

Directions for Responsible Apparel Production Costing: Stakeholder Perspectives

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Abstract

The purpose of the study is to gather reactions among a range of experienced apparel industry stakeholders to a responsible cost of ownership model based on a total cost of ownership approach, referred to as Responsible Total Cost of Ownership (RTCO) and demonstrated with factory production data from nine large apparel producers in Bangladesh. The previous research by the authors has established the TCO methodology to generate the base model and identify responsible conditions for manufacturing & demonstrate the RTCO with the field data, respectively (Hasan et. al. 2020, Hasan, R. 2019). Because research of this kind is new to the field, garnering reactions among relevant stakeholders is an important step to understand whether the RTCO approach will be understood or accepted among decision makers in apparel supply chains. Depth interviews among a diverse group of key informants in the apparel industry located in Bangladesh and the U.S. (N=7) provide the data for the study. Analysis of the interview transcripts suggest agreement with the concept of RTCO but notable differences in stakeholder approaches to implement the model or use other means to cover the cost of responsible manufacturing.

Article Classification: Research Paper

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INTRODUCTION

Global apparel production is concentrated among South Asian countries primarily due the lower production cost. Unfortunately, this production often comes with severe human rights violations and numerous industrial accidents. A persistent pattern of worker rights violations in low-cost apparel producing countries had been long noted (Alamgir & Banerjee 2019. Research demonstrates that pressure to manufacture apparel at increasingly lower prices leads to worker rights violations (Anner, 2013). Despite this link actions to identify and quantify the cost of responsible production are not pursued by industry or researchers. This research is built upon initial research by the authors which developed a robust TCO for application to apparel costing, and a framework for responsible production (RTCO) and demonstrates this model using factory data from Bangladesh (Hasan et. al. 2020, Hasan, R. 2019). The purpose of this study is to gain stakeholder responses to the concept of RTCO, considerations for implementation as well as their future perspective of Bangladesh's role in global supply chains for apparel as it relates to responsibility and cost. The objectives of this research are threefold:

Research Objectives 1: To capture subjects' initial reaction to the idea of a responsible TCO

Research Objectives 2: To capture subjects' confidence that the model could be implemented and gather their ideas for implementation including barriers (ways it can and cannot work)

Research Objectives 3: Capture respondents' perceptions of the changing global landscape for apparel sourcing in the short and long terms

Among academic research related to the apparel industry, supply chain operations, and strategic management, very little empirical research exists which demonstrates an apparel cost model using based directly on factory cost data from the field. The few studies that focus on aspects of apparel costing tend to use simulated data or focus on techniques that are increasingly outdated (Hergeth 1996 and Adikorley 2016).

Hergeth (1996) considered the use of different costing methods within the textile industry from a conceptual standpoint. He suggested that despite the availability of newer cost methods at that time (i.e., activity-based costing (ABC), and strategic cost management) the industry continued to use conventional costing systems. Hergeth pointed out the inherent shortcomings associated with the industry's lack of adoption of the newer methods, which generate clearer, more accurate cost allocations. In a second conceptual paper on cost, Rendall et. al. (1999) expanded his argument by suggesting that textile

companies could benefit from using updated accounting systems to identify overhead costs associated with specific products in order to inform better strategic decision making.

To date, the literature indicates several empirical and conceptual studies that focus on different aspects of apparel costing predominantly from a global supply chain sourcing perspective. Hines (2002) criticized UK apparel retailers' sourcing decisions for overlooking the hidden cost of sourcing in the global environment, such as cost of correction, plant visit, lost sales, lost flexibility, response time etc. Hergeth (2002) empirically examined hidden costs in offshore manufacturing practices of 28 U.S. apparel companies. Using a survey approach, he identified numerous hidden costs including examples such as transportation, training and expatriate management, facility management, quality and marketing. Hergeth further noted that the firms in the sample tended to classify hidden costs as corporate overhead, thereby distorting actual cost at the product level. In related conceptual work that focuses on global sourcing in general, both Hines (2002) and Lowson (2003) suggest that hidden administrative costs are commonly misunderstood among the firm decision process for supplier selection.

