital employed performance; and firms' attributes measured by company size status, firm listing age, and asset tangibility investment.

Table 2: Descriptive Statistics of the **Variables' Results**

Variable	Mean	Std. Dev.	Min.	Max.
NPM	-7.29	359.22	-5376.71	6946.54
CEP	7.89	63.37	-973.68	468.43
CSS	6.87	0.93	4.7	9.62
FLA	24.40	13.58	2	56
ATI	39.24	28.92	0	99.83

Source: Author's Computation (2022)

Table 2 provides a summary of the statistical features of the data. As observed, the Net Profit Margin had a negative mean and minimum values of -7.29 and -5376.71 respectively. Also, the CEP has a minimum negative value of -973.68. These scenarios imply that many of the listed firms in Nigeria operated with excessive operating costs over their total revenues for the period of the study. This further connotes that many of the sampled firms on the average are battling, struggling and contending with challenges that impeded them from generating sufficient incomes for steady or consistent net profit margin, while at the same time were unable to sustain robust returns on capital employed to their investors.

4.2 Correlation Analysis

The correlation of the firms' attributes proxies and financial performance of selected listed firms in Nigeria was examined. The correlation analysis was performed through the use of Pearson Correlation analytic tool. The result is shown on the Table 3 below.

Table 3: **Pearson Correlation Matrix**

Variable	NPM	CEP	CSS	FLA	ATI
NPM	1.000				
CEP	0.113	1.000			
CSS	0.053	0.126	1.000		
FLA	0.023	0.055	0.104	1.000	
ATI	-0.069	-0.016	-0.113	0.007	1.000

Source: Author's Computation, 2022

Interpretation

The use of Pearson correlation matrix was carried out to test for the possibility of the existence of multicollinearity among the variables. The results revealed that multicollinearity problem does not exist among the variables.

4.3 Inferential Statistics

4.3.1 Testing of Hypothesis one and Discussion of Findings

This section deals with the testing of the hypothesis one and discussion of findings

Table 3. Regression and Post-Estimation Results for Hypothesis One.

MODEL ONE				
Pooled OLS with robust Std. Err				
Variable	Coeff	Std. Err	T-Stat	Prob
Constant	-105.34	50.611	-2.08	0.038
CSS	17.04	6.599	2.58	0.010
FLA	0.509	0.723	0.70	0.482
ATI	-0.803	0.655	-1.23	0.221
Adj. R ²	0.0073			
F-Stat/Wald Stat	F _(3, 1106) = 6.45 (0.00)			
Hausman Test	chi ² ₍₃₎ = 4.33 (0.227)			
Testparm Test/LM	chi ² ₍₁₎ = 0.00 (1.00)			
Heteroskedasticity	chi ² ₍₁₎ = 1951.92 (0.00)			
Serial Correlation	F _(1, 9) = 1.362 (0.25)			
Cross-Sectional	15.00(0.00)			

Source: Author's Computation (2022).

Note: all the hypotheses were tested at 5% significance level

Interpretation of Diagnostic Tests

The study conducted Hausman tests, Breusch-Pagan Lagrangian Multiplier (LM), Pooled OLS, Wooldridge test for serial correlation and Pesaran's test for cross-sectional dependence. Thus, based on the results of the Hausman tests, LM test, heteroskedasticity test, autocorrelation tests and cross-sectional dependence test conducted, model one was estimated using Pooled Ordinary Least Square with Robust Standard Errors in order to correct the problem of heteroscedasticity and cross-sectional dependence in the model.

$$NPM_{it} = \alpha_0 + \alpha_1 CSS_{it} + \alpha_2 FLA_{it} + \alpha_3 ATI_{it} + \varepsilon_{it} \quad \text{Model 1}$$

