Supplier strategies to compensate for knowledge asymmetries in buyer–supplier relationships: implications for economic upgrading

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Abstract: This paper explores a special form of international outsourcing relationship in which suppliers make recurrent discrete transactions with the same buyers over a long period of time without the existence of any original legally binding written agreement. The study examines three research questions: (1) Can suppliers in such relationships access any of their buyers' tacit knowledge? (2) What implications does their access or the lack thereof have for their economic upgrading? (3) What strategies do suppliers adopt to compensate for existing knowledge asymmetries? The case analysis of three small Bangladeshi garment manufacturers reveals the following key findings. The studied firms only have access to their buyers' explicit/codified knowledge. Notwithstanding this, they have successfully developed relevant knowledge that has allowed them to engage in process upgrading.

Keywords: knowledge acquisition; knowledge sources; economic upgrading; buyer–supplier relationship; outsourcing.

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1 Introduction

International business (IB) scholars have traditionally analysed multinational enterprises (MNEs) as the key channels for knowledge transfer to their equity partners involved in cross-border acquisitions (Bresman et al., 1999; Bresman et al., 2009; Park and Choi, 2014; Zou and Ghauri, 2008) and joint ventures (Lyles and Salk, 2007; Park, 2011). A body of literature within IB focusing on linkages also suggests that the knowledge transferred from MNEs may drive local suppliers' upgrading by directly influencing the technology used by them, improving their production function and thus enhancing their capabilities (Giroud, 2007; Giroud et al., 2012; Giroud and Scott-Kennel, 2009). Overall, studies on knowledge transfer implicitly assume that MNEs are the most important sources of knowledge for their supplying partner firms in the host country (cf. Marchi et al., 2014). Additional or alternative sources of knowledge (e.g. Fletcher and Harris, 2012) that may be available to the local firms, and their strategies for acquiring them, are frequently untapped. In addition, the knowledge-transfer channels studied so far mostly relate to MNE headquarters and their subsidiaries (Foss and Pedersen, 2002; Mudambi

and Swift, 2011), foreign direct investment (FDI) and local linkage firms (Giroud, 2007; Giroud and Scott-Kennel, 2009), and MNEs and their strategic alliance partners (Ho and Wang, 2015). While there has been a rise in externalisation practices such as subcontracting and outsourcing/off-shoring by MNEs since the 1980s (Strange and Newton, 2006), the IB literature has continued to focus predominantly on the perspectives of MNE buyers and only limited attention has been accorded to the knowledge acquisition challenges of suppliers. There is still limited understanding of the strategies which suppliers adopt to compensate for the knowledge asymmetries in their engagement with MNEs. This paper also aims to elucidate the implications of these strategies for suppliers' economic upgrading – a concept borrowed from the global value chain (GVC) analysis and defined as 'a process of improving the ability of a firm to move to a more profitable and/or technologically sophisticated capital and skill-intensive economic niche' (Gereffi, 1999, p.38). Thus, the study follows up on recent interest in the cross-disciplinary engagement of IB and GVC perspectives (Johns et al., 2015).

We selected a labour-intensive, low-tech industry context because most existing studies related to knowledge-transfer issues between suppliers and their MNE buyers have focused on capital-intensive and high-tech industries. In these industries, a greater degree of collaboration and knowledge sharing are necessary to create value for the buyer, and this can be expected to result, as well, in some sort of value for the supplier (Khan and Nicholson, 2014; Sinkovics et al., 2015). For example, Liu and Zhang (2014) find that Taiwanese technological suppliers are able to move up the value chain by switching from original equipment manufacturing (OEM) to original design manufacturing (ODM) or even original brand manufacturing (OBM) as a result of tacit knowledge transfer from their MNE buyers. In contrast, the nature of production in labour-intensive industry is fairly standardised, codified and requires modest skill (Strange and Newton, 2006). The transfer of tacit knowledge, such as design, advertising and information technologies, is not needed to create value for MNEs in such industries (Ernst and Kim, 2002), although it is essential for suppliers if they are to elevate their position in the value chain through economic upgrading in order to achieve higher economic rewards (Gereffi and Memedovic, 2003; Tokatli, 2006). These economic rewards may include higher profit margins achieved by selling higher-value-added goods, supplying to value-conscious buyers who are less price sensitive and thus offer better prices, and finally by creating their own brands and global production networks (cf. Buckley, 2009). Therefore, it is not surprising that MNEs create high entry barriers to suppliers by protecting their tacit knowledge and by reducing unintended leakages to a minimum level (Strange and Newton, 2006). As a consequence, suppliers in labour-intensive low-tech industries face higher barriers to the acquisition of tacit knowledge than suppliers from capital-intensive high-tech industries. This paper, therefore, seeks to examine whether and how this situation may influence suppliers' economic upgrading initiatives.

Furthermore, the present study seeks to contribute to the literature by focusing on a, to date, largely neglected form of international outsourcing relationship. The findings indicate that a number of Bangladeshi garment manufacturers have been producing and supplying finished apparel to the same buyers since the time of their inception. While each of these transactions has been discrete, there is evidence of recurrent discrete transactions without any legally binding original agreement for repeat purchase. Instead there is an implicit (or at most orally expressed) promise for future orders that is subject to suppliers' ability to maintain the expected level of performance within the current

exchange in terms of price and quality specifications, on-time delivery, social compliance and protection of intellectual property. In addition, suppliers are required to make a moderate degree of relationship-specific investment, such as the purchase of customised raw materials, the specialisation of the labour force, and/or the adoption of social codes of conduct, in order to be able to meet individual buyers' expectations. This investment is necessary not only for the completion of the current transaction but also for the realisation of buyers' promises to make repeat purchases. In this paper, we coin the expression 'tacit promissory contracting' to describe this specific form of relationship. Against this background, the present paper sets out to explore the following three research questions: (1) Can suppliers in such relationships access any of their buyers' tacit knowledge? (2) What implications does their access or the lack thereof have for their economic upgrading? (3) What strategies do suppliers adopt to compensate for existing knowledge asymmetries?

The paper is organised as follows: Section 2 presents the conceptual background of the paper after which section 3 outlines the methodology. Section 4 presents and discusses the findings. The conclusion section summarises the theoretical and managerial implications, limitations and further research ideas.

2 Conceptual background

2.1 Tacit promissory contracting

The relational form explored in this paper can be explained by drawing upon the theory of the governance of contractual relations (Williamson, 1985). Macneil (2000) defines contracts as 'relations among people who have exchanged, or expect to be exchanging in the future – in other words exchange relations'. 'In this very idea, contract refers to the "relationship" in which the exchange occurs rather than specific transactions, specific agreement, specific promises or specific exchanges' (Macneil, 2000, p.878). Therefore, a contract can be informal or formal/legally binding. However, in the legal landscape, a contract is always legally binding; and according to the law of contracts a legally binding contract includes the agreement of both parties in a form which is sufficiently certain for the court to enforce (McKendrick, 2015). Contract law identifies two main forms of legally binding contracts: classical and relational. While classical contracts are rigid in nature and are used for governing discrete arm's-length transactions, relational contracts refer to original legally binding agreements which include flexible clauses and which are applied for the governing of ongoing transactions between firms and also other administrative-type, tacit exchanges that may or may not refer to the original agreement.

