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Impacts of dynamic managerial capability and international opportunity identification on firm performance

The
international
opportunity

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Abstract

Purpose – This paper aims to investigate the antecedents and outcomes of international opportunity identification (IOI) in export-manufacturing firms. The fundamental question addressed in this research is: How does dynamic managerial capability (DMC) of entrepreneurs contribute to IOI and success of the firms?

Design/methodology/approach – The research model was tested through structural equation modeling among the readymade garment manufacturing firms in the least developed country, Bangladesh. A survey was conducted with a random sampling approach and responses were collected from 390 firms.

Findings – The salient findings are: DMC has direct and indirect impacts through IOI on financial and non-financial performance; IOI mediates the relationship between managerial social capital and non-financial performance and between managerial cognition and non-financial performance; IOI has a negative relationship with the financial performance of the firms; and scope of accelerated internationalization positively moderates the relationship between IOI and financial performance of firms.

Originality/value – This paper notably shows that DMC of export-manufacturing entrepreneurs leads to the identification of the right kind of opportunities, which, in turn, generate better performance. It is advantageous for this type of firm to operate a business in multiple countries.

Keywords Export performance, Dynamic managerial capability, International opportunity identification, Export-oriented small- and medium-sized manufacturing firms, Accelerated internationalization

Paper type Research paper

Introduction

Dynamic managerial capability (DMC) is defined as the “capabilities with which managers build, integrate, and reconfigure organization resources and competencies” (Adner and Helfat, 2003, p. 1012). DMC is an outgrowth of dynamic capability theory. Dynamic



The earlier version of the paper was presented at the Academy of International Business Western USA Annual Conference 2018 and won the best student paper award.

capability theory explains the firm level capability to create, extend and modify the resource base of the organization (Teece, 2007). The roles of DMC and dynamic capability are distinct. Organizational processes are the mechanisms by which dynamic capabilities are put into use (Helfat *et al.*, 2007). However, DMC enables managers to respond to strategic changes and allocate resources in an optimum manner. In contrast to the dynamic capability theory, Adner and Helfat (2003) have positioned DMC as an individual-level capability, which is rooted in three attributes as follows:

- (1) managerial human capital;
- (2) managerial social capital; and
- (3) managerial cognition.

The combinations of these three attributes facilitate managers to sense, seize and transform opportunity to respond to the strategic changes and changing business environment (Helfat and Martin, 2015; Teece, 2007). To date, there is a dearth of empirical evidence on the impact of DMC (Andersson and Evers, 2015; Helfat and Martin, 2015; Roberts *et al.*, 2016) and this research attempts to fill this gap in the context of manufacturing firms that predominantly export.

Export-manufacturing firms are the firms that export a major portion of the production to foreign countries. These firms are also considered as export-oriented small- and medium-sized manufacturing firms because of their exporting nature and the size of the firms. Firms from the apparel industry of Bangladesh operating in business-to-business international market (Donaghey and Reinecke, 2018). The WTO (2017) ranked the apparel industry of Bangladesh as second after China. Chinese firms always get researchers' attention. However, there is a dearth of research on apparel firms in Bangladesh. Bangladesh is a densely populated country and the government has used the population to turn Bangladesh into a labor-intensive country. However, the country lacks developed infrastructure and has gone through political *chaos* and economic disruptions (Donaghey and Reinecke, 2018). These challenges have resulted in the emergence of large and successful apparel industry (WTO, 2017). Yet, remarkably, the industry's success hinges on approximately 5,000 international export manufacturers. It is noteworthy to study this important industry in this context because majority of these firms are entrepreneurial firms (Faroque *et al.*, 2017) and the success of these firms rely on the entrepreneur's capability to perform efficiently.

The importance of individual-level capabilities for international entrepreneurs is immense. The capabilities of entrepreneurs can be exploited when they can identify correct opportunities, regarding marketing, resources, raw material supplies, etc. The identification of opportunity and DMC is interlinked because DMC enables strategic actions and contributes to the performance of internationalized firms (Andersson and Evers, 2015). This study shows how DMC of entrepreneurs/managers plays a crucial role in executing strategic actions to achieve firm performance; strategic actions include, for instance, opportunity identification process. Shane and Venkataraman (2000) and Shane (2000) conceptualize opportunity as a set of beliefs, ideas and actions to create and develop new innovative products and services. It also includes improvement of existing product/service, reasonable and feasible imitation of product/service in a less saturated international market or entry into a new market (Singh, 2001). International opportunity identification (IOI) is a strategic action, and the most critical success factor for internationalizing firms (Chandra *et al.*, 2012). The logic of DMC theory links the following three specific ideas together:

- (1) individual-level capability;
- (2) strategic actions; and
- (3) firm performance (Helfat and Martin, 2015).

Based on this causal logic, this study addresses the question: What are the impacts of DMCs of entrepreneurs on IOI and international performance of the firms?

Scholars have argued that internationalized firms achieve immense success in the international market by practicing maximum intensity, proclivity and scope of accelerated internationalization. The practice of maximum intensity and proclivity has been addressed by researchers (Weerawardena *et al.*, 2007). The question that remains unanswered is: How does scope of accelerated internationalization” contribute to the performance of export-manufacturing firms? Following the appeal by Adner and Helfat (2003), Andersson and Evers (2015), Cavusgil and Knight (2015), Helfat and Martin (2015), Tabares *et al.* (2015) and Knight and Liesch (2016), the contributions of this study are threefold. *First*, the research contributes to the existing literature by creating the bridge between individual-level capability and IOI. In doing so, the research reveals the extent to which individual-level capability improves firm performance. The empirical establishment of this research merits profound insights into strategic management and multinational business knowledge. It will enhance the knowledge corridor of DMC theory (Adner and Helfat, 2003) and international opportunity perspectives (Oviatt and McDougall, 2005; Reuber *et al.*, 2018). *Second*, a study of this nature in the context of export-manufacturing firms that predominantly export from least developed economies is a rarity (Tabares *et al.*, 2015). A review paper by Helfat and Martin (2015) highlights that empirical research from individual-level capability perspective mostly focuses on developed economies. Hence, the study in an emerging economy can spur a *plethora* of research. *Third*, this study contributes to International Business (IB) knowledge by highlighting the moderating role of “scope of accelerating internationalization” between IOI and international performance in response to a call by Knight and Liesch (2016). The moderation analysis sheds light on existing IB literature by noting the effects of accelerated internationalization (*scope*) and how it can benefit the performance of the firm. The terms “manager” and “entrepreneur” are used interchangeably in this study because the entrepreneurs in these firms play the role of managers and the concept of DMC is directly related to entrepreneurship (Teece, 2012).

