

THE EFFECTS OF FIRM RELATIONAL CAPITAL ON EXPORT PERFORMANCE: THE
MODERATING ROLE OF TECHNOLOGICAL TURBULENCE

by

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A thesis presented to Ryerson University

in partial fulfillment of the requirements for the degree of

Master of Science in Management

in the program of

Master of Science in Management

Toronto, Ontario, Canada, 2020

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ABSTRACT

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Global value chains (GVCs) offer a range of opportunities to manufacturers interested in increasing their export market share by utilizing their business relationships with other firms. In recent studies, it is recognized that relational capital helps manufacturing firms to enhance their competitiveness in global markets. However, prior research does not provide a conclusive account of the impact of relational capital on their export performance in general, and particularly in the context of developing countries. Drawing on a learning-based perspective and contingency approach, this study fills these gaps by theorizing the link between relational capital and firm performance with a focus on developing-country firms that participate in GVCs. Specifically, we propose that the relational capital of these firms will have a stronger positive impact on their export performance when the market and technological turbulence are lower. The results confirm the key hypotheses by showing that developing-country firms' relational capital with buyers has a positive and significant impact on their export performance and that technological turbulence negatively moderates the relationship between relational capital with buyers and export performance. Overall, this research extends the literature on knowledge transfer, interfirm relational capital, and business performance in a developing country context.

ACKNOWLEDGMENTS

Firstly, I would like to praise the almighty Allah for granting me the opportunities and perseverance throughout my program.

I would like to express my sincere gratitude to Dr. Sui Sui and Dr. Horatio M. Morgan, my supervisors for this thesis from the Ted Rogers School of Management (TRSM). Thank you, Dr. Sui and Dr. Morgan, for your guidance and steadfast support throughout the journey of executing this thesis. Your directions and pieces of advice help me navigate through everything, starting from the research questions, literature review, REB application, sample selection, data analysis, and finalizing the result. Thank you, Dr. Max Antony Newman, for helping me in proofreading of my thesis. I would also like to thank Dr. Mohammed A. Jahed for his guidance in collecting survey data and analysis. Thank you, Dr. André Laplume, for chairing my Examination Committee.

Thank you, Dr. Hossein Zolfagharinia and Dr. Richard Chisik, for serving on my Examination Committee. Thank you also to the other TRSM faculty members along with my 20-month-long journey, and especially to Dr. André Laplume and Dr. Hong Yu for oversight of the graduate program.

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LIST OF ABBREVIATIONS

AVE	Average Variance Extracted
BGMEA	Bangladesh Garment Manufacturer & Exporter Association
CFA	Confirmatory Factor Analysis
EFA	Exploratory Factor Analysis
EPB	Export Promotion Bureau
GOF	Goodness-of-Fit
GVC	Global Value Chain
JIT	Just in Time
LEED	Leadership in Energy and Environmental Design
RBV	Resource-Based View
RMG	Ready-made garment
R&D	Research & Development
SEM	Structural Equations Modelling
SME	Small and Medium Enterprises
TQM	Total Quality Management
USGBC	United States Green Building Council

Chapter 1.0 Introduction

Global value chains (GVCs) have been a dominant feature of the global economy in recent decades. They comprise the full range of activities that are performed by multiple firms in different geographical locations (World Bank, 2017). GVCs can link local producers to global markets and create a network that connects raw-materials producers to end-users (Dijk & Trienekens, 2012). Thus, they can provide opportunities for developing country firms to grow internationally. By participating in GVCs, these firms can find new markets for their products. In addition, they can gain access to essential knowledge and benefit from interfirm learning and innovation (Pietrobelli & Rabellotti, 2011).

When manufacturing firms in developing countries participate in GVCs, they are particularly likely to interact with foreign buyers and suppliers. Although GVCs create learning opportunities for them, having strong interfirm relationships is essential for information sharing and knowledge transfer (Whipple, Wiedmer, & Boyer, 2015). A strong interfirm relationship based on mutual trust, commitment, and shared goals, is defined as relational capital (Kale, Singh, & Perlmutter, 2000). Prior research has operationalized relational capital as close interactions with buyers and suppliers, which can enable firms in GVCs to perform successfully in the global arena (Chang & Gotcher, 2007). Relational capital is thus a strategic resource of a firm that brings opportunities for improving export performance (Solaz, 2018).

Based on a learning perspective, relational capital can facilitate interfirm information sharing and knowledge transfer (Dutta, 2012; Kotturu & Mahanty, 2017). It can also widen interfirm learning opportunities and new knowledge adoption (Selnes & Sallis, 2003). This way, firms can become more innovative (i.e., develop new or significantly improved products or

services) and develop more flexible supply chains (Khan & Wisner, 2019; Pietrobelli & Rabellotti, 2011). Further, they can achieve a cost advantage and better access to international markets (Giovannetti, Marvasi, & Sanfilippo, 2015). As a result, relational capital can improve firms' competitiveness and export performance.

However, the presence of interfirm relational capital does not mean that the connected firms are learning from each other. Interfirm learning depends on various strategic and contextual factors (Lei, Slocum, & Pitts, 1997). For instance, a firm's network (i.e., GVC) position and their capacity to learn from network (i.e., GVC) partners can influence how much and how well they learn from such partners (Dutta, 2012). In particular, prior research shows that these firms often fail to benefit from their relational capital with international partners due to their weak bargaining position or limited capabilities (Kale et al., 2000; Ramaswamy & Gereffi, 2000).

Another research stream suggests that there are other important contingent factors, such as market turbulence and technological turbulence that might impact the performance of developing-country firms (Gaur, Vasudevan, & Gaur, 2011). In a situation of market turbulence, customer demands and expectations frequently change (Hanvanich, 2006). Firms need to adjust their product lines and processes continuously in this case (Gaur et al., 2011). On the other hand, technological turbulence fosters technological change in the industry and force firms to adopt new technologies (Kandemir, 2006). In a turbulent business environment, firms' competitiveness in the market and attractiveness to their partners might depend on their quick response to market and technological changes.

These insights suggest that a learning perspective with a contingent approach can explain the complex relationship between relational capital and export performance of developing-country firms. However, when it comes to these firms, there are stills gaps in our understanding of the

impact of relational capital on their export performance. Furthermore, we know relatively little about the contingent factors on which this impact depends.

To address these gaps, this study asks the following questions: When and how does relational capital impact export performance in developing-country firms? How do market turbulence and technological turbulence influence the relationship between relational capital and export performance? To address these questions, I apply a contingency approach that integrates insights from a learning perspective and prior research on the role of market and technological turbulence on the learning outcomes of firms. A learning-based view helps to describe how relational capital creates learning opportunities, which can improve firms' business performance through the acquisition and application of knowledge (Huber, 1991; Kotabe, Martin, & Domoto, 2003). Further, the contingency perspective (Fiedler, 1964) addresses why firms' strategies and actions change under different circumstances, such as market turbulence and technological turbulence (Schermerhorn, 2018).

This study expects the relationship between relational capital and export performance to be ambiguous when specific external factors (i.e., market turbulence and technological turbulence) are not taken into account. The key logic is that market turbulence, and technological turbulence creates conditions that hamper the transfer and application of knowledge between parties. Thus, it is essential to understand the impacts of firms' relational capital on their export performance under the circumstances of market and technological turbulence.

This study selected its research sample from the Bangladeshi ready-made garments (RMG) industry. This is a deliberate choice because the Bangladeshi RMG industry plays a vital role in the global apparel value chain (Rahman & Sayeda, 2016). RMG manufacturers here maintain strong relationships with their international buyers, who are large retailers and brand marketers

(Nuruzzaman, Quaddus, Jeeva, & Khan, 2013). On the other hand, they depend on international suppliers from their neighboring countries for the supply of raw materials, even final goods (Nuruzzaman, Haque, & Azad, 2016). They are acting as a critical player in the global apparel value chain by maintaining backward linkage with international suppliers and forward linkage with international buyers at the same time (Rahman & Sayeda, 2016). Thus, the Bangladeshi RMG industry offers an interesting developing-country context for this study.

Using structural equation modeling (SEM), the proposed hypotheses are tested, and the relationships among key variables of the study are examined. This study adds new evidence on a learning-based perspective by examining the relationship between relational capital and export performance in a developing country context. Further, this study extends the contingency approach by testing the moderating impacts of market and technological turbulence in the model.

The remainder of this study is comprised of six chapters. Chapter 2 explains relational capital in a global value chain, demonstrates the relational outcomes, and describes the influence of environmental turbulence. Chapter 3 discusses the methodology. Chapter 4 presents the results (i.e., descriptive statistics and full structural model testing). Chapter 5 presents the discussion of the results, implications and Chapter 6 discusses the limitations of this study, and directions for future research. Finally, Chapter 7 draws a conclusion.

Chapter 2.0 Literature Review

Nowadays, Global Value Chains (GVCs) are probably the most influential aspect of globalization (Gereffi, 2011). The rise of GVCs has tremendously changed the structure of world production and distribution. Production of goods and services is now vertically distributed into different countries (World Bank, 2017), which has motivated researchers to pay more attention to international trade and the GVC mechanism.

2.1 International business and global value chain (GVC)

A global value chain is a complex global production arrangement that breaks up the production process, so the different stages of production can be carried out by firms in various countries (World Bank, 2017). GVCs cover a chain of interrelated production activities performed by different firms that bring out a product or a service from conception to final product (UNCTAD, 2007). It is a value addition process, rather than just a system for delivering final goods to consumers.

The concept of value chains is relatively new compared to the concept of the supply chain. In a supply chain, all parties participate in fulfilling their customer demands. This approach is driven by customer demands and aims to balance demand and supply throughout the chain (Dijk & Trienekens, 2012). In contrast, the value chain is a much broader concept. A value chain is a set of interrelated activities used by companies to create a competitive advantage (Tarver, 2018). It highlights geographic distance and international expansion of production and distribution. It focuses on value development and value acquisition throughout the supply chain activities (Gereffi, 2011). Thus, the concept of the value chain, and particularly the global value chain, seem

more appropriate than a supply chain to analyze the present production and distribution system in the global economy.

2.1.1 Global value chains and firms' business performance

By participating in GVCs, firms from developing countries can gain access to new markets (Pietrobelli & Rabellotti, 2011). Moreover, small and less productive firms can become more efficient and more export-oriented when they operate in GVCs (Giovannetti et al., 2015).

By participating in a GVC, a firm also gets an opportunity to interact with other business firms. When a firm engages with other chain members, such as suppliers, buyers, and network partners over time, it can accumulate knowledge as well as learn from others (Evangelista & Mac, 2016). Thus, interactions with business partners can help a developing-country firm to gain information and knowledge related to its target markets in the international arena.

By interacting with business partners, a manufacturing firm from a less developed country can overcome its weaknesses and improve business performance through exporting (Solaz, 2018). In a study based on North African firms, such as Morocco and Egypt, Del Prete, Giovannetti, and Marvasi, (2017), showed that there is a positive impact of GVC participation on firms' performance. Authors explained that by entering into global production networks, firms can improve their relative position in world trade.

2.1.2 Interaction within the global value chain and interfirm relationship

In a GVC, all members are working together to achieve a common goal of gaining a competitive advantage and creating superior value for customers (Mac & Evangelista, 2016). A strong interfirm relationship within the GVC is essential for achieving superior performance (Whipple et al., 2015). Such a relationship among business firms can enhance their learning,

knowledge sharing, information flow, cooperation, and collaboration. It is thus an intangible asset of business firms that enables them to compete in the dynamic business world (Datta & De, 2017).

Although firms are working to achieve a common goal, their achievement can be different. Local firms recognize the demand for healthy relationships with their GVC partners as a means for managing the uncertainties and complexities that emerge from global markets (Whipple et al., 2015). Several common traits, such as collaboration, coordination, communication, commitment, flexibility, trust, and dependence, are considered to be the core of meaningful relationships in the existing literature (Kannan & Tan, 2006).

2.2 Interorganizational relationship and relational capital

Martínez-Torres (2006) used the term ‘relational capital’ to denote a strong business relationship between two business firms. Kale et al. (2000) define a trustworthy, honest, and friendly relationship between alliance partners as relational capital. They suggest that relational capital can help companies to achieve a balance between the acquisition of new capabilities and the protection of their existing proprietary assets. In an interfirm relationship, relational capital focuses on close interactions and trust between two partners, and it is a safeguarding mechanism that can reduce transaction costs (Chang & Gotcher, 2007).

Jean, Kim, and Bello (2016) define relational capital as “*a sense of mutual understanding and shared vision among exchange partners, which can reinforce customer-focused organizational culture and capabilities*” (p. 130). In their study, they addressed relational capital as a long-term trusting relationship among business firms. Such a relationship can reduce exploitation; enable firms to gain deep insight into their partners’ operation; and help them to understand the latent needs and key trends of the market (Jean et al., 2016).

2.2.1 Relational capital and trust

Previous empirical studies showed that relational capital is a kind of strong relationship between two business firms, which comprises mutual trust, respect and friendship, relationship commitment, and a feeling of shared destiny (Chang & Gotcher, 2007; Jean et al., 2016; Kohtamäki et al., 2012; Kale et al., 2000). The first component that is discussed in the existing literature is trust. Trust is the base of relational capital, which indicates a belief that a partner's word is dependable, and it will fulfill its obligation in any trade or transaction (Mohr & Spekman, 1994). It is an expectation or willingness that exists between two parties (Youn, Hwang, & Yang, 2012).

In a relationship, the lack of trust is detrimental to information exchange and reduces the firm's ability to participate in problem-solving (Mohr & Spekman, 1994). On the other hand, a relationship based on trust will be able to handle higher stress and enhance wider knowledge adoption (Mohr & Spekman, 1994). Once trust is established in a business relationship, the partnering firms can recognize that joint effort brings the outcomes that exceed what they would achieve individually (Pai, 2015).

2.2.2 Commitment

Commitment refers to the willingness of trading partners to exercise effort on behalf of the relationship (Mohr & Spekman, 1994). Commitment provides a context where both parties can achieve mutual benefits. It is the most advanced phase and difficult to redeploy when the relationship is terminated. A high level of commitment can be viewed as an investment in transaction-specific assets and works as a motivation to build, maintain, strengthen, and deepen the relationship (Kang & Na, 2018).

Existing literature shows that a more fruitful relationship is expected to feature a higher level of commitment and trust than a less successful relationship. A trustworthy partner is always welcome by business organizations, as trust helps them to be committed to each other (Pai, 2015).

2.2.3 Cooperation and common interest

Moberg and Speh (2003) specified common interest as a strong relationship characteristic. Common interest is the target or reason for a relationship, and cooperation can be the ladder to achieve that target. Cooperation represents a situation when parties work together to accomplish shared goals. It represents a set of tasks each party expects the other to perform in a relationship. Thus, cooperation helps to achieve a win-win situation (Pai, 2015).

In a business relationship, common interests or shared goals can bring about a sense of cooperation among the parties; and hence, facilitate the exchange of skills, enhance information flow and the transfer of knowledge across the alliance interface (Kale et al., 2000). Shared goals drive business firms to stay together and share what they know. It promotes mutual understanding and the exchange of ideas (Chow & Chan, 2008).

Mohr and Spekman (1994) acknowledge that the success of an inter-organizational relationship can be determined by the attainment of their shared goals. In their study, Jean et al. (2016) argue that long-term oriented relationships between suppliers and their international customers depend on trust and a common goal. The researchers also explained that such kind of common goals could be achieved by mutual cooperation and knowledge sharing (Wagner, 1995). In summary, we can say that trust, commitment, cooperation, and a common goal are the pillars of relational capital.

2.3 Relational capital and interfirm learning opportunity

Strong relational capital leads to the close interactions among alliance partners (Kale et al., 2000). Relational factors create an interfirm learning opportunity for participating firms in a GVC (Inkpen & Pien, 2006). It can thus facilitate information sharing, transfer of knowledge, and joint learning throughout the alliance interface.

2.3.1 Information sharing

Information sharing within the chain is an important topic discussed in the existing literature (Cheung, Myers, & Mentzer, 2010). Information sharing is the exchange of information between business firms regarding market demand, expectations of end-users, partners' strategies, and unexpected problems (Selnes & Sallis, 2003). Recent research indicates that information about the customers, competitors, and market environment is a determinant of market-oriented strategy (Cheung et al., 2010).

In this information age, businesses are keen to share information with key partners. Manufacturers often try to get updated news and customer-related information (Şahin & Topal, 2018). However, it is not easy to get access to valuable information. It is more difficult for a developing-country firm to get updated information due to its limited capabilities. In such a situation, a close relationship with international business partners can help developing-country firms to gain access to the necessary information (Cheung et al., 2010). Thus, relational capital with business partners can promote strong interfirm linkages and facilitate knowledge acquisition, which can support the targeting of various markets (Kotturu & Mahanty, 2017).

2.3.2 Transfer of knowledge

When a firm is initially venturing into international markets, it needs market knowledge (Wiklund & Shepherd, 2003). Appropriate knowledge related to products and processes is essential to cope with dynamic customer need and demands (Kotturu & Mahanty, 2017). Existing literature has identified two types of knowledge that can be transferred to business partners, namely explicit knowledge and tacit knowledge (Inkpen & Pien, 2006). Explicit knowledge can be transferred easily through instructions and formal learning. However, tacit knowledge transfer is much slower, uncertain, costly, and often context specific (Inkpen & Pien, 2006).