In the theory of governance of contractual relations, Williamson (1985) theorised about two extreme forms of governance, market and relational, drawing upon the classical and relational contracting laws respectively. Market governance is efficacious when a one-off discrete transaction is made with little/no transaction-specific investment made by either party because the goods in question are standardised in nature and could be produced with standard equipment. Such transactions are operationalised through a classical sales contract and there exists no joint planning on future structures and processes for maintaining the relationship. On the contrary, relational governance is applied when parties make recurrent discrete transactions under an original legally

binding agreement, even if not all of the interactions, investments and exchanges will always refer to the original agreement. Such relationships are characterised by a high degree of reciprocity in terms of relationship-specific investment, socio-economic support, planning for the future and problem solving. The exchanges in such relationships involve a high level of tacit content and cannot always be measured in monetary value. The termination of the relationship is highly unlikely and, if it does occur, is likely to be gradual (Williamson, 1985).

The form of relationship studied in this paper sits in the middle of a spectrum with an extreme transactional pole and an extreme relational pole. The studied firms have been making recurrent discrete transactions with the same buyers since their inception, but without the existence of any original legally binding written agreement. Each transaction is discrete and undergoes a process of bargaining in which the buyers often dominate and the suppliers consent to the price through an invoice. The international nature of the transaction could potentially result in greater uncertainty for both parties in terms of currency rate fluctuation, and payment and shipment delays, which necessitates the involvement of a third party as a guarantor. Thus, each time, the exchange is operationalised through a letter of consent (LC), issued jointly by the banks of the supplier and the buyer, providing a guarantee of payment and the delivery of the goods respectively. The LC is the only legally binding document that holds the substance of each exchange, such as the agreed price, volume, quality specifications and other clauses of sale. Buyers are not legally bound to make a repeat purchase, although they make a promise (non-legally binding) in which they informally (primarily orally) consent to make a repeat purchase if the suppliers perform at an expected level in the current transaction. Suppliers still have to make relationship-specific investments, such as the purchase of customised raw materials, the specialisation of labour and the implementation of labour codes in order for the current transaction to happen and to attract repeat orders from the same buyer, even though the plans for future orders are never legally binding and always tentative.

The buyer's 'promise' is the key incentive that encourages suppliers to make idiosyncratic investments. According to contract law, the definition of a 'contract promise' corresponds to a 'present communication of a commitment to future engagement in a specified measured exchange' (Macneil, 1978, p.858). In this case, the 'specified measured exchange' is suppliers' past performance and their commitment to serve the buyers' customised needs (expressed via their relationship-specific investments). Macneil (1978, p.858) also stresses that 'trust must exist if a promise is to be of any value'. Therefore, suppliers make such investments primarily out of their trust in the buyers and their tacit expectation of receiving future orders from them, although there is no legally binding agreement. As the relationship is primarily based on an informal, either orally expressed or implicit, promise, the term 'tacit promissory contracting' can be coined to describe it. A comparison of tacit promissory contracting with market and relational governance is displayed in Table 1, including dimensions such as level of personal involvement, communication, measurability, socio-economic support, planning, cooperation, sharing of obligations, transferability, duration, commencement, termination and participants' views (cf. Macneil, 1978), to contrast the features of extreme transactional and relational forms of governance.

Table 1 Promissory contracting: a comparison with market governance and relational governance

Dimensions (adapted from Macneil, 1978)	*Market governance (extreme transactional pole)*	*Tacit promissory contracting*	*Relational governance (extreme relational pole)*
Nature of transaction	• Discrete (one-off) arm's-length transaction	• Recurrent discrete transactions with multiple yet the same buyers over a long period of time without having any original legally binding agreement	• Recurrent discrete transactions with one key buyer under the blanket of an original legally binding agreement
Balance of autonomy	• Both parties retain autonomy	• Buyers retain most autonomy in deciding both exchange specifications and future planning	• Both parties retain autonomy; there exists a high level of reciprocity
Personal involvement	• Segmental, limited, non-unique, transferable	• Mostly transaction-specific interaction with some degree of personal relationship (mostly with the owner), non-unique, transferable	• Whole person, unlimited, unique, non-transferable
Type of communication	• Limited, linguistic, formal	• Formal standards and specifications • Informal bargaining and planning for future	• Extensive, deep and not limited to linguistic • Mostly informal in addition to a formally written original agreement
Subject matter of satisfaction	• Performance in current transaction, monetisable, economic exchange only	• Current and past performance in terms of meeting delivery time, quality and labour standards; monetisable; social exchange not important	• In addition to economic, complex personal non-economic satisfaction; social exchange important
Commencement	• One-time discrete transaction based on one clearly written legally binding agreement • Classical or neoclassical sales contract used as reference for commencement	• Recurrent discrete transactions but no original legally binding agreement exists • Each transaction commences through a neoclassical contract that involves a third party (i.e. letter of consent from bank)	• Recurrent discrete transactions under an original legally binding agreement • Interactions, investments and exchanges may or may not always refer to the original agreement (i.e. relational contracting)
Termination	• Non-performance of the conditions specified in the legal agreement • No margin of error is permitted	• Non-performance of the conditions specified in the LC • Future orders from the same buyer depend on past performance • Termination is fairly easy, although the buyer may allow some margin of error before making the decision to terminate	• Termination is highly unlikely and, if anything, is likely to be gradual • Joint efforts to solve errors before making a decision to terminate
Measurement of exchange	• Measurable and monetised	• Measurable and monetised	• Both exchanges and other factors are relatively difficult to measure in terms of monetary value

Table 1 Promissory contracting: a comparison with market governance and relational governance (continued)

Dimensions (adapted from Macneil, 1978)	*Market governance (extreme transactional pole)*	*Tacit promissory contracting*	*Relational governance (extreme relational pole)*
Sources of socio-economic support	• No support provided	• No support provided	• High level of socio-economic support
Duration	• Short agreement process • Short time between agreement and performance	• Long-term recurrent transaction process • Relationship can end with poor performance	• Long-term; no finite beginning or end to either relationship or performance
Planning	• Complete and specific planning related to particular exchange • Only remote contingencies are beyond reasonable planning • Tacit expectations are very limited • Planning entirely legally binding	• Complete and specific planning related to each discrete exchange • No joint planning on future structures and processes • Suppliers make idiosyncratic investments based on buyers' promises to make future orders that tend to depend on suppliers' consistent performance • Tacit expectation of getting future orders from buyers • Planned-for future orders are never legally binding and always tentative	• Limited specific planning related to particular transaction but extensive planning on future structures and processes; joint creative effort or investment to implement future planning • Tacit expectations are a recognised aspect of relational planning, without which relations cannot survive • Planning is legally binding but often some degree of tentativeness exists
Future cooperation required in post-commencement planning	• Almost not required	• Cooperation is not given in either performance or future planning	• Success entirely depends on future cooperation in both performance and future planning
Incidence of benefits and burdens	• No sharing of benefits and burdens	• No sharing of benefits and burdens	• Undivided sharing of both benefits and burdens
Obligations undertaken	• Genuinely expressed, communicated and exchanged promises from both parties	• Obligations are mostly undertaken by the suppliers, some of which are clearly communicated, while others are implied	• Relation itself develops obligations which may or may not include genuinely expressed, communicated and exchanged promises from the parties
Transferability	• Entirely transferable	• Transfer involves moderate level of complexity; only pursued if suppliers perform badly	• Transfer of relation is likely to be uneconomic and difficult to achieve
Participants' views of transaction or relation	• Transaction performance is highly important • Altruistic behaviour is not expected • Problems are governed by specific rights	• Transaction performance is highly important and future continuity depends on performance in current exchange • Altruistic behaviour not expected • Problems are governed by specific rights	• Relational aspects are more important than transactions • Significant expectation of altruistic behaviour • Problems are resolved jointly