Literature review

Dynamic managerial capability

The seminal work was proposed by Adner and Helfat (2003) to explain DMC as the dynamic capability of a managers. Majority of the studies on capability has focused on to explain organizational ability to cope in a changing environment (Adner and Helfat, 2003). DMC is an outgrowth of dynamic capability theory (Helfat and Martin, 2015). Dynamic capability denotes singular focus on strategic changes without incorporating organizational changes. DMC postulates “singular focus on managerial impact on strategic changes by incorporating the impact of managers on strategic changes” (Helfat and Martin, 2015, p. 2). DMC has ended this debate by highlighting the differences between managerial decision and corporate strategy. DMC influences operational and strategic decision of top managers. Helfat *et al.* (2007, p. 3) defined DMC as the “capacity of managers to create, extend, or modify the resources base of the organization.” The sensing, seizing and transforming of opportunities emerged from the conceptualization of Teece (2007) and was subsequently improved by O’Reilly and Tushman (2008) and Helfat and Martin (2016, p. 189) to frame DMC as the “capacity of senior managers to ensure learning, integration, and, when required, reconfiguration and transformation-all aimed at sensing and seizing opportunities as markets evolve.” This study conceptualizes DMC as the capability of entrepreneurs to sense, seize and transform opportunities on a continuous basis (Helfat and Martin, 2016; Teece, 2012, 2016).

The dimensions of DMC provide insights to the transformation of valuable information by involving a routine search of essential resources and deployment decisions to develop

competitive business assets (Helfat and Martin, 2015). When a new market evolves, DMC is important in learning, integrating, reconfiguring and transferring resources and competencies. The strategic action of DMC bridges the gap between intention and performance outcomes. Not all capabilities are DMCs and not all entrepreneurs will have it. To achieve superior performance, the possession of a single capability does not yield maximum output, but the simultaneous presence of all three attributes of DMCs are necessary to perform the strategic activity and achieve desired outcomes.

Managerial human capital is defined based on educational qualification, experience and training that facilitates managers to reconfigure organizational resources and competencies (Castanias and Helfat, 1991). Helfat and Martin (2015) note that managerial human capital is the key driver of the development of capabilities, which requires prior entrepreneurial, managerial, academic and training activities to mobilize resources and competencies. The mobilization of resources and competencies require cognitive concentration to process knowledge and transform economic values. Among the three attributes, managerial social capital gets much attention in export-oriented internationalization research to explain the network relationship of entrepreneurs. Managerial social capital is defined as a formal and an informal network relationships of managers that create the conduits of information to identify new opportunities (Adner and Helfat, 2003). However, the concept of identifying opportunities is not limited to entering new markets but includes identifying skilled personnel, investment opportunities, information regarding market intelligence, etc., (Mostafiz and Goh, 2018). Managerial cognition, which is contextual, refers to the beliefs, knowledge structure and the mindset of managers, which serve the basis for taking strategic decisions (Adner and Helfat, 2003).

Andersson and Evers (2015) have proposed a relationship between the attributes of DMCs and international opportunity recognition to achieve international growth. Our study has deviated from the conceptualization of Andersson and Evers (2015) as follows:

- by empirically investigating the effects of the attributes of DMCs of entrepreneurs on IOI practices of the firm;
- by conceptualizing international opportunity recognition as strategic action of the firm to explore and exploit the international opportunity; and
- by proposing and empirically validating a unified model on DMCs and IOI to achieve performance.

The fundamental argument behind conceptualizing IOI as a strategic action of the firm requires critical analysis and transformation of information to achieve feasibility and creates economic value. The concept of DMC is distinct from the concept of IOI. Theoretically, DMC is the capabilities of the managers, which lead to the strategic actions such as opportunity identification (Faroque *et al.*, 2017), thereby eliminating the reverse causality.

International opportunity identification

The economic theory of opportunity proposes that entrepreneurial opportunities refer to the action to create new goods/service by creating cost-effective operational methods through new sources of raw materials. International entrepreneurs have to be opportunistic and strategic actions such as IOI require dynamic ability of managers (Helfat and Martin, 2015). Mainela, *et al.* (2014, p. 16) have noted that IOI is a continuous practice for entrepreneurial firms where “a situation that both spans and integrates elements from multiple national contexts in which entrepreneurial action and interaction transform the manifestations of economic activity”.

The nexus of IOI in internationalization business to achieve firm performance has been established (Zahra and Hayton, 2008; Chandra *et al.*, 2012). Export-manufacturing firms tend

to be entrepreneurial firms. The definition proposed by Oviatt and McDougall (2005, p. 540) in defining the entrepreneurial activities of export-oriented internationalization firms as “the discovery, enactment, evaluation, and exploitation of opportunities – across national borders – to create future goods and services,” is well-accepted. Reuber *et al.* (2018) argue that opportunity identification is an individual-level cognitive process that requires innovation and structuring activities. For instance, a new market entry is considered as a growth opportunity, which is an individual-level opportunity. According to Ko and Butler (2006) and Oviatt and McDougall (2005), export-oriented internationalization firms can accelerate their performance by identifying multiple opportunities and entering into multiple countries (*scope*). In this research, we specifically address the role of *scope* of accelerated internationalization.

Accelerated internationalization process

The *scope* of internationalization is one of the three dimensions of accelerating internationalization process (Weerawardena *et al.*, 2007). The term “international scope” refers to the “geographical scope of international activities” and indicates firms exporting their products to one or more than one international market or regions (Tallman and Li, 1996). Oviatt and McDougall (1994, p. 46) posit that internationalized firms should “operate their business in multiple countries”; whereas Blesa *et al.* (2008, p. 171) have argued that “firm should operate business under consolidated international phenomenon.” None of the scholars has suggested an exact number of countries that export-oriented internationalized firms should operate their business. Rugman and Hoon Oh (2011) and Rugman *et al.* (2015) have highlighted the ambiguity to operationalize multinationality based on the scope measure. However, Onkelinx *et al.* (2012) denote that only *scope* of internationalization exhibits true nature of degree of internationalization. Moreover, an exposed internationalized firm generates maximum scale of profit from multiple international markets (*scope*) (Tallman and Li, 1996). Therefore, in general, if export-oriented small- and medium-sized manufacturing firms, which are internationalized from near inception could operate in multiple international markets then the chances of better performance are higher.

Hypothesis development

The fundamental theoretical anchor of this study is DMC (Adner and Helfat, 2003). This study creates a bridge between the capability (DMC) and strategic action (IOI) to explain the firm performance. This study conceptualizes IOI as a mediator, which requires a set of beliefs, ideas and actions to create and develop innovative product/service; improvement, imitate reasonable and feasible product/service in a less saturated international market or for entering a new market (Shane and Venkataraman, 2000; Singh, 2001). These conceptualizations confirm the nomological validity of the research framework. Furthermore, the idea of “entering new market” to identify opportunity leads this study to incorporate “scope of accelerated internationalization” (Tallman and Li, 1996). This study conceptualizes scope of accelerated internationalization as a moderator between IOI and international performance of the firms, meaning that new international market operations might bring superior firm performance for export-manufacturing firms. Figure 1 represents the conceptual framework of this study.

