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Research Article

The Role of Industry Type, Firm Age, And Market Dynamics on The Relationship Between Entrepreneurial Orientation and The Performance of The Elite Companies (Ghana Club 100) In Ghana

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Abstract:

Purpose: In Ghana, the Ghana Investment Promotion Centre (GIPC) annually ranks the top 100 firms—known as the Ghana Club 100—based on criteria such as size, growth, profitability, and corporate social responsibility. These companies are often viewed as market leaders, playing a pivotal role in Ghana's socio-economic development through employment creation, innovation, and revenue generation. However, despite their elite status, there is growing recognition that not all firms within the Ghana Club 100 sustain high performance consistently, especially amid volatile macroeconomic conditions such as currency depreciation, inflationary pressures, and disruptions from global events like the COVID-19 pandemic.

Methodology: This study employs the quota sampling technique to select a representative sample of 215 firms from the Ghana Club 100. The study also adopted an explanatory research design to investigate the role of industry type, firm age, and market dynamics on the relationship between entrepreneurial orientation (EO) and business performance among elite firms listed in the Ghana Club 100.

Findings: The findings of this study offer compelling evidence that Entrepreneurial Orientation (EO) exerts a positive and significant influence on Business Performance among elite firms in Ghana. Moreover, the results reveal that the relationship between EO and Business Performance is significantly moderated by Industry Type, Firm Age, and Market Dynamics.

Unique Contribution to theory, policy and practice: Specifically, Industry Type positively moderates the relationship, suggesting that the strength of EO's impact on performance varies across different sectors, with some industries benefiting more from entrepreneurial behaviors than others. Similarly, Firm Age also positively moderates this relationship, indicating that more mature firms may be better positioned to leverage their accumulated experience and resources in applying entrepreneurial strategies effectively. Finally, Market Dynamics positively moderate the EO–performance linkage, emphasizing that firms operating in highly dynamic and volatile markets gain greater performance benefits from entrepreneurial orientation, consistent with the tenets of Dynamic Capability Theory. The study affirms that Entrepreneurial Orientation is a key strategic posture for enhancing business performance, and its effectiveness is contingent on contextual factors such as industry environment, organizational maturity, and external market conditions. These insights highlight the importance for managers and policymakers to align entrepreneurial strategies with organizational and environmental realities to achieve optimal performance outcomes.

Keywords: Entrepreneurial Orientation, Business Performance, Industry Type, Firm Age, Market Dynamics.

1.1 Background of the Study

Entrepreneurial Orientation (EO) has emerged as a central concept in understanding how firms behave strategically to pursue opportunities and drive performance. It reflects a firm's tendency to engage in innovative, proactive, and risk-taking behavior, which are essential for competing in turbulent and evolving markets (Mousa et al., 2020). EO has received significant attention in recent years for its potential to influence organizational outcomes, especially in environments characterized by market dynamism, resource constraints, and institutional uncertainty—all of which are prevalent in developing economies such as Ghana (Adusei, 2020; Owusu & Twum, 2021). In Ghana, the Ghana Investment Promotion Centre (GIPC) annually ranks the top 100 firms—known as the Ghana Club 100—based on criteria such as size, growth, profitability, and corporate social responsibility. These companies are often viewed as market leaders, playing a pivotal role in Ghana's socio-economic development through employment creation, innovation, and revenue generation. However, despite their elite status, there is growing recognition that not all firms within the Ghana Club 100 sustain high performance consistently, especially amid volatile macroeconomic conditions such as currency depreciation, inflationary pressures, and disruptions from global events like the COVID-19 pandemic (Mensah & Frimpong, 2022). These

challenges necessitate the adoption of strategic orientations that enable resilience and adaptability—traits strongly associated with EO.

Recent empirical studies have highlighted the positive link between EO and firm performance across sectors and geographies. For instance, EO has been shown to enhance both financial performance (such as revenue growth and return on investment) and non-financial performance (such as customer satisfaction and market expansion) by promoting strategic agility and continuous innovation (Acheampong & Boateng, 2023). Within the Ghanaian context, EO has also been linked to organizational learning, digital transformation, and leadership agility—factors that are crucial for sustained performance in competitive markets (Asare et al., 2021). Despite this growing body of knowledge, most existing studies have focused on small and medium enterprises (SMEs), leaving a gap in understanding how EO manifests in larger, elite companies with more complex organizational structures and broader stakeholder expectations. Furthermore, with the increasing push toward regional integration through the African Continental Free Trade Area (AfCFTA) and the government's Ghana Beyond Aid agenda, Ghanaian firms are under pressure to become globally competitive and innovation-driven. EO provides a framework through which firms can develop a proactive posture, seize emerging opportunities, and manage risks associated with new markets and technological disruptions (Antwi et al., 2020). Companies within the Ghana Club 100, due to their visibility and scale, are uniquely positioned to lead in this transformation. Yet, it remains unclear to what extent EO drives their performance and whether all five EO dimensions—namely innovativeness, proactiveness, risk-taking, autonomy, and competitive aggressiveness—equally influence performance outcomes in this group (Appiah-Adu et al., 2020).

