

## Chief Executive Officer (CEO) Attributes and Market Value of Listed Industrial Goods Firms in Nigeria

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### ABSTRACT

Despite the global recognition of CEO attributes such as educational qualification, gender, ownership, tenure and origin in shaping firm outcomes, empirical evidence from Nigeria remains inconclusive. This study addressed this gap by investigating the effect of CEO attributes on the market value of listed industrial good firms in Nigeria. The study employed an ex-post facto research design, using secondary data sourced from the Nigerian Exchange Group between 2015-2024. The population was 12 industrial good firms out of which 11 were purposively selected as the sample size of this study. Data were analyzed using descriptive statistics and panel regression techniques. The findings revealed that CEO educational qualification exhibits a significant positive effect, highlighting the role of expertise and knowledge in effective leadership. CEO gender has nonsignificant effect, suggesting that gender at the CEO level has not yet translated into improved performance. CEO origin has a nonsignificant on market capitalization of listed industrial goods firms in Nigeria. The study concluded that CEO attributes are significant determinants of firm market values. It recommended amongst others that boards prioritize competence and qualifications in CEO appointments, encourage CEO gender diversity and also promote enabling environments for internal CEO appointments, to strengthen governance and investors' confidence.

**Keywords:** *CEO attributes, Market value, Market capitalization, Gender, Origin, educational qualification*

### 1. INTRODUCTION

In the fields of accounting, finance and economics, corporate governance and the function of top executives have long been the focus of intense interest and examination. A firm's performance and, eventually, it's worth are greatly impacted by the efficacy of its executives, especially the Chief Executive Officers (CEO) (Odubuasi et al., 2022). Numerous studies have examined CEO characteristics, which include a variety of qualities like tenure, gender, and education and experience, in an effort to determine their impact on business performance (Palia et al., 2013). The CEOs are the management leaders appointed by the Board of Directors to oversee the company's operations and attain its strategic goals for sustainable corporate performance (Akpan, 2024). Consequently, the CEO serves as the operational leader overseeing the daily activities of the organization and is accountable for all business decisions. The CEOs are the primary factors influencing the success or failure of a specific organization. In the current economy, marked by

intensified market competition, technological advancements, inflation and interest rate volatility, variable exchange rates, alterations in tax legislation, and environmental concerns, the role of senior management, particularly CEOs, in influencing the organization as a whole is essential (Imasuen et al., 2022). Although this fundamental job pertains to all employees within a company, the CEO bears the ultimate responsibility for optimizing the firm's value.

The performance of firms serves as a metric for assessing the economic results of business enterprises, ensuring returns for all stakeholders and promoting sustainability. Akpan et al. (2022) contends that the fundamental objective of initiating a company enterprise, which is profit generation, must consistently be achieved to ensure the viability of accounting continuity. Whenever this objective is not achieved, the CEO is perceived as ineffective and unproductive. And so, it is pertinent to examine the effect of CEO attributes on the market value of listed industrial goods firms to ascertain if these attributes can make or mar the value of a firm. The extent to which these qualities influence firms' value has not been extensively discussed in Nigeria literature except in the works of (Yahaya, 2025; Yusuf & Yahaya, 2023) which investigated the linkage between CEOs' attributes and firms' financial performance. This study seeks to fill this gap.

### **Statement of the Problem**

The primary objective of every business organization is to maximize shareholders' wealth by increasing its market value. In an increasingly competitive and dynamic business environment, the role of the Chief Executive Officer (CEO) has become critical in shaping strategic decisions that influence organizational performance and market valuation. As the highest-ranking executive, the CEO determines the firm's strategic direction, investment decisions, resource allocation, innovation, and stakeholder relationships, all of which ultimately affect investors' confidence and the firm's market capitalization. Despite the strategic importance of CEOs, many listed firms in Nigeria have continued to experience fluctuations in their market capitalization. While some firms have recorded substantial improvements in market value, others have experienced persistent declines despite operating under similar macroeconomic and regulatory conditions. These variations suggest that firm-specific leadership characteristics may play an important role in influencing investors' valuation of companies. In particular, CEO education, CEO origin, and CEO gender have emerged as important demographic characteristics that may shape managerial competence, strategic decision-making, innovation capability, corporate governance quality, and ultimately market value.

