

Network exploration and exploitation capability, foreign market knowledge, and international market performance: the role of strategic orientations

Abstract

The empirical study aims to analyze the relationship between an internationalizing firm's network exploration and network exploitation capability and foreign market knowledge, with EO as a moderator. It also investigates the association between foreign market knowledge and firms' market performance, with moderation of proactive export MO and responsive export MO. Primary data was collected by a structured questionnaire from 198 exporting firms of Bangladesh, a developing economy in South Asia. The authors incorporated hierarchical regression for the analysis. According to the results, exporting firms' network capability, network exploitation and exploration, has significant positive impacts on foreign market knowledge. Second, contrary to the hypotheses for positive effects of EO, international EO has no effect and only a marginal influence, respectively, on network exploitation-market knowledge and network exploration-market knowledge association. Third, there is a significant positive relationship between foreign market knowledge and firms' market performance. Finally, while both proactive and responsive export MO play a significant moderating role in this relationship, the latter's impact, nonetheless, is negative contrary to authors' proposition. The study contributes to the network perspective to internationalization by differentiating network capabilities with the lens of exploration and exploitation. Second, it questions the necessity of international EO by demonstrating its insignificance when combined with exporting firms' network capability. Finally, the study investigated the role of proactive export MO, in addition to responsive MO, on firms' international performance. As a result, the study offers valuable academic insights to International Entrepreneurship, export performance, and strategic orientation literature, along with managerial and policy implications.

Introduction

Networks are often considered seminal for successful entrepreneurial internationalization. Although earlier International Entrepreneurship (IE) literature assessed the importance of networks in internationalization of entrepreneurial ventures, it failed to conceptualize network as a capability and examine the role of network capability in the international market entry (Mort and Weerawardena, 2006). Some recent studies have emphasized how network-related organizational capabilities impact the internationalization of firms (e.g., Weerawardena, Mort, Liesch, and Knight, 2007; Torkkeli, Kuivalainen, Saarenketo, and Puumalainen, 2016; Torkkeli, Puumalainen, Saarenketo, and Kuivalainen, 2012, etc.). Nonetheless, these studies have not fully answered the call by Jones, Coviello, and Tang (2011, p. 643) that, "research on the nature and impact of a dynamic networking capability is warranted." One specific area that requires further academic attention is the role of network exploration and network exploitation activities on entrepreneurial international performance (Faroque, Morrish, Kuivalainen, and Sundqvist, 2018). In addition, two strategic orientations, namely market orientation (MO) and entrepreneurial orientation (EO), need further attention as intervening variables in export performance research (Faroque and Takahashi, 2012). The study by Acosta, Crespo, and Agudo (2018) suggests the indirect impacts of international EO on firms' international performance through network capability. Conversely, Baker, Grinstein and Harmancioglu (2016) found negative moderation of EO on the relationship between external network utilization and a firm's innovation performance. Furthermore, although empirical research demonstrates the positive moderating role of MO on firms' international performance, the studies mostly focus on responsive MO (e.g., Bhuian, Menguc, and Bell, 2005; Baker and Sinkula, 2009; Boso, Cadogan, and Story, 2013; Cadogan,

Kuivalainen, and Sundqvist, 2009), by considering its necessity for responding to current market needs. The empirical study seeks to address these research gaps by analyzing the relationship between an internationalizing firm's network exploration and network exploitation capability and foreign market knowledge, with EO as a moderator. Also, we investigated the relationship between foreign market knowledge and firms' international market performance, with moderating influence of proactive export MO and responsive export MO.

Theoretical Background and Hypotheses Development

Integrating theoretical arguments based on the Resources-Based Theory (RBT) (Barney, 1991; 2001), network perspective to internationalization (Coviello and Munro, 1995; Johanson and Mattsson, 1988), and dynamic capability theory (Teece, 2007), our study theoretically explained and hypothesized the relationships. Network capability is considered as a determinant for acquisition of knowledge and resources necessary for internationalization, especially in small and medium sized enterprises (SMEs) (Weerawardena, Mort, Liesch, and Knight, 2007). In addition, networks provide firms with easier access to the resources needed for early internationalization and mitigate the challenges related to the liabilities of foreignness, newness, and smallness faced by small firms (Musteen, Datta, and Butts, 2014). Based on the discussion, we propose that, the network exploitation capability, that emphasizes on firms' ability to exploit existing network and its resources, assists the internationalizing firms to acquire and create foreign market knowledge useful for internationalization. In addition, Firms' ability to upgrade both knowledge and network capability is a necessary condition for better internationalization performance, particularly in young firms (Zhou, Barnes, and Lu, 2010). The performance advantage of firms is significant when the firms have networking capability to (re)create or (re)configure social network structure in such a manner that they can mobilize and assemble the needed complementary network resources for value creation (Mu, 2013). Based on the same ground we posit that, the network exploration capability, i.e., internationalizing firms' ability to explore new network relationships, assists these firms in updating their knowledge base on overseas customers and markets. Therefore, the first two hypotheses test the positive effects of network exploitation and exploration capability on foreign market knowledge.