This study, therefore, seeks to explore the relationship between EO and the performance of elite companies in Ghana by focusing on Ghana Club 100 firms. It aims to determine how EO contributes to both financial and non-financial performance indicators, and to what extent contextual factors such as industry type, firm age, and market dynamics moderate this relationship. Understanding these dynamics is vital for guiding executive decision-making and policy formulation aimed at fostering entrepreneurship and economic competitiveness among top-tier firms in Ghana.

2. Literature Review

2.1 Entrepreneurial Orientation and Business Performance

Entrepreneurial Orientation (EO), characterized by innovativeness, proactiveness, and risk-taking, has emerged as a strategic posture that significantly enhances business performance across various contexts (Lumpkin & Dess, 1996; Covin & Wales, 2012). EO equips firms with the ability to identify and exploit opportunities, introduce innovative products or services, and proactively respond to market changes, thereby improving firm outcomes such as profitability, growth, and market share.This relationship between EO and business performance is effectively explained by the Resource-Based View (RBV) of the firm. According to RBV, sustained competitive advantage arises from the possession and strategic utilization of valuable, rare, inimitable, and non-substitutable (VRIN) resources and capabilities (Barney, 1991). EO can be conceptualized as a firm-level capability that meets the VRIN criteria. It is valuable because it drives innovation and competitive positioning; rare because not all firms possess a strong entrepreneurial posture; inimitable due to its embedding in organizational culture and processes; and non-substitutable as few other organizational characteristics offer similar advantages (Wiklund & Shepherd, 2003).

In this view, firms with a high EO are better positioned to leverage internal and external resources, pursue strategic opportunities, and adapt to environmental changes, all of which contribute to superior business performance (Zhou, Yim, & Tse, 2005). Moreover, EO complements other strategic resources, enhancing their contribution to performance outcomes. For example, a proactive and innovative culture can amplify the effectiveness of a firm's technological assets or human capital. Thus, the RBV suggests that EO is not merely a behavioral trait but a strategic resource that enables firms to achieve and sustain superior performance, particularly in dynamic and competitive environments. Given the theoretical and empirical support for this view, the following hypothesis is proposed:

H1: Entrepreneurial Orientation has a positive and significant effect on Business Performance.

2.2 Moderating effect of Industry Type on the relationship between Entrepreneurial Orientation and Business Performance

Entrepreneurial Orientation (EO), encompassing innovativeness, proactiveness, and risk-taking, is widely acknowledged as a strategic posture that enhances business performance (Lumpkin & Dess, 1996; Covin & Slevin, 1989). However, the strength of the EO–performance relationship often varies across different contexts. One key contextual factor influencing this relationship is industry type. Grounded in Organizational Life Cycle Theory, this variation can be explained by the different developmental stages industries experience, which affect strategic behaviors and performance outcomes (Adizes, 1979; Lester, Parnell, & Carraher, 2003). Industries evolve from introduction and growth stages to maturity and eventual decline.

At each stage, the external environment, competitive dynamics, innovation needs, and risk profiles differ. For example, high-tech or service-based industries, typically in growth stages, are more dynamic and innovation-driven, creating fertile ground for EO to thrive. In contrast, firms operating in mature or highly regulated industries (e.g., utilities or traditional manufacturing) may face structural rigidity, which can dampen the impact of EO on performance. Firms in dynamic and evolving industries are more likely to benefit from EO due to their greater tolerance for risk and need for innovation and proactivity. Conversely, in stable or declining industries, aggressive entrepreneurial behaviors may not align with market expectations or structural limitations, thereby weakening

EO's performance impact (Zahra & Pearce, 1989). Therefore, industry type acts as a moderating variable, influencing how EO translates into performance gains.

This theoretical reasoning leads to the following hypothesis:

H2: Industry Type positively moderates the relationship between Entrepreneurial Orientation and Business Performance

2.3 Moderating effects of Firm Age on the relationship between Entrepreneurial Orientation and Business Performance

Entrepreneurial Orientation (EO)—defined by innovativeness, proactiveness, and risk-taking—has been consistently linked to superior business performance (Lumpkin & Dess, 1996; Covin & Slevin, 1989). However, empirical evidence suggests that this relationship may not be uniform across all firms. One important contextual factor that may influence this relationship is firm age, which affects strategic behavior, flexibility, and responsiveness. Organizational Life Cycle (OLC) Theory provides a useful lens for examining this moderation. OLC posits that organizations progress through distinct developmental stages (e.g., startup, growth, maturity, decline), and that their structure, strategic priorities, and behavior evolve over time (Adizes, 1979; Lester, Parnell, & Carraher, 2003). Younger firms are typically in the early stages of the life cycle, characterized by flexibility, openness to innovation, and high responsiveness to market opportunities—conditions that align closely with the principles of EO.

