

THE EFFECT OF BOARD CHARACTERISTICS AND LIFE CYCLE ON CORPORATE PERFORMANCE

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Abstract

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This research investigates the effect of board characteristics and corporate life-cycle on the performance of listed firms in Ghana covering the period 2009–2018. The paper adopts the approach propounded by Dickinson (2011) to cater to proxy measures of firms' life cycle stages. Using the pooled estimated generalized least squares (EGLS), the findings reveal that chief executive officer (CEO) tenure has a positive significant effect on performance. The presence of inside directors negatively and significantly influences performance. The results further indicate that at different levels of statistical significance, the various stages of the firm's life cycle have a negative impact on the main dependent variable (ROA). With the alternative firm performance proxy (ROE), the results report that aside from the decline stage which negatively drives performance, the rest of the stages (i.e., introduction, growth, and maturity) have a positive influence on performance. However, only the growth and maturity stages exert a significant effect on performance. As part of the suggestions, the study proposes that firms should reduce the proportion of executive directors and appoint more non-executive directors to the board to boost performance. Also, firms should endeavor to increase investment in research and development at every stage of their production to ensure steady profit growth.

Keywords: Corporate Governance, Board Characteristics, Firm Life Cycle, Corporate Performance, Ghana

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1. INTRODUCTION

Corporate governance is vital in the daily operations of every firm. Its significance is so apparent in view of its role in ensuring that shareholders' welfare is looked after by management. Corporate governance is a process and system by which companies are controlled and directed (Gillan, 2006), and the mechanism used in directing and controlling

the activities of a firm. In other words, corporate governance is a broad subject, which embodies the interconnection regarding the management, the owners of the firm (shareholders), the directors of the board, and other stakeholders. The shareholders are the non-informed category in this interconnection due to their lack of direct power and influence as a result of information asymmetry and their inability to be part of the routine

management of the firm. When this interconnection is properly handled, the organization's performance will be enhanced but, if it turns sour it may result in an agency problem. Corporate governance is a mechanism used to resolve agency problems. The agency issue may occur when the agents (managers) intend to satisfy their interests as against that of the shareholders (Jensen & Meckling, 1976). Effective corporate governance practices are crucial for minimizing the principal-agent problem in the firm.

Corporate governance research has increased in recent years. The incidents of the WorldCom case, Maxwell Saga, the Korea Daewoo saga, and Parmalat are some of the corporate governance issues that served as a wakeup call to the general public and shareholders to rekindle their interests and awareness in corporate management (Kyereboah-Coleman, 2008). These scandals have also contributed to some of the global governance reforms. For instance, the U.S. Congress passed the Sarbanes-Oxley Act in 2002 to rejuvenate people's hope in corporate financial reporting by hammering on the enhancement of corporate governance performances. Other bodies such as the Organisation for Economic Co-operation and Development (OECD) also formulated non-mandatory codes of corporate governance to assist examine and intensify the regulatory framework of corporate governance.

Prior empirical studies on corporate governance policies and practices have been carried out in certain developing economies as well as developed economies. Most of the findings of these researches revealed that good corporate governance resonates with firm performance. Notwithstanding the vast academic studies, the association between corporate governance and firm performance has not been exhaustively investigated in the Ghanaian context given the few attempts (Kyereboah-Coleman & Biekpe, 2006; Ofoeda, 2017; Baldavoo & Nomlala, 2019; Owiredu & Kwakye, 2020; Musah & Adutwumwaa, 2021; Andoh et al., 2023; Sarpong-Danquah et al., 2022). Even so, findings from these studies are inconclusive, therefore requiring further investigations. This paper aims to contribute to the unsettling evidence on the corporate governance-firm performance linkage within the context of Ghana.

Along with corporate governance, we explore the influence of the corporate life cycle on firm performance. The corporate life cycle and performance nexus have also gained research attention. However, this relationship has been largely ignored in the context of Ghana. According to Dickinson (2011), firms are changing entities and the route of development is based on indigenous factors and exogenous factors. The company's tactical choice, financial resources, and managerial ability are some of the key indigenous factors. For the exogenous factors, macroeconomic indicators and the competitive environment are notable. A company's life cycles are stages emanating from the changes in these factors and many of which come from tactical activities and good corporate governance undertaken by the firm. Therefore, comprehending the purpose of the corporate life cycle could aid organizations to make good use of resources to outstrip their peers and boosts performance.

