

EXPLORING THE NEXUS BETWEEN CORPORATE LIFE CYCLE AND FINANCIAL PERFORMANCE OF LISTED NON- FINANCIAL FIRMS IN NIGERIA

Williams Okpebenyo¹
Patience Johnson Itabita
Ademu Yunusa
Danlami Joseph Aduku

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ABSTRACT

The study aimed to investigate the critical relationship between the corporate life cycle and financial performance of listed non-financial firms in Nigeria. The study's population consisted of one hundred and sixty-one (161) publicly traded firms listed on the floor of the Nigerian Exchange Group (NGX) as of December 31, 2021. Five financial performance variables namely return on assets (ROA), return on equity (ROE), net profit margin (NPM), and earnings per share (EPS) and two stages (growth and decline stages) were assessed. Based on the fixed and random effect panel data regression, the study found that ROA, ROE, NPM, and EPS are significantly influenced by the growth and maturity stages in the Corporate Life Cycle of firms while ROE and NPM are not significantly affected by growth and maturation stages. Consequently, management of firms are encouraged to adopt the 'perking's order' of financing their operations.

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Original research



1. INTRODUCTION

Globally, in the last twenty-five years, a significant number of empirical studies have emerged indicating that the corporate life cycle has a notable impact on the financial performance and sustainability of firms (Habib, 2017). Previous research focused on products within organisations, particularly in the areas of marketing, strategy, finance, and performance management, but now there is an increasing interest in the life cycle of companies themselves (Arikan & Stulz, 2011). Chandler's theory suggests that firms go through various stages as they develop, akin to a life cycle, with specific firm-level elements operating at different stages and common industry-level characteristics applicable to markets or industries as a whole. Each stage of a company's life cycle is unique and multi-faceted (Fisher et al., 2013).

The current study aims to explore the critical relationship between corporate life cycle and financial performance

in non-financial firms listed on the Nigeria Stock Exchange. Financial performance is crucial for businesses to provide social amenities and enhance shareholder value (Yahaya & Onyabe, 2020; Beal & Yasai-Ardekani, 2023). Various parameters, such as return on capital employed, return on assets, return on equity, and others, are used to evaluate financial performance. Understanding how companies evolve through different stages of growth and the subsequent impact on their financial well-being is essential in a dynamic economy where businesses face constant change and challenges.

In Nigeria, non-financial firms listed on the stock exchange are prevalent, yet many struggle with financial performance due to inadequate strategies to navigate the corporate life cycle stages (Can et al., 2023; Yahaya & Onyabe, 2020). Research indicates that mismanagement and a lack of financial strategies have led to business failures and financial crises in Nigeria and globally (Ukolobi & Jeroh, 2020; Yahaya & Onyabe, 2020). The

¹ Corresponding author: Williams Okpebenyo
Email: williamokpebenyo01@gmail.com

study seeks to fill the existing gap by investigating how the corporate life cycle influences the financial performance of listed non-financial firms in Nigeria, aiming to provide valuable insights for sustainable business practices and growth.

The main goal of this study is to investigate how the corporate life cycle affects the financial performance of listed non-financial firms in Nigeria. However, the specific objectives are to:

1. Determine the effect of the corporate life cycle on the return on equity of listed financial firms in Nigeria.
2. Examine the relationship between the corporate life cycle and the profit margin of listed non-financial firms in Nigeria.
3. Investigate the impact of the corporate life cycle on the earnings per share (EPS) of listed non-financial firms in Nigeria.

2. LITERATURE REVIEW

This section provides conceptual clarification of Corporate Life Cycle and financial performance.

2.1 Concept of the Corporate Life Cycle

All living organisms experience the life cycle, which progresses from birth through growth, maturity, old age, and death. Each phase of the life cycle presents unique challenges that prompt the organism to seek sustainable means of survival. As an organism undergoes growth-related changes, distinct traits or characteristics emerge to support it during that specific life cycle stage. Similarly, the life cycle theory posits that corporate entities, like living organisms, experience distinct stages. Businesses have a life cycle of operations, evolving within varying phases influenced by the dynamic social, political, and economic environments in which they operate. People often compare the firm's life cycle concept to the product life cycle, which illustrates the firm's simultaneous progression through different phases. The life cycle theory states that products change as they move from the introduction phase, when they enter the market. During this phase, firms focus on creating product awareness through effective marketing strategies and advertising. Subsequently, the product enters the growth stage, expanding into a larger consumer market, often facilitated by price reductions to attract a broader customer base. Following this phase is the saturation stage, characterised by stagnant sales and limited replacement opportunities. Eventually, the product enters the decline stage, marked by a decrease in market demand due to innovations or newer products entering the market.

Similarly, the firm's life cycle encompasses stages from birth through growth, maturity, revival, and decline, as explained by Black (1998). As firms progress through their life cycle, they encounter challenges unique to each stage of development. Therefore, management must proactively address emerging issues at each phase of the

firm's life cycle. Aligning with the life cycle model, firms navigate through distinct stages of existence in a sequential manner, allowing for the identification and adjustment of operational and structural equilibrium at each stage.

Stage One: Introduction

Every organisation begins its operations by launching new products or services. In the introduction phase, sales are typically low but gradually increase. Companies focus on targeting specific customer segments by highlighting their competitive advantages and value propositions. However, due to low revenue and high initial startup costs, businesses often incur losses during this stage. Throughout the business life cycle, the profit cycle lags behind the business cycle, creating a delay between sales growth and profit growth. This delay is crucial in relation to the financing life cycle, as discussed in the final section of this article. While income is negative during the launch stage, it decreases even further compared to profit. Although the business's service may not yet reflect the capitalization of initial startup costs, its income certainly does. The introduction stage is characterized by higher levels of investment, capital expenditure, sales growth, research and development (R&D) expenditure, and accruals, which are likely to result in increased deferred taxes (Poterba et al., 2011; Drake & Martin, 2017).

According to Doorasamy (2021), transactions during this phase involve income deferral, primarily to reduce taxable income. Deferrals lead to an increase in book income compared to taxable income, resulting in overall positive book-tax differences. Consequently, when profits rise and taxes remain constant, the accounting effective tax rate (ETR) decreases. The introduction stage presents various tax-deferral opportunities. People often perceive larger positive book-tax differences, generated at this phase through strategic tax deferral options, as a sign of aggressive or questionable tax positions (Doorasamy, 2021). To enhance future earnings, management may exhibit traits similar to those of prospector strategists, such as actively pursuing opportunities and engaging in risky tax strategies.

In the startup and growth phases, an additional dollar in cash is highly valuable as companies lack internal capital resources to finance investments and innovations (Oluwatayo et al., 2016). Firms appear to influence cash strategies by considering trade-offs and evaluating the benefits and costs of establishing a target cash ratio. Increasing after-tax cash flows is crucial for companies in their early stages, motivating managers to leverage innovative approaches to significantly reduce corporate tax payments. The introduction stage's typical uncertainty and limited information about future cash flows and profit margins allow management to make confidential agreements that significantly reduce the corporate tax burden, particularly when linked to performance-based compensation plans (Drake, 2012).

