










“Three-way interaction effect of entrepreneurial orientation, CEO power, and organizational slack on Indonesian firms’ performance”

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THREE-WAY INTERACTION EFFECT OF ENTREPRENEURIAL ORIENTATION, CEO POWER, AND ORGANIZATIONAL SLACK ON INDONESIAN FIRMS' PERFORMANCE

Abstract

This study aims to explore the complex interplay between entrepreneurial orientation, CEO power, and organizational slack, and their collective impact on firm performance within Indonesia's manufacturing sector, providing actionable insights to optimize operations in a dynamic, resource-constrained environment. The paper employs a longitudinal approach, utilizing dynamic panel data from 127 publicly-traded manufacturing companies listed on the Indonesia Stock Exchange from 2014 to 2022, focusing on this sector due to its significant role in Indonesia's economy and the unique challenges these firms face in adapting to market changes and competitive pressures. The study initially found that entrepreneurial orientation did not significantly influence firm performance. However, when CEO power was introduced into the analysis, it significantly, albeit negatively, moderated the effect of entrepreneurial orientation, suggesting that higher CEO power may actually diminish beneficial impacts of entrepreneurial orientation on performance ($\beta = -48.041, p < 0.05$). Importantly, the analysis revealed that organizational slack can positively interact with both entrepreneurial orientation and CEO power, mitigating this negative influence and enhancing firm performance ($\beta = 15.261, p < 0.05$). These findings illuminate the complex interdependencies within strategic management, underscoring the necessity of aligning upper echelon power dynamics with organizational resources. This alignment is crucial for leveraging the full potential of entrepreneurial orientation to enhance firm performance.

Keywords

manufacturing industry, corporate governance, business performance, resource constraints, power dynamics, strategic leadership, emerging economy, entrepreneurial firm

JEL Classification

M10, M12, M21

INTRODUCTION

Understanding the impact of entrepreneurial orientation on firm performance necessitates a nuanced, context-specific approach, especially pertinent to the Indonesian manufacturing sector. Entrepreneurial orientation, encompassing innovativeness, risk-taking, and proactiveness, generally supports adaptability and competitiveness in dynamic environments (Hughes & Morgan, 2007; Wales, Patel, et al., 2013). However, its application in resource-constrained firms brings unique challenges. The distinct dimensions of entrepreneurial orientation – innovativeness, risk-taking, and proactiveness – can have varied performance outcomes, which highlights the need for firms to strategically prioritize some dimensions based on their specific context (Covin & Wales, 2019; Dai et al., 2014).

In exploring the intricate dynamics between entrepreneurial orientation and firm performance, the moderating roles of CEO power and organizational slack emerge as pivotal elements. The research underscores that CEO power can serve as a double-edged sword: while it has the potential to align entrepreneurial orientation with firm strategies effectively, it can also induce overconfidence, thereby diminishing the firm's resilience and skewing strategic alignment (Saiyed et al., 2023; Vanhees et al., 2023; Wong, 2020). This nuanced interplay suggests that the mere adoption of entrepreneurial orientation is insufficient for enhancing firm performance. Instead, a strategic approach, especially within the context of Indonesian manufacturing firms, necessitates a careful orchestration of entrepreneurial orientation that takes into consideration the specific dynamics of CEO power and the available organizational slack. Upper echelon plays a critical role in moderating these effects, with an excessive concentration of power at the CEO level being associated with potential risks to firm resilience (Wong, 2020).

Simultaneously, organizational slack represents a crucial factor that can either propel firms toward innovation or drag them into inefficiency, depending on their management (Chen et al., 2023; Li et al., 2023). Organizational slack, or the availability of excess resources, provides firms with the flexibility needed for innovation and adaptation (Wang, 2023). However, when not managed properly, it can lead to complacency and waste, highlighting the importance of finding an optimal balance. This balance is not only critical in terms of resource allocation but also in moderating the influence of CEO power on the effectiveness of entrepreneurial orientation. Insufficient slack, conversely, can restrict a firm's innovative capabilities by imposing too rigid resource constraints.

For firms within Indonesia's dynamic manufacturing sector, pinpointing the optimal blend of CEO power and organizational slack is essential to fully capitalize on entrepreneurial orientation and ensure sustainable performance. Research demonstrates the critical role of combining entrepreneurial orientation with transformational leadership to drive innovation and boost firm performance in Indonesia (Putra et al., 2020). Additionally, Peng et al. (2010) show that organizational slack can significantly enhance performance, particularly in private firms where CEO duality moderates this effect. Therefore, Indonesian manufacturing firms must strategically align CEO power with organizational resources to foster innovation, sustain growth, and remain competitive in a complex industry landscape.