In response to the shortcomings of cost and risk determination in global supply chains, Holweg, Reichhart and Hong (2011) proposed a comprehensive model designed to consider cost and risk to ultimately improve managerial sourcing decisions. Their model specifies three categories of cost: static, dynamic, and hidden cost, which they subsequently testing in the U.S. apparel context and found that many times global sourcing is not beneficial since hidden cost and dynamic cost are not considered in the initial calculations. In another study, Hartman et al. (2012) investigated how hidden cost impact the overall cost of seasonal and fashion apparel for shorter and longer lead time.

The literature offers several examples of cost models for apparel with different foci. Yeh and Yang (2003) developed a cost model to compare garment dying under immediate versus postponed distribution scenarios. Their comparison suggests lower costs associated with the postponement scenario, when the following parameters have large values: total demand quantity, number of colors, inventory holding cost rate, demand standard deviation, lead-time, and safety stock. In a similar study, Sabir et. al. (2014) developed a simulation model to determine product cost, time and operator needs under variable demand scenarios.

A series of related master's thesis and a single doctoral dissertation demonstrate efforts to generate apparel cost models for U.S. markets. These empirical efforts rely heavily on cost estimations from secondary data sources that commonly lack precision but provide examples of models generated by academics for this industry. Fiallos (2010) executed an initial effort to develop a comprehensive product cost model for sourcing cotton t-shirts and denim jeans from multiple countries to the U.S. market. His approach considers the full supply chain from yarn production to product delivery and incorporates diverse data including secondary factory data, trade association data, and consulting report data. Building on Fiallos' (2010) effort, Liu (2012) developed a model to calculate freight-on-board (FOB) costs for cotton t-shirts and denim jeans based on trade association data [e.g., International Textile Manufacturing Federation (ITMF)]. Liu compared the model's calculations with OTEXA data and did not find agreement. More recently, Adikorley (2016) applied the Fiallos model, in a focused examination on sourcing cotton t-shirts and denim jeans from countries in Sub-Saharan Africa (SSA).

In summary, the empirical work to date that focuses on costing directly within the apparel context relies on estimated or simulated costs, which leads to results that are difficult to generalize in practice. As stated by a number of researchers, actual cost data are needed to generate more applicable cost models within the industry context (Ellram, 1995; Wouters. et. al., 2005). Further, with recent emphasis on corporate social responsibility in apparel supply chains, researchers and practitioners need to understand costing methods for apparel that account for conditions that support responsible manufacturing.

METHODOLOGY

The methodology uses semi-structured interviews to capture key informant's reactions to the responsible TCO and better understand directions for implementation. To gain perspectives from different supply-chain perspectives the study includes stakeholders from factories, the business sector and the government in Bangladesh as well as the view of a major importing western brand headquartered in the United States.

Selection of Key Informants

Efforts to recruit respondents with extensive experience in apparel supply chains in Bangladesh and the U.S. (i.e., the western brand) were initially undertaken to establish the sample. Further, the respondents were selected for representation across the relevant supply chain perspectives: factory owners, industry consultants, government officials, workers unions, and social compliance experts in Bangladesh. The additional key informant represents the western brand perspective through the lens of a compliance director. An initial list of potential stakeholders for the study was generated though desk research and anecdotal inputs from conversations with industry experts. Key informants were identified by stakeholder category and invited to participate in a semi-structured, depth interview. Initially 15 key informants were invited to participate in the study. Due to the demanding work schedules of the targeted individuals, time and logistics prevented many candidates from participating. Further, data collected among key informants in Bangladesh were carried out in-person, thereby limiting the window for data collection to a relatively short period of time.

Data Collection

The respondents were initially contacted through e-mail, using an attached cover letter to communicate the purpose of the research, invite participation and provide information on informed consent (Appendix 1). Many of the target informants were suggested by colleagues and researchers in the field and therefore expected the invitation e-mail. A total of 15 respondents were invited which led to seven completed interviews. After individuals agreed to participate, they were sent a confidentiality agreement, an executive summary and a sample of discussion questions prior to the interview (Appendix 2). Each respondent has reviewed the executive summary and the possible interview questions before the interview. All six interviews for key informants in Bangladesh were conducted in person by the principal researcher in January 2019. Two out of six interviews were audio recorded with the permission of the interview. The U.S. interview was conducted over a secure phone line due to accommodate the respondent's time limitations. Each interview lasted approximately one hour. In closing, each subject was offered a copy of the final report with their aggregated results.