The contribution of this study is as follows: First, the paper adds to the few studies examining the impact of corporate governance on firm performance in Ghana. Second, research on the effect of the corporate life cycle on firm performance is almost absent in the case of Ghana. Hence, we fill this gap in the literature by considering how the life cycle of a firm from its inception to maturity influences firm performance. In addition, the finance and accounting literature use firm age as a popular proxy for a firm's life cycle, and this proxy does provide some indication about firm maturity but it cannot reflect a firm's life cycle in its entirety due to its intrinsic flaws (Faff et al., 2016). This study, therefore, employs cash flow pattern classification by Dickinson (2011) to measure different stages of the corporate life cycle. The power of Dickinson' (2011) methodology is that it creates the firm's life cycle based on variability in operating, investing, and financing activities. The approach may also assist in the altering of cash flow patterns with reference to these activities, to efficiently identify variations in company performance and resource utilization.

The remainder of the paper is structured as follows. Section 2 presents the literature review. The methodology is highlighted in Section 3. Section 4 provides the results and discussion and Section 5 concludes the paper.

2. LITERATURE REVIEW

2.1. Theoretical literature review

This section looks at the theories underpinning this research. It explains the main theories of corporate governance and the corporate life cycle.

2.1.1. Agency theory

This theory was propounded by Jensen and Meckling (1976). The agency theory indicates the relationship between the principal (owners) and agents (managers). The basic principle behind this theory is that executives' interest may not satisfy the interest of shareholders that will maximize their returns at any given time unless stringent measures are put in place to check the operations and behaviour of agents (Jensen & Meckling, 1976). In the lens of corporate governance, the agency theory clearly describes the manager-corporate shareholder relationship and highlights the role of corporate boards in this relationship (Bhagat & Bolton, 2008). The theory argues that the inclusion of more non-executive directors is pertinent to reducing potential conflict of interest issues that may arise in the corporation.

2.1.2. Stewardship theory

The stewardship theory regards managers as caretakers rather than agents in an optimistic matter of managing the company assets or safeguarding the interest of shareholders. Davis et al. (1997) postulate that "a steward protects and maximizes shareholders' wealth through firm performance because by so doing the steward's utility function is maximized" (p.21). Vallejo (2009) describes the stewardship role as one that is hitched

on psychological and situational elements. The psychological elements in which stewards get motivated to function effectively are based on their prescribed duties comprising intrinsic drive as well as personal power. The intrinsic motivation is limited to an individual and offers contentment and zeal to do more. Managers who are stewards mostly possess a solid bond and empathy with their firms (Zahra et al., 2008). Equally, they exhibit a high sense of affinity and cultivate good interpersonal relationships that are long-lasting. These features may turn out to be a foundation for the impetus for higher performance and attainment of significant results which may lead to the general improvement of the performance of the organization.

2.1.3. Resource dependency theory

Firms rely on diverse resources in carrying out their core duties to realize their objectives. The resources may encompass labour, capital, and raw materials. Unfortunately, most organizations may not be able to internally generate most of these resources which are critical for their functioning. The fundamental view of the advocates of the resource dependency concept is that firms' behaviour and success are dependent on the external resources they possess. The boards of directors have what it takes to assist in procuring the needed resources for the continued existence of the firm (Pfeffer & Salancik, 1978). One of the significances of independent members serving on boards is to offer the firm exposure to the outside world to acquire resources, not within the reach of the organization for its corporate success.

2.1.4. Corporate life cycle theory

According to the life cycle hypothesis, corporations go through a number of distinct stages of growth, and as they progress through these stages, their capabilities, strategies, organizational structures, and operational methods change significantly (Quinn & Cameron, 1983). Life cycle theory offers organizations with problem-solving techniques and rules to evaluate the development of firms across stages. More so, appreciating the purpose of the life cycle assists corporations to apply important resources in the best possible manner to outstrip their opponents and maintain the main life cycle (Adizes, 1999). Fama and French (2001) also expanded the life cycle theory to include a suggestion that retention of earnings differs over the life of the firm. The finance literature also shows that life cycle stages have a significant impact on achieving companies' financial performance (Dickinson, 2011; DeAngelo et al., 2006).