Managerial human capital and international opportunity identification process of firms

The managerial human capital refers to the skill, knowledge and the analytical ability of the entrepreneurs to take a strategic decision to respond to changes (Adner and Helfat, 2003). Human capital facilitates entrepreneurs to transform opportunity into intentions through

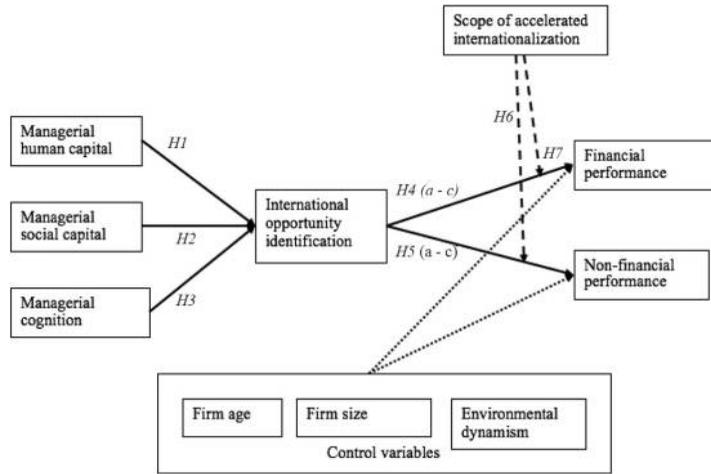


Figure 1. Conceptual framework

learning orientation (Dimov, 2007). The managerial human capital is derived from learning skills that are achieved through the investment in academic qualification, training and prior experiences, both managerial and entrepreneurial experiences (Adner and Helfat, 2003). The mechanism that managers use to convert learning into capabilities include experimental learning, vicarious learning and congenital learning (De Clercq et al., 2012). These learning nourish knowledge and intensify the ability of the managers to deal with international activities. De Clercq et al. (2012, p. 148) denote that “founders with prior international experience are more aware of international opportunities, more capable of assessing such opportunities, and more favorably to pursuing such opportunities.” Learning from experience is the central argument of human capital, which, in turn, provides resource advantage if it is rare, unique and inimitable (Campbell et al., 2012).

To compete for acquiring opportunities, resources and competencies, experienced entrepreneurs are more capable of accumulating knowledge and expertise that can bypass conventional market and enable them to develop new markets (Seghers et al., 2012). The managerial experience facilitates them to mobilize similar strategies, common practices and develop their learning orientation. This learning orientation enables entrepreneurs to accumulate both tacit and explicit knowledge, improvise intangible resources and competencies and improve other entrepreneurial activities (Adner and Helfat, 2003; Grichnik et al., 2014). Besides, managerial human capital encourages entrepreneurs to act more efficiently in different environments and broaden the knowledge level to develop required abilities and skills. Therefore, we argue the following hypothesis:

- H1. There is a positive relationship between the managerial human capital of entrepreneurs and IOI process of export-manufacturing firms.

Managerial social capital and international opportunity identification process of firms

The social capital of entrepreneurs refers to the relationship with business partners, alliances, government officials and other union leaders, which facilitates them to have better managerial control, influence and power. The foundation of managerial social capital is based on managerial tie use, trust and solidarity from both internal and external networks

(Kemper *et al.*, 2011). Stronger tie, trust and solidarity in the form of social capital are a source of new knowledge accumulation. When entrepreneurs are able to manifest strong tie, trust and solidarity between them, these will increase the chance to share international opportunities. One opportunity that is not important to an entrepreneur may turn out to be a significant opportunity for another entrepreneur. Tie, trust and solidarity help entrepreneurs to exchange information and share their experiences about international opportunities. It provides the basis to acquire information regarding new technological enhancement opportunities, improve efficiency and enhance the ability of entrepreneurs' skill to deal with international activities by learning from the knowledge that they accumulate from network relationships (Yli-Renko *et al.*, 2002). Ellis (2011) argues that effective social capital of the entrepreneurs with local network (i.e. government, competitors and potential stakeholders) create significant information benefit, specifically for entrepreneurs experiencing the first time internationalization. This information benefit due to strong social capital not only delivers new opportunities but also becomes a source of exchange about new opportunities (Ellis, 2011). Social capital is also a key predictor of post-succession firm performance (Lee *et al.*, 2008). The network theory mostly focuses on firm-level network alliances, but the managerial social capital of DMC emphasizes on individual-level capabilities of entrepreneurs. Entrepreneurs' social capital gets attention in export-oriented internationalization research to overcome complexity such as scarcity of resources and uncertainties through the advantage of managerial ties and network relationships. These can potentially escalate international growth and performance in a distinct way. If entrepreneurs are able to continue to develop strong network relationships with potential stakeholders in the international market, the chances of failure can be minimized (Zimmerman *et al.*, 2009). In a participative governmental environment, higher level of social capital of entrepreneur increases the emergence of new source of opportunities (Tasavori *et al.*, 2018).

The generation of the new ideas and unique resources configuration is significantly necessary for opportunity identification because:

- top management relationships provide access to important information; and
- optimal use of unique resources facilitates opportunity identification (Andersson and Evers, 2015).

Innovative ideas and creativity come from the cooperation of business partners through the development of social capital between entrepreneurs (Luk *et al.*, 2008). It plays an important role in capabilities development, such as marketing capability by providing the sources of valuable and effective market information. Based on the above argument, we propose the following hypothesis:

- H2. There is a positive relationship between the managerial social capital of entrepreneurs and IOI process of export-manufacturer firms.

Managerial cognition and international opportunity identification process of firms

Managerial cognition is defined as the mindset (beliefs, knowledge structure and mental process) of entrepreneurs by which they create the linkage between a variety of actions and transform those actions to outcomes (Adner and Helfat, 2003). Modern researchers conceptualize the theory of cognition in many different perspectives, which are rooted in the same ideology. However, Oviatt and McDougall (1994) have noted that the most important cognitive model of international entrepreneur is the "global mindset." The global mindset is

defined as a vision of entrepreneurs to practice openness and cultural diversification, which facilitates the propensity of entrepreneurs toward international markets and creates synergy among diversity (Nummela *et al.*, 2004). The tendency of successful entrepreneur includes the characteristics of seeking valuable information, business processes and opportunities. Efficient knowledge structure enriches entrepreneurial decision-making capability to understand the needs of global market.

Global mindset, also, plays an important role in the capability building process of international entrepreneurs to achieve competitive advantage in the international market (Weerawardena *et al.*, 2007). Entrepreneurs with strong global mindset play pivotal role in decision-making in export-oriented internationalized firms (Oviatt and McDougall, 2005). This emphasizes the importance of entrepreneurs' global mindset – their cognitive ability in taking strategic decisions. Having a higher level of entrepreneurial global mindset has better chances of creating new ventures in comparison with other entrepreneurs. It also enables them to anticipate future economic business environment, predict changes in the international market, improve entrepreneurial commitment decisions on resource allocation and expand entrepreneurial commitment to oversee the whole world as one big marketplace (Nummela *et al.*, 2004). Ramsey *et al.* (2016) postulate that having a high-level of global mindset enable managers to create an ability to implement international strategy to improve organizational level performance. Hence, the international performance of export firm is conceptualized through the fulfilment of organizational goals. However, variety of organizational goals creates a path between global mindset and international performance of the firms through different intervening variables. Based on these arguments, we propose the following hypothesis:

- H3. There is a positive relationship between managerial cognition of entrepreneurs and IOI of export-manufacturing firms.