With rising global competition and the ever-increasing power of reputable branded retailers, numerous suppliers compete to be part of the GVCs of these retailers. There exists an extreme power asymmetry between MNEs and their suppliers (Pietrobelli and Saliola, 2008; Ponte and Gibbon, 2005). This explains why MNEs can control operations through an informal promise of a repeat purchase without any legal obligation to deliver on that promise. At the same time, the hope that the buyer will place a repeat purchase and a lack of alternatives obliges suppliers to follow MNEs' codified instructions, maintain performance-oriented expectations and make relationship-specific investments. The absence of a legal agreement enhances the flexibility and bargaining power for the MNE buyers, making termination fairly easy and rapid, without incurring much of a transaction cost (Williamson, 2008). The higher degree of flexibility could also bring in increased economic efficiency for the MNEs (cf. Madhok and Tallman, 1998). On the contrary, this higher degree of flexibility translates into greater uncertainty for the suppliers. As a consequence, suppliers are likely to be more committed to offer reciprocity in exchange for MNEs' promises by maintaining expected levels of performance and relationship-specific investments. Therefore, the footloose nature of the relationship enables the buyers to capture greater economic efficiency from their suppliers.

2.2 Knowledge transfer in international outsourcing relationships

The IB literature on knowledge transfer predominantly focuses on knowledge flows between MNE headquarters and their subsidiaries (Bjorkman et al., 2004; Lyles and Salk, 2007). The knowledge-transfer process has been studied in the context of international joint ventures (Lyles and Salk, 2007; Park, 2011) and acquisitions (Bresman et al., 1999; Bresman et al., 2009; Zou and Ghauri, 2008). Previous studies have identified the role of MNEs' capabilities (Park, 2011), willingness (Wang et al., 2004) and control mechanisms (Park and Choi, 2014) as factors shaping the success of knowledge transfer to subsidiaries. The attention of these studies is on MNEs as the focal node of knowledge creation and distribution to their subsidiaries (Marchi et al., 2014). This body of literature presumes the knowledge flow to be a one-way process in which subsidiaries are regarded as mere learners (Lyles and Salk, 2007).

An alternative stream of IB literature highlights the role of subsidiaries in knowledge creation (Almeida and Phene, 2004; Andersson et al., 2005), their contribution in extracting local knowledge and then feeding it into MNEs' global networks (Buckley and Carter, 2002; Mudambi, 2002). These studies shift the focus towards subsidiaries from the traditional one on headquarters as the focal nodes of knowledge. Even so, these studies are centred on knowledge flows within an intra-organisational network, in which greater coordination and collaboration exist between a knowledge transferor and recipient (Marchi et al., 2014).

Only recently, a small number of studies have examined knowledge transfer in inter-firm networks such as international strategic alliances (Ho and Wang, 2015) and cross-border outsourcing relationships (Liu and Zhang, 2014). The tendency for regarding MNEs as the vital source of knowledge is also evident in this body of literature (Bojica and Fuentes, 2012; Liu, 2012). Suppliers are assumed to depend only on MNE buyers for knowledge resources (Liu, 2012). Further to this, Liu and Zhang (2014) found that the knowledge flow from MNE buyers influenced suppliers' capability formation. While this

body of literature provides critical insights on knowledge transfer within inter-firm networks, it ignores the alternative sources of knowledge (besides MNE buyers) that may influence suppliers' upgrading performance.

In this respect, Fletcher and Harris (2012) argue that small firms can acquire tacit and explicit knowledge required for internationalisation from both external and internal sources. They list a number of internal and external knowledge sources. The internal sources include employees and MNE buyers, and the external sources include network partners, business associations, chambers of commerce, consultancy firms or research agencies, trade databases and government sources. Tacit knowledge can be acquired and/or developed from past mistakes, collaboration with buyers/partners, grafting and mimicking competitors. Explicit knowledge can originate from internal staff, formal and informal communication lines, codified information from buyers and published organisational documents (Huber, 1991).

The alternative sources (other than buyers), including employees, network partners, business associations and consultancy firms, may hold specific significance in our paper. We assume that suppliers' access to MNE buyers' knowledge resources will be limited in our relational context. Li et al. (2010) argue that a formal legally binding written contract can enhance the potential for explicit and tacit knowledge flow in a long-term relationship in three ways; first, by constructing the foundation of collaborative exchange though formalisation of precise goals and expectations; second, by reducing the risk and thereby increasing the level of comfort to an collaborative exchange through prevention of opportunistic behaviour; and third, by formalising the process of knowledge transfer. In line with these arguments, a possible question could, therefore, be whether and how the absence of a formal contract influences suppliers' access to MNE buyers' knowledge resources.

In addition, the access may also depend on MNEs' strategic intent to share knowledge with the suppliers (conceptualised as 'knowledge openness' in Liu and Zhang (2014)). In this respect, we draw on Giuliani and Macchi (2014) who suggest that, when MNEs' strategic motivation for investment is to seek economic efficiency, they have an insignificant/negative economic impact on host-country firms. This implies that efficiency-seeking MNEs are likely to safeguard their core knowledge (often design skills and branding) and thus reduce knowledge transfer or unintended spill-overs to a minimum level. These MNEs may allow suppliers to access only the codified knowledge that they need in order to smoothly perform the production function. Hence, the suppliers in our study context are unlikely to get access to their MNE buyers' tacit knowledge; if this is the case, then how do the suppliers compensate for the lack of knowledge resulting from their constrained access? In this respect, Sinkovics et al. (2014) argue that firm survival is often dependent on alleviating constraints. In line with this argument, suppliers' survival in the global market and their ability to satisfy powerful trading partners may depend on their strategies to alleviate the knowledge constraints which is an area of research that has received limited attention to date (Marchi et al., 2014).

2.3 GVC governance, upgrading and knowledge dynamics

GVC analysis could argued to be a framework for investigating the management of externalisation in a global context. More specifically, the framework helps us to understand how a group of firms operating in a specific functional position is governed by a lead firm (Gereffi and Lee, 2012). The primary focus of GVC analysis is on the

governance of inter-firm relations and thus it offers a basis for IB studies aiming to investigate knowledge flow and other concerns in networked forms of MNE-supplier relationships (Lee and Gereffi, 2015). The GVC approach provides a holistic view of global industries from two vintage points: top down and bottom up (Gereffi and Lee, 2012). The top-down view focuses on the organisation of value chain activities and the modes of governance coordinating the value chain (Gereffi et al., 2005), while the bottom-up view focuses on upgrading by suppliers (Barrientos et al., 2011; Gereffi, 1999; Giuliani et al., 2005; Pavlínek and Ženka, 2011). These two perspectives are complementary and interdependent (Lee and Gereffi, 2015).

