Inside the multi-tier supply firms: Exploring responses to institutional pressures and challenges for sustainable supply management

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Abstract

Supply chain scholars, industry leaders and policy makers have begun to recognize the importance of embedding sustainability in multi-tier supply chains. However, research on the developing country multi-tier suppliers' (de)coupling responses and institutional logics behind the adoption of sustainable supply management (SSM) practices is limited. This study attempts to bridge this gap by investigating the perspectives of multi-tier suppliers and their wider stakeholders. Our findings show that factory management of multi-tier suppliers use diverse (de)coupling responses. This paper also identifies several institutional logics – social, environmental and economic – that are perceived to conflict and complement with the SSM implementation.

Keywords: Sustainable supply management, Multi-tier supply firms, decoupling responses

Introduction

Increasingly, supplier firms face significant pressure and scrutiny from external stakeholders such as global buyers, government, non-government organisations (NGOs), and media to effectively implement sustainability practices in supply chains. This is mainly driven by the sustainability challenges of disaggregated global supply chains (Kim and Davis, 2016), substantial danger of reputational risks and boycotts (Meinlschmidt et al., 2018), and the invisible nature of lower-tier suppliers' sustainability implementation (Meinlschmidt et al., 2018; Nath et al., 2019). Accordingly, prior research has investigated the impact of institutional pressures on suppliers to manage socially and environmentally sustainable practices, also known as sustainable supply management, in the upstream side of supply chains (Huq and Stevenson, 2018).

However, scholars argue that while institutional pressures (coercive, mimetic and normative) are attempting to address sustainability implementation in supply chains, these pressures do not continuously lead to diffusion (Oliver, 1991) along the supply chains due to organisational decoupling responses (Bhakoo and Choi, 2013; Wilhelm et al., 2016). These decoupling responses occur when organisational adaptations to external institutional pressures have uncertain consequences for increases

in fixed and operating expenses (Sinkovics et al., 2016), trade-offs and conflicts among divergent economic, social and environmental sustainability goals and logics (Saved et al., 2017), or when practices do not reflect local circumstances (Huq and Stevenson, 2018). Recent studies have also identified the unintended consequences of sustainability implementation, which create opportunistic tendencies and tensions in managing competing stakeholders' interests (Xiao et al., 2019). Despite this, the operations and supply chain management (SCM) literature on the suppliers' SSM implementation concerning institutional complexity, contextual factors, and logics has predominantly explored the perspectives of buyers (Grimm et al., 2016; Meinlschmidt et al., 2018; Xiao et al., 2019) and direct first-tier suppliers (Hug et al., 2014; Hug and Stevenson, 2018). Surprisingly, knowledge on the upstream multi-tier suppliers' decoupling responses and conflicts behind the adoption of SSM practices from the managerial perspective of developing country multi-tier suppliers is still lacking (Huq and Stevenson, 2018; Nath et al., 2019; Villena, 2019). Accordingly, the purpose of this paper is to investigate the research questions: (RQ1) How do multi-tier suppliers (de)couple the implementation of sustainability practices in supply chains? and (RQ2) What institutional logics permit these suppliers to (de)couple the SSM practices?