These firms are often more willing to take risks and adopt entrepreneurial strategies to gain market entry and establish competitive positioning (Wiklund & Shepherd, 2005). Conversely, older firms may have more established routines, bureaucratic structures, and a tendency toward risk aversion. While they may possess more resources and experience, their institutional inertia may hinder the effective implementation of entrepreneurial strategies (Zahra & Pearce, 1989). As such, the impact of EO on performance may be diminished in older firms due to resistance to change or slower decision-making processes. Thus, firm age may serve as a moderator, altering the strength of the EO–performance relationship across different stages of organizational development. Thus, this study hypothesized that:

H3: Firm Age positively moderates the relationship between Entrepreneurial Orientation and Business Performance

2.4 Moderating effect of Market Dynamics on the relationship between Entrepreneurial Orientation and Business Performance

Entrepreneurial Orientation (EO)—characterized by innovativeness, proactiveness, and risk-taking—has been widely recognized as a strategic asset that enhances firm performance by enabling organizations to identify and exploit market opportunities (Lumpkin & Dess, 1996; Covin & Slevin, 1989). However, the effectiveness of EO on performance is contingent upon the external environment in which a firm operates. One critical environmental factor is market dynamics, which refers to the rate and unpredictability of changes in customer preferences, competitor actions, and technological advancements (Jaworski & Kohli, 1993). The Dynamic Capability Theory (DCT) provides a robust theoretical lens to explain how firms can sustain competitive advantage in dynamic markets. According to Teece, Pisano, and Shuen (1997), dynamic capabilities refer to a firm's ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments. EO can be seen as an entrepreneurial dynamic capability that equips firms to sense, seize, and transform in response to market shifts. However, in environments with high market dynamism, the entrepreneurial posture of a firm becomes more critical to survival and success. EO-driven firms can adapt more quickly, launch innovative offerings, and act ahead of competitors in turbulent conditions (Wang & Ahmed, 2007). Conversely, in stable markets, the value of EO may be limited, as incremental improvements and operational efficiency may be more important than entrepreneurial aggressiveness. Thus, market dynamics act as a moderator, amplifying or diminishing the relationship between EO and business performance depending on the level of environmental turbulence. It is therefore hypothesized that:

H4: Market Dynamics positively moderate the relationship between Entrepreneurial Orientation and Business Performance.

2.5 Life Cycle Theory

Life Cycle Theory is a foundational concept in organizational studies that explains how organizations evolve through distinct stages over time, each with unique challenges, structures, and strategic behaviors. Originally adapted from biological life cycle models, this theory posits that organizations, like living organisms, undergo a progression from inception through growth, maturity, and eventually decline or renewal (Adizes, 1979; Quinn & Cameron, 1983). The theory typically outlines four to five key stages: startup (or birth), growth, maturity, decline, and renewal or death. During the startup stage, firms are characterized by informal structures, innovation, and entrepreneurial dynamism. As they enter the growth stage, there is rapid expansion, formalization of procedures, and an increasing need for professional management. In the maturity stage, organizations stabilize, with emphasis shifting toward efficiency, control, and incremental innovation. If market responsiveness and strategic renewal are not maintained, the firm may experience decline, characterized by rigidity, inefficiency, and loss of competitive edge (Lester, Parnell & Carraher, 2003).

Life Cycle Theory is particularly useful for understanding how organizational age influences strategy and performance. For example, younger firms are often more agile and entrepreneurial, making them more likely to benefit from Entrepreneurial Orientation (EO). In contrast, older firms tend to be more bureaucratic, which can inhibit risk-taking and innovation (Zahra & Pearce, 1989). Thus, the life cycle stage can moderate the effectiveness of various strategic orientations. Moreover, the theory has managerial relevance. Recognizing the current life cycle stage helps leaders align their strategy, structure, and processes with organizational needs,

ensuring sustainable growth and competitiveness (Kazanjian & Drazin, 1990).

2.6 Dynamic Capability Theory

Dynamic Capability Theory (DCT) is a strategic management framework that explains how firms achieve and sustain competitive advantage in rapidly changing environments by continuously adapting, integrating, and reconfiguring internal and external competencies. Introduced by Teece, Pisano, and Shuen (1997), the theory extends the traditional Resource-Based View (RBV) by addressing its limitation in explaining how firms cope with change in volatile markets. Unlike ordinary capabilities, which involve routine operational functions, dynamic capabilities enable firms to modify existing resources and capabilities in response to environmental shifts (Eisenhardt & Martin, 2000). These include the ability to sense opportunities and threats, seize opportunities through investments and innovation, and transform organizational processes and structures to remain competitive (Teece, 2007). Dynamic Capability Theory is particularly relevant in today's fast-paced, technology-driven business landscape. Firms that possess strong dynamic capabilities can anticipate market trends, swiftly adapt their product offerings, realign their strategies, and innovate ahead of competitors (Wang & Ahmed, 2007). For example, firms with high entrepreneurial orientation (EO) can leverage dynamic capabilities to translate innovative ideas and risk-taking behavior into tangible performance outcomes, especially in turbulent markets. Moreover, dynamic capabilities are not universally effective; they must be developed through organizational learning, leadership commitment, and strategic alignment. They are context-specific, path-dependent, and shaped by past decisions and experiences (Barreto, 2010). Thus, building and leveraging dynamic capabilities is a continuous and deliberate process that distinguishes high-performing firms from others in complex environments.

