Working paper

Garments as a driver of economic growth

Insights from Pakistan case studies

International Growth Centre





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Garments as a Driver of Economic Growth:

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IGC, Pakistan

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1 Introduction and the Broader Context

Pakistan's scarce resources need to be focused on activities that contribute to rapid economic growth, generate productive employment for the rapidly increasing urban labor force and help improve the balance of payments. In light of this over-riding concern, the recent performance of garments manufacturing and the opportunities arising in the international garments trade are encouraging and are the motivation for this study.

1.1 Textiles Manufacturing In Pakistan

Based on its soil, climate and irrigation endowments, Pakistan is among the top five producers of cotton in the world accounting for 9 percent of total world output of cotton. Putting this to its advantage, Pakistan has followed a proactive strategy of textiles led industrialization. The textiles chain consists of activities spanning ginning, spinning, weaving, finished fabrics, garments -woven and knitwear, home textiles, particularly bed linen and towels, and synthetic fiber. Textiles manufacturing accounts for 56 percent of exports (USD 14 billion out total exports of USD 24.5 billion), 46 percent of manufacturing, 38 percent of employment and 8.5 percent of GDP¹.

Within textiles, garments manufacturing is now a significant and growing component. This can be seen in Table 1.1 that shows the number of manufacturing firms in various segments of the textiles chain, their relative size, the volume of production and the value of exports. Garments (including knitwear) stand out both in term of the number of firms as well as the value of exports.

The value of garments exports has nearly quadrupled from USD 1.02 billion in 1990 to USD 3.72 billion in 2011-12. Of the total, 91 percent of the exports are destined to the rich country markets in the United States and European Union via some of the world's leading brand names. This requires productions systems that are geared to the world's most demanding markets both in terms of the quality of product as well as timeliness of delivery. Pakistan has emerged as a major player in denims. The local cotton fibre is particularly suited to denims and firms have invested in state-of-the- art machinery. Denim manufacturing has been growing at 27 percent per annum in terms of value exported.

¹ As reported by PRGMEA

	Number of units	Size	Production	Exports (US\$ billion)
Ginning	1260		20 million bales	0.36
		10 million spindles	2.9 billion. Kg yarn	2.23
Spinning	442	·	0.1	
		170 integrated	1 billion sq meters	
Weaving	124 large	28,500 shuttle less	cloth	
-	425 small	400,000 power		
		looms		2.64
			4.8 billion sq	
Finishing	10 large		meters cloth	
	625 small			
	50 large		670 million pieces	
Garments	2500 small			1.77
(woven)				
Knitwear	2500		350 million pieces	
				2.31
Towels			53 million kgs	
	400			0.76
Synthetic Fabric			148 million sq	
			meters	0.67

Table 1.1: The Importance of Garments and Knitwear in the Textiles Value Chain.

Source: PRGMEA

Pakistan's textiles policy has, via a combination of tariff, tax and financing incentives, nudged the private textiles manufacturers steadily towards higher value addition. Embedded in the broader import substitution industrialization strategy, textiles took the first steps towards value addition in the 1960's via import of machinery that converted raw cotton into low count yarn. The next phase was investment in weaving and more recently in finishing (see Figure 1.1). Each phase represents a notch higher on the value addition chain.

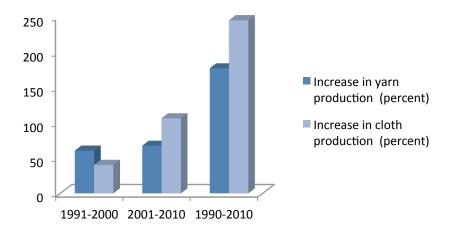


Figure 1.1: Steady progression towards higher value addition in the textiles chain

Source: Economic Survey 2011-12

Garment manufacturing in Pakistan got a jump start as a result of the rationalization in the global garments trade under the 20 year Multi-Fiber Arrangement (MFA) that came into effect in 1974. Under the MFA, United States and other advanced economies negotiated bilateral quotas with the major suppliers of textiles and garments. In 1995, following the Uruguay Round, MFA was superseded by the Agreement on Textiles and Clothing (ATC). Not all beneficiaries of the MFA in Pakistan survived the winding up of the agreement. Those who had not taken advantage of the protected market access to become internationally competitive were wound up. Many, however, survived and continued to do well even after the expiry of the ATC in 2005. Figure 1.2 shows the export performance of garments compared to other segments of the textiles sector.

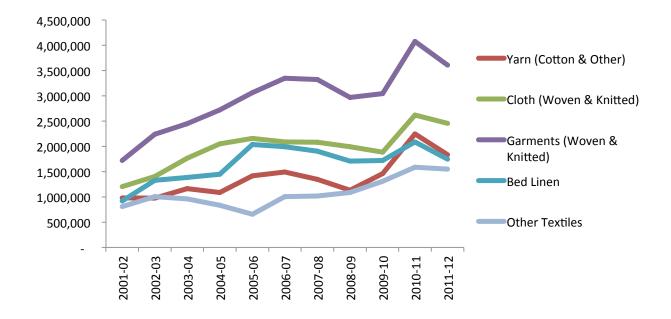
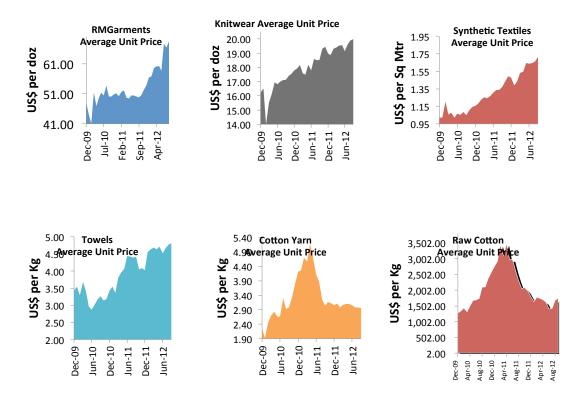
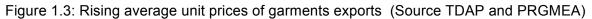


Figure 1.2: Pakistan Cotton, Textiles, RMG and Made-ups exports

Pakistan Readymade Garments Manufacturers and Exporters Association (PRGMEA) estimates that in the 10-year period 1999-2009, US\$7.5 billion were invested in textiles. Nearly 80 percent of the total investment was in spinning, weaving and finishing activities. Garments and made ups accounted for only about 12 percent or nearly USD 900 million.

It is argued by many observers of the textiles chain that relative to other segments, investment in garments is far short of what it should be given its potential for creating jobs and contributing to an improvement in the country's trade balance. This is seen clearly in the evidence on rising export unit value of garments compared to other manufacturing activities in the value chain (Figure1.3).





PRGMEA estimates, furthermore, that given the capital intensity of production technology, USD 1 million invested in spinning and weaving generate 34 jobs compared to 460 jobs in garments manufacturing. Put another way, USD 1 million invested in spinning and weaving adds USD 0.27 million to exports compared to much larger USD 3.2 million when invested in garments.

The claims by PRGMEA regarding the benefits of investment in garments are verified in conversations with leading players in textiles who are familiar with the production technology of the entire value chain. One leading textiles business house representative offered the following as a stylized fact (later echoed by many others):

"50,000 Kg of cotton fiber generates 400 jobs in spinning, weaving and finishing stages but 1600 jobs in garments manufacturing. Moreover, a garment manufacturing is far less energy intensive than spinning, weaving and finishing²"

² Estimate provided by Mr Shaukat Elahi, Nagina Group, Lahore

1.2 The Potential for Growth in Garments

Between 2005 and 2010 world garments exports increased by 5 percent per annum to reach USD 350 billion or 2.4 percent of world merchandize trade. China was the leading exporter of garments followed by EU, Hong Kong, Bangladesh, Turkey and India in 2nd, 3rd, 4th, 5th and 6th place respectively. Between 2000 and 2010, the share of Mexico and United States in world garments exports declined substantially but others, primarily in Asia, increased theirs. China doubled its share from 18.3 percent to 37 percent and impressive gains were made by Bangladesh from 2.6 to 4.5 percent and Vietnam from 0.9 to 3.1 percent. Turkey (3.6 percent) and India (3.2 percent) made a modest gain of 0.2 percent. Pakistan ranked 12th among garments exporters maintained its share of 1.1 percent.

There is a consensus in the industry that, going forward, it will be difficult for China to sustain its share in the world garments trade. The reason is the rising cost of labor, a key determinant of international competitiveness in garments. It is estimated that average labor cost of an operational hour is USD 1.88 and USD 1.44 in the Coastal and inland regions of China respectively, which is three times the cost in Vietnam and Pakistan, twice that of India and 6 times that of Bangladesh.

China's exit from the world garments trade, like Japan and the Asian tigers' earlier, is inevitable. This leaves a world market of USD 120 billion (plus more as China becomes a net importer of garments) wide open. This is the opportunity on offer to Pakistan.

Whether Pakistan takes advantage of the opportunity depends on how garments manufacturing firms perceive their growth prospects, the risks to realizing the potential and how those risks can be mitigated.

The study begins, in Section 2, with a brief description of Pakistan's garments industry to conclude that contrary to the widely held view, garments manufacturing is a modernizing economic activity that helps local firms improve their production environment to global standards. Without such modernization, and the productivity improvement that comes with it, it is difficult to be in the international supply chain of leading brand names catering to a rich and a demanding (in terms of quality and timeliness of products) cliental. Section 3 presents garments manufacturing firms' perception of about future growth prospects and discusses their ability to compete with Bangladesh, a strong contender for the market vacated by China. Section 4 explores the risks to growth as perceived by the manufacturers distinguishing between those that arise from the within the firm, from the factor markets in which the firms operate and those associated with the sovereign risk. Section 5 discusses the coping mechanisms

by firms to manage the risks to growth. Finally, section 6 presents the firms' view on what the government can do to help firms mitigate the risks.

1.3 The Sample Design

The discussion presented in the study is based on detailed conversations with 33 garments manufacturing firms in Pakistan. Firms were interviewed in the 3 major manufacturing centers: Lahore, Faisalabad and Karachi, which form clusters of garments production.

Directory of Industries, Punjab, 2010 was the source for identifying garment manufacturers in Lahore and Faisalabad; while Pakistan Ready-Made Garments Export Association (PRGMEA) and Pakistan Hosiery Manufacturers Association (PHMA) drew up the sample in Karachi. Firms were oversampled from Lahore and Karachi as they have a larger concentration of garments manufacturers compared to others.

Stratified random sampling was carried out, with stratification at 3 levels: city, knitwear/woven-wear, and size. The number of employees of firm was taken as an indicator of the size of the firm. Small firms were those employing less than 100 workers. Medium sized were those employing 100-1000 workers, and large firms employ over a 1000 workers.

Since a few firms had already shut down or their current contact information was not available, snowball method was used to fill in the gaps. The interviewed buying houses also provided information for selecting firms while using the snowball sampling method.

The criteria for selecting the firms were as follows:

Specialization is an important distinguishing feature because of the differences in the value chain and skill requirement of the work force. Furthermore, it also sheds light on firm capabilities depending on whether they specialize in an activity based on Pakistan's comparative advantage as in Woven (backward linkages) compared to knitwear.

Location matters because the major industrial clusters of Pakistan's garments industry are located in the South (Karachi) and North (Lahore, Sialkot, and Faisalabad). These clusters are clearly distinguished by the firms. Karachi is seen to have the advantage of being a port city, a large workforce at easy commuting distance, better availability of gas (firms are allowed to use gas run generators) and many complementarities with other manufacturing activities. Lahore, Faisalabad and Sialkot have clean water and better law and order, relatively safer for women to work, low political divide and lack of extortion groups demanding a share of the profits.

Size is another important distinguishing feature because the literature is replete with examples of market segmentation by size that affects access to credit, raw material,

export destinations and intra-firm capabilities that affect performance and the ability to be a part of global supply chains.

Age, is a measure of experience, an obvious factor in shaping firm capabilities. If firms do not grow in size with time (as seems to be the case for most industries in Pakistan, see IGC study, Barriers to Growth: Why Firms Don't Grow in Pakistan), the high incidence of youthful firms would be disadvantage in being a part of the global value chain.

