

APPAREL GVC ANALYSIS

BANGLADESH, SRI LANKA AND TURKEY

READER PLEASE NOTE:

As the scope of the activity is purely to test the methodology for its relevance and applicability, rather than to inform ongoing operations or project design, breadth of study is prioritized over rigor and empirical evidence. Information relies on market intelligence, no firm conclusions are drawn and recommendations are indicative only; illustrating the type of insight that could be derived using the approach given appropriate time and resource.

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1 BANGLADESH

1.1 Description

The origins of the modern apparel industry in Bangladesh date to the late 1970s when South Korean, Taiwanese and other East Asian manufacturers began to invest in and source from Bangladesh to take advantage of its MFA quotas and cheap labor. Local entrepreneurs followed, stimulated by the industry's low investment requirements relative to other sectors and assisted by the transfer of knowhow and technology from South Korea in particular. Growth was strong from the late 1980s until the early 2000s and the apparel sector's share of exports rose from less than 1 percent in 1980 to 75 percent in 2004, while the number of firms in the industry increased from around 130 to nearly 4,000 over the same period. Expectations of the effects of the demise of the MFA on Bangladesh were pessimistic but in reality the outcome was the reverse of that predicted: between 2005 and 2009 both export values and market share increased, due to the industry's ability to contain costs by squeezing wages and profits. This growth continued during after the global financial crisis, in part due to the so-called 'Walmart' effect which induced developed country consumers to switch to lower cost items and averaged just over 15 percent a year between 2004 and 2013.

Bangladesh is now firmly established as an important producer and the second-largest exporter of apparel in the world. But its growth has consisted mainly of increased volumes of old products in old markets – with the EU and US together accounting for 80 percent of total export demand. Its product structure is dominated by low-end products and low levels of productivity. There has been little if any expansion of new products in new markets, though some increase in old products in new markets.¹ Also despite its origins in East Asian foreign investment, the industry is dominated by locally-owned firms. Until 2005, foreign direct investment was restricted to export processing zones and though this restriction has been relaxed there is little evidence of foreign firms operating outside the zones.² In the short run Bangladesh could benefit from accessing non-traditional markets, particularly those vacated by China as its labor costs rise beyond the level needed for competitiveness in basic garments. In the long term however, merely augmenting sales of its existing product range is unlikely to be sufficient to sustain growth in living standards.

1.2 Segmentation

The Bangladeshi apparel industry specializes in basic products with long lead times and large batch sizes. Around 70 percent of clothing exports consists of four commodity items: cotton t-shirts, cotton trousers, cotton woven shirts and basic underwear.³ The country is almost completely absent from product

¹ There are signs that this may change: the government gives firms a 5 percent subsidy on the value of exports to non-traditional markets (e.g. Brazil, China, Russia, South Africa, Turkey) and most of the companies to whom we spoke were looking at new export destinations (one had sales agents in Peru and South Africa). Representatives of retailers from these markets (e.g. South Africa's Edcon) have also set up buying houses in Bangladesh.

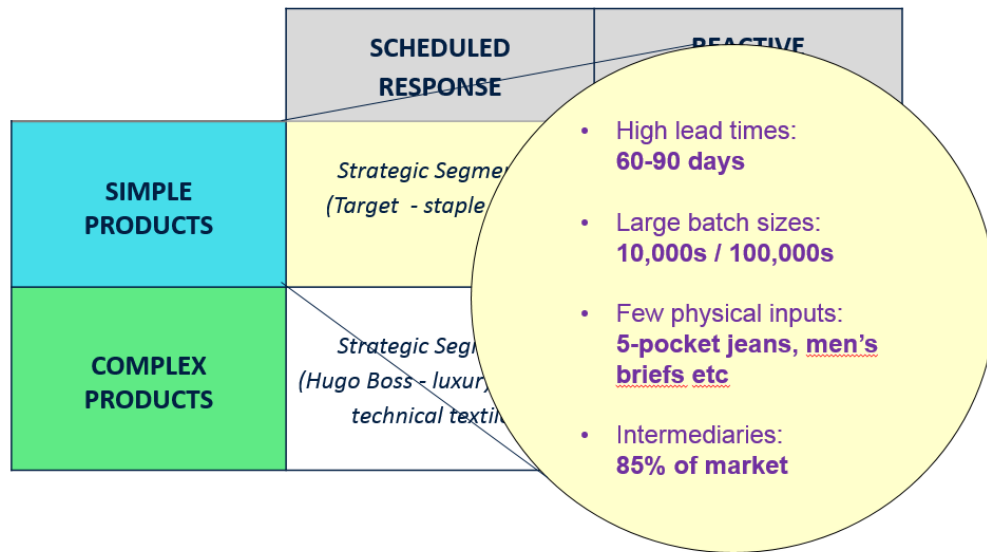
² Of the 1,654 investment projects registered in garments during 2003 and 2011, only 181 or 11 per cent were foreign-originated (UNCTAD 2011: p. 4).

³ Within this staple basket, exports are concentrated are in menswear rather than more design-intensive womenswear.

http://www.just-style.com/comment/bangladeshs-garment-trend-lines-look-pretty-poor_id121926.aspx

categories such as outerwear, technical sportswear and shapewear – areas into which former competitors such as Sri Lanka have established a firm presence in the last decade. Its export basket comprises simple products with relatively few inputs and uncomplicated designs, whose production can be managed through intermediaries without the need for direct contact between buyer and manufacturer. This places it firmly in the traditional, simple scheduled-response strategic segment and out of reach of both the simple and complex reactive response value chains.⁴ The distinguishing characteristics of this segment are long lead times, large batch sizes, simplicity of design and a high degree of intermediation between manufacturers and final buyers.

Figure 1 - Bangladesh is firmly positioned in the simple scheduled segment



Costs: Bangladesh's primary advantage continues to lie in its low labor costs. For most apparel firms, the largest cost factor is raw materials (largely fabric and accessories) which are responsible for around 60-70 percent of the total, followed by labor with around 20 percent and rent and utilities.⁵ In the basic segment in which Bangladesh operates and in which the dominant activities are manual tasks such as cutting, trimming and sewing, manufacturers take raw materials prices as given and labor costs are particularly influential. Unit values in Bangladesh for staple items such as woven trousers and shirts are lower than in competitor countries (Cambodia, India, Indonesia, Pakistan, Sri Lanka and Vietnam); the same is true for dresses and skirts, though not for sweaters and sweatshirts. The minimum monthly wage in 2013 was \$68, also the lowest of any of its direct competitors.

⁴ Even though both H&M and Zara operate in Bangladesh they source only staple items (in the case of Zara basic woven and knitwear, no leather goods).

⁵ World Bank, Tailor Made, p. 52.

Table 1 - World Export Rankings

Export Rank/ Indicator/ Country	Rank & World Unit Values (based on Number of Items, 2013)						World Export Rank, by Product Category, by Value (2013)					
	Trousers (1)	Sweaters/ Sweatshirts (2)	Knit Shirts (3)	Coats (4)	Woven Shirts (6)	Dresses & Skirts (7)	Trousers (1)	Sweaters/ Sweatshirts (2)	Knit Shirts (3)	Coats (4)	Woven Shirts (6)	Dresses & Skirts (7)
1 China	4 / \$6.5	8 / \$7.7	5 / \$4.1	7 / \$17.4	4 / \$7.2	7 / \$8.5	1	1	1	1	1	1
3 Bangladesh	3 / \$6.3	6 / \$6.2	2 / \$2.9	3 / \$13.3	2 / \$6.2	1 / \$5.0	3	3	3	4	4	9
6 India	5 / \$6.9	4 / \$5.2	3 / \$3.8	4 / \$16.0	7 / \$7.8	8 / \$8.6	11	8	5	13	3	3
11 Pakistan	8 / \$8.2	3 / \$4.8	1 / \$2.8	1 / \$7.8	3 / \$6.7	3 / \$6.1	9	11	14	14	29	33
10 Sri Lanka	7 / \$7.5	7 / \$6.3	7 / \$4.6	5 / \$16.7	8 / \$9.2	6 / \$8.4	13	17	15	24	10	12
5 Vietnam	6 / \$7.0	1 / \$4.6	8 / \$4.6	8 / \$20.5	5 / \$7.2	4 / \$6.8	5	4	6	3	7	5
8 Cambodia	2 / \$6.3	5 / \$5.5	4 / \$3.9	2 / \$10.9	1 / \$6.2	2 / \$5.3	7	6	9	8	11	10
7 Indonesia	1 / \$6.0	2 / \$4.6	6 / \$4.2	6 / \$16.9	6 / \$7.6	5 / \$6.9	6	7	8	5	6	6
World	\$7.8	\$7.0	\$3.9	\$19.8	\$8.3	\$9.7						

Source: UNSD (2015); unit values based on number of items; unit values include cotton and MMF products. Number in parenthesis after product category indicates the product categories rank in 2013 in global apparel exports.

Lead times: Lead times for the firms we spoke to were around generally between 60 and 120 days, with some quoting as low as 40 for an influential buyer. This compares with 10-15 days for country such as Turkey, which is operating in the fast response segment, or 30-40 days on average for Sri Lanka and as low as 5-10 days for high value-to-volume products like lingerie that can be airfreighted.⁶ The difference is mainly a question of logistics. Bangladeshi producers are constrained by deficiencies in local infrastructure – in particular the limited use of containers on the Dhaka-Chittagong corridor, inefficient customs procedures at the port of Chittagong and congestion at Dhaka airport – which make it impossible to replicate some other countries’ transition to a fast response model.

Table 2 - Typical time required to complete each stage of process

Opening back to back letter of credit	4-6 days
Raw material production	15 days
Shipping time for raw materials	21 days
Clearance at port	5 days
Production of garments	20 days
Shipping to importer	25 days
Total	90 days

Quality and reliability: Bangladesh’s lower labor costs are partly offset by its lower productivity. In the case of polo t-shirts, for example, the output of 13-27 pieces per person/day is significantly lower than the 18-35 pieces per person/day managed by comparable factories in China. Capacity utilization in Bangladeshi factories is around 90 percent (and at a similar level for denim jeans, another typical product) but in-factory and client reject rates are much higher, as is labor absenteeism when compared to Asian competitors.⁷

⁶ Given the bulky nature of their products it does not make sense for Bangladeshi manufacturers to use air-freight unless they are late on an order.

⁷ DTIS p. 123.

Table 3 - Inefficiencies in Capacity Utilization, Waste, Rejects and Absenteeism (Percent)

Polo shirt manufacturing	Bangladesh	China	Ethiopia	Vietnam
In-factory product rejection	4–8	2–3	2–5	1–3
Product rejection by client	0–3	0	1–3	0–1
Production waste/scrap	5–12	5–10	10–11	1–7
Capacity utilization	90–95	60–85	55–70	80–95
Labor absenteeism rate	1–3	1	6–12	0.3–2

Source: Global Development Solutions, LLC.