H1: Internationalizing firms' network exploitation capability is positively related to their foreign market knowledge.

H2: Internationalizing firms' network exploration capability is positively related to their foreign market knowledge.

EO or entrepreneurial proclivity, specifically innovativeness, risk-taking, and proactiveness, is considered as the catalyst for developing appropriate relationship networks, acquiring appropriate knowledge and absorbing this into the firm's knowledge base (Zhou, Barnes, and Lu, 2010). Acosta, Crespo, and Agudo (2018) found that, international EO positively influences the network capability of internationalizing SMEs. Furthermore, The study by Zhou (2007) emphasized that, entrepreneurial proclivity of early internationalizing firms can be invaluable to push forward-looking knowledge about foreign markets from multiple sources of information, including both domestic and international networks of cooperative and social relationships. On the other hand, Baker, Grinstein, and Harmancioglu (2016) proposed that, the weaker EO firms are likely to benefit more from external network utilization since these firms suffer from learning deficits that external networks can mitigate. In the same study, they found EO negatively moderates the relationship between external network utilization and foreign market success. In addition, Bhuian, Menguc, and Bell (2005) demonstrated that, moderate EO is best for a firm's performance because market intelligence is used instrumentally or conceptually in such organizations. As a result, the existing research is inconclusive about the effects of EO. We support the positive role of EO, and, thus, posit

that exporting firms' EO has positive moderating impacts on network capability-market knowledge relationship.

H3: The association between internationalizing firms' network exploitation capability and foreign market knowledge is positively moderated by international EO.

H4: The association between internationalizing firms' network exploration capability and foreign market knowledge is positively moderated by international EO.

Next, we investigated if superior level of foreign market knowledge endows firms with better export performance. In order to understand how export ventures adapt to their foreign market environments, the knowledge based view literature (related to RBT) posits that, the ability to integrate available informational and experiential knowledge in relevant organizational capabilities can be a key theoretical premise (Morgan, Zou, Vorhies, and Katsikeas, 2003). As firms acquire foreign market knowledge, they are able to position and strategically market their products in export markets (Musteen, Datta, and Butts, 2014). Entrepreneurial learning of market knowledge is not confined to organizational routines and administrative structure; it is rather characterized by an 'exploration and out-of-the-box thinking' approach to the pursuit of entrepreneurial opportunities (Matsuno, Mentzer, and Özsoy, 2002). Moreover, when firms' initial knowledge base about the overseas markets is greater, it is likely to initiate more capacity to absorb additional knowledge, and, thereby, enhances the experiential learning that is critical for success in international markets (Musteen, Datta, and Butts, 2014). Therefore, our next hypothesis propose that,

H5: There is a positive relationship between firms' foreign market knowledge and international market performance.

MO is a process based on information (Acosta, Crespo and Agudo, 2018). In addition, it is market-driven capability with adaptive nature (Boso, Story, and Cadogan, 2013). To analyze the moderating influence of MO on foreign market knowledge-export marketing performance relationship, we first categorized this strategic orientation as proactive export MO and responsive export MO. A firm's MO is comprised of both responsive and proactive dimensions, though responsive MO toward customer 'expressed' needs is where most empirical research has focused (Blocker, Flint, Myers, and Slater, 2011). Nevertheless, in addition to being responsive to customer requests, firms need to proactively understand and address their 'latent and future' needs as part of an ongoing, value-creating, relational process (Beverland et al., 2007; Flint et al., 2002; Tuli et al., 2007, cited in Blocker et al., 2011). Based on this discussion, we argued that an internationalizing firm's responsive export MO plays an important role in understanding 'existing' customer needs and exploiting the existing market opportunities. Therefore, it intensifies firms' foreign market knowledge-export market performance relationship. Similarly, the proactive export MO emphasizes on exploring new overseas market opportunities and understanding the 'latent' and future customer needs, and, thus, strengthens the foreign market knowledge-export market performance association. Furthermore, as responsive MO focuses on expressed customer needs, we associated responsive export MO with acquisition and creation of firms' market knowledge, together with exploring the existing market opportunities. Likewise, because proactive MO, a more future-oriented approach, focuses on the latent and future customer needs, we linked this dimension to activities related to upgradation of existing market knowledge base. The last set of hypotheses reflects the moderating role of MO.

H6: The relationship between foreign market knowledge and export performance is positively moderated by responsive export MO.