To address these questions, this paper adopted an institutional theory lens (DiMaggio and Powell, 1983). In particular, this paper responds to the call for a broader application of institutional theory by adopting the assumptions of (de)coupling and institutional logics to understand and examine the sustainability implementation of multi-tier suppliers (Huq and Stevenson, 2018; Meinlschmidt et al., 2018). It is important to understand apparel multi-tier suppliers' decoupling phenomena and institutional logics behind SSM implementation since a significant portion of sustainability risks and challenges are generated by the extended supply chains that lie beyond first-tier apparel suppliers in developing countries (Hug and Stevenson, 2018; Wilhelm et al., 2016). In Bangladesh, in 2013, an eight-story factory building called Rana Plaza collapsed which killed about 1,136 workers who were engaged in producing apparel products for global retailers (Huq and Stevenson, 2018). Consequently, the incident led to global criticism of the Bangladeshi government and the apparel sector. For example, the United States of America suspended trade benefits such as the Generalized System of Preferences (GSP) for Bangladesh due to inadequate workers' workplace safety, and placed intense institutional pressures on the Bangladeshi government and extended suppliers to address the apparel industry's SSM implementation practices (Reuters, 2013). Accordingly, European Union also raised the possibility to withdraw GSP from Bangladeshi apparel sector (Reuters, 2013). It is also evident that after the 2013 Rana Plaza apparel factory collapse, a significant number of factories – around 1,600 – were closed in 2013-14 (Bangladesh Garment Manufacturer and Exporter Association (BGMEA), 2018), and many apparel suppliers are symbolically adopting sustainability practices (Hug and Stevenson, 2018). The unintended consequences and suppliers' symbolic adoption flagged issues around the effectiveness of these SSM governance pressures amongst upstream suppliers in Bangladesh. As such, Bangladeshi apparel industry comprise an appropriate research context for investigating and understanding the multi-tier suppliers' decoupling issues and the local ground-level realities concerning SSM practices. In this study, multi-tier apparel suppliers are first-tier suppliers, second-tier suppliers and third-tier suppliers, who produce apparel products and facilitate production processes such as milling, dyeing, washing, weaving, finishing, cutting, sewing, checking and packing for brandowning buying firms in GSCs (Soundararajan & Brown, 2016; Tachizawa & Wong, 2014).

This paper makes several key contributions: first, we particularly looked at the multi-tier suppliers' decoupling issue in a developing country context, which is an under-research area. While there is considerable research focusing on SSM implementation pressures and challenges, fewer empirical studies have been conducted in the context of developing country multi-tier suppliers' perspectives (Huq and Stevenson, 2018; Nath et al., 2019), in comparison to developed countries. For example, Hug and Stevenson (2018) examined the role of institutional pressures, impediments, and decoupling responses of a developing country's first-tier apparel suppliers' social sustainability practices. However, most empirical studies including the study by Huq and Stevenson (2018) in the context of developing countries have not captured the perceptions of the extended suppliers beyond first-tier suppliers (Kim et al., 2018; Wilhelm et al., 2016). Accordingly, to bridge this gap, we specifically examined the extended suppliers' perspectives (second-tier and third-tier suppliers) in the research setting of Bangladesh, an important outsourcing hub for apparel manufacturing globally. Second, this paper highlighted further empirical evidence related to the growing field of institutional logics (Glover et al., 2014; Sayed et al., 2017) and tensions (Xiao et al., 2019) by suggesting the prevailing multiplicity of logics (social, environmental and economic) amongst a developing country's multi-tier suppliers that conflict or complement with the implementation process. Finally, although the implementation of sustainability practices by distant extended suppliers is challenging (Nath et al., 2019), we argue that our findings would enable the global apparel buying firms and first-tier suppliers understand how to predict multi-tier suppliers' conflicts and (de)coupling behaviour, and consider how it can be discovered and further avoided.

Literature Review

Institutional pressures, decoupling and multi-tier suppliers' sustainable supply chain research

To understand the institutional impediments, and reasons behind the implementation of SSM practices in developing country multi-tier apparel suppliers, this research applies an institutional theory lens, specifically using key constructs: institutional pressures, decoupling and institutional logics. Institutional theory provides a useful theoretical frame that aids in understanding how firms progressively respond to a combination of external isomorphic pressures – coercive, mimetic and normative – from powerful factors and actors within their institutional field (DiMaggio and Powell, 1983). Within the context of sustainable supply chains, prior research on SSM further acknowledged the role of supplier selection and assessment mechanisms (i.e., codes of conduct and third-party certification) as the main coercive pressures used by buying firms as conditions for obtaining production orders (Nath et al., 2019; Wilhelm et al., 2016). While auditors from certification bodies and third parties regularly assess sustainabilityrelated codes of first-tier suppliers, first-tier suppliers on behalf of buyers also play a facilitating role in monitoring the implementation of sub-suppliers' sustainability practices (Wilhelm et al., 2016; Nath et al., 2019). Moreover, some studies suggested that assessment and enforcement mechanisms from several institutional actors such as industry associations and industry-based assessment regulators (Nath et al., 2019) exerted coercive pressures on suppliers to implement sustainability practices. In addition, there is a mimetic tendency to adopt the third-party certification logos and competitors' best practices among peer manufacturers and retail buyers (Sayed et al., 2017). Within the context of institutional influences, universities, industry associations, trade unions, and networks of sustainability experts provide awareness-raising training, workshops, and other capacity-building support, which exert changing normative pressures on suppliers to manage sustainability practices (Nath et al., 2019). Thus, to effectively extend sustainability to their supply bases, buying firms and other institutional actors apply a range of supplier selection, assessment and collaborative mechanisms (Gimenez and Sierra, 2013; Nath et al., 2019).