Stage Two: Growth

During the growth phase, organisations undergo rapid expansion. With a sharp increase in sales, companies begin to see profits once they surpass the initial investment threshold. However, as the profit cycle lags behind the business cycle, the profit level does not match the sales level. Ultimately, the revenue during the growth stage turns positive, indicating an excess of cash inflow. A strengthened cash position and the certainty of investment opportunities are likely to empower management to enhance profits during the company's growth phase. As businesses transition from the introduction stage to the growth phase, they have access to a broader range of tax planning options due to the evolving market dynamics and increased globalisation of markets and products. As the company expands into new products and regions and progresses along the innovation continuum that began in the introduction stage, they tend to assume greater levels of risk. Previous research suggests that companies in the growth stage exhibit a higher proportion of working capital and intangible assets compared to those in the mature or decline stages, including costs related to research and development, patents, and copyrights (Ahmed et al., 2017).

However, as the company moves into the growth phase and interacts with more external stakeholders, such as tax authorities, management may become more concerned about the reputational implications of expanding into new markets and product lines. These concerns may diminish their enthusiasm for engaging in strategies that would enhance their financial performance (Hasan et al., 2015).

Stage Three: Maturity

In the maturity phase, sales continue to grow, albeit at a slower pace, often due to market saturation or increased competition from new market entrants. Sales reach their peak during this stage. While business continues to expand, profits start to decline during the shakeout phase. This growth in sales and decline in profits indicate a significant increase in costs. Eventually, revenue increases and surpasses profits. Reduced investment outlays, limited innovations, and the retention of resources and capabilities are characteristic of a company in the mature phase (Dickinson, 2011; Drake, 2012). With more access to experience and resources, management may prioritize fundamental operational decisions over tax avoidance strategies, or it may not effectively align core operational decisions with tax efficiency. A company in the mature stage may experience slower sales growth, more consistent net income, and less fluctuation in cash flow, leading to a greater reliance on retained earnings. Management may be less inclined to the stability and lower risk associated with the company's current and potential future earnings and cash flows, management may be less inclined to actively pursue tax avoidance strategies during this period.

Stage Four: Shake-Out

As businesses expand, sales gradually start to decrease. Overall, revenues become narrower, while profits usually remain steady. As companies reach the growth phase, significant capital expenditures typically outpace profits on the income statement, resulting in higher cash generation. It is noteworthy that many companies extend their business life cycle during this period by reinventing themselves and investing in technologies and emerging markets, enabling them to realign within their evolving industries and reinvigorate their growth in the marketplace. Decreased operational cash flows, heightened uncertainty regarding future cash flows, profitability, innovations, and investments, among other factors, may contribute to a company's poor financial performance. A company is more likely to explore cost-minimization measures at this stage due to the operational expenses it incurs in its day-to-day operations. Additionally, a company may implement restructuring or asset sale strategies to revitalise itself. Investors primarily evaluate a company's resilience in managing financial challenges and restoring profitability based on its cash flow generation and profit potential (Black, 1998).

Stage Five: Decline

During the final phase of the business life cycle, sales, profits, and revenue all decline. Companies come to terms with their inability to prolong their business life cycle by adapting to evolving industry conditions at this stage. They lose their competitive edge and eventually exit the market. Furthermore, a financially distressed company actively engages in tax planning due to the unstable nature of its cash flows and generally low levels of liquidity during this period (Aharony et al., 2006; Esqueda & O'Connor, 2020; Nasri & Zekovksi, 2014). According to Patrick and French (2016), effective resource utilization is essential during challenging times to enhance the firm's financial performance. Nasri and Zekovksi (2014) emphasize that a company with limited resources will take measures to reduce its expenses. Cutting expenses across all categories is less likely to adversely impact a company's performance compared to other expenditure reductions. Consequently, management may adopt a prospector-style strategic framework in this phase, as they are more inclined to pursue riskier ventures that may necessitate aggressive financing approaches.

2.2 Financial Performance

Financial performance is intricately linked to profitability, a fundamental element in assessing a company's financial health. Profitability measures management's efficiency in utilizing both total and net assets recorded on the balance sheet. It is a measure of effectiveness that assesses the relationship between net profit and the assets used to generate it. Owners, particularly shareholders in a corporation, view profitability as the return on their investment resulting from management's endeavours.

Financial performance is defined as the achievement of measurable production objectives. Firm performance is a multidimensional concept comprising client-based performance, financial and economic performance, human resource performance, and firm profitability. Secinaro et al. (2020) established that market-based metrics for evaluating a company's performance include return on equity (ROE) and return on investment. Bhagat and Bolton (2008) utilised various metrics such as return on assets, turnover ratio, operating margin, sales per worker, growth indicators, and cash flows to assess firm performance. This study will focus on key metrics essential for non-financial firms, specifically return on assets, return on equity, return on capital employed, net profit margin, and earnings per share. Return on Assets (ROA) measures net profit as a percentage of total assets, calculated as EBIT divided by average total assets in book value. Return on equity (ROE) indicates the proportion of net income relative to shareholders' equity, reflecting the firm's profitability based on the capital provided by shareholders.

Return on Equity

Some people interpret return on equity (ROE), also known as return on common equity, as the profitability of shareholders' own capital. This financial metric, representing the portion of overall profits that can be distributed to shareholders, serves as an incentive for investors to acquire shares. Shareholders retain residual rights to earnings, with profits typically allocated first to debt interest, followed by preference shares, and finally to common shareholders, if applicable.

We use the return on equity (ROE) ratio to assess companies' profitability based on its equity capital. The formula for calculating return on equity is as follows (Sartono, 2001):

$$\text{ROE} = \text{net income after tax} / \text{total equity}$$

Return on equity (ROE) evaluates the profitability of investments made by owners or shareholders in a firm's capital, reflecting how effectively companies manage their financial resources (net worth). According to Bunea et al. (2019), a higher return on equity (ROE) ratio signifies better profit growth. The return on equity quantifies the return on equity, often referred to as company profitability (Sawir & Agnes, 2005). A higher value indicates increased profit potential due to the efficient use of working capital to support the firm's operations, ultimately leading to higher profits. In his study, Rumaly (2023) found a positive impact of return on equity (ROE) on profit growth, emphasising the importance of precise investment strategies in maximising earnings. Furthermore, the income from debt can help offset capital costs.

According to Choiriyah et al. (2021), return on equity reflects the efficiency with which a firm utilises the resources provided by its owners. This ratio is considered crucial in financial analysis, highlighting the achievement of a satisfactory return as a primary business objective. The ratio of net profit to owners' equity, which holds significance for both current and prospective

shareholders, underscores the management's responsibility to enhance shareholder wealth.

