27



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Entrepreneurial Orientation and Performance for Subcontracting Korean SMEs: The Role of Buyer-Supplier Relationship

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Abstract

Purpose: The main objective of this study is to examine the impact of entrepreneurial orientation (EO) on small and mediumsized enterprises' (SMEs) performance in the context of subcontracting buyer-supplier relation. Specifically, we seek to examine whether the power dynamics between buyer and supplier either support or hamper subcontracting SMEs' ability to effectively pursue EO for enhancing their performance. **Research design, data, and methodology:** We collected survey questionnaires from Korean SMEs that are certified with Inno-biz by the Korean Ministry of SMEs and Startups. The collected data was analyzed using SPSS 26 and AMOS to create an integrated model. **Result:** Based on the analysis, our findings indicate that the proactiveness and innovativeness dimensions of EO have a positive effect on the SMEs' performance. However, the risk-taking dimension of EO has a negative effect on performance. Additionally, buyer dependency exhibit both positive and negative moderating effects on different dimensions of EO. **Conclusion:** For SMEs that rely heavily on a particular buyer in terms of sale, pursuing innovativeness dimension of EO could lead to positive performance, while pursuing proactiveness dimension of EO had a negative moderating effect on performance.

Keywords : Entrepreneurial Orientation, Subcontracting SMEs, Buyer-Supplier Relationship, Business Group

JEL Classification Code : D22, M10, M31

1. Introduction

For many years, small and medium-sized enterprise (SME) have been recognized as an actor that plays a vital role in driving economic growth and national innovation (Audretsch & Keilbach, 2004; Wennekers & Thurik, 1999). Because of their internal resource constraints and enhance competitiveness, SMEs frequently form cooperative relationships with other firms externally. Such collaborative endeavors by SMEs have proven to be effective strategies

for leveraging partners' resources and knowledge, while strengthening its own core capabilities.

Cooperative relationships between SMEs and other entities offer a range of benefits. By collaborating with external partners, SMEs can access additional resources, knowledge, and technologies that they may not possess internally. For example, literature suggest that seeking external sources for open innovation can be more effective method for enhancing competitiveness rather than relying solely on internal capabilities.

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SMEs operating in East Asian economies, such as China, Japan, and South Korea, frequently establish a specialized business relationship called subcontracting with large buyer firms. Subcontracting involves a distinct form of outsourcing, wherein a subcontractor firm carries out specific tasks or processes for a buyer firm based on the provided specifications (Imrie, 1986). According to Cho (2014), approximately 50% of SMEs in East Asia are engaged in subcontracting contracts. The complexity of markets and intense competition by large business groups that are dominant in this region make subcontracting a valuable practice for SMEs.

From the supplier's perspective, engaging in transactions with larger buyers serves as a risk-sharing mechanism, reducing uncertainty arising from market fluctuations (Hancke, 1998; Lee et al., 2021). Concentrating transactions with powerful buyers can also lead to cost savings in marketing expenses and production inventory management, resulting in increased production efficiency. Furthermore, SMEs can tap into the capabilities of their buyers to enhance the supplier's technological ability.

While subcontracting relationships offer various advantages, they also pose significant challenges, particularly when SMEs become overly dependent on specific buyers such as large business groups, which are prevalent in East Asian countries (Cho, 2014). As the dependence on a single buyer increases, the supplier's bargaining power may diminish, leading to potential profit reductions of subcontracting SMEs through price reductions or discounts demanded by the buyer (Preffer & Salancik, 2003; Lee et al., 2021). Furthermore, investments made by suppliers for a specific buyer increase asset specificity in the business transactions, which in turn can also exacerbate the imbalance of bargaining power between buyer and supplier.

To mitigate such issues, subcontracting SMEs should enhance their product development capabilities to maintain their bargaining power toward buyer(s) at appropriate level. For instance, SMEs may pursue original design manufacturers (ODM) rather than original equipment manufacturers (OEM). This may allow SMEs to propose product specifications to buyers rather than merely accepting specifications from buyers. Such efforts would enhance SMEs' bargaining power and help them reduce asset specificity for a specific buyer effectively. For example, American company called Gore has developed Gore-Tex fabric, a specialty material with irreplaceable technology, and formed licensing agreements to outdoor brands around the world. They have built up hard-to-imitate competences for themselves and "set the rules of the game" in its industry by keeping the competition in their favor by dealing with buyers (Wathne & Heide, 2004).