Within the top-down view, Gereffi et al. (2005) identify five possible modes of governance. Market governance and hierarchical governance are the opposite extremes with the first one referring to purely transactional, non-equity relationship and the later one referring to equity relationship characterised by high degree of collaborative exchange. Between these two extremes, the three non-equity forms of relationships are captive, relational and modular. Our studied form of relationship is very much in line with the captive form of governance, in which buyers restrict the supplier from serving other buyers in order to exclude competitors from reaping the benefits of their efforts. However, one of the key differences in the case of 'tacit promissory contracting' is that suppliers are not bound to serve a specific buyer and can serve multiple buyers at the same time. The other characteristics of captivity are still prevalent, such as the high bargaining power of the buyers, a high ability to codify, low supplier capabilities and an absence of mutuality.

In contrast to Williamson's (1985) theory of contractual governance, the 'contract' (formal or informal) is not a focus of the theory of GVC governance put forward by Gereffi et al. (2005). Thus, it is not yet sufficiently understood to what extent 'tacit promissory contracting' differs from the captive form of governance from a contractual point of view. This ambiguity highlights a specific concern about the theory of GVC governance in relation to the role of a legally binding contract within the different forms of governance. It is observed in our paper that the existence and the form of a legally binding contract can potentially shape the extent of uncertainty and power asymmetry involved in a buyer-supplier relationship, which can influence the nature of the governance as well. To this end, the form of contract could be an important factor in non-equity-based governance modes, which, however, is not explicitly highlighted in the theory of GVC governance.

The bottom-up view of GVC analysis focuses on upgrading, defined as the 'capacity of a firm to innovate in order to increase the value added' (Giuliani et al., 2005, p.550). Economic upgrading is a form of upgrading that has a capital dimension and a labour dimension. The capital dimension refers to the use of new machinery and advanced technology. The labour dimension refers to skills development through which increased productivity is achieved (Barrientos et al., 2011). Humphrey and Schmitz (2002) categorise economic upgrading in the following way:

i *Process upgrading* involves changes in the production process with the objective of making it more efficient; this can be achieved by substituting capital for labour.

ii *Product upgrading* means introducing more advanced product types, often requiring higher-skilled workers to make items with enhanced features.

iii *Functional upgrading* is changing the mix of activities performed towards higher-value-added tasks. Gereffi and Frederick (2010) suggest four functional upgrading trajectories:

   a Cut, make and trim (CMT) producers: the focus of the supplier is on production alone, and assembling imported inputs following buyers' specifications.

   b Package contractor sourcing or Original Equipment Manufacturer (OEM): the supplier takes on a broader range of tangible manufacturing-related functions, such as sourcing inputs and inbound logistics in addition to production.

   c Full package provider or Original Design Manufacturer (ODM): supplier carries out some of the pre-production processes, including design and R&D.

   d Original Brand Manufacturer (OBM): supplier acquires post-production capabilities and is able to fully develop products under its own brand names.

iv *Chain upgrading* means shifting to a more technologically advanced production chain that involves moving into new industries or product markets.

In GVC analysis, knowledge dynamics are usually examined in relation to the process of upgrading. While IB studies predominantly focus on intra-organisational knowledge flows (mainly, between headquarters and subsidiary), the GVC literatures cover the same in a range of inter-firm/non-equity relational contexts (Marchi et al., 2014). The GVC analysis explores the link between these forms of inter-firm governance and the nature of knowledge transferred (e.g. Gereffi et al., 2005). There is also evidence in the GVC literature that the form of inter-firm governance influences the type of upgrading in the supply base (e.g. Humphrey and Schmitz, 2002). Furthermore, Ernst and Kim (2002) find that inter-firm knowledge transfer in a global production network provides new opportunities for capability formation by local suppliers in developing countries. Previous studies in GVC analysis, therefore, have separately examined the connection between inter-firm governance and the nature of knowledge flow (e.g. Gereffi et al., 2005), inter-firm governance and the type of upgrading (e.g. Humphrey and Schmitz, 2002) and the nature of knowledge flows and suppliers' capability development (e.g. Ernst and Kim, 2002). While these findings imply that there may exist a link between the form of inter-firm governance, the nature of knowledge flows and the level of suppliers' upgrading (Marchi et al., 2014), to date this line of reasoning remains unaddressed in the GVC domain. Inspired by GVC analysis, therefore, we aim to explore this link.

GVC analysis not only pays attention to MNEs as the focal node controlling knowledge flows, but also considers the role of suppliers. The capabilities of suppliers are regarded as a key determinant of knowledge flow and form of governance in this domain (Gereffi et al., 2005). It must be noted, however, that GVC analysis has also been criticised for its lack of focus on the firm-level internal strategy adopted for such capability development (Coe et al., 2008). As a consequence, there is limited attention accorded to suppliers' strategies for acquiring knowledge outside of the relationship with their lead firm. In tacit promissory contracting, in which buyers may actively want to limit the transfer of knowledge, suppliers' additional strategies for knowledge acquisition may matter even more for upgrading.

3 Methodology

3.1 The study context

The study is based on data collected from three Bangladeshi garment manufacturing firms. The Bangladeshi garment industry has grown quickly since its inception during the 1980s (Bangladesh Garment Manufacturers and Exporters Association (BGMEA), 2015). After China, it is the second most sought after production destination for Western retailers. The producers in the industry supply primarily to American and European retailers. Most suppliers produce low-to-medium-value-added basic garments. Notably, the value added by the industry has remained static at around 25–30% for the last 20 years. Only a limited number of suppliers have moved beyond CMT to upgrade service levels such as quality lab (39%), design (36%), composite unit (21%) and ticketing (10%) (McKinsey, 2011). As a consequence, the Bangladeshi garment industry can be deemed an interesting context for studying upgrading.

The studied firms have been supplying to most of their buyers for a long time. However, they also produce small orders from new buyers, most of which are seasonal and short-term. In line with the conceptualisation of promissory contracting presented earlier, these firms have been involved in discrete recurrent transactions with the same buyers for a long period of time without the existence of an original legal agreement binding the relationship. The absence of a legal contract leaves both parties with the flexibility to terminate the relationship at any point in time without giving formal notice and without any involvement from the court. All three firms had, however, received informal promises from their long-term buyers regarding repeat purchases and had subsequently made investments to maintain the ongoing relationships with the buyers, such as the training of their labour forces so as to be able to meet buyers' specific quality requirements, the purchase of customised raw materials and compliance with their buyers' labour codes. Thus, the form of these inter-firm relationships is in line with the characteristics of tacit promissory contracting. This unique relational context makes the cases interesting to study.