Analysis

Interview notes which are guided by the objective driven protocol (Appendix 1, 2), provide raw data for the analysis. Content analysis of these data suggest varying degrees of agreement as well as unique perspectives on the initial reaction to the RTCO (RO1), important considerations for implementation (RO3) as well as key informants' future visions of global apparel supply chains. In many cases captured views reflect the unique perspectives of informant positions and experience in the field (e.g., factory owner, union leader, western importer). Interview data are content analyzed and subsequently interviewed within each objective.

RESULTS

The seven key informants reported an average of 23.5 years of industry experience, with the longest experience reported by the government official in Bangladesh with 40 years and the least experience reported by the compliance director from the western brand with 10 years. Each stakeholder category included a single respondent, with the exception, of two established factory owners who each reported 25 years of experience in apparel manufacturing. For description of each key informant's perspective see Table 1. Note that respondents tend to use the terms for sustainability and social compliance interchangeably. This distinction was clarified in the interviews.

Respondent Types	Years of	Perspectives	
	Experience		
	in Industry		
Government Officials (R1)	40 years	High-ranking government official with direct	
		responsibility for national economics and trade.	
		Historically familiar with government policy and	
		business and focused on economic development.	
Factory Owners (R2, R3)	25 years	Both owners of large, successful first tier apparel	
		export factories with approximately \$100 million in	
		annual sales. Directly experienced the industry's	
		evolution and are dedicated to leading the industry	
		into its next phase of development.	
Industry Consultant (R4)	30 years	Former CEO of a large successful garment firm with	
		deep apparel industry experience and knowledge.	
		Currently an industry consultant advising decisions	
		related to strategic management, negotiation and	
		policy advice.	
Compliance Auditor (R5)	18 vears	Extensive experience auditing garment factories in	
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Table 1: Description of Interview Respondent Profiles and Perspectives (N =7)

		knowledge of third-party certifications and a broad
		perspective of the political dynamics of social
		compliance in Bangladesh.
Union Leader (R6)	15 years	Union leader who organizes and promotes union
		activity among workers in the formal and informal
		garment factories in Bangladesh. Experience in
		working to establish free association among workers
		who do not necessarily understand the concept of
		unions.
U.S. Brand Professional (R7)	10 Years	Corporate brand director with responsibility for social
		compliance in global supply chain for apparel.
		Responsible for monitoring practices among supply
		chain partners across a portfolio of products for a
		large, established U.S. sportswear brand.

Research Objective One (RO1)

RO1: To capture subjects' initial reaction to the responsible TCO (RTCO) concept and model. In terms of general reaction, the seven key informants agreed that the RTCO model is logical in principle, but offer unique insights into the approach, interpretation and potential expansion of the model. Most respondents focused on the development of the TCO for a single t-shirt product and identified variables that could be considered in creating a more robust RTCO model.

The two key informants with extensive experience and an understanding of the role of the apparel industry in the country's economic development (R1, R4) agree that demonstrating the cost of responsible production is important to the industry's future advancement. Note that R1 is a high-ranking government official who prioritizes economic progress, while R4 is an industry advisor who has been a part of the apparel sector since it began to grow in the early 1980s. R4 also suggests an alternative approach for establishing RTCO understanding to the industry.

The two factory owners (R2 & R3) consistently suggested that the RTOC model using the T-Shirt data was likely too conservative. The evaluation of R2 suggested that it may be possible to provide

responsible working conditions in the high end of our cited cost range, among factories that require no remediation and are currently compliant and operational. The second factory owner (R3) suggested a comparatively higher cost for providing responsible working conditions, citing that a minimum 10 percent of freight-on-board (FOB) per product would cover the additional cost. Note however, that this respondent included the recent increase in wages in his estimate which was not accounted for in our proposed model.

Five out of seven key informants suggested directions for future RTCO model development (Table X). The factory owners point out that the RTCO for a simple t-shirt, manufactured in nine similar factories, does not produce a generalizable estimate and offer potential paths for improvement. Several respondents suggested ideas for building a more generalizable model including the following suggestions:

- Estimating RTCO for various factory sizes, brands, product types, seasonality and consideration of the large and widespread deviation of compliance practices among factories, using a large cost database (R4). The deviation among factory compliance is corroborated among the compliance officer interview data (R5).
- The key informant representing the western brand (R7) suggests that the treatment of cost within the RTCO is different when it is expressed as an isolated cost associated with the factory rather than a cost contributor directly to the product. Buyers will likely be much more open to paying a fixed cost for responsible production for higher value-added products.