Therefore, processing orders from buyers through subcontracting transactions is insufficient for SMEs. Instead,

they must actively try to transform current business transactions into cooperative partnerships with buyers rather than dependent one (Hingley, 2005; Irvine et al., 2016). Intermediary SMEs could form such a cooperative relationship with large buyers if they attain distinctive, specialized competences that buyers find challenging to develop internally.

In this perspective, entrepreneurial orientation (EO) becomes crucial for subcontracting SMEs to overcome these unique challenges dealing with large buyers (Atuahene-Gima & Ko, 2001). An entrepreneurial orientation refers to a strategic posture that prioritizes innovation, risk-taking, and proactiveness in an organization's decision-making processes (Covin & Slevin, 1989; Brouthers et al., 2015). EO can help SMEs to differentiate themselves and generate new business opportunities with new innovative products, and adapt to changing market conditions quickly rather than relying on current business transactions and business partners (Cho, 2021; Jeong et al., 2006; Knight, 2001).

Nevertheless, the existing literature has not sufficiently discussed whether EO can also have a significant positive effect on subcontracting firms. We aim to answer the following research question. Does a supplier's EO have a positive impact on building a collaborative buyer-supplier relationship? How the reliance on a particular buyer firm affects the subcontracting SME's efforts to pursue EO and its outcomes? We examine the above relationships also hold when the buyer belongs to a large business group, such as *chaebols* in Korea.

This study analyzes whether EO successfully enhance suppliers' bargaining power in the buyer-supplier relationship to promote the co-prosperity of supply chain partners. Taken together, this study aims to contribute to the literature by (1) applying the resource dependency theory to the subcontracting context, (2) verifying the empirical relevance of EO and power dynamics between buyer-supplier in enhancing the performance of subcontracting SMEs. Subsequently, we elaborate on our empirical study and discuss both theoretical and managerial implications from our results. Finally, we consider limitations of our study.

2. Literature Review

2.1. Entrepreneurial Orientation

Small and medium-sized enterprises (SMEs) constitute a vital part of the global economy and play a significant role in driving innovation, employment, and economic growth. However, their limited resources and inherent liability of smallness often hinder their ability to compete with larger firms in product development and market expansion. Entrepreneurial orientation (EO) has emerged as a strategic approach that can compensate for these disadvantages by fostering an entrepreneurial culture within SMEs (Atuahene-Gima & Ko, 2001; Covin & Slevin, 1991). EO is a concept that represents an organization's willingness and ability to pursue innovative and proactive actions, take calculated risks, and explore new opportunities (Lumpkin & Dess, 1996). EO encourages firms to be more adaptable, competitive, and responsive to market changes, thereby enhancing their overall performance (Wiklund & Shepherd, 2005).

EO is composed of three distinct dimensions: proactiveness, risk-taking, and innovativeness (Covin & Slevin, 1991; Wang, 2008). These dimensions capture different aspects of the entrepreneurial mindset and behavior within organizations. Proactiveness involves a firm's ability to anticipate and act on emerging opportunities and challenges before they become evident to others (Li et al., 2010; Lumpkin & Dess, 1996). This dimension emphasizes the need for sensing market opportunities and swift action to capitalize on favorable conditions. Risk-taking entails a firm's willingness to engage in ventures that involve uncertain outcomes and potential losses (Covin & Slevin, 1991; Lee et al., 2001). It is the willingness to invest resources, time, and effort into new opportunities despite the inherent uncertainties. Lastly, innovativeness refers to a firm's inclination to introduce new products, services, or processes that are novel and differentiate the company from its competitors (Covin & Slevin, 1991). This dimension emphasizes the importance of continuously seeking and embracing innovation as a means to stay ahead in dynamic and competitive markets.

Each EO dimension contributes to fostering an entrepreneurial culture within an organization in unique ways and can positively impact its performance and competitiveness. However, prior research predominantly adopted a single-dimensional approach to assessing EO, limiting our understanding of the specific effects of each dimension on performance. This one-dimensional perspective hindered the identification of effective strategies tailored to different EO dimensions. For example, research suggests that each dimension of EO can exert a distinct impact on organizational outcomes. For instance, studies have shown that innovativeness is positively associated with product development and market expansion (Lumpkin & Dess, 1996). Risk-taking has been linked to higher levels of firm performance, but its effects may be contingent on the level of environmental uncertainty (Rauch et al., 2009). Proactiveness, on the other hand, has been found to influence a firm's ability to identify and exploit market opportunities promptly (Wiklund & Shepherd, 2005). Therefore, understanding the relative importance of each EO dimension can inform the development of effective strategies tailored to a firm's specific needs and context.