3.2 Research design and sample

The study is based on a multiple case study approach. The data have been collected through interviews with the owners/managers (six interviews). The interviews lasted for one and half hours and were followed by factory visits. Interviewees were asked about the history, critical incidents, current constraints and future plans of their firm. The interview guide also included questions about their relationships with their buyers (such as the existence of a contract, length of relationship, process of ordering, materialising and finishing a transaction, exchange of knowledge and information, modes of contacting buyers, critical shapers of repetitive relationships and so on). Interviews were conducted in Bengali and were translated and transcribed afterwards. Organisational documents such as annual reports, sample order placement documents and buyers' design specifications were also collected.

The selection criteria included the presence of the relational context explored in this paper, the size of the firms, and their resource constraints. The satisfaction of these criteria by the case companies enabled us to examine the knowledge flows between buyers and suppliers as well as suppliers' strategies for acquiring necessary knowledge resources to compensate for knowledge asymmetries.

Table 2 Background of firms

Topic/firm	*Firm A*	*Firm B*	*Firm C*
Starting year	2010	2009	2010
Country location	Bangladesh	Bangladesh	Bangladesh
Ownership structure	Investment from Turkish and Bangladeshi owners (joint venture)	Owned by two brothers (local)	Owned by two friends (local)
Surrounding environment	Urban: rented building	Industrial: own building in industrial area	Industrial: rented shared building
Number of employees	500	600	550
Workforce nationality:			
Managers	Bangladeshi and foreign	Bangladeshi	Bangladeshi
Supervisors	Bangladeshi	Bangladeshi	Bangladeshi
Workers	Bangladeshi	Bangladeshi	Bangladeshi
No. of production lines	Five lines	Six lines	Five lines
Size	Small	Small	Small
Turnover	£9 million	£13 million	£6 million
Net profit	£0.18 million	£0.24 million	No data
Production method	Traditional (progressive bundle system)	Traditional (progressive bundle system)	Traditional (progressive bundle system)
Form of relationship with MNE buyer	Non-equity, non-contractual, captive	Non-equity, non-contractual, captive	Non-equity, non-contractual, captive
Structure of local value chain	Lead contractor with own network of suppliers in Bangladesh	Lead contractor with own network of suppliers in Bangladesh	Lead contractor with own network of suppliers in Bangladesh
Origin of buyers	Mainly the Netherlands; other European countries	The Netherlands, Belgium, and Spain	The UK and Italy
Means of contact with buyer	Direct	Direct and buying house	Direct and buying house
Length of relationship with buyers	Mixed (long-term and short-term)	Mixed (long-term and short-term)	Mixed (long-term and short-term)

The selected firms share a number of similarities (Table 2). They were all established in 2009 or 2010. They have 500–600 employees and five or six production lines. Their product ranges mainly include tops such as t-shirts and polo shirts. All of them supply European buyers. All the firms are OEM service providers (Table 3). Their position is that of lead contractor/first-tier supplier within the buyers' GVC network. Each has its own network of local suppliers. They receive orders from buyers directly and then source

raw materials from their supplier network. The firms have some minor differences in terms of the surrounding area, ownership structure, workforce nationality, revenue turnover and net profit.

Table 3 State of economic upgrading

Topic/firm	*Firm A*	*Firm B*	*Firm C*
Capital:			
Type of upgrading	Horizontal Capacity increase Productivity increase	Horizontal Moving to self-constructed building Capacity increase Productivity increase	Horizontal Capacity increase
Functional activities	OEM	OEM	OEM
Level of automation	Recently purchased automated machines to replace helpers	Recently purchased automated machines to replace helpers	Planning to purchase automated machines to replace helpers
Technological advancement	CAD and CAM machine appliqué and graphic printing machine CCTV camera on factory floor	CAD and CAM machine CCTV camera on factory floor	N/A
Level of value-added in product	Medium value-added	Low value-added	Low value-added
Labour:			
Productivity rate	38% (previously 33%)	35% (previously 28%)	30%
Defect rate	7% (previously 8%)	7% (previously 12%)	8%
Skill development mechanism	Informal on-the-job training by colleagues and supervisors Self-learning	Informal on-the-job training by colleagues and supervisors Self-learning	Informal on-the-job training by colleagues and supervisors Self-learning
Promotion	Informal, skill-based	Informal, skill-based	Informal, skill-based
Work allocation	Daily production target given Overtime allowed up to 2 hours/day	Daily production target given Overtime allowed up to 2 hours/day	No targets given Overtime practised up to 4–6 hours/day Planning to introduce daily target system
Job rotation allowed	Not practised	Not practised	Not practised
Workers' skills	Specialised and repetitive	Specialised and repetitive	Specialised and repetitive

The state of economic upgrading of the firms was analysed by drawing upon Barrientos et al. (2011), who categorise economic upgrading in terms of capital and labour dimensions (Table 4). The capital dimension included factors such as functional

activities, technological advancement, level of automation and level of value added, while the labour dimension included the productivity rate, defect rate, skills development mechanism, promotion, work allocation system and workers' level of skill.

The data were analysed using template analysis. The dimensions in the template included the upgrading pursued, the relevant content of technological and marketing knowledge and their respective sources, and finally, the type of knowledge transferred from buyers. The template was an amalgamation of dimensions originating from different literatures and was developed with the purpose of exploring the link between the nature of upgrading and the content and sources of knowledge. The upgrading initiatives included in Table 4 were a summary of the findings from Table 3. The sources and content of technological and marketing knowledge were analysed using Fletcher and Harris (2012).

Fletcher and Harris (2012) identified two types of knowledge as most relevant for firms involved in international business, i.e. technological and marketing knowledge. Both types contain tacit and explicit dimensions. The explicit elements of technological knowledge involve production output, codified specifications, raw materials, plant and machinery, while the tacit elements could be skills, process knowledge and organisation. The explicit element of marketing knowledge comprises information on the behaviours of suppliers, competitors and customers. Besides the information-oriented components, marketing knowledge also involves tacit knowledge of how to do pricing, product development, channel management, marketing communication, selling, planning and implementation. Drawing upon Huber (1991), Fletcher and Harris (2012) also presented a range of external (network partners, government sources, business associations and competitors) and internal (such as, formal and informal communication with buyers and employees, published organisational documents, experiences and mistakes) sources that can be used by export-oriented firms to acquire the tacit and explicit knowledge required for internationalisation. The use of Fletcher and Harris's (2012) dimensions in the framework allowed us to examine the use of external and internal sources for acquiring both the technological and marketing knowledge required, and to find out how those sources influenced the nature of the upgrading achieved by the studied firms.

The template analysis allowed us to analyse data using a pre-determined framework, which enabled us to compare the cases across these same dimensions, and to thereby discover the underlying drivers of upgrading in the firms with a relatively objective approach. The high degree of structure in the template analysis also facilitated the synthesis of concepts from two spheres of literature (i.e. IB and GVC) and the establishment of analytical links (King, 2012).

4 Results and discussion

The data revealed three key findings. First, the case firms only had access to buyers' explicit/codified knowledge. This finding shows that suppliers lack access to the tacit knowledge resources of their MNE buyers, which answers the inquiry made in our first research question. Second, they had developed relevant technological and marketing capabilities that were necessary for upgrading. They had done so based on their own firm-level experiences of managing buyers' repetitive purchases. They had also used a range of external sources to acquire knowledge, mostly publicly available information sources. As a result, the studied firms had only been able to pursue process upgrading

and only in technocratic and output-oriented dimensions rather than in labour/skill-oriented ones (Table 4). The last two findings answer the research questions related to suppliers' strategies for knowledge acquisition (RQ3) and the upgrading implications of those strategies (RQ2).