In this knowledge-based economy, most of the firms depend on updated technology and product-related knowledge to get advantages over their competitors (Sureephong, Chakpitak, Ouzrout, Neubert, & Bouras, 2007). It might be tough to get an appropriate product or technology related knowledge for a small firm, or one located in a less developed country. A firm considers collecting essential knowledge from its partners from the networks in which the firm is involved, if such knowledge is not available internally (Dutta, 2012). Therefore, firms can use relationships with partners for exchanging intangible resources, which are difficult to collect from the market by themselves.

2.3.3 Joint learning

Learning from business partners is the principal motive for alliance formation (Inkpen & Pien, 2006). Selnes and Sallis (2003) define joint learning as a process that can improve future behavior in a relationship. Jean et al. (2016) describe joint learning capability as an inter-organizational competence that can leverage relational capital, regardless of the size and strength of the partners. A firm can learn collectively with its channel partner in creating value for both parties in a relationship. However, firms learning

from their partners depend on some contextual factors, such as the nature of the business, type of knowledge, and the benefits derived from the relationship (Lei et al., 1997).

2.4 Relational outcomes and the firm's business performance

Prior studies on relational capital have shed light on the factors that explain various relational outcomes, which emerge from an interfirm relationship (Manuj & Mentzer, 2008; Pietrobelli & Rabellotti, 2011; Jean et al., 2016). Further, these outcome variables might influence the firm's performance directly or indirectly (Chiarvesio, Maria, & Micelli, 2013; Dijk & Trienekens, 2011; Manuj & Mentzer, 2008).

2.4.1 Innovation and new product development

Innovation and new product development are essential for firm performance. Relational capital brings opportunities for innovation. Learning from partners and getting essential knowledge can enhance firms' innovation capability (Pietrobelli & Rabellotti, 2011). Further, innovation capability can enable a supplier firm to offer new value to international customers, which can increase its competitiveness in the global marketplace (Jean et al., 2016). This way, innovation resulting from relational capital helps firms to excel against their superior competitors.

On the other hand, the transfer of knowledge between business firms can create an opportunity for joint R&D and new product development (Mowery, Oxley, & Silverman, 1996). Learning and joint sensemaking activities enable partnering firms to increase performance-related outcomes by enhancing new product development (Cheung, Myers, & Mentzer, 2011). Innovations and new product development thus improve the efficiency and performance of individual firms within the global value chain.

2.4.2 Cost advantage and easy access to a foreign market

The existing literature also focuses on the implications of relational capital for cost advantage and foreign market entry. A well-structured relationship with business partners can help to reduce the complexity of transactions (Pai, 2015). Building a relationship with international business partners might enable business firms to achieve economies of scale and scope. In such a situation, the firm is capable of reducing its inventory, production cost, production time, or the delivery time to the customer based on the changing market scenario (Agarwal, Shankar, & Tiwari, 2006). Giovannetti et al. (2015) show that network participation reduces agency and transaction costs and allows business firms with a more efficient way to transfer resources. This kind of involvement enables business firms to reduce some of the competitive disadvantages.

These days, participating in GVC lead by developed country-based firms is a common way to access to developed-country markets (Gereffi, 2011). GVC participation brings opportunities to learn from their partners and to adapt themselves to changing market situations. Further, mutual learning between GVC partners creates an avenue to understand each other's needs better and helps them to respond accordingly (Selnes & Sallis, 2003).

Thus, inter-organizational learning makes a firm more agile and brings agility in their relationships (Khan & Wisner, 2019). Agarwal et al. (2006) explain that when firms gain agility (i.e., quick response to buyers' orders), their business performance upgrades. They also explain that agility maximizes business profit through quick response to customer requirements with effective cost reduction. Thus, a relatively small, less productive, and the weaker firm can gain access to the international market by utilizing the relational capital.

Figure 1: *Relational capital, relational outcomes, and firm's export performance*

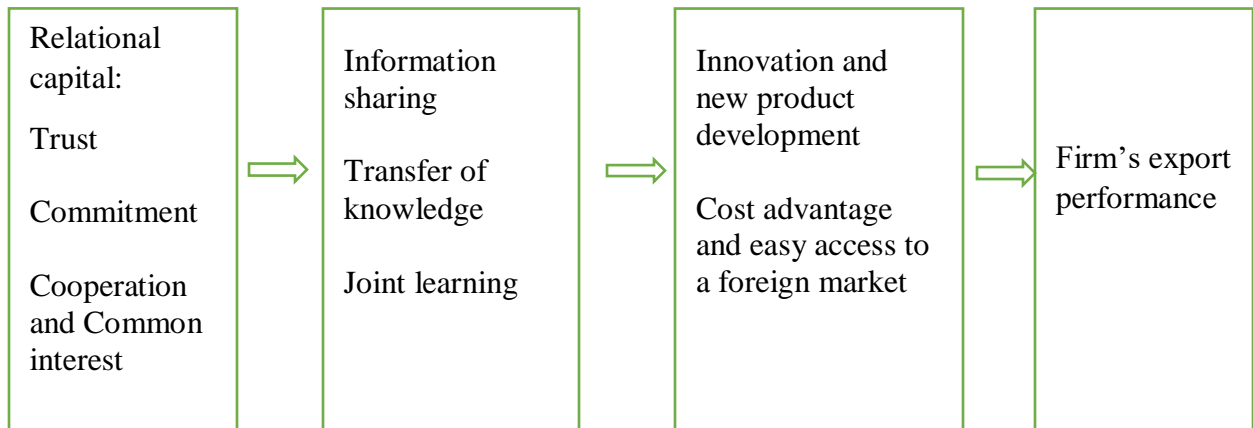


Figure 1 shows the impact of relational capital on firms' export performance. Strong interfirm relationships based on trust, commitment, cooperation, and common interest create opportunities for information sharing, transfer of knowledge, and joint learning in the GVC. Consequently, developing country firms get opportunities for innovation and new product development. Further, the relational benefits (i.e., cost advantage, easy access to foreign markets) help developing country firms to improve their competitiveness and export performance in the GVCs. Thus, relational capital paves the way to improve export performance through interfirm learning and knowledge transfer.

2.5 Firm's performance and turbulent business environment

The risk of disruptions caused by various environmental forces is an important issue raised by present empirical business research. At the present time, business firms are facing a higher degree of uncertainty and complexity in their environment (Corrêa & Silva, 2016). A frequent and unpredictable change in the market increases the risk and uncertainty in the firm's business process (Wang, Dou, Zhu, & Zhou, 2015). Researchers describe this situation as a turbulent environment

(Trkman & McCormack, 2009). This environment is characterized by unpredictable and frequent market and technological changes within an industry that interrupt the flow of information and reduce learning opportunities from other business firms (Calantone, Garcia, & Droge, 2003).

Empirical studies identified three types of turbulence that might arise from a business environment: market turbulence, technological turbulence and competitive intensity (Jaworski & Kohli, 1993; Wong & Ellis, 2007; Gaur et al., 2011).

2.5.1 Market turbulence

Market turbulence can be defined as the rate of change in the composition of customers and their preferences (Hanvanich, 2006). It refers to the instability in the external environment, which creates pressure on firms to change their strategies in response to changing customer needs (Gaur et al., 2011). In a situation of market turbulence, customer demands and preferences change very fast. Products and production processes become obsolete, forcing firms to change their product lines and processes continuously. Buyers' entry or exit from the marketplace is a continuous process, and firms need to put a constant emphasis on initiating new products (Hult, Hurley, & Knight, 2004). A good understanding of customers' preferences and competitor's strategy becomes very important in a situation of market turbulence.

2.5.2 Technological turbulence

The second factor that has an impact on business performance is technological turbulence, understood as the rate of technological change (Jaworski & Kohli, 1993). Technological turbulence can be defined as the degree of change related to the product and process technologies in an industry in which a firm engages (Hanvanich, 2006). Technological turbulence arises when the underlying technologies of product or services change rapidly, and their rate of obsolescence

is high (Kandemir, 2006). Thus, changes in the specifications or standards of products or services contribute to technological turbulence. Consequently, in an environment with high technological turbulence, a firm needs to cope with continuous technological change in the marketplace.

2.5.3 Competitive intensity

The third environmental factor is a competitive intensity. Competitive intensity can be defined as the level of competition among the firms in an industry (Wong & Ellis, 2007). In their study, Jaworski and Kohli (1993) argue that an organization may perform well in the absence of competitive intensity. On the other hand, in a situation of high competition among existing firms, clients or users have many alternatives to satisfy their needs and demands. As a result, organizations can lose their customers to their competitors.

The intensity of rivalry among existing competitors is thus a determinant of industry attractiveness. The five forces model by Michael E. Porter (1981) describes that the larger the number of competitors in an industry, the less power of the firms is within that industry. Thus, existing studies use this factor for industry analysis.

As my research is going to analyze relational capital and business performance in a global value chain context, I look forward to concentrating on the impact of market turbulence and technological turbulence in this study.

2.5.4 Moderating influence of market and technological turbulence

Organizational research scholars (Gaur et al., 2011) addressed the role of the environment as an important contingency factor in the existing literature. A higher level of environmental uncertainty and complexity creates pressure on the business firms to be more responsive to cope

with the situations. In such a case, the scope of learning and knowledge sharing becomes restricted in the inter-firm relationship, and firms' business performance might be affected (Kandemir, 2006).

Hanvanich (2006) examines the role of environmental turbulence on the relationship between organizations learning orientation and their performance and innovativeness. By examining survey data from 200 supply chain professionals, the author suggests that under high environmental turbulence, learning orientation is a useful predictor of firms' performance and their innovativeness. Another study (Santos-Vijande & Álvarez-González, 2007) suggests that the long-term survival of the firm in the marketplace depends on its understanding of changing customer needs and demands.

2.6 Gap in the existing literature and research opportunity

Well-performing business relationships among chain members are considered as significant sources of competitive advantages for business firms in the existing literature (Chang & Gotcher, 2007). Based on the resource-based view (RBV) of the firm, some of the studies have suggested that firms' relational capital creates an opportunity to get access to the resources from other firms that are unique, costly, and not available to them (Barney, 1991). Previous research suggests that such kind of strong interfirm relationship or relational capital can be an important predictor for the firm's business performance (Solaz, 2018).

Another study has shown that firm performance depends on the flow of information and knowledge in interfirm relationships (Pietrobelli & Rabellotti, 2011). It also explains that firms' learning from their relationships depends on different strategic and organizational contexts (Lei et al., 1997). Further, researchers argued that the advantages that arise from interfirm relationships may not always work out for firms (Dutta, 2012). Thus, successful implementation of relational

advantages depends on firms' position, benefit from the relationship, and their capacity to learn from their partners (Cheung et al., 2011; Dutta, 2012).

Although these insights are helpful, the resource-based view (RBV) and inter-firm learning perspective leave gaps in our understanding of the impact of relational capital on firms' performance under different contextual settings. These gaps are particularly problematic in the context of global value chains, where developing-country firms are involved in business relationships with partners from developed countries (Dijk & Trienekens, 2012). In such relationships, developing-country firms hold a weak position and comparatively weak bargaining power due to their limited resources and capabilities (Ramaswamy & Gereffi, 2000). Further, their weak capabilities and limited resource endowment can undermine their capacity to acquire and use knowledge from their interfirm relationships (Inkpen & Pien, 2006). Thus, interfirm learning opportunities can be restricted, and developing-country firms' business performance might decrease. Hence, this study focuses on the exploration of the relational capital and its impact on firms' export performance, in the context of GVCs that involve developing-country firms.

In a GVC, a firm is dependent on its buyers as well as its suppliers (Hergert & Morris, 1989). Collaboration and relationship can be between a supplier firm and a manufacturing firm, the same way it can be between a manufacturing firm and its customers or client firms (Preetha & Sudhakar, 2015). Therefore, it is also essential to understand the relationship between both sides (forward and backward). Most of the existing studies analyze one-sided (either with the buyer or with the supplier) relational capital and its impact (Jean et al., 2016; Navarro-García, Sánchez-Franco, & Rey-Moreno, 2016; Su, 2013). However, prior research suggests that analyzing both sides (buyer-supplier) can provide helpful insights (Kim, Lee, & Lee, 2017). Therefore, this study will analyze the performance effects of relational capital from both sides.

Furthermore, this study will examine the moderating influence of market and technological turbulence on the link between firms' relational capital and their export performance. In an uncertain and rapidly changing market, the flow of information and knowledge might be more restricted (Dutta, 2012). Rapid technological obsolescence might hamper developing-country firms' performance as well as their attractiveness to their business partners from the developed economies (Goto & Endo, 2014). Thus, market and technological turbulence could have implications for the capacity to learn and achieve superior export performance.

In sum, this study will add to prior research on relational capital by addressing these questions: When and how do firms' relational capital impact their export performance? How do market turbulence and technological turbulence influence the impacts of firms' relational capital on their export performance? In the next section, I will develop an appropriate theoretical framework and hypotheses to address these questions.

2.7 Theoretical framework

An integrative framework that combines insights from the learning-based perspective of the firm can address significant gaps in our understanding of relational capital and its impact on the export performance of developing-country firms. Building on the previous build discussion, I emphasize that inter-firm relationships are an important vehicle for knowledge acquisition and learning, which can result in new or improved competencies in partnering firms (Schoenmakers & Duysters, 2006). Through learning, in the form of knowledge acquisition and application, an organization can change its future behavior in performance-enhancing ways (Huber, 1991). Inter-firm learning can also help firms reduce redundant costs, improve quality, and increase speed and flexibility (Cheung et al., 2011). Thus, learning from inter-firm relationships, as captured by

relational capital, can enhance firms' performance, and potentially export performance, through the transfer of productive knowledge (Kotabe et al., 2003).

The contingency perspective (Fiedler, 1964) is helpful for addressing the moderating influence of market and technological turbulence on the relationship between relational capital export performance in developing-country firms. This perspective suggests that an organization's effectiveness is contingent, which is reliant upon the interchange between the optimal course of actions and explicit circumstances. This implies that effectiveness results from a good fit between characteristics of the organization (i.e., structure) and contingencies (i.e., environment, size, strategies) that reflect the situation of the organization (Donaldson, 2001). In a contingency perspective, there is no one best way to manage the organization in all circumstances. Thus, successful managers need to identify and implement practices that match the unique demands of different situations well (Schermerhorn, 2018).

Further, the "good match" between an organization's actions and the external status predicts high group performance and "out of match" results in low group performance (Ayman, Chemers, & Fiedler, 1995). In other words, business firms should monitor and assess their market environment diligently (Wang et al., 2015). These insights are helpful for theorizing about how developing-country firms' learning in GVCs depends on market and technological turbulence and the implications for their export performance.

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2.8 Hypothesis development

Based on a learning-based perspective, this study developed two baseline hypotheses. The relationship between relational capital and export performance has been predicted from both buyers' and suppliers' sides in a GVC context. Further, I apply a contingency perspective to predict the moderating influence of market and technological turbulence on these relationships.

2.8.1 Firms relational capital with buyers impacts their export performance

Considering the limited research on the impact of relational capital with buyers on manufacturing firms' export performance, a focus on this direct relationship is appropriate for my baseline hypothesis. The learning-based perspective can explain how a firm can improve its export performance by acquiring and using knowledge from its GVC partners.

In an international business network context, a strong relationship can be considered as a core competence of a firm (Lages, Silva, & Styles, 2009). In a GVC, firms must share sensitive, strategic, and confidential information with their chain partners. Thus, trust is essential for continuing a smooth flow of information and knowledge within business networks. Moreover, a trustworthy relationship is positively associated with relational learning (Cheung et al., 2010). A trustworthy relationship thus creates an opportunity to learn from a partner who has different skills and knowledge (Inkpen & Pien, 2006).

Studies have found that a firm's ability to develop and maintain strong relationships is a factor that contributes to the success of shared effort (Dyer and Singh, 1998). Further, there is a positive association between relational capabilities and relational innovation (Lages et al., 2009). The current study also reveals an association between relational innovation and new product development (Jean et al., 2016). Innovation and new product development further contribute to firm performance (Tsai & Yang, 2013).

Prior studies also confirmed that long-term commitment in a channel relationship helps to enhance knowledge flow and learning from partners (Kohtamaki et al., 2012). Further, trust and commitment decrease agency costs and increase business performance (Anderson & Weitz, 1992).

Zhao, Huo, Flynn, and Yeung (2007) show that different kinds of relational commitment help manufacturing firm's customer integration. The research found that relational capital with the customer has a significant positive effect on financial performance and firm value (Taghieh, Taghieh, Poorzamani, 2013). Relational capital also helps to develop the market strength of manufacturing firms by achieving customer loyalty. Interfirm relationships with foreign buyers create the scope of joint R&D, joint quality control, joint marketing, and so forth (Selnes & Sallis, 2003). Thus, developing country firms get opportunities to collaborate and to learn with their partners from developed countries. Consequently, it helps to build new capabilities and increase the export strengths of manufacturers from developing countries (Zangane, Makvandi & Hosseini, 2012). Thus, relational capital with international buyers might have a positive relationship with the export performance of manufacturing firms in a global value chain.