Interpretation and Discussion of findings

As shown in Table 3 (Hypothesis One), the probability values of the t-test revealed that CSS (p=0.010) has a statistically significant effect on Net Profit Margin (NPM), while FLA and ATI insignificantly affect NPM (FLA: p=0.482; ATI: p=0.221). This is indicated by the sign of the

coefficients of the explanatory variables; that is, CSS ($\alpha = 17.04$); FLA ($\alpha = 0.509$); and ATI ($\alpha = -0.803$). This result indicated that CSS and FLA positively impacted NPM while ATI has negative effect on NPM at the defined level of significance of 0.05, and F-statistics of 6.45, the p-value of 0.00. This result shows that it is only CSS that has a positive statistically significant effect on NPM as shown by the p-value of its t-statistics. Although, considering both the magnitude and probability together, only company size status significantly affects NPM. The explanatory powers of the independent variables reflect that the joint variations in the independent variables yield 0.73% variation in the NPM, while the remaining 99.27% changes in NPM are caused by other factors outside the scope of this model. Therefore, at a level of significance 0.05, the f-statistics is 6.45 while the p-value of the f-statistics is 0.0000 which is less than 0.05 adopted level of significance. Therefore, the study rejected the null hypothesis and accepted the alternate, which means that firm characteristics have significant effect on net profit margin of selected listed companies in Nigeria.

Furthermore, the probability values of the t-test revealed that CSS has significant effect on Net Profit Margin (NPM), while FLA and ATI insignificantly affect NPM. The result shows that an increase in the company size (measured by market capitalization) of the firms will result to an increase in the Net Profit Margin. This implies that, the older the firm, the increase in NPM while an increase in the investment in tangible assets of firms would lead to decrease in NPM. This therefore implies that company size status, being measured by market capitalization, is an integral part of internal resources that serves as a key predictor variable of financial performance of firms (Kabue & Kilika, 2016). This result validates and lends credence to Resource-based view theory on which this study was underpinned. Thus, company size status is essentially an internal resource on which the firms' capability to achieve superior performances in net profit margin is hinged. This signifies the dependency role that company size status plays in driving corporate financial performance of firms. Thus, company size status is an essential and crucial attribute that plays a sensitivity role in the survival, sustenance and performance of firm's growth (Hashmi, Gulzar, Ghafoor, & Naz, 2020). This finding shows that company size status significantly drives NPM of selected listed firms in Nigeria, in consonance with the studies of Dang, Li and Yang (2018) and Aguilar-Fernández and Otegi-Olaso (2018).

4.3.2 Testing of Hypothesis two and Discussion of Findings

This section deals with the testing of the hypothesis two and discussion of findings

Table 4. Regression and Post-Estimation Results for Hypothesis Two.

MODEL TWO				
Panel Corrected Standard Error for Random Effect				
Variable	Coeff	Std. Err	T-Stat	Prob
Constant	-53.619	14.771	-3.63	0.000
CSS	8.276	2.310	3.58	0.000
FLA	0.197	0.121	1.63	0.103
ATI	-0.005	0.055	-0.09	0.925
COS				
Adj. R ²	0.018			
F-Stat/Wald Stat	F _(3, 1105) = 31.18 (0.00)			
Hausman Test	chi ² ₍₃₎ = 3.51 (0.319)			
Testparm Test/LM Test	chi ² ₍₁₎ = 4.23 (0.02)			
Heteroskedasticity Test	chi ² ₍₁₎ = 209.82 (0.00)			
Serial Correlation Test	F _(1, 110) = 0.487 (0.486)			
Cross-Sectional	9.780 (0.00)			

Source: Author's Work (2022).