This study aims to identify which dimensions of EO are

more important for the performance of SMEs that rely on specialized contracts called subcontracting. In Korea, SMEs that enter into subcontracting contracts with buyer firms, particularly chaebols, gain certain advantages. A close relationship with a reputable business group signals the competency of the subcontracting SMEs to the market, generating a certification effect that attracts other potential buyers (Lee et al., 2021). This enhances the SMEs' reputation and opens up new opportunities for growth and expansion.

Despite the advantages of subcontracting with largescale buyers, there is a potential for power imbalances that may negatively impact the subcontracting SMEs (Pfeffer & Salancik, 2003). As the power imbalance between buyer and supplier increases, and the subcontracting SMEs may face challenges such as price pressure and reduced profit margins. In such situations, the importance of EO becomes critical. By adopting EO practices, subcontracting SMEs can maintain their competitive edge, foster innovation, and develop strategies to mitigate the adverse effects of such buyer dominance over supplier.

2.2. Buyer-Supplier Relationship

The buyer-supplier relationship is a crucial aspect of subcontracting for Korean SMEs. The resource dependence theory provides a valuable framework for understanding the dynamics of this relationship and its impact on SME performance. The resource dependence theory posits that organizations are vulnerable entities that depend on external parties for critical resources (Lee et al., 2021; Pfeffer & Salancik, 2003). As a firm's dependency on external parties increases, so does the potential threat from these third parties, which can lead to undesirable situations. In the context of buyer-supplier relationships, resource dependence theory highlights how firms can become "locked-in" to sub-optimal relationships due to high dependency on one another (Choi et al., 2018; Narasimhan et al., 2009). For instance, Köhler and Rammer (2012) revealed that an imbalance in power could eventually hurt suppliers' future sales and has negative relationship with the supplier's R&D activities.

In subcontracting arrangements, a high level of dependency can create a lock-in situation for both the supplier and the buyer (Narasimhan et al., 2009). This lock-in occurs when a firm is forced to maintain a continued relationship, even if it is not the most beneficial decision for their long-term interests. Suppliers may feel reluctant to improve their technological capabilities or seek alternative buyers due to this lock-in effect (Narasimhan et al., 2009).

The nature of the buyer-supplier relationship can significantly impact the performance of subcontracting Korean SMEs. An excessively dependent and one-sided relationship can destroy the mutual benefits that subcontracting is meant to achieve. On the other hand, when subcontracting firms and their buyers mutually support each other, a "network of mutual dependence" is formed (Sacchetti & Sugden, 2003). In this scenario, both parties work together for their mutual benefit, leading to enhanced business performance and overall growth.

For subcontracting Korean SMEs, understanding the resource dependence dynamics is critical for optimizing their buyer-supplier relationships. By reducing excessive dependency and fostering mutual support and cooperation, SMEs can create a more balanced and beneficial relationship with their buyers.

In such a balanced relationship, the buyers would support the supplier's efforts of maintaining a competitive edge. This is because buyers believe that they can mutually benefit by having their suppliers complement each other's technological deficiencies in developing final products. (A relationship with competitive supply chain partners allows the firm to achieve a higher price or quality level to attract customers in the market). As a result, by adopting EO practices, subcontracting SMEs can enhance their competitive edge, foster innovation, and develop strategies to proactively mitigate the adverse effects of such buyer dominance over supplier. By forming a collaborative relationship with buyers, suppliers could receive more access to intangible resources, market opportunities from its partners, ultimately enhancing the overall performance and competitiveness of subcontracting SMEs.

3. Hypotheses

3.1. Proactiveness

Studies have demonstrated that firms with a strong EO engage in exploratory learning to discover novel solutions for customer problems (Atuahene-Gima & Ko, 2001; Li et al., 2010). This proactive approach allows these companies to introduce innovative products by creatively combining both internal and external resources (Zhou et al., 2005; Wang, 2008).

For subcontracting SMEs, relying solely on existing contracts and adhering to the buyer's current specifications may not address the buyer-supplier imbalance effectively. Instead, SMEs should constantly monitor the market and explore new opportunities within specific market niches to propose new product specifications to the buyer rather than merely accepting orders. By taking a proactive stance in seeking new market niches, subcontracting SMEs can achieve growth and improved competitiveness.

H1: Proactiveness of subcontracting SMEs is positively related to firm performance.