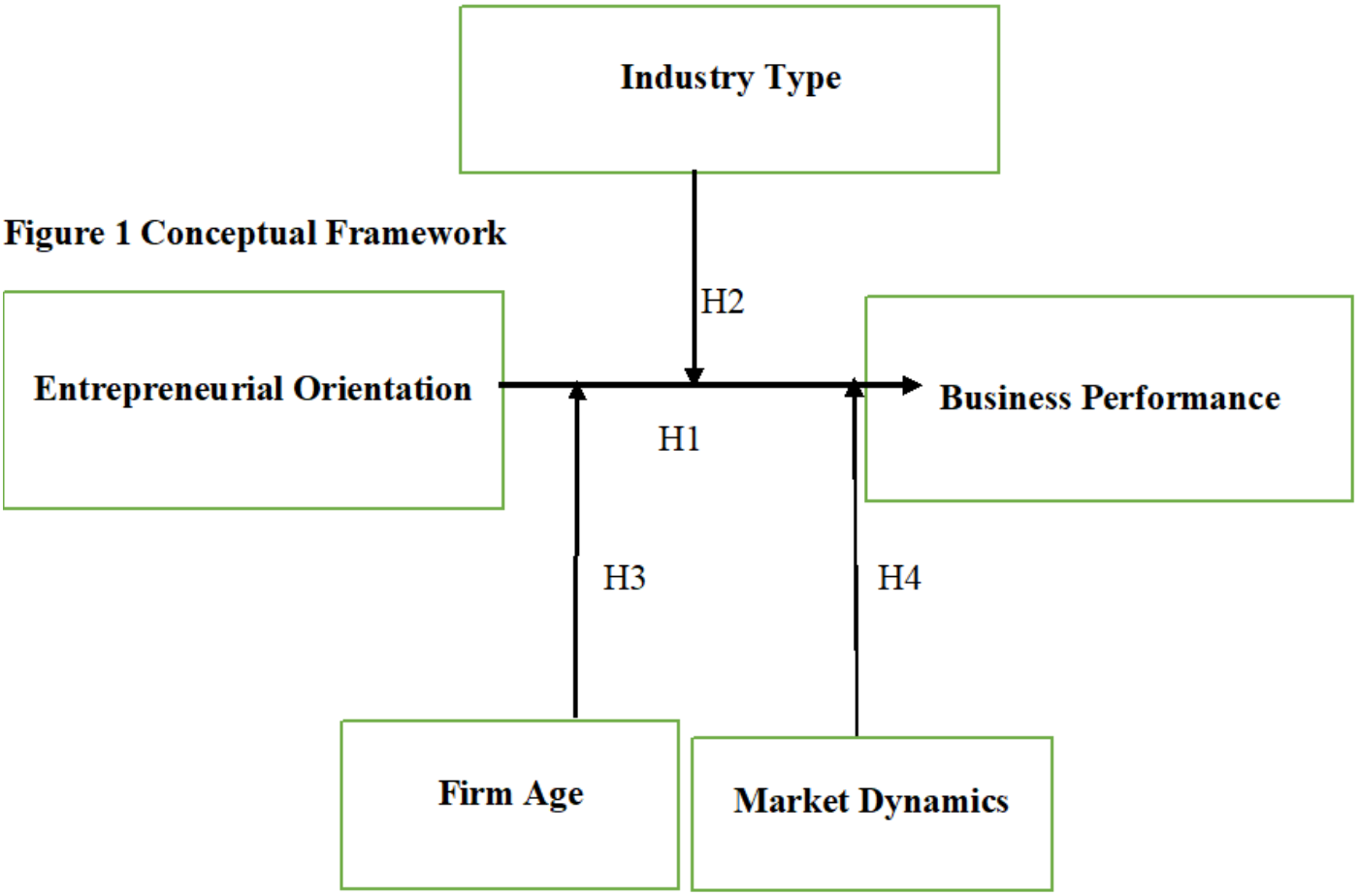

Figure 1 Conceptual Framework

3. Methodology

3.1 Research Design

This study adopts an explanatory research design to investigate the role of industry type, firm age, and market dynamics on the relationship between entrepreneurial orientation (EO) and business performance among elite firms listed in the Ghana Club 100. Explanatory research is used to identify causal relationships between variables and to explain the underlying mechanisms through which one variable influences another (Creswell & Creswell, 2018). Given the multifaceted nature of EO and its contextual dependence on external and internal factors, this design is suitable for uncovering how and why industry-specific characteristics, organizational maturity (firm age), and environmental dynamism influence the EO-performance link.

3.2 Sampling Technique and Sample Size

This study employs the quota sampling technique to select a representative sample of 215 firms from the Ghana Club 100. Quota sampling is a non-probability sampling method that ensures specific subgroups (or quotas) within a population are adequately represented based on predetermined characteristics such as industry type or firm size (Etikan & Bala, 2017). Given the study's focus on examining how industry type, firm age, and market dynamics moderate the relationship between entrepreneurial orientation and firm performance, quota sampling is appropriate for stratifying the sample by sectoral representation (e.g., manufacturing, services, finance) to ensure generalizability across diverse industries. The target population comprises elite firms listed in the Ghana Club 100 rankings, making it critical to control for firm heterogeneity. The sample size of 215 firms is deemed adequate based on Krejcie and Morgan's (1970) table for a population under 500 and to achieve sufficient statistical power for multivariate analysis.