However, learning from interfirm relationships with international buyers might not always be effective. Studies show that interfirm learning and transfer of knowledge are contingent upon the exchange environment and mechanisms that are present between the chain partners (Kale et al., 2000). In a GVC context, developing country firms' success might depend on the willingness of their partners to actively exchange essential knowledge and their capacity to learn from their partners (Schoenmakers & Duysters, 2006). Moreover, the weak bargaining power of developing country firms and the dominant position of their international buyers in the GVC might hamper the scope of learning in such an interfirm relationship (Ramaswamy & Gereffi, 2000). Thus,

relational capital with buyers might not result in learning; and hence, it might not improve the export performance of developing-country firms in GVCs.

2.8.2 Firms relational capital with suppliers impacts their export performance

Most of the studies examine the one-sided relationship to evaluate the impact of relational capital on a firm's performance. In a GVC, besides the relationships with international buyers, firms also maintain relationships with international suppliers for the supply of raw materials or semi-finished goods (Hergert & Morris, 1989). In this case, local manufacturing firms depend on their key suppliers from abroad to get ingredients that are not available in the local market (Solaz, 2018). Thus, relational capital creates learning opportunities for manufacturing firms from their foreign suppliers who have different skills and knowledge.

In this global business environment, foreign suppliers play a key role in value production, and they have a significant contribution to the manufacturing firm's competitiveness (Chiarvesio et al., 2013). In global markets, manufacturing firms need to be agile to provide an uninterrupted flow of goods to their global customers (Khan & Wisner, 2019). A manufacturing firm's agility depends on cooperation and learning with their suppliers (Khan & Wisner, 2019). Further, firms' that are more concerned about learning from suppliers are more responsive to uncertainties (Tse, Zhang, Akhtar, & Macbryde, 2016). Thus, interfirm learning from suppliers helps to reduce manufacturers' inventory cost and lead time (Kotabe et al., 2003), as well as improvement in performance and quality (Kannan & Tan, 2006).

All these arguments emphasize the importance of maintaining a strong backward linkage with key suppliers. Thus, relational capital with international suppliers might have a good influence on the firm's export performance. The existing body of literature provides evidence of the relation between attempts to manage suppliers and business success (Kannan & Tan, 2006).

However, poor coordination with them causes excessive delays in production and finally leads to poor customer services (Chan, Kumar, Tiwari, Lau, & Choy, 2008).

Studies show that the average delivery time of the manufacturers collecting raw materials from international suppliers is higher than those who are collecting raw materials from the domestic market (Ferdousi, 2009). Due to higher lead time, learning opportunities from international suppliers are not helpful to local manufacturers in this context. Moreover, in the GVC (i.e., apparel industry), international buyers are determining the flow of supplies, such as the specifications and sourcing of raw materials (Ramaswamy & Gereffi, 2000), which is narrowing the scope of local manufacturers' interactions with their suppliers as well as learning from them. Thus, relational capital with suppliers might not result in learning; and hence, it might not improve the export performance of developing-country firms in GVCs.

2.8.3 Influence of market turbulence on the link between the firms' relational capital and their export performance

Environmental factors bring opportunities as well as threats and constraints. They affect the attractiveness, feasibility, and uncertainty related to collaborations (Wang et al., 2015). Contingency perspective suggests that business performance depends on the fit between a firm's strategy and the business environment (Ayman et al., 1995). To be successful, managers require contingency thinking that matches practices with opportunities and problems specific to different people and situations (Schermerhorn, 2018).

In a turbulent market, needs and demands are ambiguous. Most of the time, decision-makers are not aware of possible future scenarios; the relationship between their actions and outcomes are not clear (Silvestre, 2015). In such a situation, information sharing and transfer of knowledge might be restricted (Gaur et al., 2011). As the outcome of the interfirm relationship

depends on communication efficiency and productive knowledge transfer (Kotabe et al., 2003), then the complexity of knowledge transfer due to market turbulence might hamper firms' export performance.

Interorganizational relational capital creates potential for individual firms to share their observations and experiences (Inkpen & Pien, 2006). On the other hand, market turbulence might reduce that potentiality to developing country firms. In a turbulent market, a developing country firm might not get enough learning opportunities from its partner as the ability of the firm's learning depends on some contextual factors, such as the nature of the business activity and type of knowledge (Lei et al., 1997). Moreover, it is challenging to transfer tacit knowledge as it is context-specific, costly, and uncertain (Inkpen & Pien, 2006).

Although valuable knowledge and information regarding the market can be obtained from business partners through relational capital (Cai, Liu, Huang, Liang, & Shen, 2014), partners from a developed country might not be willing to share them in a situation of market turbulence. Thus, the higher the extent of market turbulence is, the lower are the impacts of relational capital on firms' export performance. Hence my first hypothesis:

Hypothesis 1a: Market turbulence negatively moderates the impacts of firms' relational capital with buyers on their export performance.

Hypothesis 1b: Market turbulence negatively moderates the impacts of firms' relational capital with suppliers on their export performance.

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2.8.4 Influence of technological turbulence on the link between the firms' relational capital and their export performance

Empirical studies have highlighted the link between being technologically updated and successful in the global market (Knight & Cavusgil, 2004). Empirical research showed that a higher level of technological exchange between the buyer and the supplier results in a higher likelihood of supplier performance (Kotabe et al., 2003). However, studies also revealed that firms' business relationships are associated with technological changes (Terawatanavong, Whitwell, Widing, & Ocass, 2011).

Technological turbulence can create a higher rate of technology obsolescence in any industry (Kandemir, 2006). Firms belong to the environment of high technological turbulence may confront a higher rate of change in product and process technology (Hanvanich, 2006). Rapid technological change demands new technological adoption in firms' production process. Consequently, firms need to invest in their research and development (R&D) (Mowery et al., 1996). However, most of the manufacturing firms from developing countries are not capable of investing in new technology. Backdated technology reduces their competitiveness in the market and attractiveness to international partners. Consequently, developing country firms lose learning opportunities and relational benefits from their business partners in a competitive market.

In conditions of high technological turbulence, firms need to maintain flexibility to switch to other partners whose capabilities are more appropriate to the changing circumstances (Terawatanavong et al., 2011). In such a situation, long term relationship becomes an obstacle to change (Selnes & Sallis, 2003) and relational capital hinders the learning required to support firms in adapting to technological turbulence (Terawatanavong et al., 2011). Firms may fail to fill the gap between present technological, environmental requirements, and their technological

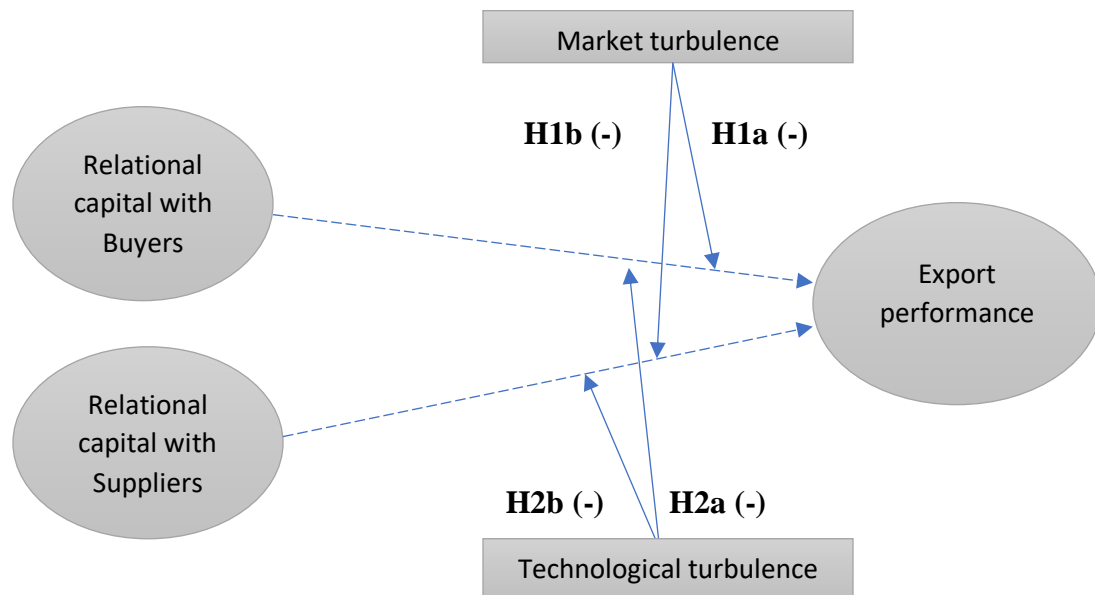
capabilities (Kandemir, 2006). Consequently, manufacturers' export performance may be hampered (Vaan, 2014). Therefore, under conditions of technological turbulence, relational capital will be less of an influence on export performance for manufacturing firms in developing countries.

Hence my second hypothesis:

Hypothesis 2a: Technological turbulence negatively moderates the impacts of firms' relational capital with buyers on their export performance.

Hypothesis 2b: Technological turbulence negatively moderates the impacts of firms' relational capital with suppliers on their export performance.

Figure 2: *Impacts of relational capital on export performance and the moderating role of market turbulence and technological turbulence*



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Chapter 3 – Methodology

This empirical research aims to determine the effects of manufacturers' relational capital on their export performance under different environmental situations. Empirical studies found that quantitative research is suitable for this form of inquiry (Bryman, 2004; Creswell, 2009). A deductive approach is appropriate since this study will use the existing theory to test the circumstances. Thus, the quantitative method is suitable to measure the variables and determine the causal relationship among the constructs under study.

A survey instrument was used to collect the data and test the proposed hypotheses. Unavailability of related data sources on the relevant field in Bangladesh and maintaining manufacturers' business secrecy are the reasons to depend on perceived survey data.

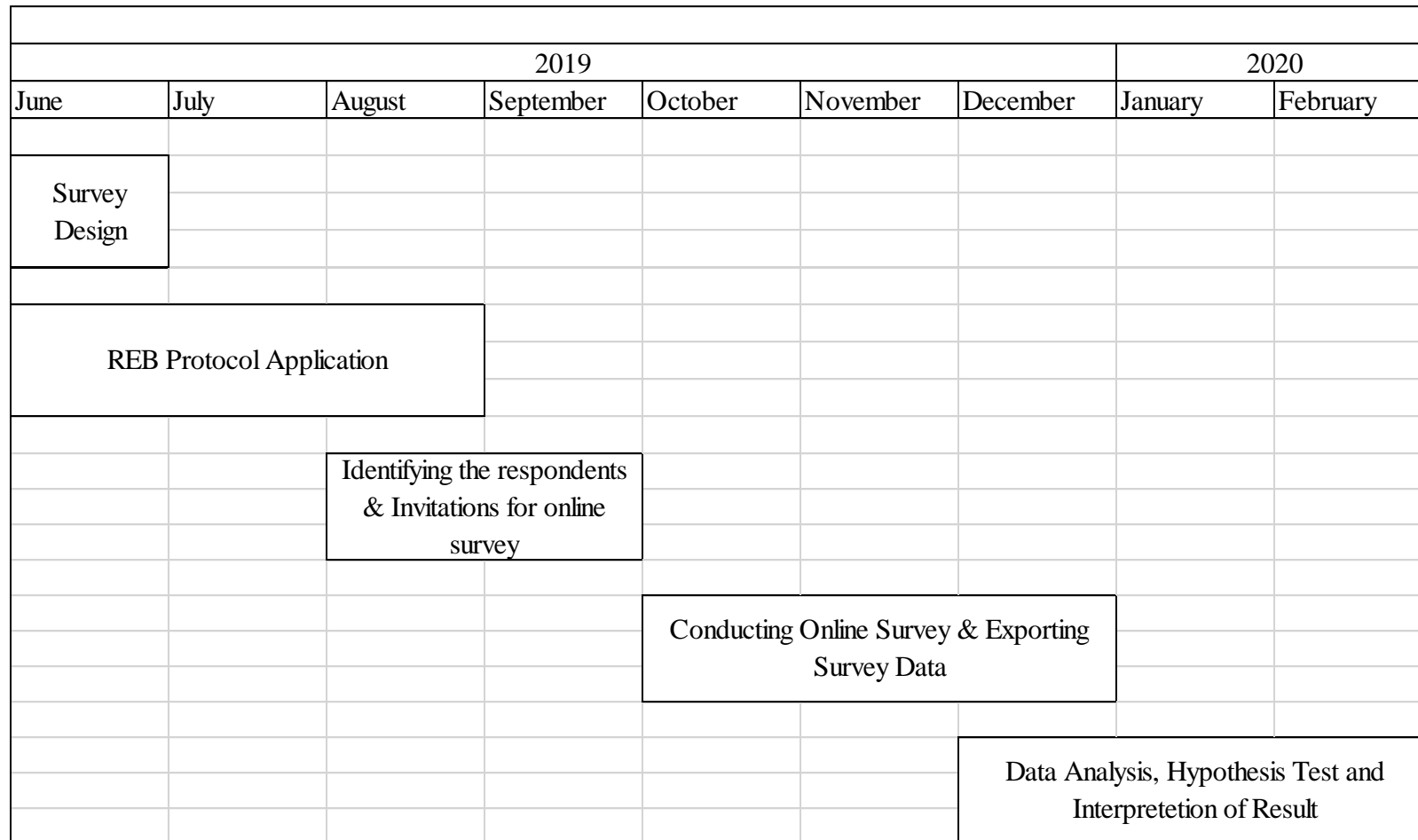
3.1 Research Timeline

As shown in figure 3, the data collection and analysis process started in June 2019. In late June 2019, I submitted my Research Ethics Board (REB) protocol application at Ryerson University. At the same time, I was identifying potential respondents for my research study. In early August 2019, my REB protocol application got approval. I sent invitations for participating in an online survey to potential respondents in September 2019.

Finally, my online survey data collection completed in mid-December 2019 after the survey link expired, and after that, I started to analyze the survey data. The whole process ended in February 2020.

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Figure 3 – Timeline of Data Collection and Data Analysis



3.2 Survey design

A survey is an arrangement for collecting information (Sue & Ritter, 2016). A survey design studies a population sample to furnish a quantitative description (Creswell, 2009). Four critical steps were outlined by Creswell (2009) to design a standard survey format. The first step starts with stating the rationale for selecting survey research. Identifying the nature of survey and the method of data collection is the second step. The next step is to develop a survey instrument and point out the population and sample. Conducting a survey is the fourth and final step.

3.2.1 Nature of the survey research

The rationale for selecting a survey design for this study has been stated in section 3.1. Overall, the purpose of survey research can be classified into three different categories: descriptive, exploratory, and confirmatory (Rungtusanatham, Choi, Hollingworth, Wu, & Forza, 2003). This study aims to test the existing theory and the hypotheses that have already been developed. Thus, it is confirmatory survey research. Moreover, this study complies with the characteristics mentioned by Robson (2011), in the following context:

- Quantitative research design has been selected, and a survey questionnaire was used for data collection.
- Data were collected from a representative sample.
- The results of the research are to be generalized to a broader population.
- Data were collected at a single point in time.

This study used a self-completion questionnaire to collect quantitative data. It is one of the popular data collection methods in management research (Sapsford, 1999). Questionnaires were selected in this study due to their high structure level, and they are well suited for collecting large

standardized data to examine the hypotheses (Robson, 2011). As mentioned earlier, the online survey method was used to send the questionnaires to respondents. This method provides an opportunity to conduct a cost-efficient, quick survey. It is also effective in contingency questions (Sue & Ritter, 2016). As the population of this study is situated in another country (Bangladesh), an online survey is the best alternative to minimize cost, save time, and to avoid the travel risk for the researcher. In this study, an online survey tool, Qualtrics has been used to collect the responses.

3.3 Development of construct measurements

This study uses a seven-point response format to operationalize its constructs and variables. The seven-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree), has been adopted to measure the most constructs in this study. The Likert scale has been chosen due to its best possible outcome to estimate the latent variables (Clason & Dormody, 1994). Moreover, A seven-point Likert scale ensures a higher statistical variability for the survey responses (Saraph, Benson, & Schroeder, 1989).

Based on the theoretical domain, this study developed five constructs. These are relational capital with buyer, relational capital with supplier, export performance, market turbulence, and technological turbulence. This study operationalizes relational capital using a six-item scale based on the existing literature (Jean et al., 2016; Whipple et al., 2015). Relational capital constructs were assessed by relational dimensions based on the extent of manufacturer perceptions of long-term, trustworthy relationships with their international customers as well as international suppliers. Same items were used to measure relational capital with the buyer and relational capital with the supplier as well. The present study provides evidence of using the same items to measure the relational capital with both supplier and buyer at the same time (Whipple et al., 2015).

Four items retained for market turbulence assessed the extent to which the preference and needs of an organization's customers tend to change over time (Wong & Ellis, 2007; Jaworski & Kohli, 1993). Technological turbulence is comprised of four items scale to determine the extent to which technology in an industry is unstable and unpredictable (Wong & Ellis, 2007; Jaworski & Kohli, 1993).

Regarding export performance (Sousa & Novello, 2012), a four-items scale was used to measure the level of satisfaction (scored from 1 = “very dissatisfied” to 7 = “very satisfied”) of the respondents about their organizations’ export performance for a specific period. These are; meeting expectations, export sales growth, export profitability, and export market share.

Based on the literature, we control for the size of the firm, which is measured by the number of employees of the respective firm (Giovannetti et al. 2013; Jiang, 2008; Nurruzman et al., 2016).