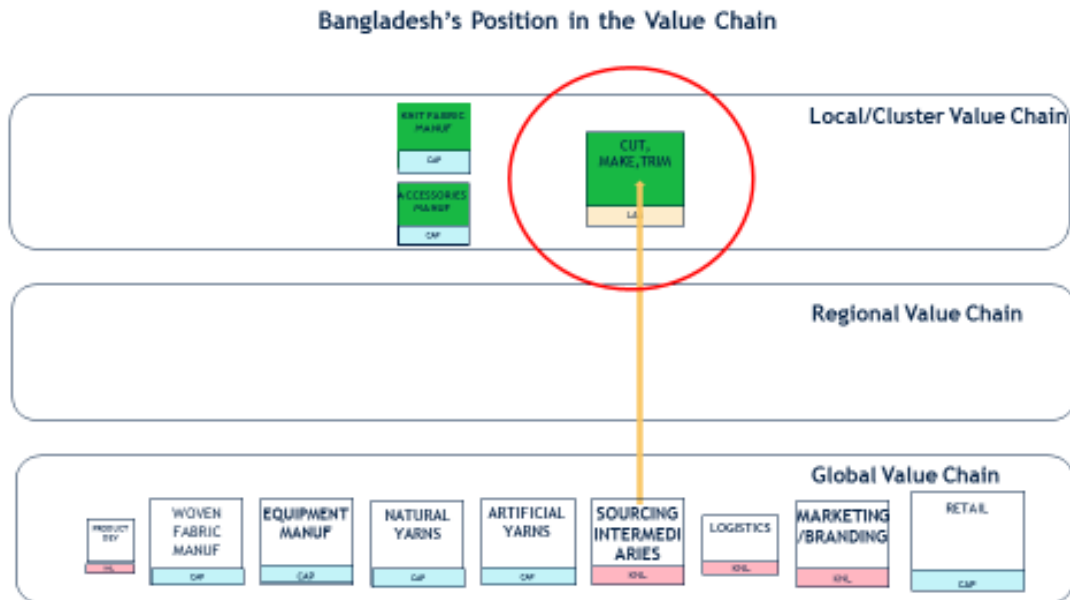
Standards compliance: The Bangladeshi industry has a poor reputation with regard to compliance with labor standards. The problem has mainly to do with the use of buildings as factories that were originally designed for residential purposes. In response to the 2013 Rana Plaza collapse, European and US buyers came to agreement to set and monitor common standards for work safety. The so-called Accord/Alliance partnerships have ensured that compliance with labor standards is no longer a problem among large exporters. But violations are still common among producers for the domestic market, many of whom are situated in dense populated urban areas and operate out of converted residential buildings that lack water treatment and other common facilities. Because these producers often share premises and labor compliance in Bangladesh is largely a matter of building safety, non-compliance by one firm can undermine the export potential of its neighbors.

Firms complain that there is no financial reward for compliance nor that they receive any assistance towards the costs of remediation. They also contend that there is no return, either in terms of margin or access, on investing in anything beyond the minimum required standards. So-called ‘green factories’ exist in Bangladesh but they are small in number, expensive and generally viewed as bait to attract buyers who will then conduct business as usual with less modern operations. We were told that buyers from non-traditional markets (e.g. Russians, South Africans) are not concerned with labor or environmental performance. Nonetheless few if any firms will export wholly to non-traditional markets and it does not make economic sense for manufacturers to maintain compliant and non-compliant production lines simultaneously within the same factory.

1.3 Structure of the value chain

The geographic distribution of functions in the apparel value chain is driven primarily by cost considerations, followed by quality and reliability and then by responsiveness and social and environmental compliance. This differentiates it from some other value chains, such as automotive, in which location decisions are driven primarily by the need for physical proximity to OEMs and Tier 1 suppliers, or agribusiness, in which the key determinant is distance from agricultural production sites. Given its primary comparative advantage in low cost labor, Bangladesh concentrates in garment assembly (cutting, trimming and sewing). There has been some backward integration into knitted fabric and accessories manufacturing, though relatively little into woven, but almost no forward integration into branding, marketing and retail.

Figure 2 - Strategic Segment 1: Simple Product / Forecasted Response



Backward integration: fabric and yarn manufacture: Bangladesh is almost self-sufficient in accessories (thread, buttons etc.) and knitted fabrics. Domestic suppliers are able to supply around 80 percent of accessories and 90 percent of knitted fabric. But the situation is quite different for woven fabric manufacture, with its larger investment requirements. There are three types of factory in Bangladesh: (i) integrated manufacturers that import the cotton but are responsible for the rest of the production process (spinning, weaving/knitting, cutting/trimming/sewing); (ii) those that import the yarn and complete the rest of the process themselves; and (iii) those that import fabric and limit their activities to cutting/trimming/sewing. Most Bangladeshi knitted garment manufacturers are in the second category and most woven garment manufacturers are in the third (also known as 'CMT' factories).

Forward integration: design and branding: Most companies producing for export have at least some design capacity but it tends to be reactive to buyer initiatives. This is an area in which the skills gap is particularly pronounced. Several firms mentioned that they would like to develop their design capabilities but feared they would not be able to find pattern masters or product developers. One manufacturer said that they saw design as a means of building reputation and a stepping stone to working direct with premium brands rather than adding value directly. There are exceptions: another company to which we spoke sells its own private label denim jeans in Eastern Europe; and a third was designing its own branded men shirts for the US market. There are also several local brands but they are considered too weak to compete even in regional markets like India.

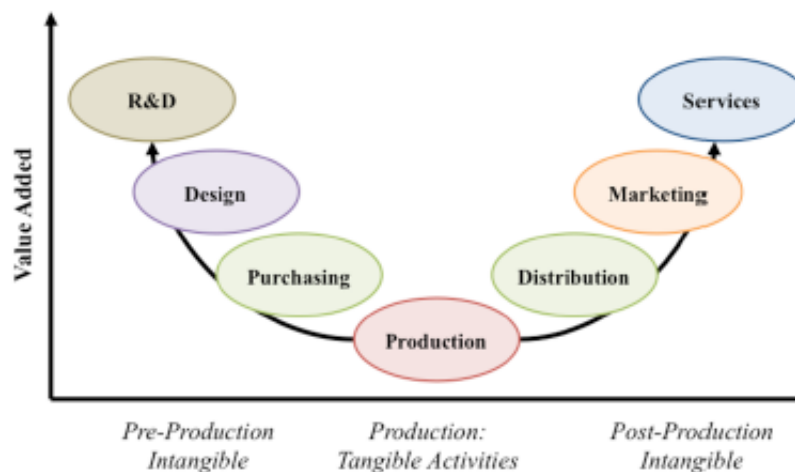
Role of intermediaries: Around 85 percent of firms in Bangladesh work with intermediaries, of whom Li & Fung is the most prominent representative. The more established firms prefer to work directly with buyers, so as to avoid the loss of margin (around 7-9 percent according to one manufacturer) and retain control over their choice of suppliers. Overall, the proportion of firms working with intermediaries has remained more or less constant; some manufacturers use them in certain segments and in others not. Traditionally the competitive advantage of companies such as Li & Fung has resided in their superior information about and capacity to manage supplier performance in a highly fragmented market and this

remains the case, even with respect to buyers such as H&M and Zara. However, the role of intermediaries is also expanding to comprise a fuller package of support services for both buyers and manufacturers. For the former they take on risk management functions, particularly those sometimes associated with government such as the setting and monitoring of compliance with labor and other standards. For the latter, they advise on sources of finance for remediation and in some cases on the details themselves of the upgrading required. They may also act as consultants to vendors on tax and regulatory issues.

1.4 Distribution of value-added

In the buyer-driven global apparel value chain, profits come from combinations of high-value research, design, sales, marketing, and financial services that allow the retailers, designers and marketers to act as strategic brokers in linking overseas factories and traders with product niches in their main consumer markets.⁸ The companies that develop and sell brand-name products have considerable say over how, when, and where manufacturing will take place, and how much profit accrues at each stage, essentially controlling how basic value-adding activities are distributed along the value chain. The outcome is to skew the distribution of profits towards those activities that they control – namely those at either end of the value chain.

Figure 3 - Distribution of Value-Added



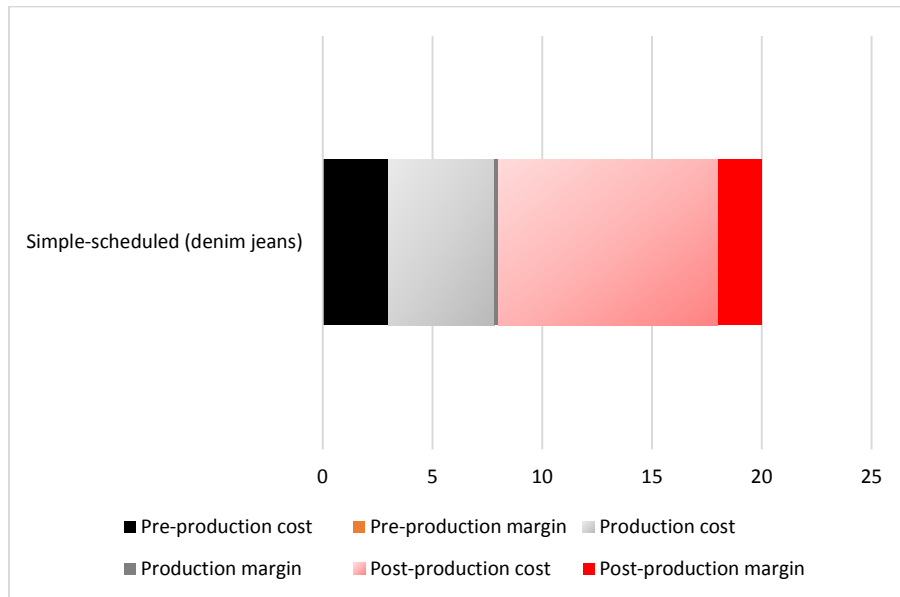
This skewedness is particularly pronounced in the simple slow-response segment in which Bangladesh operates. For denim jeans, the distribution of costs is more or less as follows: pre-production (design and purchasing) – 15 percent; production (dyeing, washing, CMT) – 25 percent; and post-production (distribution, marketing, financial and other services) – 60 percent. But the distribution of margin or profit is even more uneven: of final hypothetical retail price of \$20, approximately 10 percent accrues as profit to the retailer, while just 0.75 percent goes to the producer and, in this simple segment at least, there is almost no return at all on design.⁹ It follows that the prospective gains from focusing more on

⁸ Gereffi & Memedovic, 2003.