Although numerous empirical studies have investigated the relationship between CEO attributes and firm performance, the existing evidence remains inconclusive. Some studies reported that highly educated CEOs possess superior knowledge and strategic capabilities that enhance firm value, whereas others found no significant relationship between CEO education and corporate performance. Similarly, while some scholars argued that internally appointed CEOs improve firm value through organizational continuity and firm-specific knowledge, others found that externally recruited CEOs contribute more effectively through strategic renewal and innovation. Likewise, the literature on CEO gender presents conflicting evidence, with some studies indicating that female CEOs improve firm value through enhanced governance and stakeholder orientation, while others reported insignificant or negative effects. These inconsistent findings have made it difficult to establish a clear understanding of how CEO attributes influence market value.

Furthermore, most existing studies have been conducted in developed and emerging economies outside Nigeria, where corporate governance systems, institutional environments, investor behaviour, and regulatory frameworks differ considerably from those prevailing in Nigeria. Consequently, the applicability of these findings to Nigerian firms remains questionable. Within Nigeria, the few available studies have largely focused on accounting-based measures of financial performance such as return on assets, return on equity, earnings per share, and profitability, while relatively little attention has been devoted to market-based measures such as market capitalization, which more directly reflects shareholders' wealth and investors'

expectations.

In addition, previous Nigerian studies have predominantly concentrated on sectors such as banking, insurance, and manufacturing generally, with limited empirical evidence specifically addressing listed industrial goods firms. The industrial goods sector occupies a strategic position in Nigeria's economy because of its contribution to infrastructure development, manufacturing activities, employment generation, and economic growth (Uford, 2017; Asuquo et al, 2024). The sector is characterized by substantial capital investment, long-term production cycles, and heightened exposure to economic uncertainties, making effective executive leadership particularly important (Akpan et al 2024). Nevertheless, empirical evidence on whether CEO education, CEO origin, and CEO gender influence the market capitalization of firms within this sector remains scarce (Essien et al, 2023).

Another important limitation of previous studies is that many have examined CEO characteristics in isolation or alongside broader corporate governance variables such as board size, board independence, ownership structure, CEO duality, and audit committee characteristics. Consequently, limited empirical attention has been given to the combined influence of CEO education, CEO origin, and CEO gender on market capitalization within the Nigerian industrial goods sector. This creates a significant knowledge gap regarding the specific CEO attributes that are most relevant to enhancing market value.

It is against these empirical, contextual, sectoral, and methodological gaps that this study is undertaken. Specifically, the study seeks to examine the effect of CEO education, CEO origin, and CEO gender on the market capitalization of listed industrial goods firms in Nigeria. The findings are expected to provide empirical evidence that will enrich the upper echelons and corporate governance literature while offering practical insights for boards of directors, shareholders, investors, regulators, and policymakers in making executive appointment decisions that enhance market value and shareholders' wealth.

The empirical studies reviewed present mixed findings. Yahaya (2025) reported that CEO education has a positive and statistically significant relationship with firm performance; similarly, Akpan (2024) found that CEO education significantly influences shareholders' value added among listed healthcare firms in Nigeria. Conversely, Akwarandu (2025) established that CEO academic background has no significant effect on the firm value of financially distressed listed non-financial firms in Nigeria. These contradictory findings indicate that the effect of CEO education on firm value remains inconclusive. The empirical evidence on CEO gender is also limited. Anyang and Uwah (2024) found that CEO attributes collectively exert a significant positive effect on the market capitalization of listed deposit money banks in Nigeria. However, the study did not isolate the individual effect of CEO gender on market value. although Akpan et al. (2022) demonstrated the importance of gender diversity in corporate governance by establishing that audit committee gender diversity significantly moderates the relationship between corporate social responsibility disclosure and earnings management, the study focused on audit committee characteristics rather than CEO gender. Consequently, empirical evidence on the specific effect of CEO gender on market capitalization remains limited. Also, other related studies were conducted outside Nigeria (Alrobai & Albaz, 2025; Chikunda et al. 2025) under different institutional, economic, and corporate governance environments. Consequently, their findings may not be directly applicable to Nigerian listed firms. Thus, it was as a result of the identified gaps that this study was conducted to examine the effect of CEO attributes on market value of listed industrial goods firms in Nigeria.