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Table 1 - Measurement of items used for each construct

Constructs	Measures	Supporting literature
Relational capital with buyers	<ul style="list-style-type: none">➤ Our key international buyers are trustworthy.➤ These buyers are genuinely concerned that we succeed.➤ These buyers keep the promises they make.➤ We believe the information these buyers provide us.➤ The goals and objectives of both parties in the relationship with our international buyers are compatible.➤ We expect the relationship with our major international buyers to continue for a long time.	Jean et al. (2016); Whipple et al. (2015)
Relational capital with suppliers	<ul style="list-style-type: none">➤ Our key international suppliers are trustworthy.➤ These suppliers are genuinely concerned that we succeed.➤ These suppliers keep the promises they make.➤ We believe the information these suppliers provide for us.➤ The goals and objectives of both parties in the relationship with our international suppliers are compatible.➤ We expect the relationship with our major international suppliers to continue for a long time.	Jean et al. (2016); Whipple et al. (2015)
Market turbulence	<ul style="list-style-type: none">➤ In our kind of business, customers' product preferences change quite a lot over time.➤ Our customers tend to look for new products all the time.➤ We are witnessing demand for our products from customers who never bought them before.➤ New customers tend to have product-related needs that are different from our existing customers.	Jaworski & Kohli (1993); Wong & Ellis, (2007)
Technological turbulence	<ul style="list-style-type: none">➤ The technology in our industry is changing rapidly.➤ Technological changes provide big opportunities in our industry.➤ It is very difficult to forecast where the technology in our industry will be in the next 2–3 years.➤ A large number of new product ideas have been made possible through technological breakthroughs in our industry.	Jaworski & Kohli (1993); Wong & Ellis, (2007)
Export performance	Over the last three years our organization's- <ul style="list-style-type: none">➤ Export sales growth➤ Export profitability➤ Export market share➤ Degree of meeting expectations	Sousa & Novello, (2012)

3.4 Questionnaire Layout

The questionnaire used in this study has three parts. In the first part, there are screening questions, respondent's job profile, and company profile. This study aims to analyse the cross-border relationship between Bangladeshi RMG manufacturers and their foreign buyers and suppliers. To ensure these criteria, I added three screening questions at the beginning of the survey questionnaire. Respondents asked to select YES and NO if they are i) involved in export business, ii) they have at least one foreign supplier, iii) they deal with overseas buyers or their local representative. The respondents could continue the rest of the questionnaire if the answer is YES for all of these questions. Measurement items for each construct were illustrated in the second part of the questionnaire. The third part is the comments section, where respondents asked to put their comments/suggestions about their firm's international business prospects and the relationship with their business partners.

In addition to the main questionnaire, an electronic consent form was attached to collect the respondents' consent. This consent form contains elements such as the purpose of the study, confidentiality of participants, potential risk and benefits, voluntary nature of participation, and dissemination of collected data. For this online survey, a questionnaire was developed using an online survey tool Qualtrics. A recruiting email was sent to every respondent containing the survey link developed by Qualtrics. Respondents were able to start the survey by clicking on the survey link. The total estimated time to complete the questionnaire was approximately 30 minutes, and they had 25 days to think and participate in the study.

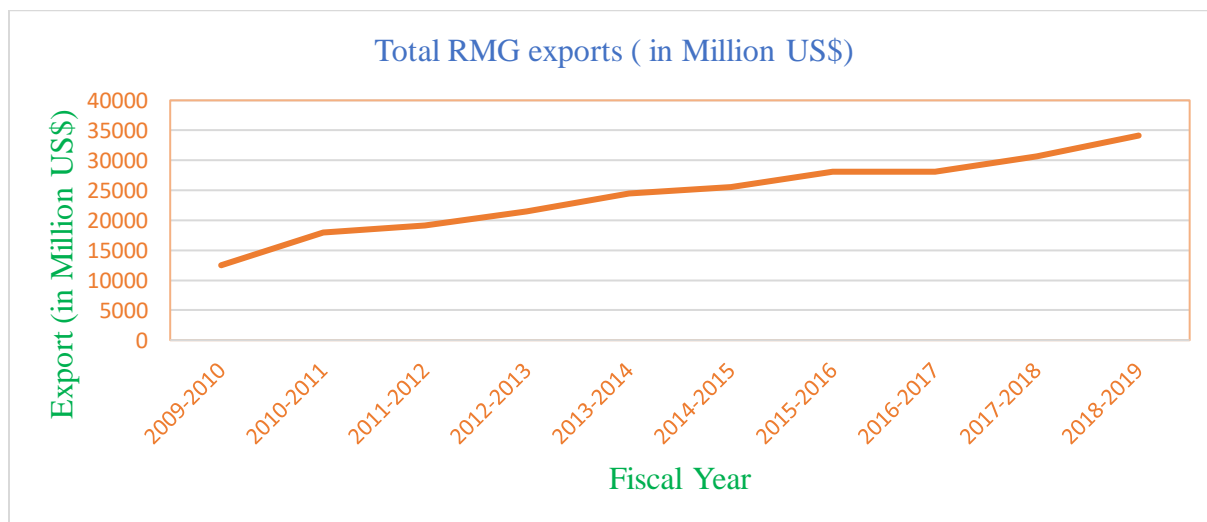
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3.5 Research setting: profile of the Bangladeshi ready-made garment industry

According to the World Trade Organization (2018), Bangladesh is the second-largest garment exporter in the world, next to China. For the fiscal year 2017-18, it holds 6.5 percent of the global RMG market share (World Trade Organization, 2018). Top clothing retailers such as Zara, GAP, H&M, Adidas have been placing their orders for garments to Bangladesh every year. The comparatively low price of RMG products is one of the reasons for buying from Bangladesh (Khan & Ullah, 2017). The availability of cheap labor helps Bangladeshi RMG manufacturers to maintain low production costs and comparatively low prices in the global apparel market.

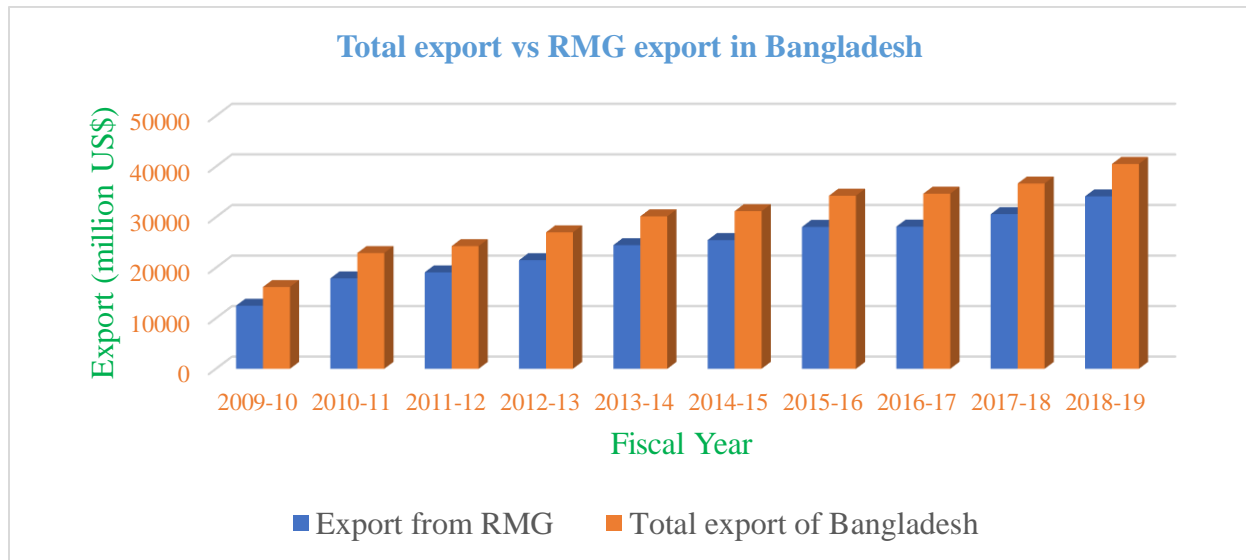
In Bangladesh, the apparel industry started its journey in late 1970s (Nuruzzaman et al., 2013). It is now the single largest exporting industry for Bangladesh, generating 84.21% of the total export earnings of the country (BGMEA 2019; EPB 2019). For the fiscal year 2018-2019, the total RMG (woven + knit) exports are 34,133.27 million US\$, maintaining a growth rate of 11.49% (BGMEA, 2019).

Figure 4: *Total RMG exports in Bangladesh (Fiscal Year Basis)*



Data Source: Export Promotion Bureau Compiled by BGMEA

Figure 5: Total export vs. RMG export



Data Source: Export Promotion Bureau Compiled by BGMEA

RMG is the largest manufacturing sector in Bangladesh, with more than 4 million direct employees and 4,621 operating companies (BGMEA 2019). Approximately 15 to 20 million people are benefiting from this industry indirectly (EPB, 2019). The leading apparel items exported from Bangladesh are shirts, trousers, jackets, t-shirt, and sweaters. The main destinations are EU countries, the USA, Canada, Japan, and Australia (BGMEA, 2019). In 2018-2019, 61.91% of total RMG exports destined for EU countries. At the same time export for USA is 17.97%, and Canada is 3.45% at the same time (BGMEA, 2019).

Nowadays, Bangladesh's RMG industry is facing various challenges from internal sources (i.e., political instability, labor unrest) and pressure from external stakeholders (i.e., environmental compliance requirements by buyers). In Bangladesh, the RMG industry witnessed several industrial disasters, such as Tazreen Fashions Ltd. fire in 2012 and Rana Plaza garment factory building collapsing in 2013 (Muhammad, 2015). Moreover, low wages, inhumane working

conditions, verbal and physical abuse, irregular or non-payment of salary encourage external stakeholders to create intense pressure on this industry (Muhammad, 2015).

However, RMG industry is making progress in terms of environmental compliance. Many garment factories are adopting green technologies to meet buyer requirements to get more purchase orders. They are producing garments by using cleaner techniques that preserve the environment. According to the US Green Building Council (USGBC), Bangladesh has the highest number of green garment factories in the world. Overall, the total number of LEED (Leadership in Energy and Environmental Design) certified garment factories in Bangladesh is now 90 (Mirdha, 2019). To minimize labor unrest, the government has announced a revised pay structure for the garment sector (The Daily Star, 13 January 2019). Bangladesh Garment Manufacturers and Exporters Association (BGMEA) and different ministry of the government are closely monitoring and working to solve problems in the RMG sector (BGMEA, 2019).

3.6 Sample selection

The sample is the subset of the population from which data will be collected (Sapsford, 1999). Sampling is the process that ensures that the selected sample will be representative of the population (Daniels, 2020). Due to the limitation in terms of time and cost, it is nearly impossible to observe the whole population, so the sample is essential for the majority of survey research.

This study followed a probability sampling technique. Probability sampling is also known as random sampling, where the selection is made randomly from a complete list of units (Daniels, 2020). Random sample is desirable since i) every element has an equal chance of being selected and the characteristics of the sample will be similar to the characteristics of the population (Daniels, 2020), ii) it is possible to estimate the sampling error and erase the risk of potential bias (Daniels, 2020).

In Bangladesh, there are 4,621 garments manufacturers listed with BGMEA. Most of them were located near two major cities; Dhaka and Chittagong. Simple random sampling is employed to select 550 RMG manufacturing firms based on the directory of BGMEA. The unit of analysis is at a firm-level for this survey study. The respondents were the management or senior-level officials of the companies who were assumed to be the most knowledgeable about the operations of the company.

3.7 Survey procedure

The invitations were sent after getting approval from the Ryerson Ethics Board (REB). It is made clear in the recruitment letter that this study does not need to disclose the respondent's personal information or the name of their organizations. The only purpose of this study is academic and only the researcher, and his supervisors have access to the information collected. The data collected from this survey will be secured and stored for five years and will be destroyed after that period. Further, it is confirmed that there is no direct benefit for participating in this survey, and no risk is associated.

Before sending the final questionnaire to respondents, a pre-test is desirable (Sapsford, 1999). A pre-test should be carried out by two groups of people: academics/colleagues and the people in the industry (Forza, 2002). In this empirical study, a pre-test was carried out in two stages. At the first stage, the initial questionnaire was shown to my two supervisors from Ryerson University. This is done to assess the content and face validity of the questionnaire items and to make sure that the instruments addressed all theoretical concerns. Next, the questionnaire was sent to two experts in the RMG industry in Bangladesh. One of them is a prominent researcher in this field, and another is a higher-level garment official. The objective is to ensure that both instructions

and questions were clear. Minor revisions were also made to provide understandable and user-friendly questionnaire for the respondents. No pilot survey was conducted for this study.

3.8 Data collection and analysis

As mentioned earlier, this study uses an online survey tool to collect survey data. This new system is useful for many exploratory research projects. Further, it is useful in gathering information rapidly and relatively inexpensively from geographically scattered participants (Sue & Ritter, 2016). An invitation email containing a survey link was sent to senior officials, managers, and owners of 550 RMG manufacturers in Bangladesh. Out of 550 invitations, 116 were accepted and participated in the survey. Among them, the total number of usable responses was 95, representing a 17 percent response rate. This study used cross-sectional studies where the data were gathered only once.

3.8.1 Data screening

Data screening is an important part of the multivariate analysis (Hair, Ringle, & Sarstedt, 2011). Screening helps to ensure that data meets the requirements of analysis by a thorough examination. Dealing with missing data is the primary stage of data screening. This study followed Kline (2005) who recommended treating missing data by deleting it.

Checking for outliers is the next vital stage to check the normality of the data. Normality reveals whether the data is normally distributed in the population sample (Sapsford, 1999). This study uses Partial Least Squares-Structural Equation Modeling (PLS-SEM) and PLS-SEM does not assume that the data are normally distributed (Hair et al. 2011). In PLS-SEM, it is assuming that the sample distribution is the reasonable representation of the population distribution (Hair et

al. 2011). Thus, PLS applies nonparametric bootstrapping, which enables the estimated coefficient to be tested for their significance (Hair et al. 2011).

Multicollinearity is another potential concern, which is defined as the extent to which any variable's influence can be explained by other variables in the same analysis (Hair et al., 2011). In this study, multicollinearity is measured by variance inflation factors (VIF). The values of VIF above 5 indicate the possibility of multicollinearity (Shumon, 2019). In this study, the VIF values were found (Appendix: 1), ranging from 1 to 2.84, which means that my dataset does not have the issues of multicollinearity.

3.8.2 Scale validity and reliability

Before going to test the validity of the construct, it is essential to check the unidimensionality and reliability (Hair et al., 2011). Unidimensionality reveals that on one scale, all items are strongly associated, thus represent one construct. To assess unidimensionality, this study conducted confirmatory factor analysis (CFA) by using the statistical software SmartPLS. In the measurement purification process, I eliminated the items with an unaccepted loading (less than 0.5) to increase convergent validity (Jean et al., 2016). After this, as shown in Table 2, at least two items remained for each construct. Moreover, all items were loaded significantly on their corresponding factors ($p < .05$), and loadings were all > 0.6 (Table 2). An adequate level of convergent validity was indicated by these loadings (Fornell & Larcker, 1981).

To assess the internal consistency of the measurements, the composite reliability of each construct was calculated (Table 2). All composite reliability was > 0.7 , which was above the recognized acceptable level of 0.7 (Fornell & Larcker, 1981). Table 3 indicates a good level of discriminant validity among the constructs in this study, as their diagonal elements are greater than the off-diagonal elements in their corresponding rows and columns (Fornell & Larcker, 1981).

Cross-loadings are absent from my CFA model (Appendix 2). The final CFA model demonstrated that the model has a good fit with the dataset: Chi-square equals to 349.85, SRMR= .090, NFI=.64. Here, Chi-square (χ^2 , sometimes referred to as T) is the original fit index for structural models because it is derived directly from the fit function (Newsom, 2018). Another absolute fit index in this model is the standardized root mean square residual (SRMR). Here, the Relative Fit Index is Bentler-Bonett Normed Fit Index (NFI).