⁹ Team interview with Denim Expert.

design and supply chain management in this segment are likely to be limited. As one company owner told us, ‘Bangladeshis are too willing to haggle over small differences in margin without understanding how value-added is distributed.’

Figure 4 - Costs and Margins (US\$)



Manufacturers in the simple-scheduled segment in which Bangladesh specializes face intense competitive pressures. Although it is become harder to obtain the environmental and social certifications needed to operate in the export market, CMT production is modular and easily scalable with low initial investment requirements [what are minimum investment requirements?]. Even more importantly, the power of buyers is high. Final purchasers or intermediaries dictate which accessory and fabric suppliers a manufacturer may work with and to which other firms it may outsource production. Buyers also have the power to impose remediation costs on suppliers, even though these amount to no more than a few cents of the final sales price per item (approximately 90 cents per pair of \$22 denim jeans).¹⁰

1.5 Policies

Industry Associations: The principal industry association is the Bangladesh Garment Manufacturers and Exporters Association (BGMEA). Founded with 12 members in 1978 it now comprises around 4200 factories, representing 100 percent of woven garment exports, more than 95 percent of sweater exports and around half of light knitwear exports (there is a separate body for knitwear manufacturers). BGMEA has come under huge scrutiny since the Rana Plaza scandal and is regarded by most of the firms we spoke to as defensive and hostile to interventions by outsiders to improve working conditions in particular and towards foreign direct investment more generally. Some firms characterized it as ‘a throwback to the quota regime when politics was all that mattered’ and representative of an oligopoly of large exporters with an interest in maintaining the low-wage, low-productivity status quo.

¹⁰ BloombergBusiness, Ninety Cents Buys Safety on \$22 Jeans in Bangladesh.

Sectoral policy: In addition to largely quota free access to EU and US markets, the growth of the apparel sector benefited from two key government policies. The first was the introduction of bonded warehouses, through which firms were exempted from paying tariffs on imported inputs used in production for export. This was complemented by the mechanism of back-to-back letters of credit through which manufacturers were able to claim credit for imports with local banks against final orders from foreign buyers, thus avoiding the need for large amounts of working capital.

Trade policy: Bangladesh has a preferential trading relationship with the EU through the GSP, which provided quota- and tariff-free access since the early 1980s, and since 2011 through GSP+. It also has duty-free market access to Australia, Canada, Japan, New Zealand and Norway. However, there remain significant barriers to intra-regional trade despite the existence of several trade and cooperation agreements.

1.6 The challenges

Bangladesh is firmly entrenched as a producer in the simple-scheduled segment, with few options either for capturing additional margin within this segment or moving to another one. The returns on moving into pre-production activities such as design are typically small for the product groups in which it specializes and the path towards forward integration into post-production activities such as distribution and retail is barred, given its lack of a viable domestic market. Meanwhile, moving to the simple reactive segment would require reducing lead times to below 30 days, which is unthinkable given the quality of the country's infrastructure and logistics; while switching from simple to complex products would require significant improvements in organizational capacity, particularly supply chain management.

The country therefore faces the prospects of being locked into a subordinate position as a low cost producer confronting competitive pressures on two sides – on the one hand from even cheaper producers such as Ethiopia and Lesotho and on the other hand from more evolved players such as Sri Lanka, which is pursuing a deliberate strategy of capturing the higher margins associated with logistics and supply chain management, research and development while limiting countries like Bangladesh to lower margin assembly.

In the short run, perhaps the next five years, Bangladesh could benefit from accessing non-traditional markets, particularly those vacated by China as its labor costs rise beyond the level needed for competitiveness in basic garments. But even this would require tackling its supply side constraints in infrastructure to handle the larger volumes such a strategy implies. At the same time, the industry should continue to focus on curbing its negative environmental and social externalities, moving beyond ad hoc initiatives and attempting to ensure, through international bodies if necessary, that compliance requirements are standardized across all countries operating in the same segment.

2 SRI LANKA

2.1 Introduction

Ten years after the dismantling of global apparel quotas, the Sri Lankan apparel manufacturing sector has defied ex-ante predictions of demise and remained a viable player in the highly competitive global apparel industry. The small island nation has maintained its global share of apparel exports at around 1.2 per cent, when the club of winners tended to be large economies with low wages such as China, Bangladesh, Vietnam and India. This achievement reflects important changes in strategy by industry leaders in the lead up to quota liberalization in 2005 and beyond, and an agility to adjust to positive and unfavorable developments in the trading environment.

The Sri Lanka apparel sector took off after Sri Lanka's trade liberalization in 1977, transforming itself in the next 35 years to become the largest exporter and largest manufacturing employer in the country, and a globally recognized supplier of high quality products in niche markets. The sector has matured from its infancy in the early 1980s through a series of joint ventures with US, UK and East Asian partners, to evolve from a cut-make-trim (CMT) assembly manufacturer to one where it is a full package contractor handling all aspects of the manufacturing process for niche products, and some large firms being involved in product design.

The share of the textiles and apparel exports rose from 5 percent of total goods exports in 1976 to 37 percent in 1986 and peaked at almost 60 per cent in 2002, and hovers around 50 percent in 2014. The apparel (textiles and apparel) sector was the single largest manufacturing employer absorbing 49 (54) percent of the manufacturing workforce in 2009¹¹. Of this workforce, 77 (73) percent were women.

Apparel dominates the textiles and clothing sector since the industry lacks a textile base, and continuously has accounted for over 90 percent of textiles and apparel exports since 1978. As a result, traditionally there has been high import content of apparel exports with fabric sourcing concentrated in East Asia – particularly from mainland China, Hong Kong, South Korea.

The key export destination markets are the US and EU, but their relative importance has diminished somewhat, with their average market share of 95 per cent during 1980-2005, falling to an average of 82 per cent during 2013-2014. Before 2005, the US was the dominant market with an average market share of 58 percent (over 1996-2004) compared to 37 percent for EU. However, since then the roles have reversed and the US market share averaging 39 per cent over 2005-2014, while the EU captured 50 percent.

2.2 Segmentation

The Sri Lanka industry adjustment to quota liberalization came through consolidation of the industry as smaller factories closed down or were absorbed by larger conglomerates. Departing foreign investors

¹¹ Department of Census and Statistics (2010)

were bought over by their national partners. Wages and favorable working conditions were maintained, although sector employment dropped. A second round of firm consolidation occurred in the aftermath of the global recession and loss of EU GSP plus preferences in 2010. The number of firms dropped from 817 in 2004 to 450 by 2011. Three (five) conglomerates are now responsible now 35 (44) percent of all exports (Athukorale and Ekanayake, 2015). Family-ownership characterizes many of the largest national apparel manufacturing conglomerates, but they are professionally run. This includes the top 3 firms, MAS Holdings, Brandix Lanka Limited and Hirdaramani Group.

Table 4 - Apparel Manufacturers

> 500 US\$ million	>100-500 US\$ million	< U\$100 million
Brandix Lanka Group	EAM Maliban Textiles	Polytex Garments
MAS Holdings	Smart Shirts	Orit Apparel
Hiradamani Group	Timex -Fergasam Group	Hela Clothing
OmegaLine Group	Crystal Martin Garments	Courtlads Clothing Lanka
	Penguin/Emjay	Daya Group
	Star Garments	Favourite Group
		Orient Garments
		Quantum Clothing
		Tri Star Apparel Group
		Jay Jay Mills Lanka

Recent apparel sector development may be seen to have two phases – the first was to ‘add value’ to garments and then the second phase was to “go narrow and deep.” The Sri Lankan apparel sector specializes in niche products and establishes a global presence in them, as in the case of brassieres, gloves coated with rubber and women’s swimwear. Bras are the number one apparel export of the country accounting for 9 per cent of apparel exports in 2014, and 4 percent of all exports. Its exports of bras accounted for 4.3 per cent of world exports of bras. The country is also the world’s largest exporter of rubber-coated gloves with a market share of 12.5 percent, and is also the fourth largest global exporter of women’s swimsuits.

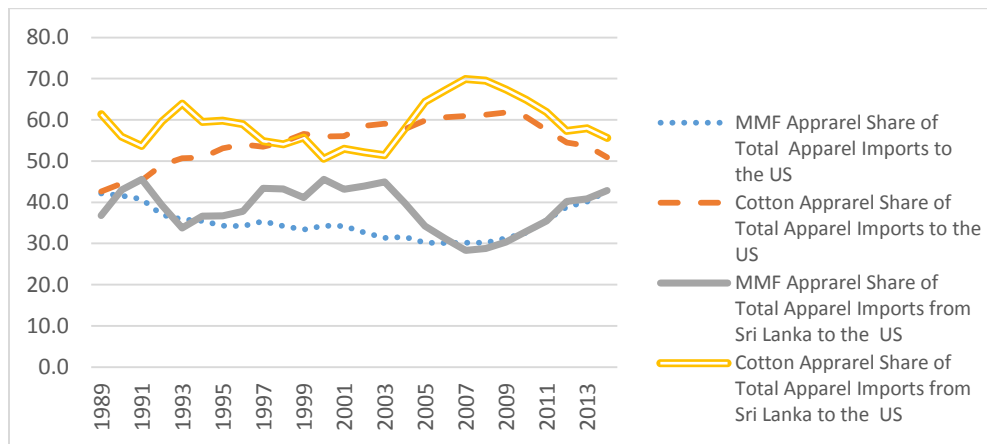
The country has gained a reputation for its high quality lingerie –and if defined as the brassieres industry along with slips and panties (HHS6108+HS6208+HS6212) –its exports are valued at just over a billion dollars – constituting 28 of apparel exports. Lingerie exports from Sri Lanka, are (a distant) second only to China whose exports in 2014 were valued at US\$11.7 billion. However, as a share of national exports, Sri Lanka comes highest in the world, thus earning the sometimes heard phrase “lingerie capital of the world”. Sri Lanka has a strong expertise in the construction of this most technical garment, and may be classified in the forecasted demand-complex products segment (See Figure 1). Production of such products require strong value chain management skills to coordinate the multiple inputs (on average 30 components, but may go up to 50) that are need for production.

Sri Lanka has a clear bias towards womenswear which tend to be more design-intensive (and hence contain more value-added) than menswear. Along with these niche products, the industry produces high quality branded casualwear, such as women’s trousers, men’s trousers and woven t-shirts, which also make up a substantial share of the apparel business. When unit prices are considered for the similar products also exported by China or Bangladesh such as trousers, the Sri Lankan products come in at a

higher unit value. Even in the case of brassieres, Sri Lankan bras enter the US at around US\$ 6.8 compared to the average bra entering the US at US\$ 3.6. Over time, the Sri Lankan price point has diverged upwards from the average import price and still continued to grow and gain market share in the US. The rise in unit values for Sri Lankan products is consistent with quality upgrading by using new materials, and doing more sophisticated and innovative processing.