1. LITERATURE REVIEW AND HYPOTHESES

Entrepreneurial orientation is increasingly recognized as a vital driver of business success, reflecting an organization's dedication to pioneering new ideas, boldly confronting uncertainties, and actively shaping market trends – an emphasis strongly corroborated by recent scholarly discussions in innovation and entrepreneurship (Altahat & Alnadi, 2024). Central to this orientation is innovativeness, which encourages firms to break from the norm and foster a culture of creativity for the introduction of new products and services, thereby enhancing a firm's competitive edge when synergized with other dimensions of entrepreneurial orientation (Capelleras et al., 2020; Shan et al., 2016). Alongside innovativeness, proactiveness and risk-taking are crucial, pushing firms to anticipate future markets and commit resources to

uncertain ventures, which positions them to seize first-mover advantages and embrace strategic daring as part of their core operations (Kreisser et al., 2010; Tang et al., 2008). Moreover, dimensions of competitive aggressiveness and autonomy, though less emphasized, significantly influence entrepreneurial orientation by driving firms to outperform rivals through ambitious strategies and enabling swift, flexible decision-making processes within the firm (Lechner & Gudmundsson, 2014). Together, these elements of entrepreneurial orientation not only shape a firm's strategic maneuvers but also underscore its overall performance in the competitive business landscape. It also highlights a firm's readiness for renewal, showing its ability to adapt to market conditions through proactive and innovative strategies that align well with market orientation, effectively enhancing customer attraction and securing long-term business success (Maharani et al., 2024; Silver et al., 2016).

Entrepreneurial orientation is increasingly acknowledged as a pivotal lever for boosting firm performance. Engelen et al. (2016) articulated how these core dimensions of entrepreneurial orientation contribute directly to enhancing organizational competitiveness and growth, thereby offering a robust conceptual framework that intertwines entrepreneurial orientation and strategic behaviors with measurable performance outcomes. The relationship between entrepreneurial orientation and performance is further clarified by Galbreath et al. (2020), who demonstrate that while differentiation strategies enhance the effects of entrepreneurial orientation within the Italian context, cost-leadership strategies may undermine them, indicating that the benefits of entrepreneurial orientation are substantial yet dependent on specific strategic alignments and competitive dynamics in each market. Anwar et al. (2022) confirm that high entrepreneurial orientation significantly enhances opportunity recognition and performance in new ventures, underscoring its role as a vital driver of success in emerging markets and reaffirming its status as a critical precursor to firm performance.

In emerging markets, the volatility and unpredictability inherent to these environments can modify the relationship between entrepreneurial orientation and firm performance. The distinct economic and cultural landscapes in these markets can either amplify or mitigate the effects of entrepreneurial orientation strategies. Focusing on the role of moderating variables in this relationship is crucial, as these can significantly shape the outcomes of entrepreneurial orientation initiatives. For instance, market dynamism, external support, and broader environmental influences act as crucial moderators that either amplify or limit the potential advantages derived from entrepreneurial orientation within emerging markets. Boso et al. (2013) emphasize the importance of market dynamism as a moderator, illustrating that in highly dynamic markets, the proactive component of entrepreneurial orientation becomes particularly beneficial. This dynamism allows firms to leverage their innovative capabilities to adapt rapidly to changing conditions, thus improving performance outcomes (Story et al., 2015). In addition, Cui et al. (2018) highlight how institutional transitions in emerging economies can further moder-

ate this relationship by reshaping market-supporting institutions that govern economic transactions and resource allocation, thus influencing the competitive distinctiveness of firms and ultimately impacting firm performance. Environmental factors critically influence entrepreneurial orientation and firm performance, as Basco et al. (2020) illustrate, by showing how varying legal, institutional, and cultural contexts shape firm behavior and strategic decision-making in emerging markets.

While prior research has adeptly identified external moderators, it is also critical to consider internal factors that significantly influence the relationship between entrepreneurial orientation and firm performance. A pivotal element influencing this relationship resides in the intricacies of leadership and strategic decisions of an organization. Within the realm of upper-echelon research, the impact of CEO power on firm performance has been a long-standing topic of investigation (Combs et al., 2007; Daily & Johnson, 1997; Gala & Kashmiri, 2022). CEOs hold significant influence over resource allocation (Anderson & Berdahl, 2002) and strategic decision-making (Humphery-Jenner et al., 2022). However, agency theory suggests that excessive concentration of power may lead to self-serving behaviors and suboptimal decisions (Eisenhardt & Bourgeois III, 1988). In the context of Indonesia's manufacturing sector, where collective cultural dimensions and collaborative decision-making are esteemed, the pronounced power of a CEO can result in resistance to change and a reluctance to embrace the innovative and risk-taking elements of entrepreneurial orientation. Such resistance can be especially pronounced when shareholder power is concentrated within a tenured CEO, potentially stifling the entrepreneurial dynamism that entrepreneurial orientation seeks to instill within an organization.