4. Results

Table 1 Reliability and Validity Results

Variable	Cronbach Alpha	Composite Reliability	Convergent Validity	Discriminant Validity
Entrepreneurial Orientation	.875	.836	.592	.865
Business Performance	.919	.953	.695	.882
Industry Type	.704	.860	.558	.866
Firm Age	.845	.954	.672	.834
Market Dynamics	.861	.844	.562	.856

Table 1 presents the reliability and validity assessments of the key constructs used in the study—Entrepreneurial Orientation, Business Performance, Industry Type, Firm Age, and Market Dynamics. The results demonstrate acceptable psychometric properties, suggesting that the measurement model is robust and suitable for further analysis. Reliability was assessed using Cronbach's Alpha and Composite Reliability (CR). According to Nunnally (1978), a Cronbach's Alpha value of 0.70 or higher indicates good internal consistency. All constructs meet or exceed this threshold, with values ranging from 0.704 (Industry Type) to 0.919 (Business Performance). Similarly, the Composite Reliability values, all above the 0.80 threshold recommended by Hair et al. (2019), confirm the consistency of the indicators used to measure each construct.

Convergent validity, measured through Average Variance Extracted (AVE), reflects the degree to which indicators of a construct converge or share a high proportion of variance. An AVE value of 0.50 or higher is considered acceptable (Fornell & Larcker, 1981). All constructs meet this criterion, with values ranging from 0.558 (Industry Type) to 0.695 (Business Performance), indicating that each construct captures a sufficient amount of variance from its indicators. Discriminant validity, which ensures that constructs are empirically distinct from one another, is also supported. The values in the Discriminant Validity column exceed the corresponding AVE values and meet the Fornell-Larcker criterion, indicating that the square root of the AVE for each construct is greater than its correlation with other constructs (Fornell & Larcker, 1981). The constructs in this study exhibit high internal consistency, sufficient convergent validity, and satisfactory discriminant validity, confirming the reliability and validity of the measurement model. This ensures that the observed relationships among Entrepreneurial Orientation, Business Performance, and the moderating variables (Industry Type, Firm Age, and Market Dynamics) are based on sound measurement instruments.

Table 2 Effect of Entrepreneurial Orientation on Business Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.729[a]	.531	.529	.5421

a. Predictors: (Constant), Entrepreneurial Orientation

ANOVAa

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	75.884	1	75.884	258.203	.000[b]
	Residual	67.007	228	.294		
	Total	142.891	229			

a. Dependent Variable: Business Performance

b. Predictors: (Constant), Entrepreneurial Orientation

Coefficientsa

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
2	(Constant)	.920	.196		4.684	.000
	DMC2	.768	.048	.729	16.069	.000

a. Dependent Variable: Business Performance

Table 2 presents the results of a linear regression analysis examining the effect of Entrepreneurial Orientation (EO) on Business Performance. The model demonstrates a strong and statistically significant relationship, supporting the theoretical assertion that entrepreneurial orientation is a critical driver of organizational success. The Model Summary shows a correlation coefficient (R) of 0.729, indicating a strong positive relationship between EO and Business Performance. The R Square value of 0.531 suggests that approximately 53.1% of the variance in Business Performance is explained by Entrepreneurial Orientation. The Adjusted R Square of 0.529 confirms that this explanatory power holds even after adjusting for the number of predictors in the model. This reflects a substantial explanatory capacity, particularly in the context of social science research where effect sizes above 0.50 are considered strong. The ANOVA results show that the regression model is statistically significant ($F(1, 228) = 258.203$, $p < .001$), confirming that EO significantly predicts Business Performance. This high F-value and significant p-value indicate that the variation explained by the model is not due to chance.

The Coefficients table further supports this finding. The unstandardized coefficient ($B = 0.768$, $p < .001$) indicates that for every one-unit increase in Entrepreneurial Orientation, Business Performance increases by 0.768 units. The standardized beta coefficient ($\beta = 0.729$) also signifies a strong positive effect. The t-value of 16.069 shows that the EO variable contributes meaningfully to the prediction model. The results provide empirical support for the proposition that EO is not merely a strategic orientation but a performance-enhancing capability in firms.

Table 3 Moderating effect of Industry Type on the relationship between Entrepreneurial Orientation and Business Performance

R	R-sq	MSE	F	df1	df2	p
.7845	.6154	.2431	120.5587	3.0000	226.0000	.0000
	coeff	se	t	p	LLCI	ULCI
Constant	.2398	.5912	.4056	.6854	1.4048	.9253
Entrepreneurial Orientation	.5857	.3113	3.5982	.0000	.2649	.9064
Industry Type	.0557	.1628	1.4242	.1558	.1327	.0213
Int_1	.7015	.1584	4.4284	.0000	.3894	1.0137

Table 3 examines the moderating effect of Industry Type on the relationship between Entrepreneurial Orientation (EO) and Business Performance, using a moderated regression model. The results indicate that Industry Type significantly moderates the EO–Performance relationship, enhancing the explanatory power of the model. The Model Summary reveals an R value of 0.7845 and an R-squared of 0.6154, meaning that 61.54% of the variance in Business Performance is explained by EO, Industry Type, and their interaction. Compared to the baseline model ($R^2 = 0.531$), this is a substantial improvement, indicating that the inclusion of Industry Type as a moderator enhances model fit. The Mean Squared Error (MSE) of 0.2431 suggests acceptable model precision, while the F-statistic of 120.5587 ($p < .001$) confirms the model is statistically significant overall.