## **2. LITERATURE REVIEW AND THEORETICAL FRAMEWORK**

### **CEO attributes**

Basically, CEO attributes encompass things ranging from the personal qualities to professional skills, and behavioral traits that shape the leadership style and ultimately influence the performance of the firms they serve (Cheng & Dai, 2025). According to Cheng and Dai (2025), these attributes are absolutely never limited to technical knowledge or managerial experience,

but also extend to vision, resilience, integrity, and the ability to engage effectively with both internal and external stakeholders. In most firms, it is a known practice that CEOs are appointed by the board of directors and this shows the importance placed on their suitability for wheeling the company's strategy and safeguarding the interests of stakeholders and shareholders (Aggarwal & Varma, 2024). The expectation here, is that a CEO should bring a mix of competence and foresight to the firm. It is a known fact that CEOs hold the central position in corporate life because their actions shape not only the strategic direction of the firm but also its culture and long-term survival (Akpan, 2016). As members of the top management team, Umair and Dilanchiev (2022) mentioned that they play very major role in exploring opportunities, designing structures, as well as making strategies that align with dynamic business ambience. And of course, all these as well as the quality of a CEO's leadership has long been considered a determinant of organizational success (Barnard, 2017). Be that as it may, the influence of CEO attributes is not always positive. The corporate world has witnessed several high-profile cases of fraud and financial scandals such as Enron, WorldCom, Tesco Plc, Toshiba, and Satyam where CEOs were directly implicated in unethical practices, particularly earnings manipulation (Troy et al., 2011). These cases pointed to the darker side of executive influence: when leadership attributes such as ambition and risk-taking are misdirected, they can jeopardize not only firm performance but also the integrity of the entity in the eye of the entire markets. This reality demonstrates that CEO attributes must be understood not only in terms of their potential to create value but also in relation to the risks they pose if unchecked (Troy et al., 2011). Effective board of directors have been suggested to be the balance in charge of empowering of CEOs with systems that promote accountability and ensuring that leadership attributes are channeled toward ethical governance initially.

### **Market value**

Market value represents the worth of a firm as determined by the financial markets, and it reflects investors' collective perception of a company's prospects (Fasua, 2021; Borad, 2022; Charles & Uford, 2023). Unlike book value, which is anchored in accounting records and calculated as the difference between assets and liabilities, market value is forward-looking, based on how much investors are willing to pay for a company's shares (Ahmed, 2019). In practical terms, it is often equated with market capitalization, obtained by multiplying the firm's outstanding shares by the current market price per share (Saka, 2021). Market value, however, can extend beyond equity to consider a company's debt obligations and cash reserves, since these affect what a potential buyer would actually pay to acquire the firm (Borad, 2022). In essence, it is the price tag the market attaches to a business at any given point in time (ICAN, 2020). A key feature of market value is its fluidity. It does not remain static like book value but fluctuates in response to a wide range of factors; economic cycles, investor sentiment, corporate governance practices, profitability, debt levels, and broader market conditions (Janicka et al., 2020). During periods of economic expansion, market values tend to rise, driven by optimism and bullish trading, while recessions and bear markets often lead to steep declines (Rowland et al., 2019; Etim & Uford, 2019). Beyond these cycles, valuation metrics such as price-to-earnings, price-to-sales, or enterprise value-to-EBITDA also guide how investors assign worth to firms (Truong et al., 2022; Ahmed, 2019). A company trading at higher multiples signals greater investor confidence, whereas low multiples may suggest skepticism about growth or sustainability (Fasua, 2021). It is important to note that a firm's market value may diverge sharply from its book value or shareholders' equity (Omura, 2005). A stock trading significantly below its book value is often regarded as undervalued, signaling a potential bargain for investors if the fundamentals remain strong (Ahmad et al., 2022). Conversely, a premium market value does not automatically mean overvaluation; much depends on the industry, the company's competitive position, and how its valuation compares with peers (Omura, 2005). Market value in this study was measured using market capitalization.