However, heterogeneous responses, also recognised as decoupling, to institutional pressures for sustainability may occur (Bhakoo and Choi, 2013; Meyer and Rowan, 1977). According to Oliver (1991), outward institutional pressures could encourage not only acquiescence (adherence to taken-for-granted rules and imitating successful firms) but also compromise, avoidance, defiance and manipulation (heterogeneous responses). According to this viewpoint, organisational responses such as compromise (partly negotiating or conforming to institutional norms and values) refers to the circumstances where partial SSM practices are implemented (Oliver, 1991). However, organisational responses such as avoidance (voluntarily hiding violations), defiance (openly blaming the sources of pressures) and manipulation (viciously exercising influence to change the content of the practice) refer to the circumstances where no SSM practice is implemented at all (Oliver, 1991). For example, first-tier suppliers embrace formal sustainability assessment policies in response to buyers' and other stakeholders' pressure while they actually monitor sub-suppliers' technical performance requirements, such as quality of the product and machines, and on-time delivery alongside marginal social requirements (Nath et al., 2019). In this sense, firsttier suppliers may either be less likely to monitor sub-suppliers' social and environmental conduct or make only occasional changes (Bhakoo and Choi, 2013; Wilhelm et al., 2016). However, decoupling is a more complex phenomenon in the field of socio-environmental governance, specifically sustainability standards adoption, as organisations are embedded within different economic and cultural contexts, which may require divergent practices (Wijen, 2014). Hence, more in-depth exploration is needed to understand how multi-tier suppliers decouple the sustainability implementation practices in the complex institutional setting of a developing country (Huq and Stevenson, 2018; Nath et al., 2019).

Institutional logics and multi-tier sustainable supply chain research

Research also suggests that institutional pressures may lead to heterogeneous responses rather than homogeneous consequences if conflicting institutional logics exist (Bhakoo and Choi, 2013). As such, the existence of conflicting institutional logics has been regarded as one explanation for decoupling (Meyer and Rowan, 1977). Institutional logics are defined as "assumptions and values, usually implicit, about how to interpret organizational reality, what constitutes appropriate behavior, and how to succeed" (Thornton, 2004, p. 70). The term "institutional logic" was introduced by Alford and Friedland (1985) and has been applied by several scholars in different contexts (Glover et al., 2014; Greenwood et al., 2010; Sayed et al., 2017).

Greenwood et al. (2010), for example, examined how multiple types of logic such as regional state logic, family logic and market logic may complement but may compete or conflict with each other, thus generating complex institutional contexts for the organisations. Within the sustainability context, Glover et al. (2014) examined the role of institutional logics across the dairy supply chain, and found that economic logic (cost reduction and profit maximisation) competes with sustainability logic (the concern for integrating social and environmental sustainability), which indicates challenges for implementing sustainability practices. Similarly, in their study, Sayed et al. (2017) found a multiplicity of institutional logics (sustainability versus financial logic) across three tiers of food and catering supply chains. Moreover, Wilhelm et al. (2016, p. 43)

examined the implementation of sustainability practices in multi-tier supply chains, finding that "suppliers operate in different contexts and are exposed to conflicting trade-offs that dictate efficiency and legitimacy concurrently". For example, the key findings of a recent study by Huq and Stevenson (2018) have argued that first-tier apparel suppliers are likely to decouple the formal adoption of socially sustainable practices due to conflict between the financial and social logics. However, they did not explore what conflicting logics and tensions permit second-tier suppliers and beyond to decouple the SSM practices. Hence, it is crucial to understand the conflicting logics and their unintended consequences concerning SSM implementation practices, particularly in the context of a developing country multi-tier apparel suppliers' perspectives (Huq and Stevenson, 2018; Nath et al., 2019; Xiao et al., 2019).