Net Profit Margin

Profit growth is critical to both the country's economic well-being and the company's prosperity. Handayani and Winarningsih (2020) advocate for the use of a firm's net profit to assess its financial health. The net profit margin, a crucial financial metric, assesses a company's profitability by calculating the proportion of profit from its total revenue. It serves as a vital gauge of a company's efficiency in cost management and profit generation from its operational activities. The formula for calculating the net profit margin is as follows: The formula for calculating net profit margin is (net profit/total revenue) * 100; net profit denotes the earnings after subtracting expenses such as operating costs, taxes, interest, and other non-operating expenses, while total revenue represents the income from the company's business operations. Expressed as a percentage, the net profit margin illustrates the portion of revenue converted into profit. A higher net profit margin indicates superior efficiency in converting revenue into profit. It is noteworthy that net profit margins can vary significantly across industries due to differing cost structures and profit expectations. Comparing net profit margins among companies in the same industry can offer insights into their relative profitability and operational efficiency.

Handayani and Winarningsih (2020) underscore that a firm's net profit margin (NPM) mirrors its net income from sales. A higher net profit margin signifies greater ability to generate income from sales, indicating enhanced efficiency and effectiveness, which in turn influences investor interest and contributes to continued profit growth. However, variations in net profit margins are common across industries, with some sectors typically exhibiting higher margins due to factors like production costs, market dynamics, and competition. Comparing a firm's net profit margin with that of industry peers or competitors can provide valuable insights into its financial performance. Prajogo et al. (2018) asserts that the net profit margin establishes a link between net profit and sales, highlighting management's proficiency in product production, administration, and sales. It serves as a comprehensive indicator of the firm's capability to translate revenue into profit efficiently. Insufficient net profit margins may prevent shareholders from receiving satisfactory returns on their investments. A firm with a high profit margin ratio is better positioned to withstand challenges such as declining sales, rising production costs, or reduced demand for its products or services.

Earnings per Share

Earnings per share (EPS) refers to the portion of a company's earnings, net of taxes and preferred stock dividends, allocated to each share of common stock. We commonly examine EPS as an indicator to evaluate a company's profitability per unit of shareholder ownership. As a result, earnings per share have a significant impact on share prices and serve as the

denominator in the widely used P/E ratio (Battisti et al., 2020). In line with Billio et al. (2021), earnings per share gauge the segment of a company's profit assigned to each outstanding share of common stock. EPS serves as a fundamental indicator of profitability, illustrating the amount of profit generated on a per-share basis. While EPS alone may not reveal extensive insights, its true significance lies in comparing EPS figures over various quarters or years to evaluate the company's earnings growth on a per-share basis.

EPS essentially calculates the post-tax payment and dividend distribution to preferred stockholders and bondholders. Typically, companies report EPS data on a quarterly, semi-annual, and annual basis. To compute earnings per share, begin with the net income (earnings) for the relevant period, subtract any preferred stock dividend, and then divide the resultant figure by the total number of outstanding shareholders during that period (Billio et al., 2021). By dividing the net income available to common shareholders by the average number of outstanding shares, EPS offers insights into the profit generated per share. A higher EPS generally indicates enhanced profitability and potential value for shareholders. To access a company's specific earnings per share value, refer to its financial statements, such as the income statement and the average number of outstanding shares, which are detailed in the footnotes or management discussion and analysis section of the annual report.

2.3 Theoretical Review

2.3.1 Stakeholder Theory (Edward Freeman, 1984)

Edward Freeman introduced the stakeholder theory in 1984, tracing its origins back to the General Electric Company period from 1922 to 1941. Stakeholder theory has been characterised in various ways, including as a viewpoint, a set of ideas, expressions, and metaphors linked to the primary objective of maximising stakeholder value. Researchers and practitioners of stakeholder theory emphasise the interconnected interests that form the basis of all corporate value creation. According to Bahadorestani et al. (2019), considering stakeholder interests in managerial decision-making leads to "better outcomes for all stakeholders by recognising their shared interests." If a stakeholder pursues their interests at the expense of others, the remaining stakeholders may withdraw support or seek to establish an alternative network for creating stakeholder value. Stakeholder theory's roots lie in strategic organisational planning, systems theory, and organisational theory subfields within organisational management. Strand and Freeman (2015) delve into the evolution of the stakeholder concept, with a particular focus on the Scandinavian influence on early theory development. Rehnman initially introduced the term "stakeholder" in his 1964 publication, which included the first stakeholder map and introduced key concepts in stakeholder thinking, such as shared interests,

cooperative strategic stance, and rejection of a narrow economic view of the organization. Freeman's "Strategic Management: A Stakeholder Approach" (1984) provided one of the initial and prominent definitions of stakeholders.

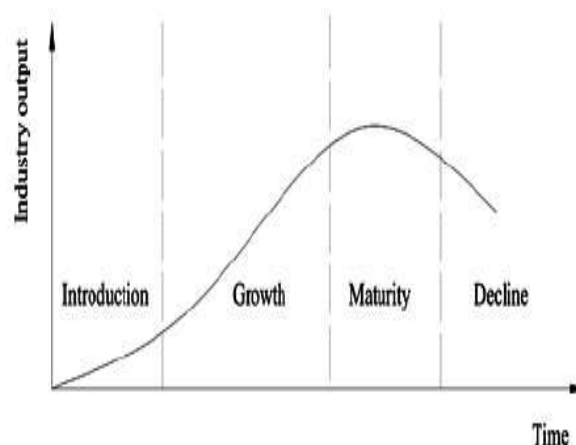


Figure 1. Phases of life cycle

Source: Porter, 1980.

The book urges businesses to consider and rely on any group or individual that can influence or impact the company's goal attainment. One of its major contributions was the identification and description of various interest groups, including employees, customers, suppliers, shareholders, local communities, and more. Over time, we refined definitions to streamline the array of potential stakeholders involved in the complex decision-making processes of management. In essence, stakeholder theory emphasises the importance for businesses to prioritise the concerns of all relevant parties and adjust their strategies and actions accordingly as they progress through different stages of the corporate life cycle. This comprehensive approach can enhance the long-term success and sustainability of a company.

2.3.2 Stewardship Theory (Donaldson and Davis, 1991)

Donaldson and Davis (1991) introduced stewardship theory within the realm of corporate governance. Stewardship theory is a modern concept positing that managers act as stewards of the organisation, with behaviours and objectives in harmony with those of the owners (Löhde et al., 2021). This theory underscores that for the firm to fulfil its role as a steward, it must be economically self-sustaining, promoting resource efficiency through collaborative efforts with stakeholders. The firm views profits as crucial funding mechanisms for achieving its service-oriented mission, with its core values of integrity, fairness, and respect guiding management decisions across all aspects. The primary focus is on serving the common good through sustainable business practices that enhance societal and

environmental well-being. Central to this service-oriented approach is the belief that management comprises trustworthy individuals who engage collaboratively with employees at all levels and other stakeholders (including customers, suppliers, and communities) who share a similar ethos (Davis, 2016). This collective effort benefits business owners in terms of increased sales and earnings, with management prioritising decisions based on what is best for the collective group rather than individual interests. Multiple groups' satisfaction leads to increased revenues and financial incentives. Stewardship theorists advocate for systems that empower management, arguing that control or monitoring mechanisms are unnecessary because management possesses qualities similar to those of the owners (Davis, 2016).