Mediating role of international opportunity identification between dynamic managerial capability and firm's performance

Investigating the performance of DMC is a two-step process. First, the investigation should measure the impacts of the attributes (dimensions) of DMC on intermediate outcome (strategic action) and then measure the consequences of those impacts on the final outcome (Helfat and Martin, 2015). Capability has intended outcomes such as assets orchestration. These outcomes should be recognizable. The strategic action fills the gap between the capability and recognizable intended outcomes (Helfat and Martin, 2015). DMC enables entrepreneurs to do reliable and repeated activities in a satisfactory manner (Teece, 2012). According to Andersson and Evers (2015), the attributes of DMC of entrepreneurs play a role in identifying the correct international opportunity, which, in turn, enhances the growth of the firm. IOI plays a mediating role between networking capability and export performance (Faroque *et al.*, 2017). The cognitive ability of entrepreneurs plays a role in recognizing international opportunity for desired outcomes (Kiss *et al.*, 2015) and helps in reducing the liability of foreignness. Accordingly, an active social network of experienced entrepreneurs assists them to identify new business opportunities for the firm. Dimov's (2010) study provides evidence on how human capital of nascent entrepreneurs can contribute to venture emergence through opportunity identification. Empirical evidences show that IOI plays an important role in enhancing the international performance of export-oriented internationalized firms (Bhagavatula *et al.*, 2010). IOI is entrepreneurial actions and interaction across national borders to manifest economic activities (Mainela *et al.*, 2014). Entrepreneurs cannot identify opportunities unless they possess dynamic ability, which

helps them to process information (Shane and Venkataraman, 2000). IOI is an enormously important driver to stimulate internationalization (Francioni *et al.*, 2016). It helps in new venture strategies and firm's growth patterns. Kropp *et al.* (2006) have shown the importance of IOI in achieving better performance through accumulating knowledge from market. Importance of IOI has been highlighted by Zahra and Hayton (2008) and De Clercq *et al.* (2012) in international activities by internationalizing firms. Pla-Barber and Escriba-Esteve (2006) show the significance of IOI in accelerated internationalization process. Therefore, in this study we propose the following hypotheses:

- H4a. IOI mediates the relationship between managerial human capital of entrepreneurs and the financial performance of export-manufacturing firms.
- H4b. IOI mediates the relationship between managerial social capital of entrepreneurs and the financial performance of export-manufacturing firms.
- H4c. IOI mediates the relationship between managerial cognition of entrepreneurs and the financial performance of export-manufacturing firms.
- H5a. IOI mediates the relationship between managerial human capital of entrepreneurs and non-financial performance of export-manufacturing firms.
- H5b. IOI mediates the relationship between managerial social capital of entrepreneurs and non-financial performance of export-manufacturing firms.
- H5c. IOI mediates the relationship between managerial cognition of entrepreneurs and non-financial performance of export-manufacturing firms.

Moderating role of scope of accelerated internationalization

Onkelinx *et al.* (2012) have suggested that the ideal way to investigate the accelerated behavior of internationalization firm is to investigate the *scope* of accelerated internationalization. To minimize the liability of foreignness, small firms often choose multiple countries to operate their businesses by using the sprinkler strategy (Onkelinx *et al.*, 2012). It is the most viable option to achieve accelerated internationalization and improve the firm's performance (Weerawardena *et al.*, 2007). The sprinkler strategy facilitates the firms to achieve fast-mover advantage to capture the international market. The sprinkler strategy suggests that firms behave aggressively to enter new markets (Luo and Tung, 2007). Tallman and Li (1996) stress on sprinkler strategy and argue that greater scope delivers a higher degree of internationalization. Multiple market entry provides higher opportunities to learn and accumulate more information regarding the changes and increase the awareness of entrepreneurs in response to the volatile situation (Kuivalainen *et al.*, 2007). Exporting to multiple countries helps firms to diversify their risks and achieve better performance when compared to firms that operate in fewer markets (Weerawardena *et al.*, 2007). It also brings imitability and diversity in competencies while performing in the international market. New market entry is not only available for exporting, but also can open doors for direct investment and other strategic alliances. The new export market operation provides a platform to achieve global reach and opportunity to establish new international reputations. Additionally, broader *scope* provides new market of clients to generate higher profitability (financial benefits). New market entry is embedded in the internationalization process of the firms, which improves the organization knowledge base, which, in turn, increases the chances to exploit more opportunities. Hence, it can be argued

that the *scope* of accelerated internationalization is vital in translating IOI to better performance. Based on the above arguments, we propose the following hypothesis:

- H6. The scope of accelerated internationalization moderates the relationship between IOI and non-financial performance of export-manufacturing firms.
- H7. The scope of accelerated internationalization moderates the relationship between IOI and the financial performance of export-manufacturing firms.

Research methodology

Research design and sample

We developed the questionnaire based on the previous literature to test our hypotheses in the context of a least developed economy. The apparel industry of Bangladesh is the world's third-largest readymade garments exporter (WTO, 2017). These firms are operating in low-technological industry and play a significant role as contract manufacturers for large multinationals. The founders/entrepreneurs of the firm are the informant of the data of DMC and IOI. We managed to collect financial data (return on assets and return on equity) from the finance manager and non-financial data from the operations managers of each firm. The firms were chosen by using random sampling method from the database of BGMEA (www.bgmea.com.bd) and BKMEA (www.bkmea.com). In total, approximately 5,500 firms were registered with these associations. We administered and distributed 800 paper-based questionnaires to these firms and collected 470 responses. We found that these firms internationalized at their first year of establishment. The response rate was 58.75 per cent. We performed Mahalanobis D^2 test to identify outliers. After removing all the extreme cases, 390 valid cases were carried forward for further statistical analyses. The skewness and kurtosis values represent that data were normally distributed (Hair *et al.*, 2010).

Measurement

International performance has been measured based on both subjective (Hult *et al.*, 2008) and objective measures (Cerrato and Piva, 2015; Jantunen *et al.*, 2008). Eight items have been used to measure the non-financial performance based on seven-point Likert scale. Return on assets and return on equity have been used to measure the financial performance of firms.

The managerial human capital construct has been measured using four items (prior managerial experiences, prior entrepreneurial experience, educational qualification and prior training experiences) adapted from Grichnik *et al.* (2014) and Davidsson and Honig (2003). *The managerial social capital* construct has been measured using 13 items reflecting three dimensions: managerial tie (Items 1-6), managerial trust (Items 7-10) and managerial solidarity (Items 11-13) (Kemper *et al.*, 2011) based on seven-point Likert scale. *Managerial cognition* construct has been measured using seven items reflecting three dimensions (pro-activeness, commitment and international vision) to capture the global mindset of entrepreneurs (Nummela *et al.*, 2004). *The IOI* construct has been measured using eight items to capture the number of identified opportunities, the values, uniqueness and the feasibility of those opportunities (Gordon, 2007; Ko and Butler, 2006; Puhakka, 2007). *The scope of accelerated internationalization* has been measured based on one item indicating the number of countries that the firm is exporting to (Onkelinx *et al.*, 2012).

The study controls the correlation of dependent variables by "firm size," which is based on number of employees and firm age is based on the years of international operations and operationalized as dummy variables (nominal variables); and environmental dynamism is based on the industrial changes, technological changes and environmental changes in the

international market (Jantunen *et al.*, 2008) on seven-point Likert scale, where 1 represents extremely high dynamism and 7 represents extremely low dynamism.