2.2. Empirical literature review

Several empirical studies have been carried out to examine the effect of several corporate governance features on firm performance. For instance, Arora and Sharma (2016) looked at the effect of corporate governance practices of Indian manufacturing companies on performance. Using different estimation techniques, the study discovered board size to have a significant role in enhancing firm performance. The researchers, however, evidenced

that CEO duality does not affect performance. By using an index of corporate governance, Bhatt and Bhatt (2017) revealed a substantial positive effect of corporate governance on performance. Using data from Tanzanian firms, Assenga et al. (2018) indicated that firm performance is positively driven by gender diversity while board size does not influence performance. Alabdullah (2018) found that managerial ownership structure directly influences the performance of companies registered on the Amman Stock Exchange. Shettima and Dzolokarnaini (2018) revealed that a larger board size enhances the performance of microfinance institutions in Nigeria. Kaur and Singh (2019) documented that firm performance is reduced when CEOs tend to stay longer in office and when firms have female CEOs. Applying panel regression analysis, Puni and Anlesinya (2020) reported that board composition (both insiders and outsiders) improves the performance of Ghanaian firms. They also found that corporate board size, meeting frequency of the board, and ownership structure in terms of shareholder concentration increase performance. The study further established that while CEO duality does not enhance performance, board committees decrease firm performance. Employing the fixed effects and two-stage least squares (2SLS) techniques, Wang et al. (2019) revealed that the link between institutional ownership and performance is negative and significant in the case of Pakistan. The findings also showed that firm performance has no significant relationship with board size, board independence, board diversity, and board meetings. Alshirah et al. (2022) reported that board size and family ownership adversely affect corporate performance in Jordan. In Ghana, Asamoah and Puni (2021) revealed that outside directors and corporate audit committees considerably drive performance (defined by Tobin's Q). Naz et al. (2022) reported firm performance in Pakistan is influenced by the corporate governance quality index. Amin et al. (2022) revealed that women on corporate boards directly impact the performance of corporations.

Turning to the nexus between the corporate life cycle and performance, the empirical evidence is very scanty. While earlier studies have delved into the effect of numerous factors on firm performance at the various life cycle stage (Zhou et al., 2016; Sridharan & Joshi, 2018; Pham & Pham, 2020; Aldaas, 2021; Alqahtani et al., 2022), research exploring the direct link between life cycle and performance is virtually absent. Therefore, we seek to address this literature void.

3. RESEARCH METHODOLOGY

3.1. Data sources

The study employs only secondary data covering 15 companies quoted on the Ghana Stock Exchange over the years 2009–2018. The sampled firms and the study period are chosen based on data availability. Specifically, the data were retrieved from the firms' yearly financial statements and reports maintained by the Annual Reports Ghana and the respective firms' websites. To ensure a fair analysis, at least two firms from each industry were considered.

3.2. Description of variables

Based on prior studies, the most often employed performance indicators include return on assets (*ROA*), return on equity (*ROE*), net interest margin (*NIM*), and many others. This study employs *ROA* as the main dependent variable. The study also supplements this measure with *ROE* to find out if similar results hold with a different measure. These two measures are considered performance indicators in this study because of the significance accorded to them as key measures of firm performance in the governance literature (Goel, 2018; Musah & Adutwumwaa, 2021; Yakubu & Bunyaminu, 2022). In line with Yakubu and Musah (2022), “*ROA* is defined as the ratio of net income to total assets while *ROE* is computed by dividing net income by shareholders’ equity” (p. 6).

We employ board size, CEO tenure, CEO duality, inside directors, and corporate life cycle as the independent variables while controlling for the influence of firm size. By definition, board size (*BODS*) is the total number of directors on an organization’s board. CEO tenure (*CEOT*) is measured as the number of years a CEO stays in office. In measuring CEO duality (*CEOD*), we use a dummy variable. That is, 1 if the CEO is also the chairperson/vice-chairperson of the board and 0 for otherwise. The proportion of executive directors to total directors is used to measure inside directors (*INSD*). Firm size (*FSIZE*) is the log of total assets.