Individuals are inherently motivated to work for organizations or others in order to fulfill entrusted tasks and responsibilities, according to stewardship theory. It asserts that individuals lean towards a collective and organisational mindset rather than an individualistic one, working towards organisational, group, or societal goals for personal fulfillment. Consequently, stewardship theory offers a unified framework for understanding managerial motivations across various organisational contexts. According to this theory, stewards preserve and maximise shareholder wealth through effective business performance, acting as leaders and managers working in the shareholders' best interests to safeguard and enhance their investments. Stewards derive satisfaction and motivation from the organisation's success, promoting autonomy among employees and executives to optimise shareholder returns. Employees take ownership of their roles and demonstrate dedication to their work. Stewardship theory emphasises the establishment of long-term trust-based relationships founded on shared goals, engagement, and reciprocal relationships. In conclusion, stewardship theory is pertinent due to its emphasis on responsible and ethical management practices aligned with shareholder interests and the company's long-term prosperity. Applying stewardship principles can assist businesses in navigating challenges and transactions encountered throughout the corporate life cycle, contributing to sustained success and value creation.

2.3.3 Industry Life Cycle) Model (Michael Porter, 1980

Michael Porter conceptualized the Industry Life Cycle Model (ILC) in 1980, based on the central premise that a firm's industry predominantly influences its environment. The characteristics and robustness of the industry determine the competitive landscape, shaping the rules of engagement and, consequently, the strategies necessary for survival and advancement. This model outlines the progressive stages of development and transformation that industries commonly undergo over time. It delineates the evolutionary path of an industry, with each phase characterised by a distinct blend of technological progress, expansion, and competitive

dynamics (Porter, 1980). The standard stages, or phases, of the industry life cycle comprise:

- i. Introduction stage
- ii. Growth stage
- iii. Maturity stage
- iv. Decline stage

The public first encounters a novel product, service, concept, or solution to a persistent issue during the introduction phase of the life cycle. This startup phase involves the inception and initial promotion of a new product or service. Subsequently, the industry life cycle progresses to the growth phase, where consumers begin to recognise and express interest in the industry's offerings. Following the growth stage is the maturity phase, where the focus shifts from expansion to optimising cash flow and revenue through effective strategies. As industries progress through growth and maturity, they eventually reach a declining phase, indicating that the industry's capacity to sustain growth is waning (Porter, 1980).

The Industry Life Cycle Model provides insights into the sequential stages in which industries progress from inception to maturity and decline. Management professionals, analysts, and investors commonly utilise this model to comprehend and anticipate the opportunities and challenges associated with each phase. In the dynamic business landscape, a thorough understanding of the industry life cycle aids investors and businesses in making informed decisions regarding risk management, resource allocation, financial planning, and strategic positioning. It is essential to acknowledge that not all industries follow the same growth trajectory, and external factors can impact the duration and intensity of each stage.

2.3.4 Resource Base View Theory

Penrose (1959) is credited as the trailblazer and primary contributor to resource-based theory. Resource-based theory (RBT) posits that an organisation encompasses a broad array of resources, and organisational growth involves leveraging existing resources while also developing new ones. Barney and Hesterly (2006) argue that resource-based theory underscores how organisations leverage their resources and capabilities to establish a competitive advantage that ultimately leads to enhanced value creation, organisational effectiveness, and superior performance. To achieve organisational effectiveness, prudent resource allocation and capability utilisation against evolving business landscapes are essential. According to resource-based view theory, firms are a compilation of resources and capabilities that are critical for product or market competition. A firm can harness its physical, human, and organizational assets, known as resources, to devise and implement strategies. According to Gakuo and Rotich (2017), resources serve as a critical focal point for understanding firm strategy from a resource-based perspective. These resources' development, heterogeneity, and immobility define organizational effectiveness and produce superior economic and financial outcomes. Firm resources and

capabilities, such as R&D expertise and advertising investments, contribute to firm heterogeneity and play a pivotal role in attaining competitive advantage. The resource-based view theory is relevant to this study because it advocates for firms to cultivate resources and capabilities that competitors find difficult to imitate. This emphasis on long-term sustainability can assist non-financial firms in maintaining a competitive edge over time, resulting in consistent financial performance and revenue generation.

3. METHODOLOGY

3.1 Research Design

In this study, an *ex-post-facto* research design was used. This design was used because it seeks to establish dynamics that are linked with certain occurrences or behaviour types by analysing past events in an already existing situation or circumstance. Thus, the researcher has no control over certain dynamics or variables, as the events already exist and cannot be manipulated or changed.

3.2 Population of the Study

The population of the study refers to the totality of all the variables under study from which the researcher draws his sample. In this study, the entire population included publicly traded non-financial firms on the floor of the Nigerian Exchange Group (NGX) as of December 31, 2021. The study population consists of one hundred and sixty-one (161) publicly traded non-financial firms in Nigeria (the NGX, 2021). See Appendix I

3.3 Sample of the Study

In this study, Purposive sample technique was used. The sample of the study was selected based on the following criteria: the availability of sufficient data to measure the study variables, during the study period the firm has not been written off or delisted from the stock exchange, the availability of the firms financial reports in a regular base and the firm do not merged during the study period. However, after filtering firms with incomplete dataset for the period, a sample size of seventy-five (75) firms was used for the study. The adoption of data filtering was spurred by persistent absence of dataset from the financial statements of non-financial firms.

3.4 Sources of Data Collection

The data required for this study was obtained from a secondary source. The secondary data was obtained from the annual reports and accounts of the firms under investigation as well as the database of the Nigerian Exchange Group (NGX). Data on corporate life cycle were obtained from the Nigerian Exchange Group while data on financial were obtained from the financial statements (annual reports and accounts) of the listed firms in Nigeria. The data comprises corporate life cycle (an independent variable) and financial performance, which is the dependent variable (such as return on assets,

return on equity, return on capital employed, net profit margin, and earnings per share).

This study period covers a ten-year (10-year) period following the implementation of the International Financial Reporting Standard (IFRS) from 2012 to 2021. The data obtained in this study have been validated by the regulatory framework of businesses (Companies and Allied Matters Act) as well as economic activities in the Nigerian context; thus, there was no room for data validation.

3.5 Method of Data Analysis

Descriptive and inferential statistics were employed in analysing the data collected. Panel regression was employed. The fixed effect model was used to assess the unobserved time-invariant individual effect of the independent variable on the dependent variable. The random effect model measures the difference between the average score at firm *i* and the average score over time, and it is “random” because the sample has been randomly selected from a larger population.

In this study, corporate life cycle was the independent variable, while financial performance was the dependent variable. To measure the corporate life cycle of firms, we employed the firm-size approach/methodology (denoted by the natural logarithm of total assets). According to Zhipeng and Zhao (2010) and Gulec and Karacaer (2017), firm-size approaches and methodologies help to eliminate coinciding corporate life cycle stages in firms. For instance, the numbers of firms in the growth and maturity stages are the same. Hence, we restricted our sample to firms with at least two stages in their corporate life cycle (growth, maturity, and decline).

Following the firm-size approach and methodology, an interesting pattern emerged in our dataset: the growth-maturity stage of firms (the smallest) and the decline stage of firms (the largest). In our dataset, we identified the smallest size of the firm as 5.03 (growth maturity), while the largest is 9.38 (decline). On the basis of the above, the growth-maturity stage was estimated to range from 5.03–7.99, while the decline was 8.01–9.38. This approach and methodology are in line with Zhipeng and Zhao (2010), Gulec & Karacaer (2017).