Table 1.2: The garments specialization of the firms chosen for the case studies

	Number of firms in the sample
Knit wear firms	20
Wovens	13
Total	33

Table 1.3: The location of firms chosen for the case studies

	North Zone (Lahore, Sialkot)	Faisalabad,	South Zone (Karachi)	Total firms
Knits	9		11	20
Woven	11		2	13
Total firms	20		13	33

Table 1.3: The size of firms chosen for the case studies

	Small (<100 employees)	Medium (100-1000 employees)	Large (>1000 employees)
Knits	2	8	10
Woven	2	3	8
Total firms	4	11	18

	Less than 5 years old	5 – 10 years old	More than 10 years old	Total firms
Knits	1	2	17	20
Woven	1	2	10	13
Total firms	2	4	27	33

Table 1.4: The age of firms chosen for the case studies

1.4 The Garment Industry

The history and experience of the knitwear and woven garments sectors in Pakistan are quite different and these differences are well captured by the structure and current situation of the firms in our sample. The knitwear sector developed as a result of the large guotas Pakistan received under the MFA, particularly from USA for cotton knit shirts. At that time, Pakistan's spinning and weaving industries were well established, but very little knitted fabric was being manufactured. Consequently, the firms that entered the industry, which was initially located in the South Zone (around Faisalabad and Lahore), had to produce their own fabric. Thus, even today, majority of knitwear exports are to USA and most of the firms in the South Zone are vertically integrated, i.e., everything is done in-house and only materials purchased are yarn and accessories. Pakistan, however, did not receive a substantial guota for woven garments and as a result the industry developed somewhat later and more slowly. Since the 1980s, Pakistan has been an important producer and exporter of cotton fabrics, including denim, for which the cotton grown in Pakistan is particularly suitable. Therefore, Pakistan's woven garments exports are almost entirely cotton trousers, predominantly denim jeans. Also, since good quality fabric was easily available, there are very few vertically integrated firms in this sector. In fact, this gives local manufacturers of denim jeans a competitive advantage as they are able to get the fabric, which is 40 to 50 percent of the cost of the garment, at a lower price than their competitors say in Bangladesh who use fabric imported from Pakistan.

Knitwear: Of the ten firms in our sample in the *South Zone*, eight have vertically integrated operations. Nine of them started on a small scale with a few knitting and stitching machines or with a dyeing/bleaching plant and all have grown substantially and some have expanded at a phenomenal rate. Most of the firms were set up in the 1990s, and in our sample there is none that started after 1998. In contrast, only 3 of the ten firms in our sample in the *North Zone* are vertically integrated and the rest have their knitting and dyeing done commercially. Most of them also started on small scale and have grown substantially, however, unlike the South Zone, four of the firms have been set up since 2000, with least two having started after the end of the quota regime in 2005.

Woven Garments: The position of this sector is quite different from that of the knitwear industry. Only five of the eleven firms in our sample were established prior to 1998 and only three are vertically integrated, in the sense that they produce their own fabric. Many of them also started on a small scale, but several are large-scale ventures started by well-established firms in the textile industry. The predominant product is denim-jeans and they export primarily to Europe.

2 A Modernizing Manufacturing Activity

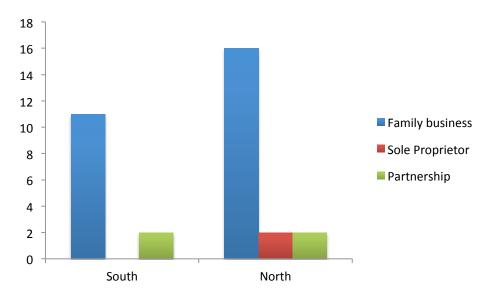
2.1 The Players

2.1.1 The entrepreneurs

Most of the entrepreneurs in garments manufacturing have a solid textiles or professional background, such as engineering, MBA, chartered accounting and banking (Table 2.1). Many have long standing family experience in earlier stages of the textiles chain. Others specialized in processes of garments manufacturing before setting up units for manufacturing the full garment. Still others had professional experience as managers in garments manufacturing firms before setting up their own. At least one entrepreneur specialized in computer engineering before turning to garments.

Most firms in both the North and South regions are family businesses. Most owners also head the management of the firm. Two firms each in the North and South regions are partnerships while one entrepreneur in the North reported that he was a sole proprietor.

Figure 2.1: Ownership Status of the Firm



Company	Location	Entrepreneur background			
name					
Firm 1	South	started with a dyeing plant			
Firm 2	South				
Firm 3	North	CA - Textile background			
Firm 5	North	BIBO gee groups			
Firm 6	North	Engineer and MBA			
Firm 7	North	Large business house involved in the textiles chain			
Firm 8	South	Management and Ownership different; management is professional			
Firm 9	North	Professional experience in Accounting			
Firm 10	South	Background in Banking			
Firm 11	North	Warehouse business and trading in fabric			
Firm 12	North	Engineering background			
Firm 13	South	Diversified textile base; investment banking experience			
Firm 14	North	Doctor (MBBS) but family background in textiles.			
Firm 15	South	Garments background			
Firm 16	South	Marketing experience			
Firm 17	North	MBA with professional background in textiles			
Firm 18	North	Textiles background			
Firm 19	North	Fathers and uncles in textiles			
Firm 20	North	Father and brother in the dyeing business			
Firm 34	North	Among the largest Pakistan conglomerates; professional management			
Firm 21	North	Computer engineering background; Professional experience in textiles			
Firm 22	South	Originally in PVC pipes, moved to Pakistan after the fall of Dhaka			
Firm 23	South	Management has professional experience in textiles			
Firm 24	North	Background in textile			
Firm 25	South	Dyeing plant established in 1980s			
Firm 26	South	Acting MD has experience in textiles other partners don't.			
Firm 27	South	Marketing/agent for textiles			

Table 2.1: Background of the entrepreneurs

Firm 28	South	
Firm 29	North	Family in knitwear business
Firm 30	North	Family in wool sweaters business
Firm 31	North	Diversified industrial experience, textile factory in Bangladesh
Firm 32	North	Director has a professional degree in textiles
Firm 33	North	

2.1.2 The Workers

Firms characterize their human resources in terms of stitchers, middle management, senior management and ancillary workers. Stitchers constitute the bulk of the workforce. Based on early visits with some large firms and conversations with buying house representatives, the prior going into the detailed interviews was that garments manufacturing firms would have a much larger share of female workers (among stitchers and supervisory staff) compared to other manufacturing activities. The detailed interviews revealed that even though some large firms have found female workers more disciplined and productive and plan to increase the share of female workforce, the overall trend of employing female labor, at about 16 percent of the total workforce, is not very different from other manufacturing activities (Table 2.2).

	Firms selected for the studies			Overall Manu	ufacturing In	dustry
	Total Employment	Male (%)	Female (%)	Total Employment (millions)	Male (%)	Female (%)
Knitwear	46,540	85	15			
Woven-wear	53,200	83	17			
Total	99,740	84	16	7.1	86	14

Table 2.2: Employment by Gender

Source: PBS, various years, Pakistan Labour Force Survey for overall employment levels

Not only is the garment industry is more labor intensive than any other industry, most of the workers employed it are skilled, primarily stitchers. Many of them get their training on the job as helpers, but a significant number have also been formally trained by the garment firms. Most large firms have training programs for stitchers, but there are not many programs for training of supervisory and quality control workers, who are usually promoted from the stitchers. As most firms pay stitchers on piece rates, there is a substantial turnover and as a result the smaller firms benefit from workers trained by the

large firms and don't need to have their own training programs. This probably also makes the large firms less willing to invest in training of their workers.

Skilled workers have substantially higher incomes than unskilled workers and thus the garment industry provides jobs, which are capable of pulling families out of poverty and transforming the lives of the next generation. In our sample firms, stitchers on average were taking home over Rs15000 per month, which was two-thirds higher than the wage of an unskilled worker – in July 2012, the Punjab government had increased the minimum monthly wage from Rs 7000 to Rs 9000. Responses of some of the firms in Lahore on the subject are illustrative of the income levels:

Firm 30, Woven, large, Lahore: "See it also depends on how good a stitcher he is. But on average he can take Rs 15,000 to Rs 20,000. This does not include overtime"

Firm 19, Woven, Medium, Lahore: "On average he/she can earn up to Rs 20,000. We determine the [piece] rates by interacting with other owners or by asking employees from other factories. The piece rate is more or less the same of all firms while retention incentives differ"

Firm 6, Woven, large, Lahore: "On average skilled workers get around Rs 15,000 per month".

2.1.3 The Buyers

The trade in readymade garments is dominated by Western brand names catering largely to Western buyers. The supply chains of the large western band names are oriented North-South. Thus garments manufacturers in developing countries account for nearly 90 percent of the Western (the EU and the US) purchase of garments. South Asian garments manufacturers export between 45 percent (India) and 88 percent (Bangladesh) of their garments to these two destinations.

Western dominated global garments value chains grew rapidly in the 1970's as a result of streamlined and lean retailing in the US. The factors that influenced the growth of value chains included, i) rising incomes and advertising that led to demand for differentiated clothing, ii) the associated frequent refreshing of clothing that compressed the life cycle of the stock so that carrying large stocks was costly, iii) spread of technologies that enabled the tracking of merchandize (such as bar codes) and iv) the use of computers and Information Technology that helped manage information on sales and forecasting of demand for better inventory management. The switch was further facilitated by the emergence of brand names that had the deep pockets and management resources needed to make the switch to production through global value chains. The firms in our sample (Table 2.3, both large and small, are part of the global value chains as they supply to both clothing brand names (LEVI's, Wranglers, GAP etc) and retail brands (Walmart, Zara, H & M, J.C. Penny etc). One enterprising medium sized firm, Firm 17 has opened stores by the name of Shubinak in Malaysia and Canada that are proving to be a success.

		Brands	Retailers	Online Stores	Total No. of firms
Knits	Large	7	5	0	7
	SME	5	4	0	9
Woven	Large	7	7	0	7
	SME	3	2	1	5
Total no. of firms		22	18	1	

Table 2.3: The buyers

Table 2.4: Buyer location

	Export destination		
	US	EU	Both
Knitwear manufacturers	11	3	5
Woven wear manufacturers	1	9	2
All firms	12	12	7

2.1.4 Buying Houses

There are three types of buying houses operating in Pakistan. First, large clothing brands tend to have their own sourcing offices in major garment exporting countries. There used to be a number of these in Pakistan, but now only LEVIS continues to maintain a sourcing office here while others have shifted the responsibility for Pakistan to their regional hubs or offices in neighboring countries where they have a major operation such as India or Bangladesh. Second, large international buying houses such as Li and Fung have sourcing offices in Pakistan. Third, are local buying houses that represent clothing brands or international retail chains. In this category there are few which are run by professionals, but majority are ad hoc operations where the owner has been able to build contacts with a few international clothing brand or retail operations. Most large firms and innovative medium sized firms sell directly to international buyers and only go through a buying house if it is the sole representative of a famous clothing brand which they want to target, or as a filler when they have temporary surplus capacity. Small firms and those lacking the capability to sell directly to international buyers are forced to go through buying houses and the firms in our sample generally

had a very negative opinion about the role played by buying houses in Pakistan. A few remarks from the interviews are provided as an illustration:

Firm 25, Knits, Small, Karachi: Their role is "becoming increasingly dangerous due to their alignment with the buyer. The buying hoses are a necessity not a preference. It is hard to find business on one's own given the current law and order conditions so buying houses fill in their gap"

Firm 31, Knits, large, Faisalabad: "They are a culprit, siding with the buyer and driven by their own profit rather than doing their job of facilitating relations between the two parties"

Firm 12, Knits, Large, Lahore: "They are not honest and stoop to low practices"

Firm 19, Woven, Medium, Lahore: "Buying houses in Pakistan do not follow professional and ethical practices".

2.2 Staying on the Global Supply Chain by Adding Value

Staying on the global supply chain, let alone moving along it to higher value added products in an internationally competitive setting, is demanding. The global value chain is evolving as competition intensifies and buyers get richer and more discerning. Buyers in middle and high-income countries that account for the majority of sales are increasingly style and quality conscious while remaining cost conscious. The consequence is the need for customization and production in smaller lots, refreshing fashions with regularity and on much shorter ordering cycle, while continuing to meet high standards of quality and delivery.