Research Method

The embryonic state of the literature on socially and environmentally sustainable practices of upstream supply chains in global supply chains (Grimm et al., 2016; Kim et al., 2018; Soundararajan and Brown, 2016), especially in the developing country supplier context, has called for exploratory research (Saunders et al., 2015). Hence, an exploratory, qualitative interview method was adopted, as this is argued to be an appropriate tool for understanding complex issues involving temporal dynamics, intricacies and multiple levels of analysis in a comprehensive way (Saunders et al., 2015).

This paper focused on the apparel sector in a developing country: Bangladesh, the world's second largest apparel exporter. Data collection took place in Dhaka city, Gazipur, Chittagong city, and Narayangonj - the most important apparel exporting regions in Bangladesh - from late March to June 2017. Qualitative data were collected primarily in the form of face-to-face in-depth semi-structured interviews with various owners and managers, as it has been argued that face-to-face interviews allow researchers to witness non-verbal cues, including body language and the facial expressions of the interviewees (Saunders et al., 2015). The participants in this study were selected purposively based upon several criteria recommended by Soundararajan and Brown (2016): first, their level of involvement and relevance to the research context (e.g., multi-tier apparel suppliers in Bangladesh); second, their level of awareness related to various aspects of SSM in the research context; third, practical accessibility; and fourth, their willingness to take part in the research process. In addition, during interviewing, a snowball sampling technique was used to gain access to additional potential participants through interviewee referrals. For example, second-tier suppliers acted as referrals because of their direct connections with sub-contractors and accessory suppliers (e.g., third-tier suppliers).

The data collection process was mainly conducted in two phases. During the first phase, a total of 46 semi-structured interviews with owner/managers across multitier suppliers were conducted: 23 participants from first-tier suppliers; 16 participants from second-tier suppliers, and 7 from third-tier suppliers (Table 1). The interview process with participants from each tier ended when responses became repetitive and did not generate additional insights from the new interviewee (Soundararajan and Brown 2016). The participants hold a variety of positions (e.g., compliance manager, business owner, human resources and administrative manager). During the second phase of data collection, to triangulate and support interview data from the factory owners and managers, a total of 18 in-depth semi-structured interviews were conducted with a wider range of relevant institutional actors. These are buyers, third-party

auditors, NGOs, higher education institute, inspectors, supranational organization, media, trade unions, industry associations and workers.

Table 1: Profile of the participating multi-tier suppliers in the apparel supply industry