Furthermore, the explanatory variables (corporate life cycle measures—growth, maturity, and decline) led to the use of multiple regression analysis in the data analysis. Interestingly, the study adapts existing models of the corporate life cycle and financial performance of firms. In view of the above, the following empirical models served as the foundations for testing the relevant hypotheses of the study:

Model I

$$ROA_{it} = a_0 + \delta_1 GroMat_{it} + \delta_2 Decl_{it} + \mu_{it} \quad \text{eq.1}$$

Model II

$$ROE_{it} = a_0 + \delta_1 GroMat_{it} + \delta_2 Decl_{it} + \mu_{it} \quad \text{eq.2}$$

Model III

$$ROCE_{it} = a_0 + \delta_1 GroMat_{it} + \delta_2 Decl_{it} + \mu_{it} \quad eq.3$$

Model IV

$$NPM_{it} = a_0 + \delta_1 GroMat_{it} + \delta_2 Decl_{it} + \mu_{it} \quad eq.4$$

Model V

$$EPS_{it} = a_0 + \delta_1 GroMat_{it} + \delta_2 Decl_{it} + \mu_{it} \quad eq.5$$

Variable Description:

GroMat = Corporate Life Cycle (measured using growth-maturity stage).

Decl = Corporate Life Cycle (measured using decline stage).

ROA = Return on Assets (firm's net income divided by total assets)

ROE = Return on Equity (net income divided by shareholder's equity)

ROCE = Return on Capital Employed (net operating profit or earnings before interest and taxes (EBIT) divided by capital employed)

NPM = Net profit Margin (net profit divided by sales, multiplied by 100)

EPS = Earnings per share (profit after tax minus preference dividend divided by number of ordinary shares ranking for dividends)

U = Error Term

it = Firms at time *t*.

a_0, a_1, a_2 = Constant Coefficient.

4. ANALYSIS AND DESIGN

Table 1 showed the mean (average) for each of the variables and their respective standard deviations (degree of dispersion) for the sampled non-financial firms in Nigeria from 2012-2021; the results shed some lights on the nature of the selected non-financial firms in Nigeria in terms of the corporate life cycle stages (growth-maturity – *gromat* and decline – *decl*) and financial performance measures of the study (return on asset – *ROA*, return on equity – *ROE*, return on capital employed – *ROCE*, earnings per share – *EPS*, and net interest margin – *NPM*)

Table 1: Summary of Descriptive Statistics

Statistics	ROA	ROE	ROCE	EPS	NPM	GROMAT	DECL
Mean	1.3063	6.8941	6.5754	1.5644	1.5512	6.8202	8.4268
Std. Dev.	16.973	404.81	17.531	6.0756	2.5810	0.6618	0.3291
Min. Val	-179.9	-1964.3	-179.5	-20.23	0	5.0300	8.0100
Max. Val	176.27	10264.7	193.1	57.630	38.700	7.9900	9.3800
Skewness	-1.1571	21.0748	0.0394	5.5175	9.6972	-0.3261	0.8542
Kurtosis	42.640	547.28	42.463	42.387	120.59	2.6503	3.0949
Obs.	758	758	758	758	758	631	127

Source: Researcher's Computation via STATA 13.0

First, return on equity (*ROE*) showed the highest average with a value of 6.8941 (in terms of financial performance indicator) and this was followed by return on capital employed (*ROCE*) with a mean value of 6.5754 while return on asset (*ROA*) had the least mean value of 1.3063; in terms of corporate life cycle, decline stage (*decl*) recorded the highest mean value of 8.4268 while growth-maturity stage had the least (*gromat* - 6.8202). Also, *ROE* showed the highest dispersion with a standard deviation value of 404.818 while *decl* showed the least dispersion with a standard deviation of 0.3291; the standard deviation revealed that the sampled non-financial firms' corporate life cycle in Nigeria are similar. The high mean value for *decl* is a clear indication that most publicly quoted non-financial firms have attained a decline stage in their corporate life cycle compared to those in their growth-maturity stage.

Remarkably, the minimum value of the publicly quoted non-financial firms for the growth-maturity stage is 5.03 while the maximum value is 7.99, suggesting among other things that the sampled publicly quoted non-financial firms had a minimum of five (5) firms that have attained their growth-maturity stage with approximately

eight (8) firms that had maximally attained their growth-maturity stage. On the other hand, the minimum value of the publicly quoted non-financial firms for the decline stage is 8.01 while the maximum value is 9.38; an indication that the sampled publicly quoted non-financial firms had a minimum of eight (8) firms with approximately nine (9) firms. Drawing inference from values of standard deviation values for the corporate life cycle stages, we can infer that there are more publicly quoted non-financial firms that had attained their decline stages

Second, the skewness values for *ROA* (-1.1571) and *GROMAT* (-0.3261) are negative; indicating that they moved in the opposite direction from the other variables of the study while the other variables (*ROE* = 21.0748; *ROCE* = 0.0394; *EPS* = 5.5175; *NPM* = 9.6972; and *DECL* = 0.8542) moved in the same direction. The kurtosis value for *GROMAT* is < 3 (mesokurtic – a standard normal distribution), implying that growth stage of the publicly quoted non-financial firms would lead to increased remarkable positive financial performance while the other variables *ROA*, *ROE*, *ROCE*, *EPS*, *NPM*, and *DECL* were > 3 (leptokurtic), suggesting that the

variables would result in a greater chance of extreme negative financial performance for the sampled publicly quoted non-financial firms in Nigeria.

Table 2. Karl Pearson Correlation Matrix

	ROA	ROE	ROCE	EPS	NPM	GROMAT	DECL
ROA	1.0000						
ROE	0.3267	1.0000					
ROCE	0.9382	0.3449	1.0000				
EPS	0.2776	0.1366	0.2983	1.0000			
NPM	0.0273	0.0108	-0.0097	-0.0293	1.0000		
GROMAT	-0.0507	-0.0487	-0.0599	-0.3954	0.0667	1.0000	
DECL	0.1115	0.0782	0.1196	0.4514	-0.0754	-0.9395	1.0000

Source: Researcher's Computation via STATA 13.0

Table 2 showed the results of the Karl Pearson correlation matrix for the dependent and the independent variables for the sampled publicly quoted non-financial firms in Nigeria and it was shown that *DECL* is positively linked to all the financial performance variables (*ROE*, *ROA*, *ROCE*, *EPS*, *NPM*) except *GROMAT* that is negatively related. This implied that there is a positive relationship between *DECL* and all the financial performance variables of the study while *GROMAT* had a negative relationship with all the financial performance variables of the study (*ROE*, *ROA*, *ROCE*, *EPS*, *NPM*). Furthermore, the Karl Pearson correlation matrix revealed that no two independent variables of the study (*GROMAT* and *DECL*) were perfectly correlated, since none of the Pearson correlation coefficients exceeded 0.8. Thus, there are no suspected cases of multicollinearity problems in the empirical models of the study; however, this was further confirmed by the post-estimation results (variance inflation factor).