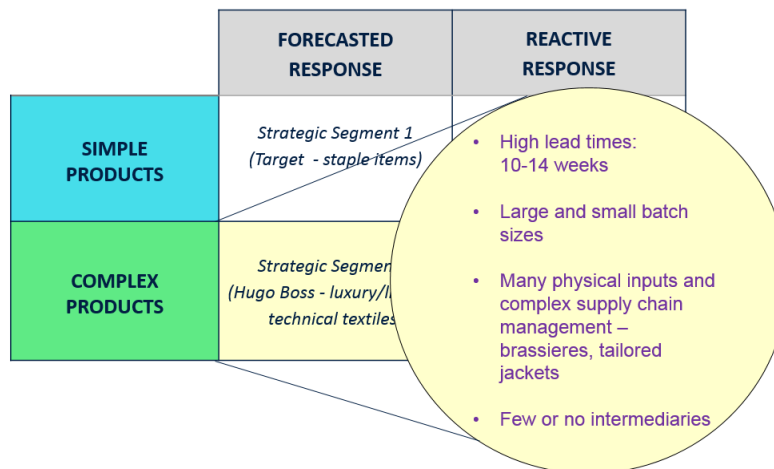
The post-2005 period has also seen a shift to an increase in export of knitted apparel compared to woven apparel, the share of knitted apparel rising from 30 percent in 1997 to 40 percent in 2004 and 57 percent by 2014.

Figure 5 - Exports to the US by fiber (1989-2014)



Sri Lanka also tends to work increasingly more with man-made fibers (MMF), which is consistent with its move to more sportswear and evening dresses, and the global trend of rising share of synthetic apparel. Although there has been a decline in the cotton apparel share in global apparel exports, cotton apparel still dominates making up 45 percent of exports, while MMF apparel account for 39 per cent and the apparel of other textile materials constituting the remaining 16 percent. For exports to the US, Sri Lanka follows global trends with an increasing MMF apparel share from 2007, with its MMF apparel share marking a sharp rise from 30 percent in 2009 to 43 percent in 2014 (see Figure 5).

Figure 6 - Sri Lanka in the forecasted demand-complex products segment



2.3 Underlying these trends are some key features of the industry

Strategic and deep relationships with buyers: Much of the recent evolution of the industry has come about from the industry's strategy of consolidating a set of strategic international buyers and making substantial relational investments to further the partnership. Some of these buyers include Victoria's Secret/Pink, Nike, Speedo and Marks and Spencer. These collaborative relationships have helped propel the movement into the niche markets, and led to important knowledge transfers and increased margins.

Costs and educated workforce: Consistent with the overall high national social indicators, Sri Lankan apparel workers are well-educated with an entry level operator having about 10 years of educational attainment, compared to 6.8 years for Bangladeshi workers. Thus Sri Lankan workers receive higher wages and tend not to be competitive in making high volume low-margin simple products. Still struggling to overcome an image problem of women factory workers, a worker preference for services jobs (including in the now expansive tourism sector), and opportunities for jobs abroad, factories face rising wages and worker shortages. In supporting the government's initiatives to develop livelihoods in post-conflict zones, the apparel industry does get to access a new source of cheaper labor, which comes with more required training and less efficient infrastructure. On average, labor constitutes about 14 per cent of costs, materials account for 70 percent, fuel and utilities for 5 percent, services for 6 percent and other costs make up the last 5 percent. The average monthly wage for a sewing operator in 2015 was SLRs. 25,000.

Lead times: Lead times quoted varied by product, buyer relationship and destination, and the extent to which firms stock fabric. On average lead times were around 30-40 days, given that fabric is sourced from East Asia, and shipping time from Hong Kong to Colombo was 12 days. However in the lingerie business, lead times have been reduced for specific products from 6 months to 7-14 days, with the shorter times for panties to Europe. Allowing for imports of parts, a bra may still be delivered in 21 days. This is due to backward integration, manufacturing process innovations, incurring inventory costs for some basic fabric, multiple locations of production, and the use of air shipment. Lingerie exporters have increasingly resorted to air freight. The shipping cost of a panty is 10 cents, while the air freight cost would be \$1, and brands are willing incur this cost if needed. The use of air shipments are only practical for high-value to weight ratio items, such as high-value lingerie made in Sri Lanka. As a result, the share of exports through air shipment increased from 20 per cent in 2004 to 37 percent in 2011 (Athukorale and Ekanayake, 2015).

Shorter runs and greater flexibility- The large firms wanted to offer buyers production of smaller batch sizes (even of 1000-5000 pieces) which would be more responsive to actual client sales. Small production runs imply lower efficiency levels (around 45 per cent) compared to 80 per cent efficiency under mass production. Thus, manufacturers focused on increasing productivity, through multiskilling of operators, introducing a modular concept of a line working on multiple styles, and innovation.

Culture of Innovation: Sri Lankan firms have focused on innovation along all aspects of the value chain from manufacturing processes (seamless manufacturing), to fabric development (eg. Halyleys INNO fabric). The large firms have specific innovation centers or "disruption" cells and promote innovation along the entire workforce. Competitions have been held to develop solutions for the top concerns of the firm. Employees also collaborate with the academics from the University of Moratuwa Department of Textile and Clothing technology.

Compliance champions: The industry is well-known for having high labor standards. The reputation for compliance grew when the industry realized it could market its organically developed social responsibility strategies adopted when many factories moved into rural areas under incentives provided by the then President to spur rural employment in the early 1990s. These policies were standardized across the various firms within an apparel conglomerate, and a unified corporate social responsibility strategy was born in the early 2000s. High quality standards in the working environment became part of the Sri Lanka brand, and the industry organization JAAF developed its own standards under the “Garments without Guilt” campaign. The large firms have state of the art factories with air-conditioning and unified cafeterias for management and production workers. In 2013, Mahesh Amalean, Chairman of MAS Holdings, was the recipient (among 5 global leaders) of the first UN “Champion of Women’s Empowerment Principles Award” presented by the UN Women/UN Global Compact.

Stewards of Sustainability: Firms have become increasingly supportive of foreign buyers’ initiatives for sustainability standards, with the introduction of internationally certified ‘green’ factories’. In 2008, Brandix’s Seeduwa Eco-center received the first platinum certificate in the Leadership in Energy and Environmental Design (LEED) by the US Green Building Council for an apparel plant. Now, similarly certified factories have been set by the larger firms. Although initially spurred by buyers, firms have embraced sustainability initiatives as part of their culture. Thus a local firm who made laudable relational investments consistent with a buyer’s sustainability initiative, was not bitter that they lost the order from the buyer, as the Sri Lankan manufacturer now had firmly embraced sustainability as part of its own corporate culture and identity. Innovative chemical leasing program was recently launched, and apparel firms have worked with the IFC on energy saving initiatives. They rely on clean technology, using laser for fading jeans instead of sand blasting, using ozone technology instead of bleaching, and having a biomass boiler.

Important Role of FDI - There are five key stylized facts about the role of foreign investment in Sri Lanka’s textiles and apparel industry. i) High share of foreign investment in the early development of the apparel manufacturing sector through the 1980s. ii) Dominance of joint ventures over fully-owned firms at this early period. iii) Decline in foreign capital participation in the apparel manufacturing sector. iv) Dominance of fully-owned foreign firms currently among the residual apparel producers, and v) Rise of foreign capital participation through joint ventures in textiles and fabric manufacturing, accessories and related services. Recently, outward FDI has become a means of providing scale as well as a mix products with very skill intensity to buyers.

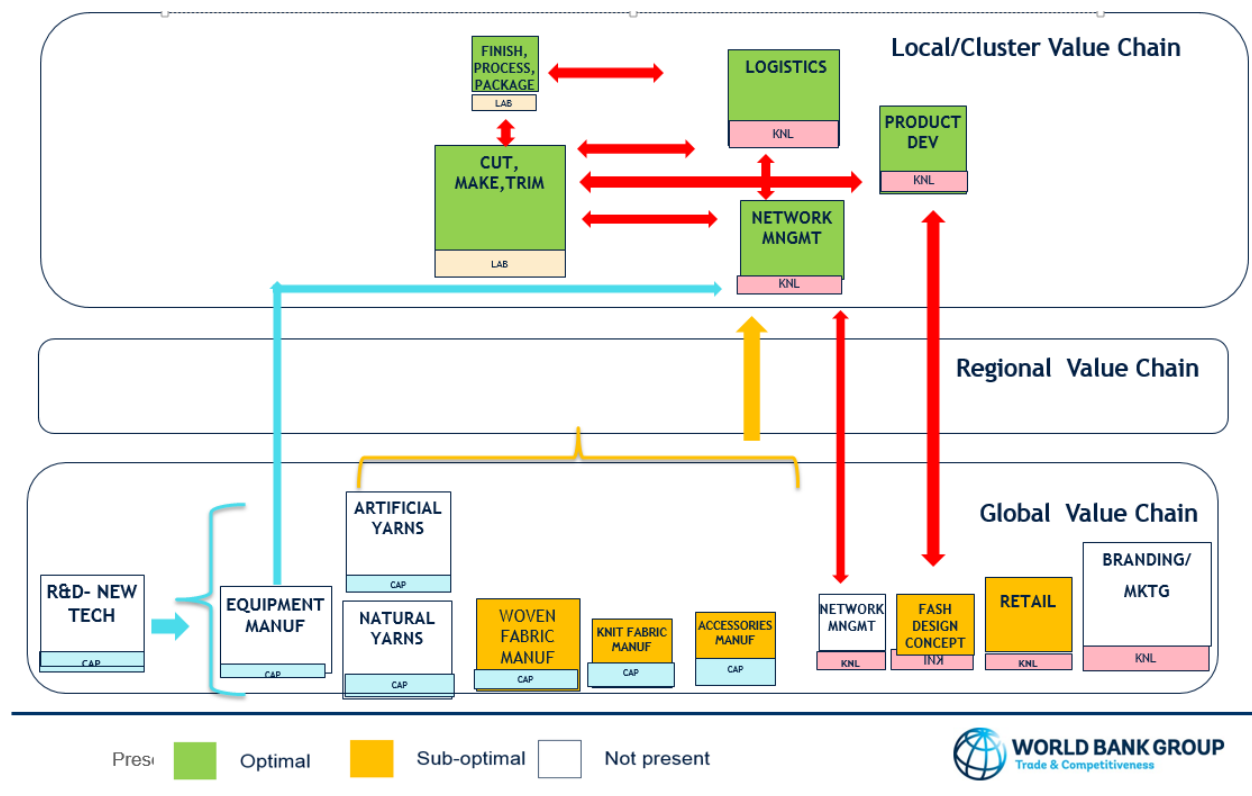
2.4 Structure of the Value Chain

The value chain of the forecasted demand- complex product segment is presented in Figure 7.