The consolidation of authority within the CEO role can substantially affect the efficacy with which a firm harnesses its entrepreneurial impetus (Cao et al., 2015). While visionary leadership is indispensable for steering and synchronizing entrepreneurial orientation with organizational objectives, an excess or unmonitored concentration of power in the CEO's hands may paradoxically hinder the very innovation and adaptability that entrepreneurial orientation seeks to cultivate (Keil

et al., 2017). Moreover, CEO psychological traits can significantly shape how entrepreneurial strategies are implemented. Characteristics like assertiveness, self-efficacy, and even narcissism, often associated with powerful CEOs, can either amplify or hinder the potential benefits of entrepreneurial orientation (Engelen et al., 2016; Palmer et al., 2019; Wales, Gupta, et al., 2013). For instance, an overly assertive or narcissistic CEO might stifle the collaborative and adaptable decision-making that underpins successful entrepreneurial orientation implementation. This is particularly relevant to the manufacturing context, where precision and reliability are often highly valued alongside innovation.

In a sector characterized by systematic processes and gradual innovation, the assertive influence of a powerful CEO can paradoxically constrain the organization's entrepreneurial spirit. The protective instincts that accompany CEO duality roles may further insulate the firm from market signals, inhibiting the proactive stance that is the lifeblood of entrepreneurial orientation (Finkelstein, 1992; Gala & Kashmiri, 2022). The tenure of a CEO, encapsulated in the findings of Boling et al. (2016), provides a longitudinal perspective on CEO power. It suggests that while the initial stages of a CEO's tenure might be marked by vigorous entrepreneurial orientation activities, the inflection point arrives when the CEO's entrenched power begins to overshadow the entrepreneurial zeal, causing a decline in performance as the organization becomes less responsive to market imperatives. Powerful CEOs, focused on decisive actions, stifle the innovation they intend to foster (Zavertiaeva & Ershova, 2022). Unchallenged decision-making can quell the diverse perspectives crucial for successful entrepreneurial endeavors (Gala & Kashmiri, 2022). This concern is amplified in Indonesian manufacturing, where the emphasis on operational efficiency might make risk-taking less culturally ingrained. Additionally, Indonesian firms' dependence on stakeholder support and the need to maintain a good reputation could influence how CEOs choose to exercise their power (Leuz & Oberholzer-Gee, 2006).

While a firm's entrepreneurial orientation can drive innovation and growth, its effectiveness is often contingent on the power dynamics within

the organization. However, a crucial factor can alter this dynamic: the presence of significant organizational slack, particularly financial slack (Marino et al., 2008; Wang, 2023; Zhang et al., 2021). Excess financial resources grant CEOs flexibility, restoring a degree of autonomy often stifled in high-power environments. This allows entrepreneurial CEOs to pursue innovative opportunities with greater freedom (Mousa & Chowdhury, 2014). Interestingly, while slack mitigates some of the constraints of CEO power, it can also decrease the CEO's focus on stakeholder engagement due to reduced dependence on these external relationships (Wong, 2020). Organizational slack alone will not transform a CEO lacking entrepreneurial drive into a strategic risk-taker. Rather, high slack acts as a powerful buffer against the limitations of a high-power environment (Zhang et al., 2021). It unlocks CEOs suppressed entrepreneurial tendencies, making them more responsive to stakeholder needs as well (Wong, 2020). However, excess slack can signal inefficiencies and decrease a firm's sense of urgency to innovate (Shaikh et al., 2018). This means CEOs must strike a balance when utilizing this resource. Restoring autonomy is a key advantage of organizational slack for high-power CEOs. It empowers them to implement entrepreneurial strategies involving experimentation and collaborative approaches, even if such initiatives initially contradict the norms of sole authority. Slack provides the space and support that allows CEOs to maintain flexibility in decision-making and express their entrepreneurial inclinations while remaining respectful of the cultural importance of CEO power.

The multifaceted nature of entrepreneurial orientation underscores its potential to drive innovation and competitive advantage within dynamic markets. However, the effectiveness of entrepreneurial orientation is often contingent on a complex interplay of internal factors. Power dynamics, specifically the concentration of power within the CEO role, can significantly influence how a firm leverages its entrepreneurial drive. Moreover, the presence of organizational slack can act as a powerful modulator, either restoring autonomy for entrepreneurial CEOs or creating a sense of complacency that hinders proactive and innovative behaviors. This study investigates the complex interplay between entrepreneurial orientation,

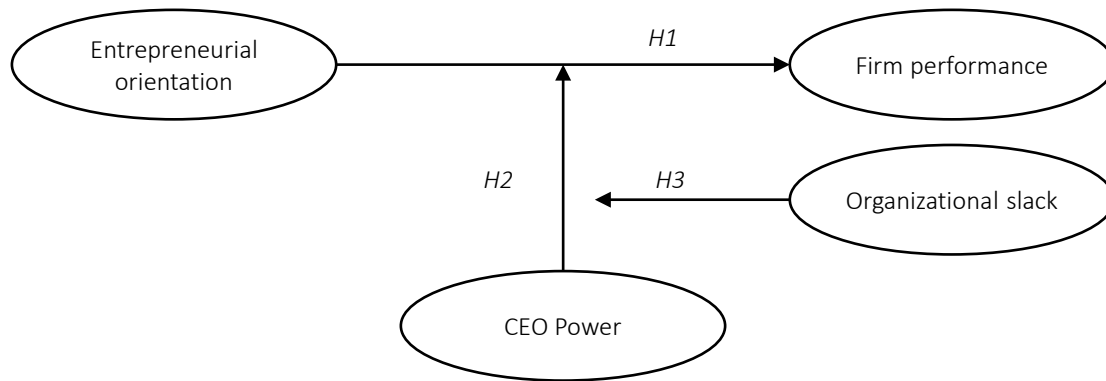


Figure 1. Research model

CEO power, and organizational slack within the Indonesian manufacturing sector, aiming to understand how these factors collectively influence firm performance and provide actionable insights for firms in a dynamic, resource-constrained environment.