To understand how firms add value and remain abreast in an intensely competitive international value chain setting, it is important to understand that the product they sell is complex and requires bringing together a lot of materials purchased from different sources from within the country and outside.

Typical response from firms producing knitwear on the complexity of the product produced is captured in the discussion of the importance of trimmings and accessories in the manufacturing process:

Firm 10, Knits, Medium, Karachi: "Labels, main labels and the side labels, buttons, zips, hand tags, price stickers, garment stickers, poly bag, poly bag stickers, carton, carton tapes, barcodes so altogether there are 18-20 suppliers who are linked up that way. Since I have more than one line, I am dealing with 60-70 suppliers".

Firm 5, Knits, Large, Lahore: ".... There are a lot of accessories. There are tapes, twill tapes especially for ladies. Then there are embroidery threads: the gold or the metallic embroidery threads".

Firm 8, Knits, Large, Karachi: The garments we produce are heavily embroidered which enables us to cater to some of the high end brands. Embroidery and printing costs relatively less but adds a lot of value.

Firm 21, Knits, Medium, Faisalabad: "Trimmings include zips, buttons and labels. So the things which are available here we try them out but there are a few things which we have to import because the suppliers are customers nominated, for example Zara will tell us where to buy the hangers and we can't take them from any other place"

Firm 15, Knits, Large, Karachi: "Walmart makes it mandatory for me to buy the hangers from a certain company in Hong Kong and the labels have to be bought from another manufacturer in a different country".

For manufacturers of woven garments, product differentiation is achieved via both trimmings and accessories and also, as we will see below, in the washing process.

2.3 Firms' Internal Value Chain

Based on the detailed interviews with firms, the principle stages of the value chain of typical knitwear and woven garments manufacturers are presented in Tables 2.5 and 2.6below. The vast majority of small and medium (and some large) knitwear manufacturers, particularly in Karachi, purchase yarn and trimmings from other manufacturers in the market and have the knitting and dyeing done commercially. They main processes within the firm are cutting, stitching (including adding accessories) and packing. Then there are the large vertically integrated firms that purchase yarn and trimmings from suppliers and then do the knitting and dyeing of the fabric within the firm. This is followed by cutting, stitching (adding accessories) and packing. Firms that do not produce the fabric in-house report that 20 percent of the value of the final knitted garment is created in the firm while the rest is in the inputs purchased/work outsourced in the market. Value added in-house is higher for vertically integrated firms, with knitting and dyeing contributing on average 23 percent of the total, with most of the value being added at the dyeing stage. Importantly, accessories purchased by knitwear firms on average account for as much as 10 percent of the value of the final product. Firms producing low end garments buy all the accessories locally, and in their case accessories average about 5 percent and for those who have to import most of the accessories from sources nominated by the buyer the cost of accessories can be substantially more than 10 percent.

		Raw materials			Knitting &	Cutting- Stitching-
		Yarn	Fabric	Trimmings	Dyeing	Packing(CMT)
	Small		73	11		20
Knits	Large		75	8		17
r\IIIIS	Vertically Integrated	47		8	23	16

Table 2.5: Value chain for knitwear manufacturers (percentage of value added, 20 firms)

For manufacturers of woven garments (Table 2.6), over half the value of the final product is in the fabric and trimmings. The value added at the cutting and stitching stage is 20 percent stage (similar to knitwear manufacturers) but a noticeably high percentage of value added is at the washing and finishing stage.

Table 2.6: Value chain for woven industry (percentage of value added, 13 firms)

		Raw materials	Cutting & Stitching	Washing & Finishing	
		Fabric & Trimmings			
Woven	Small	54	19	15	
	Large	55	20	20	
	Vertically Integrated	65	19	16	
Sector Average		58	19	17	

2.4 Ways of Value Addition

Given the distinct stages of adding value to the final product, where do the firms concentrate to respond to the exacting demand of the international value chain? Let us hear it directly from the firms:

2.4.1 A General Observation

Firm 7 Ltd, Woven, Large, Faisalabad: The more complex a garment, higher is the value added. To make it more complex, you need to spend more time per piece. Essentially you are selling time then. Also the small trimmings add value. The buyer

does not want large lots of the same product but small batches incorporating different designs.

Knitting

Firm 18, Knits, Large, Faisalabad: Jacquards are basically designs within the fabric. There are different types of dyeing methods but they are all basically chemical processes at the finishing or the dyeing stage. Some applications are done after the garment has been stitched. These are fancy looks. So this value addition is mostly developed in the last ten years in Pakistan.

Firm 10, Knits, Medium, Karachi: "I can produce 300,000 units from here per month of a basic item but if it's a value added product (I will show it to you as well) in the whole day I was able to produce only 1200 pieces. Basically I produced a knitted leather jacket. I got the sample approved for it but when it came to production a lot needed to be done"

Stitching and Embroidery

Firm 32 Knits, Medium, Faisalabad: "In hoods there are zips and pockets and it is a complex stage of manufacturing the garment; the more complex it is the more value addition and more profitability".

Firm 24, Knits, Large, Faisalabad: "Profit margin of 30-40% if the garment is complex to manufacture but if there is a slight error in embroidery or in the stitching, or the color is mismatched, the customer rejects the garment and profits nosedive".

Firm 3, Woven, Small, Lahore: A special kind of pocket by the name of *Bon Pockets* fetches a very high price; you can either produce them by acquiring the machine or by hiring a skilled craftsmen. The former is expensive to purchase while the latter is hard to find. We would eventually like to purchase it and get bigger orders for such pockets. It is good value addition.

Firm 12, Knits, Large, Lahore: Printing, embroidery and trimmings are the ones that add value. CMT (Cut-Make-Trim) rates are more or less fixed with buyers having full information. The areas where we can add value are the things mentioned or reduce the SAM (standard allowable minute) in order to compete with Bangladesh.

Firm 8, Knits, Large, Karachi: The garments have heavy embroidery on them and hence a high end product.

Washing and Finishing

Firm 11, woven, LHR, small: "We have done random wash recently which completely changes the look of the garment. There is tint as well which is done in different colors

and we do that too. We tie up some powder to the garment and put it into a machine so wherever the powder touches the garment, it changes the look of it."

Firm 23, Woven, KHI, Large: "In denim one of the most intricate things is the washing itself. This is where you get all the money out of your customers and within this framework you see Turkey, Italy as your main competitors. They have wonderful laundries. They are in fact the pioneers. In most of the cases we get the inspirations from them and then we work on it."

New Materials and Specialized Processes

To stay ahead in an intensely competitive and evolving global supply network, firms add value in terms of materials and specialized processes.

Firm 19, Woven, Medium, Lahore: We make army uniforms and import fabric from Europe or the Far East. But we also keep trying to develop different fabric textures on our own. [Because of the] poor patents regime, we lose first mover advantage quickly. Our fabric is quickly copied by others who have not borne any R&D costs.

Firm 9, Woven, Small, Lahore: Most of the cost of the product is on account of the fabric, even stitching per piece is higher than normal jeans because the fabric takes more handling and therefore require special skills. Value is added by the special bullet proof fabric (Kevlar) for the inside lining and by installing knee pads or increasing the flexibility at the thigh area for greater comfort. We are now also working on waterproof material designed for the rainy season.

Firm 18, Knits, Large, Faisalabad: We also work with materials with anti-micro bile application. When we go out in the sunlight or in heat we usually sweat and the clothes get yellow and it gives a foul smell. So we make an application on the garment which kills bacteria. You don't have the stains there and there is no smell. Actually it's the bacteria, which penetrates and grows and thus causes the smell and the stains. So this is called anti micro bile application on which we have done a lot of work. We also apply water repellant and wicking (opposite to repellant) processes. So on the outside you apply water repellent and on the inside you apply wicking. The sweat gets absorbed from inside and does not show on the outside and because on the outer side we have the repellent the water does not enter from outside. Some of our customers called it as storm fleece: that is you can wear it in a storm and the clothes inside would not get wet.

2.5 Developing Own Design Capability

Producing in small batches with quick turn-around time requires continuous innovation and therefore the capacity to develop designs and bring them into production quickly. **Firm 28, Woven, Large, Karachi:** "Firm 28 has invested a huge amount, 5 times that of other garment industries, in order to stay in the comfort zone of the customers. On time delivery and the right quality is the key." ": we have an office in Istanbul. It helps in R&D as well because the fashion travels from Europe to Turkey to Pakistan. So our R&D staff stays in Istanbul for 15 days and in Pakistan for 15 days. We have invested a lot in R&D plus we have five sample departments and we are very fast in sampling. Whatever sample we have to develop, 90% of the time we are providing the services in four to five days. On time sample development and delivery is a key factor in a fast growing business".

Firm 30, Woven, large, Lahore: "A couple of years back, the buyers gave us samples and told us to replicate them. But for the last one and a half years we have been hiring designers directly. Two of them are here and one is based in the UK. They normally produce 30-40 designs. They tell us the price and suggest the needed adjustments in the design before going into production. This allows us to sell most of the designs. Having a range of products (incorporating many designs) is a basic requirement of high fashion".

Firm 14, Knits, Large, Faisalabad: "We follow the CBI website which gives advice on the trendy designs and colors of a particular season. We develop our design themes based on the trends posted on the website. Most of the time, it is about the "in" colors ".

Firm 20, Woven, Large, Lahore: ". You employ a lot of people in washing. You must have seen jeans that look old. That is done by people using chemical sprays and washing techniques in the washing areas."

Firm 25, Knits, Small, Karachi: Real value addition takes place when adding labels, zips, small patches and tags. The accessories dictate the design and differentiate the product. In knits the product cannot be differentiated through washing as the washing is more or less uniform. It is the small trimmings that add value. We procure the trimmings from the local market or import them if desired by the customer.

Firm 6, Woven, Large, Lahore: "I have hired three designers in U.K. They travel to New York and Holland to be close to the buyer and designers. We have allocated a budget for it. We have to make products that the customer himself is asking of us.

Firm 7, Woven, Large, Faisalabad: We also have business in Istanbul where we produce 16,000 garments per month. It is a retail business because we realized that in order to be a global company we need to look at our supply chain and set up small plants in markets and cities wherever the fashion market exists. We don't want to be just in the garments business but in the fashion business. So, if the US wants a fashion product, the plant is set up in Canada which is capable of meeting small and medium sized orders. Today's fashion is tomorrow's bulk. So we set up offices there and later

the bulk manufacturing in Pakistan. Istanbul is closer to the fashion market of Europe. Istanbul is attractive because it is close to the fashion market of Europe.

Firm 23, Woven, Large, Karachi : In denim one of the most intricate things is the washing itself. This is where you get all the money out of your customers and within this framework you see Turkey, Italy as your main competitors. They have wonderful laundries. They are in fact the pioneers. In most of the cases we get the inspirations from there first and then we work on it. Product development happens for both US and EU but for Europe you need to have your own models, you need to have a story line, you need to work hard with an inspiration. You need to go to trade/fashion shows to see what is happening there. Get all the inspirations and get back and work on it. You have to come up with lovely presentations every time. This is not exactly the same with US but yes they do have their own requirements. They actually give you the inspiration and then you work on it.

2.6 Finding Niche Markets

Small and medium firms use different strategies to capture export markets aside from being part of the global supply chain of a large buyer. One such is identifying and supplying garments to niche markets.

Firm 29, Knits, Small, Lahore: "I make uniforms for American Baseball and American football. This (October) is the high season for American football uniforms. The baseball season starts in January and will last till March"

Firm 9, Woven, Small, Lahore: "I make very heavy, protected garments for bikers. It's a branded product with the fabric produced from bulletproof material. Concept is from leather to denim in order to make add extra protection to casual jeans for bikers. At present, I have an order of 6000 pieces, which I have to produce by January. New catalogues are being made and this month onwards we will start receiving orders. The next 3-4 months will see increased activity."

Firm 24, Knits, Large, Faisalabad: "Our main market is schools in England for which we make school sports uniforms. Our strength is rugby shirts. This is the type of garment you would not normally see in the market. We make rugby tops and have orders from 120 schools in the UK".