Strategic backward integration – fabric, components and accessories: Given the rising importance of shorter lead times and demand for full-package suppliers, the lack of local fabrics and accessories was a serious constraint as it increased time costs. Regional sourcing was also limited due to insufficient quality standards, lack of reliability, lack of business networks and poor connectivity within the South Asian region. Local apparel manufacturers took on the initiatives in backward integration, and the result has been the successful production of high quality inputs, from fabrics and elastics, to accessories like buttons and hangers. The efforts at backward integration were initially led by the large local

manufacturers with the goal of producing locally-produced inputs that would pass the global buyer's quality standards and be included in their list of nominated (acceptable) suppliers. Thus to get the production and quality right quickly, local firms sought joint venture partnerships with internationally competitive foreign firms -often already nominated international suppliers of their buyers. This strategy produced the development of firms like Stretchline, Noyon Lanka Lace, A&E buttons Lanka etc. Stretchline which produces elastics has gone on to become a globally competitive firm with factories in many countries, and is a global supplier in its own rights. In addition, other local suppliers have also developed, indigenously and with foreign partners. Industry growth and government incentives for suppliers to the apparel sector also attracted fully-owned foreign firms such as the zip manufacturers of Hong Kong, YKK. While there was backward integration, it was also a focused strategy that produced high quality inputs and catered to the growing lingerie industry- particularly brassieres.

Figure 7 - Sri Lanka's Position in the Apparel Value Chain (Niche markets)



Strategic backward integration- value chain/network management: Another approach to remain competitive and attractive to buyers, was the development of supply chain management skills by local firms. Again, it was the large firms that invested in the systems technology and management skills needed in-house to effectively co-ordinate the value chain and provide transparency to the buyers. The result has been high quality development of services to the extent that an apparel conglomerate launched its own consulting firm that caters not only to all the companies within the group, but to outside firms as well.

Strategic backward integration – design: Another key component of the value chain that has developed in Sri Lanka is the design component. In-house training and establishment of design schools has been

important in providing the product development component, vital for buyers and their designers in communicating with the local counterparts to convert conceptual design to practical products ready for manufacturing. Firms also developed their design capabilities through the close collaborative partnerships with strategic buyers, and having their designers have work spells in New York or London interacting closely with them. While the two largest firms focused on backward integration in fabrics and accessories, other firms focused on building a large design team. One leading firm provided greater value and enhanced their relationships with buyers by providing original designs, and such designs have not only gone into production, they have hit the pages of Vogue (UK). There are alternate ways of payment for design services, including payment in the form of a royalty from sales. There are also stand-alone design houses that offer a range of design services to foreign buyers and local manufacturing firms to support product development or original design.

Sub-contracting: Sub-contracting is pursued as needed but given the consolidation in the industry, it is more prevalent among the small –medium firms. Even large firms have a group of factories that they have previously approved, that they may use for sub-contracting, if “within-conglomerate” sub-contracting is not an option. Medium firms close to Colombo that have labor shortages also resort to sub-contracting, and setting up new facilities in rural areas.

Intermediaries: Given the complexity of products and the strategy of building deep relationships with buyers, the role of intermediaries is not substantial. It is currently estimated at 40 percent, with 60 percent of transactions going through buyer representatives in Colombo or directly with buyers abroad. Li and Fung, the largest global apparel intermediary does have an office in Colombo. These intermediary: direct buyer transaction ratio in Bangladesh is about 85:15, where the production of basic items do not require the buyer to engage intimately with the manufacturer. The decline of intermediaries implies that the manufacturers get the margin that the intermediaries would charge (estimated at around 5-15 per cent) and are free to source from the most suitable supplier of their choice (within the buyer’s acceptable list of suppliers).

Logistics: Given the strategic position of Sri Lanka, the Colombo port handles a lot of transshipment and is the 33rd busiest port in the world. All the exporters interviewed mentioned the efficiency of the customs clearance system. Air cargo transportation is efficient, but there were some concerns that capacity utilization is quite high. Internal transport has recently got a boost with the implementation of highway development, and two highways being completed in the last 3 years. In the value chain, the brand decides who carries their cargo (airline/shipping company). Recent legislation of “free port” status to Sri Lanka’s ports offers new opportunities for global warehousing and distribution, facilitated by efficient cargo handling - unloading time for a 40 foot container is 2.5 hours. One swimwear firm has no warehouses and sends its product to the logistics firm where packing may be done according to buyer requirements and out to the port in 4-6 hours.

Buyers: Sri Lanka has built deep relationships with brands and retailers such as Victoria Secret, Pink, Nike, Speedo and Marks and Spencer, and also produces for brands and retailers such as Calvin Klein, Ralph Lauren, Tommy Hilfiger, Next, Debenums, BHS, Macys etc. Given its small size it did not attract mass retailers like Walmart and Target, and the low margin, high volume business in which they operate. At the same time they have not attracted luxury retailers, though a shirt manufacturer mentioned their recent orders from Brooks Brothers and Hugo Boss. Even the medium firms had buyers they had nurtured since the 1980s, and sometimes were in risky situations relying only one buyer.

Forward integration -branding: Moving into brand development offers CMT manufacturers an opportunity to capture the much larger margins associated with retailing. The set of the skills required for successful branding are significantly different to manufacturing, and many firms have had to learn and hire outside expertise in image building and retailing. The combination of design capability along with marketing skills have led to the launch of many brands, and as the business develops most firms tend to separate their retail business from the manufacturing business. Two manufacturers have ventured into international branding, and one firm has explicitly created a company to manage their brands. However, the scale of operations have not developed to such an extent like in Turkey, where the brand business also sources product from outside manufacturers.

Given the small size of the population (22 million) in this island nation, the brand pioneers have focused on penetrating the large, high-growing, youthful market of neighboring India. In particular, they have tapped the growing purchasing power and demand of Indian women who are increasingly entering the workforce. A supplier to top brands like Victoria Secret and Triumph International, MAS Holdings developed their own brand of brassieres (amanté) for the Indian market with a product that specifically caters to the body type of the South Asian woman. Within 5 years it has captured 25 percent of the premium segment in the Indian market. While the “amanté” brand products has been distributed through department stores and specialist shops, another Sri Lankan entrepreneur has ventured into brand retailing through sales of women’s western wear, especially dresses, in their own stores. The Avirate brand of the Timex-Fergasam group has 14 stores in India, and is sold in the second tier cities through department stores. Avirate captures the demand for westernwear by Indian women even for formal and semi-formal events, and not just for casualwear as was the case before. Both firms work with Indian advertising firms to generate campaigns and promotions.

In the aftermath of these pioneers, the growth of brands for the domestic market has mushroomed in the last two years and the sophistication of the marketing has tremendously grown for existing local brands. It is only a matter of time for some of these new brands to break into regional markets. For example, shirtmaker ‘Emerald’ has developed its brand using the local (and internationally recognized) cricket heroes –Kumar Sangakara and Mahela Jayawardene.

The potential for brand retailing is high because Sri Lanka already has mature support services in the terms of a sophisticated architecture/interior design sector which has made its mark on new boutique hotels and the renovation of colonial buildings. The advertising field is large and contains many foreign firms. However, the marketing skills in the country have not been previously targeted for apparel brand development, perhaps with the exception of Odel and the recent initiatives by Emerald shirts. In June 2014, an industry association was launched and according to it, the domestic retail sector has sales of about US\$ 2 billion and local brands have 40% market share.

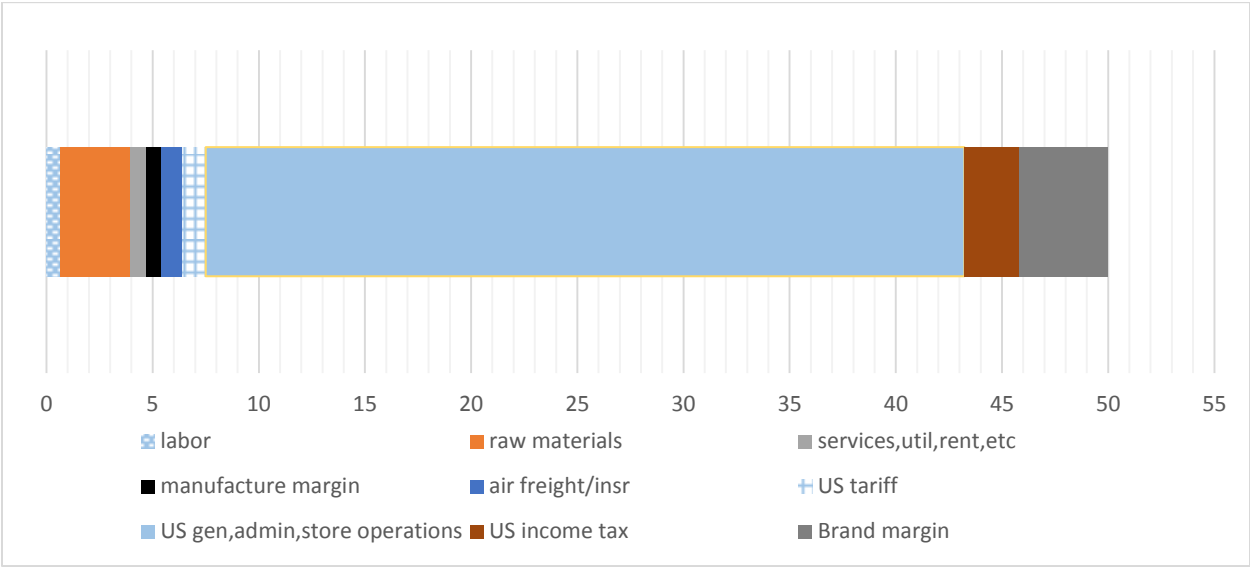
2.5 Distribution of value-added

Compared to the mid-1980s, the value-added of the apparel sector has grown substantially from 15percent, where most of the components were imported to 55 percent today. Consistent with this, the textile import share of total apparel exports has fallen from an average of 58.4 percent during 1990-94 to 44.8 percent during 2009-2011 (Yatawara, 2013)

The key ways that the apparel industry has added value is through backward integration in terms of fabric and accessory production, final product upgrading, the provision of finishing services such as dyeing and processing, design and product development capabilities, supply chain management and logistics services.

However, looking at the contribution of value to the price of a Victoria Secret bra, we see that the large proportion of value-added (around 71 percent) happens in the USA, through the branding, marketing and retail services provided. This is consistent with the recent findings of an average of 70.3 per cent US value added among two imported apparel products studied (Moongate Associates, 2013). The manufacturer margin is 1.5 percent of sales price (or 70 cents), and labor cost is 1.3 percent (or 66 cents), while the brand net profit margin is \$4.2 from the \$50 item. If we allow for a markdown such that 50 percent of the products have to be sold at US\$ 40, not much changes with the US value added being 70 percent, with the manufacturer margin at 1.6 percent and labor cost at 1.5 percent of sale price.