H7: The relationship between foreign market knowledge and export performance is positively moderated by proactive export MO.

The theoretical framework for our study is presented in Figure 1.

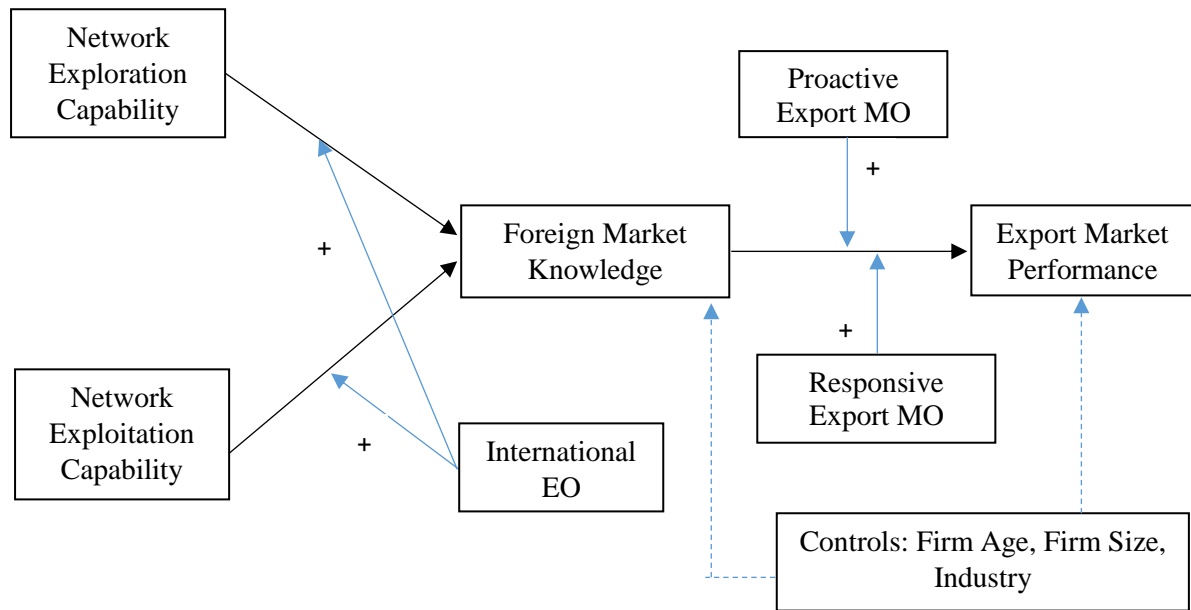


Figure 1: The relationship between network exploitation, network exploration, foreign market knowledge and export market performance

Research Methodology

Primary data was collected by a structured questionnaire from 198 exporting firms in multiple industries of Bangladesh, a developing economy in South Asia. The measures for statistical analysis are shown in Table 1. We used factor analysis to test the reliability and validity of these variables. We incorporated hierarchical regression for the final analysis.

Table 1: Measures for the Study

Type of Variables	Measures
Independent variables	Network exploitation capability (Walter, Auer and Ritter, 2006; Mitrega, Forkmann, Ramos, and Henneberg, 2012), and network exploration capability (Parida, Pemartín and Frishammar, 2009; Mitrega et al., 2012)
Dependent variables	Foreign market knowledge (Musteen, Datta, and Butts, 2014), and export market performance (Leonidou, Palihawadana, and Theodosiou, 2011)
Moderating variables	International EO (Kuivalainen, Sundqvist, and Servais, 2007; Jambulingam, Kathuria, and Doucette, 2005; Wang, 2008), proactive export MO, and responsive export MO (adapted from Narver, Slater, and MacLachlan, 2004)
Control variables	Firm age, firm size, industry

Results and Analysis

The results of hierarchical regression are summarized in Table 2. First, exporting firms' network capability, network exploitation and exploration, has significant positive impacts on foreign market knowledge. Second, contrary to our expectation for the positive effects of international EO, the results show that international EO has no effect and only a marginal influence, respectively, on network exploitation-market knowledge and network exploration-

market knowledge. This indicates the internationalizing firms with sufficient network exploitation and exploration capability can acquire, create and update foreign market knowledge without having a strong international EO. Therefore, if internationalizing firms utilize EO related resources in networking in an attempt to develop their knowledge base, it will be useless but a resource consuming effort. Third, the positive relationship between foreign market knowledge and firms' market performance is significant. Finally, while both proactive and responsive export MO play an important moderating role in this relationship, the latter's impact, nonetheless, is negative contrary to our proposition. This indicates when organizations emphasize more on exploiting existing market opportunities and serving expressed customer needs, it may hurt their international market performance as market knowledge is not upgraded to accommodate the customer's future and latent needs.