Firm 14, Knits, Large, Faisalabad: We have a team sitting in the United States who does our marketing. Generally I visit countries to look for niches. Through research I discovered the Ivy Leagues and we now provide hoodies to the Ivy Leagues. It was a long and difficult barrier to pass through. And now we are exploring the market for graduating gowns not just for students graduating but also their parents and younger siblings.

Firm 30, Woven, Large, Lahore: We deal with highly fashionable garments which have a short life starting from their production till their demand in the markets. We make all the latest trends in demand for a particular season. CMT rates are known by all, it's when you diversify and add trimmings to make it fashionable you can get a slightly higher margin.

Firm 13, Knits, Large, Karachi: We make plain/blank T-shirts for all sorts of promotions. All our standard T-shirts are colored or white with no printing.). Buyers import our product and whenever a new promotion is due, they print it accordingly. Let's say of the movie *Spiderman* is due to be released, the buyer will get Spiderman printed while if it's a launch of a new product.... etc

Firm 19, Woven, Medium, Lahore: We make uniforms and vests for armies. We also develop some fabric textures ourselves and reap some profit till the first movers advantage lasts.

2.7 Using Information Technology

Globalization of the garments supply chain became possible as information technology lowered the transactions costs of monitoring production by suppliers located in developing countries. This enabled quality control and just-in-time inventory. Firms, in turn, use information technology improves the efficiency of the internal value chain.

Firm 22, Knits, Large, Karachi: "In knits we have quite a strong accounting and we have an ORACLE based accounting system and we do the job order costing on it. Not many factories do it. Job order costing mechanism is done by hardly 5% of the people. They keep on working on it for years. This is developed from the last eight years. We assign a number to every order and do all the expenses according to that job order and when the order is shipped then we make a statement. Whatever expense we incur that is against a certain head. The system is such that once the order number is allotted then whatever expense we incur that is written there. We buy the raw material according to the order number and also do the knitting and the dyeing according to the order number. Everything has the order number written there. Then we consolidate and get the total expense and when we ship it is also according to the order number. So we can know about the expense [on any item] immediately."

Firm 10, Knits, Medium, Karachi: "We have been developing the ERP tracking system since 2009 which is going to be the first such system in Pakistan. Right now 90% of the work is complete and it is going to be completely operational in 2013. It is about the tracking of the garment. Barcode will be assigned to each individual garment to see what operations will be performed on which garment at what time. That way we can see its real time productivity. Suppose I bought X amount of yarn which is converted to

knitted fabric by a certain knitter and the tracking system will also tell us which was the lot it was issued to for dyeing and at which date? So when the garment is scanned it will give complete information on cutting, operations, operations performed by whom the date and who packed the lot. I can see online 100,000 pieces with 50,000 pieces being in cutting, 25,000 pieces in line and 25,000 pieces being off line. So I will say that these many pieces should not be offline and hence I will identify the reason for it. We make a flow chart of the production and work with a chain. Machines are divided up that is to say that in the manufacture of a garment which machines are required for which operations. Once the bundles open, then it has to be in one flow, it can't be coming back and forth because it would be time sensitive then. So we have been working on the ERP system, the only thing left in it is the bar-coding".

Firm 30, Woven, Large, Lahore: "The passwords to these CCTV cameras installed [on the shop floor and service areas] are known by the customers abroad. I was asked about the logins and passwords at the meeting. A customers in the USA asked me about the absence of fire extinguishers and threatened [either] install [or} otherwise he would cancel the order. It was a requirement of the one of the buyers located in the USA and UK. Cameras cover the entire production plant."

Firm 24, Knits, Medium, Faisalabad: "We have an online tracking system. If the customer wants to know where the order is, I have people in the IT department and the information is fed online. They can go online to check whether it is at the cutting stage or the knitting stage etc. Every customer has a different id number. So he would enter the id and the password to know the details of his orders"

Firm 6, Woven, Large, Lahore: "If I have a person on some operations and I compare his time, or what is called Standard allowable Minutes (SAMs) in the language of industrial engineering, to the ones I am dictated from the bench marks , his SAM is much higher than that."

Firm 23, Woven, Large, Karachi: "We were amongst the very few companies who installed a system [CCTVs and monitors] in order to get a clear visibility of actually what is happening in the [production] system. If there is something happening in your washing then you can just look at the monitor."

Firm 18, Knits, Large, Faisalabad: "In this entire discussion of the manufacturing processing, I have not talked about the fact that how do we govern it. All our systems are IT based which ensures complete traceability and tracking"

Firm 27, Knits, Small, Karachi: We use automated cutting technology to ensure less wastage.

Firm 3, Woven, Small, Lahore: We are gradually shifting to automated stitching machines as they are energy efficient and productive.

Firm 12, Knits, Large, Lahore: My machines are automated and I even got a full automatic dyeing plant with a capacity of 20 tons but eventually had to convert it to semi-automated. [As] its hard to find the right people to operate it so now with the current semi automated settings, the capacity is 17 tons.

Firm 2, Knits, Medium, Karachi: We do not have automated cutting or sketching tools as we have an experienced tailor whose patterns have always been approved so we really do not feel the need to employ any technology. In terms of keeping records and stocks, we do resort to IT to manage our records.

Firm 4, Knits, Woven, Large, Faisalabad: We have automated machines, JIT (Just-in-Time) inventory and security systems. Industrial engineers are hired to calculate SAM and SMV [Standard minute value]. However we are short of Machine operators who could better handle the automated machines.

2.8 **Producing to Global Standards**

Contrary to the general view that garment factories are sweat shops that allow buyers to violate rich country worker safety and environment standards, our case studies reveal that being part of the global supply chain is resulting in global standards that are setting trends for other manufacturers (not subject to such standards) to emulate. Many of the medium and large firms are WRAP (Worldwide Responsible Accredited Production) certified, which is a certification for social compliance.

Firm 17, Woven, Medium, Lahore: "We are Global Organic Textile Standard (GOTS) Manufacturing certified which is the highest standards of organic products in Pakistan. We didn't do everything by ourselves, we created a supply chain, and we created synergies. We made a whole collection for catalogue. Now the catalogue is running in the U.S and it is highly credible and it is manufacturing for other brands also. We are making for Timber Land, we made for 'Life is Good' - all fitness inspired and the environmentalists." "This is all organic, hand-made, hand embroided basically all sustainable products, with the embroidery done in Chitral. We have set up a supply chain again, and developed a team of creative people and designers here which can develop a product using their skills and the quality of the product should be such that we can present it in the world standing next to any brand in the world."

Firm 20, Woven, Large, Lahore: "If I have to work with LEVIS, I need to have a full-fledged water treatment plant. This is the requirement by all the brands."

Firm 23, Woven, Large, Karachi: "In terms of quality, the customers to whom we are working we need all the certifications for all the compliances, etc. We are not allowed to

outsource. If they allow it then we will definitely go for it because it is definitely cheap. So it will save us a lot of money but we are not allowed"

Firm 28, Woven, Large, Karachi: "There are some brands like LEVIS, H n M, and GAP which don't work with you until you have the waste water treatment plant and the Reverse Osmosis Plant. So they would not place order with you until you have these. So from the buyer side it is this restriction as well. They might give you a time of three to six months so that you can install them before placing the orders. We have the water treatment plant and the RO [reverse osmosis] plant. We are WRAP certified and we have other certifications as well. Whenever a customer comes to us we fulfill their requirements. We have a dedicated team regarding this and have a compliance department in this regard"

Firm 10, Knits, Medium, Karachi: "My factory is SA 8000 compliant which is the superior to all other compliances. I don't need to get other certification for my factory. When a factory is compliant the rates would be different."

Firm 15, Knits, Large, Karachi: "In Bhinder where we grow our organic cotton and where we have our ginning unit, there are other industries there as well. But Bhinder geographically falls under the territory of Balochistan. That's 60 km from here. In fact in Bhinder where we grow organic cotton, I made three primary schools and a secondary school there. There was no school there"

Firm 5, Knits, Large, Lahore: "It is a modern unit. This is also fully compliant: light, clean water, cleanliness, sanitation. Also we have to be careful whether the chemicals that we are using are harmless or harmful so all these things we have to take care off. We have to provide the fire-fighting equipment to avoid damage in case of fire break out. So these things add up to the cost. In order to run a treatment plant it requires 10-15 lac; for aeration; it consumes 200-300kW of electricity but this is necessary for compliance"

Firm 6, Woven, Large, Lahore: "We have so many audits of the factory by the buyer that we are forced to be socially complaint. If I am not socially compliant then the customer would not work with us. If they find even a single case of child labor here, they can cancel my standing orders as well. So we are very careful about issues such as minimum wage, provident fund, and double over time etc. We fulfilled the minimum wage requirement in the same month when the notification was issued."

3 Growth: Past and Future

Garments have provided many countries an opportunity to enter the global trade regime and benefit from productivity and income gains for their workers. In the 1940's, Japan was a major supplier of garments followed by the East Asian tigers in the 1960's. Meanwhile, developed economies, faced with rising domestic labor costs combined with concerns about loss of employment, began to strike long term relations with East Asian economies to structure a managed trade regime in garments. Later this evolved into the 20 year Multi-fiber Agreement (MFA) between the United States and other advanced economies that resulted in negotiated quotas with major suppliers of garment and textiles. This was followed by other agreements (such as the Agreement on Textiles and Clothing, ATC, reached in 1995 and a host of regional trading agreements) that facilitated the dispersal textiles and garments manufacturing to developing countries.

Highly sensitive to wage costs, the spread of the garment industry has followed the changing wage patterns in manufacturing countries. Europe and Japan moved out of garments as living standards improved making way for East Asian countries. They, in turn, made way for China following increase in their labor costs. In 2010, China had a 37 percent share (up from 18.3 percent in 2000) in the world garments trade with Bangladesh, Turkey and India ranked 4th, 5th and 6th respectively. Pakistan was ranked 12th with a share of 1.1 percent unchanged from 2000.

Our case studies pick up some of the detailed nuances of the changing international scenario that influences firm growth.

3.1 Episodes of Rapid Growth

Firm 18, Knits, Large, Faisalabad: "The first major growth spurt was in 2000 where we went from 150 machines to 400 machines. Then we kept growing every year. In 2003, we were working with 700-800 machines and then we went to 1700-1800 machines. That was a big jump. The next jump came in 2006 and then in 2009 and the last one in 2012. In between, there was steady growth at 20-25%. Actually the main growth push was in two years, 1999 and then 2000. We were increasing our customer base and then of course when you start from scratch there is multiplication along the way. After that in 2003, we brought in a new customer, Russell Corporation that gave us a huge volume. It did a large fall (season) fleece program. This required us to increase our capacity in sewing. By 2006 we penetrated quite a lot in the retail stores. We were dealing with Walmart and JC Penny. They had given us the divisions of sportswear and a huge volume was coming to us. By 2009 we had gone into value-added garments with Abercrombie & Fitch and others. Our requirement for sewing machines kept on growing. The orders with JC Penny and Walmart kept on growing and then Coles was also

added to our customer base. This year we have added another very good customer by the name of Under Armour, which is a U.S based company. They are a big upcoming company and a brand. In my view, in a matter of a couple of years they will have a big impact."

"JC Penny in 2003-04 informed us that they are making a substantial change in their supply chain. They had decided to get out of logistics and asked us to manage that stage of the supply chain. They now required us to deliver directly to the retail outlets. We were now required to keep our own warehouse (we have huge one in Los Angeles). JC Penny educates us on how to deal directly with the stores. Walmart and Coles studied the change introduced by JC Penny and came directly to us. We explained to them our IT based model and they liked it very much. In fact, we are now doing IT based logistics systems for 6-7 local vendors, including Interloop, the socks giant. We have a separate team designated for it. We have a complete software house here.

Firm 15, Knits, Large, Karachi: "we owe our growth and quality improvement to companies like Walmart, Sears, JC Penny etc. They have persuaded us to discard old methods and use new, more efficient, equipment and processes. There have been times when Walmart says to us that we should buy such and such machines. They have even brought the machines here, demonstrated their use and given us price discounts to buy the machines. So we owe it to them."