The union leader (R6) in Bangladesh offered a unique perspective of the RTCO model in terms of the intended allocation of the additional cost. He suggested that the factory owners are likely to intercept any additional margin paid by buyers for their personal profit without ensuring that the workers benefit from a more responsible factory environment.

Variables	Respondent	Role
Factory size	R2, R3	Factory owner
Production process & product category	R4, R7	Industry consultant Brand Executive
Demand & seasonality	R4	Industry Consultant

Table 2: Suggested Variables to Consider for RTCO Future Model Development by Key Informants

Existing factory standards	R4, R5	Industry Consultant
		Compliance Auditor
Current degree of factory	R4, R5	Industry Consultant
deviation from compliance		Compliance Auditor
standard		

Research Objective Two (RO2)

RO2: To capture subjects' confidence that the model could be implemented and gather their ideas for implementation including barriers (ways it can and cannot work)

The seven key informants agreed that an approach such as the RTCO should be implemented in some form in the Bangladeshi apparel industry. However, there are differing opinions on how to address the additional costs of responsible production.

The government official (R1) uniquely views the issue of responsible production as a natural outcome of industry evolution and believes that factory owners should invest in improving working conditions among factories to position for future growth. As a result, the factories should negotiate better terms with buyers that contribute to the added cost of establishing more secure and ethical supply chains. He added that the government is unlikely to intervene this buyer – seller issue.

The two factory owners (R2, R3) and the industry consultant (R4) suggested that factories lack skills for effective negotiation and suggest that development of these skills is imperative to achieve a more equitable price from buyers, provided that the responsible standard is indeed implemented at the factory level. The factory owners also brought up the likelihood that emerging industry concentration among garment producers in Bangladesh will result in greater bargaining power among the large factory groups which will lead to the ability to demand more equitable prices for production. The industry consultant (R4) also suggested that industry consolidation in the garment sector is underway, however he predicts that the factories that will most effectively consolidate will be those that are most efficient rather than those that are simply large.

Until the factories are powerful enough to negotiate with the brands to get a better price to address the responsible production cost, I do not think brands will respond to that. End of the day, it is business, and nobody cares ethics when you talk over USD. It's all about how better a factory can do with the current price only.

Additionally, one of the factory owners (R2) pointed out that tariffs on imports of basic versus luxury goods in apparel are the same, despite the vast difference in market value. He suggested that

restructuring tariffs in a manner that reduces the duty on basic goods provides monetary relief for factories to provide responsible production.

The brand professional (R7) suggested that their brand is already paying for responsible apparel production in Bangladesh by covering the cost of compliance. He expressed that the brand is open to any additional cost of compliance if the increase is adequately justified in the negotiation. He offered a unique perspective mentioning that the impact of additional cost is lower on a higher FOB product which might be more reasonable to cover.

The compliance auditor (R5) highlighted a unique way to address the additional cost of responsible apparel production since she feels it is highly unlikely for many brands to address this cost through increased FOB. She suggested that factory owners and brands should mutually invest in transforming currently low factory efficiency (40-45% average) and subsequently share the benefits. She further doubts whether a higher FOB will be spent on actual working conditions improvement, without oversight to monitor implementation. In the course of the interview, the compliance officer posed the following thought-provoking question:

Are the most profitable factories being most compliant in Bangladesh?

The Union Leaders (R6) offered the most unique perspective among the respondents regarding the implementation of RTCO model in the industry. He questioned why factories are incapable improving factory working conditions despite many years of success in business and sustained profit. In agreement with other respondents he suggests that buyers should share the cost burden and that factories should negotiate this in their price. In agreement with the compliance auditor (R6), the union leader suggests that a mechanism to confirm that additional revenue is being invested to improve factory working conditions.

Research Objective Three (RO3)

RO3: To capture respondents' perceptions of the changing global landscape for apparel sourcing in the short and long terms.