3.2. Risk-taking

Risk-taking involves the readiness to embrace business risks and allocate substantial resources, even in situations of high uncertainty or limited project validation (Keh et al., 2002). Firms characterized by high risk-taking actively pursue opportunities through bold actions, unhampered by internal resource constraints. For suppliers, exploring new technological capabilities and diversifying their buyer portfolio away from existing subcontracting contracts that ensure stable revenue inherently demands risk-taking. These efforts can ultimately enhance the supplier's bargaining power, leading to a mutually dependent relationship with the current buyer that can positively impact performance.

H2: Risk-taking of subcontracting SMEs is positively related to firm performance.

3.3. Innovativeness

Innovativeness refers to the ability to generate creative ideas and develop new processes, products, or services, with the intention of establishing a competitive advantage through differentiation. According to Lumpkin and Dess (1996), innovativeness is characterized by a firm's willingness to foster creativity, embrace technological leadership, and promote the development of new processes within the organization. Firms that exhibit such tendencies are more likely to achieve organizational success through effective changes in areas such as technological innovation, management practices, and product design.

H3: Innovativeness of subcontracting SMEs is positively related to firm performance.

3.4. Buyer Dependency

The resource dependence theory contends that power imbalances in inter-organizational contexts can lead to suboptimal performance, creating a lock-in situation for both partners (Benton & Maloni, 2005; Zhao et al., 2008). Specifically, in the context of this study focusing on Korean business groups, these dominant players in the domestic market provide stable and significant size-order placements for subcontractors. However, previous research has shown that an increase in a supplier's dependence on a particular buyer in terms of sale can weaken its bargaining power, resulting in the supplier accepting lower payments for parts and materials (Choi et al., 2018; Hingley, 2005).

On the other hand, other studies have highlighted the benefits of close inter-firm relationships for subcontracting SMEs, facilitating knowledge sharing, and fostering the transfer, recombination, or creation of specialized knowledge (Hu et al., 2019; Keister, 1998). Increased dependence on large-scale buyers provides stability in income based on high order volume, enabling subcontracting firms to invest more in research and development (Kotturu & Mahanty, 2016; Lee et al., 2021). This close relationship with a large business group in Korea signals the competency of the subcontracting SMEs in the market, creating a certification effect that attracts other potential buyers (Lee et al., 2021).

However, when a supplier is already in a dependent relationship with a particular buyer, it is expected that the buyer will seek to maintain a power balance in its favor and may not support the supplier's efforts to increase its bargaining power through entrepreneurial behaviors.

Chang and Gotcher (2007) argue that powerful buyers often demand suppliers to make investments specific to the subcontracting relationship, leading to higher asset specificity. While this may initially bring stable income and improved production efficiency due to a large number of orders, the balance of power between the buyer and supplier may eventually collapse. As the power balance collapses, the buyer may offer unfavorable conditions to the supplier, reducing the supplier's incentives and prioritizing its own profits over mutual goals. In such cases, buyers may not support the supplier's entrepreneurial orientation to develop capabilities not directly related to the buyer's specified product requirements. These unsupportive buyers' behaviors act as significant constraints on the supplier's ability to effectively pursue entrepreneurial orientation, thereby adversely affect their performance.

H4a: Buyer dependency negatively moderates the relationship between proactiveness and firm performance of subcontracting SMEs.

H4b: Buyer dependency negatively moderates the relationship between risk-taking and firm performance of subcontracting SMEs.

H4c: Buyer dependency negatively moderates the relationship between innovativeness and firm performance of subcontracting SMEs.

4. Methodology

4.1. Data

To test the hypotheses, we conducted a survey targeting Korean subcontracting SMEs. Our sampling frame comprised 18,000 companies with Inno-biz certification, which is a category of businesses endorsed and nurtured by the Korean Ministry of SMEs and Startups. To obtain Innobiz certification, a company must demonstrate technological competitiveness in the global market and show growth potential in its industry, with a minimum operational history of three years.

Introduced by the Korean government in 2001, the Innobiz certification aims to provide startups a growth pathway towards becoming mid-sized enterprises. This certification grants various financial and tax benefits, along with preferential treatment. Inno-biz companies mainly operate in the manufacturing sector and excel in technological innovation, making them an ideal sample for our study.

Our study exclusively focuses on firms engaged in subcontracting activities, as this enables us to explore measures to enhance their performance through effective buyer-supplier relationship management.

To collect data, we compiled a list of companies with Inno-biz certification and randomly distributed questionnaires to 750 Inno-biz companies. We received 426 usable responses, resulting in a response rate of 56.8%. For our analysis, we utilized 232 questionnaires, excluding companies not involved in subcontracting relationships with buyers or having incomplete data. The demographic characteristics of our sample are presented in Table 1.