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Table 2 - Details of measures of the constructs, factor loadings, reliability tests, and fit statistics

Item description	Factor loadings	Composite reliability	AVE	t-value
Relational capital with buyers (1= strongly disagree; 7= strongly agree) ➤ Our key international buyers are trustworthy (rcb1). ➤ These buyers are genuinely concerned that we succeed (rcb2). ➤ These buyers keep the promises they make (rcb3). ➤ We believe the information these buyers provide us (rcb4). ➤ We expect the relationship with our major international buyers to continue for a long time (rcb6).	.79 .81 .69 .79 .60	.86	.55	12.97 12.73 9.07 16.68 7.78
Relational capital with suppliers (1= strongly disagree; 7= strongly agree) ➤ Our key international suppliers are trustworthy (rcs1). ➤ These suppliers are genuinely concerned that we succeed (rcs2). ➤ These suppliers keep the promises they make (rcs3). ➤ We believe the information these suppliers provide us (rcs4). ➤ The goals and objectives of both parties in the relationship with our international suppliers are compatible (rcs5). ➤ We expect the relationship with our major international suppliers to continue for a long time (rcs6).	.83 .81 .74 .79 .81 .69	.90	.61	15.95 20.22 10.54 13.28 18.87 9.99
Market turbulence (1= strongly disagree; 7= strongly agree) ➤ In our kind of business, customers' product preferences change quite a lot over time (mt1). ➤ Our customers tend to look for new products all the time (mt2).	.79 .90	.83	.72	4.81 9.15
Technological turbulence (1= strongly disagree; 7= strongly agree) ➤ The technology in our industry is changing rapidly (tt1). ➤ Technological changes provide big opportunities in our industry(tt2). ➤ A large number of new product ideas have been made possible through technological breakthroughs in our industry (tt4).	.66 .78 .85	.81	.59	6.28 8.16 13.91
Export performance (1 = “very dissatisfied” to 7 = “very satisfied”) ➤ Export sales growth (ex1) ➤ Export profitability (ex2) ➤ Export market share (ex3) ➤ Degree of meeting expectations (ex4)	.82 .83 .62 .79	.85	.59	14.20 20.87 7.62 16.74

Table 3 - Discriminant Validity (Fornell-Larcker Criterion)

	Export performance	Market turbulence	Relational capital with buyers	Relational capital with suppliers	Technological turbulence
Export performance	0.768				
Market turbulence	0.371	0.845			
Relational capital with buyers	0.606	0.414	0.740		
Relational capital with suppliers	0.506	0.290	0.664	0.780	
Technological turbulence	0.449	0.327	0.537	0.456	0.765

3.8.3 Method of data analysis

This study used the Structural Equations Modeling (SEM) to determine the relationships between the variables of the study. SEM is a widely used statistical model to explain the relationships between multiple variables (Hair et al. 2011). It is the combination of factor analysis and multiple regression analysis. SEM allows researchers to measure the relationship in a complex model that includes latent variables, formative variables, chains of effects, and allows numerous group comparisons (Lowry & Gaskin, 2014). Using SEM in this research is appropriate since:

- i) First-generation techniques (i.e., correlations, regressions, ANOVA) offer limited capabilities in terms of causal modeling. In contrast, second-generation methods (i.e., PLS-SEM, covariance-based SEM) offer extensive, flexible, and scalable causal-modeling capabilities (Lowry & Gaskin, 2014).
- ii) From confirmatory factor analysis (CFA), SEM draws upon the notion of latent variables, and from path analysis (PA), SEM adopts the idea of modeling direct and indirect relationships. Due to these combined advantages, SEM becomes an essential and enduring research tool in management research (Shah & Goldstein, 2005).

Specifically, this study used the PLS-SEM model for the empirical analysis. PLS-SEM is a promising method and offers vast potentials for management researchers (Hair et al. 2011). It is a more “regression-based” approach and serves well when the goal is predicting the key target constructs (Hair et al. 2011). Moreover, PLS-SEM is a good selection when the data is non-normal, and the sample size is relatively small (Hair et al. 2011).

3.8 Data limitations

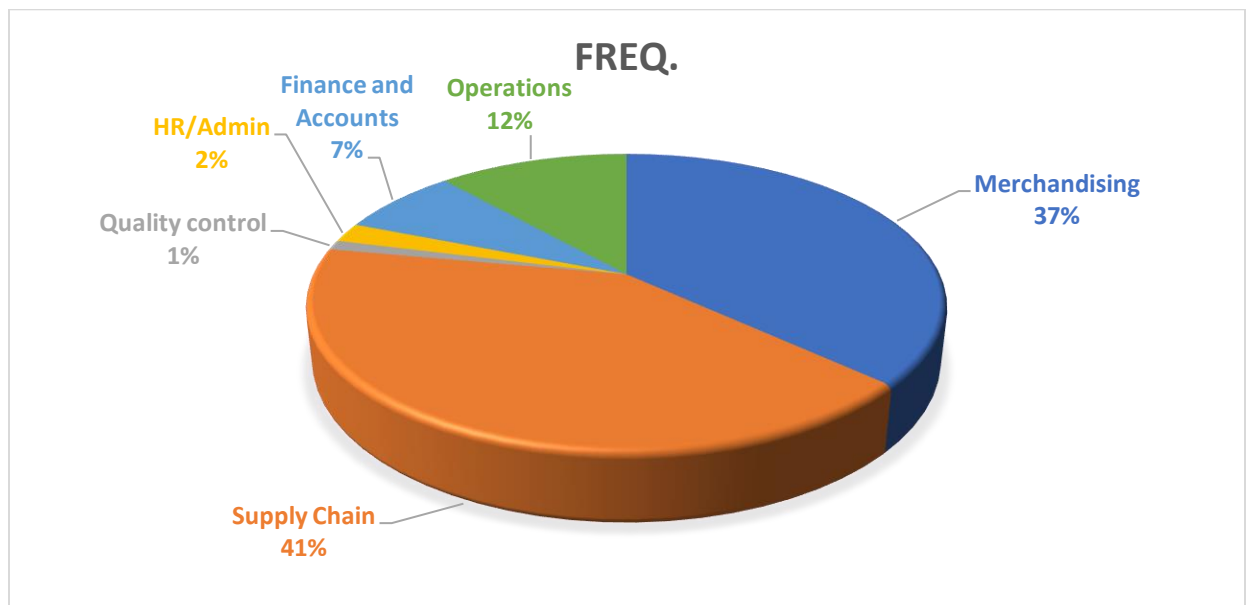
One potential limitation of this study is that the measurement of export performance is not based on the actual performance of the firm; rather, it is based on the perceptions of the respondents who are surveyed. In this study, I have selected one respondent from each firm, which might be a limitation. Using a single respondent in management research might be unreliable (Bowman & Ambrosini, 1997). Although I tried to select the upper-level employees of the firm, those who are the decision-makers of the organization, it is ambiguous what their role is in deciding on the selection of buyers and suppliers. The language problem might be another limitation, though the survey questionnaire created is as simple as possible and understandable to the respondents. Only survey data was collected and there is no in-depth interview that has been proved effective in related research (Nuruzzaman et al. 2013). Moreover, this study is limited by its timeframe, scope, and having a single investigator. Other limitations are discussed in Chapter 6.4.

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Chapter 4.0 Results

This study identified those respondents who are knowledgeable about the firm's key international buyers and suppliers. A total of 95 samples were obtained from my online survey. Figure 6 shows that most of the respondents are from merchandising and supply chain, which represent 37% and 41% of total respondents, respectively. Existing literature identified supply chain and merchandising as the concerned departments for maintaining the relationship with buyers and suppliers (Nuruzzaman et al., 2013).

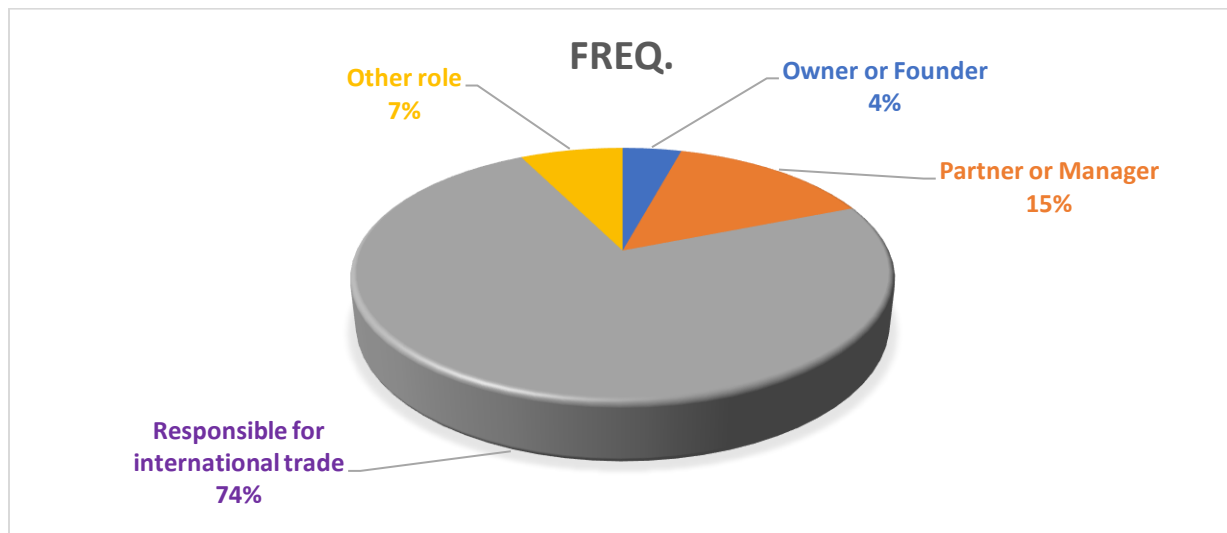
Figure 6 – Respondents' area of work in their organizations



Furthermore, the role of the respondents was confirmed by asking a question in the survey. Figure 7 revealed the different functions of survey respondents. Out of those surveyed, 74% are responsible for international trade of their firm, 4% are the owners or founders of the firm, 15%

are the partners or managers, and 7% play other roles in their respective organizations. Thus, most of the respondents are knowledgeable to answer the survey questions related to this study.

Figure 7 – Respondents’ managerial role in their organizations



4.1 Full structural model testing

Testing the structural model is necessary to examine the structural relationships and their significances. This study analyzed PLS-SEM by using statistical software SmartPLS. Before going to test the relationship's significance, it is essential to establish enough measurement and construct validity, which is done in the previous section. Table 4 presents the measures of constructs and their relationships (respective path coefficients). Path coefficients reveal the size and effect of the relationships between variables (Wong, 2013). In PLS-SEM, individual path coefficient can be explained as standardized beta coefficients (β) of ordinary least squares regressions (Hair et al., 2011). Here (Table 4, Figure 8), the independent variables are RCB (relational capital with the buyers), RCS (relational capital with suppliers), MT (market turbulence), TT (technological turbulence), and export is the dependent variable that represents the export performance.

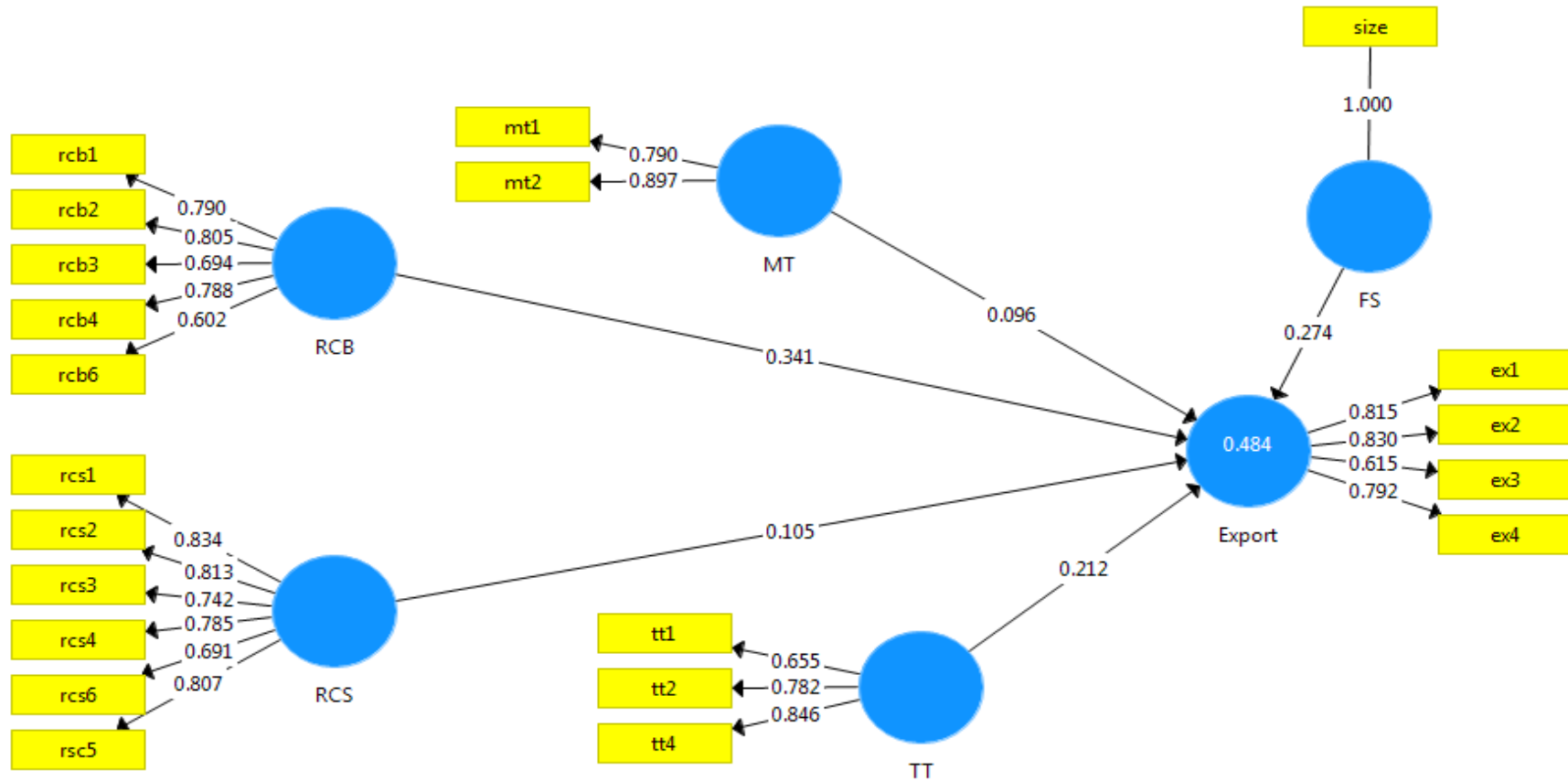
Table 4 – Measurements of the variables and their relationships with export

Variable	Measurements	Path Coefficients (β) Relationship toward Export
Export (Export performance) Dependent variable	ex1 - Export sales growth. ex2 - Export profitability. ex3 - Export market share. ex4 - Degree of meeting expectations.	
RCB (Relational capital with buyers) Independent Variable	rcb1 - Our key international buyers are trustworthy. rcb2 - These buyers are genuinely concerned that we succeed. rcb3 - These buyers keep the promises they make. rcb4 - We believe the information these buyers provide us. rcb6 - We expect the relationship with our major international buyers to continue for a long time.	.341
RCS (Relational capital with suppliers) Independent Variable	rcs1 - Our key international suppliers are trustworthy. rcs2 - These suppliers are genuinely concerned that we succeed. rcs3 - These suppliers keep the promises they make. rcs4 - We believe the information these suppliers provide us. rsc5 - The goals and objectives of both parties in the relationship with our international suppliers are compatible. rcs6 - We expect the relationship with our major international suppliers to continue for a long time.	.105
MT (Market turbulence) Moderator	mt1 - In our kind of business, customers' product preferences change quite a lot over time. mt2 - Our customers tend to look for new products all the time.	.096
TT (Technological turbulence) Moderator	tt1 - The technology in our industry is changing rapidly. tt2 - Technological changes provide big opportunities in our industry. tt4 - A large number of new product ideas have been made possible through technological breakthroughs in our industry.	.212
FS (Firm size) Control	size - What is the approximate total number of employees in your firm?	.274

Relational capital with the buyers is measured by five items rcb1, rcb2, rcb3, rcb4, rcb6. Relational capital with suppliers is measured by six items rcs1, rcs2, rcs3, rcs4, rcs5, rcs6. Market turbulence is measured by two items mt1, mt2, and technological turbulence by three items tt1, tt2, tt4. The only dependent variable is export performance, measured by four items ex1, ex2, ex3, and ex4. Here, FS is the firm size, which is a control variable and measured by the item size (number of employees). In figure 8 the coefficient of determination, R^2 , is 0.484 for the variable export. That means that the five latent variables (RCB, RCS, MT, TT, FS) explain 48.4% of the variance in export. Figure 8 shows the total structural model calculation. Figure 8 shows the loadings of the items on their respective constructs and the relationships (β) among the constructs. Here, relational capital with buyers (RCB) has strongest impact on Export (.341), followed by FS (.274), TT (.212), RCS (.105), MT (.096).