Figure 8 - Value added and margins along the value chain for a bra(US\$), 2014.



Source: The above is based on 9.1 % net profit margins, tax rate, and expenditures for LBrands parent, company of Victoria Secret, with sales of US\$11.4 billion and net profits of \$1.04 billion in 2014, as reported in the corporate website, www.lb.com. The breakdown of manufacturing costs comes from team interviews, the sales price and markdown comes from the Victoria’s Secret website, and the import price in the US come from OTEXA. The general, administration and store operations expenditure is calculated as a residual, and indicates that US value added is 71 percent of sale price.

2.6 Policies and the Institutional Environment

Industry associations

A key factor vital for the success of the industry is the effective working relationship between a supportive government and an effective, well-organized industry group, the Joint Apparel Association Forum (JAAF). First, the six existing apparel-related associations were brought together under one

umbrella organization in 2002, “to speak in one voice” in the face of the impending quota liberalization by 2005. The JAAF developed a 5 year strategic plan for building competitiveness in the industry to face the greater competition, and has continued to come up with plans to maintain the country’s position in global trade. JAAF has successfully advocated for the industry in negotiations with the government.

Sector policy

The government has generally been very supportive of the industry given its importance as a source of foreign exchange and particularly a source of employment, particularly rural employment. Since the 1977 liberalization, the government has provided various income and trade tax incentives for foreign investors operating in export processing zones, and those investing in the ‘non-traditional’ sector –of which apparel was the main player (The traditional being tea, rubber and coconuts). Since the establishment of the Board of Investment (BOI) in 1992, incentives are given not based on nationality of the investor but only capital investment, employment size etc. The government supported the JAAF initiatives for building competitiveness, offering special incentives for backward integration and designating fabrics a “strategic sector” for even deeper incentives. The industry on its part has responded to the government call for investments in post-conflict zones since the cessation of violence in 2009.

Trade preferences

Given the small margins in the sector up to the branding and retailing functions, trade preferences can have significant impacts on the industry. On a positive note, the immense competitive pressure in 2005 was alleviated by receiving preferences to the European market under the EU’s GSP+ scheme. As a result, there was a market shift from the USA to the EU market. Similarly, the loss of such preferences in 2010 had a strong negative impact on many players in the industry. Interestingly, the GSP+ scheme’s policy change on the rules of origin to allow for regional cumulation, had a strong impact on regional sourcing. The potential preferences under the scheme were worth the effort to venture away from traditional East Asian suppliers and engage with previously unknown suppliers from India and Pakistan. Since then the growth in regional sourcing has continued even after the loss of preferences. The sourcing of cotton from Northern India though is not likely to reduce lead times since although it is physically closer, the poor trade facilitation between the two countries implies that sourcing from India takes just as long as sourcing from Hong Kong- 2-3 weeks.

2.7 Challenges, Opportunities and Factors driving Sri Lanka Apparel in the next 5-10 years

The key assets that Sri Lanka has are its strategic geographical position along international sea routes, visionary industry leaders, reputation for high quality clothes, experience and skills in supply chain/network management, commitment to innovation, reputation as a compliance champion and steward of sustainability, a united and effective industry group, and an educated work force. The key challenges facing Sri Lanka is the lack of large scale fabric base, distance from their main markets, rising wages and labor shortages due to preferences for services jobs and opportunities abroad, and poor regional logistics to exploit any complementarities with its neighbors. Additional considerations include:

Ability to move into Segment 2

How much can the apparel sector move within our segments? Is there potential to go into fast response. There may be but they cannot go beyond niche in fast fashion as they are restricted by the fabric base, and limited logistics in south Asian, lack of high quality MMF in South Asia. Sri Lankan clearly do achieve speed, particular in panties – but Victoria's Secret is not a fast fashion retailer. They have four seasons in which they introduce collections. The brand nevertheless uses speed to and customer information to hold less inventories and reduce markdowns. The products would need to be light weight if to be fast response, so that air shipments were feasible. The Sri Lankans could not well in fast fashion since the segment does not require advanced branding skills. However, using the Indian market for such endeavors is limited by the export quota of 8 million pieces imposed by India in the 1998 India-Sri Lanka free trade agreement.

Another concern is the significant distance from its key markets of the US and EU, and the rising preference for physical proximity as reflected by some inshoring in the US and the resurgence of neighboring Caribbean apparel industries, such as in Honduras and El Salvador. Sri Lanka will need to remain innovative so it does not lose its US customers to Central Asian suppliers.

Trade preferences

Sri Lanka is likely to be affected by trade agreements and preferences they secure, as well as those from which they are excluded. Thus there are significant gains to be had from free entry into the Chinese retail market through a currently-in-negotiation free trade agreement with China, as well as the resumption of the EU's GSP+ scheme of preferences which looks more likely with the introduction of the new government. Similarly the exclusion from the Trans Pacific Partnership (TPP) will be important, as US buyers may shift their focus to Vietnam and Sri Lankan firms may direct new investment to Vietnam instead of Sri Lanka. Since Vietnam is close to China, a key source of synthetic fabric, this should cut on lead times. The renewal of AGOA preferences are not likely to affect Sri Lanka because the African economies are in a different segment producing more basic items.

2.8 Key Emerging Frontiers

Apparel Logistics Hub

Given the strategic geographic position of Sri Lanka along international trade routes (75 percent of port business is transshipment), the country is also developing a strategy of becoming a logistics and distribution hub in the image of Hong Kong. Spearheaded by JAAF, the initiative led the government to pass legislation (Finance Act 2012) that recognizes its ports as "free ports." It creates 5 'bonded zones' where up to 20 percent value addition may be done, and then re-exported. Thus it would involve entrepot trade, transshipment, distribution center, regional headquarters, front –end services, design and R&D center. The zones contain warehouses where currently 'pick and pack' services are offered – including multi-country consolidation and 'ratio packing' (where boxes are packed according to style-color-size-quantity requirements ready to direct delivery to retail stores at destination). For local manufacturers, the attraction is that they would no longer need to have warehouses in the factory area, and the packing services would also be provided.

Figure 9 - Sri Lanka's Exports, Imports



Although, the legislation is not an industry-specific, the industry aims to create a “niche operator business in apparel” in Colombo. Some local business has developed first-class warehousing facilities, with the apparel sector accounting for 40 per cent of the business for largest firm in the field. Old factories in the EPZ by the airport are being converted to warehouses. Heavy investments in software have been made, and sophisticated security and tracking systems are in place that have passed US audit firms. Before the legislation, a European retailer was already using Sri Lanka as its regional warehousing hub, for products to be sent to its stores in Asian and Middle Eastern markets. New business includes a Finnish clothing retailer that consolidates sourcing products from Sri Lanka and Bangladesh, and has them packed and sent directly to Russia.

The interest from foreign logistics firms has been tepid, and recently the legislation that allowed for only 40 per cent foreign ownership in the freight forwarding was amended to allow 80 percent foreign ownership, with a \$10 million minimum investment. Recently, the SG Group- the second largest Japanese logistics firm invested in the largest local logistics firm, with a view to Colombo as a good link to its business in Africa.

Regional Value Chain Coordinator

An opportunity lies in leveraging Sri Lanka’s skills in supply chain management, human resources management of large firms, reputation for corporate social responsibility, compliance and sustainability to partner with regional firms to deliver on international orders, produced South Asia based on the relative cost advantages of each location.

Sri Lankan firms are already investing in India, Bangladesh and Vietnam, manufacturing products according to the relative advantage in each location, and are giving their buyer a greater mix of products and scale. For example, the Sri Lankan firms in Bangladesh are exporting their eco-friendly production techniques as well as their compliance strategies to their factories in Bangladesh. For Bangladeshi exporters to be interested, the Sri Lankan firms would need to offer something more than what the current set of intermediaries do.

Table 5 - Value Chain Assets and Liabilities in South Asian countries

	Sri Lanka	India	Bangladesh	Pakistan
Value chain/Network management	+		-	
Good Compliance and sustainability reputation	+		-	
Strategically located port	+			
Cheap labor	-		+	+
Availability of labor	-	+	+	
Skilled workers	+	+	-	
Cotton/Backward integration	-	+		+
Land	-	+		+
Tariff Preferences to key markets			+	+
Low tariffs for imported inputs	+	-	+	
Large domestic market	-	+		
Proximity to major market		+	+	+

Innovation Collaborations

Given the high cost of R&D, apparel firms have devised collaborative strategies for innovation. This investment in innovation not only leads to higher margins, but also leads to production order for the firm in Sri Lanka.

- *Investments in start-ups in innovative products for hygiene and comfort:* A leading Sri Lankan firm bought part of a start-up of women’s underwear business that developed a product with technical textiles to address comfort due menstruation. Jointly, they are developing a new product for those with incontinence issues- all packaged in an elegantly designed underwear with lace. The research is done in New York and the manufacturing in Sri Lanka.
- *Investments in health-related wearable technology start-ups in the US:* “Smart clothing” uses fabrics embedded with sensors that send information wirelessly to a smartphone app. A Sri Lankan firm has invested in a firm which patented nanosensor technology capable of real-time cardiac diagnostic monitoring via a basic t-shirt, bra, or undergarment. The firm has moved also into applications in the neurological, diabetic and sports medicine / performance diagnostics monitoring markets. The firm based in University Park, Pennsylvania is getting prepared for the FDA approval process.
- *PPP investment in Nanotechnology Institute:* The two titans of the apparel industry are the largest private sector investors in the Institute, and the Chairman is the head of MAS Holdings.. Already the first patent was developed in the field of agriculture, related to controlled release of water to soil.

Production of new and more complex products

Buyer-connected introduction of new products of varying complexity. These may be simpler products that complement the buyer/brand’s portfolio such as the introduction of yoga pants and shapewear..

Alternately, this has involved the production of innovative new products from buyers such as Nike and FlyKnit knitted yarn toppers for comfort and formfitting sneakers (SL firm is the number one or second largest supplier), and Athos clothing for monitoring performance. Higher prices associated with greater complexity (\$120-\$150 for Nike sneakers, and \$99 each for an Athos shirt and a pair of pants, offers less resistance from strategic buyers for high margins.

Additionally, high quality, niche products such as handloom products (only fair trade handloom business in South Asia in the Sri Lanka), or a fusion of western fashion with artisanal work, or products that exploit Sri Lanka's tradition of lace making could be explored. The sector has decided to leave the heavy embellishments on fabric to India.