Considering the research framework (Figure 1) and the established variables, this study investigates the complex interplay between entrepreneurial orientation, CEO power, and organizational slack within the Indonesian manufacturing sector. The following research hypotheses have been designed:

- H1: Entrepreneurial orientation is positively related to firm performance.*
- H2: CEO power negatively moderates the relationship between entrepreneurial orientation and firm performance.*
- H3: The negative moderation effect of CEO power on the relationship between entrepreneurial orientation and firm performance is weaker when organizational slack is high.*

2. METHOD

The study analyzes data from 127 Indonesian manufacturing firms listed on the Indonesia Stock Exchange between 2014–2022. Firms are selected from three industry sub-segments: 57 firms from basic and chemical, 34 firms from consumer products, and 36 firms from miscellaneous industries. The analysis involves a detailed scrutiny

of annual reports, utilizing computer-aided text analysis to quantify entrepreneurial orientation and measuring CEO power through indicators like CEO tenure, shareholding, and duality. It also accurately assesses organizational slack. This thorough methodology will provide a nuanced understanding of the relationship between entrepreneurial orientation and firm performance.

This paper, using dynamic panel data from 2014 to 2019, measures the interaction between entrepreneurial orientation, CEO power, and organizational slack to understand their continued influence on firm performance from 2020 to 2022. To effectively address these complexities, the study employed a two-step System Generalized Method of Moments (System-GMM) estimation, utilizing STATA 14 for the analysis. The two-step system-GMM method was chosen due to its robust capabilities in handling dynamic panel models, which are particularly well-suited for datasets characterized by a larger number of firms (N) compared to the number of time periods (T) (Roodman, 2009). Such an approach not only enhances the reliability of the results but also ensures adherence to recommended practices for maintaining model validity in complex longitudinal datasets similar to those used in this study.

To test the hypotheses, three models are examined. Model 1 establishes the direct link between entrepreneurial orientation and firm performance, hypothesizing that firms with greater entrepreneurial orientation will demonstrate superior performance. Model 2 introduces CEO power as a potential moderator, positing that higher CEO power may weaken the positive relationship between entrepreneurial orientation and firm

performance, potentially due to misaligned priorities or excessive risk-taking. Model 3 expands the analysis further by incorporating organizational slack as a second-order moderator. The analysis explores whether the potentially negative moderating effect of CEO power on the entrepreneurial orientation and performance relationship is influenced by a firm's level of organizational slack. Consequently, the equations for the dynamic panel data using a two-step GMM model are structured as follows:

$$FP_{it} = \alpha_{it} + b_1 FP_{it-1} + b_2 EO_{it} + b_3 C_{it} + e_{it}, \quad (1)$$

$$FP_{it} = \alpha_{it} + b_1 FP_{it-1} + b_2 EO_{it} + b_3 CEOPower_{it} + b_4 EO_{it} \cdot CEOPower_{it} + b_5 C_{it} + e_{it}, \quad (2)$$

$$FP_{it} = \alpha_{it} + b_1 FP_{it-1} + b_2 EO_{it} + b_3 CEOPower_{it} + b_4 OS_{it} + b_5 EO_{it} \cdot CEOPower_{it} + b_6 EO_{it} \cdot CEOPower_{it} \cdot OS_{it} + b_7 C_{it} + e_{it}. \quad (3)$$

where the study examines entrepreneurial orientation (EO_{it}), CEO power ($CEOPower_{it}$), and organizational slack (OS_{it}) in shaping firm performance (FP_{it}). The investigation focuses on the impact of entrepreneurial orientation on firm performance, and then examines how this relationship changes based on CEO decision-making authority ($EO_{it} \cdot CEOPower_{it}$). Additionally, a three-way interaction ($EO_{it} \cdot CEOPower_{it} \cdot OS_{it}$) explores if organizational slack influences the moderating effect of CEO power on the entrepreneurial orientation-performance link. This nuanced focus reveals the context-dependent nature of these relationships and crucial insights into strategic posture and power dynamics. Subscript “ i ” denotes firm-level data, “ t ” the time dimension (year). This study adopts a multi-dimensional approach to measure firm performance, focusing on the long-term impacts of entrepreneurial orientation. Firm performance is evaluated using longitudinal analyses, which include metrics, such as return on equity, sales growth, and market-to-book value averaged over a three-year period ($t+1$ to $t+3$) (Combs et al., 2005). This approach captures the delayed effects of entrepreneurial orientation. Entrepreneurial orientation is quantified using com-

putational text analysis of publicly available documents, such as CEO shareholder letters and management discussion and analysis sections (Short et al., 2010). By analyzing the frequency of keywords related to innovativeness, proactiveness, and risk-taking, the study gauges a firm's annual focus on entrepreneurial orientation, providing an indirect measure of its strategic posture.