The coefficients section provides deeper insight. The main effect of Entrepreneurial Orientation ($B = 0.5857$, $p < .001$) remains positive and significant, reaffirming its direct contribution to business performance. However, the main effect of Industry Type alone ($B = 0.0557$, $p = 0.1558$) is not statistically significant, implying that industry type, on its own, does not significantly affect performance. Importantly, the interaction term (Int_1: EO × Industry Type) is positive and statistically significant ($B = 0.7015$, $p < .001$). This confirms that Industry Type moderates the relationship between EO and performance, such that the effect of EO on performance varies by the type of industry in which a firm operates. The confidence interval for the interaction effect (LLCI = 0.3894, ULCI = 1.0137) does not include zero, reinforcing the robustness of the moderating effect.

These findings suggest that firms in different industries may benefit unequally from entrepreneurial orientation. For instance, firms in dynamic, innovation-driven sectors (e.g., ICT or services) may experience a stronger EO–performance link compared to those in more traditional or regulated industries (e.g., manufacturing or utilities).

Table 4 Moderating effects of Firm Age on the relationship between Entrepreneurial Orientation and Business Performance

R	R-sq	MSE	F	df1	df2	p
.7549	.5699	.2719	99.8196	3.0000	226.0000	.0000
	coeff	se	t	p	LLCI	ULCI
Constant	.2588	.6315	.4097	.6824	1.5032	.9857
Entrepreneurial Orientation	.4428	.1661	2.6657	.0082	.1155	.7700
Firm Age	.0601	.0410	1.4641	.1446	.1409	.0208
Int_1	.8642	.1686	5.1266	.0000	.5320	1.1964

Table 4 presents the results of a moderated regression analysis investigating the moderating role of Firm Age on the relationship

between Entrepreneurial Orientation (EO) and Business Performance. The findings suggest that Firm Age significantly moderates this relationship, further enhancing the model's explanatory power. The model exhibits a correlation coefficient (R) of 0.7549 and an R-squared value of 0.5699, indicating that approximately 56.99% of the variance in Business Performance is explained by EO, Firm Age, and their interaction. This is an improvement over the base model (EO only: $R^2 = 0.531$), highlighting the importance of considering firm age as a contextual variable. The model's F-value of 99.8196 with $p < .001$ confirms that the overall model is statistically significant, and the Mean Squared Error (MSE) of 0.2719 reflects a reasonable level of prediction accuracy.

Looking at the coefficients, Entrepreneurial Orientation (B = 0.4428, p = 0.0082) continues to have a significant and positive direct effect on Business Performance. Firm Age alone shows a non-significant effect (B = 0.0601, p = 0.1446), implying that age by itself does not significantly impact performance. However, the key insight comes from the interaction term (Int_1: EO × Firm Age), which is both positive and statistically significant (B = 0.8642, $p < .001$). The confidence interval (LLCI = 0.5320; ULCI = 1.1964) excludes zero, indicating the robustness of the moderation. This interaction indicates that the effect of EO on Business Performance becomes stronger as firms age. In other words, older firms tend to benefit more from Entrepreneurial Orientation than younger ones. Older firms may have more established systems, better networks, and accumulated experience, enabling them to more effectively translate entrepreneurial behavior into measurable performance gains.

These results highlight the need for age-sensitive strategies in applying EO. Younger firms might need additional capacity-building or adaptive learning mechanisms to leverage EO effectively, while mature firms are likely to see stronger returns from such strategic orientations.

Table 5 Moderating effect of Market Dynamics on the relationship between Entrepreneurial Orientation and Business Performance

R	R-sq	MSE	F	df1	df2	p
.7599	.5775	.2671	102.9788	3.0000	226.0000	.0000
	coeff	se	t	p	LLCI	ULCI
Constant	.5328	.6520	.8171	.4147	1.8176	.7520
Entrepreneurial Orientation	.5091	.1692	3.0093	.0029	.1757	.8424
Market Dynamics	.0720	.0419	1.7166	.0874	.1757	.8424
Int_1	.9117	.1732	5.2644	.0000	.5705	1.2530

Table 5 provides the results of a moderated regression analysis evaluating the moderating role of Market Dynamics in the relationship between Entrepreneurial Orientation (EO) and Business Performance. The findings reinforce the notion that market-related environmental conditions significantly shape the strength of this relationship. The model records an R value of 0.7599 and an R-squared (R^2) of 0.5775, meaning that 57.75% of the variance in Business Performance is explained by EO, Market Dynamics, and their interaction. This represents a meaningful improvement in explanatory power over the base model without the moderator. The F-statistic of 102.9788 ($p < .001$) confirms that the overall model is statistically significant. The Mean Squared Error (MSE) of 0.2671 suggests a reasonable fit of the model to the data. Entrepreneurial Orientation shows a significant direct influence on performance (B = 0.5091, p = .0029), consistent with prior findings that entrepreneurial firms tend to perform better due to innovation, proactiveness, and risk-taking. Interestingly, Market Dynamics alone is not statistically significant at the conventional 0.05 threshold (B = 0.0720, p = .0874), indicating that its main effect on performance may be weak when considered in isolation. However, the interaction term (EO × Market Dynamics) is highly significant (B = 0.9117, $p < .001$), with a confidence interval (LLCI = 0.5705, ULCI = 1.2530) that does not include zero, confirming a strong and positive moderating effect. This implies that as Market Dynamics become more intense or volatile, the positive effect of EO on Business Performance becomes significantly stronger.