All three firm owners indicated that they had received only codified design instructions and published quality and labour standards from the buyers. None of them had received technical assistance, training support, financial assistance or managerial guidance from the buyers. Thus they had learnt mainly to decode buyers' codified instructions and implement them. They had learnt to satisfy specific buyers through repeated service delivery. The owner of Firm A said that local representatives of new/existing buyers often visited their factories and recommended technical changes (such as machinery or quality improvements). The implementation of those changes was necessary in order to enter into a new relationship or extend an existing one. Similarly, the owner of Firm B remarked,

> "*We have dedicated production lines for our regular buyers. In those lines, we have machines set up according to their [individual buyers'] specifications. The workers working on those lines are specifically trained to meet individual buyers' product and quality requirements. The supervisors train the line workers to concentrate on sensitive aspects for individual buyers; for instance, some buyers are sensitive about the accuracy of collars, some about the buttons or zippers, and some about the cuts … We had to learn to decode buyers' instructions through our own efforts. Initially, we struggled, but after several years of experience we can now do this more confidently*."

The firms were, therefore, expected to make idiosyncratic investments (Subramani and Venkatraman, 2003), even though they received no financial or technical assistance from the buyers. The absence of collaboration in the relationships limited the transfer of tacit or experiential knowledge to the suppliers (cf. Locke, 2013). The MNE buyers' desire for economic efficiency had limited the extent of knowledge transfer and even spill-over to the suppliers (Giuliani and Macchi, 2014). As a consequence, the firms stated that they acquired tacit knowledge mainly from meeting individual buyers' preferences, and from their own mistakes and problem-solving initiatives. These experiences were limited within the boundary of day-to-day activities, were relationship specific and were mostly technocratic.

The suppliers' lack of access to their buyers' knowledge resources seemed to have had implications for their upgrading as well. Firms B and C had started out as CMT service providers and later become OEM suppliers. Firm A had started out as a buying house and, within a year, had established an OEM factory. The findings show the upgrading initiatives to have remained relatively slow in the early years for all three firms. The upgrading initiatives had accelerated somewhat over the last two years as they had experienced pressure for social compliance from the buyers. In order to make up for the increased cost of compliance, they had sought to increase productivity and sales. Firm A and B had replaced the majority of their manual machines with automatic machines in order to produce more output for a lower labour cost. Both firms had also purchased sophisticated machines such as computer-aided manufacturing (CAM) and computer-aided design (CAD) machines for implementing complex designs. They had installed CCTV cameras on the factory floor to monitor workers' negligence and theft and thus minimise productivity losses. Firm A had also introduced a new unit for appliqué and embroidery and had thus started producing more complex designs. Firm C was in the

process of implementing similar initiatives at the time of our data collection. All three firms had recently included new buyers to increase sales. As a consequence, they had introduced a daily target-based work allocation system to increase workers' productivity. Under this system, workers were allocated daily pieces to be produced within regular factory hours (eight hours) and any additional time required would not be considered overtime and would thus be unpaid. Systematic production scheduling was being used to work out the daily targets. This system was allowing the firms to produce the same amount of output at a lower cost by avoiding overtime. While a number of initiatives had been implemented to upgrade machinery, none of the cases showed evidence of efforts taken to develop workers' skills.

The content and sources of technological and marketing knowledge had needed adjustment over the period studied, as the firms' upgrading initiatives had changed. During their early years, the focus of developing technological knowledge had been on learning the overall apparel manufacturing process, handling the machinery and decoding buyers' designs and material instructions. All three firms had experienced pressure from buyers to maintain economic and other performance-oriented dimensions. The firm owners said that efficiency in these aspects was a precursor to deepening the relationships with the buyers and was also vital for the survival of their businesses. The owner of Firm A remarked,

> "*Commitment matters greatly in sustaining relationships with buyers. As the relationships with the buyers have deepened, we have become increasingly cautious about maintaining our commitment towards quality control, on-time delivery and copyright issues.*"

Therefore, a large amount of their required technological knowledge involved quality checks, systematic scheduling and intellectual property protection. In recent years, additional focus had been put on learning the mechanisms needed to increase labour productivity and on handling sophisticated machinery. Thus, all the firm owners highlighted the need for knowledge of machine automation, effective work allocation methods and workers' incentive systems.

The studied firms had adopted various strategies to fulfil their requirements for technological knowledge. They had used a number of internal sources for developing and leveraging technological know-how. For instance, Firms A and C had relied heavily on their owners' previous experience in the industry. Firms A and B had recruited local and foreign experts such as industrial engineers, designers and managers to internalise tacit knowledge. Firm C, on the contrary, had sponsored their current production manager to attend courses on operations management and to learn about systematic scheduling techniques. All of the firms showed a preference for hiring experienced workers from the surrounding industrial areas to avoid the cost of training.

In addition, all three firms had used external sources for acquiring technological know-how. One of the major sources had been the training and meetings provided and held by the BGMEA. They had received information on current industry practices and advanced process-oriented methods from BGMEA programs. Firm B had hired technical consultants during the construction and setting up of its new factory building. Following competitors' moves (such as the purchase of new machinery, the recruitment of experts) had been a key strategy for gathering information on technological trends in the industry and was observed mainly in the case of Firms A and C.

Table 4 Suppliers' strategies for knowledge acquisition

Topic/year	*Firm A*	*Firm B*	*Firm C*
Upgrading pursued	• Capacity increase • Purchase of CAD and CAM machine and install CCTV • Replace 80% of manual machines with auto-machines • Implement new work allocation based on daily target to increase workers' productivity	• Construction and start of production in new independent factory building with six production lines • Become OEM service provider • Start contacting buyers directly • Replace manual machines with auto machines in new factory • Purchase CAD and CAM machines, install CCTV • Introduce daily target-based work allocation	• Rent one more floor to increase capacity and add two production lines • Add more orders from existing buyers • Manual machines to be replaced with auto-machine soon • Add new buyers • Daily target-based work allocation system to be introduced soon
Technological knowledge acquired	• Garment production process • Implementing complex designs with sophisticated cuts and patterns • Operating new machines • Techniques to increase workers' productivity	• Garment production process • Training workers • Decoding buyers' instructions • Quality control, reducing lead-time, production scheduling • Operation of new machines • Early defect detection • Increasing workers' productivity	• Garment production process • Quality control, reducing lead time • Production scheduling • Techniques for workers' productivity increase • Operating auto-machines
Source of technological knowledge	• Owners' previous work experience • Technical assistance and managerial assistance from Turkish investor • Training from BGMEA for machine operation and quality control • Demonstration from the auto-machine suppliers • Recruitment of experienced workers from competitors' factories • Recruitment of industrial engineer, designer and foreign employees (from Turkey and the Netherlands) for managerial expertise • Following competitors' new efficiency-increasing techniques	• Demonstration from machine suppliers • Recruitment of experienced workers/executives from the industrial zone • BGMEA's training on quality control and production scheduling • Recruitment of technical consultants • Learning from benchmark practices and following competitors • Recruitment of industrial engineer to handle production schedules and reduce defect rate	• Owner's previous experience in the industry • Funding production manager to attend course on Operations Management at university • Following competitors' productivity-increasing practices