Supplier's	Profile of the participating mi Products and services	Major Buyers	Size	Position of interviewee
Position in the		(in terms of type of	(approx. no.	
Supply Chain		buyer)	of workers)	
Tier 1 Supplier 1	Full-packaged (Bottoms, Fleece jackets, Knit, Sportswear, Swim shorts)	North American and European Union (EU)	7360	Deputy General Manager (DGM), Head of Compliance
Tier 1 Supplier 2	Full-packaged (Knits, Woven Tops & Bottoms for men, women and kids)	North American, EU and Australasia Buyers	7200	General Manager (GM), Compliance & Industrial Safety
Tier 1 Supplier 3	Full-packaged (Jackets, Sportswear, Vest, Pants)	North American and EU Buyers	14234	Manager, Compliance
Tier 1 Supplier 4	Full-packaged (Woven apparel & textile products and other services)	North American and EU, and Asian Buyers	15200	Assistant manager (AM), Compliance Team Leader, Sustainability
Tier 1 Supplier 5	Full-packaged (Polo shirts, T-shirts, Sweat Shirt, Jacket, Basic Shirt)	North American, EU, Australasia and Asian Buyers	25000	Senior GM, Administration, HR & Compliance GM, Admin., HR & Compliance
Tier 1 Supplier 6	Full-packaged (Apparel and textile products)	North American, EU and Asian Buyers	30000	Deputy GM, HR Executive Director, HR Manager, Environment & Compliance
Tier 1 Supplier 7	Full-packaged (Intimate Apparel e.g. Underpants, Bra, Bikini, Sleepwear)	North American Buyers	17000	GM, Quality Assurance & Compliance
Tier 1 Supplier 8	Full-packaged except accessories (Knitting, dyeing, cutting, sewing, & finishing knitwear)	EU Buyers	1530	AM, Compliance Manager, HR & Compliance
Tier 1 Supplier 9	Full-packaged (Woven, knit & flat knit, Denim trousers, Denim jacket, Skirt)	EU Buyers	7315	Head of CSR
Tier 1 Supplier 10	Full-packaged (Denim bottom, Twill pants, shorts, Denim western jackets)	North American and EU Buyers	14000	Manager, HR & Compliance
Tier 1 Supplier 11	Limited-packaged (Cutting, sewing, & finishing woven items)	North American and EU Buyers	4000	Manager, HR corporate
Tier 1 Supplier 12	Limited-packaged (Cutting, sewing, & finishing woven items)	EU Buyer	430	Head of HR, Compliance & Accounts
Tier 1 Supplier 13	Full-packaged except accessories (Denim & non-denim woven bottoms)	North American, EU and Asian Buyers	1900	GM, Admin., HR & Compliance
Tier 1 Supplier 14	Full-packaged (Formal and casual shirts for men, ladies blouses)	EU and Asian Buyers	8300	SGM, Admin & Compliance
Tier 1 Supplier 15	Full-packaged (Men's formal suits and denim pants, sweaters)	North American and EU Buyers	20000	Chief Operating Officer Manager, Compliance
Tier 1 Supplier 16	Limited-packaged (Cutting, sewing and finishing woven bottoms & jackets)	EU and Asian Buyers	1720	AM, HR & Compliance
Tier 1 Supplier 17	Full-packaged (Men's and women's woven jeans, jackets, trousers)	North American, EU and Asian Buyers	30000	AGM, Sustainability
Tier 2 Supplier 1	Accessories (Nylon, plastic and metal zippers, sewing thread, buttons).	Tier 1 Supplier 13 & other T1 Suppliers	550	AGM, Admin. & Compliance
Tier 2 Supplier 2	Accessories (Apparel label solutions)	Tier 1 Supplier 14 & other T1 Suppliers	188	Manager, Compliance Manager, Customer Service & Business Development
Tier 2 Supplier 3	Accessories (Printing, packaging, embroidery, poly & elastic)	Tier 1 Supplier 4 & other T1 Suppliers	150	Head of Marketing, Second- generation Owner
Tier 2 Supplier 4	Apparel washing facility	Tier 1 Supplier 16 and other T1 suppliers	400	Manager, HR & Compliance
Tier 2 Supplier 5	Knit composite	Tier 1 Suppliers & Small-sized EU Buyers	140	Business Owners
Tier 2 Supplier 6	Knit composite	Tier 1 Suppliers	576	Manager, HR & Admin
Tier 2 Supplier 7	Textile (Fabrics, dyeing and finishing)	Tier 1 Suppliers	550	Manager, HR, Admin. & Compliance
Tier 2 Supplier 8	Textile (Fabrics, dyeing and finishing)	Tier 1 Suppliers (Buyers' nominated)	400	Manager, HR, & Compliance Managing Director

Tier 2 Supplier 9	Apparel woven items, subcontractor	Tier 1 Suppliers	300	Managing Director, Second-
				generation Owner Commercial Manager
Tier 2 Supplier 10	Textile (Fabrics, dyeing and finishing)	Tier 1 Suppliers (North American & EU Buyers' nominated)	4000	AGM
Tier 2 Supplier 11	Textile (Knit fabrics, dyeing and finishing)	Tier 1 Suppliers	315	Manager, HR & Compliance Executive, HR & Welfare AGM, Commercial
Tier 3 Supplier 1	Grey fabrics subcontractor	Tier 2 Suppliers	23	Business Owner
Tier 3 Supplier 2	Colour and Accessories	Tier 2 Suppliers	24	Manager, Dyeing Business Owners
Tier 3 Supplier 3	Grey fabrics	Tier 2 Supplier 7 and other T2 Suppliers	100	Business Owner
Tier 3 Supplier 4	Grey fabrics subcontractor	Tier 2 Local Suppliers	99	Chief Executive Officer
Tier 3 Supplier 5	Grey fabrics	Tier 2 Supplier 8 and other T2 suppliers	150	Senior Merchandiser Manager, HR & Admin.