Further, CEO power is conceptualized and measured through three dimensions: structural power, ownership power, and expert power, based on role multiplicity, equity held, and tenure, respectively (Tang et al., 2011). This study excludes prestige power due to its reduced relevance in current research contexts (Combs et al., 2007). Organizational slack is operationalized using the current ratio to reflect a firm's short-term liquidity and resource agility (Terry Mousa & Chowdhury, 2014). Several control variables are integrated to ensure the robustness of the findings, including firm size, firm age, a performance crisis indicator, research and development investment, and market uncertainty. These measures collectively provide a comprehensive framework to explore the intricate dynamics between firm strategies, leadership influence, and performance outcomes in a nuanced and empirically robust manner.

3. RESULTS

Appendix A shows a detailed descriptive overview of the means, standard deviations, and correlations of variables. Table 1 presents the results of the system-GMM analysis, starting with Model 0 to establish the baseline effects of control variables on firm performance. Interestingly, Model 1 reveals a positive but statistically insignificant relationship between entrepreneurial orientation and firm performance ($\beta = 3.717, p > 0.10$). This finding rejects Hypothesis 1 and challenges the assumption of a universally positive link between entrepreneurial orientation and performance. It highlights the context-dependent nature of entrepreneurial orientation's impact on performance, particularly within emerging economies like Indonesia's manufacturing sector. This result suggests that the direct impact of entrepreneurial orientation on performance may be less pronounced in this specific context, necessitating a deeper exploration of other factors that could influence this relationship.

Table 1. Two-step system-GMM results on firm performance

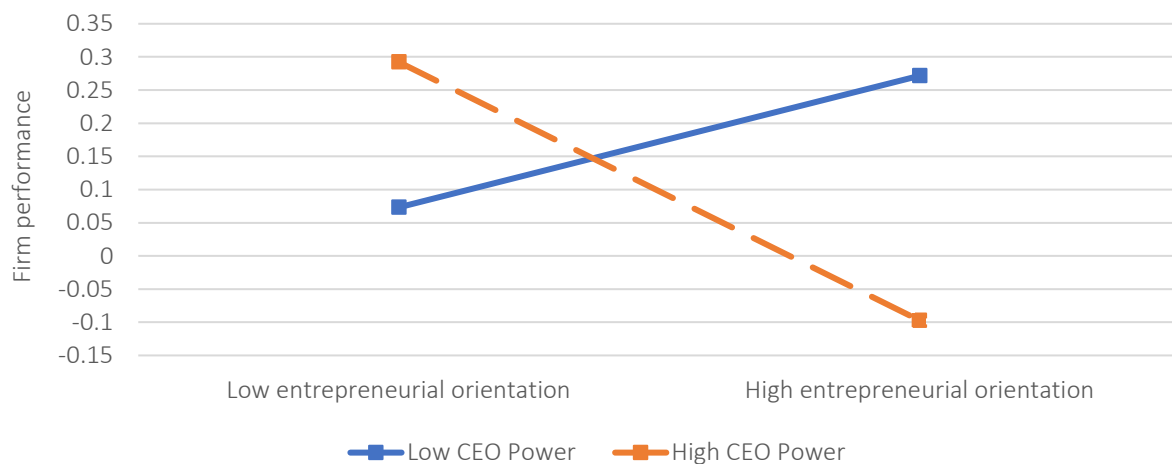
Variable	Model 0		Model 1		Model 2		Model 3	
Firm size	0.089**	(0.033)	0.090**	(0.033)	0.009**	(0.004)	0.090**	(0.037)
Research and development	0.000**	(0.000)	0.000**	(0.000)	0.000**	(0.000)	0.000**	(0.000)
Firm age	0.009**	(0.004)	0.009**	(0.004)	0.009**	(0.005)	0.009**	(0.005)
Market uncertainty	0.154*	(0.080)	0.154*	(0.079)	0.152*	(0.087)	0.151*	(0.087)
Performance crisis	0.482	(0.470)	0.478	(0.469)	0.546	(0.479)	0.567	(0.517)
Entrepreneurial orientation			3.717	(12.458)	43.129*	(24.792)	48.123*	(25.152)
CEO power					0.164*	(0.088)	0.165*	(0.088)
Organizational slack							-0.030	(0.023)
Entrepreneurial orientation *CEO Power					-48.041**	(22.179)	-82.921**	(28.565)
Entrepreneurial orientation *CEO Power*Organizational slack							15.261**	(5.847)
N	635		635		635		635	
Wald χ^2	1058.86**		1068.10**		981.27**		1187.63**	
Hansen (<i>p</i> -value)	0.504		0.502		0.532		0.503	
AR (1)	0.000		0.000		0.000		0.000	
AR (2)	0.330		0.322		0.323		0.326	
Group	127		127		127		127	
Instrument	15		16		18		20	

Note: **Significant at 5%; *Significant at 10%.