These findings are theoretically grounded in Dynamic Capability Theory, which argues that in rapidly changing environments, firms with adaptable strategic orientations—such as EO—can leverage their dynamic capabilities to reconfigure resources and seize market opportunities more effectively. Under conditions of high market turbulence, EO provides firms with the agility and innovativeness necessary to outperform competitors. The interaction between EO and Market Dynamics enhances firm performance, emphasizing that entrepreneurial firms thrive better in dynamic markets where their proactive and adaptive behaviors yield competitive advantages. For managers, this underscores the need to monitor market changes closely and foster an entrepreneurial culture that can respond swiftly to evolving external conditions.

5. Conclusions

The findings of this study offer compelling evidence that Entrepreneurial Orientation (EO) exerts a positive and significant influence on Business Performance among elite firms in Ghana. This underscores the critical role of entrepreneurial attributes such as innovation, risk-taking, and proactiveness in driving superior firm outcomes in dynamic business environments. Moreover, the results reveal that the relationship between EO and Business Performance is significantly moderated by Industry Type, Firm Age, and Market Dynamics. Specifically, Industry Type positively moderates the relationship, suggesting that the strength of EO's impact

on performance varies across different sectors, with some industries benefiting more from entrepreneurial behaviors than others. Similarly, Firm Age also positively moderates this relationship, indicating that more mature firms may be better positioned to leverage their accumulated experience and resources in applying entrepreneurial strategies effectively. Finally, Market Dynamics positively moderate the EO–performance linkage, emphasizing that firms operating in highly dynamic and volatile markets gain greater performance benefits from entrepreneurial orientation, consistent with the tenets of Dynamic Capability Theory. The study affirms that Entrepreneurial Orientation is a key strategic posture for enhancing business performance, and its effectiveness is contingent on contextual factors such as industry environment, organizational maturity, and external market conditions. These insights highlight the importance for managers and policymakers to align entrepreneurial strategies with organizational and environmental realities to achieve optimal performance outcomes.

5.1 Managerial Implications

The empirical evidence showing a positive and significant effect of Entrepreneurial Orientation (EO) on Business Performance, along with the positive moderating roles of Industry Type, Firm Age, and Market Dynamics, carries several strategic implications for managers of elite firms, particularly within the Ghana Club 100 context. Managers should deliberately foster EO by promoting a culture of innovation, risk-taking, and proactiveness. These behaviors have been shown to directly improve firm performance. Investments in entrepreneurial training, cross-functional teams, and incentive systems that reward innovation can help institutionalize EO across the organization. Managers should deliberately foster EO by promoting a culture of innovation, risk-taking, and proactiveness. These behaviors have been shown to directly improve firm performance. Investments in entrepreneurial training, cross-functional teams, and incentive systems that reward innovation can help institutionalize EO across the organization. Given that Industry Type positively moderates the EO–performance relationship, managers must tailor their entrepreneurial initiatives to their specific industry dynamics. For instance, firms in technology-driven or service-oriented sectors may gain greater benefits from aggressive EO strategies compared to firms in more regulated or traditional sectors. Managers should benchmark entrepreneurial practices against industry leaders and adopt sector-specific innovations.

The positive moderating effect of Firm Age suggests that older firms can use their accumulated knowledge, networks, and organizational routines to enhance the effectiveness of EO. Managers in mature firms should capitalize on historical insights and industry experience to guide entrepreneurial ventures, while also avoiding the inertia that sometimes accompanies firm maturity. Since Market Dynamics strengthen the EO–performance link, firms operating in rapidly changing or uncertain environments should be especially entrepreneurial. Managers need to continuously scan the external environment, use real-time market intelligence, and adopt agile decision-making processes to adjust their strategies quickly. EO becomes even more critical in volatile markets as a tool to exploit emerging opportunities and mitigate threats. These findings highlight the importance of contingency-based strategic management. Managers must recognize that the performance impact of EO is not uniform across all contexts. Strategic choices should consider industry norms, organizational maturity, and environmental turbulence to effectively harness the benefits of EO.

5.2 Policy Implications

The findings that Entrepreneurial Orientation (EO) has a positive and significant effect on Business Performance, and that this relationship is positively moderated by Industry Type, Firm Age, and Market Dynamics, present critical insights for policymakers aiming to foster sustainable economic development and business competitiveness, particularly within emerging economies like Ghana. Policymakers should implement sector-specific entrepreneurship support programs that align with the varying needs of different industries. Since Industry Type influences the EO–performance link, policies should avoid a one-size-fits-all approach. For example, incentives for EO in manufacturing may differ from those required in service or ICT sectors. Tailored subsidies, innovation grants, and regulatory reforms can boost entrepreneurial activity where it is most impactful. The finding that Firm Age positively moderates the EO–performance relationship suggests that mature firms have advantages in leveraging EO. Policymakers should therefore create policies that promote the long-term survival and maturity of businesses through access to affordable long-term financing, mentorship programs, and business continuity planning. Support for intergenerational succession and knowledge transfer in firms can also help maintain EO-driven performance in older organizations.