Table 3: Variance Inflation Factor (VIF)

Variables	VIF	1/VIF
DECL	1.32	0.7577
GROMAT	1.32	0.7577
Mean VIF	1.32	

Source: Researcher's Computation via STATA 13.0

Table 3 showed the multicollinearity results for the aggregate panel data of the sampled publicly quoted non-financial firms in Nigeria. The mean VIF is = 1.32 and it is not greater than the accepted mean VIF level of 10.0, indicating that there is the nonexistence of multicollinearity problems in the empirical model of the corporate life cycle and financial performance in Nigeria. Hence, the panel dataset are exceptionally reliable for carrying out statistical inferences.

Table 4. Heteroscedasticity Test

Chi2(1)	6.98
Prob. > Chi2	0.0082

Source: Researcher's Computation via STATA 13.0

Table 4 showed the Breusch-Pagan/Cook-Weisberg test for heteroskedasticity for the aggregate panel data of the

sampled publicly quoted non-financial firms in Nigeria. Heteroskedasticity is a situation where the variance of the residuals is unequal over an array of measured variables. The Breusch-Pagan/Cook Weisberg chi2(1) is = 6.98, Prob. chi2 is = 0.0082 which is not greater than 0.05% significance level indicating the nonexistence of heteroskedasticity problems in the variables of the study. Thus, the result implied that the sample used in the panel data regression does not contain unequal variance and as such, there is evidence that the results are valid.

Table 5. Ramsey REST Test

F(3, 34)	0.52
Prob. > F	0.6696

Source: Researcher's Computation via STATA 13.0

Table 5 showed the Ramsey regression specification-error test (RESET) for omitted variables and the fitted values of the response variables (dependent variables – *ROA*, *ROE*, *ROCE*, *EPS*, and *NPM*). The result revealed that F(3, 34) is = 0.52 and Prob. F is = 0.6696, indicating that the alternate hypothesis was rejected while the null hypothesis was accepted, suggesting that the powers of the fitted values have no relationship which serves to explain the response variables (i.e. the model has no omitted variables), thus the corporate life cycle and financial performance models do not suffer from omitted variables problem or functional form misspecification.

Table 6. Cameron & Trivedi's Decomposition of IM-Test

Source	Chi2	Df	P
Heteroskedasticity	2.86	4	0.5812
Skewness	5.76	2	0.0563
Kurtosis	2.90	1	0.0887
Total	11.51	7	0.0117

Source: Researcher's Computation via STATA 13.0

The Cameron and Trivedi's decomposition of information matrix (IM) test was carried out to ensure that the empirical models of the corporate life cycle and financial performance variables are not violating any of the assumptions of the panel data regression model for us

to make good inferences about the dataset of the study (Table 6). The aggregate heteroskedasticity result is (Chi2 = 11.51; p-value = 0.1177 < 0.05) and are statistically significant indicating that the null hypothesis was rejected while the alternate hypothesis was accepted that our empirical models do not violate any of the

assumptions of panel data regression. Remarkably, the dataset satisfies four (4) basic axioms of panel data regression (normality, multicollinearity, heteroscedasticity and information decomposition tests).

Table 7. Unit-Root for Panel Data (Stationarity Test)

Variables	Unadjusted t	Adjusted t	Variance	P-value	Lag	Model
ROA	-8.6412	-4.9770	6.00	0.0000	1	Constant
ROE	-10.5587	-7.8456	6.00	0.0000	1	Constant
ROCE	-9.8657	-7.3202	6.00	0.0000	1	Constant
EPS	-7.1869	-3.0910	6.00	0.0010	1	Constant
NPM	-11.123	-3.4859	6.00	0.0002	1	Constant
GROMA	-9.7215	-3.1582	6.00	0.0008	1	Constant
DECL	-10.193	17.774	6.00	1.0000	1	Constant

Source: Researcher's Computation via STATA 13.0

Table 7 showed the unit-root for panel data (stationarity test) using the Levin, Lin and Chu (LLC) tests. The test results for data stationarity revealed that the series of variables (return on assets, return on equity, return on capital employed, net profit margin, earnings per share, firm size, and growth stage) used in the model are stationary at level 5%, because the p-values are less than 5% level.

However, data of decline stage was not stationary at level 5%; this is expected because it shows the reversed nature of the firms in terms of their life cycle. Given the nonexistence of a unit-root in the performance variables, it is possible to examine the causation between variables of the study.

Table 8. Fixed and Random Effects Panel Regression for Corporate Life Cycle (*GROMAT* and *DECL*) and Financial Performance (Return on Equity) in Nigeria

<i>Dependent Variable: Return on Assets (ROE)</i>				
<i>Estimator(s)</i>	<i>Fixed Effect (FE)</i>		<i>Random Effect (RE)</i>	
<i>Variable(s)</i>	<i>Coefficient</i>	<i>Probability</i>	<i>Coefficient</i>	<i>Probability</i>
GROMAT	20.7816 (1.55)	0.122	20.1504 (1.51)	0.132
DECL	21.6638 (1.98)	0.049	21.3653 (1.95)	0.051
_cons.	-165.9119 (-1.71)	0.088	-162.2714 (-1.67)	0.0096
F-value	(2, 399) = 2.35			
F-Probability	0.00=0.0968			
R-Squared (within)	0.0116		0.0116	
R-Squared (between)	0.0000		0.0003	
R-Squared (overall)	0.0113		0.0113	
Wald Ch2(6)	4.71			
Prob. Ch2	0.0947			
Hausman Test	Chi2(2) = 6.59		Prob>Chi2= 0.0371	

Source: Researcher's Computation via STATA 13.0; * significant at 0.05% level; Items in parentheses are t-values for FE; Z-scores are in parentheses for RE,

Table 8 showed the fixed and random effects panel regression for the corporate life cycle and return on equity (*ROE*) of the publicly quoted non-financial firms in Nigeria. Using the RE results, the coefficients are 20.1504(*GROMAT*) and 21.3653(*DECL*), suggesting that the sampled publicly quoted non-financial firms corporate life cycle will lead to approximately -202% and 214% changes in return on equity(*ROE*). Besides, all the corporate life cycle stages (*GROMAT* and *DECL*) and financial performance measure of *ROE* were

insignificant for both FE (F, 2, 399=2.35; F-Prob. = 0.0968 > 0.05) and RE (Wald Ch2(2) = 4.71; Prob.Ch2 = 0.0947 > 0.05) at 5 percent significance level and the result is similar to the panel least square (PLS) result. Furthermore, the t-test results for *GROMAT* (t = 1.51) and *DECL* (t = 1.98) showed that the individual corporate life cycle are statistically insignificant in explaining the influence on the dependent variable (*ROE*). Nevertheless, the overall R² is 0.0113 for RE; impliedly, all the corporate life cycle variables jointly

explained about 1.13% variation in *ROE*. Additionally, the result of the Hausman test (Prob>Chi2= 0.0371 < 0.05) suggests that FE is more efficient than RE.