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Figure 8 - PLS-SEM results (full structural model)



- Predictors: RCB (relational capital with buyers)
- Predictors: RCS (relational capital with suppliers)
- Predictors: MT (market turbulence)
- Predictors: TT (technological turbulence)
- Control: FS (firm size)
- Dependent variable: Export (export performance)

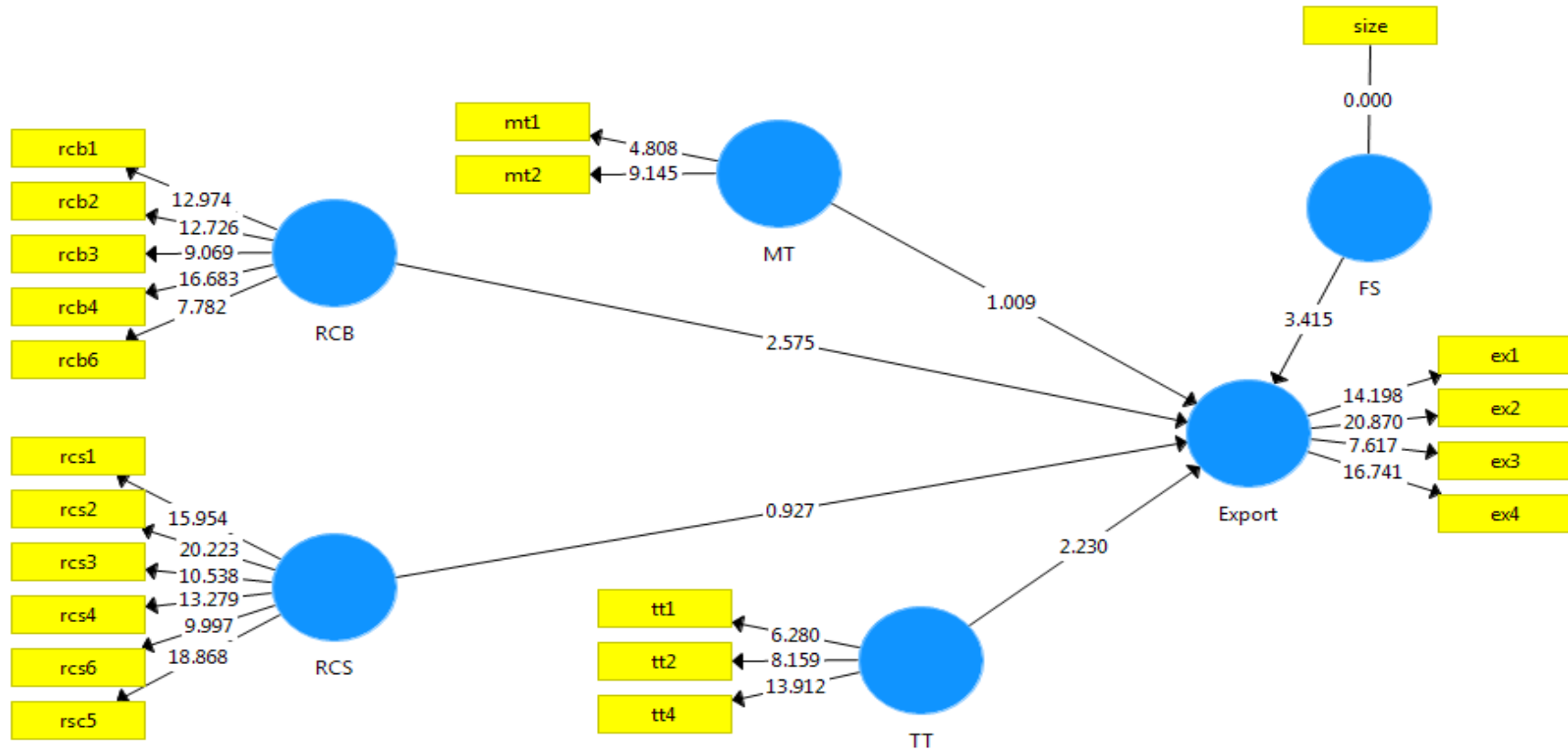
Table 5 - Size, Significance, and direction of the structural paths

	Coefficients (β)	Standard Deviations	T Statistics	P Values
Firm size -> Export performance	0.274	0.080	3.415	0.001
Market turbulence -> Export performance	0.096	0.095	1.009	0.313
Relational capital with buyers -> Export performance	0.341	0.132	2.575	0.010
Relational with suppliers -> Export performance	0.105	0.113	0.927	0.354
Technological turbulence -> Export performance	0.212	0.095	2.230	0.026

To assess the structural model, scholars suggested to look at R^2 , beta (β), and corresponding t-values via bootstrapping procedure with a resample of 5000 (Hair et al., 2011). Table 5 and figure 9 revealed the size and effect of the relationships between the variables. Further, the significance of the relationships is presented here. Relational capital with buyers (RCB) positively and significantly impacts the export performance (Export) of the firm ($\beta = 0.341$; $p < 0.05$). Contrary to expectations, relational capital with suppliers (RCS) has no significant impacts on export performance ($\beta = 0.105$; $p > 0.05$). Firm size (FS) is a control variable, positively and significantly associated with export performance ($\beta = 0.274$; $p < 0.05$). The other variables, market turbulence (MT) and technological turbulence (TT) are the moderating variables in the model. The moderation effect is showed in the next section.

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Figure 9 - PLS-SEM bootstrapping results (testing the significance of the relationships)



- Predictors: RCB (relational capital with buyers)
- Predictors: RCS (relational capital with suppliers)
- Predictors: MT (market turbulence)
- Predictors: TT (technological turbulence)
- Control: FS (firm size)
- Dependent variable: Export (export performance)

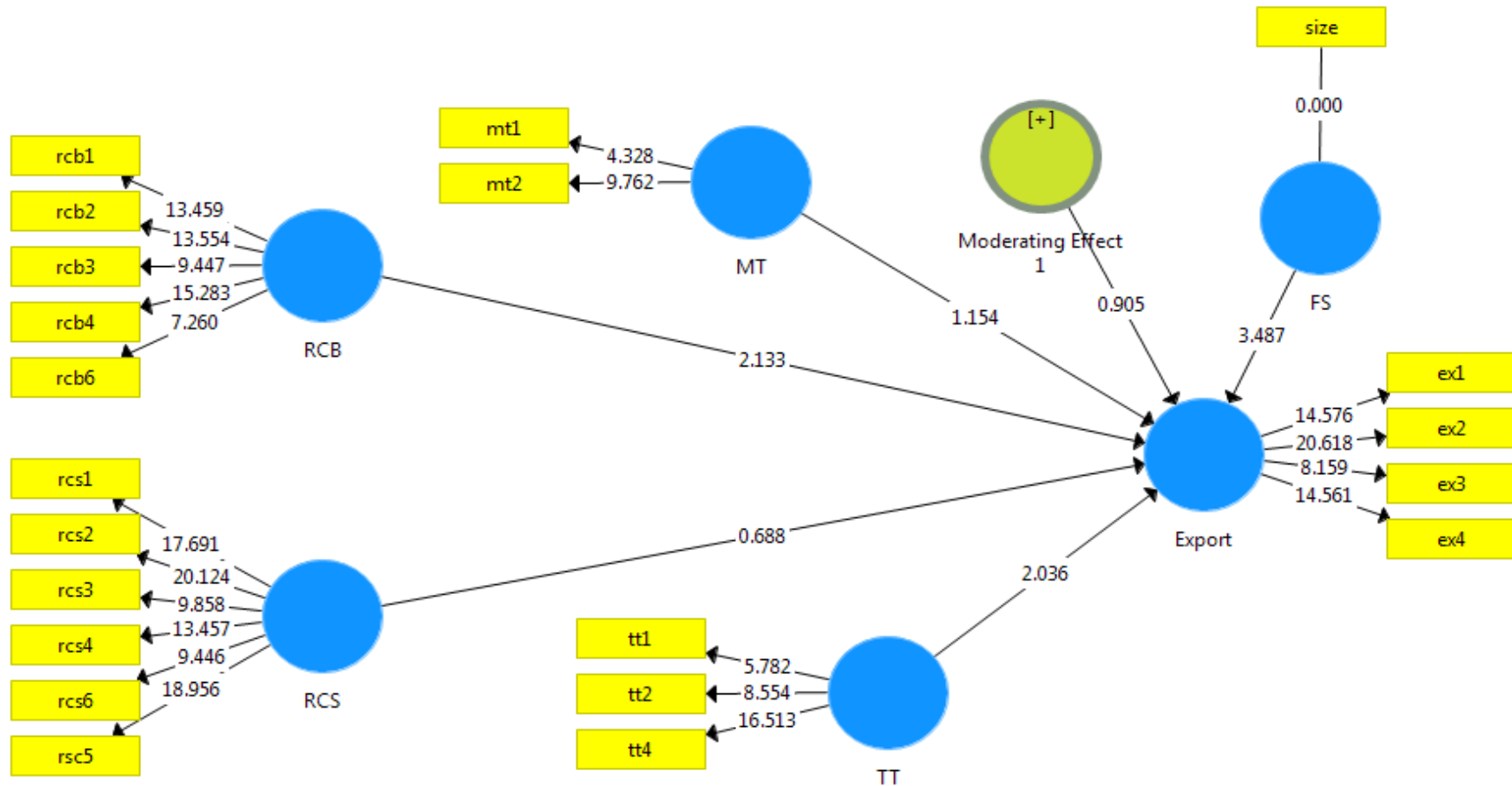
4.2 Moderation effect of market turbulence

Hypothesis 1a of this study suggests that market turbulence would have a moderation effect on the relationships between relational capital with buyers and export performance. Hypothesis 1b of this study indicates that market turbulence would have a moderation effect on the relationships between relational capital with suppliers and export performance. Here, moderation analysis is estimated by applying PLS product-indicator approach. PLS can give a more accurate assessment of moderator effects by calculating the error that diminishes the estimated relationships and enhances the validation of theories (Ali, Kim, & Ryu, 2016). As table 6 shows, when the independent variable is relational capital with buyers, the estimated path coefficients for the effect of the moderator market turbulence on export is negative and not significant ($\beta = -0.123$; $p > 0.05$). But, the relationship between relational capital with buyer to export is still significant ($\beta = 0.308$; $p < 0.05$). This indicates that market turbulence has no significant impact on the relationships between relational capital with buyers and export performance (Table 6; Figure 10: t-values 0.905, $p > .05$). Hence, H1a that market turbulence negatively moderates the impacts of firms' relational capital with buyers on their export performance is not supported.

Table 6 - Moderation effect (market turbulence on relational capital with buyers and export performance link)

	Coefficients (β)	Standard Deviations	T Statistics	P Values
Firm Size -> Export performance	0.279	0.080	3.487	0.001
Market turbulence -> Export performance	0.116	0.100	1.154	0.249
Moderating Effect 1 -> Market turbulence on Relational capital with the buyer to Export performance	-0.123	0.136	0.905	0.366
Relational capital with buyers -> Export performance	0.308	0.144	2.133	0.033
Relational capital with supplier-> Export performance	0.082	0.119	0.688	0.491
Technological turbulence -> Export performance	0.192	0.094	2.036	0.042

Figure 10 - PLS-SEM bootstrapping results (moderating effect of Market turbulence on Relational capital with buyers-Export performance)



- Predictors: RCB (relational capital with buyers)
- Dependent variable: Export (export performance)
- Moderator: MT (market turbulence)
- Control: FS (firm size)

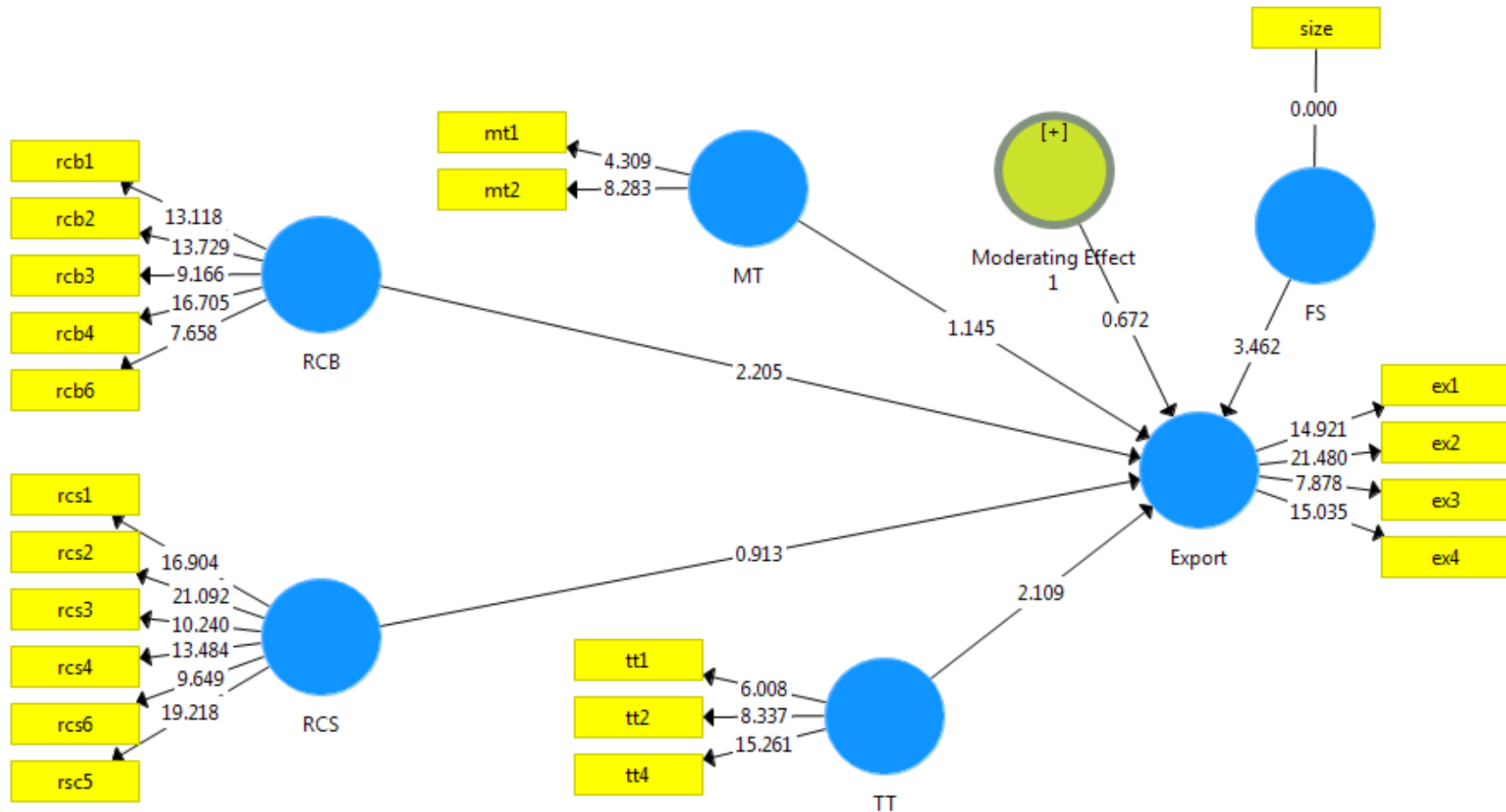
Table 7 and figure 11 show the moderation effect of market turbulence on the relationship between relational capital with suppliers and export performance. Here, the estimated path coefficient shows that the effect of the moderator market turbulence on export (when the independent variable is RCS, $\beta = -0.086$; $p > 0.05$) is negative but statistically not significant. At the same time, the effect of relational capital with suppliers on export performance remained insignificant ($\beta = 0.104$; $p > 0.05$). This result indicates that market turbulence has no moderating impacts on the relationship between relational capital with suppliers and export performance. (Table 7; Figure 11; t-values 0.672, $p > .05$). Hence, H1b that market turbulence negatively moderates the impacts of firms' relational capital with suppliers on their export performance is not supported.

Table 7 - Moderation effect (market turbulence on relational capital with supplier and export performance link)

	Coefficients (β)	Standard Deviation	T Statistics	P Values
Firm size -> Export performance	0.280	0.081	3.462	0.001
Market turbulence -> Export performance	0.111	0.097	1.145	0.252
Moderating Effect 1 -> Market turbulence on Relational capital with the supplier to Export performance	-0.086	0.129	0.672	0.502
Relational capital with buyers -> Export performance	0.306	0.139	2.205	0.028
Relational capital with suppliers -> Export performance	0.104	0.113	0.913	0.361
Technological turbulence -> Export performance	0.195	0.093	2.109	0.035

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Figure 11: PLS-SEM bootstrapping results (moderating effect of Market turbulence on Relational capital with supplier-Export performance)



- Predictors: RCS (relational capital with suppliers)
- Dependent variable: Export (export performance)
- Moderator: MT (market turbulence)
- Control: FS (firm size)

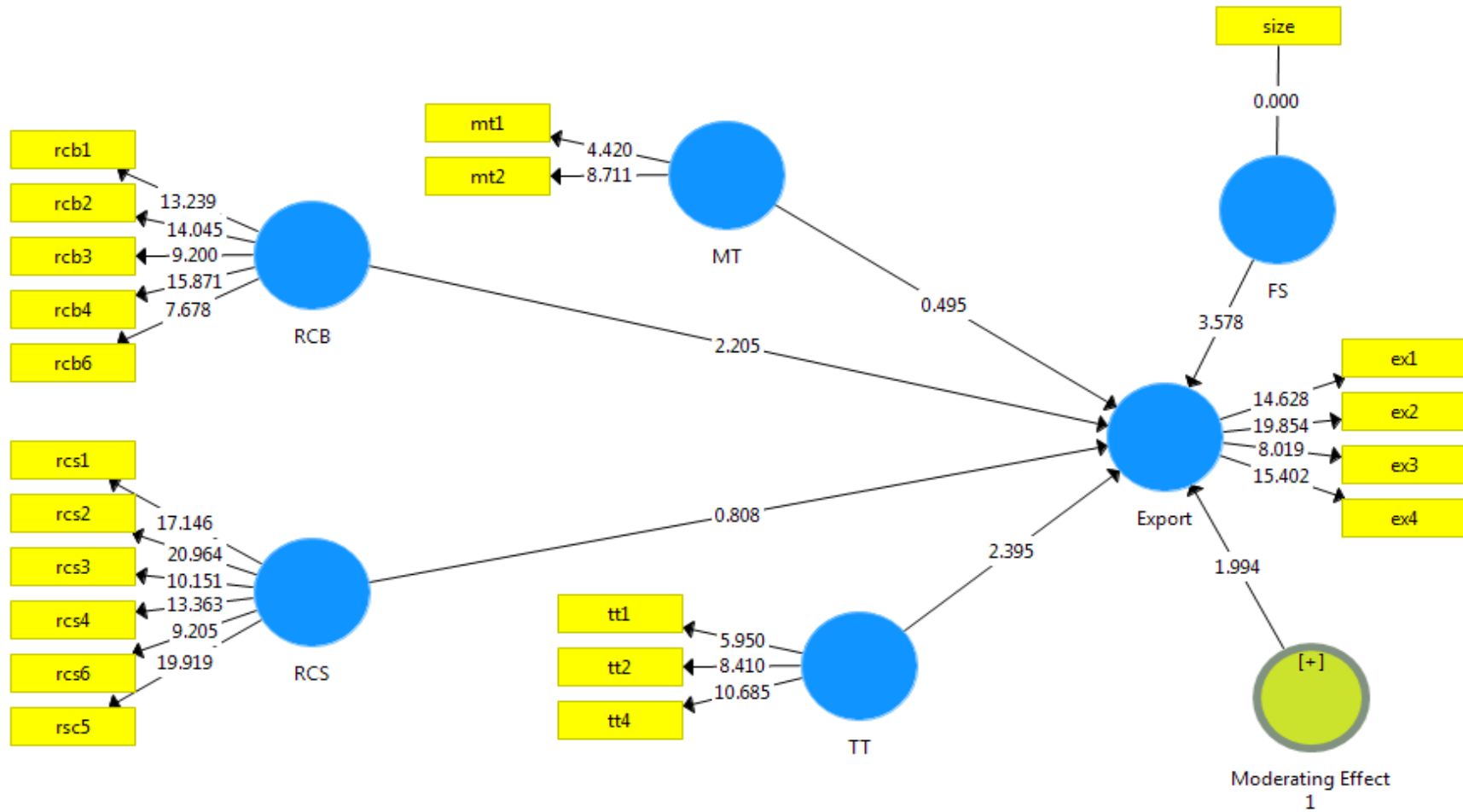
4.3 Moderation effect of technological turbulence