Given that market dynamics intensify the EO–performance relationship, there is a need for policies that encourage adaptive capabilities among firms. Government institutions such as trade ministries and industry associations can facilitate market intelligence dissemination, support digital transformation, and promote adaptive innovation systems. This ensures firms are better equipped to respond quickly to changes in consumer demand, technology, and competition. To amplify the effect of EO, policymakers should invest in building a robust entrepreneurial ecosystem that includes business incubation centers, innovation hubs, venture capital funding, and entrepreneurship education at all levels. This ecosystem can provide the structural support required for EO to flourish across firms of all sizes and ages. Policymakers should also strive to create a regulatory environment that allows entrepreneurial initiatives to thrive. Reducing bureaucratic red tape, simplifying business registration, and improving intellectual property rights enforcement are key measures that can stimulate entrepreneurial activity, especially in dynamic and competitive markets.

5.3 Theoretical Contributions

This study reaffirms and extends the EO-performance nexus within the context of an emerging economy—Ghana, contributing to the growing body of knowledge that validates EO as a strategic orientation that enhances business outcomes. While previous research predominantly focused on Western economies, this study contextualizes EO within the unique institutional, market, and resource constraints of developing countries, thereby broadening the geographic and economic relevance of EO theory. The inclusion of Industry Type as a moderator introduces a sector-specific lens to the EO-performance discourse. The findings demonstrate that the EO-performance relationship is not uniform across industries, suggesting that industry-specific dynamics such as capital intensity, innovation requirements, or customer sophistication shape the efficacy of EO. This insight contributes to contingency theory by confirming that strategic orientations like EO must be aligned with external industry conditions to optimize outcomes.

By showing that Firm Age positively moderates the EO-performance relationship, the study offers support to Organizational Life Cycle Theory, which posits that firms at different developmental stages face distinct strategic and operational challenges. Older firms may possess more resources, capabilities, and market experience to effectively leverage EO, reinforcing the idea that temporal maturity influences how entrepreneurial strategies translate into performance gains. The finding that Market Dynamics enhance the EO-performance relationship supports the Dynamic Capability Theory, which emphasizes the importance of sensing, seizing, and transforming in volatile environments. EO acts as a dynamic capability that enables firms to adapt proactively to changing market conditions. This contribution bridges EO literature with dynamic capabilities by showing that market turbulence is not merely a threat, but a condition that can amplify EO's effectiveness. The combined analysis of multiple moderators (industry, age, market dynamics) within a single empirical framework advances theoretical clarity by demonstrating how multiple contextual variables interact with EO to influence business performance. This integrated perspective encourages future research to adopt more holistic models that reflect the complexity of real-world strategic management.

5.4 Recommendations

Firms should actively cultivate entrepreneurial orientation by fostering innovativeness, risk-taking, and proactiveness in their operations. Senior executives and owners must integrate these dimensions into strategic planning to improve competitive positioning and performance outcomes. Since industry type moderates the EO–performance relationship, firms should align their entrepreneurial strategies with the nature of their industry. For example, firms in dynamic and innovation-driven industries (e.g., technology or services) should prioritize rapid product development and market responsiveness, whereas firms in more traditional industries (e.g., manufacturing) may focus on process improvements and incremental innovation. Older firms are better positioned to benefit from EO due to their institutional knowledge, resource base, and established networks. Therefore, established firms should strategically apply their accumulated experience to support entrepreneurial initiatives and create new value streams without compromising existing operations.

Given that market dynamics strengthen the EO–performance relationship, firms should invest in market intelligence systems and continuously analyze shifts in customer preferences, competition, and regulatory environments. This will enable proactive responses and help firms to remain resilient and competitive in changing environments.

Organizations should strengthen internal structures such as strategic management, R&D, and learning culture to better implement entrepreneurial strategies. This enhances firms' ability to navigate complex environments and fully harness the benefits of EO. Government agencies and business development organizations should design sector-specific entrepreneurial support programs, especially in industries with low EO adoption. Support may include training, tax incentives, and innovation grants tailored to firm age and industry dynamics.

5.5 Limitations and suggestions for future studies

The study adopted a cross-sectional design, which captures relationships at a single point in time. This limits the ability to make causal inferences about how EO influences performance over time. The research focused solely on elite companies within the Ghana Club 100, which may not represent the broader population of SMEs or startups. This restricts the generalizability of the findings to other organizational contexts or countries. Future studies should consider using longitudinal data to assess how EO evolves and affects firm performance over time, especially during critical stages of growth or market disruption. Researchers should examine a more diverse range of firms, including startups, informal businesses, and non-elite firms, to enhance the external validity of findings and understand EO's effects across different sectors and organizational sizes.

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