Table 1: Sampl	le Descriptions
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R&D Ratio	N(%)	Annual Sales(KRW)	N(%)		
5% or less	105(45.3)	5(45.3) 2.5 billion won or less			
6%~10%	86(37.1)	86(37.1) 2.6~ 5 billion won			
11%~20%	30(12.9)	(12.9) 5.1~ 10 billion won			
21% or less	11(4.7)	10 billion won or above	52(22.4)		
Number of Employees	N(%)	Buyer Dependency Ratio	N(%)		
15 or less	76(32.8)	20% or less	35(15.1)		
16 ~ 30	70(30.2)	21%~40%	75(32.3)		
31 ~ 100	75(32.3)	41%~80%	86(37.1)		
100 or above	11(4.7)	81%~100%	36(15.5)		

4.2. Measurement

To measure the variables for hypothesis testing, this study employed measurement items that have already demonstrated reliability and validity in previous research. Some items were adapted to align with the characteristics of Korean subcontracting SMEs, and the majority were measured using a 5-point Likert scale (1 = not at all, 5 = very much). Table 2 provides a summary of the measurement items along with their details.

Prior to testing the hypotheses in this study, an analysis was conducted to confirm the reliability and validity of the multi-item variables. The reliability analysis, presented in Table 2, reveals that all Cronbach's α values were 0.7 or higher. Additionally, the factor loading values for nearly all items were measured to be 0.6 or higher, indicating

satisfactory reliability.

To examine the effect of buyer dependency on performance, we measured suppliers' dependence on buyers based on the percentage of sales made to their number one buyer. About half of the companies were doing business with their number one buyer for 1% to 40% of their sales, while the rest were relying on their relationship with their number one buyer for an even larger percentage of their sales (Table 1). In addition, there were 71 cases where the subcontracting SME's first-tier buyer was a *chaebol*, or business group in Korea. This study further conducts a robustness test on whether the hypotheses of this study are still supported with a sample of SMEs that subcontract to large business group.

Variables	Factor Loading	Cronbach α
Firm Performance		.894
Revenue	.855	
Market Share	.883	
Profitability	.880	
Overall Company Performance	.850	
EO (proactiveness)		
We act proactively than our competitors		
We take an aggressive stance against our competitors		
We tend to introduce new products or technologies before our competitors		
We preemptively respond to changes in business environment		
EO (risk-taking)		.847
We prefer high-risk projects with high potential returns	.751	
We pursue high growth rather than current profits	.784	
We pursue rapid growth rather than survival	.827	
EO (Innovativeness)		.803
We aim to achieve competitive advantage through R&D	.651	
We introduced many new product lines in the last three years	.727	

Table 3: Mean	s, Standard	Deviations,	and (Correlations
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We focus our capabilities on developing new products/technologies	.833	
Our technology is difficult for competitors to imitate	.692	

5. Results

5.1. Descriptive Statistics

A correlation analysis was conducted to examine the relationships among the variables. As shown in Table 3, the majority of the key variables exhibit correlations of 0.5 or lower. Additionally, when assessing the variance inflation factor (VIF), values were found to be below 10, indicating the absence of multicollinearity issues.

5.2. Empirical Results

Regression analysis was conducted to examine the relationship between entrepreneurial orientation, buyer dependency, and firm performance of Korean subcontracting SMEs (Table 4).

Hypothesis 1 posited that the sub-dimension of entrepreneurial orientation, proactiveness, would have a positive impact on firm performance of Korean subcontracting SMEs. The results, as presented in Table 4, reveal a positive and significant effect of proactiveness (β =0.187, p<0.05), thus supporting Hypothesis 1. However, the results indicate that risk-taking has a negative and significant effect (β =-0.117, p<0.10), failing to support Hypothesis 2. Furthermore, the results demonstrate a positive and significant impact of innovativeness (β =0.139, p<0.10), providing support for Hypothesis 3.

Next, we examined the moderating role of buyer dependency on the focal relationship. The results suggest that buyer dependency negatively moderates the relationship between proactiveness and firm performance (β =-0.006, p<0.10), providing support for Hypothesis 4a. However, the moderating effects of buyer dependency on the relationships between innovativeness are positive and significant (β =0.005, p<0.10), contrary to our expectation.