Dickinson’s (2011) technique is used in this study to create the metrics for the stages in the firms’ life cycle utilizing data from the firms’ cash flow statements. She argues that “cash flow captures differences in a firm’s profitability, growth, and risk” (p. 1970). She also indicates that “one may use the cash flow from operating (*CFO*), cash flow from investing (*CFI*), and cash flow from financing (*CFF*) to group firms into lifecycle stages such as introduction, growth, maturity, and shake-out/decline” (p. 1972).

The methodology describes “introduction, if $CFO < 0$, $CFI < 0$ and $CFF > 0$; growth, if $CFO > 0$, $CFI < 0$ and $CFF > 0$; mature, if $CFO > 0$, $CFI < 0$ and $CFF < 0$ and the remaining signs from *CFO*, *CFI* and *CFF* classified under the decline/shake-out stage” (Dickinson, 2011, p.1972). Dickinson (2011) incorporates the inferences from several research fields, such as production behaviour, learning/experience, investment, market share, and entry/exit patterns, to identify the life cycle stages. As a result, this technique record how organizations perform and allocate their resources. According to Dickinson (2011), “firms are allocated to one of four life cycle stages in each year, namely introduction-stage (birth-stage), growth-stage, mature-stage, and shake-out/decline-stage, based on the combined signs of each of the net cash flows from operating, financing, and investing activities” (p. 1972). The net cash flows can be negative or positive, yielding eight possible cash flow patterns. The eight cash flow combinations are shown in Table 1.

Table 1. Net cash flow combinations (life cycle measure)

<i>Net cash flow (NCF) and predicted sign</i>	<i>Intro</i>	<i>Growth</i>	<i>Mature</i>	<i>Shake-out/decline</i>				
NCF from operating activities	-	+	+	-	-	-	+	+
NCF from investing activities	-	-	-	+	+	-	+	+
NCF from financing activities	+	+	-	+	-	-	+	-

The variables *Intro*, *Growth*, *Mature*, and *Shake-out/decline* represent the life cycle stages of firms and each variable is the proxy for firm life cycle stages in Models 1 and 2 and will be expressed as dummy variables, which is equal to 1 if the net cash flows signs fall under it and 0 otherwise. The variables *INTRO* (introduction) and *DECL* (decline) stages are projected to be negatively related to performance, while *GROW* (growth) and *MATUR* (maturity) stages variables are expected to be positively related to performance.

3.3. Model specification

This study empirically examines how corporate governance and the corporate life cycle affect firm

$$ROA_{i,t} = \alpha + \beta_1 BODS_{i,t} + \beta_2 CEOT_{i,t} + \beta_3 CEOD_{i,t} + \beta_4 INSD_{i,t} + \beta_5 INTRO_{i,t} + \beta_6 GROW_{i,t} + \beta_7 MATUR_{i,t} + \beta_8 DECL_{i,t} + \beta_9 FSIZE_{i,t} + \varepsilon_{i,t} \quad (2)$$

$$ROE_{i,t} = \alpha + \beta_1 BODS_{i,t} + \beta_2 CEOT_{i,t} + \beta_3 CEOD_{i,t} + \beta_4 INSD_{i,t} + \beta_5 INTRO_{i,t} + \beta_6 GROW_{i,t} + \beta_7 MATUR_{i,t} + \beta_8 DECL_{i,t} + \beta_9 FSIZE_{i,t} + \varepsilon_{i,t} \quad (3)$$

where, all acronyms are previously defined except the life cycle indicators. For the corporate life cycle variables, *INTRO*, *GROW*, *MATUR*, and *DECL* represent the introduction, growth, maturity, and decline stages, respectively.

performance. The paper adopts a panel approach, and the model, following Brooks (2008) is described below:

$$Y_{i,t} = \alpha + \beta X_{i,t} + \varepsilon_{i,t} \quad (1)$$

where, *i* represents the respective firms and *t* is the time period; *Y* is the dependent variable and *X* represents the explanatory factors; α is the intercept term and β denotes the coefficients of the regressors; $\varepsilon_{i,t}$ is the error term.

To explore the influence of corporate governance and life cycle on performance, the models below are estimated:

To scrutinize the influence of corporate governance and firm life cycle on firm performance, the pooled estimated generalized least squares (EGLS) with cross-section weights are employed. This technique generates standard errors that are resistant to serial correlation.