Overall, the respondents agree that Bangladesh will maintain its share in the world apparel export market for the foreseeable future. Though the individual respondents present unique perspectives of the ways that the industry will evolve in future markets. Four out of seven respondents (R1, R2, R3, R4) suggest that the industry will gain power through consolidation among the manufacturing groups that are most efficient and financially capable and demonstrate an ability to incorporate technology, automation and sustainability requirements. The factory owners (R2, R3) suggested that from a global perspective, Bangladesh will likely represent a monopoly for basic knit products; while domestically, the industry will more closely reflect the conditions of an oligopoly. The significance of knit products arises from Bangladesh's current export capability for the category which accounts for a large percentage of the country's garment exports (BGMEA, 2019). The factory owners added that Bangladesh's continued price competitiveness paired with post-Accord era improved compliance standards give the country an export advantage over major competitors including India, Vietnam, Cambodia, China, and Greater Africa. But respondent R2 (factory owner one) reiterated that Bangladesh's ability to maintain garment export volume, depends on importing brands and retailer's understanding and acceptance that the post-Accord era will require increased production cost to maintain workplace standards. The second factory owner respondent (R3) emphasizes the continued dominance of price as a decision factor in the following quote:

I think globally- it's just a price war. It's always a race for the lowest cost. Look post Rana Plaza, many brands invested in Africa- and they have not yet seen success. Guess what would happen if they would have been successful- the story of Bangladesh ends. So, no matter how much it costs to produce responsibly, unless you are cheapest, or have another form of competitive advantage- you are never an option.

This respondent further suggested that government need to strengthen its efforts to negotiate trade agreements (e.g. GSP in U.S. market) and to provide stronger oversight for NGO interventions into the internal affairs of Bangladeshi businesses. He expressed optimism for the industry by pointing out that most current factory groups are led by second-generation entrepreneurs whose deep knowledge prepares them well to position the industry for success in future markets. The industry consultant (R4) also recognized the established position of Bangladesh in global apparel production by pointing out the existence of approximately 100 manufacturing groups in Bangladesh who he describes as adept at understanding and managing global apparel business and capable of leading the industry into the future.

The government official mentioned the country's economic reliance on apparel exports and the lack of economic alternatives in the near-term, as the reasons to continue to focus on the garment industry with a strong government and private focus. He points out that slowing or ceasing operations is not an alternative. The respondent illustrates his perspective in the following statement:

The over-dependence of Bangladeshi apparel exporters only on few countries is a strategic weakness... (R1)

He suggested that long-term survival of the industry, depends on exporter capabilities in market and product diversification.

The compliance auditor (R6) predicts that Bangladesh can continue export dominance in the world apparel market based on its comparatively low production costs for the short-term. However, in the long-term, commitment to industrial safety will naturally impact price and threaten the viability of the industry. The Union Leader (R7) suggests a somewhat similar perspective to respondent R6 in his suggestion that long-term survival of Bangladesh apparel exporting depends on the integrity of factory owners to follow through on industrial safety during the post Accord and Alliance era. He expresses concern whether Bangladesh will be able to afford to maintain adequate safety standards and provide worker welfare while maintaining its low-cost country status.

The U.S. brand professional offered a unique perspective from the buyer's perspective. He suggested that Bangladesh is still a very cost competitive country and extremely important for importing apparel brands and retailers in the west. Bangladesh is even more important to U.S. buyers after the recent presidential administration initiation of a trade war with China. This political development motivated U.S. brands to secure apparel manufacturing capacity outside of China which currently represents its largest trade partner for apparel imports. The respondent suggested that even including additional costs of safety and responsible production, Bangladesh remains cost competitive compared to China, Vietnam, and Cambodia. The respondent concluded by predicting that Bangladesh will likely be dominant in apparel exports in the future global markets.

CONCLUSIONS

Based on the insights offered by the industry expert respondents, several conclusions can be drawn directly from the interview results. Primarily, regardless of perspective, the respondents agreed that the provision of responsible standards among apparel manufacturers in Bangladesh is critical for the long-term success of the industry. The respondents also consistently suggested the shared responsibility of importing brands in bearing the cost of providing socially responsible standards. No doubt was expressed, that the goal of responsible manufacturing in apparel was necessary in the near and long terms. Additionally, several respondents suggested that oversight will be necessary to effectively implement responsible standards in apparel manufacturing.

A second conclusion drawn from the interviews involves respondent perspectives of the industry that impact the ability of companies to provide a responsible workplace. A common observation among most of the key informants is a lack of negotiating skill among factory owners. These respondents expressed that stronger negotiating skills among the factories could result in better terms which can mitigate the cost of responsible production standards. In practice, the nature of negotiation among factory decision makers tends to be transactional and emotional rather than analytic or data driven. Another perspective that emerged from the data, which is offered by the compliance auditor, is an overall lack of efficiency in Bangladeshi apparel factories. Her assertion is supported by industry data that suggests 40 to 45 percent efficiency in apparel manufacturing. The respondent points out that even marginal improvements in efficiency can result in gains that can cover the cost of responsible production standards implementation.