Variables	Mean	S.D.	1	2	3	4	5	6	7	8
1. Firm Performance	3.20	0.55								
2. Firm Size	35.10	42.68	.128*							
3. R&D Intensity	8.47	7.20	041	.065						
4. Advertising Intensity	4.72	5.28	114*	.046	.271**					
5. EO Proactiveness	3.36	0.63	.129**	.217**	.091	.159**				
6. EO Risk-taking	2.89	0.72	.060	.144**	.098*	.097	.692**			
7. EO Innovativeness	3.36	0.60	.143**	.108*	.109*	.155**	.633**	.518**		

8. Buyer Dependency	51.44	28.08	080	033	068	015	.027	.798	067	
Note: *n < 0.05: **n < 0.01										

		DV = Firm	Performance	
	Model 1	Model 2	Model 3	Model 4
Intercept	3.224*** (.063)	2.526*** (.216)	2.612*** (.227)	2.648*** (.228)
Firm Size	.001** (.001)	.001 (.001)	.001 (.001)	.001 (.001)
R&D Intensity	002 (.005)	004 (.005)	005 (.005)	005 (.005)
Marketing Intensity	011 (.007)	015** (.007)	015** (.004)	013* (.007)
EO Proactiveness		.187** (.051)	.196** (.089)	.222** (.090)
EO Risk-taking		117* (.068)	116* (.068)	128* (.068)
EO Innovativeness		.139* (.078)	.129* (.078)	.104 (.078)
Buyer Dependency(BD)			002* (.001)	002* (.001)
Proactivness * BD				006* (.003)
Risk-taking * BD				.003 (.002)
Innovativeness * BD				.005* (.003)
R ²	0.029	0.090	0.115	0.137
Adjusted R ²	0.007	0.057	0.079	0.090
F value	1.333	2.753***	3.197***	2.899***

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Note: N = 232; *** p<0.01; ** p<0.05; * p<.10

In addition, we conducted a robustness test on 71 SMEs whose largest customer was *chaebols* (Table 5). This subset accounts for 26% of the total sample and highlights the significant influence of *chaebols*, which hold dominant positions in all industries and exert considerable power in Korea. Our result shows that among the EO dimensions, risk-taking negatively affects performance (β =-0.217, p<0.05), while the other dimensions do not significantly affect the performance of subcontracting SMEs.

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	DV = Firm Performance						
	Model 1 Mode						
Intercept	3.102***	2.676***	2.641***				
	(.115)	(.400)	(.436)				
Firm Size	.003	.003	.003				
	(.001)	(.001)	(.001)				

R&D Intensity	004 (.009)	007 (.009)	007 (.011)
Marketing Intensity	.001 (.011)	001 (.011)	001 (.012)
EO Proactiveness		.127 (.140)	.126 (.141)
EO Risk-taking		217** (.106)	216** (.107)
EO Innovativeness		.196 (.146)	.197 (.148)
Buyer Dependency(BD)			.001 (.003)
R^2	0.061	0.147	0.149
Adjusted R ²	0.011	0.057	0.048
F value	1.333	2.753**	2.648*

Note: N = 71; *** p<0.01; ** p<0.05; * p<.10

6. Conclusions

This study delved into the intricate relationship between EO and the performance of subcontracting Korean SMEs, with a specific focus on buyer-supplier relationships. The findings of this research shed light on various aspects of this power dynamic between buyer and supplier in value chain and contribute to our understanding of the factors influencing subcontracting SMEs' performance.

It was observed that the entrepreneurial orientation of SMEs holds a pivotal role in increasing their performance, primarily by augmenting the supplier's bargaining power toward buyer at appropriate level. Among the EO dimensions, proactiveness and innovativeness emerged as positive antecedents for enhancing performance for subcontracting SMEs. These dimensions enable SMEs to propose product specifications aligned with market trends and foster innovation that are difficult for buyer to replicate, thereby elevating their competitive advantage. These efforts can transition the buyer-supplier relationship from one of dependency to a cooperative partnership, where both parties work together for their mutual benefits and enhanced business performance.

However, the dimension of risk-taking displayed a contrasting impact, exerting a negative influence on the performance. For subcontracting SMEs, risk-taking can be viewed as an effort to diversify buyer portfolios at the expense of stable income from a large buyer firm. Given the high reliance of Korean subcontracting SMEs on the largest buyer (51.44% in our sample), such efforts can result in performance setbacks, at least in the short term. Rather than seeking new buyers amid the uncertainties they entail, the results of this study advocate for an incremental approach to enhance the bargaining power of suppliers while nurturing

existing buyer relationships.