Table 4 Suppliers' strategies for knowledge acquisition (continued)

Topic/year	*Firm A*	*Firm B*	*Firm C*
Marketing knowledge acquired	• Buyers' contact information • Communicating and maintaining liaison with buyers • Understanding the needs of buyers • Promoting to buyers through website and brochure	• Buyers' contact information • Promoting the new compliant factory to the buyers • Understanding buyers' needs • Information on competitors' upgrading initiatives	• Contact information for new buyers to approach directly • Understanding buyers' needs • Information on competitors' upgrading initiatives
Source of marketing knowledge	• Owners' previous work experience • Web sources • Contacts made through buying house business • References from previous buyers • Personal relationships with other garment owners	• References from existing buyers • Web sources • Owners' overseas visits to search for buyers • BGMEA meetings/seminars	• Buying house • Competitors in the industrial zone • References from existing buyers • Italian partner's personal network provided links to a few new buyer contacts • Owners' visits to Italy and other European countries to search for new buyers
Knowledge transferred from buyers for upgrading	• Codified design and material instructions; quality standards; labour standards • Machine specifications and new investment required	• Codified design and material instructions; quality standards; labour standards • Machine specifications	• Codified design and material instructions; quality standards; labour standards

Table 5 Strategies for knowledge acquisition and upgrading: Firm A

Topic/year	*2010*	*2011–2012*	*2013*	*Early 2014*
Upgrading pursued	• Establishes buying office in Bangladesh and liaison office in the Netherlands • Produces low-value-added garments in Bangladesh through subcontractors	• Starts factory in Bangladesh with three production lines • Factory provides OEM service • Starts production of medium-value-added garments	• Capacity increases; adds two more production lines with auto-machines • Purchases CAD machine • Establishes appliqué and embroidery section • Rents additional floor to accommodate new machines	• Replaces 80% of manual machines with auto-machines • Installs CCTV camera in production area to prevent workers' negligence • Implements new work allocation based on daily targets to increase workers' productivity while reducing overtime
New technological knowledge acquired	• Garment production process	• Knowledge of machinery • Implementing complex designs with sophisticated cuts and patterns	• Knowledge of operating new machines	• Knowledge of techniques to increase workers' productivity
Source of new technological knowledge	• Previous work experience of partner	• Previous work experience • The Turkish investor provided technical assistance and managerial assistance • Training from BGMEA for machine operation and quality control • Recruitment of experienced workers from competitors' factories	• Suppliers of auto-machine demonstrated to supervisors • Recruits one industrial engineer to train workers on embroidery machines • Recruits one designer to interpret complex designs and use CAD • Recruits a few foreign employees (from Turkey and the Netherlands) for managerial expertise	• Observes how competitors were introducing new systems to increase workers' productivity

Table 5 Strategies for knowledge acquisition and upgrading: Firm A (continued)

Topic/year	*2010*	*2011–2012*	*2013*	*Early 2014*
New marketing knowledge acquired	• Buyers' and subcontractors' contact information • Communicating and maintaining liaison with buyers • Coordinating local subcontractors	• Buyers' contact information, raw material and machine suppliers • Approaching buyers at right time to get seasonal orders • Coordinating raw material suppliers	• Information about the needs of newly acquired buyers • Promoting the new upgraded machines and capacity increase to buyers through website and brochure	• Information on competitors' upgrading initiatives
Source of new marketing knowledge	• Previous work experience • Web sources	• Experience from buying house business	• References from previous buyers help firm to contact new ones	• Attends BGMEA meetings • Personal relationships with other garment owners
Knowledge transferred from buyers for upgrading	• Codified design and material instructions; quality standards; labour standards	• Same	• Same	• Same
Reason for upgrading	• Start of business	• To meet buyers' demand for medium-value-added garments	• To compensate for the cost of CSR compliance by increasing capacity and efficiency	• To maintain profits by increasing capacity and efficiency while being compliant

Table 6 Strategies for knowledge acquisition and upgrading: Firm B

Topic/year	*2009*	*2010–2012*	*2013*	*Early 2014*
Upgrading pursued	• Start of factory in one floor of a rented shared building with two production lines • Provides CMT service	• Inclusion of new buyers	• Construction and start of production in new independent factory building with six production lines • New factory becomes OEM service provider • Starts contacting buyers directly • The old factory provides CMT service for Chinese and Malaysian buyers	• Replaces manual machines with auto-machines in new factory • Purchases CAD machines • Installs CCTV • Introduces daily target-based work allocation • Workers' productivity increases from 28% to 35% in new factory • Defect rate reduced from 12% to 8% in new factory • No change in old factory
Relevant technological knowledge acquired	• Garment production process • Factory set up • Training workers	• Training workers • Decoding buyers' instructions	• Quality control, reducing lead time, production scheduling	• Operation of new machines • Early defect detection to reduce wastage • Increasing workers' productivity
Source of technological knowledge	• Machine suppliers give training on machines' operation and factory set up • Guidance from buying house • Recruitment of experienced workers/executives from the industrial zone	• Experienced supervisors train other workers • Continuous contact with buying house to understand buyers' instructions on design and quality	• Experience from previous factory • Owners attend training provided by BGMEA on quality control and production scheduling • Hire consultant for guidance on building a compliant factory	• Learning from benchmark practices and following competitors • Training from BGMEA • Recruitment of industrial engineer to handle production schedules and reduce defect rate

Table 6 Strategies for knowledge acquisition and upgrading: Firm B (continued)

Topic/year	*2009*	*2010–2012*	*2013*	*Early 2014*
Relevant marketing knowledge acquired	• Understanding buyers needs	• Same	• New buyers' contact information to approach directly • Promoting the new compliant factory to the buyers • Developing linkages with own local suppliers and coordinating them	• Information on new buyers who want to source from compliant factories • Information on competitors' upgrading initiatives
Source of marketing knowledge	• Buying houses	• Buying house	• References from existing and ex-buyers allow firm to link with new buyers • Owners' overseas visits to search for buyers	• Attending BGMEA meetings/seminars • Establishes separate procurement and separate marketing department
Knowledge transferred from buyers for upgrading	• Codified design and material instructions; quality standards; labour standards	• Same	• Same	• Same
Reason for upgrading	• Start of business	• To increase sales	• To meet CSR compliance requirement	• To maintain profits by increasing capacity and efficiency while being compliant