The interviews also suggested agreement that the government should pursue favorable trade negotiations with export markets and provide more oversight into NGO activities within Bangladesh. All respondents agreed that the industry's health is vital to the future of Bangladesh but continue to voice concern over the conflicting goals to provide safer workplaces and very low-cost goods simultaneously.

IMPLICATIONS

Actionable insights for practice can be drawn from the interview results including directions for establishing responsible production practices in the industry, suggestions for building capabilities among factories, relevant directions for policy making and considerations for future industry positioning.

The industry needs to establish internal agreement on ways to establish and provide responsible working conditions. The Accord and Alliance brought the concept of safety compliance to the industry with mixed results (Alamgir & Banerjee, 2019). A major criticism of these interventions was their unilateral approach that did not include factories in the decision-making process. Though the initiatives are viewed with skepticism among the Bangladeshi business sector, they familiarized the industry with a compliance mechanism. Toward this end, factories need to invest in tangible improvement programs and in turn use their improved production standards as a tool for negotiation with importing brands. From the importing brand perspective, assuming proportionate responsibility for providing responsible working conditions can lead to more efficiency and less risk in supply chains.

Another practical insight that emerged from the interviews focuses on opportunities to realize improvements at the factory level that can ultimately contribute to improvements in working conditions. Two specific areas for improvement are emphasized: negotiation skills and the need for efficiency improvements in factories. Factory owners and representatives need training in negotiation skills as well as data-driven decision making. When negotiating with brands from developed countries, the factories generally suffer from a power imbalance due to a lack of comparable data and supporting resources. The second opportunity for factory improvement is to develop efficiency in apparel production. The lack of efficiency in Bangladeshi apparel production is noted in the literature (Te Velde, 2014). Therefore, improvements in production planning and subsequent management processes will likely impact factory efficiency and profitability leading to more internal resources for the factory.

The findings suggest that the government can provide support to the industry through stronger trade negotiations with importers. For example, trade negotiations with developed countries outside of the European Union can result in agreements that will lead to market diversification for exports, thereby providing less reliance on a single export market. Additionally, the interviews as well as evidence from the media suggest resistance among the business sector to outside intervention among NGOs. The government has an opportunity to support the business sector, by providing more oversight into the activities of NGOs. This could also lead to greater coordination of services among these institutions and better cooperation between actors who conflicted in the past.

Implications for the future industry positioning include actions to diversify products, mechanisms for monitoring responsible production practices and the challenge to balance a traditionally low-cost production model with one that also provides worker welfare. Currently, the industry is heavily focused on knitted garments which are typically less profitable than other types of garments. By pursuing more value-added knit garments as well as diversifying into different products such as denim, the industry can diversify its product offerings and increase profits. Regardless of mechanism, the industry must continue to work towards transparency and actively monitor working conditions.

LIMITATIONS AND FUTURE RESEARCH

The key informants for the study were extremely knowledgeable and experienced with considerable tenure in the apparel industry in Bangladesh. By design, the respondents represented unique stakeholder perspectives. Depth of insights into each stakeholder perspective would provide a more robust understanding of the demands that their unique roles present. Additional interviews with stakeholders from all perspectives would logically lead to more robust results and expanded practical implications. Additional stakeholder can also inform the research: sourcing managers, business strategy professionals, local brand officials, western trade representatives, customs experts, and trade association leaders. By engaging with more key informants, potential bias due to perspective can be reduced.

The findings provide insight into areas that are likely benefit from inquiry in the future. A common theme that emerged in the analysis of the interview data is the competitiveness of Bangladesh as an apparel exporter in future markets. Though this is a complex question, the view of the country's competitiveness is commonly cast in comparison to low-cost apparel competitors including Vietnam and Cambodia. The role of China and its current evolution to a higher value-added manufacturing country also impacts the competitiveness of Bangladesh. Future research should consider the role of transparency as a potential form of competitive advantage for Bangladesh, due to its comparatively higher degree of openness compared to its competitors. Because the issue of transparency is currently emerging as a business concept, empirical evidence related to its value does not exist. The apparel industry in Bangladesh provides a rich context for examining the potential benefits of transparency from a profitability perspective.

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