Results

Descriptive statistics

Table I represents the characteristics of survey data based on firm size and firm age. Majority of the firms were large with 52.3 per cent of the firms having more than 1,000 employees. The maximum number of firms (49 per cent) was relatively young with age between 6 and 15 years. As mentioned earlier, these firms internationalized from their inception. The mean value of the constructs (Table II) indicates that all value falls into the category of moderate to high/agreeable position. This result shows that entrepreneurs from Bangladesh apparel industry have the higher levels of DMC and IOI.

In addition, the variance inflation factor (VIF) values show that constructs do not correlate with each other and represent minimal effects of multicollinearity (<5.0). In addition, the result of Harman's single factors test shows that the first component percentage of variance is less than 50 per cent (41.604 per cent) (Podsakoff *et al.*, 2003). Besides, we collected data from multiple sources as the founder/entrepreneurs were responsible for providing information on DMC and IOI and the financial manager provided information on financial performance and the operational manager provided information on non-financial performance. This mechanism of collecting data from multiple sources helped this study to minimize the effects of common method variance (CMV). Furthermore, we conducted common latent factor analysis as suggested by Chang *et al.* (2010) in international business research. A model was developed where all items were loaded on a single factor. The findings are significantly different from the findings of measurement model ($\chi^2 = 5310$, $df = 819$, $p < 0.001$). This study also follows the psychological separation of the constructs of the questionnaire items while collecting data on DMC and IOI as guided by Chang *et al.* (2010). Hence, this study concludes that there is minimal effect due to CMV.

Reliability and validity

Cronbach's alpha and composite reliability (CR) (Table III) show that the reliability score of each construct is greater than 0.70 (Hair *et al.*, 2010). We performed confirmatory factor analysis (CFA) for measurement model validity before performing structural equation

Characteristics	No. of enterprises	(%)	Cumulative
<i>No of employee</i>			
<150	3	0.7	0.7
151-200	7	1.7	2.6
201-500	92	23.6	26.2
501-1,000	84	21.6	47.7
1,001-2,000	103	26.4	74.1
>2,001	101	25.9	100
<i>Firm age</i>			
1-5	78	20	20
6-10	92	23.58	43.58
11-15	93	23.85	67.43
16-20	79	20.26	87.7
More than 20	48	12.3	100

Table I.
Data characteristics of the sample ($N = 390$)

Constructs in the model	1	2	3	4	5	6
(1) Managerial human capital	0.816					
(2) Managerial social capital	0.529**	0.790				
(3) Managerial cognition	0.241***	0.289***	0.774			
(4) International opportunity identification	0.547**	0.417**	0.420**	0.780		
(5) Financial performance	0.318**	0.326**	0.180**	0.164**	0.936	
(6) Non-financial performance	0.357**	0.423**	0.488**	0.416**	0.217***	0.766
<i>Control variables</i>						
Firm size	0.640**	0.574**	0.518**	0.598**	0.441**	0.575**
Firm age	0.572**	0.528**	0.473**	0.547**	0.411**	0.526**
Environmental dynamism	-0.160**	-0.192**	-0.168**	-0.198**	0.012	-0.219**
Mean score	20.50	72.54	39.87	43.73	7.72	44.10
Standard deviation	3.36	8.84	4.95	6.20	1.5	5.7
Skewness: statistics (std. error)	-0.057 (0.124)	-0.194 (0.124)	-0.244 (0.124)	-0.142 (0.124)	0.918 (0.124)	-0.289 (0.124)
Kurtosis: statistics (std. error)	-0.464 (0.247)	0.003 (0.247)	-0.317 (0.247)	-0.657 (0.247)	0.905 (0.247)	-0.409 (0.247)
VIF	1.859	2.237	2.255	2.381	1.142	2.738

Notes: Diagonal is the square root of the AVE; **correlations significant at the 0.05 level (two-tailed); ***correlations significant at the 0.01 level (two-tailed)

Table II. Descriptive statistics, correlation matrix of constructs and CFA summary

modeling (SEM) for structural model with AMOS (Version 24), by adopting maximum likelihood estimation. Average variance extracted (AVE) and maximum shared variance (MSV) had been conducted to check the convergent validity. Results show that AVE score of each construct is greater than 0.5 and higher than MSV score of the subsequent construct. This result indicates that there are no convergent validity issues between constructs (Sharif *et al.*, 2018). In addition, we also computed average shared variance (ASV) and heterotrait-monotrait (HTMT test) ratio of correlation to check the discriminant validity. Results show that the MSV score of each construct is greater than ASV score and none of the HTMT correlations between constructs is above 0.80 (Henseler *et al.*, 2015; Mostafiz *et al.*, 2019). Therefore, this study has achieved the assumptions of discriminant validity. Table IV represents the results of HTMT correlation ratio.

Hypotheses testing

The two-step method proposed by Anderson and Gerbing (1988) was followed to test the hypotheses by conducting CFA and SEM. Table V gives the model fit statistics of the measurement model and structural model. The goodness of fit for measurement model in this study indicates an acceptable level of fit (Hair *et al.*, 2010). The standardized factor loadings (Table III) satisfy the minimum threshold of 0.50 (Anderson and Gerbing, 1988).

The structural model presents a significant chi-square ($\chi^2 = 1719.848$, $df = 981$, $p < 0.000$) and $\chi^2/df = 1.753$, are within the acceptable and adequate range. Other fit indices

The
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Items/Constructs	Std. loadings (critical ratio)	α	CR	AVE	MSV	ASV	Max reliability (H)
<i>Managerial human capital</i>		0.884	0.888	0.666	0.432	0.364	0.954
1. Prior entrepreneurial experiences	0.767 (18.034)						
2. Prior managerial experiences:	0.883 (22.418)						
3. Prior academic education	0.739 (17.060)						
4. Training experiences	0.866						
<i>Managerial social capital</i>		0.956	0.956	0.621	0.523	0.380	0.977
1. Top manager at buyer firms	0.801 (17.007)						
2. Top manager at supplier firms	0.790 (16.652)						
3. Top manager at competitor firms	0.811 (17.883)						
4. Political leader in various levels of the government	0.786 (17.009)						
5. Officials in industry bureaus	0.795 (17.402)						
6. Officials in regulatory and supporting organizations such as tax bureaus, state banks, commercial administration bureaus and the like	0.774 (17.163)						
7. I assumed that he or she would always look out my interest	0.781 (18.006)						
8. I assumed that he or she would go out of his or her way to make sure I was not adversely affected	0.796 (17.565)						
9. I felt like he or she cared what happened to me	0.787 (17.550)						
10. I believed that this person approached his or her job with professionalism and dedication	0.798 (16.605)						
11. Members of my business network believe that the needs of the whole network should take priority over personal needs	0.811 (17.642)						
12. Members of your business network accept decisions taken within the network even when they have different opinions	0.748 (17.692)						
13. Problem-solving by many members of a business network gives better results than those by individuals	0.786						
<i>Managerial cognition</i>		0.908	0.912	0.584	0.518	0.385	0.982
1. It is important for our company to internationalize rapidly	0.643 (13.890)						
2. Internationalization is the only way to achieve our growth objective	0.774 (15.111)						
3. We will, have to internationalize to succeed in the future	0.796 (15.692)						