Decision: FE is = 2.35 (p-value=0.0968 > 0.05) and is insignificant, providing evidence to reject the alternative

hypothesis and an acceptance of the null hypothesis. This result supports the proposition that corporate life cycle does not significantly affect return on equity of listed nonfinancial firms in Nigeria.

Table 9. Fixed and Random Effects Panel Regression for Corporate Life Cycle (*GROMAT* and *DECL*) and Financial Performance (Net Profit Margin) in Nigeria

<i>Dependent Variable: Net Profit Margin (NPM)</i>				
<i>Estimator(s)</i>	<i>Fixed Effect (FE)</i>		<i>Random Effect (RE)</i>	
<i>Variable(s)</i>	<i>Coefficient</i>	<i>Probability</i>	<i>Coefficient</i>	<i>Probability</i>
GROMAT	0.7287 (1.85)	0.066	0.7418 (1.90)	0.057
DECL	1.6822 (5.20)	0.000	1.6947 (5.30)	0.000
_cons.	-5.3836 (-1.88)	0.061	-5.4815 (-1.94)	0.053
F-value	(2,399)=53.19			
F-Probability	0.0000			
R-Squared (within)	0.2105		0.2105	
R-Squared (between)	0.3293		0.3311	
R-Squared (overall)	0.2107		0.2107	
Wald Ch2(6)			108.93	
Prob. Ch2			0.0000	
Hausman Test	Chi2(2) = 0.07		Prob>Chi2= 0.9632	

Source: Researcher's Computation via STATA 13.0; * significant at 0.05% level; Items in parentheses are t-values for FE; Z-scores are in parentheses for RE,

Table 9 showed the fixed and random effects panel regression for the corporate life cycle and net profit margin (*NPM*) of the publicly quoted non-financial firms in Nigeria. Using the RE results, the coefficients are 0.7418(*GROMAT*) and 1.6947(*DECL*), suggesting that the sampled publicly quoted non-financial firms corporate life cycle will lead to approximately 74% and 169% changes in net profit margin (*NPM*). Besides, all

the corporate life cycle stages (*GROMAT* and *DECL*) and financial performance measure of *NPM* were significant for both FE (F, 2, 399=53.19; F-Prob. = 0.0000 < 0.05) and RE (Wald Ch2(2)= 108.93; Prob.Ch2 = 0.0000 < 0.05) at 5 percent significance level and the result is similar to the panel least square (PLS) result.

Table 10. Fixed and Random Effects Panel Regression for Corporate Life Cycle (*GROMAT* and *DECL*) and Financial Performance (Earnings per Share) in Nigeria

<i>Dependent Variable: Earnings per Share (EPS)</i>				
<i>Estimator(s)</i>	<i>Fixed Effect (FE)</i>		<i>Random Effect (RE)</i>	
<i>Variable(s)</i>	<i>Coefficient</i>	<i>Probability</i>	<i>Coefficient</i>	<i>Probability</i>
GROMAT	-0.0548 (-0.23)	0.815	-0.0573 (-0.25)	0.805
DECL	-0.1436 (-0.75)	0.456	-0.1437 (-0.76)	0.450
_cons.	2.3521 (1.38)	0.168	2.3670 (1.40)	0.160
F-value	(2,399)=1.22			
F-Probability	0.2972			
R-Squared (within)	0.0061		0.0061	
R-Squared (between)	0.1032		0.1017	
R-Squared (overall)	0.0058		0.0058	
Wald Ch2(6)			2.39	
Prob. Ch2			0.3021	
Hausman Test	Chi2(2) = 0.05		Prob>Chi2= 0.9756	

Source: Researcher's Computation via STATA 13.0; * significant at 0.05% level; Items in parentheses are t-values for FE; Z-scores are in parentheses for RE

Furthermore, the t-test results for *GROMAT* ($t = 1.90$) and *DECL* ($t = 5.30$) showed that the individual corporate life cycle are statistically significant in explaining the influence on the dependent variable (*NPM*) except *GROMAT* that is statistically insignificant. Nevertheless, the overall R^2 is 0.2107 for RE; impliedly, all the corporate life cycle variables jointly explained about 21.07% variation in *NPM*. In addition, result of Hausman test ($\text{Prob} > \text{Chi}^2 = 0.9632 > 0.05$) suggests that RE is more efficient than FE thus, RE showed that the subjects from which measurements were drawn are random and that the differences between firms in Nigeria are therefore not of interest, thus the subjects and their variances are identical.

Decision Wald Ch2 of RE is = 108.93 ($p\text{-value} = 0.0000 < 0.05$) and is significant, providing evidence to reject the null hypothesis and an acceptance of the alternative hypothesis. This result supports the proposition that there is significant relationship between corporate life cycle and the profit margin of listed nonfinancial firms in Nigeria.

Table 10 showed the fixed and random effects panel regression for the corporate life cycle and earnings per share (*EPS*) of the publicly quoted non-financial firms in Nigeria. Using the RE results, the coefficients are -0.0573 (*GROMAT*) and -0.1437 (*DECL*), suggesting that the sampled publicly quoted non-financial firms corporate life cycle will lead to approximately -0.57% and -1.33% decrease in earnings per share (*EPS*). Besides, all the corporate life cycle stages (*GROMAT* and *DECL*) and financial performance measure of *NPM* were insignificant for both FE ($F, 2, 399 = 1.22$; $F\text{-Prob.} = 0.2972 < 0.05$) and RE (Wald $\text{Ch}^2(2) = 2.39$; $\text{Prob.Ch}^2 = 0.3021 < 0.05$) at 5 percent significance level and the result is similar to the panel least square (PLS) result.

Furthermore, the t-test results for *GROMAT* ($t = -0.25$) and *DECL* ($t = -0.76$) showed that the individual corporate life cycle are statistically insignificant in explaining the influence on the dependent variable (*EPS*). Nevertheless, the overall R^2 is 0.0058 for RE; impliedly, all the corporate life cycle variables jointly explained about 0.58% variation in *EPS*. In addition, result of Hausman test ($\text{Prob} > \text{Chi}^2 = 0.9756 > 0.05$) suggests that RE is more efficient than FE thus, RE showed that the subjects from which measurements were drawn are random and that the differences between firms in Nigeria are therefore not of interest, thus the subjects and their variances are identical.

Decision Wald Ch2 of RE is = 2.39 ($p\text{-value} = 0.3021 > 0.05$) and is insignificant, providing evidence to reject the alternative hypothesis and an acceptance of the null hypothesis. This result supports the proposition that corporate life cycle does not have significant effect earnings per share (*EPS*) of listed nonfinancial firms in Nigeria.

5. DISCUSSIONS

The structural analysis and design has been done for airbus A-380 hangar as pre-engineered steel framed building by considering the maximum dimensions as 120M x 115M x 26m eave height and 31M clear height as from floor finish level to the top of the frame. For designing the steel frame pre-engineered building hangar staad-pro software has been used. In this design 3d analysis has been done and in the above all the structural details and drawings have been mentioned. The following results have been obtained from this design.