### **CEO education and market capitalization**

The educational qualifications of Chief Executive Officers (CEOs) represent one of the most important foundations of their leadership journey. Education provides the knowledge base,

intellectual exposure, and analytical capacity that are essential for navigating the complex realities of organizational management. Signal of competence and credibility; higher levels of education, particularly prestigious degrees from recognized organizations, can serve as a statement of competence and expertise. According to Akpan et al. (2024) noted that investors and stakeholders consider CEOs with advanced education as having the requisite knowledge and abilities to properly run the company. This sense of expertise can boost investor confidence, which can boost the company's market value (Certo et al., 2016). Intellectual capital and strategic decision-making: CEO education can help build intellectual capital and provide a broader view on corporate initiatives. CEOs with postgraduate degrees may have analytical and critical thinking ability, research talents, and a broader awareness of industry trends. These characteristics can help with informed decision-making, strategic planning, and capitalizing on market possibilities, potentially increasing the company's market value (Bassett & Kosnik, 2003). The relationship between CEO education and market value is mixed as per the literature. Ali et al. (2022), Ghardallou et al. (2020), Altuwaijri and Kalyanaraman (2020) and Hendrawaty et al. (2020) revealed positive relationship between the two. However, negative relationship has been proven in the study of Gounopoulos et al. (2021). Thus, this study hypothesized that:

*Ho1: CEO education has no significant effect on market capitalization of listed industrial goods firms in Nigeria*

### **CEO origin and market capitalization**

Chief Executive Officer (CEO) origin refers to whether the chief executive is appointed from within the organization (internal CEO) or recruited from outside the organization (external CEO). CEO origin has increasingly attracted scholarly attention in corporate governance literature because it influences strategic decision-making, organizational continuity, innovation, and ultimately firm value. The appointment of either an internal or external CEO presents different strategic advantages and challenges that may significantly affect investors' perceptions and the market valuation of firms. An internal CEO is an executive who has risen through the ranks of the organization and possesses substantial knowledge of the firm's culture, operations, employees, customers, and strategic direction (Akpan, 2024). Internal CEOs are generally viewed as custodians of organizational knowledge and are more likely to ensure strategic continuity. Conversely, an external CEO is recruited from outside the organization and is expected to introduce new managerial competencies, innovative ideas, and transformational leadership capable of improving organizational performance, particularly where existing management practices have become ineffective (Oktapiani et al. (2023). Market capitalization, which represents the total market value of a company's outstanding shares, is widely recognized as one of the most important indicators of firm value. It reflects investors' assessment of a firm's future earning potential, growth prospects, governance quality, and risk profile (Thomas & Christopher, 2025).

Since CEOs play a central role in determining strategic direction, resource allocation, investment decisions, financing policies, and corporate reputation, their background and origin may significantly influence investors' confidence and consequently market capitalization (Hitt et al., 2019). The relationship between CEO origin and market capitalization is primarily explained through differences in managerial knowledge, strategic orientation, and investor expectations. Internal CEOs possess firm-specific human capital accumulated through years of organizational experience. Their deep understanding of organizational routines reduces information asymmetry, minimizes transition costs, and facilitates faster implementation of strategic decisions. Such familiarity often reassures investors regarding the stability of future earnings, thereby supporting market valuation (Akpan et al., 2024).

On the other hand, external executives often introduce fresh perspectives, superior industry knowledge, advanced managerial capabilities, and innovative business models that can improve organizational competitiveness. Investors may interpret the appointment of an external CEO as a signal that the board is committed to improving operational efficiency and creating shareholder

value, especially following periods of poor corporate performance (Zhang & Rajagopalan, 2010).