Employing the resource dependency theory, this study examines how buyer dominance influences the dynamics of the buyer-supplier relationship. This is achieved by gauging buyer dependency through sales to the largest buyer. It was hypothesized that with escalating buyer dependency, an imbalance of power within the buyer-supplier relationship is exacerbated, which in return prompts large buyers to assert control over product specifications and other requisites imposed on suppliers, thereby curtailing suppliers' entrepreneurial orientation (EO) behaviors. Consistent with these results, buyer dependency negatively moderates the relationship between proactiveness and performance of subcontracting SMEs. This observation resonates with prior research, which has highlighted that when a buyer exercises substantial market influence during negotiations, suppliers are compelled to relinquish incentives and accept reduced remuneration for components and materials (Choi et al., 2018).

On the other hand, as buyer dependency in terms of sales percentage increases, supplier can effectively mitigate market risks by securing consistent orders from significant buyers (Deardorff & Djankov, 2000). This engenders income stability, potentially facilitating increased investments in innovation by subcontracting firms. Moreover, sizeable buyers possess the capacity to impart their organizational and managerial proficiencies, which pertain to diverse subcontracting affiliations. This, in turn, extends suppliers access to supplementary resources germane to innovation (Lee et al., 2021). Furthermore, the availability of critical information, encompassing technical assistance and market insights, extended from prominent corporations to suppliers appears to accentuate innovation performance (Kalwani & Naravanda, 1995). In line with previous findings, our results affirm that buyer dependency serves as a positive moderator, amplifying the correlation between innovativeness and performance.

In summary, this study highlights the complex nature of buyer-supplier relationships for subcontracting Korean SMEs. Our findings underscore the existence of both advantages and drawbacks for SMEs engaged in transactions with significant buyers. Notably, our study illuminates how SMEs' EO endeavors possess the potential to bolster the negotiation position of subcontracting suppliers. It is evident in our results that purchasing power alone does not determine the bargaining power in the buyersupplier relationship. Rather, suppliers must augment their capacity for product development to ensure the maintenance of an appropriate level of bargaining power vis-à-vis their buyer(s). These insights collectively contribute to an enriched comprehension of SMEs' strategic maneuvers as they navigate the intricate terrain of interactions between buyers and suppliers.

7. Limitation

Our study is subject to several limitations. First, the reliance on subjective metrics to evaluate our dependent variable, firm performance, could be augmented by the integration of objective indicators derived from secondary data in subsequent investigations. Additionally, given that our sample exclusively comprises Korean SMEs, the applicability of our findings across diverse settings raises valid concerns. To enhance the robustness of our conclusions, an exploration of how EO sub-dimensions influence firm performance could encompass companies representing various nations. Lastly, the pursuit of further research is merited to delve into potential mediating mechanisms between EO and firm performance, encompassing alternative internal capabilities and strategic orientations that could elucidate the observed relationships.

References

- Atuahene-Gima, K., & Ko, A. (2001). An empirical investigation of the effect of market orientation and entrepreneurship orientation alignment on product innovation. *Organization Science*, 12(Jan-Feb), 54-74.
- Audretsch, D. B., & Keilbach, M. (2004). Entrepreneurship capital and economic performance. *Regional Studies*, 38(8), 949-959.
- Benton, W. C., & Maloni, M. (2005). The influence of power driven buyer/seller relationships on supply chain satisfaction. *Journal of Operations Management*, 23(1), 1-22.
- Brouthers, K.D., Nakos, G., & Dimitratos, P. (2015). SME entrepreneurial orientation, international performance, and the moderating role of strategic alliances. *Entrepreneurship Theory and Practice*, 39(5), 1161-1187.
- Chang, K. H., & Gotcher, D. F. (2007). Safeguarding investments and creation of transaction value in asymmetric international subcontracting relationships: The role of relationship learning and relational capital. *Journal of World Business*, 42(4), 477-488.
- Cho, S. (2014), Welfare reforms, labour markets and inter-firm relations in South Korea since 1997: An inter-institutional approach. *Competition Change*, 18(1), 20-36.
- Choi, S. J., Ko, J. K., & Jung, S. (2018). A conglomerate's effort for co-prospering with its subcontractors and firm value: evidence from Korea. *Sustainability*, 10(7), 2512.
- Covin, J. G., & Slevin, D. P. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal*, 10(1), 75-87.
- Deardorff, A., & Djankov, S. (2000). Knowledge transfer under subcontracting: evidence from Czech firms. World Development, 28(10), 1837-1847.
- Hancke, B. (1998), Trust or hierarchy? Changing relationships between large and small firms in France. Small Business Economics, 11(3), 237-252.
- Hingley, M.K. (2005), Power to all our friends? Living with

imbalance in supplier-retailer relationships. *Industrial Marketing Management*, *34*(8), 848-858.