Interpretation of Diagnostic Tests

The study conducted Hausman tests, Breusch-Pagan Lagrangian Multiplier (LM), Pooled OLS, Wooldridge test for serial correlation and Pesaran's test for cross sectional dependence. Thus, based on the results of the Hausman tests, LM test, heteroskedasticity test, autocorrelation tests and cross-sectional dependence conducted on Model two the study was estimated using Panel Corrected Standard Error for random effect model in order to correct the problem of heteroscedasticity and cross-sectional dependence in the model.

$$CEP_{it} = \beta_0 + \beta_1 CSS_{it} + \beta_2 FLA_{it} + \beta_3 ATI_{it} + \varepsilon_{it} \quad \text{Model 2}$$

Interpretation and Discussion of Findings

As illustrated in Table 4, the probability values of the t-test revealed that CSS (p=0.000) has significant effect on Capital Employed Performance (CEP), while FLA and ATI insignificantly affect CEP (FLA: p=0.103; ATI: p=0.925). Considering the coefficients of the explanatory variables; CSS ($\Omega = 8.276$); FLA ($\Omega = 0.197$); and ATI ($\Omega = -0.005$) means that CSS and FLA positively impacted CEP while ATI has negative effect on CEP. Hence, at a level of significance 0.05, the f-statistics is 31.18 while the p-value of the f-statistics is 0.00 which is less than 0.05 adopted level of significance. Therefore, the study rejected the null hypothesis and accepted the alternate, which means that firm attributes have significant effect on capital employed performance of selected listed companies in Nigeria. Thus, an increase in the company size status of the firms will result into approximately 8.28 per cent increase in the capital employed performance. This therefore implies that, the older the firm, the increase in CEP by 0.19 per cent; while an increase in asset tangibility investment of firms would lead to

0.005 per cent decrease in CEP. Although, considering both the magnitude and probability together, only company size status significantly affects CEP. The explanatory powers of the independent variables reflect that the joint variations in the independent variables yield 0.18% variation in the CEP, while the remaining 99.82% changes in CEP is caused by other factors outside the scope of this model. Even though the magnitude of the joint effect is low; however, the probability of the F-test (p -values of 0.00) showed that firm attributes significantly affect capital employed performance of selected listed companies in Nigeria.

Furthermore, the results obtained from this study show that company size status has a significant effect on financial performance measured by Net profit margin and capital employed performance. This connotes that company size status is really a very crucial strategy in maintaining robust financial performance of listed firms in Nigeria. This result is supported by the empirical findings of other scholars that have previously carried out similar study in this area. For instance, Nga and Long (2021) have documented the evidence of a significant association between company size and financial performance measures. On the contrary, the result of this study negates the work of Patjoshi and Nandini (2019) who found insignificant relationship between company size and financial performance measure.

In addition, firm listing age is another firms' attributes that plays pivotal role is measuring the incremental or detrimental changes and growths that a firm experience from its incorporation date to its determinable period. Thus, as a firm continues to operate and grow, its listing age usually contributes to its unique strength and capacity to pay dividends periodically (Brawn & Šević, 2018). Firm listing age has a positive effect on all financial performance variables used in this study and this result was supported by the empirical results of Haykir and Celik (2018); Mallinguh, Wasike & Zoltan (2020) who found a positive relationship between firm age and financial performance. However, the result of Legesse and Guo (2020), and Pervan, Pervan and Ćurak (2017) found a negative relationship between firm listing age and financial performance.

Furthermore, this study has shown a negative effect of asset tangibility on financial performance which is in line with the study of Ali (2020), Ali, Yassin and AbuRaya (2020), Musah, Kong and Osei (2019), Martins and Alves (2010) and Moradi and Paulet (2019) who found negative association between asset tangibility and financial performance measure. But on the contrary, the work of İltaş and Demirgüneş, (2020) contradicted the observed negative association between asset tangibility and financial performance measure who found a positive association between asset tangibility and financial performance.