Review of related literature shows the studies of Choi et al. (2022), Haque et al. (2022), Vo et al. (2020) and Rhim et al. (2006) who found positive relationship between insider CEOs and firm performance. Hamza et al. (2020), Kim and Jang (2021) and Zheng (2010) found positive relationship for outside CEOs and growth/performance. However, Oktapiani et al. (2023) found no relationship, thus this study hypothesized that:

*H<sub>02</sub>: CEO origin has no significant effect on market capitalization of listed industrial goods firms in Nigeria.*

### **CEO gender and market capitalization**

Several studies have explored the relationship between CEO gender and firm performance or market value, yielding mixed results. Khan and Vieito (2013) found that companies led by female CEOs had lower risk levels and distinct performance outcomes compared to those led by male CEOs, suggesting that CEO gender influences both performance and risk. Similarly, Davis et al. (2010) reported that female CEOs, due to their stronger market orientation, positively influenced market growth and financial performance. Dezso and Ross (2012) also found that firms managed by female CEOs delivered significantly higher equity returns, attracting more investor interest. Bear et al. (2010) linked gender, as part of governance, to investment decisions and firm outcomes. However, not all findings align; Alm and Winberg (2016) found no significant relationship between CEO gender and firm performance measures like ROA and Tobin's Q, indicating that the evidence remains inconclusive and context-dependent. Akpanowo and Akpan (2024) found out that female CEO has an insignificant effect on earnings yield of consumer goods companies in Nigeria. Based on the foregoing, this study hypothesized that;

*H<sub>03</sub>: CEO gender has no significant effect on market capitalization of listed industrial goods firms in Nigeria*

### **Theoretical framework**

This study was anchored on upper echelons theory, propounded by Hambrick and Mason (1984), holds that organizational outcomes are a reflection of the values, experiences, and cognitive orientations of top executives (Perkins & Shortland, 2024). In other words, the strategic choices and performance of a firm are shaped by the personal attributes of its leaders, particularly the Chief Executive Officer (CEO) (Saiyed et al., 2023). Attributes such as educational attainment, professional experience, cultural background, and gender influence how CEOs perceive problems and opportunities, evaluate risks, and allocate resources. This perspective emphasizes that firms are not neutral entities; rather, they mirror the characteristics of their decision-makers, meaning that CEO differences inevitably translate into variations in firm performance and market outcomes (Carpenter et al., 2004). In the context of this study, the upper echelons theory provides a compelling explanation for how CEO attributes influence a firm's market value. For example, the educational background of a CEO may determine their capacity to understand complex market dynamics and implement strategies that enhance firm competitiveness. Similarly, gender and cultural origin may affect leadership style, risk preferences, and the ability to attract diverse stakeholders, thereby shaping investor perceptions and valuation.

### **Empirical framework**

Akwarandu (2025) explored the impact of Chief Executive Officer (CEO) characteristics on company worth, using data from distressed, non-financial corporations publicly traded in Nigeria between 2015 and 2024. Ordinary least squares (OLS) regression was employed to assess the effects of the independent variables on firm value, following preliminary analyses that included descriptive statistics, correlation analysis, and normality testing. Findings revealed that, within the examined timeframe and sector, the CEO's academic background did not have a significant

impact on the financial worth of Nigerian publicly traded non-financial firms experiencing financial strain.

Alrobai and Albaz (2025) examined the impact of CEO traits and firm attributes on corporate environmental, social, and governance (ESG) performance within the Egyptian context as an emerging market. The findings showed that CEO power and confidence significantly affected ESG performance and shaped firm strategy, while CEO tenure had no significant influence. Additionally, the study found mixed evidence concerning firm financial attributes, with firm size and operating cash flow showing a positive impact on ESG performance, whereas firm listing tenure had a negative impact. Chikunda et al. (2025) investigated the association between CEO tenure and firm performance using unbalanced panel data from a unique hand-collected dataset of listed firms in New Zealand between 2000 and 2020, within a principles-based corporate governance regime. Employing ordinary least squares, two-stage least squares, and propensity score matching tests. The findings documented a significant positive impact of CEO tenure on firm performance, highlighting the benefits of longer tenure.

Yahaya (2025) investigated the relationship between Chief Executive Officer (CEO) education and firm performance among publicly listed companies in Nigeria. While interest in executive characteristics had been growing, the researchers noted that empirical evidence on the influence of CEO educational attainment on firm performance in emerging economies like Nigeria remained limited. The findings revealed a positive and statistically significant relationship between CEO education level and firm performance, indicating that higher education particularly in finance, economics, or management enhanced strategic decision-making and outcomes.