Firm 4, Knit/Woven, Large, Faisalabad: We expanded immensely and increased capacity on a large scale towards the end of the quota regime. Everyone was of the opinions that huge orders would be awaiting Pakistan and small players would be forced to leave.

Firm 9, Woven, Small, Faisalabad: I was working with a partner till 2010. I was responsible for production and the partner for marketing. We had some differences and eventually separated. That's when my buyer asked me to set up my own unit. So in 2010 we started off with 16 stitching machines and now we have 60. That buyer is still with me.

Firm 25, Knits, Small, Karachi: We do our business through buying houses. And since we started in 2007, our scale is very mall. We are gradually expanding to reach out to customers with bigger orders.

3.2 **Prospects for Future Growth**

There is consensus among firms and international experts that as with others before it, rising costs in China are driving it out of garments. This provides an opportunity for garment manufacturers in other developing countries to take the export market share vacated by China. Given the global garments trade of \$350 billion, of which China's share is 37 percent, this is a huge market share available to others to capture. In fact,

China may itself become an attractive export destination. Domestic sales of garments in China doubled between 2005 and 2011 (Textiles Outlook International, December 2012). A survey of Chinese apparel producers indicated that 93 percent of their turnover in 2011 came from the domestic market.

The case studies provide some insight into whether Pakistani garment manufacturers are gearing up to take advantage of the opportunity presented by China's withdrawal. One way to assess this is to examine capacity utilization by firms. High capacity utilization (80 percent or more) would be an indicator that firms are taking decisions about expansion. Among the firms studied (Table 3.1), a small proportion reported under 50 percent capacity utilization. The majority of firms reported over 80 percent capacity utilization. And yet, few firms expressed strong optimism about future growth prospects.

	0-50%	50-80%	>80%
Knits	3	7	6
Woven	1	2	9
Total no. of firms	4	9	15

Table 3.1: Capacity utilization

When asked directly about future growth prospects for the industry, 11 (mostly in woven wear) said that prospects were bright, 12 said that they would muddle along while 4 were downright pessimistic. Note that twice as many woven wear firms were optimistic about future growth prospects than knitwear firms and three-fourths of knitwear firms thought prospects were poor or indifferent, as compared to one-third in the woven wear. When asked about the firm's own prospects 12 were optimistic, stating that despite the distortions, they were experiencing growth. While 14 firms were of the opinion that they could do much better but were restrained by factors such as energy shortages, volatile yarn prices, bad law and order, etc.

It is also important to look at how the pattern of the buyers' activity influences the firm's views about the future. Six firms saw no change in their buyer's attitude; buyers are regular, consistent and satisfied with the orders received. While 18 believed that more buyers could easily be attracted but due to the disruptions, the buyer is reluctant to place orders in Pakistan. A closer look indicates that firms in the knitwear industry were facing greater difficulty in establishing a solid buyer's base. This problem becomes clearer after taking into account the difficulties of 6 firms in trying to retain existing buyers. They had either suffered or were suffering from customer pull out. All 6 belonging to the knitwear industry; some of these firms are still in the business but are incurring heavy losses while the others have halted their operations.

Table 3.2: Prospects for Growth

	Outlook for Pakis Garment Industry		Pakistan's	Specific with regards to the Firms – outlook is positive		Specific with regards to the buyers– outlook is positive		
	Bright	Dim	So-So	Yes	Yes, But	Yes	Yes, But	No, Buyer pulling out
Knit	4	3	9	8	7	3	11	6
Woven	7	1	3	4	7	3	7	0
Total No. of firms	11	4	12	12	14	6	18	6

Let's hear it directly from firms on growth prospects:

Firm 30, Woven, Large, Lahore: "We added 200 machines three to four months back. Previously there were 400. The machines are fully operational."

Firm 23, Woven, Large, Karachi: "We are among the top denim mills in Pakistan. We intend to be the number one mill in the next five years' time. Currently we are producing 1.5 million pieces a month and we intend to reach 2.1 million pieces a month." "We are somewhat vertically integrated but we don't have our own spinning mill. We are in the process of getting there but it will take another five years' time."

Firm 24, Knits, Medium, Faisalabad: "In the next year we are increasing our facility to more than a 1000 machines. We want to increase capacity but the problem is that we are short of space. We were not big to start off with but we grew big step by step. We are quite established now."

Firm 22, Knits, Large, Karachi: "Since 2009 there is an increase of 15-20% [in production] every year. This year we have increased three lines so it is an increase of another 15-20%." "We have an average of 400 machines in this particular building and we are producing 50,000 dozen [pieces] a month. With given capacity, we are hoping to achieve the target of 60,000 dozen per month".

Firm 10, Knits, Medium, Karachi: Revenue last year was \$9.5 million - we almost touched almost \$10 million. The year before that it was US\$7 million and the year before that, US\$5 million. This year, till June I have the report, which was for \$6.5 million. The second half is busier so that means that we will easily crossUS\$6.5 million in the second half."

Firm 25, Knits, Small, Karachi: We are gradually expanding our production to be able to take up big size orders.

J.B, Industries, Knit, Large, Karachi: We have gone through some rapid expansion and forwardly integration. We expanded our capacity gradually every year. But now I have come to a point where the 'one man show' can no longer work. Expanding further, would require additional management and it's hard to get professional managers in this business. Due to the stress level involved, it's mostly run by families.

Firm 12, Ltd, Knits, Large, Lahore: I do realize that in order to sustain myself, I have to grow at least in line with the rate of inflation which has been in double digits in Pakistan. I have grown in the past but now with the increased number of distortions lowering our price competitiveness, I am not getting any orders and hence there is no question of expansion.

3.3 The Competition

India and Turkey, currently ranked 5th and 6th in terms of their share in the world garments market, managed to increased their share of the market by a modest 0.2 percent in the period 2000 to 2010. Vietnam is on the other hand, is a more likely contender for the opportunity provided by China's departure. Between 2000 and 2010, Vietnam increased its share of the world garments market from 0.9 percent to 3.1 percent. Bangladesh that nearly doubled its share from 2.6 percent in 2000 to 4.9 percent in 2010, may be an even more serious contender.

Many Pakistani garment manufacturers have regular contact with their Bangladeshi counterparts and therefore have an understanding of their strengths and weaknesses as potential competitors for the market vacated by China. Firms interviewed for this study were asked how they perceived the threat of international competition, in particular from Bangladesh that might cloud their growth prospects. The objective was to elicit from the firms their "working" benchmarks of international competitiveness.

	Bangladesh-A Threat?	Bangladesh-Not a threat?
Knits	12	4
Woven	8	4
Total	20	8

Table 3.4: Views on Bangladesh as it affects firm's prospects

Firm 1, Knits, Medium, Karachi: "How much order can the world give to Bangladesh. They do have a saturation point" "In Sri Lanka and Bangladesh, they get the forecasting for the whole year from the buyer. When it is so, they are better able to program the production and the procurement whereas we can't do that" **Firm 28, Woven, Large, Karachi:** "Bangladesh despite having the advantage of 10% in GSP also has the advantage of labor cost: labor cost in Bangladesh is 1/3rd of Pakistan's. If the salary is \$38 in Bangladesh then it is \$90 in Pakistan." "When we approach the buyers they say, "Since we are not able to send our quality control people to Pakistan how can we work in Pakistan" whereas some of the best brands in the world are working in Bangladesh."

Firm 15, Knits, Large, Karachi: "We don't want any exemption. Don't have mercy on us and give concessions. What we are saying? We only say that finish off the concessions for others. Level playing field is one answer to all the problems. The day it is done, Bangladesh's industry will be finished."

Firm 18, Knits, Large, Faisalabad: "Bangladesh had 15-17% price advantage due to various rebates. 6-7 years back Europe was considering withdrawing the tax advantage given to Bangladesh. The Bangladeshi PM was in the EU for 12 days to prevent that from Happening. It was argued that because Bangladesh has to face the floods, the people are susceptible to poverty. In Pakistan, who cares for us?"

Firm 11, Woven, Small, Lahore: "Our customer first gets the quotations from everywhere e.g. India, Bangladesh etc. So we have to let go of certain big orders because our costs are high especially the overhead costs."

Firm 20, Woven, Large, Lahore: "An issue which has hurt Pakistan in this field is the duty free structure in Bangladesh. If I export to Europe I will have to pay 12% duty or the customer has to pay 12 % duty. On the other hand Bangladesh is duty free till now. So it has an edge over Pakistan." "Even though we have an advantage of cheap cotton still we cannot compete with countries like Bangladesh or India because their labor is well trained."

Firm 23, Woven Large, Karachi: "China is almost out and now we have competition with Bangladesh"

Firm 5, Knits, Large, Lahore: "Be it LEVIS, NIKE, H & M, Chess nobody is here. They have shifted to India or Bangladesh. We have to travel there and we have to beg for the orders. We go there as beggars. They give us the orders, which are leftover by these countries. We are no more in a position to dictate our business" "Many people went to Bangladesh and have established their units there. There are banking facilities there and there are buyers there" "Bangladesh is a very cheap country but their export per kg is three times than ours. They are exporting the garments, which are light-weight. We get the orders, which are heavy fabric garments, which they can't manufacture because their spinning sector is weak. But it is growing. They have 5.5 million spindles. Unit value is less than ours but overall per kg value is more than ours. Ours is 2 garments per kg. Theirs is 5-6 garments per kg."

Firm 6, Woven, Large, Lahore: "For Bangladesh, if you say the export is 20 billion dollars, then they also have the duty free access to European Union for so many years now which we do not have. They are also getting some cash rebate probably, in terms of their export performance, which we had for some time and then sometime not. And also their policy makers think more about the textiles and the made ups because that is their main business and there are people in their Assembly (parliament) who are garment manufacturers and our Assembly does not have garment manufacturers. That is why they have an edge as far as the policymaking is concerned. We have a difference of 10% in selling price in the form of import duty. It is difficult to match it. But once we have a duty free access to E.U. then you will see the difference in growth here as well." "I would say that one should be given level playing field so that I can compete with Bangladesh".

Firm 10, Knits, Medium, Karachi: "We don't work with customers (buyer/stores) who had been already working in Pakistan. Most of the customers that we [have] brought in had been working with Bangladesh or India or China". "If we are diverting the work which was originally done in Bangladesh or India, it shows that we can compete."

Firm 22, Knits, Large, Karachi: "Even for the US the large volume goes to Bangladesh, for smaller quantities they don't have any other choice so those orders are placed here. Our currency is depreciating and the currency in India is appreciating so we get the left over orders of India as well" "Competition is more from Bangladesh and Vietnam now. India is a market for Bangladesh".

Firm 30, Woven, Large, Lahore: "People normally prefer to place orders in Bangladesh because of our government policies." Yesterday I was sitting with the compliance manager from Bangladesh and he was looking at the number of people who are dealing with Primark from Bangladesh or Pakistan. He was telling me that Pakistan is far behind in the compliance issue as compared to Bangladesh and China. We don't see that happening for Pakistan even in the next ten years. Bangladesh was far behind us but now it is ahead of us"

Firm 32, Knits, Medium, Faisalabad: "The biggest factor is the labor cost. Bangladesh, Cambodia, Sri Lanka, Vietnam are out-competing us because the wages are less and secondly they have got the duty advantage especially in the EU. We pay 11-12 % duty. This adds up to our cost so the customer prefers Bangladesh and he can get a cheaper price there".

Firm 13, Industries, Knits, Large, Karachi: GSP is definitely a factor stopping us but otherwise Bangladesh is not a threat. We have better labor. The workers in Bangladesh may be more docile and obedient but look at how much they can produce in a given amount. Our worker if handled well is much more productive".

Firm 25, Knits, Small, Karachi: It's definitely a threat. GSP allows them to be competitive. Buyers have to pay duty on our products while it's not the case for Bangladesh. Then Bangladesh gives priority to its textile industry with no law and order problems, incentivizes it and subsidize it as well. We neither have GSP nor any subsidies.

Firm 12, Knits, Large, Lahore: For sure, the GSP is a huge factor plus Bangladesh has consolidated a huge base in knits. The new customer will not come because there is not much of an advantage in the pricing of knit wear. Bangladesh has gone up a lot in knit wear (competency in costing), business is migrating from China because of it policy (announced 3 years ago)to shift from high energy cost producing goods to low energy products and are gradually increasing the cost of textiles. Then the way Bangladeshi laborers work; they are so obedient and submissive. They have seen hardships and value their job whereas here the workers still have an agriculture background giving them the job security and an attitude.