All interviews were tape-recorded with the interviewee's consent, except for two cases where the participants did not permit it. However, all interviews were supplemented with comprehensive field notes. The interviews ranged in length from approximately 30 to 90 minutes, and were later transcribed for data analysis. For data analysis, thematic analysis (Braun and Clarke, 2006) was used since it offers flexibility to analyse detailed accounts of textual data using a step-by-step framework in supply chain sustainability research and supports the qualitative data analysis (Soundararajan and Brown, 2016). A blended coding process was followed, initially using codes derived deductively from the semi-structured interview protocol and the literature review, adding inductive codes as the analysis continued (Saunder et al., 2015). Given that majority of the codes emerged from the interview data, a full set of codes was circulated between two of the researchers (authors) for confirmation, with any initial disagreements resolved through discussion. Multiple steps were undertaken to improve the research quality and rigour such as reliability and validity by using the data triangulation approach through factory visits, multiple stakeholder interviews, and independent interpretation of data and findings by authors (Saunder et al., 2015).

Findings

Multi-tier suppliers' (de)coupling responses to institutional pressures (RQ1)

The findings that relate to the multi-tier suppliers' (de)coupling responses to institutional pressures for sustainability implementation are summarised in Table 2. The findings revealed that multi-tier suppliers incorporate (coupled) certain social and environmental practices that are demanded by their buyers and other stakeholders. In particular, buyers' and direct suppliers' selection and assessment mechanisms, followed by third-party auditor assessment requirements were the significant institutional pressures that influenced multi-tier apparel suppliers' responses to acquiescence SSM practices. However, our findings confirms and extends the work on the decoupling phenomenon in the complex institutional contexts (Huq and Stevenson, 2018; Jamali et al., 2017) by identifying multi-tier suppliers' decoupling responses – compromise, avoidance, defiance and manipulation - that disconnect the tendency of owners' and managers' responses to align with the genuine implementation of SSM practices. For example, our analysis illustrates novel insights by highlighting the differences in the decoupling responses used by the multi-tier suppliers - for example, concealment of violations such as child labour issue (e.g., Tier 3 Supplier 4), which has been viewed as conformity issue for the developing country suppliers in prior literature (Huq et al. 2014; Jamali et al., 2017).

Table 2: Multi-tier suppliers' (de)coupling responses to institutional pressures

(De)coupling	Forms of responses/tactics	Sample illustrative quotes
responses	G C : GGM	(377.1
	Conformity to SSM implementation due to pressures	"We have pressure from buyers to fulfill their business requirements. The majority of buyers and buying houses are focusing on technical and
	from buyers' direct selection and	social sustainability-related requirements during the assessment process
Acquiescence	assessment requirements, third-	of our current activities. Additionally, some other buyers put emphasis
requiescence	party indirect assessments, legal	on environmental requirements. Based on the fulfillment of these
	obligations	requirements, they place orders in our factory." (Tier 1 Supplier 8-1)
	Mock compliance between buyers	"We sometimes practically feel that we can engage workers in excessive
	and suppliers; Personalizing	work due to different reasons. For example, in case of delay of receiving
Compromise	mock compliance checklist	imported raw materials [fabrics] or getting late buyers' approval [short
	allowed by the auditors/regulators	lead time] to produce their orders. This is the situation where brands and
		first-tier suppliers accept excessive working hours." (Tier 2 Supplier 1)
	Voluntarily conceal violations;	"We sometimes hide the real age of some workers. The age of some
	Unauthorized sub-contracting;	helpers is below 15 since we can hire them at BDT 3000 or 4000. The
Avoidance	Masking the dark side of the	age of most operators is above 18 years though." (Tier 3 Supplier 4)
	factory	
	Blaming actors associated with	"Inspectors and auditors from several regulatory agencies come to our
	institutional demands	factory but they do not monitor properly. They take money from us and
Defiance		then provide a positive report about our factory. They don't care whether
		factories are maintaining the labour and environmental rules. If any
		factory maintains these rules, they still want money. So most owners do
		not want to invest when instead they can satisfy the inspectors and
		auditors." (Tier 2 Supplier 10)
3.5 1 1.0	Owners' influence on and control	"There is no workers' association in most factories. Some medium sized
Manipulation	over workers and their	factories like us have workers' associations in documentation [pocket
	associations	committee] but no real activities at all. These associations are not
		active." (Tier 3 Supplier 3)