Practically, enhancing financial performance has been an imperative issue for management and the board of directors of firms in both developed and developing country like Nigeria, given the role corporate life cycle plays in either increasing or decreasing the financial performance. In order for publicly quoted firms to improve their financial performance, there must be efficient strategies put in place when firms are either experiencing a growth or decline in their corporate life cycle (Habib & Hasan, 2018; Zhao & Xiao, 2018). In this study, the role corporate life cycle (growth and decline stages) play in improving the financial performance of publicly quoted non-financial firms was investigated from 2012-2021. In specific, five financial performance variables namely return on assets (*ROA*), return on equity (*ROE*), return on capital employed (*ROCE*), net profit margin (*NPM*), and earnings per share (*EPS*) and two stages in the corporate life cycle of firms (growth and decline stages) were assessed. Consequently, this section dealt with the discussion of findings; the discussion was tailored towards the validated research hypotheses of the study as follows:

Practically, *ROE* (also known as return on common equity) is a profitability ratio which gives a portion of the overall profits of a firm to existing shareholders and hence entice investors to purchase more shares of the study. Shareholders have a residual right on earnings and as such companies' profit will first be utilized to pay any debt interest, followed by preference shares, and last (if any) common shareholders. In his research by Nadyayani and Suarjaya (2021), it was shown that *ROE* positively significantly influences profit growth. This is so because the company's nature and pattern of investments are highly exact, allowing all assets to be employed properly and earnings to be maximized. The revenue generated by debt can be used to pay the cost of capital in addition to the revenue provided by debt.

Prior studies had revealed that corporate life cycle has the tendency to influence the *ROE* of firms; however, whether corporate life cycle (growth and decline stages) influence *ROE* of publicly quoted non-financial firms has received less attention in the management literature in Nigeria. Given this lacuna in the management literature, we investigated the effect growth and decline stages have on *ROE* of the publicly quoted non-financial firms in Nigeria. The findings indicated an insignificant positive effect of corporate life cycle on *ROE* of the publicly

quoted non-financial firms in Nigeria ($FE = 2.35$; $p\text{-value} = 0.0968 > 0.05$). This finding disagrees with the empirical results of Arikan and Stulz (2016) who found a positive significant effect of corporate life cycle on ROE. On the other hand, the study did not agree with studies literature on the relationship between corporate life cycle and ROA of firms.

Realistically, profit growth is one of thing that is very vital in many ways; for the profit, growth and sustainability benefits of the firm. To see the financial condition of a firm, we can see it from the net profit generated by the firm (Handayani & Winarningsih, 2020). Net profit margin is a financial metric that measures the profitability of a company by calculating the percentage of profit generated from its total revenue. Thus, it is a key indicator of a company's efficiency in managing its cost and generating profit from its operations. In the views of Handayani and Winarningsih (2020), a higher net profit margin indicates that a company is more efficient in converting its revenue into profit. More so, net profit margin can vary significantly across industries, as different sectors have different cost structures band profit expectations. A higher margin profit ratio is advantageous in the face of falling sales, cost of production or declining demands for the product or services.

Prior studies had revealed that corporate life cycle has the tendency to influence the NPM of firms; however, whether corporate life cycle (growth and decline stages) influence NPM of publicly quoted non-financial firms has received less attention in the management literature in Nigeria. Given this lacuna in the management literature, we investigated the effect growth and decline stages have on NPM of the publicly quoted non-financial firms in Nigeria. The findings indicated a significant positive effect of corporate life cycle on NPM of the publicly quoted non-financial firms in Nigeria (Wald $Ch2 = 108.93$; $p\text{-value} = 0.0000 < 0.05$).

Prior studies had revealed that corporate life cycle has the tendency to influence the EPS of firms; however, whether corporate life cycle (growth and decline stages) influence EPS of publicly quoted non-financial firms has received less attention in the management literature in Nigeria. Given this lacuna in the management literature, we investigated the effect growth and decline stages have on EPS of the publicly quoted non-financial firms in Nigeria. The findings indicated an insignificant positive effect of corporate life cycle on EPS of the publicly quoted non-financial firms in Nigeria (Wald $Ch2 = 2.39$; $p\text{-value} = 0.3021 > 0.05$). On the other hand, the study did not agree with existing literature on the relationship between corporate life cycle and EPS of firms.

6. CONCLUSIONS

In management literature, there is a lack of studies that had investigated whether corporate life cycle variables of growth and decline stages affect the financial performance of listed non-financial firms in Nigeria.

Most studies had focused on three stages in the corporate life cycle (introduction, maturity and shake-out stages) and their effects on financial performance, thus creating a lacuna in the management literature in this area of study. Consequently, to fill the lacuna in the management literature in this area of study, the study used a dissimilar analytical framework (such as the fixed and random effect panel data regression) and hybrids of management theories (stakeholder, stewardship and resource-dependency theories) in explaining the relationship between the identified corporate life cycle stages (growth and maturity) and the financial performance of listed non-financial firms in Nigeria.

The study found that while corporate life cycle (growth and maturity stages) have significant effects on return on assets, return on capital employed and the net profit margin, it was found that corporate life cycle (growth and maturity stages) do not significantly affect the return on equity and earnings per share of the publicly quoted non-financial firms in Nigeria. On the basis of the fixed and random effect panel data regression, the study concluded that return on assets, return on capital employed and net profit margin are significantly influenced by the growth and maturity stages in the corporate life cycle while return on equity and earnings per share were not significantly influenced by the growth and maturity stages in the corporate life cycle of publicly quoted non-financial firms in Nigeria.

7. RECOMMENDATIONS

On the basis of the findings of the study, the following recommendations were proffered:

- (1) The study revealed that corporate life cycle significantly affects net profit margin of publicly quoted non-financial firms in Nigeria; thus, firms' management should keep a close watch on net profit margin; this can be realized by the formulation of strategic policies targeted at increasing sales and discouraging operating expenses in order to strengthen net profit margin.
- (2) The study found that corporate life cycle does not significantly affect return on equity of the publicly quoted non-financial firms in Nigeria; thus, management of firms are encouraged to adopt the 'perking's order' of financing their operations. The perking's order of financing would be that publicly quoted non-financial firms should use more of debts in growth stage and equity-financing instruments in the decline stage in the corporate life cycle.
- (5) The study revealed that corporate life cycle does not have significant effect earnings per share of the publicly quoted non-financial firms in Nigeria; hence there is the need to discourage the issuance of ordinary shares during growth stage and encourage the issuance of preference shares during growth stage in the corporate life

cycle. This as a matter of fact would help management of publicly quoted non-financial firms curtail excessive or abnormal dividends paid out to shareholders, hence improving earnings per share.

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Williams Okpebenyo

Delta State Polytechnic,
Nigeria.

williamokpebenyo01@gmail.com

ORCID: 0009-0005-3360-9319

Danlami Joseph Aduku⁴

Prince Abubakar Audu University,
Nigeria.

1212ozaydlamini@gmail.com

ORCID: 0009-0005-5621-8943

Patience Johnson Itabita

Delta State Polytechnic,
Nigeria.

itabitajohnson@gmail.com

ORCID: 0009-0009-0480-7366

Ademu Yunusa

Prince Abubakar Audu University,
Nigeria.

ademu881@gmail.com

ORCID: 0009-0003-3112-1112