4.4 Implication of Findings

The findings of this study have implications for the diverse stakeholders of the firms for national economic growth. These stakeholders include the following: Managers, creditors,

investors, government, researchers, professionals, scholars and the general public. The multi-faceted implications are succinctly outlined below:

To the Board management:

Within the purview of this work, the empirical results and evidence from the hypotheses tested showed that out of the three predictor variables studied, only company size status (proxied by market capitalization) is statistically significant in driving growth of NPM and CEP; while ATI and FLA were statistically insignificant in influencing financial performance measures of NPM and CEP. This therefore, implies that Board management should appropriately, configure their firms' financial strategies to exploit the usage of their company size status (measured by market capitalization) to drive their financial performance in NPM and CEP.

To the investors

The results of the descriptive statistics of financial performance measures of NPM and CEP over the period of 2011 to 2020 shewed variations in the values of NPM and CEP for the entire period of the study. This implied a state of an unhealthy internal realisms of their performance among the sampled listed firms in Nigeria, which showcased their inability to achieve a stable, consistent upward swing and positively progressive going-concern status. This may provide a signal to investors to individually, corporately and carefully examine the situational growth of each firm's NPM and CEP by paying close attention to healthy firms among the listed companies studied in view of the fact that many of them did generate negative NPM and CEP as empirically documented in the study. Investors should be more interested in more profitable firms that generate sufficient incomes that can translate into positive and improved steady or consistent net profit margin, while at the same time able to sustain robust returns on capital employed.

To standard setters and regulators

The measures of financial performance under this investigation (NPM and CEP) are among the core foundations on which going-concern strategy of business firms are built. However, the observed variations in the panel data trends of the sampled or selected listed companies in Nigeria from 2011 to 2020 serve as signals and perhaps red flags that should be of great concern to the Capital Market regulators about the companies that had negative performances and profitability. This evidence should provide standard setters and regulators with some red flags that can be used to establish policies and regulations that would help to salvage and reverse the unwholesome trends before being snowballed into systemic existential risks that can engender national economic crisis and recession. Stock Market regulators will especially find the outcome of this work very useful in calibrating national economic frameworks, policies, standards and regulations to help regulate listed firms to avoid the use of Regulators executive fiat to deactivate their listing from the capital market, which may lead to their corporate extinction.

5.0 Conclusion

Financial performance is sensitive to some micro-economic variables and development. More specifically, this research investigated the effect of company size status, firm listing age, asset tangibility on net profit margin and capital employed performance of selected listed companies in Nigeria. Consistent with expectations, the result revealed that company size status has statistically significant positive effect on financial performance. Also, a positive effect of firm listing age with financial performance was observed. The positive effect for both variables implies that an increase in either or both company size status or firm listing age will produce a positive financial performance of the firm. Therefore, on the overall, this study comprehensively documented the evidence of firms' attributes measures of CSS, FLA and ATI to have joint significant effect on the financial performance of selected listed companies in Nigeria. Thus, the study concluded that firms' performance measures of CSS, FLA and ATI had joint significant effect on the financial performance of selected listed companies in Nigeria.

5.1 Recommendations

In view of the findings from this study, the followings recommendations are hereby proffered: From the result of the regression estimates, both company size status and firm listing age have significant positive effect on net profit margin. It is hereby recommended that company size status should be strategically employed to grow their financial performance. Firms should strive to achieve a good size by increasing their market capitalization consistently in order to achieve a better financial performance. Thus, firms' top Management should deepen their company size in order to achieve a bigger size status by increasing their market capitalization consistently in order to boost their financial performance robustly.

Furthermore, the variations observed in the capital employed performance of the sampled firms in which some of the studied firms even had negative performance, which were largely linked to high operating cost. Therefore, Operations Managers of firms should continue to institute sound cost control measures as well as implementing sales revenue or earnings expansion strategies to spur up and sustain their superlative performance on the capital employed in running their business thereby producing competitive returns to investors. In view of the variations that were observed oscillating and zig-zag growth patterns of NPM and CEP over the entire period of the study; which were due to high overhead costs, it is hereby recommended that listed firms should aggressively pursue cost reduction programme as strategy to drive their financial performance in NPM and CEP.

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