Multi-tier suppliers' institutional logics that allow (de)coupling of SSM practices (RQ2) As summarised in Table 3, in this section we present our findings relating to the institutional logics - social, environmental and economic - that are conflicting or complementing at multi-tier apparel suppliers towards the implementation of SSM practices. In terms of conflicting institutional logics, the findings suggested that the majority of owners and managers experienced financial difficulties in investing in social sustainability (meeting fire safety standards and paying the minimum wage) as well as environmental sustainability (installing ETP) related practices. For example, the participant (Tier 1 Supplier 3) pointed out the reason behind this conflict: "Safety structure has improved a lot in recent years although many factories have been closed down due to non-compliance. The main challenge is high fixed cost. Besides, prices are still low. Wages are increasing every year as it is mandatory. Many sub-contracting firms are almost failing. It is not possible for them to ensure all safety requirements demanded by international buyers due to the high investment involved". Incentivising the lower-tier suppliers plays a critical complementary role in building sustainable supply chains (Villena, 2019). In contrast, the participant (Tier 2 Supplier 4) confirmed the evidence of complementary logics between social and economic sustainability: "We are now a C category compliant supplier [BSCI audit rating based on individual factory conditions]. Our next target is to move forward to B category and then A category...If we can implement all social requirements, the health and well-being of workers will be improved. Workers will be motivated. Our business orders and productivity will automatically grow". As such, social improvement was likely to complement economic logic, which may lead to greater SSM implementation at the extended supplier level.

Table 3: Institutional logics that allow multi-tier supplier to (de)couple SSM implementation

Institutional	Logics interplay amongst multi-tier	Illustrative sample quotes	
logics	suppliers		
Conflicting logics	Conflict in social and economic logics (high investment costs for safety standards; unexpected factory closures (productivity and workers loss) due to addressing non-compliance Conflict in environmental and economic logics (high implementation costs for environmental improvement; doubt about the recovery of environment related improvement costs)	"Price is a barrier for my factory. If foreign buyers increase prices for the direct local suppliers, we will get more knitting charges [price] because we are dependent on their businesses. Then, we can look forward to the implementation of solutions to workers' safety and security issues." (Tier 3 Supplier 1) "The capacity of our factory building is small. With a low price from our buyers it is a challenge to set up and use the ETP properly. Say for example, we got 5 BDT (Bangladeshi taka) for washing and dyeing one piece of apparel while the minimum wage for workers was 930 BDT. Now the minimum wage as per law is 5300 BDT. Nevertheless, the price for the same activities has remained the same [5 BDT]." (T2-S4)	
Complementary logics	Social logic complements economic logic	"Since we are investing in health and safety initiatives, we perceive orders as well as cutting and making charges [CM price] from buyers will be increased. (Tier 2 Supplier 8, I2)	
	Environmental logic complements economic logic	"Recently we have started to implement EMS 14001. We have projected energy and water reduction targets of 5% from the present level by 2020. We are yet to choose a method to achieve this target. We believe our company will financially benefit". (Tier 1 Supplier 3)	

Conclusions

This paper contributes and responds to the call for more theory-grounded research on SSM and multi-tier supply chains (Grimm et al., 2016; Hug and Stevenson, 2018; Meinlschmidt et al., 2018; Tachizawa and Wong, 2014) through an empirical investigation of how the implementation of an emerging country's multi-tier suppliers' actual SSM practices differs in response to institutional pressures and what institutional logics permit these suppliers to do so. Drawing on institutional theory, the findings indicated that multi-tier suppliers applied several decoupling approaches such as voluntarily concealing violations (e.g., child labour), mock compliance with buyers/direct suppliers, and defying institutional actors such as buyers, auditors, government inspectors who demanded the effective implementation of SSM practices. Furthermore, the findings identified three institutional logics – social, environmental and economic - that were perceived to conflict and complement with the implementation of SSM practices. As such, economic logic dominated the thinking of owners and managers, thus leading to superficial implementation of SSM practices. This may be because majority suppliers experienced the money required for social and environmental improvements as costs, not investments. Our findings may be of particular interest to buying firms and policy makers who seek to overcome the defiant attitudes of extended suppliers that lie beyond first-tier suppliers.

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