Model 2 supports Hypothesis 2, demonstrating that CEO power significantly moderates the relationship between entrepreneurial orientation and firm performance. While both entrepreneurial orientation ($\beta = 43.129$, $p < 0.10$) and CEO power ($\beta = 0.164$, $p < 0.10$) independently exhibit positive associations with performance, their interaction reveals a crucial dynamic. The significant negative interaction between CEO power and entrepreneurial orientation ($\beta = -48.041$, $p < 0.05$) indicates that as CEO power increases, the positive effect of entrepreneurial orientation on firm performance diminishes. Figure 2 visually reinforces these findings, highlighting the interaction effect. Interestingly, when entrepreneurial orientation is low, high CEO power

er seems to have a compensatory effect, leading to the highest peak in firm performance. However, as entrepreneurial orientation increases, the positive slope representing the entrepreneurial orientation and performance relationship becomes less steep.

This suggests that entrepreneurial orientation might be particularly potent within environments where power is less centralized. However, as CEO power intensifies, there is a trade-off: high CEO power in itself seems to enhance firm performance, but it simultaneously diminishes the positive impact that entrepreneurial orientation has on the outcome. These results raise an intriguing duality: while powerful CEOs might bring certain

**Figure 2.** Interaction of entrepreneurial orientation and CEO power on firm performance

advantages, perhaps a more distributed approach is better suited to fully harness the dynamic and sometimes disruptive potential of high entrepreneurial orientation. Conversely, the findings suggest that firms with less inherent entrepreneurial orientation might especially benefit from the direction and decisive action that can be associated with high CEO power.

To test Hypothesis 3, a moderated moderation analysis was conducted to examine the three-way interaction effect of entrepreneurial orientation, CEO power, and organizational slack on firm performance (Model 3). The analysis revealed a significant positive interaction among these variables, indicating that the combined influence of entrepreneurial orientation, CEO power, and organizational slack enhances firm performance ($\beta = 15.261, p < 0.05$). This supports Hypothesis 3 and reveals a complex yet crucial dynamic. Figure 3 visually demonstrates that when firms exhibit low levels of entrepreneurial orientation, the highest firm performance occurs when CEO power is high and organizational slack is low. This suggests that when firms lack a strong entrepreneurial drive, a decisive leadership style with centralized decision-making, coupled with limited excess resources, can lead to better performance outcomes. In this scenario, it is possible that the firm benefits from a more focused and streamlined approach. Conversely, low entrepreneurial orientation combined with low CEO power and high organizational slack seems to create the least favorable conditions for performance. This in-

dicates that without strong leadership or inherent entrepreneurial drive, an abundance of resources can lead to a lack of direction, inefficiency, and hindered performance.

When firms exhibit high levels of entrepreneurial orientation, the results align more closely with expectations. The most significant positive impact of entrepreneurial orientation on firm performance occurs when CEO power is low and organizational slack is high. This underscores the importance of distributed decision-making and a less centralized power structure when a firm is highly entrepreneurial. Moreover, the presence of abundant resources allows these firms to take calculated risks, pursue innovative opportunities, and experiment without the fear of immediate repercussions. In contrast, the combination of high CEO power and low organizational slack presents the most challenging environment for firms with high entrepreneurial orientation. The excessive concentration of power stifles the innovation, risk-taking, and proactive strategies that a high entrepreneurial orientation typically fosters. Limited resources further constrain the firm's capacity to act on its entrepreneurial impulses.

4. DISCUSSION

The entrepreneurial orientation and performance relationship, while robust in developed economies (Davis et al., 2010; Rauch et al., 2009; Soares & Perin, 2020), demands a more context-specific