Table 2: Results of Hierarchical Regressionⁱ

2a: Dependent variable: Foreign market knowledge						2a: Dependent variable: International market performance				
	Model 1	Model 2	Model 3	Model 4	Model 5		Model 1	Model 2	Model 3	Model 4
Controls						Controls				
Firm age	-.025	-.010	-.033	-.035	-.049	Firm age	.011	.012	.007	.001
Firm size	.058	.039	.055	.053	.071	Firm size	-.036	-.075	-.058	-.051
Industry	.103	.100*	.087	.093	.088	Industry	.051	.019	.007	.010
International EO	.696***	.407***	.401***	.392***	.386***	Responsive export MO	.327***	.283***	.288***	.309***
Single effects						Single effects				
Network exploitation		.396***	.184	.211*	.164	Proactive export MO	.374***	.093	.038	.015
Network exploration			.264**	.274**	.331***	Foreign market knowledge				
Interaction effects						Interaction effects				
Network exploitation x international EO				.056	-.139	Foreign market knowledge x responsive export MO			-.345***	-.302***
Network exploration x international EO					.222*	Foreign market knowledge x proactive export MO				.158*
R²						R²				
R ²	.505	.577	.600	.603	.612	R ²	.425	.577	.612	.625
Change in R²						Change in R²				
Change in R ²		.072	.023	.003	.009	Change in R ²	.152	.035	.035	.013
F-value						F-value				
F-value	49.274***	52.447***	47.813***	41.160***	37.194***	F-value	28.352***	43.355***	42.787***	39.432***

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Discussion

The study contributes to the network perspective to internationalization, especially by differentiating firms' network capabilities with the lens of exploration and exploitation. Our results for H1 and H2 concurs with exiting research that, network exploration and network exploration capabilities have a significant positive influence on firms' international performance (Faroque et al., 2018), through developing and upgrading their level of foreign market knowledge. Second, our study questions the necessity of international EO by demonstrating its insignificant effects when combined with exporting firms' network capability to develop their knowledge in overseas customers and markets. The analysis of H3 and H4 are different from previous research which demonstrated that a firm's performance is positively influenced by both EO and network capability (e.g., Acosta, Crespo, and Agudo, 2018; Boso,

Story, and Cadogan, 2013). We have explained the contradiction as follows; networking itself is an entrepreneurial task and part of a company's activity and structure (Dubini and Aldrich, 1991). Network capability allows firms to explore new business opportunities and develop new resources at a limited risk (Mu, 2013). Furthermore, firms with extended networks identify significantly more opportunities (Hills, Lumpkin, and Singh, 1997). Thus, the effect of network capability on an internationalizing firm's level of market knowledge is not contingent on its international EO level. Then, we have accepted H5 and concluded that, there is a significant positive relationship between firms' international market knowledge and foreign market performance. Finally, the study investigated the role of proactive export MO, together with responsive export MO, and found that, proactive export MO is more critical than responsive MO for firms' international performance. Furthermore, an overreliance on the responsive dimension may have a deleterious effect on market performance of internationalizing firms. Prior studies also argued that, despite the importance of proactive MO, firms appear to frequently neglect or inadequately attend to this dimension (Tuli et al., 2007, cited in Blocker et al., 2011). Therefore, the findings support H6 and H7, though in an opposite direction for the former.

Academic, Managerial, and Policy Implications

Our findings imply that, managers need to focus on the proactive export MO to occasionally update their market knowledge level in addition to creating and acquiring such knowledge, and, thereby, improve market performance. The findings also imply that, policy makers need to take some steps to encourage and help develop a proactive MO ingrained in managerial attitude and organizational culture by offering market information sessions, market analysis, and similar training programs to these firms. Lastly, the insignificance of international EO imply that, academics need to further explore the impacts of strategic orientation in combination with firms' network capabilities. In addition, the importance of proactive export MO to explain firms' international market performance indicates the necessity of future research incorporating the same in IE and export performance literature.

Conclusion, Limitations, and Direction for Future Research

The study is a significant contribution to International Entrepreneurship, export performance, and strategic-orientation research. However, our empirical study is not without limitations. First, the study adopts a cross-sectional research design and cannot confirm causality among the variables used. A longitudinal research design could allow for the time lag required for the market performance outcomes. Second, we have investigated the foreign market performance of exporting firms in Bangladesh. Future researchers may distinguish the early internationalizing (or born global) firms and traditional exporting firms in order to analyze whether the relationship between network capability-foreign market knowledge and foreign market knowledge-firms' international market performance differ for these categories. Last of all, we have analyzed the effects of individual network capability on export performance. Future research could investigate the trade-off between internationalizing firms' dual network capability.

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ⁱ Additional tables are available upon request.