Firm 3, Woven, Small, Lahore: Bangladesh has GSP access which means once Bangladesh refuses an order, that's when it comes to us. Plus Bangladesh has really specialized machines for different types of clothing while we are lagging behind. They can invest in these machines because they have large orders.

Firm 19, Woven, Medium, Lahore: "GSP is greatly effecting our cost competitiveness. No disrespect to Bangladesh but we are giving all our Raw Material to them, why don't we use our own raw material and process it. Once this stops, we can attract the buyer to come".

Firm 31, Knits, Large, Faisalabad: "They have so much to offer, be it incentives, marketing, labor dedication and skills, quality of the product etc. We need to follow their model. I am the only company in Pakistan who owns a factory in Bangladesh."

Firm 13, Industries, Knits, Large, Karachi: "I have done a lot of research and my family has been doing business for long. What I have seen that whoever has stayed in Pakistan has benefitted. Bangladesh has its problems. If there are strikes there, the workers destroy the entire factory."

3.4 The Bottom Line

The garment industry in Pakistan is actually a story of two different industries when it comes to growth. While the knitwear industry was not immediately affected by security concerns and US travel restrictions following 9/11 because of its large US quotas, US buyers in planning their supply chain for the post-2005 period downgraded Pakistan from the position of a primary supplier. Thus the end of the quota regime in 2005 saw fall in orders which was major shock to knitwear industry and many of the largest firms which were over extended (such as Ammar, Klass, etc.) closed down. The industry had

hardly recovered when it was hit by a series of adverse shocks starting end-2007, which resulted in more business closures including of leading firms such as Leisure textiles. In December 2007 Benazir Bhutto was assassinated and in 2008 and 2009 there were a spate of terrorist bombings in Lahore and these events made international buyers even more reluctant to have Pakistan as a major supplier. The situation was compounded by the global recession in 2008-09 and a record flare up in cotton prices in 2010. Since then the industry has been faced by crippling power and gas shortages. The firms in our sample are the ones that have survived these shocks, but many have been badly affected. In the South Zone four of the firms are in crisis while in the North Zone two of the firms are closed and one is operating at 50% of capacity. Of the 20 knitwear firms in our sample only about 5 are still growing strongly, with one of them also having set up a manufacturing operation in Bangladesh.

For the knitwear industry to regain growth momentum, among other things, it needs to diversify away from US to Europe where Bangladesh, its major competitor, enjoys duty free access. Firms in Pakistan are confident that if they had a level playing field they could successfully compete in Europe and substantially expand their market share. Therefore, the outcome of Pakistan's application to EU for GSP plus status in 2014 may well be a deciding factor for the future of the knitwear industry in Pakistan. If the negotiations are successful and Pakistan can begin to solve its energy problem then knitwear industry should see strong growth in coming years, however, if Pakistan fails to get GSP plus status then the knitwear industry is likely remain in the doldrums.

The situation in woven garment sector is quite different. Its prime market is Europe, where travel restrictions and security concerns are less binding. The industry has been growing strongly, and a number of firms have developed capabilities necessary to successfully compete and move value ladder. Firms like Firm 6 are among the fastest growing in the world and others like Firm 23, Firm 28, Firm 34, and Firm 7 have reached a scale of production, which will allow them to successfully compete in any market. The denim fabric produced in Pakistan is among the best in the world, which other exporting countries like Bangladesh and Vietnam have to import. However, over the medium term to sustain growth in woven garment industry will need to diversify, as there are limits to how long it can base its growth on only denim jeans.

4 Risks to Achieving Growth Objectives

A major risk to taking advantage of the growth opportunities presented by the changing dynamics of the international market for garments is competition from garment manufacturers in other countries. This was discussed in the previous chapter. This chapter discusses risks to growth objectives arising from Pakistan specific factors. The first is the risk arising from within the firm i.e. entrepreneur specific risk that has to with an individual's capacity to respond to the opportunities, the way the firm is organized and the marketing decisions taken by the individual firm i.e. relying on one big buyer versus reaching out and contracting with diversified buyers. The second category of risk is associated with the market environment in which the firm operates. These include the labor market, the markets for capital, raw material (for example, yarn/raw cotton availability and stability of supply and prices), market based compliance with safety and environment standards (i.e. availability of market based certification), availability and reliability of energy (gas and electricity) and the quality of infrastructure that affect logistics and therefore the cost of timely delivery of orders. The third category of risk is sovereign or country risk and is associated with an unstable macro-economic environment, political instability and general law and order that encompasses strikes by workers or other stakeholders and violence due to militant activity (Political Violence in Pakistan 1988-2010: Patterns and Trends, IGC).

4.1 Risks internal to the Firm

Management/internal organization related risks to growth and expansion were identified by 14 firms in our case studies. More small and medium firms spoke of management /organization risk than large firms. Among the woven wear manufacturers, it was the large firms that spoke of management/organization as being a problem. Five firms in our sample, mostly small and medium sized firms, pointed out dependence on single buyer as a major threat to growth prospects.

Table 4.1: Risks internal to the firm

		Management/ organization	Buyer Dependence
Knitwear	Large	2	1
	Small and medium	5	3
Wovens	Large	7	0
	Small and medium	0	1
Total No. of firms		14	5

Selected responses by firms on perceptions about internal risks are reproduced below:

4.1.1 Management Limitations

Firm 23, Woven, Large, Karachi: "See, I may be extremely good in Textiles and very skillful in knowing the details of the process and the product itself but when it comes to coordination and making the process flow, how to connect different activities, you need different skills. I am so involved in developing the product that I somehow ignore the importance of other activities that make the supply chain move. We realized that we need management specialist to do this for us. We had actually hired someone from LUMS. He stayed for three months and then left. The reason for hiring him was to help improve coordination across departments. But the nature of the business is so volatile and the environment is perhaps not conducive enough to allow people from good institutions to flourish. We have been trying our best to induct people so that they feel that they can prosper in this business. But they lose patience."

Firm 27 Knits. Small, Karachi: "We shut down for some time because we had some family issues as it's a family owned business and there some working capital problems. Banking issues as well but we have talked to them and they have been cooperative so it's going to work well now".

Firm 2, Knits, Medium, Karachi: We have actually shrunk our operations as it has become hard to manage at a large scale. This business of garment manufacturing is stressful at every stage. We have to chase and keep a check at every point. It's a family owned business where each member is looking after a particular department and for now that's all we can manage.

Firm 13, Knits, Large, Karachi: Obviously every business wants to expand, our business has expanded over 200% in the past 2 years. But now we have reached a level, where 'one man show' can't be extended. We need an entire team now.

Manufacturing is not an issue; our labor can churn out some good stuff efficiently. I export fabric to Sri Lanka, yes their workers might be more docile, ethical etc but our labor is way more efficient. Our labor has the capability. The problem is the absence of Middle Level management. In Pakistan there are mainly family enterprises, with Seth (autocratic) culture. It is vital to change the Seth culture.

4.1.2 Buyer Dependence

Firm 27, Knits, Small, Karachi : "The business was going reasonably well until 9/11. We had an operation in UAE, Jordan and Mexico... Our biggest customer at that time was American Eagle, a very patriotic American brand and [after 9/11] they refused to buy from Arabs or the Muslims."

Firm 32, Knits, Medium, Faisalabad: "Things are not that great this year. We were dealing mainly with Aeropostale. We had fully booked our capacity for Aeropostale but all of a sudden their orders were disrupted. We were not dealing directly with the buyer. A local buying house was the intermediary. The buying house had a program with the buyer and they had some disagreements so the buyer stopped giving them the work. They [Aeropostale] are doing very limited work in Pakistan now. They had a lot of work in Pakistan in the last season but now it is not even 5-10%. The issue was late deliveries. Not from us but from the other vendors"

Firm 16, Knits, Small, Karachi: We started to shrink our operation after the abolishment of the quota regime because we were not receiving sufficient orders to cover the overheads. Then one of our big buyers (Walmart) asked us to acquire an octopus printing machine [which we did, but unfortunately the paint used in] it gave some allergies to a child in the United States. That resulted in not just Walmart not buying our products but a sharp decline in the worldwide demand for octopus printing machine [products]. The investment was a huge loss. Most of our financial capital was bank-borrowing with heavy interest payment which we could not pay. Since 2007 we have gradually abandoning our operations. Now we just knit and weave for others commercially. We are no more into exports.

Firm 12, Knits, Large, Lahore: In the good old days when Gap was my main customer [and I was a strategic vendor for them], they had strategic vendors who received the orders first and they also had back-up vendors. Any adjustment in orders affected back up vendors but not the strategic ones. But unfortunately this has changed. Now every season new costing is devised. The world is a huge place. You can find many suppliers. Gap introduced the change in denim and woven but has not yet implemented fully in knits. Recently, when the cotton shortages were experienced, Gap sourcing head was replaced by the head of logistics. He announced that the sourcing model was flawed. While sitting in San Francisco, they were not competent to take decisions since they

had no knowledge of the market. Instead of making sourcing hubs compete, we should allow them to take their decisions in a coordinated fashion. There are now 3 hubs: for denim, woven and knits. India has denim and Hong Kong has woven. We are in the India hub for denim. Unfortunately knit [hub] has been given to Korea. In Pakistan, there are 2 suppliers of knit and denim (Artistic in Pakistan). All the knit business has gone to Korea, mostly fashion with very basics left to us hence reducing our production even further.

4.2 Factor Market Risk

These are risks to growth and expansion embodied in the enabling environment in which garment manufacturers operate in Pakistan. Four categories of risks are discussed: i) risks associated with the availability of human resources, ii) those associated with the capital market, specifically working capital, iii) raw material related risks and iv) risks associated with energy and general infrastructure.

4.2.1 Human Resources

Firms identify two aspects of the labor market as being vital to the growth prospects of the firm. The first is the availability of stitchers, considered to critical in adding value to the garments, and middle management that coordinates the activities at various stages of the value chain and ensures that the orders are delivered on time and are of the contracted quality. This frees up the time of the owner/managing director to focus on realizing the firm's overall business vision and address the binding constraints that prevent the firm from realizing the vision.

The shortage of stitchers is widespread. Not surprisingly, more large firms complain of shortage of stitchers than small and medium firms. The shortage of stitchers appears to be a larger problems among woven garments manufacturers than among knitted manufacturers.

The difficulty in obtaining middle management is reported by most firms in our sample of case studies. The vast majority of knitwear firms, regardless of size, vocalized the shortage of middle management. Among the woven wear manufacturers, large firms' views on the absence of middle management are similar to those of knitwear manufacturers.

Table 4.2: Human resource availability

			Availability of Market	Stitchers in the	Availability of the Market	Middle Management in
			Abundant	Short supply	Abundant	Short supply
Knitwear	Large		4	5	1	7
	Small medium	and	5	4	1	7
Woven	Large		2	6	1	7
	Small medium	and	4	1	2	2
Total No.	of firms		15	16	5	23

Drilling one level down to where firms are located, relatively more knitwear manufacturers in Karachi report that stitchers are hard to find compared to similar firms in Lahore and Faisalabad. Among manufacturers of woven garments, it is the firms in Lahore who report greater difficulty in hiring stitchers.

Table 4.2.1: Stitchers' availability by location

		Adequate	Abundant	Tight	
Knit wear	Faisalabad	2	1	3	
	Karachi	5	1	3	
	Lahore	1	0	1	
Woven	Karachi	1	0	1	
	Lahore	4	3	4	
	Faisalabad	0	0	0	
Total No. of firms		13	5	12	

Detailed interviews with firms identify some critical aspects of the labor market:

- Large firms carry out in-house training of most of their workers
- Job entry level schooling of workers is considered to be of poor quality
- It is becoming increasingly more difficult to get workers because employment opportunities in the services sectors are growing.
- There is shrinkage of the pool of workers as a consequence of the energy crisis: as firms reduce production, piece wageworkers move to jobs in other sectors (services mainly).
- Location specific shortages of workers are also caused by the security situation as workers move to safer locations.