4. RESULTS AND DISCUSSION

4.1. Descriptive statistics

Table 2 reports the descriptive statistics of both the independent and dependent variables used in the study. It shows the mean, maximum, minimum, and standard deviation values of the variables. *ROA* has a mean value of 0.092, signifying that performance averagely rises by 0.092 units or 9.2%. This indicates that the average return on assets is approximately 9%. The minimum and maximum values of *ROA* are -0.100 and 0.629, with a standard deviation of 0.102. *ROE* has a mean of 0.153, suggesting that on average the sampled firms generate about 15.3% returns on the investment they received from their shareholders for the study period. The minimum value of *ROE* is -0.534 and it has a maximum of 0.783. Board size has a mean of

8.72, a standard deviation of 1.767, a minimum of 5, and a maximum of 14 indicating that the average board size is 9 for the sample period. The mean of CEO tenure is 5.04 which suggests that the firms' CEOs averagely spend 5 years in office for the years under study. CEO duality records an average of 0.007 and a maximum value of 1.000 which depicts that most of the companies are not led by CEOs who also serve as board chairpersons. The ratio of inside directors to total board members on average is 0.251. For the life cycle measures, all the stages record a minimum of 0.000 and a maximum of 1.000. The maturity stage has the highest average value and standard deviation, implying that most of the firms are at the maturity stage. The average value of the control variable (firm size) is 8.623 and with minimum and maximum values of 7.346 and 10.03, respectively.

Table 2. Descriptive statistics

Variable	Mean	Maximum	Minimum	Std. Dev.	Observations
<i>ROA</i>	0.092	0.629	-0.100	0.102	150
<i>ROE</i>	0.153	0.783	-0.534	0.254	150
<i>BODS</i>	8.720	14.000	5.000	1.769	150
<i>CEOT</i>	5.040	27.000	1.000	5.280	150
<i>CEOD</i>	0.007	1.000	0.000	0.082	150
<i>INSD</i>	0.251	0.714	0.083	0.148	150
<i>INTRO</i>	0.087	1.000	0.000	0.282	150
<i>GROW</i>	0.167	1.000	0.000	0.374	150
<i>MATUR</i>	0.580	1.000	0.000	0.495	150
<i>DECL</i>	0.040	1.000	0.000	0.197	150
<i>FSIZE</i>	8.623	10.030	7.346	0.660	150

Source: Authors' computation.

4.2. Correlation matrix

Table 3 presents the correlation matrix for the independent variables. The results of the correlation indicate that the respective variables are low, and therefore suggest that the study has no multicollinearity issues. Based on Kennedy's (2003) assertion, a high correlation occurs when

the correlation coefficient is more than 0.80. We further presented evidence of the nonexistence of multicollinearity by performing the variance inflation factor (VIF) analysis as shown in Table 3. When the VIF is greater than 10 and the tolerance value is less than 0.10, there is evidence of multicollinearity. However, this is not the case for our variables as evidenced in Table 3.

Table 3. Correlation matrix and variance inflation factor analysis

	<i>BODS</i>	<i>CEOD</i>	<i>CEOT</i>	<i>INSD</i>	<i>INTRO</i>	<i>GROW</i>	<i>MATUR</i>	<i>DECL</i>	<i>FSIZE</i>
<i>BODS</i>	1.000								
<i>CEOD</i>	-0.033	1.000							
<i>CEOT</i>	-0.227	-0.063	1.000						
<i>INSD</i>	-0.127	-0.001	-0.102	1.000					
<i>INTRO</i>	-0.139	-0.025	0.029	0.033	1.000				
<i>GROW</i>	0.010	-0.037	-0.109	-0.041	-0.138	1.000			
<i>MATUR</i>	0.049	0.070	0.107	-0.055	-0.362	-0.526	1.000		
<i>DECL</i>	-0.006	-0.017	-0.105	-0.118	-0.063	-0.091	-0.240	1.000	
<i>FSIZE</i>	0.521	0.014	-0.220	0.126	-0.137	-0.012	0.027	0.041	1.000
VIF	1.51	1.01	1.13	1.14	1.59	1.99	2.41	1.33	1.48
Tolerance	0.661	0.986	0.887	0.875	0.631	0.501	0.414	0.750	0.676

Source: Authors' computation.