(continued)

Table III.
Summary of
standard loadings,
CR, AVE, MSV, ASV
and maximum
reliability (H)

Items/Constructs	Std. loadings (critical ratio)	α	CR	AVE	MSV	ASV	Max reliability (H)
4. The growth we are aiming at can be achieved mainly through internationalization	0.795 (14.174)						
5. The entrepreneur of the company is willing to take the company to the international markets	0.832 (16.280)						
6. The company's management uses a lot of time in planning international operations	0.794 (16.065)						
7. The company's management sees the whole world as a one big marketplace	0.770						
<i>International opportunity identification</i>		0.929	0.925	0.511	0.518	0.510	0.985
1. How many international business ideas did you identify in the past three years?	0.714 (15.304)						
2. How many international business opportunities did you identify in the past three years?	0.793						
3. How much did you modify/develop an international opportunity from idea generation to opportunity identification?	0.832 (13.753)						
4. How many recognized international business opportunities were considered as novel or innovative?	0.704 (13.302)						
5. How many novel or innovative ideas were considered feasible and desirable?	0.746 (14.149)						
6. How many international opportunities have you pursued in the past three years?	0.718 (13.295)						
7. How much are you able to shift organizational resources to capitalize on emerging opportunities in international markets?	0.766 (13.477)						
8. How quickly can you respond to changes in the international market and adapt to respond to external opportunities?	0.813 (12.276)						
<i>Financial performance</i>		0.932	0.934	0.875	0.106	0.072	0.988
1. Return on assets	0.949						
2. Return on equity	0.922 (19.473)						

Table III.

(continued)

The
international
opportunity

Items/Constructs	Std. loadings (critical ratio)	α	CR	AVE	MSV	ASV	Max reliability (H)
<i>Non-financial performance</i>							
1. New product and service introduction in international markets	0.788 (13.394)	0.919	0.919	0.587	0.523	0.504	0.920
2. Time to market for new product and service internationally	0.755 (12.380)						
3. Number of successful new product and service in international markets	0.798 (12.916)						
4. Global reach (i.e. presence in strategically located countries worldwide)	0.758 (12.162)						
5. International reputation of the firm	0.744 (12.732)						
6. Gaining a foothold in international markets	0.763 (11.821)						
7. Success of main international business	0.791 (12.762)						
8. Success of main international business from competitor perspective	0.731						

Notes: Critical ratio greater than 1.96 is significant at $**p < 0.05$, $***p < 0.001$ n.s: not significant

Table III.

Construct	1	2	3	4	5	6	7	8
Managerial human capital	–							
Managerial social capital	0.642	–						
Managerial cognition	0.575	0.515	–					
International opportunity identification	0.569	0.621	0.748	–				
Financial performance	0.325	0.326	0.191	0.159	–			
Non-financial performance	0.668	0.722	0.718	0.714	0.216	–		
Scope of accelerated internationalization	0.668	0.607	0.599	0.591	0.303	0.702	–	
International opportunity identification * scope of accelerated internationalization	0.060	0.044	0.064	0.049	0.208	0.049	0.052	–

Table IV.
HTMT Correlation
ratio

Model	X^2	df	X^2/df	RMSEA (90% C.I.)	GFI	CFI	NFI	RFI	IFI	TLI	SRMR	PCLOSE	
Measurement model	1,446.453	795	1.819	0.046	0.042-0.050	0.854	0.947	0.819	0.882	0.948	0.943	0.0386	0.965
Structural model	1,719.848	981	1.753	0.044	0.041-0.047	0.846	0.947	0.882	0.876	0.947	0.942	0.0374	0.998

Table V.
Model fit statistics

MBR

such as CFI > 0.900 (0.947), IFI > 0.900 (0.947), TLI > 0.900 (0.942), SRMR < 0.05 (0.0374) and RMSEA < 0.05 (0.044) show evidence of acceptable fit for structural model (Hair *et al.*, 2010). Table VI highlights the results of the hypothesized relationship between constructs and Table VII represents the total effects, direct effects and indirect effects of exogenous variable on endogenous variables. We performed bootstrapping procedure to examine the mediation effects of IOI in the structural model using 5,000 re-sample (Hair *et al.*, 2010). The effects of managerial human capital on IOI is insignificant (H1) ($\beta = 0.062$, $p > 0.05$). However, both managerial social capital (H2) ($\beta = 0.317^{***}$, $p < 0.01$) and managerial cognition (H3) ($\beta = 0.535^{***}$, $p < 0.01$) have significant impact on IOI. The direct effects of IOI on non-financial performance is positively significant ($\beta = 0.203^{***}$, $p < 0.05$), but on

Table VI.
Results of hypothesized relationships in SEM model

Hypotheses	Std. estimates	Critical ratio	<i>p</i> -value	Conclusions
H1	0.062n.s	1.084	0.255	Not supported
H2	0.317***	5.953	0.000	Supported
H3	0.535***	9.566	0.000	Supported
H4a	-0.012n.s	-0.80	0.201	Not supported
H4b	-0.060**	-1.93	0.022	Not supported
H4c	-0.101**	-2.06	0.025	Not supported
H5a	0.013n.s	0.92	0.243	Not supported
H5b	0.065**	2.954	0.002	Supported
H5c	0.110**	2.823	0.002	Supported
H6	-0.024n.s	-0.771	0.472	Not supported
H7	0.106**	2.569	0.020	Supported

Notes: Critical ratio greater than 1.96 is significant at ** $p < 0.05$; *** $p < 0.001$; n.s: not significant

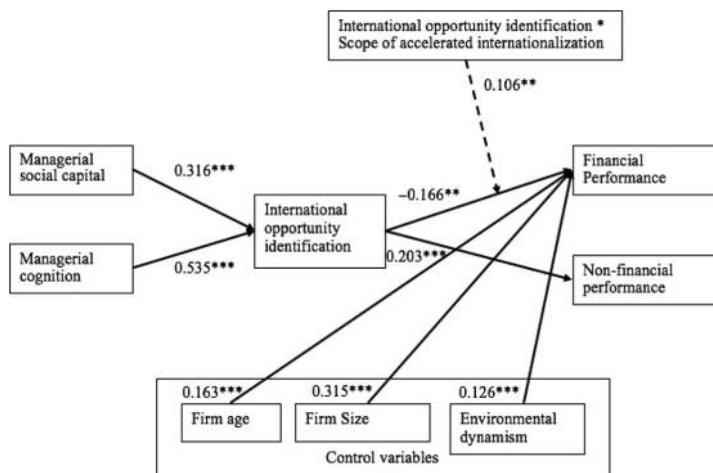
Table VII.
Standardized direct, indirect and total effects of exogenous variable in SEM model