Here are the views expressed by firms on human resource availability:

Firm 24, Knits, Medium, Faisalabad: "According to our estimates, 40 percent of the skilled workers in our line of business have left work. There is acute electricity shortage and factories can't afford to run on diesel. They start to lay off people and eventually close down. We are providing the training facility also in the sense that if somebody does not get work, we make them sit on a machine so that they can learn. But they are not seeing a secure future for themselves so some of them have opted for other jobs such as plying rickshaws etc."

Firm 21, Knits, Medium, Faisalabad: "We have labor shortages in this industry. Previously, it was the case that 70 percent of the skilled worker (ustaad) would also bring a trainee (shagird) along. The trainee would work for free and would learn on the job. At that time we used to discourage such informal training arrangements since we did not want untrained or semi-trained people in the factory. But now the industry has changed and now we pay people to get the skill. Actually the amount of work is reduced now. People work 15-20 days in a month and with inflation this is not enough. So people are leaving to drive their own motorcycle rickshaw or start a small shop. People say that there is unemployment but we don't find large enough pool of people to hire from. New people are not coming because a) they can't afford to sit idle for several days in a month and b) they have other options like driving motor cycle Rickshaws. Also, agriculture has improved. People previously used to come to Faisalabad from Hasilpur or Bahawalpur but now they have gone back and the people who come don't have that kind of devotion to their work."

Firm 18, Knits, Large, Faisalabad: "A strange thing happened in the last three months. There was a slump in the business. The amount of work declined and piece workers didn't have much to do so they went off. After a while when orders came in and we called them, many of them didn't come back. We investigated and got to know that during the 1.5-2 months they were off, many had found jobs driving Chingchi rickshaws (Chinese motorcycle rickshaws). I met some of them personally and said that you have worked here for so long so what is the matter now. They said that we used to work the same number of hours with you as well but now we are the masters of our own time. We didn't think about it earlier but when we were free of the factory job we thought about it. Now we go to work and also give time to our children. We earn the same amount but it's not a factory job. We don't have strict timings nor the compulsion of waking up early. Sometimes my son drives it and sometimes I do it. So the laid off workers have found alternatives to the factory jobs. Secondly, for those who are a little bit educated, sometimes they get fed up of the factory job and if they have a better wage offer from somewhere, they leave."

Firm 22, Knits, Large, Karachi: "See in Karachi when the law and order situation went bad, people from Punjab left and now there is a shortage of skilled workers"

Firm 9, Woven, Small, Lahore: My product is different and so is the required skills set. I find workers and then train them in house. The problem is the mindset. These people need and can rightfully earn it by doing work and producing more pieces but they want easy money without putting in effort.

Firm 12, Knits, Large, Lahore: The mindset is the problem. Workers do not understand the importance of quality or the dynamics of the garment or the consumer. For them it does not matter if a stitch is skipped as we have a common practice in Pakistan to sew minor errands but that's not the case in the United States.

Noor Apparels, Knit, Medium, Karachi: Yes at times its high peak season and you can't find enough workers. Usually we work with labor contractors. Also strikes and bad law and order [day in the city] means it's a day off from work as the workers do not show up due to security hazards.

Firm 8, Knits, Large, Karachi: The stitching operators are very hard to find. The rest is fairly easy.

Firm 13, Knit, Large, Karachi: Personally I am investment banker and prefer to do trading than manufacturing as I hate dealing with uneducated workers and tedious labor issue such as directing and instructing workers at every stage.

Firm 4, Knit/Woven, Large, Faisalabad: Finding skilled machine operators is a difficult job. That's where we find the biggest shortage

Firm 25, Knits, Small, Karachi: Yes we do face some difficulty finding the right people and equally hard to retain them. The workers keep switching plus they insist they know a lot but when the crunch comes, their lack of skills shows up. Middle management is not a problem as it's a small firm and we don't need managers.

Firm 7, Woven, Large, Faisalabad: Blame the worker's education, their village where nothing was taught, or irrelevant education. Starting from class 1, it is not about computer, laptop or speaking in English but more with acquiring a skill. You will pass and then become a *babu*... At grade 5, you can judge if the student is good at math or science. 10% of the students study useful areas whereas 90% take up to humanities or the so called humanities. The 90% who fail, should be directed elsewhere. Secondly our location: we are away for the industrial hub. The industry has evolved in general imbibing bad practices. The reason for going to a distant rural location was to train everybody from scratch, not just out of fear of losing workers but also because of the trend of contractual labor where bad labor practices spread from factory to factory.

Same goes for management. We were able to control the inflow and outflow and prevent inheriting anyone else's garbage. Our first question used to be 'do you know stitching' and if the reply was 'yes', we would not recruit. We spent US\$4 million to train people from scratch.

Firm 27, Knits, Small, Karachi: At times it is hard to find the right stitcher, or if he is new then he takes his time to adjust. But then we have contractors and they handle such problems.

4.2.2 Working Capital

The vast majority of firms self-finance their capital needs both the initial investment as well as the working capital. The initial investment may be pooled resources among family members or among friends /business partners. Working capital is generated via advances from buyers. By and large, firms report that both working and fixed capital are abundantly available and would not currently pose a risk to plans for expanding business.

Detailed interviews reveal considerable reluctance to borrow from banks. This is occasionally because of religious beliefs ("interest based finance is forbidden"). It may also be reflective of the high interest rates currently prevailing in the market. A substantial expansion to capture a larger share of the international market for garments would require substantially larger working capital and increased bank funding. The high interest cost thus would pose a risk.

		Self-	Borrowed	Working Capi	tal	Fixed Capital	
		Financed		Abundant	Short	Abundant	Short
Knitwear firms	Large	8	1	8	0	8	0
	Small and Medium	8	2	7	2	6	2
Woven wear firms	Large	7	1	5	1	6	0
	Small and Medium	5	0	3	2	1	3
Total No. of F	irms	28	4	23	5	21	5

Table 4.3: Sources and availability of capital

The working capital requirements for a firm in the garment industry are substantial and a rule of thumb is that working capital can be turned over 5 to 6 times in a year, in other

words a firm with Rs 1 billion (\$10 million) annual exports will need about Rs200 million of working capital. Since most firms don't want to borrow from the banks, their operations and growth are limited by the funds they can generate themselves and on the terms they can get from the yarn suppliers.

Firm 17, Woven, Lahore, medium: "Ever since we have started this business, either we work out the terms with the customers or with the suppliers. We say to fabric suppliers that we will pay you in 30 days or 60 days and we are pretty honest about it that we don't have the bank financing etc. Sometimes LEVIS gives the guarantee on our behalf to the supplier. So when we have to create the supply chain equations we know what not to do and then we manage everything accordingly. It's like a home-made bakery. It cannot be standardized. It includes your personal emotions, your relationship with the customers, customer's trust and it took around 20 years starting from 1993 and not only from 2004 when I started the business."

Firm 11, Woven, Small, Lahore: "We have not dealt with the banks as far as the financing is concerned. The owners say that we have to manage everything within what we have and not borrow from the banks."

Firm 20, Woven, Large, Lahore: "Normally our investment moves around 6-7 times because our lead time is let us say 40-45 days. In other businesses our investment moves around 4 times."

Firm 29, Knits, Small, Lahore: "I generate the working capital from my business and reinvest. I took loan from a bank once. It was for six months and I paid it back. The best thing is not to take any loans. If a company is running without loans then it would be able to survive even in the worst of times and it will flourish"

Firm 32, Knits, Medium, Faisalabad: "I don't owe the bank a single penny. It is all selffinanced. So even in bad times I have the ability to survive" "there is a cycle: if Rs10 crore(100 million)is in circulation, you can operate 500 machines and you can make 200,000 pieces of garment. You will need to inject more money if you want to increase capacity. If not, then the circle keeps running. The shipment that I did last will give me the money to run the current cycle: I will buy yarn, pay the supplier and pay the wages"

Firm 28, Woven, Large, Karachi: "basically working capital is a combination of selfequity, Islamic banking and the credit from the supplier side. So it is a combination of all three."

Firm 24, Knits, Medium, Faisalabad: "we are one of those companies that are loan free. Whatever money we have invested in the company, we don't have any loans."

Firm 23, Large, Woven, Karachi: "REPEAT We are one of those companies which are loan free. Whatever money we have invested in the company, we don't have any loans."

Firm 22, Large, Knits, Karachi: "We are a self-financed company and we don't do any business with the bank. Some time back we took some loan from the bank but very little – when we bought this unit – but we paid it off after six months" "The dealing with customer is on LC (Letter of Credit). Some customers also have Document payments but mostly on LC. Once it is shipped, then we get the payment within 15-20 days. Shipment is done in 45-60 days and the payment comes in 15 days. Also there are some payments, which can be deferred. We pay the yarn mills after 15-20 days. We have to pay the labor in cash and also we have to incur the utilities costs as cash"

Firm 10, Knits, Medium, Karachi: "In 2001 my mother said to us that we should not do interest-based financial dealings. Over for four years, since 2005, we have reduced interest based financial arrangements and we are now completely out. I also felt it that at that time there was no barkaa't in the business. Payment would always be short. Now we are very comfortable. Nobody's payments are due. We pay them well ahead of time."

Firm 5, Knits, Large, Lahore: "We managed working capital through rotation and if it is tight we take it from the other unit. Actually I am making my own yarn as well. If I was buying from elsewhere I would have to pay them. But when I export it I get 50-60% working capital. This is how I am surviving" "I don't have much of a bank loan. This is one of the reasons I am existing. I believe that if you borrow then you keep giving it back to the bank only. You have to build up your own resources and that is why I am surviving"

Firm 1, Knits, Medium, Karachi: "For investment we do (bank borrowing) but not for working capital. Working capital is self- generated."

Firm 15, Knits, Large, Karachi: "You know if we hand over the industry tomorrow to our children, we are fine. We are not earning for the bank. The day you start earning for the bank, you are headed to bankruptcy."

Firm 21, Knits, Medium, Faisalabad: "Working capital requirement is quite a lot. We are working very little. Our exports should be 40-50 crore[400-500 million] Rupees. We are just surviving at the moment so we reduced the work. We are incurring losses. If they give us yarn and we take it for 45 days he charges us Rs 1000 per sack. If we take it on cash then it would be less expensive. The interest rate in Pakistan is too high. They are just trying to completely finish off this business.

4.3 Other Market Risks

Since the industry for knitted fabric has not developed in Pakistan, knit wear firms have to purchase the yarn and either knit it in house or have it done commercially. This tends to increase the production cycle time and also exposes the firm to a price risk. Most orders are negotiated and confirmed at least with a 6 month lead time, while the production cycle about 2 to 3 months. Since the cost of yarn is almost 50% of the total cost of the garment, yarn is only procured when a firm is ready start production of that order. If the price at the time of the purchase of yarn is substantially higher than that assumed at the time of negotiating order the firms anticipated profit can turn into a loss. In Pakistan, there is no futures market in yarn or mechanism by which a firm can place an order for yarn at a fixed price three months in advance. Thus knitwear firms are exposed uncovered risk, and many believe that because the spinners have a very strong industrial association (APTMA) they can effectively lobby for policies favoring them as well work together to manipulate yarn prices whenever there is a mild scarcity in the market. These sentiments were expressed by many as reflected in these quotations.

Firm 12, Knits, Large, Lahore: "All over the world forward booking is done but unfortunately here [there is] no mechanism. If here I book yarn for the future, no one will give it to me and even if he does he will quote an exceptionally high price. My revenue is hedged but not cost ..."