4.3. Regression results

The regression results are presented in Table 4. These estimates are based on Model 1 where performance is gauged by *ROA* and Model 2 with *ROE* being the alternative performance measure. The R^2 values in both models depict that about 27% of variations in return on assets and 25.2% variation

in return on equity respectively are explained by the corporate governance measures and firm life cycle. The F-statistic and the associated probability values indicate that the regression models overall are statistically significant, hence supporting the fact that the explanatory factors used in the study are crucial factors explaining performance.

Table 4. Regression results

Variable	ROA	ROE
BODS	-0.003 (0.002)	-0.008 (0.006)
CEOT	0.002* (0.001)	0.005* (0.003)
CEOD	0.008 (0.055)	-0.101 (0.096)
INSD	-0.076*** (0.026)	0.0917 (0.075)
INTRO	-0.067*** (0.021)	0.0189 (0.044)
GROW	-0.022** (0.010)	0.058* (0.031)
MATUR	-0.003 (0.006)	0.080*** (0.026)
DECL	-0.039** (0.016)	-0.008 (0.041)
FSIZE	-0.026*** (0.006)	-0.076*** (0.016)
Constant	0.362*** (0.048)	0.768*** (0.126)
R ²	0.270	0.252
Adj. R ²	0.223	0.204
F-statistic	5.744	5.240
Pro. (F-statistic)	0.000	0.000
Observations	150	150
Number of firms	15	15

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Standard errors are in parentheses.

Source: Authors' computation.

4.3.1. The impact of corporate governance variables on firm performance

From the regression analysis in Table 4, board size negatively affects firm performance. Although the finding is in line with Alshirah et al. (2022), it contradicts most prior studies (Arora & Sharma, 2016; Shettima & Dzolkarnaini, 2018; Puni & Anlesinya, 2020) establishing a positive relationship between board size and performance. The result implies that decreasing the number of directors on the board improves firm performance. It also indicates that corporations with few directors on the board perform more effectively than those with more members on the board. Larger boards make coordination more challenging and less effective. Smaller boards on the other hand lessen the leeway of free-riding in the board and improve board decision-making. Kyereboah-Coleman and Biekpe (2006) also concluded that small board sizes enhance firm performance in Ghana. However, given the statistically insignificant coefficient of board size, the study infers that its influence on firm performance is negligible. This finding holds when ROE is used to gauge performance.

The impact of CEO tenure on performance is positive and statistically significant at 10%. This result holds for both performance measures. The finding depicts that as CEOs remain on the job for longer periods of time, firm performance increases. It implies that CEOs with a longer term are more likely to gratify shareholders' interests through wealth maximization. This result contradicts the agency theory, which argues that CEOs who have been in office for a lengthier period of time tend to focus more on serving their interest instead of serving the interest of shareholders. Likewise, the finding disagrees with the result of Kaur and Singh (2019) who concludes that CEO tenure is negatively linked with performance.

For the main dependent variable (ROA), CEO duality shows a positive albeit insignificant influence on performance. This indicates that CEO duality leads to a rise in company performance but the impact is insignificant. In other words, CEOs playing the role of both inside director and corporate chairperson do not have an influence on performance. Deploying ROE as a performance indicator, the result indicates a negative insignificant impact on firm performance.

The results evidence a significant negative linkage between inside directors and performance (ROA). The implication is that more executive board members obstruct firm performance. This also means that, if the board contains more executive directors or executive directors controlling the board then performance will decrease. This is contrary to stewardship theory, which describes corporate managers as caretakers in a positive way of managing the company assets or safeguarding the interest of shareholders. The results indicate the presence of agency theory, which states that "executive directors have self-interest and cannot work in a manner that will maximize shareholder profits at any specified moment. They can only do so under stringent rules and inspections put in place to hold to check and account for the behavior of agents in safeguarding the interest of the shareholders" (Jensen & Meckling, 1976, p. 306). The results suggest the appointment of more independent executives on the board since inside executive decreases firm performance. The presence of more outside directors may bring on board a diverse set of competencies that may be leveraged to serve the best interest of shareholders. When ROE is used as a performance measure, inside directors influence performance positively although the impact is insignificant.

4.3.2. The impact of corporate life cycle on firm performance

From the regression results, the introduction stage of firms has a negative significant influence on ROA as a measure of firm performance. This finding lends credence to the assumption that firms confront inadequate financial resources during the startup period and meet their financial obligations by borrowing from outside sources. The effect of the introduction stage on ROE is positive but insignificant.