Besides market turbulence, this study also hypothesized that technological turbulence would have a negative moderation effect on the relationship between relational capital with buyers and export performance. It also hypothesized that technological turbulence would also have a negative moderation effect on the relationship between relational capital with suppliers and export performance. Table 8 shows the path coefficients result, t-values, and p-values for the effect of technological turbulence as a moderator on the relationship between relational capital with buyers and export performance. Here, moderating effect is negative and significant ($\beta = -0.210$; $p < 0.05$). This finding indicates that technological turbulence significantly moderates the relationship between relational capital with buyers and export performance (Table 8; Figure 12; t-values 1.99, $p < .05$). At the same time, we also found that technological turbulence is still significantly related to export performance (Table 8; Figure 12; t-values 2.395, $p < .05$). Hence, H2a that technological turbulence negatively moderates the impacts of firms' relational capital with buyers on their export performance is supported.

Table 8 - Moderation effect (technological turbulence on relational capital with buyers and export performance link)

	Coefficients (β)	Standard Deviation	T Statistics	P Values
FS -> Export performance	0.294	0.082	3.578	0.000
MT -> Export performance	0.050	0.101	0.495	0.620
Moderating Effect 1 -> Technological turbulence on Relational capital with buyers to Export performance	-0.210	0.105	1.994	0.046
Relational capital with buyers -> Export performance	0.285	0.129	2.205	0.028
Relational capital with suppliers -> Export performance	0.084	0.104	0.808	0.419
Technological turbulence -> Export performance	0.205	0.086	2.395	0.017

Figure 12 - PLS-SEM bootstrapping results (moderating effect of Technological turbulence on Relational capital with buyer-Export performance)



- Predictors: RCB (relational capital with buyers)
- Dependent variable: Export (export performance)
- Moderator: TT (technological turbulence)
- Control: FS (firm size)

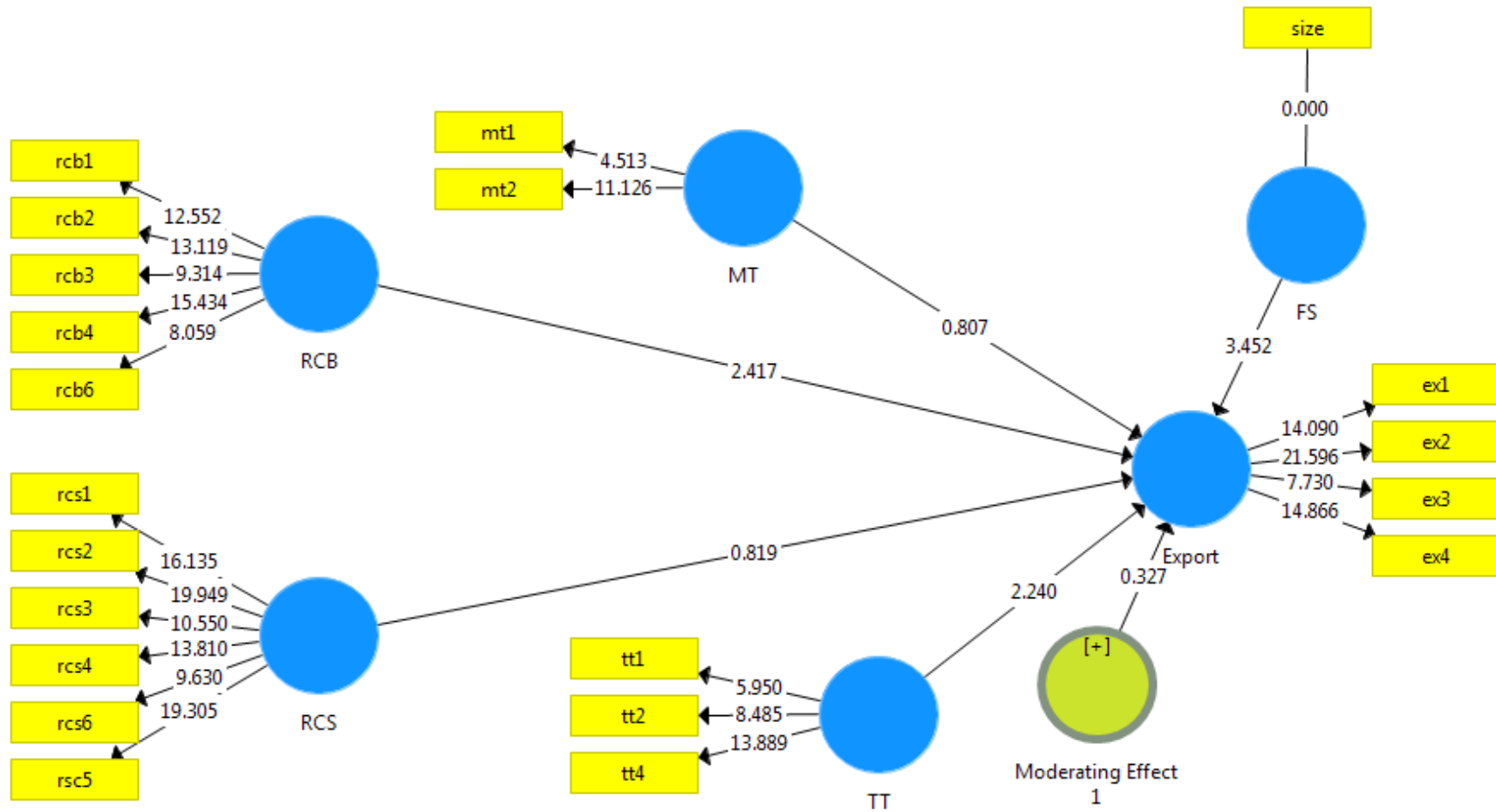
Although technological turbulence significantly affects the buyer's relational capital and export performance, it is not significant in the case of the supplier's relational capital and export performance. Table 9 and figure 13 show that moderating effect is not significant ($\beta = -0.048$; $p > 0.05$). This finding indicates that technological turbulence has no moderating effects on the relationships between a firm's relational capital with international supplier and export performance (figure 13; t-values 0.327, $p > .05$). Hence, H2b that Technological turbulence negatively moderates the effects of firms' relational capital with suppliers on their export performance is not supported.

Table 9 - Moderation effect (technological turbulence on relational capital with supplier and export performance link)

	Coefficients (β)	Standard Deviation	T Statistics	P Values
FS -> Export performance	0.279	0.081	3.452	0.001
MT -> Export performance	0.082	0.101	0.807	0.420
Moderating Effect 1 -> Technological turbulence on Relational capital with suppliers to Export performance	-0.048	0.146	0.327	0.743
Relational capital with buyers -> Export performance	0.329	0.136	2.417	0.016
Relational capital with suppliers -> Export performance	0.097	0.118	0.819	0.413
TT -> Export performance	0.219	0.098	2.240	0.025

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Figure 13 - PLS-SEM bootstrapping results (moderating effect of Technological turbulence on Relational capital with supplier-Export performance)

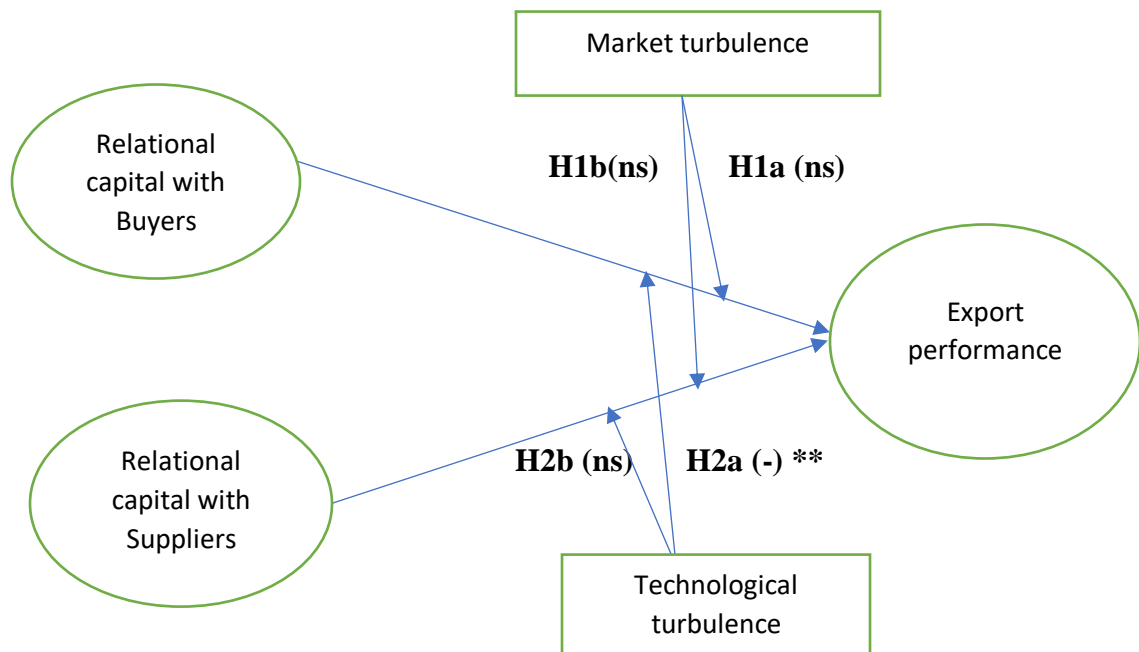


- Predictors: RCS (relational capital with suppliers)
- Dependent variable: Export (export performance)
- Moderator: TT (technological turbulence)
- Control: FS (firm size)

4.4 Summary of the findings

The findings of this study indicate that market turbulence does not significantly moderate the relationship between relational capital with buyers and export performance. Again, market turbulence does not considerably moderate the relationship between relational capital with suppliers and export performance. On the other hand, technological turbulence significantly moderates the relationships between relational capital with buyers and export. However, technological turbulence does not moderate the relationship between relational capital with suppliers and export. In every case, relational capital with buyers is significantly related to export performance. Although relational capital with suppliers is not significantly associated with export performance.

Figure 14 - Model summary of the findings



Note: **<0.05; ns = non-significant.

Chapter 5.0 Discussion

The objective of this thesis is to investigate the impacts of firms' relational capital on their export performance. This study further examined the moderating influence of market turbulence and technological turbulence on the relationship between relational capital and export performance. Two specific research questions were asked to analyze this concept:

RQ-1: When and how does relational capital impact export performance in developing-country firms?

RQ-2: How do market turbulence and technological turbulence influence the relationship between relational capital and export performance?

To investigate these questions, a quantitative methodology has been selected. An online survey was conducted in the Bangladeshi RMG industry, and 95 responses were retained for the analysis. In the discussion that follows, I will further discuss the previously reported results and their implications.

5.1 The impacts of firms' relational capital with buyers on their export performance

In line with the interfirm learning-based perspective, present studies demonstrate that firms' relational capital with international buyers helps them to learn from their partners, which enhances their export performance (Pietrobelli & Rabellotti, 2011; Selnes & Sallis, 2003). In contrast, it is also demonstrated that interfirm relational capital does not confirm that the connected firms are learning from each other. Especially in the context of the developing country, where learning and adoption of knowledge depend on various strategic and contextual factors (Dutta, 2012; Lei, Slocum, & Pitts, 1997). Thus, the relationship between relational capital with buyers and export performance is dubious in the existing literature. Empirical findings resolved this ambiguity by

confirming a significant positive relationship between firms' relational capital with buyers and their export performance.

This finding receives practical support from the sample of Bangladeshi ready-made garments industry, in which relational capital with buyers is positively and significantly related to the manufacturing firm's export performance. This result is consistent with the notion of this study that firms' relational capital with their international buyers is a significant predictor of their export performance in the developing-country context.

Moreover, this finding is consistent with the existing literature. Interfirm relational capital enables a producer to create a safeguard from information misappropriation, reduce fear in the transaction, and uncover the emerging needs of the market (Jean et al., 2016). This way, relational capital with buyers brings competitive advantages for a manufacturer. Thus, this empirical finding supports value-chain literature (Sousa & Novello, 2012), which demonstrates that the distribution link in the value chain has now become one of the critical elements of success abroad.

This study adopted the relational capital with buyers' construct based on trust, mutual understanding, collaboration, and shared goals between the manufacturers and their international buyers. A relationship based on trust and shared goals motivate collaboration and joint learning (Jean et al., 2016). In line with the learning perspective, joint learning, and new knowledge integration that emerged from inter-firm relationships enhance a firm's performance (Cheung et al., 2011). Further, trustworthy and collaborative relationships with international buyers help local manufacturers to reach the global market with limited capabilities. Thus, relational capital enables enriched interactions, information sharing, and knowledge creation, which further enhance firms' export performance (Kohtamaki et al., 2012).

This empirical finding showed that the impact of relational capital with international buyers on export performance is significant even after the moderators involved in the model. This relational impact is significant, even in the presence of highly turbulent market and technological environments. This finding is consistent with the practical scenario of the RMG industry in this region. Azmeh and Nadvi (2014) presented that the garments value chain is buyer-driven, reflecting the power of branded marketers and large retailers. Most of the garments companies in Bangladesh are subcontractors. They are producing finished goods based on their buyers' specifications (Nurruzzaman et al., 2016). Here, the production of RMG is mostly dependent on the buyer's order. There is no doubt that international apparel brands and retailers are holding a dominant negotiating position with the local RMG manufacturers (Uddin, 2019). Thus, buyers play a vital role in the RMG industry. Consequently, relational capital with buyers is the most crucial predictor of RMG manufacturers' export performance.

This study has collected some open comments from the respondents regarding their buyers' relations. In their comments, respondents identified the buyers' relation as a very significant factor in their performance. Respondent A stated, *"We believe a long-term relationship which is profitable for both the company."* Respondent B said, *"Free exchange of market-related, and end consumer behavior related information is very important."* Another respondent C argued that maintaining a long term and trustworthy relationship is helpful to get a new order. Respondent D said, *"My firm is doing well in maintaining a good relationship with foreign buyers. I hope that it will continue ensuring sustainable growth in export"*.

To sum up, it can be said that relational capital with international buyers is playing a significant role in the Bangladeshi RMG industry, which is consistent with the findings of this study. Research on the Bangladeshi RMG industry also confirms that firms' forward linkage with

international buyers determines firms' export performance and productivity (Rahman & Sayeda, 2016). So, the findings revealed from the survey on the RMG industry are entirely in the expected direction.

5.2 The impacts of firms' relational capital with suppliers on their export performance

Present studies provide evidence of the relation between attempts to manage suppliers and business success (Kannan & Tan, 2006). The flow of resources from suppliers enhances manufacturers' export performance (Tse et al., 2016). However, managing suppliers' relation is not always helpful to developing country manufacturers (Ferdousi, 2009). In one study, Nurruzzaman et al. (2016) found that high lead-time is a problem in the Bangladeshi RMG sector, mainly for import dependency for raw materials. Moreover, a weak negotiating position in GVC and dependency on international suppliers reduces local manufacturers' learning opportunities and consequent relational impact on their export performance (Lei et al., 1997). Thus, the impact of relational capital with suppliers is not clear to us.

The findings of this study did not support a significant relationship between manufacturing firms' relational capital with international suppliers and their export performance. This empirical finding indicates that manufacturers' relational capital with international suppliers is not a significant predictor of their export performance in the Bangladeshi RMG industry. Thus, the findings of this study do not resolve the ambiguity regarding the relationship between relational capital with suppliers and firms' export performance in the developing country context.