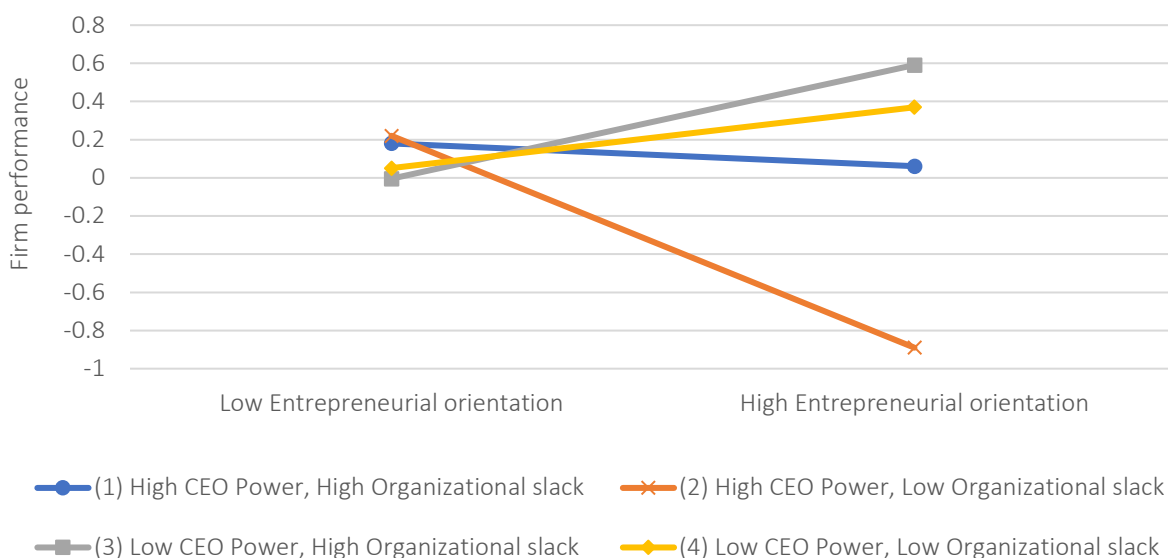


Figure 3. Three-way interaction of entrepreneurial orientation, CEO power, and organizational slack

lens in emerging markets like Indonesia. The findings from the Indonesian manufacturing sector challenge the conventional assumption of a universally positive link between entrepreneurial orientation and firm performance. This indicates that the effectiveness of entrepreneurial strategies may vary significantly depending on regional economic conditions and sector-specific dynamics, underscoring the need for a nuanced understanding of entrepreneurial orientation role in different market environments. The analysis of Indonesian manufacturing firms shows no significant relationship between entrepreneurial orientation and firm performance. This finding is consistent with similar studies, such as McGee and Peterson (2019) in the US and Chaston and Sadler-Smith (2012) in the UK, both of which found no significant relationship between entrepreneurial orientation and firm performance across various business contexts. These findings suggest that the relationship between entrepreneurial orientation and firm performance may be influenced by contextual factors and does not universally guarantee improved performance. This observation contrasts with studies in Indonesian SMEs (Erista et al., 2020), which highlight the dominant impact of innovativeness and risk-taking on firm success. The discrepancy suggests that the influence of entrepreneurial orientation may vary significantly across different firm sizes and market contexts, indicating a more complex interplay of factors at play in larger manufacturing firms compared to smaller enterprises.

This study underscores the profound influence of institutional factors on how entrepreneurial strategies function within manufacturing firms in emerging economies. While some studies emphasize the indirect, primarily innovation-driven impact of entrepreneurial orientation on performance (Wahyuni & Sara, 2020), this study revealed a more complex and context-dependent relationship. This aligns with a growing recognition that entrepreneurial orientation alone may not be sufficient for performance gains, particularly as firms mature and external influences intensify (Silver et al., 2016). Specifically, this study highlights that Indonesian manufacturing firms may struggle to fully leverage the benefits of entrepreneurial orientation, suggesting the need for tailored strategies that consider the unique challenges and opportunities within this market con-

text (Neneh & Van Zyl, 2017; Susanto et al., 2017). These constraints necessitate adaptive entrepreneurial strategies tailored to the specific institutional landscape. Moreover, institutional support systems in emerging economies may differ from the developed markets, influencing how firms access resources, navigate regulations, and build innovation ecosystems. This could introduce additional complexity in translating entrepreneurial orientation into tangible performance gains (Altahat & Alnadi, 2024; Silver et al., 2016).

While CEO power offers advantages, such as decisive strategic action and enhanced resource allocation (Engelen et al., 2016), the findings highlight potential drawbacks in fostering an entrepreneurial climate. A concentration of power at the top risks limiting bottom-up initiatives, diverse perspectives, and the experimentation inherent in entrepreneurial orientation. This echoes concerns raised by Eisenhardt and Bourgeois III (1988), who noted how excessive power can lead to sub-optimal decision-making. Furthermore, in the Indonesian manufacturing context, where operational efficiency is highly valued, a powerful CEO might prioritize rigid structures and minimize the type of risk-taking and experimentation vital to entrepreneurial orientation success (Pratono, 2018). This tension between traditional management expectations and entrepreneurial orientation strategies could be particularly pronounced when decision-making rests heavily on a single individual, indicating a complex interplay between leadership style and entrepreneurial success in specific cultural and industrial settings.

The findings suggest that high CEO power can undermine the positive link between entrepreneurial orientation and firm performance. This observation aligns with theoretical perspectives on power dynamics within organizations, indicating that excessive concentration of decision-making authority may inhibit the flexibility and initiative typically associated with entrepreneurial orientation, thus affecting overall firm outcomes negatively. Hambrick and Mason's (1984) upper echelons theory emphasizes how the dispositions and decisions of top executives significantly shape outcomes. Specifically, an overemphasis on CEO power can stifle the collaborative decision-making that fuels innovation (Naaman & Sun, 2022). This

risk is further supported by Humphery-Jenner et al.'s (2022) view of power as the ability to control or withhold resources, potentially restricting the flow of ideas and resources essential to entrepreneurial initiatives. Additionally, the approach/inhibition theory of power (Keltner et al., 2003) suggests that CEOs with high power may overemphasize reward-seeking behavior, neglecting necessary risk assessments that temper entrepreneurial strategies.