The results show that firms' growth stage and performance (ROA) are negatively and significantly related. This result contrasts the study's expectation of a positive influence of growth on performance, given that higher sales are experienced at the growth stage with accumulated profits and improved investor confidence. The results, however, note that the growth stage exerts a positive significant influence on return on equity as an alternative performance measure.

Firms' maturity stage influences ROA negatively and the effect is insignificant. This suggests that firms' performance decreases as they reach maturity. The finding diverges from the proposition that "matured firms have a competitive edge through innovation, short-term and long-term sustainability, which enables them to win relatively loyal customers and develop a high

sales margin by offering high quality at lower prices, thus increasing profitability” (Noga, 2009, p. 1). In terms of the ROE measure, the findings evidence that the maturity of firms has a positive and significant effect on firm performance.

Finally, we reveal a negative significant influence of the decline stage on firm performance. The negative effect can be attributed to losses some firms incur which emanate from several factors including loan repayments, asset liquidation, and market competition, among others (Kuś & Żurakowska-Sawa, 2017).

Turning to the control factor, the results depict that firm size has a significant negative relationship with performance in terms of both ROA and ROE. This is contradictory to the study's expectations. The reason could be that the size of a firm's assets does not necessarily guarantee performance if not put to efficient use. The finding is incongruent with that of Yakubu (2019).

5. CONCLUSION

This study examined the influence of corporate governance and firm life cycle on the performance of quoted companies on the Ghana Stock Exchange over the period 2009–2018 using the pooled estimated generalized least squares (EGLS). ROA and ROE are used as performance measures. The research follows Dickinson's (2011) approach to developing proxy variables for firms' life cycle stages. We observed that the influence of the corporate governance measures on firm performance varied depending on the measure of firm performance. The findings showed that board size impacts negatively and insignificantly on both performance measures. The number of years CEOs stays in office (CEO tenure) positively and significantly drives the performance of firms whether performance is gauged by ROA or ROE. CEO duality shows a positive effect on ROA and an inverse relationship with ROE. Nevertheless, the impact is insignificant for the two performance measures. Although executive directors significantly drive performance in terms of ROA, it influences ROE insignificantly. The study realized that at different levels of statistical significance, the various stages of the corporate life cycle negatively influence the main dependent variable (ROA). With the alternative firm performance proxy (ROE), the results showed that except for the decline stage which inimically affects performance, the rest of the stages (i.e., introduction, growth, and maturity) positively drive performance. However, only

the growth and maturity stages exert a significant effect on performance.

Based on the findings, the study makes some recommendations. First, given the significant positive effect of CEO tenure on performance, the study recommends that CEOs should be made to stay longer in their position as this will help enhance performance. However, this must be done with strict commitment from shareholders to ensure that the CEOs do not deviate to serving their interests rather than serving the interest of the shareholders. For the fact that inside directors' presence reduces firm performance, there is a need for corporations to reduce the ratio of executive directors and appoint more independent board members. For firms that decide to maintain more executive directors, rigorous standards and monitoring must be implemented to check the behaviour of the directors to safeguard shareholders' interests. Managers should not overlook the significant influence of the corporate life cycle on firm performance in their financial decisions as disregarding it may have major consequences for performance. Firms should endeavor to increase their investment in research and development at every stage of their production to ensure steady profit growth.

Although the findings are relevant for firm-level policy-making and implementation, the study has some limitations. First, the study focuses solely on firm-specific factors, ignoring how macroeconomic variables might impact the link between corporate governance and performance. Additionally, because the study relies on listed companies, the findings may not be applied to non-publicly quoted firms. Similarly, the study is focused on Ghana, and the findings may not be pertinent to other developing economies. Given these pitfalls, we propose a number of significant areas for future studies. Firstly, the study recommends further research to examine the effect of the macroeconomic environment on firm performance in the context of the firm life cycle. Secondly, future research might include non-listed firms in addition to listed companies to offer a more holistic view of the relationship between corporate governance and performance, as well as how the life cycle influences firm performance in Ghana. Again, future research can consider a panel of different countries to study the influence of corporate governance and the life cycle on performance as this will offer a more comprehensive analysis. Furthermore, further studies can employ different performance measures, in addition to ROA and ROE.

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