New Generation SMEs

The JAAF is interested in promoting the development of 200-500 person factories to support the movement of local lead firms to more chain management activities, and away from CMT.

2.9 Implications for the IFC/WB

- 1) Support investment in developing new and upgrading logistic infrastructure.
- 2) Encourage Board of Investment in targeting logistics firms.
- 3) Learning visits of leading global logistics firms for Sri Lankan firms, especially in Spain to study the innovations developed to implement fast fashion strategies.
- 4) The port efficiency and customs clearance have been praised but Sri Lanka scores relatively poorly in the 2014 Logistics Performance Index (LPI) with a 2.7 score (of 0-5 where 5 best) and rank of 89 of 160 countries. The lowest scores are for infrastructure, customs clearance and international shipments. Further investigation would be useful to understand where improvements may be done. Since the LPI is based on foreign logistics professionals outside the country, it would be interesting to see if foreign firms do face a harder at the port, or other issues are driving this seeming anomaly.
- 5) Trade facilitation – electronic documentation at customs.
- 6) Regional Connectivity investments.
- 7) Regional supplier finance facility
- 8) Advocate gradual liberalization of outward FDI, though the government has been accommodative under a non-automatic route.

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3 TURKEY

3.1 Description

The Turkish textile and apparel industry originated in Ottoman times – the first modern industrial factory in the Ottoman Empire was a textile factory that was established by the State in 1835 – and was stimulated by government investment and incentives from the 1930s through the 1980s. Following the country's liberalization, private sector participation intensified and the industry has continued to expand and modernize, now representing 15% of Turkish industrial production and absorbing 28% of the manufacturing labor force. As a relatively high labor cost producer, Turkey competes primarily on flexibility and responsiveness, drawing on its inherent advantages of closeness and preferential access to the European market, traditional strengths in textile and fashion design and its well-developed logistics infrastructure compared to lower income competitors. Turkish manufacturers are known for their short lead times, generally no more than three to four weeks and sometimes as little as ten days. The industry is largely vertically integrated and geographically scattered, with some regions serving as hubs for a number of product groups. In addition to strong capacity in knitted and woven fabric manufacture, it has a small but growing number of textile machinery manufacturers and exporters. Turkey has also seen an increase in the number of home-grown retail brands in the past two decades. Close to twenty indigenous brands supply the local market, selling mostly through their own stores. Turkey is now the world's sixth largest exporter of textiles and the fourth largest exporter of apparel, predominantly still to Europe but also increasingly to non-traditional markets in Africa, Asia and the Middle East.

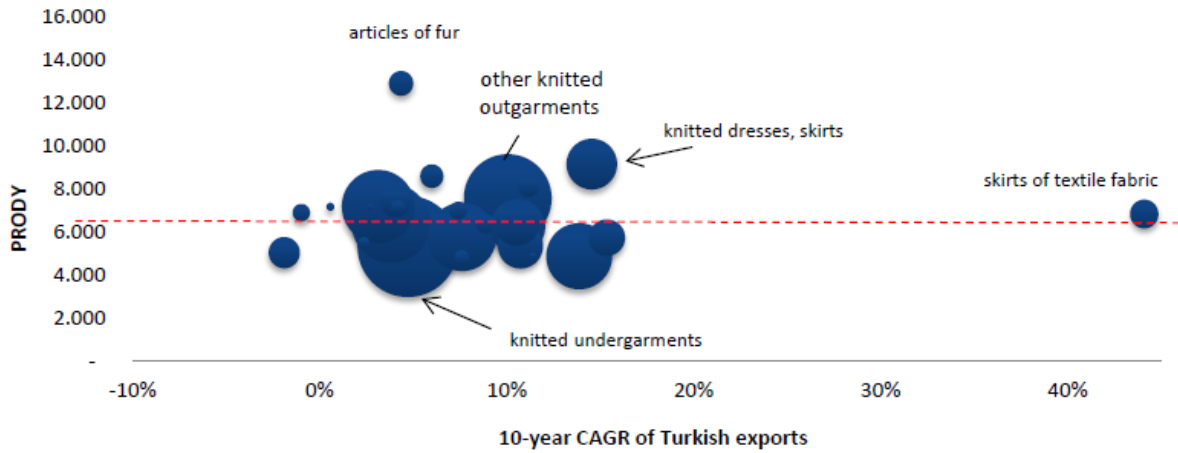
3.2 Segmentation

The Turkish apparel industry is large and complex. While there is an emerging number of retailers, most businesses are still sole-suppliers to European and global brands. Most manufacturers have been traditionally operating in the scheduled response segment with both simple and complex products. However, there is now also an increasing number of exporters supplying the reactive simple fast fashion segment (accounting for about 15% of the exports), as well as a small but very fast growing number of retailers working in this segment.

A considerable number of exporters have developed the capacity to respond both to traditional and fast fashion demand cycles, maximizing the use of their own productive capacity and that of their suppliers.¹² The move towards complex/scheduled segment is also manifested in the increased sophistication of the apparel export basket; which seemed to have moved into middle and higher sophistication product areas (e.g. outer garments). (World Bank, Turkey CEM) as shown below.

¹² One firm commented that over the past decade half of its production has come to be geared towards four-week lead times while the other worked with 10-14 week lead times.

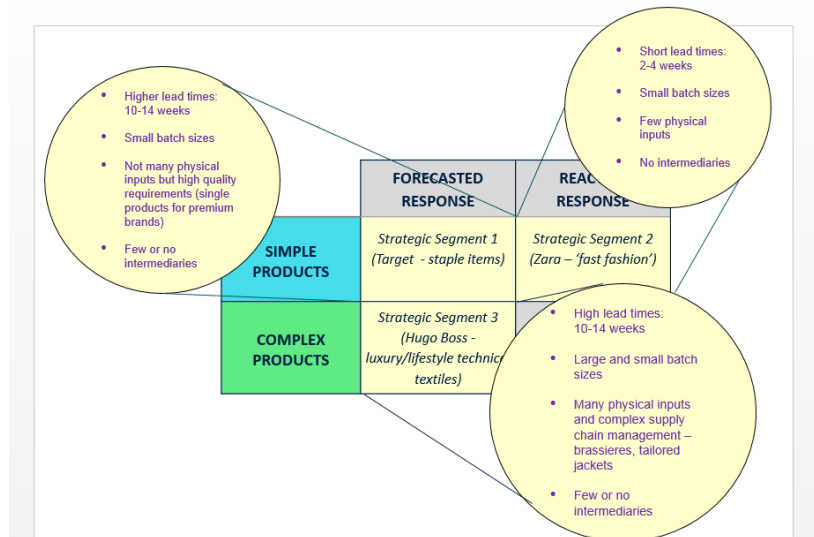
Figure 10 - Export Performance and Sophistication



Source: World Bank, CEM 2014

While the share of exports destined for Europe has remained more or constant since at 2000 at around 75 percent, there has been a very noticeable jump in the share going to Spain (from 1 percent to 10 percent) – reflecting the fast-growing ties between INDITEX and its Turkish suppliers.

Figure 11 - Turkey is positioned in all three segments but strongest in complex/scheduled and reactive simple



Costs: Turkey is a relatively high labor cost producer, with a monthly minimum wage of US\$ 437, compared to \$68 in the case of Bangladesh, \$52 in Sri Lanka, and US\$ 200-300 in China. High direct labor costs are further inflated by taxes of up to 35 percent. This makes certain basic product categories unviable – according to industry officials, the cost of producing a simple t-shirt in Turkey is double what it would be in Bangladesh and three to four times what it would be in India. As a result, Turkey can no longer compete in the US market for products that are under the US\$80-90 per kg price band.

Lead times: Turkish manufacturers are known for their ability to achieve short lead times, produce in small batches and respond agilely to changes in orders. Most of the firms interviewed for this study quoted being able to work with three to four week lead times, while a few quoted as little as two weeks. That they are able to do so is due partly to Turkey's Customs Union with the EU and relative geographic proximity to European markets. Strong logistics infrastructure and fast-track processing of goods shipments, though not of visas, also help Turkish suppliers remain responsive, as does their own expertise in supply chain management.

Quality and reliability: Turkey's labor productivity is on a par with Eastern Europe and exceeds that of many trade competitors, but falls below that of OECD states. While direct labor costs in production are high, the country's increasing stock of higher-skilled labor in professional services, as well as in areas such as design, marketing, retail, sales and technology adoption, provide a competitive edge beyond the factory floor. Nonetheless restrictions on part-time and short-term contracts, high severance pay and redundancy costs continue to contribute to the large size of the informal economy, which negatively affects overall labor productivity (with an estimated productivity gap of 30-40% for formal and informal businesses).

Standards compliance: The industry suffers from a lack of globally or nationally agreed upon set of rules and regulations govern workplace practices. Many suppliers complain about buyers' unwillingness to pay for better workplace standards and the lack of communication between their sales and compliance departments. Only one of the manufacturers interviewed confirmed a specific global buyer's willingness to pay for the increased number of measures put in place to improve labor standards.

3.3 Structure of the value chain

Turkey firms are represented at all stages of the value chain, from the production of cotton and artificial fibers, through yarn and fabric manufacture, to garment assembly and post-production activities such as marketing, logistics and retail – even if their competitiveness is greater in some activities than others. As elsewhere, the distribution of activities is driven by the interplay between traditional cost advantages, institutional factors and physical proximity to the final consumer. Over time, Turkish manufacturers' presence in non-time sensitive staple products has diminished as labor costs have risen and they have lost ground to Asian competitors, notably Bangladesh. On the other hand, the industry has adapted by leveraging the existence of a large, local market to develop its own indigenous retail capacity. These home-grown retailers typically began as manufacturers for European brands then graduated to post-production once they had mastered the range of functions required.¹³ In most cases they then divorced their retail from their manufacturing operations, or at least managed them in such a way as to preserve full competitive sourcing autonomy.

¹³ An example is LcWaikiki, originally an exclusive supplier to a French brand under this name, which first received a license to sell its own production in Turkey and followed that with a small design shop that experimented with the product lines that did well in Turkey. It proved so successful at this that it was able to acquire its own buyer, the France-based retailer that was about to go bankrupt due to its own poor performance. LcWaikiki shut down its European operations and focused on Turkey, allowing the retailing and manufacturing sides of the business to supply and procure competitively (after an initial attempt at full vertical integration). Today, it has 15 percent of the Turkish retail market, with 400 nationwide stores, and 120 stores abroad in the CIS and Middle East and plans to expand into Algeria, China, Indonesia and Kenya.