Exogenous variables	Type of effects	Endogenous variable								
		International opportunity identification			Financial performance			Non-financial performance		
		β	CR	<i>p</i> -value	β	CR	<i>p</i> -value	β	CR	<i>p</i> -value
Managerial human capital	Direct	0.062n.s	1.084	0.319	0.079n.s	1.034	0.944	0.194*	3.287	0.002
	Indirect	-	-	-	-0.012n.s	-0.8	0.201	0.013	0.92	0.243
	Total	0.062n.s	0.984	0.319	-0.007n.s	-0.078	0.942	0.207**	3.285	0.000
Managerial social capital	Direct	0.316***	5.953	0.000	0.242*	3.086	0.023	0.347**	6.297	0.000
	Indirect	-	-	-	-0.060*	-1.93	0.022	0.065*	2.954	0.002
	Total	0.316**	4.87	0.000	0.114n.s	1.676	0.111	0.409**	7.57	0.000
Managerial cognition	Direct	0.535***	9.566	0.000	0.004n.s	0.055	0.694	0.278**	4.717	0.000
	Indirect	-	-	-	-0.101*	-2.06	0.025	0.110*	2.82	0.002
	Total	0.535***	8.629	0.000	-0.133*	-2.111	0.034	0.385**	8.02	0.000
IOI	Direct	-	-	-	-0.166*	-2.013	0.031	0.203**	3.562	0.000
	Indirect	-	-	-	-	-	-	-	-	-
	Total	-	-	-	-0.189*	-2.12	0.031	0.203**	3.562	0.000
IOI * Scope of accelerated international	Direct	-	-	-	0.106*	2.569	0.043	-0.024n.s	-0.771	0.479
	Indirect	-	-	-	-	-	-	-	-	-
	Total	-	-	-	0.106*	2.569	0.043	-0.024n.s	-0.705	0.479

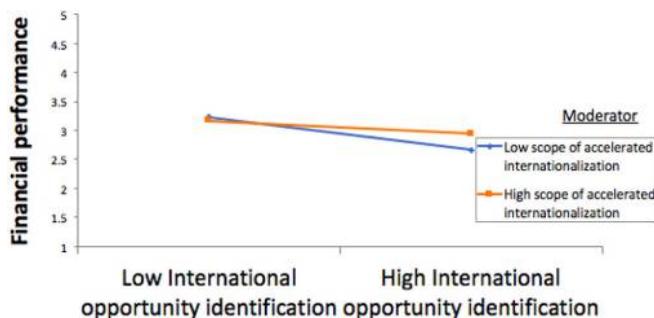
Notes: Critical ratio greater than 1.96 is significant at * $p < 0.05$; ** $p < 0.001$; n.s: not significant

financial performance is negatively significant ($\beta = -0.166^*$, $p < 0.05$). These results lead to *H4a-H4c* and *H5a* not being supported; and *H5b* and *H5c* being supported. Figure 2 represent the structural framework. We have also conduct reverse causality test in SEM and we have found insignificant relationships between the dimensions of DMC and IOI. We performed interaction moderation statistical analysis to examine the moderating effects in the structural model (Hair *et al.*, 2010). Results show that accelerated internationalization significantly moderates the relationship between IOI and financial performance ($\beta = 0.106^{**}$, $p < 0.05$), but does not moderate the relationship between IOI and non-financial performance ($\beta = -0.024$, $p > 0.05$). Figure 3 represent the graph of moderation analysis.

We investigated the boundary condition of the baseline model by using control variables, which includes: firm size (no. of the employee), firm age and environmental dynamism. Results show that firm age, size and environmental dynamism do not have significant relationships with non-financial performance of the firm (controlled). Interesting results were found from control analysis that all three control variables had significant effects on financial performance: firm size $\beta = 0.315$, $p < 0.01$; firm age $\beta = 0.163$, $p < 0.01$; and environmental dynamism $\beta = 0.126$, $p < 0.01$.



Notes: ** $p < 0.05$; *** $p < 0.001$



The international opportunity

Figure 2. Research framework (with significant standard estimates)

Figure 3. Graph of moderation analysis

Findings and discussions

Our findings provide novel insights and contribute significantly to international business, strategic management and entrepreneurship literature. In particular, this study contributes to dynamic managerial capability theory (Adner and Helfat, 2003); knowledge on the export-oriented small- and medium-sized manufacturing internationalized firms perspectives (Knight and Liesch, 2016); and international entrepreneurial behavior toward identifying opportunities (Reuber *et al.*, 2018). Following the appeal by Andersson and Evers (2015), Helfat and Martin (2015), Tabares *et al.* (2015), Tattara (2018), Mostafiz *et al.* (2019) and Xie *et al.* (2018), this study endeavored to empirically investigate the relationships between DMCs of international entrepreneurs, IOI and international performance. Therefore, uncovering the mechanism that translates DMCs of international entrepreneurs into superior financial and non-financial performance is a significant theoretical contribution. Hence, the knowledge on the relationships between DMCs and firm's performance is broader than previously documented. This study has shown positive relationships between the attributes of DMC of entrepreneurs and non-financial performance of the export-manufacturing firms. Therefore, it is noteworthy to mention that the role of DMC is different in subjective performance outcomes and objective performance outcomes.

This study also theoretically contributes to the opportunity-based view in international entrepreneurship and international business literature (Oviatt and McDougall, 2005). According to opportunity-based view, IOI is one of the most key characteristics of international firms. This study extends this knowledge by identifying the antecedents that develop IOI (Mainela *et al.*, 2014). Furthermore, this study contributes to the export-oriented internationalizing literature by providing empirical evidence on the importance of *scope* of accelerated internationalization. We argue that *scope* of accelerated internationalization is the most effective, reliable and a valid measure to capture the accelerated nature of export-oriented manufacturing firms. In fact, this study shows that the *scope* of accelerated internationalization interacts with IOI and enhances the financial performance. Considering the overall context of export-oriented internationalization knowledge in terms of intensity, proclivity and *scope*, we support Onkelinx *et al.* (2012) and Tallman and Li (1996) by noting that *scope* provides the most relevant meaning of the degree of accelerated internationalization.

Impact of managerial human capital on international opportunity identification and performance

Managerial human capital of DMC has the least influential role on IOI. This result contradicts with scholarly findings of Bhagavatula *et al.* (2010), which indicate a significant positive relationship between human capital and opportunity recognition. International entrepreneurs from least developing countries are not highly academically qualified and the literacy rates of these countries are poor. Unavailability of specialized training and facilities in the least developing countries often create hindrance to developing entrepreneurial skills and abilities. In a least developed economy, the mature traditional SMEs are operated by experienced entrepreneurs, and these firms are more self-sufficient in resources and capabilities than exporting firms (Cerrato and Piva, 2015). Previous studies on this relationship show mixed results. For example, Campbell *et al.* (2012) have highlighted that heterogeneity in managerial human capital will constrain employee mobility in workplace. Heterogeneity in human capital requires rare, valuable and inimitable experiences and training to confirm growth and survival (Schueffel *et al.*, 2011). The respondents in this study (entrepreneurs) had previous entrepreneurial and managerial experiences in similar industry and these experiences had turned out to have an insignificant role. Similar result highlighted by Dimov (2010) suggests that entrepreneurial experience has a positive role to play in identifying international opportunity,