- Hu, H. W., Cui, L., & Aulakh, P. S. (2019). State capitalism and performance persistence of business group-affiliated firms: A comparative study of China and India. *Journal of International Business Studies*, 50, 193-222.
- Irvine, P.J., Park, S.S. and Yıldızhan, Ç. (2016), Customer-base concentration, profitability, and the relationship life cycle. *The Accounting Review*, 91(3), 883-906.
- Jeong, I., Pae, J. H., & Zhou, D. S. (2006). Antecedents and consequences of the strategic orientations in new product development: The case of Chinese manufacturers. *Industrial Marketing Management*, 35(3), 348–358.
- Kalwani, M. U., & Narayandas, N. (1995). Long-term manufacturer-supplier relationships: do they pay off for supplier firms? *Journal of Marketing*, 59(1), 1-16.
- Keh, H. T., Foo, M.D., & Lim, B.C. (2002). Opportunity evaluation under risky conditions: The cognitive process of entrepreneurs. *Entrepreneurship Theory and Practice*, 27, 125-148.
- Keister, L. A. (1998). Engineering growth: Business group structure and firm performance in China's transition economy. *American Journal of Sociology*, 104(2), 404-440.
- Knight, G. A. (2001), Entrepreneurship and strategy in the international SME. *Journal of International Management*, 7(2), 255-273.
- Köhler, C. and Rammer, C. (2012). Buyer power and suppliers' incentives to innovate. ZEW-Centre for European Economic Research Discussion Paper, Available at SSRN: https://ssrn.com/abstract52141963.
- Kotturu, C. V., & Mahanty, B. (2016). Subcontracting dimensions in the small and medium enterprises: Study of auto components' manufacturing industry in India. *Proceedings* of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 230(2), 364-375.
- Lee, D., Lee, K., & Pennings, J. M. (2001). Internal capabilities, external networks, and performance: A study on technology-based ventures. *Strategic Management Journal*, 22(6-7), 615-640.
- Lee, P., Lim, S., & Cho, H. (2022). Effect of buyer dependency of subcontracting SMEs on R&D investment. *Management Decision*, 60(8), 2349-2365.
- Li, C. R., Chu, C. P., & Lin, C. J. (2010). The contingent value of exploratory and exploitative learning for new product development performance, *Industrial Marketing Management*, 39(7), 1186–1197.
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance, *Academy of management Review*, 21(1), 135-172.
- Narasimhan, R., Nair, A., Griffith, D.A., Arlbjørn, J.S. and Bendoly, E. (2009). Lock-in situations in supply chains: A social exchange theoretic study of sourcing arrangements in buyer-supplier relationships. *Journal of Operations Management*, 27(5), 374-389.
- Pfeffer, J. and Salancik, G.R. (2003). The external control of organizations: A resource dependence perspective. Stanford, CA: Stanford University Press.
- Rauch, A., Wiklund, J., Lumpkin, G. T., & Frese, M. (2009).

Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. *Entrepreneurship Theory and Practice*, *33*(3), 761-787.

- Sacchetti, S., & Sugden, R. (2003). The governance of networks and economic power: the nature and impact of subcontracting relationships. *Journal of Economic Surveys*, 17(5), 669-692.
- Wang, C. L. (2008). Entrepreneurial orientation, learning orientation, and firm performance. *Entrepreneurship Theory and Practice*, 32(4), 635-657.
- Wathne, K. H., & Heide, J. B. (2004). Relationship governance in a supply chain network. *Journal of Marketing*, 68(1), 73-89.
- Wennekers, S., & Thurik, R. (1999). Linking entrepreneurship and economic growth. Small Business Economics, 13(1), 27-56.
- Wiklund, J., & Shepherd, D.A. (2005). Entrepreneurial orientation and small business performance: A configurational approach. *Journal of Business Venturing*, 20(1), 71-91.
- Zhao, X., Huo, B., Flynn, B. B., & Yeung, J. H. Y. (2008). The impact of power and relationship commitment on the integration between manufacturers and customers in a supply chain. *Journal of Operations Management*, 26(3), 368-388.
- Zhou, K.Z., Yim, C.K., & Tse, D.K. (2005). The effects of strategic orientation on technology and market-based breakthrough innovation. *Journal of Marketing*, 69(2), 42-60.