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5.3 Moderating effect of market turbulence on relational capital and export performance link (H1a, H1b)

This study demonstrates that market turbulence has no significant impact on firms' relational capital and their export performance. Thus, it can be said that market turbulence does not moderate the relationship between firms' relational capital and their export performance in the Bangladeshi RMG industry.

This might be due to the nature of the relationship between RMG firm and the buyer's firm in the RMG value chain. In their study, Nurruzzaman et al. (2016) represent Bangladeshi garment company as a low-end producer, basically performing cutting, making, and trimming (CMT) activities. In this buyer-driven commodity chain, the physical production is separated from the design and marketing stage, which is exercised by brand marketers and retailers at the end of the chain (Ramaswamy & Gereffi, 2000). Thus, market turbulence is not significantly affecting Bangladeshi RMG manufacturers' export performance.

However, the relational capital-export performance relationship in the RMG industry might be affected by other aspects of the environment that are not examined in this research. Nuruzzaman et al. (2013) mentioned three critical components of the external environment of the RMG industry: political actions, bureaucratic behavior, and country risk arising from a variety of national differences. Based on the stakeholder's theory, they argued that the reaction from these external stakeholders might increase or decrease the competitiveness of the RMG firm directly or indirectly.

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5.4 Moderating effect of technological turbulence on relational capital and export performance link (H2a, H2b)

The findings of this study demonstrate that technological turbulence negatively moderates the impacts of firms' relational capital with international buyers on their export performance. That is, the positive effect of relational capital with international buyers on export performance is lower when technological turbulence is high.

This result is consistent with established research (Hanvanich, 2006). In a technologically turbulent environment, firms try to retain the flexibility to terminate network relationships and switch to business partners with appropriate technological competencies (Kandemir, 2006). Contingency perspective supports this scenario as business firms always try to formulate their policy and action in line with the environmental changes. As the benefits of technology transfer between business partners depend on longer-established relationships (Kotabe et al., 2003), technological turbulence, thus reducing learning opportunity by shortening strong inter-firm relationships. Further, firms' inter-firm learning capacity depends on the endowment of necessary technology-based capabilities (Mowery et al., 1996). However, it is difficult for a small firm or a firm from a developing country to cope with new technology adoption continuously.

This empirical finding is also consistent with the existing literature on the RMG value chain. In their study, Nuruzzaman et al. (2013) confirmed that the RMG industry is under tremendous pressure due to rapid technological development. It is very unlikely that RMG manufacturers with a low level of technical support can produce goods that are highly value-added and competitive in the global market (Goto & Endo, 2014). Thus, successful firms are those who keep alongside technological advances (Yusuf, 2012).

In contrast, Bangladeshi RMG manufacturers still depend on their low-cost labor-based production systems (Nuruzzaman et al., 2013). Although the RMG industry is not highly technology-driven, improved technology is playing a vital role there in the modern age (Rahman & Sayeda, 2016). Thus, the labor-based production system is decreasing the competitive strength of Bangladeshi manufacturers in the international market.

A recent analysis of the Bangladeshi RMG industry represented that export orders by overseas buyers are continuously slipping out to competitors' countries (Rahman, 2019). In the last six months, 46 apparel factories were closed, 25,453 workers, mostly women, lost their jobs (The Daily Observer, 9 October 2019). On the other hand, Vietnam, another closest competitor of the Bangladeshi RMG industry, gained a 0.1 percent increment in its market share in 2018 compared to 2017 (Dhaka Tribune, 4 August 2019). Several reasons were identified, and technological changes in the industry is one of them. Competitors like China and Vietnam are taking advantage of shorter lead-time, which is achieved by the upgrade of technology in their RMG sector. Thus, the technological advancement of competitors countries influencing overseas buyers to choose their partners from those countries. Consequently, Bangladeshi manufacturers are steadily losing their export share in the global RMG market.

Overall, this study demonstrates that relational capital with international buyers is the most significant predictor of RMG manufacturers' export performance. The business environment that is technologically turbulent reduces this relational impact on local manufacturers' export performance in a developing-country context (i.e., Bangladesh). This study also revealed that RMG manufacturers' relational capital with international suppliers does not have a significant impact on their export performance. Further, uncertainty in the market demand and customer preferences have no significant moderating impact on either buyer or supplier relationships and

consequent export performance in the RMG industry. Thus, RMG manufacturers should put more emphasis on their buyer relationships by capitalizing on learning opportunities, while reducing delivery time and improving the quality of the product. Technological upgrading can help them sustain interfirm learning, achieve higher productivity, and gain market share in the RMG value chain.

5.5 Implications

Policymakers around the world, especially in developing countries, have a demonstrable interest in encouraging their firms, especially manufacturing firms, to gain international market share through utilizing relational capital. This thesis fills the knowledge gap to understand how relational capital impacts the performance of manufacturing firms in a global value delivery network. The results suggest that by utilizing relational capital, local manufacturers can gain global competitiveness and increase their performance in the worldwide marketplace. This study also emphasizes the importance of technological upgrades in the manufacturers' production system.

Policymakers need to emphasize new technology adoption in the RMG industry and to facilitate local manufacturers' capability building. Further, reducing import dependency by creating domestic backward linkage will help local firms to achieve minimum lead-time to deliver their products to international buyers.

Drawing from the learning-based view perspective (Huber, 1991), this research provides new evidence on the relationship between relational capital and export performance in a developing country context. Supported by the interfirm learning perspective, this study added to the notion of global commodity chain study by testing the dependency of low-end producers to the large brand marketers and international distributors.

This research added to the existing literature on relational capital by testing its impacts on firms' export performance from the buyers' side and suppliers' side, which is more comprehensive in a global value chain perspective. Previous research such as Jean et al. (2016) showed the impact of relational capital on joint learning and relationship-based innovation, but my study shows the impact on export performance, which is the primary concern of manufacturing firms from a developing country.

Based on the contingency perspective, this study examined the impacts of relational capital on export performance under the circumstances of market and technological turbulence in the global market. The present study (Kandemir, 2006) tested the impact of technological turbulence on the electronic industry, but my study examined this impact on the clothing industry. Observations of this study added to the notion of the global apparel value chain research by identifying technological turbulence as a significant moderator.

Moreover, the findings of this thesis have some practical implications for manufacturing firms. This study explained that the success of interfirm learning and knowledge transfer through relational capital depends on different organizational capabilities. Thus, firms need to be aware of their learning opportunities and knowledge implication capabilities through the alliance interface. Further, this study suggests that RMG manufacturers should reduce import dependency for raw materials to minimize lead time, which will help them to increase their competitiveness by delivering goods to the international market within a reasonable time. Observations of this study will also change the concept of labor-intensive RMG production and encourage business managers to adopt updated technology in their production systems.

Chapter 6.0 Limitations and Directions for Future Research

This thesis presents several insights but is not free from limitations. Like other research, this study has some limitations to address.

First, the factors examined are from the context of the ready-made garments industry. Therefore, the findings might not generalize to other industries. The survey was conducted with the manufacturers, that, to some extent, depend on imported raw materials. Other manufacturers that rely on domestic raw materials are not included in this survey.

Second, this study examined the moderating influence of market turbulence and technological turbulence on the relational capital-export performance relationship. However, the intensity of rivalry among existing competitors within the industry (Porter, 1981) is not examined in this study. Moreover, external factors such as political instability, labor unrest, lack of government supports, and subsidies might have a moderating influence on the ready-made garment industry, which is not examined in this study.

Third, this study relies on data collected from Bangladeshi RMG manufacturers. The RMG industry from other countries, such as China and Taiwan, might behave differently due to their stable internal environment and upgraded technology. Therefore, it could be inappropriate to generalize the reported findings to interfirm relationships in different geographic and industrial contexts.

Fourth, the online survey method is used to collect the survey data. Respondents faced various problems, such as the survey link not being accessible and misunderstanding of some questions. Although this method was necessary for some reasons, it could be more effective if a face-to-face survey could be conducted.

Fifth, variables in this study were estimated by the perception surveys. Therefore, the quality of the data might have been affected by the degree of impartiality and inaccuracy. The same measures of relational capital were used to operationalize the relational capital with buyers and relational capital with suppliers. Although the present study supports this measure, it has created a little dubious situation for the respondents. Further, this study draws data only from the manufacturer's perspective. Data should be collected from both sides of a manufacturer-buyer or supplier-manufacturer dyad to achieve a more accurate understanding of relational capital and its impacts.

Sixth, the RMG value chain is a buyer-driven commodity chain, and the relationships between local manufacturers and buyers are dominated by foreign buyers (Ramaswamy & Gereffi, 2011). However, manufacturers' dependency on their international buyers was not counted in this study.

Seventh, in this study, the structural equation modeling (SEM) approach is used to analyze survey data. But the SEM approach also has its limitations. For example, SEM does not test cause-and-effect relationships between variables (Hair et al., 2011). Further, the sample size in this study is 95, which is relatively small for applying structural equation modeling (SEM). Although PLS-SEM is appropriate with a relatively small sample (Hair et al., 2011), it could be more reliable if the study would have a relatively large sample size.

Finally, this thesis was limited to investigating the impacts of relational capital on export performance only. Although it is challenging to cover all performance indicators in one study, the inclusion of other significant predictors could provide a more comprehensive understanding of the impact of manufacturers' relational capital on their export performance.

These limitations provide opportunities for future research. For example, researchers can build on this study by including in-depth interviews to gain richer details on manufacturer-buyer and supplier-manufacturer relationships. Researchers could also explore the impact of relational capital on other aspects of manufacturers' performance, such as new technology adoption or process improvement. In addition, future studies that focus on manufacturers' import dependency for RMG raw materials could clarify its impact on their export performance--which would help policymakers to set their plan regarding the backward linkage of such export-oriented industries. Some researchers might also be interested in examining the export performance effects of relational capital in other sectors, such as leather goods, jute products, agricultural products.

Finally, future studies could use secondary data (i.e., export sales) to operationalize research constructs such as a firm's export performance, which would be more appropriate to validate the results of the investigation. A cross-country analysis of the same industry might reduce the limitations arising from single-country samples.

Chapter 7.0 Conclusion

This study is designed to explore the impacts of relational capital on the export performance of developing-country firms participating in a global value chain. It has further investigated the influence of two environmental turbulences, namely market, and technology, on the link between relational capital and export performance. This thesis uses survey data, which is collected from the RMG manufacturers in Bangladesh. Based on the survey data, this study has shown that firms' relational capital with international buyers positively impacts their export performance. This study also contributes to a learning-based perspective and prior related work by identifying the significant moderating influence of technological turbulence on the relationship between relational capital and export performance. Thus, it can be concluded that relational capital with international buyers is a strategic and learning enabling asset for developing-country firms, and technological advancement paves the way to maintain productive relationships with buyers in turbulent environments.

Appendix
Table 1 – Collinearity Statistics (VIF)

	VIF
ex1	1.677
ex2	1.748
ex3	1.278
ex4	1.485
mt1	1.238
mt2	1.238
rcb1	1.801
rcb2	1.798
rcb3	1.406
rcb4	1.796
rcb6	1.237
res1	2.835
res2	2.243
res3	1.893
res4	2.429
res6	1.533
rsc5	2.121
size	1.000
tt1	1.270
tt2	1.316
tt4	1.278

Appendix
Table 2 – Cross loadings

	Export	FS	MT	RCB	RCS	TT
ex1	0.815	0.164	0.333	0.518	0.514	0.382
ex2	0.830	0.261	0.297	0.527	0.412	0.365
ex3	0.615	0.226	0.098	0.284	0.270	0.212
ex4	0.792	0.382	0.351	0.486	0.339	0.386
mt1	0.258	0.147	0.790	0.232	0.161	0.194
mt2	0.358	0.080	0.897	0.439	0.310	0.340
rcb1	0.458	0.294	0.373	0.790	0.421	0.324
rcb2	0.506	0.079	0.306	0.805	0.537	0.562
rcb3	0.437	0.082	0.257	0.694	0.531	0.357
rcb4	0.452	0.182	0.352	0.788	0.562	0.353
rcb6	0.378	-0.097	0.233	0.602	0.391	0.374
rcs1	0.344	0.198	0.216	0.428	0.834	0.275
rcs2	0.477	0.146	0.089	0.510	0.813	0.338
rcs3	0.389	0.191	0.278	0.631	0.742	0.471
rcs4	0.345	0.290	0.400	0.534	0.785	0.319
rcs6	0.418	0.026	0.287	0.500	0.691	0.351
rsc5	0.351	0.035	0.118	0.484	0.807	0.367
tt1	0.204	-0.054	0.241	0.277	0.240	0.655
tt2	0.338	-0.057	0.334	0.462	0.433	0.782
tt4	0.433	-0.088	0.203	0.456	0.354	0.846

Appendix 3 – Survey Questionnaire



1. Do you consent to take part?

Yes

No

2. Does your firm involve in export business?

☐ Yes

☐ No

(If yes then proceed to next question)

3. Does your firm have at least one foreign supplier?

☐ Yes

☐ No

(If yes then proceed to next question)

Tip: Collecting raw materials, semi-finished or finished goods from other countries that used to produce final products for export.

4. Does your firm deal with foreign buyers or their local representatives?

☐ Yes

☐ No

(If yes then proceed to next questions)

5. Which of the following option(s) best describes your position in the firm you work for?

☐ The sole owner or founder of the company

☐ A partner or manager of the company

☐ Someone who's responsible for the major international imports and exports for the company

☐ Other role in the company _____

Tip: you may choose more than one answer.

6. Which of the following option(s) best describes your area of work in the firm?

- ☐ Merchandising
- ☐ Supply chain
- ☐ Quality control
- ☐ HR/Admin
- ☐ Finance and Accounts
- ☐ Operations

Tip: you may choose more than one answer.

7. Which of the following best describes the ownership of your firm?

- ☐ Local
- ☐ Foreign
- ☐ Local and foreign
- ☐ Others [Please specify -----]

8. How long has your firm been in this business?

- ☐ Up to 5 years
- ☐ 6 to 10 years
- ☐ 11 to 15 years
- ☐ 16 to 20 years
- ☐ Over 20 years

9. What is the approximate total number of employees in your firm?

- ☐ Less than 301
- ☐ 301-600
- ☐ 601-900
- ☐ 901-1200
- ☐ More than 1200

10. Please indicate the product category(ies) of your firm for export.

- ☐ Women's wear
- ☐ Men's wear
- ☐ Kid's wear
- ☐ Industrial garments
- ☐ Sportswear
- ☐ Others [Please specify -----]

Tip: you may choose more than one answer.

11. What is the approximate number of the export market that your firm served during the last fiscal years? Number of Export Market
- ☐ Less than 5
 - ☐ 5-9
 - ☐ 10-14
 - ☐ 15-19
 - ☐ More than 20

12. Please indicate the exporting destination(s) of your firm.
- ☐ Canada
 - ☐ USA
 - ☐ Europe
 - ☐ Australia
 - ☐ Middle East Asia
 - ☐ Japan
 - ☐ Others [Please specify -----]

Tip: you may choose more than one answer.

13. Approximately what was the total annual sales revenue of the firm during the last fiscal year (in USD)?
- ☐ Up to 5 million
 - ☐ 6 to 10 million
 - ☐ 11 to 15 million
 - ☐ 16 to 20 million
 - ☐ Over 20 million

Tip: in Bangladesh, the fiscal year is 1 July to the next 30 June.

14. Please state your level of agreement for the following statements about your firm's key international buyer(s).

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
Our key international buyers are trustworthy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
These buyers are genuinely concerned that we succeed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
These buyers keep the promises they make.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We believe the information these buyers provide us.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The goals and objectives of both parties in the relationship with our international buyers are compatible.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We expect the relationship with our major international buyers to continue for a long time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

15. Please indicate your agreement with each of the following statements.

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
Our company is strongly dependent on these key international buyers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It would be very difficult for our company to replace sales and profits realized from these international buyers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our international buyers would be costly to replace.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

16. Please state your level of agreement for the following statements about your firm's key international suppliers(s).

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
Our key international suppliers are trustworthy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
These suppliers are genuinely concerned that we succeed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
These suppliers keep the promises they make.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We believe the information these suppliers provide for us.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The goals and objectives of both parties in the relationship with our international suppliers are compatible.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We expect the relationship with our major international suppliers to continue for a long time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17. Please indicate your agreement with each of the following statements.

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
In our kind of business, customers' product preferences change quite a lot over time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our customers tend to look for new products all the time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We are witnessing demand for our products from customers who never bought them before.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
New customers tend to have product-related needs that are different from our existing customers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18. Please indicate your agreement with each of the following statements.

Technological Turbulence

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
The technology in our industry is changing rapidly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Technological changes provide big opportunities in our industry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is very difficult to forecast where the technology in our industry will be in the next 2–3 years.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A large number of new product ideas have been made possible through technological breakthroughs in our industry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

19. For each of these criteria, how satisfied are you with your company's export performance during the last three years? Export performance

	Very Dissatisfied	Moderately Dissatisfied	Slightly Dissatisfied	Neutral	Slightly Satisfied	Moderately Satisfied	Very Satisfied
Export sales growth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Export profitability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Export market share	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Degree of meeting expectations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

20. In your own words, what are the things that you would most like to improve the relationship with your buyers & suppliers to cope with the dynamic international market?

21. Do you have any other comments/suggestions about your firm's international business prospects and the relationship with your business partners?

Thank you for taking the time to complete this survey.

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