Excess resources, particularly organizational slack, transform the landscape for CEOs with entrepreneurial inclinations (Mousa & Chowdhury, 2014). Slack restores a degree of autonomy essential for entrepreneurial action, counteracting the constraints of a high-power environment (Wong, 2020). Interestingly, slack may also decrease CEO focus on stakeholder engagement if the firm becomes less dependent on these external relationships (Wang, 2023). This shift enables CEOs to make bold decisions that align with their entrepreneurial inclinations, potentially leading to superior performance outcomes. However, it is essential to recognize that slack alone will not transform CEOs lacking entrepreneurial drive. It acts as a powerful buffer against the limitations of high-power leadership structures. Excess slack also carries potential downsides, signaling inefficiencies (and potentially diminishing a firm's innovation urgency) (Alessandri et al., 2014; Guha, 2016). The optimal approach is a strategic balance

with enough slack to empower CEOs and foster experimentation while ensuring a sense of accountability and fostering collaboration, which is crucial in Indonesia's manufacturing context.

This study delves into the complex relationships between entrepreneurial orientation, CEO power, and organizational slack, significantly broadening the scope of upper echelons theory. It identifies the dual nature of CEO power, acting as both a facilitator for decisive actions and a constraint on innovation, especially in settings that favor widespread initiative-taking (Davis et al., 2010; Saiyed et al., 2023). Additionally, this study re-frames organizational slack as a strategic asset, empowering entrepreneurial leaders with the flexibility to overcome the challenges of highly centralized power structures. By providing a buffer of resources, organizational slack allows for the exploration of new opportunities and adaptations to changes in the market, mitigating the restrictive effects of concentrated authority on innovation and proactive business strategies (Li et al., 2023). It also highlights the critical role of managing organizational slack effectively to sidestep potential inefficiencies (Wong, 2020). Through an in-depth examination of entrepreneurial orientation, power hierarchies, and resource management, this paper underscores the significance of context in devising successful firm strategies, thereby offering a richer theoretical perspective on how firms can navigate and flourish within these complex dynamics.

CONCLUSION

This study sought to unravel the complex interactions shaping the relationship between entrepreneurial orientation, CEO power, and organizational slack within the Indonesian manufacturing sector. The findings challenge the assumption of a universally positive link between entrepreneurial orientation and firm performance, highlighting the context-dependent nature of this relationship. Particularly in Indonesia's unique cultural and institutional environment, excessive CEO power can impede the innovation and adaptability that entrepreneurial orientation typically promotes. Organizational slack emerges as a crucial buffer, mitigating the constraints imposed by high-power CEO structures and enabling entrepreneurial agility. However, without proper oversight, excessive slack can lead to inefficiencies that detract from firm performance.

To advance the understanding of these dynamics, it is imperative to explore variations across different industries within the manufacturing sector and to investigate the impact of CEO personality traits on the effectiveness of entrepreneurial orientation. Future studies could also benefit from comparative analyses across various emerging markets to discern universal versus localized strategic implications. This broader perspective would enhance the strategic insights available to policymakers and business leaders in similar contexts, providing a clearer roadmap for leveraging entrepreneurial orientation effectively.

Further exploration into additional variables that could influence the relationship between entrepreneurial orientation and firm performance is warranted, as this analysis provides a solid foundation for such investigations. Future research could include strategic clarity, strategic responsiveness, and commitment unity as additional dimensions of entrepreneurial orientation. Moreover, the investigation of other potential mediators, such as strategic ambidexterity, strategic vigilance, and strategic foresight, could offer deeper insights into how firms can better navigate the complexities of emerging markets. Employing diverse research methodologies beyond questionnaires, such as interviews and mixed methods, will further enrich the robustness and applicability of the findings.

AUTHOR CONTRIBUTIONS

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APPENDIX A

Table A1. Descriptive statistic and correlation

No	Variable	Obs	Mean	Std. dev.	1	2	3	4	5	6	7	8	9
1	Firm size	762	14.735	1.558	1								
2	R&D	762	3,757.34	20,865.97	0.185**	1							
3	Firm age	762	39.315	14.179	0.133**	0.052	1						
4	Market uncertainty	762	0.950	0.367	-0.058	0.147**	-0.088**	1					
5	Performance crisis	762	0.428	0.495	0.087**	-0.058	-0.111**	-0.045	1				
6	Entrepreneurial orientation	762	0.004	0.002	-0.029	0.056	0.022	-0.002	-0.180	1			
7	CEO power	762	0.977	0.803	-0.132**	-0.021	-0.199**	-0.015	-0.011	-0.169**	1		
8	Organizational slack	762	2.259	2.059	-0.181**	0.095**	0.058	0.007	0.017	0.038	-0.095**	1	
9	Firm performance	762	0.675	1.610	0.151**	0.086	0.247**	-0.126**	-0.156**	0.099**	-0.157**	-0.007	1

Note: **Significant at 5%; *Significant at 10%.