However, the study also observed that the quality of education and contextual challenges in Nigeria's business environment could moderate this relationship.

Akpan (2024) examined the effect of CEO education, CEO shareholding education, and CEO tenure on shareholders' value of listed health care firms in Nigeria from shareholders' 2013 to 2022. The research design adopted for this study was Ex Post Facto, secondary data were used and 12 health care firms constituted the population of the study. The data analysis technique employed was ordinary least square regression technique and STATA 16 was the statistical package used. The result of the analysis showed that CEO education, CEO shareholding and CEO tenure have significant effect on shareholders' value added of listed health care firms in Nigeria.

Anyang and Uwah (2024) examined the relationship between CEO characteristics and firm value using samples from deposit money banks listed on the Nigerian Exchange Group between 2013 and 2022. CEO attributes, measured by educational background, tenure in office, compensation, and gender diversity in line with upper-echelon theory, served as the independent variables, while firm value, proxied by market capitalization, was the dependent variable. Employing an ex post facto research design, the study covered all 13 deposit money banks listed as of December 31, 2022, and tested four hypotheses at a 0.05% significance level using the ordinary regression technique with STATA 16. The results revealed that CEO attributes had a significant positive effect on the firm value of listed deposit money banks in Nigeria.

Akpan et al. (2022) evaluated the moderating effect of audit committee gender diversity on the relationship between social responsibility disclosure and earnings management of selected consumer goods companies in Nigeria. Earnings management was the dependent variable and the independent variable employed in this study was corporate social responsibility measured as social donation disclosure, employee relation disclosure, while audit committee gender diversity was used as the moderating variable. Ex post facto research design was adopted, secondary data were used and three hypotheses were tested. The results showed that audit committee gender diversity significantly moderate the relationship between social donation disclosure and earnings management. Also, the study found that audit committee gender diversity significantly

moderates the relationship between customer complaints disclosure and earnings management. Finally, the result showed that audit committee gender diversity significantly moderates the relationship between employee disclosure and earnings management.

### 3. METHODOLOGY

Ex-post facto research design was used in this study. This study used an *ex-post facto* research strategy because the data for the analysis has already transpired, leaving little or no room for manipulation from the researcher. Furthermore, this study, the population consisted of all industrial goods companies listed on the floor of the Nigerian Exchange Group from 2016 to 2025. As of December 31<sup>st</sup>, 2025, the total number of industrial goods companies was 12. The sample size of this study was 11 purposively selected industrial goods firms. Data used in this study were secondary and were analysed using panel least square regression analysis with STATA 17 being the statistical package used.

#### Model specification

The model for this study was adapted from the work of Saidu (2019) and was modified to suit this study. As presented below;

Market value = f(CEO attributes)

$$MCAP_{it} = \partial_0 + \partial_1 CEOEDU_{it} + \partial_2 CEOORG_{it} + \partial_3 CEOGEN_{it} + \epsilon_{it}$$

#### Where:

|                               |   |                                                                      |
|-------------------------------|---|----------------------------------------------------------------------|
| MCAP                          | = | Market capitalization                                                |
| CEOEDU                        | = | CEO educational qualification                                        |
| CEOORG                        | = | CEO origin                                                           |
| CEOGEN                        | = | CEO gender                                                           |
| $\partial_0$                  | = | Model intercept                                                      |
| $\partial_1 \dots \partial_3$ | = | Coefficient to be estimated, where $\partial_1 \dots \partial_3 > 0$ |
| It                            | = | Cross section of listed companies with time variant                  |
| $\epsilon_{it}$               | = | Stochastic error term                                                |