but the similar industry experience of entrepreneurs does not have any role in recognizing opportunity. There are contexts in which human capital has significant influence. According to [Li and Zhang \(2007\)](#), the role of human capital has been significant in achieving firm performance in high-tech industry. [Davidsson and Honig \(2003\)](#) have reported a non-significant relationship between entrepreneurial human capital and first-time sales opportunity. In emerging economies, it is common to observe that entrepreneurs do not have diverse managerial experiences and training from other industries. Majority of entrepreneurs in Bangladesh have been associated with doing business in apparel industry. Lack of heterogeneous experiences and training can lead to inflexibility in the development of international opportunity recognition skills and limit the creativity of entrepreneurs in the identification process. [Haber and Reichel \(2007\)](#) have found significant positive impact of human capital on performance while studying tourism ventures in Israel. This result leads to a contextual variation. Developed countries such as Israel practice continuous skill development program unlike emerging economies. More diverse industry experiences of entrepreneurs and skilled development program lead to large number of varied market opportunities ([Gruber et al., 2013](#)). This will also support the concept of knowledge corridor. Knowledge corridor will bring innovation in entrepreneurial decision and strategic action. Therefore, entrepreneurs should learn to unlearn irrelevant experiences and practice innovative ways to identify alternate opportunities.

Impact of managerial social capital on international opportunity identification and performance

The direct effect of managerial social capital on the performance of export-manufacturing firm is positively significant. In fact, managerial social capital of entrepreneurs has turned out to be the most critical antecedent to IOI. This reflects that having strong business network connection with various stakeholders is critical to ensure the growth of the business. Entrepreneurs with high level of social capital are able to leverage on information and knowledge shared within the business network that will help the firm to gain deeper insights of the international markets. Bangladesh is a country where mutual relationships are significantly important. Political ties with legal authorities and administrative officers are the key sources of valuable information. IOI is not worthy if the sources of information are not efficient. If opportunities are not rare and available to all entrepreneurs, then creating significant economic value is challenging. Strong social capital improves the quality of network and limits the risk of risky resource commitment. Strong network facilitates international entrepreneurs to choose from a variety of alternative options to improve firm's performance ([Seghers et al., 2012](#)). Strong network is also a source of knowledge and learning that are shared between firms in the international market. A suitable and developed strategic location in the international market is an advantage for international entrepreneurs to create and maintain international reputation and gain foothold.

IOI is uncertain and varies from one entrepreneur to another. All opportunities are not available at the same time. The well-organized managerial social capital of international entrepreneurs opens doors for indirect opportunities when a direct opportunity is not available. Once opportunities are recognized, strong ties between entrepreneurs come into action to exploit those opportunities. This study extends the work of [Bhagavatula et al. \(2010\)](#) by documenting that managerial social capital improves the IOI process and helps the firm to maintain stable financial and non-financial growth.

Impact of managerial cognition on international opportunity identification and performance

Our study suggests that managerial cognition of entrepreneurs improves IOI practice of the firm. Managerial cognition of entrepreneurs is contextual. In export-oriented small- and

medium-sized manufacturing internationalizing firms, managerial cognition of entrepreneurs requires global mindset to fulfill the behaviors of being proactive, having international commitment and possessing intensive global vision. Our results highlight that these dimensions enable international entrepreneurs to develop IOI practice by identifying correct international opportunities to achieve non-financial performance. The result is interesting in our research context. While human capital is not significant to IOI, higher level of cognition of entrepreneurs helps them identify correct international opportunities. These entrepreneurs in apparel industry see the whole world as a big marketplace. In an emerging economy context, identifying new opportunities is crucial to promote flexibility in the decision-making process. The presence of managerial cognition of DMCs in international entrepreneurs in the form of global mindset is a key pre-requisite to remove constraints in a firm's international development.

Mediating and moderating roles

Significant direct relationships have been identified between IOI and firm performance. International entrepreneurs with heterogeneous capability provide an edge to recognize international opportunities and create economic value (Hennart, 2014). Our findings suggest that IOI has positive effects on non-financial performance. IOI positively mediates the relationship between managerial social capital and non-financial performance; and between managerial cognition and non-financial performance of the firms. An interesting contribution to the body of knowledge is the moderating effect of "scope of accelerated internationalization" between IOI and the performance of the firms. This study reveals that scope of accelerated internationalization positively moderates the relationship between IOI and financial performance of the firm. This indicates that export-manufacturing firms in apparel industry have keen interest in operating in multiple countries. The positive moderation is seen to reduce the negative impact of IOI on financial performance (Figure 3). This result indicates two noteworthy contributions. First, financial performance is poor if firms in apparel industry from an emerging economy identify international opportunity from fewer countries. However, financial performance is better when *sprinkler strategy* takes place by identifying opportunities in multiple countries. Although, pursuing many markets simultaneously can be costly for resource-constrained firms, like in apparel industry of Bangladesh, but *sprinkler strategy* can help firms to spread the risk of failure by operating in multiple countries. This result supports the investigation of Tallman and Li (1996) and Luo and Tung (2007). A portfolio of investments is needed to minimize this negative effect of IOI on financial performance. Second, firms in the apparel industry of Bangladesh play a role as contract manufacturers for large multinationals, such as for ESPRIT, G-star and Denim. These firms need to explore more opportunities of contract manufacturing business in multiple countries, which lead to expansion of business to larger international market. Pursuing new opportunities is the way to dominate in international market. Our results confirm that a *sprinkler strategy* helps export-manufacturing firms to achieve financial success. In summary, we strongly suggest the managers operating in export-manufacturing industry of Bangladesh to enter multiple European and Western countries to expand their business. The non-financial benefits might not be visible, but the expansion can significantly excel the financial performance of the firms. It is evident that entrepreneurs must not only manifest DMC and invest resources and capability to IOI but also urge multiple international markets to become an exposed international firm. Differences will be there, but the significance of IOI practice is primitive and pivotal in all economies (Mainela et al., 2014).

Conclusions, limitations and directions for future research

The purpose of this study was to provide empirical and actionable evidence on individual-level dynamic capability perspective. Overall, this study suggests that DMC is a crucial antecedent to IOI in achieving the financial and non-financial performance of the firms. Our study provides the evidence on the positive impact of the scope of accelerated internationalization in enhancing the financial performance of firms.

This study poses several limitations, which, in turn, provide future research avenues. The first limitation of this study is the cross-sectional and single country analysis and its generalizability. This *caveat* can be minimized by replicating the study in other emerging economies such as India, Malaysia, Myanmar and Sri-Lanka. A comparative study between different industries such as apparel and technology-intensive firms or a comparative study between hi-tech and low-tech industries can provide more profound insights into international business knowledge. Future research can also consider the role of entrepreneurial orientation as a potential moderator between DMC and IOI.

Furthermore, future study should investigate managerial cognition in different contexts by adopting other operational measurements. It will establish the validity and thereby merit empirical evidence in managerial cognition. It will shed light on managerial cognitive capability (Helfat and Peteraf, 2015) as a general attribute of DMC of international entrepreneurs. Finally, the development of IOI practice is a vital process in export-oriented internationalized business. However, any critical stand-alone process cannot contribute to the success of the firm. Future research can extend the investigation of IOI process and explain to what extent diversified entrepreneurial capabilities play significant role as antecedents in developing IOI process, more compelling.

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