Table 7 Strategies for knowledge acquisition and upgrading: Firm C

Topic/year	*2010*	*2011–2012*	*2013*	*Early 2014*
Upgrading pursued	• Starts factory with three production lines as OEM service provider • Approaches buyers through external buying houses	• Starts to contact buyers directly in addition to the ones it is linked to through the buying house	• Rents one more floor to increase capacity and adds two production lines • Adds more orders from existing buyers	• Planning to replace manual machines with auto-machine • Adds new buyers • Planning to introduce daily target-based work allocation
Relevant technological knowledge acquired	• Garment production process	• Quality control, reducing lead time	• Production scheduling	• Techniques for increasing workers' productivity • Operating auto-machines
Source of technological knowledge	• Owner's previous experience in the industry	• Buyer's published instructions • Competitors in the industrial zone	• Production manager attending course on Operations Management at university	• Follows competitors' current practices to increase productivity
Relevant marketing knowledge	• Contact information for raw material suppliers and buying houses • Coordinating raw material suppliers and maintaining liaison with buyers via buying house	• Contact information for new buyers to approach directly	• N/A	• Contact information for new buyers to approach directly
Source of marketing knowledge	• Buying house • Competitors in the industrial zone	• References from existing/ex-buyers helped firm to get information on new buyers • Italian partner's personal network linked the firm to a few new buyer contacts	• N/A	• Owner's visits to Italy and other European countries to search for new buyers
Knowledge transferred from buyers for upgrading	• Codified design and material instructions; quality standards; labour standards	• Same	• Same	• Same
Reason for upgrading	• Start of business	• To reduce reliance on buying house and thus make higher profits	• To utilise spare floor area and increase capacity to add new buyers	• To maintain profits by increasing capacity and efficiency while being compliant

All three firms had gathered tacit marketing knowledge such as understanding buyers' product-related preferences and their ways of working. The firm owners indicated that they had mainly developed such knowledge through experience during repeat transactions with specific buyers. The mistakes and problem-solving experiences over the course of a relationship had aided the development of such know-how. They had also needed to collect information on buyers' contact details and to perform other liaison activities such as presenting to and negotiating with the buyers. All three firm owners said that their social networks, personal overseas visits and existing buyers' references were the major sources of contacting new buyers. The other means of acquiring buyers' information mentioned were searching web sources and attending meetings of the BGMEA. All three firms had recently undergone major changes in terms of social compliance. Thus, their new focus was to promote their differentiated position effectively to existing and prospective buyers. Gathering information on competitors' upgrading moves was also critical for all the firms. Firms A and B had established a separate marketing division to manage such activities, while in Firm C they were mostly performed by the owner.

The studied firms were using a number of the external and internal sources from the list of Fletcher and Harris (2012). The suppliers used these additional sources to compensate for their lack of access to buyers' tacit knowledge. The findings further show that collaborative relationships and access to buyers' knowledge resources are still critical for suppliers wishing to pursue a higher degree of upgrading (cf. Locke, 2013). Although, over a period of time, they had learned to better satisfy specific buyer needs, new skills were rarely learned. Also, with their limited resources, the suppliers could only access information-oriented or publicly available explicit knowledge, which only enabled them to improve technocratic or output-oriented dimensions of process upgrading. Such knowledge did not allow them to 'deepen' their upgrading initiatives (such as through workers' skills development), let alone 'climb the ladder' (such as by becoming an ODM or OBM service provider) (Morrison et al., 2008).

5 Conclusion

This paper is written in the context of a special form of international outsourcing relationship described as 'tacit promissory contracting'. Within this relational context, the case firms only had access to buyers' explicit knowledge that they needed to smoothly perform the production function, such as codified design instructions and published quality and labour standards. The high level of uncertainty involved in the relationship had discouraged the buyers to share their core knowledge (such as design skills and branding) and thus reduce unintended spill-overs to a minimum level. The suppliers used additional sources to compensate for their lack of access to buyers' tacit knowledge. They had used a range of external sources to acquire knowledge, such as, attending training by trade associations, hiring external consultants, recruiting experienced workers and following competitors. Nevertheless, with their limited resources, the suppliers could access only information-oriented or publicly available explicit knowledge, which enabled them to improve only technocratic or output-oriented dimensions of process upgrading rather than in labour/skill-oriented ones. These findings answering the three research questions of the paper could have further conceptual and practical implications as discussed below.

5.1 Conceptual implications

This paper contributes to the understanding of suppliers' knowledge acquisition strategies in a labour-intensive low-tech industry. In the IB literature, MNEs are mostly assumed to be the focal node of knowledge transfer. However, in labour-intensive low-tech industries there is no incentive for MNEs to transfer tacit knowledge to their suppliers as this is not essential for the delivery of the desired outputs. For this reason, our study focuses on suppliers' unilateral strategies to compensate for existing knowledge asymmetries in their relationships with buyers. While the IB literature largely focuses on MNE strategies, this paper attempts to contribute to the IB landscape by focusing on suppliers' strategies that have received little attention previously. This study makes a further contribution to the IB literature by integrating the concept of upgrading from GVC analysis into our analytical framework and linking it with the notion of knowledge transfer in a largely unexplored type of inter-firm relational context. This study also contributes to the GVC literature by opening up the black box of suppliers' upgrading strategy (Marchi et al., 2014) and also highlighting the role of legal contracts in different forms of governance. The integration of the IB and GVC literature allows the paper to add to the recent interest in cross-disciplinary engagement from both of these domains (Johns et al., 2015).

5.2 Practical implications

This study identifies a number of challenges faced by suppliers in their attempts to develop the knowledge they need to upgrade. While it is not surprising that there is a limited transfer of tacit knowledge between MNE buyers and their suppliers, given the high degree of knowledge asymmetry, the non-contractual form of relationship explored in this study seems to have intensified this asymmetric relationship even further. The findings indicate that small suppliers with limited resources are only able to access publicly available information. The key sources of tacit knowledge available to the suppliers studied were their owners' previous work experience and firm-level learning from mistakes and problem solving. They were too resource constrained to access other, more effective sources of tacit knowledge such as investing in overseas training for employees, hiring foreign consultants, and recruiting knowledgeable expatriates (cf. Fletcher and Harris, 2012). This finding further shows that, while it is necessary for suppliers to make idiosyncratic and transaction-specific investments (e.g. new machinery, building new compliant factories, productivity enhancement processes to meet delivery targets) to stay in business, such investments are rarely sufficient to overcome existing knowledge asymmetries in a meaningful way. As a result, small suppliers may be able to progress to the periphery of technological upgrading. However, pursuing economic upgrading of a higher level may not be possible for them without external institutional support.

For instance, the analysis shows that all three case firms relied heavily on the BGMEA, which is currently the only support institution providing information and training to the 6000 garment manufacturers in Bangladesh. The BGMEA is an independent association of garment exporters and is not a public support institution (McKinsey, 2011). This clearly reinforces the need for the Bangladeshi government to provide more support to small garment producers.

5.3 Limitations and future research directions

This study is exploratory in nature and thus the topic should be analysed in more detail. This study only examined small firms and large firms with more substantial resources may face different challenges and pursue somewhat different strategies to acquire/develop the knowledge necessary for economic upgrading. To this end, a comparative analysis might be conducted to find out whether firms of different sizes have different strategies for the acquisition of knowledge and different outcomes in terms of economic upgrading. Such studies might facilitate a better understanding of the constraints faced by both small and large firms in acquiring the knowledge required for upgrading.

This paper has identified the need for the government to support small, resource-constrained suppliers in order to facilitate their economic upgrading. To this end, future research may prove useful to investigate the barriers to the design and implementation of appropriate support institutions. Future research may also wish to determine the role of other environmental factors, such as the level of sophistication of customers in the local market, competition and capabilities in the backward-linkage industry.

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