### 4. ANALYSIS AND DISCUSSION

**Table 1: Descriptive statistics**

| Variable | Obs | Mean    | Std. Dev. | Min  | Max      |
|----------|-----|---------|-----------|------|----------|
| MCAP     | 110 | 353.203 | 1040.483  | .014 | 4447.572 |
| CEOEDU   | 110 | .636    | .483      | 0    | 1        |
| CEOORG   | 110 | .536    | .501      | 0    | 1        |
| CEOGEN   | 110 | .882    | .324      | 0    | 1        |
| CEOWN    | 110 | 5.434   | 14.705    | 0    | 50.46    |
| CEOTEN   | 110 | 4.864   | 3.181     | 1    | 13       |

**Source: Author's computation (2026)**

From the descriptive statistics, looking at market capitalization (MCAP), minimum market capitalization was ₦14,000,000 and maximum market capitalization was ₦4,447,572,327,000. On average, the market capitalization level in industrial goods companies was ₦445,976,738,670 with the standard deviation which shows the degree of dispersion of ₦1,153,470,374,940. All these show that the industrial goods sector in Nigeria is well capitalized by market. The standard deviation also shows a high level of variation of the data points. CEO education (CEOEDU) showed minimum and maximum of 0 and 1 respectively due to the fact that dummy variables were used with 0 showing where the CEO has no postgraduate degree and 1 showing where the CEO owns one or more of those degrees. The average was 0.636 with standard deviation of 0.483 showing a low level of variability in the data and that almost half of the CEOs in the industrial goods sector are educated. CEO origin (CEOORG) used dummy variables as well and showed mean and standard deviation of 0.536 and 0.501 respectively which show a low degree of dispersion and that the sector is characterized by either insider or outsider CEOs but the

distribution of proportion was almost fair. CEO gender (CEOGEN) showed minimum and maximum of 0 and 1 respectively too. The mean and standard deviation of 0.882 and 0.324 respectively, indicate low variation in the data.

**Table 2 Spearman's rank correlation coefficients**

| Variables  | (1)    | (2)    | (3)    | (4)   |
|------------|--------|--------|--------|-------|
| (1) MCAP   | 1.000  |        |        |       |
| (2) CEOEDU | 0.043  | 1.000  |        |       |
| (3) CEOORG | -0.085 | -0.210 | 1.000  |       |
| (4) CEOGEN | 0.053  | 0.075  | -0.058 | 1.000 |

**Source: Author's computation (2026)**

The spearman's rank correlation coefficients result is presented in Table 2, the result showed that CEO academic qualification (CEOEDU) had a negative correlation (0.043) with market capitalization of listed industrial goods firms in Nigeria. CEO origin (CEOORG) also showed a negative correlation (-0.085) with market capitalization, implying that origin has no relationship with market capitalization of the studied firms. Similarly, CEO gender (CEOGEN) had a negative positive correlation (0.053) with market capitalization of listed industrial goods firms in Nigeria. No relationship could be said for that case. These results have shown or proven the absence of multicollinearity since all the associations ranged from weak to moderate.

### Regression result

The table below presents output for pooled OLS, random effect GLS model and the robust least square regression.

**Table 3 Regression Results**

|                | (1)<br>POOLED OLS   | (2)<br>RANDOM<br>EFFECTS | (3)<br>FIXED<br>EFFECTS | (4)<br>ROBUST<br>RANDOM<br>EFFECTS |
|----------------|---------------------|--------------------------|-------------------------|------------------------------------|
|                | MCAP                | MCAP                     | MCAP                    | MCAP                               |
| CEOEDU         | 308.131<br>(0.171)  | -134.786*<br>(0.063)     | -137.118*<br>(0.068)    | -134.786<br>(0.183)                |
| CEOORG         | -10.279<br>(0.963)  | -96.435<br>(0.112)       | -97.124<br>(0.121)      | -96.435***<br>(0.005)              |
| CEOGEN         | 321.307<br>(0.308)  | -43.481<br>(0.550)       | -44.900<br>(0.547)      | -43.481<br>(0.271)                 |
| Constant       | -292.940<br>(0.402) | 452.597<br>(0.287)       | 454.700***<br>(0.000)   | 452.597<br>(0.241)                 |
| r <sup>2</sup> | 0.088               | 0.004                    | 0.082                   | 0.304                              |
| N              | 110.000             | 110.000                  | 110.000                 | 110.000                            |
| F/W            | 2.014               | 8.794                    | 1.688                   | 18.292                             |
| P              | 0.083               | 0.118                    | 0.145                   | 0.041                              |
| Hettest        | 42.34(0.000)        |                          |                         |                                    |
| Vif            | 1.20                |                          |                         |                                    |
| Lagrange       |                     | 421.81(0.000)            |                         |                                    |
| Hausman        |                     | 0.09(0.999)              |                         |                                    |

p-values in parentheses

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Source: Author's computation (2026)**