Figure 12 - Strategic Segment 2: Simple Product / Reactive Response

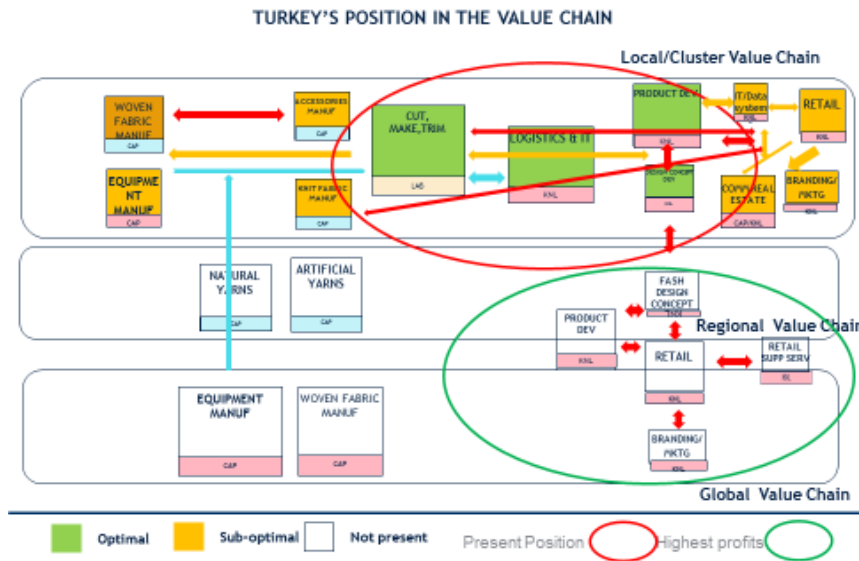
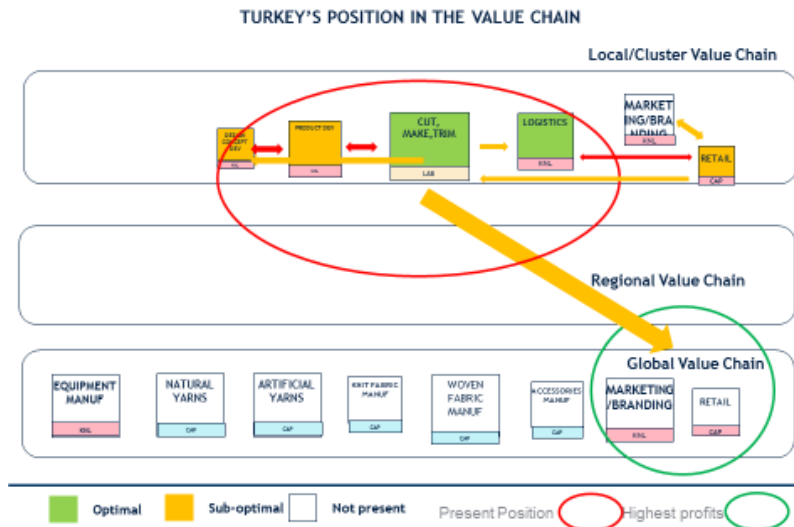


Figure 13 - Strategic Segment 3: Complex Product / Scheduled Response



Backward integration

Fabric and yarn manufacture: The history of textiles production in Anatolia goes back centuries and it was the largest industry in Ottoman Turkey. Strong government support in the mid-twentieth century meant that Turkey become a net exporter in the 1970s, a trend that has continued since under liberalization with export growth of 12 percent since 2010. The Turkish textiles industry is diversified with poles in the Marmara region, the Ege region (home textiles) and Cukurova (machine carpets, rugs and yarn production). Turkish apparel manufacturers also manage their own-supply chains backwards,

sometimes outsourcing to lower cost producers such as Egypt and Morocco, and operating as full service providers for the final buyer.

Machinery manufacture: Although around 80 percent by value of textile machinery and equipment is imported, Turkey has a small but rapidly growing (from 4 percent of the total in 2004 to 8 percent in 2010) number of machinery producers and exporters. These comprise makers of washing, cleaning, wringing, drying, ironing, pressing, bleaching, dyeing, dressing, finishing, and coating equipment, among others. Turkish equipment manufacturers are considered the most modern in the Middle East and include Belgium, France, Germany and the UK among their export markets.

Forward integration

Design and branding: Most Turkish suppliers to European brands are themselves striving to become brand-name producers and engage in both pre and post-production activities. Most offer design services to their buyers, ranging from product development to the conceptualization of new collections. Suppliers interviewed for this study contributed to or were wholly responsible for between half and all the designs they used, employing an international group of designers from India, Italy, Japan and the UK, among others, to do so. Nevertheless, the sector at large has been slow in moving from contract manufacturing to creating its own brands. The number of internationally-known Turkish brands is still small: reportedly fewer than 20 work with Government's 'Turquality' brand development program.

Retail: Turkey has also seen an increase in the number of home-grown retail apparel brands in the past two decades. Close to twenty indigenous brands supply the local market, selling mostly through their own retail stores, and more than half of these have also been exporting and selling abroad mainly in the Middle East, Russia, and Central Asia, though only a few have succeeded in penetrating the EU and US market. These emerging fast fashion brands are driven by the dynamism and changing tastes and wants of young middle income Turkish customers, working intensively with data collected through retail outlets and replicating the reactive, short product cycle model pioneered by European retailers H&M and Zara.¹⁴ Their success reflects not only the acquisition of full-service know-how via direct relationships with European buyers but a deliberate bet on the viability of the fast fashion model in middle income markets.

An important driver of reactive response retailing in Turkey has been the growth of the commercial real estate – the country has experienced a boom in shopping malls since the 1990s – and related service industries. Consulting companies such as JLL have assisted brands in expansion strategies, choice of store locations and interior design. Local retailers are more agile than foreign, needing three to six months to set up as opposed to a year or more that the foreign brands require. Commercial real estate development is expected to continue to grow in Istanbul, but the fastest growth will likely be in Anatolian cities such as Bolu, Maras, Samsun and Urfa.

3.4 Distribution of value-added

In the buyer-driven global apparel value chain, profits come from combinations of high-value research, design, sales, marketing, and financial services that allow the retailers, designers and marketers to act as

¹⁴ A Turkish-born brand that is becoming the trademark of local fast fashion is Koton. The firm puts 55 new products on its shelves every day and rolls out more than 50 collections and over 20 thousand styles every year. Working with over 4600 young and dynamic fashion designers, the company follows a similar strategy to Zara in making its shop-fronts the face of its marketing.

strategic brokers in linking overseas factories and traders with product niches in their main consumer markets.¹⁵ The companies that develop and sell brand-name products have considerable say over how, when, and where manufacturing will take place, and how much profit accrues at each stage, essentially controlling how basic value-adding activities are distributed along the value chain. The outcome is to skew the distribution of profits towards those activities that they control – namely those at either end of the value chain.

The incorporation by indigenous Turkish manufacturer-retailers of functions previously reserved to European and US retailers opens up an opportunity to capture these larger margins. The example of Koton, an emblematic fast fashion retailer based on the Zara model, is instructive: its return on equity for 2013-14 was around 30 percent, compared to minus 5 percent for Vakko, a traditional scheduled response premium retailer.

3.5 The challenges

The Turkish Government has set targets for US\$80 billion in exports by 2023 for the industry at large, with apparel US\$60 billion coming from apparel and US\$ 20 billion from textiles. These aspirations will require the industry to move into higher value added segments. This means moving out of the simple-scheduled segment, where competition from Asian producers is already strong and likely to intensify, and further developing its position in the simple-reactive segment – particularly in branding for European markets and retailing in the local and in regional markets.

Going forward, there is room for apparel manufacturers to increase their focus on higher sophistication product categories in order to capture more of the value, but this is limited, as many of the successful suppliers have already been exploiting the advantages of changing product baskets...Still Turkish apparel manufacturers' competitive position may be sustained or strengthened with:

- Continued formalization of the sector - only 9% of textile/apparel SMEs employ more than 19 people, and most of these firms are informal (employing as much as 1 million people).
- Increase in formalization will increase productivity gains in the sector too (there is an estimated productivity gap of 30-40% between formal and informal businesses);
- Consistent and reliable access to high quality and low cost imported inputs;
- Better trade deals (Turkish suppliers would like the Turkish Government to be more active on this front);
- Increased foothold as global investors, to this day, only a handful of established Turkish manufacturers invest in production facilities overseas;
- Increased "better work" standards, coupled with global pressures for such employers;
- Increased stability in Eastern Turkey, which may allow for cheaper production costs;

However, since best suppliers can reportedly achieve around 9% net profits at best, in today's low margin apparel GVCs Turkish suppliers' growth potential as sole suppliers in their current segments is limited.

Going forward, most gains will be achieved by reactive segment retailers,

Turkey's growing, urbanizing, middle income population is one of the biggest assets for the current and prospective reactive response retailers. Over 2011-2020, Turkey's population is projected to expand by

¹⁵ Gereffi & Memedovic, 2003.

8.3%, overtaking Germany to become the most populated nation in Western Europe. By 2020, Turkey will have the highest birth rates and still hold the youngest population by median age, which is 29 today.

Figure 14 - Size of the Domestic Apparel Market in Turkey

	2010	2011	2012	2013	2014
Total Apparel Market Demand	26.4	28	26.3	27	27
Total Branded Apparel Demand	12.4	14.1	16.2	17.6	17.6
Total clothing imports	3.2	3.1	2.7	3.3	2.8

Source: Turkish Clothing Manufacturers Association, 2015 & WITS, 2015

The shopping mall boom that provided emerging retailers an important boost will continue to provide opportunities for the future generation of reactive response retailers. As of 2015, the total shopping center gross leasable area reached 10.3 million sq m across 350 centers. These trends remain strong and leasable area is expected to reach 12.8 million sq m across 420 centers in the next 5 years.

However, underpinning conditions for retailing in this segment need to be strengthened further. Today, only a fraction of the 17000 branded apparel suppliers are working with Turquality to develop their own brands and marketing.

Most of the existing reactive response retailers in Turkey point to skills shortage in retail, marketing, consumer data management, overall IT systems, and shop-floor management as the most important binding constraint to their continued growth and success.

Potential for Turkish retail in this segment can be better exploited by:

- Increased investments in skills and other capacity needs that greatly affect reactive retail's success (nearly a quarter of the businesses believe that inadequately educated workforce is one of the top five constraints)
- Increased emphasis and support to ancillary service industries such as IT, commercial real estate consultancies, interior design, etc.
- A decrease in relative regulatory restrictiveness in services (which will likely yield substantial gains in value added in service-intensive industries, and retail in reactive response segment falls squarely into this category);
- Continued formalization of the sector - only 9% of textile/apparel SMEs employ more than 19 people, and most of these firms are informal (employing as much as 1 million people).
- Increased stability in the region (following Iraq's opening Turkish exports there grew 50-fold)
- More emphasis on retail capacity building, as opposed to brand development (which is the current focus of the Turkish government).