The result obtained from the multiple regression analyses is presented in Table 3. The robust regression model presented above shows a Wald-statistic of 18.292 with p-value of 0.041 indicating that overall, the robust regression model is fit for statistical inference and also that overall, the relationship between CEO attributes and market value is statistically significant. The model gave an R-squared value of 0.304 which means that 30% of the variations in market capitalization can be explained by the proxies of CEO attributes in the model. However, the unexplained part (70%) is captured in the error term.

### Discussion of findings

Results from the robust regression model showed that CEO academic qualification with coefficient and p-value of -134.786 and 0.183 respectively, has a statistically non-significant negative effect on market capitalization of listed industrial goods firms in Nigeria. This implies that there is no evidence as to the effect CEO educational qualification on market value of listed industrial goods firms in Nigeria. The negative coefficient tried to show a possible negative effect it would have had but didn't because of the p-value's insignificance. This finding tells that the educational level of a CEO is not necessarily a factor that influences the market price or capitalization of a firm. The finding is contrary to that of Herrmann and Datta (2006) which found that CEO education was strongly aligned with firm performance in the U.S. manufacturing sector. It is also contrary to that of Kokeno and Muturi (2016) findings which was a positive and significant effect of CEO education on firm outcomes in the Nairobi Securities Exchange. Ali et al. (2021), Ghardallou et al. (2020), Altuwaijri and Kalyanaraman (2020) and Hendrawaty et al. (2020) all revealed positive relationship between CEO education and market value.

The output of robust regression in Table 4.3 also presented -96.435 and 0.005 as coefficient of CEO ORG and p-value respectively. It is evident that the p-value is statistically significant at 5% level. This indicates that CEO origin has a significant negative effect on market capitalization of listed industrial goods firms in Nigeria. This implies a relationship in the inverse direction or in other words, inverse variation. This means that the appointment of insider CEO causes a reduction in market capitalization of listed industrial goods firms in Nigeria. The finding of this study was in line with those of Hamza et al. (2020), Kim and Jang (2021) and Zheng (2010) who all found positive relationship for outside CEOs and growth/performance.

The result from the robust regression model showed that CEO gender has coefficient and p-value of -43.481 and 0.271 respectively. This shows statistically non-significant negative effect on market capitalization of listed industrial goods firms in Nigeria. This implies that there are other factors in the firm that influence market capitalization, but not CEO gender. This means that women in executive positions may be in favour of objectives that prioritize long-term sustainability, ethical conduct, and active stakeholder engagement rather than short-term aggressive gains. The finding of this study is in line with Alm and Winberg (2016) who found no significant relationship between CEO gender and firm performance. The finding is contrary to Davis et al. (2010) who reported that female CEOs, due to their stronger market orientation, positively influenced market growth and financial performance; as well as Dezso and Ross (2012) who also found that firms managed by female CEOs delivered significantly higher equity returns.

### 5. CONCLUSION AND RECOMMENDATIONS

This study investigated the effect of CEO attributes; specifically, CEO educational qualification, origin, tenure, ownership and gender on market value of listed industrial goods companies in Nigeria. The findings showed that while CEO origin significantly influenced market capitalization, while CEO gender and CEO educational qualification did not show signs of significant effects. As such, the study concluded that CEO attributes have significant effect on market value of listed industrial goods firms in Nigeria. The overall effect was negative as negative coefficients made up majority for the significant ones. In line with the study's findings, the study recommended that the management of industrial goods firms should avoid overemphasizing certificates alone when appointing CEOs but instead focus on other qualities such as experiences. Also, these firms should be open to appointing external CEO who can bring fresh perspectives and innovative strategies to the firms.

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