Firm 26, Knits, Medium, Karachi: "Yarn prices are extremely volatile which upsets the forward planning and renders the cost calculations for the future obsolete"

Firm 22, Knits, Larger, Karachi: "So what happens is that the moment they [spinners] sell 40 containers to China they say that I have sold these containers to China on a cheap price [because of the large size of the order] so I am now increasing the price for local producers. So China is getting a lower price for Pakistani cotton than what we are getting"

Firm 8, Knits, Large, Karachi: "...where we face the most difficulty is the planning stage as we do not know when the yarn is coming and at what price, because that's not in our hands." "Stabilize yarn prices. Price control authority can help because situation is terrible, it is a monopoly out there and government officials/ministers are mostly supporting the spinning industry, leaving no cushion for other areas"

4.4 Energy and Other Infrastructure

Infrastructure related risks to the firms' growth objectives are summarized in Table 4.4. The main infrastructure constraints pointed out by firms are energy (both electricity and natural gas), water, roads and treatment of affluent water carrying industrial waste. The vast majority of firms (28 out of 32) report severe electricity and natural gas shortage. Both large and small firms are equally afflicted. The next important infrastructure risk is associated with water followed by roads, especially local roads. But small firms report roads to be a problem more frequently than large firms. Large firms, manufacturing woven garments also report affluent treatment facilities to be inadequate.

The quality of infrastructure varies by location and this is confirmed at the next level of disaggregation.

Poor quality of infrastructure is costly for firms resulting in delay in meeting orders that in turn imposes financial costs. The impact of power outages on the labor market in terms of shrinkage of the labor pool was discussed in the previous section.

	-	Energ	gy a Pro	blem?		Other	Other Infrastructure a Problem?					
		Powe	Power Gas			Water		Roads		Afflue Treatr	nt Water nent	
		Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	
Knits	Large	8	1	9	0	5	3	1	8	2	0	
	Small	9	1	10	0	6	4	8	2	0	1	
Woven	Large	6	2	6	2	3	5	3	5	1	4	
	Small	5	0	3	2	1	4	2	2	1	1	
Total firms		28	4	28	4	15	16	14	17	4	6	

Table: 4.4.1 Energy and infrastructure problems faced by the firms (by the size of firms)

Table: 4.4.2 Energy and infrastructure problems faced by the firms (by location)

		Ener	gy a F	Probler	n?	Othe	r Infra	structu	ure a	Problem?	
		Pow	er	Gas		Wate	Water		ls	Affluent Wa	ater Treatment
		Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Knits	Faisalabad	6	0	6	0	2	4	3	3	1	0
	Lahore	3	0	3	0	0	2	0	3	1	1
	Karachi	8	2	10	0	9	1	6	4	0	0
Woven	Faisalabad	0	0	0	0	0	0	0	0	0	0
	Lahore	10	1	7	4	3	8	5	5	1	4
	Karachi	1	1	2	0	1	1	0	2	1	1
Total firms		28	4	28	4	15	16	14	17	4	6

		Additional costs		
		Financial Costs	Delays	Maintenance Cost
Knits-North	Large	4	3	3
	Small	4	4	0
Knits-South	Large	1	2	2
	Small	5	5	5
Woven-North	Large	4	3	0
	Small	5	4	4
Woven-South	Large	2	2	0
	Small	0	0	0
Total no. of firms		25	23	14

 Table 4.4.3: Types of costs associated with power outages

4.4.1 Financial Costs of the Electricity Crisis

Firms operate on a 12-hour day and power outages last 5-6 hours. Gas fired generators produce electricity cheaply (even cheaper than the KESC grid) but there are gas outages as well. The recourse then is to use diesel generated electricity at per unit cost that is 4 times the price of KESC grid. This is a lot in a competitive international market. Thus the energy shortage poses major risk to the firms' growth objectives.

Firms' mechanisms for coping with the energy shortage and their perspectives on the associated financial costs are presented below:

Firm 28, Woven, Large, Karachi: "Energy is a serious issue, Right now we have backup generators. First source is KESC, then gas then diesel. Our MD had foreseen the energy crisis so we acquired back up gas generators and also have built up capacity for diesel generators. Moreover a huge investment has been made in the form of fixed deposit with KESC (Karachi Electricity Supply Company) because we have purchased load in advance. Without such arrangements, our buyers would have attached a lot of risk to doing business with Pakistan. Diesel based power (at Rs 28 per unit) is very expensive compared to the power purchased from KESC (Rs 5.5 per unit). If we have to meet a deadline that requires running the factory over time, first we have to see if the gas is available that day or not. So the prime decision is not about our business plan but whether the government is going to provide us the utilities we need."

Firm 11, Woven, Small, Lahore: "Recently, we were affected because of the unscheduled load shedding that resulted in electricity being shut off after every hour.

We calculated that the cost of other forms of power generation is very high. We would be better off paying higher prices to WAPDA, provided they assure reliable supply."

Firm 30, Woven, Large, Lahore: "If we have to purchase generator of 1 megawatt it costs us 250,000\$. But at the same time the cost of diesel has also gone up. At one time it was Rs. 50, now it has gone up to Rs. 115."

Firm 17, Woven, Knits, Medium, Lahore: "The issue with electricity is that it is so erratic that we don't know when we have to run the generators so the fuel cost is going up as well. The cost of electricity supplied by WAPDA is going up."

Stars portswear, Knits, Small, Lahore: "Electricity is a major concern because selfgeneration of electricity is costly. We have to buy diesel and that adds to the cost." "The prices are a problem and that is because of the electricity crisis increases the cost of raw material as well as, for example, yarn prices are up because the cost of electricity in the production of yarn has gone up."

Firm 18, Knits, Large, Faisalabad:" The prices keep on fluctuating and, as I recall, diesel was about Rs. 70 four years back and is now Rs. 105-107 per liter. This will give you an idea that the energy cost as a whole (electricity, gas and diesel) the costs have gone up almost 100%."

Firm 15, Knits, Large, Karachi: "the cost builds up. There is no gas. We invested a lot of money on our gas fired standby generators. Now there is no gas. So, we are running the diesel fired generator. See we cannot stop working. If we let the work stop then for us as per the agreement, the remaining shipment has to be air lifted.

Firm 24, Knits, Medium, Faisalabad : "We work on a 12 hour day and if you don't get electricity for 4-5 hours, you have a problem. We are operating in such a competitive market that even the tiniest of factors matters a lot. If your margin fluctuates a bit, you are no longer competitive. Your buyer is going to move somewhere. You have to bear the cost. There is extra cost for your gas, electricity, plus fuel. You know what is the situation for diesel? We are not a big factory, but we pay a monthly bill of about Rs. 10-15 lacs for petrol and diesel, altogether. This is for our processing plant and this factory. It does not include the cost incurred in the woven set up. I don't know. If we were getting out electricity directly from the power company, our cost would be about Rs500,000. We are paying Rs10 lacs extra."

Firm 10, Knits, Medium, Karachi: "Suppose my monthly bill for electricity is Rs. 300,000 and if I use diesel then that's another Rs150,000. But the main thing is that due to fluctuations I have to be on generators since my machines are computerized; their single card costs me about Rs 1,50,000, so to avoid messing up the cards I have to produce my own electricity using natural gas which costs Rs. 250,000."

Firm 5, Knits, Large, Lahore: "In this factory I have diesel generators. The cost of generating electricity is Rs. 18-20/KW. We have to use the diesel generators for 5-6 hours a day, which is an additional cost of Rs. 2-300 million. These are things which have ruined the industry"

Firm 1, Knits, Medium, Karachi: ": On diesel, the cost is 3-4 times higher. On gas, KESC would be 30-35% more expensive. The issue is of consistency of supply and voltage is very important. We maintain the consistency of supply. KESC does not."

Firm 32, Knits, Medium, Faisalabad: "WAPDA vs. diesel is 1:4 or 1:3. If you operate entirely on gas then that is cheaper as compared to WAPDA. Gas is cheap but [not available for 6 months in the year] then you have to factor in the cost of the generator"

4.4.2 Costs Associated with Delays in the Production Cycle

Firms outsource dyeing and other processes to smaller units, which have interruptions in electricity/gas supplies and don't have generators. This results in delayed delivery of materials and therefore makes it tough to meeting garment shipment deadlines. The firm then has to bear the cost of airfreight driving profits down to zero and making nonsense of growth plans. It also adversely affects buyer perception about sourcing from Pakistan.

Firm 32, Knits, Medium, Faisalabad: "Usually the problem with the local sources is that they don't deliver on time and don't honor the commitment but they have a valid reason: shortage of electricity."

Firm 28, Woven, Large, Karachi: "Also because of the energy crisis we are hand to mouth in terms of the deliveries."

Firm 11, Woven, Small, Lahore: "Raw material is the main constraint because we cannot get it on time because of the energy crisis. Producer commits to something but can't deliver it. But we can't pressurize him because he has his own constraints."

Firm 20, Woven, Large, Lahore: "Because if I have a shipment due and I am short on electricity or gas then I am gone.(Its really detrimental to my business). And then when I have to deliver the shipment, I have to air freight those goods which send my costs through the roof."

Firm 30, Woven, Large, Lahore: "My suppliers have **d**elivery issues and if we ask them why they are being late, they say it is due to energy crisis. We don't have gas, electricity or diesel so what can we do?"

Firm 29, Knits, small, Lahore: "Now in November, December, gas shortage will aggravate. What will you do if you have to dye the cloth and export? Will you do the

dying using wood fire? We take the order 3-6 months in advance. It is like you are due to deliver the order in February or March but don't have the fabric till December."

Firm 21, Knits, Medium, Faisalabad: "The energy problem is a huge issue. It is not just that the bill has increased but, as I was telling you, a major concern is that our vendors (people who manufacture polybags - for packing, hangers, tags, etc for us) don't have generators. We have diesel generators, which increase our firm's cost but our in-house work is not disrupted. But if our accessories are delivered late, our entire shipment is delayed because I don't have the machines to make the accessories inhouse. In Faisalabad, vendors who have up to 30 machines don't operate on generators. Embroideries are not done on generators. When there is no electricity the work is stopped. We can't blame them. We try o give them more time. But for us, the buyer deadlines are not flexible.

Firm 24, Knits, Medium, Faisalabad: "What happens is that if there is a disruption in the energy supply then we have to start our generators, which takes 10-15 min and that slows down the production cycle. Because of this slow down then we have to opt for overtime. The shift is till 6 pm but then they have to stay till 9 pm so that adds up to the cost. Every factory has to do this to survive because timely delivery to the buyer is very important. We do the business on Letter of Credit. If the shipment is due on December 23rd, we have to send the LC to Karachi one week earlier. The vessel does not wait for us."

Firm 10, Knits, Medium, Karachi: "Since I have more than one line so I am dealing with 60-70 suppliers and I can have problems with any one of them. I cannot provide my supplier with the generator because of which my order gets delayed. On my end, I have the generators run by diesel and gas but I cannot provide everything to my supplier"

4.5 Country (Sovereign) Risk

Unlike the previous categories of risk, country or sovereign risk is outside the immediate environment of the garments manufacturer. This includes political risks arising from the law and order situation, strikes and acts of militancy that disrupt production because workers can't turn up to work or because of delays in logistics. The other category of country risk is the macro-economic risk that introduces uncertainty in the costing and pricing decisions of firms. The macro-economic risks mentioned most frequently are the exchange rate and the interest rate risks. Firms' responses to the two broad categories are presented in Table 4.5.

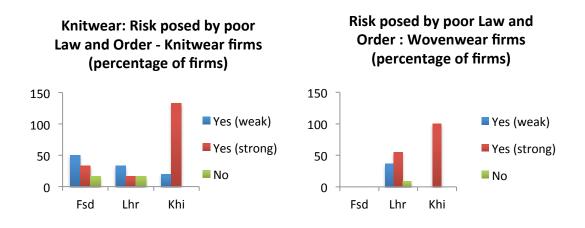
		Politi	cal Ris	ks							Macr	oecono	mic F	Risks		
		Law	aw and Order.		Strikes Militancy					Exch Rate	ange	Interest rate				
		Y		Ν	Y		Ν	Y		Ν	Y		Ν	Y		Ν
		W	S		W	S		W	S		W	S		W	S	
Knits	Large	5	4	0	1	6	2	4	4	1	6	3	0	0	3	0
	Small	1	7	2	1	5	4	1	6	3	4	2	0	0	6	0
Woven	Large	3	5	0	2	1	3	1	2	5	0	0	1	1	3	0
	Small	1	3	1	1	2	2	3	1	2	0	0	0	0	1	1
Total firr	ns	10	19	3	5	14	11	9	13	11	10	5	1	1	13	1
Y = Yes	s, N = N	lo, W	= Wea	ak, S	= St	rong										

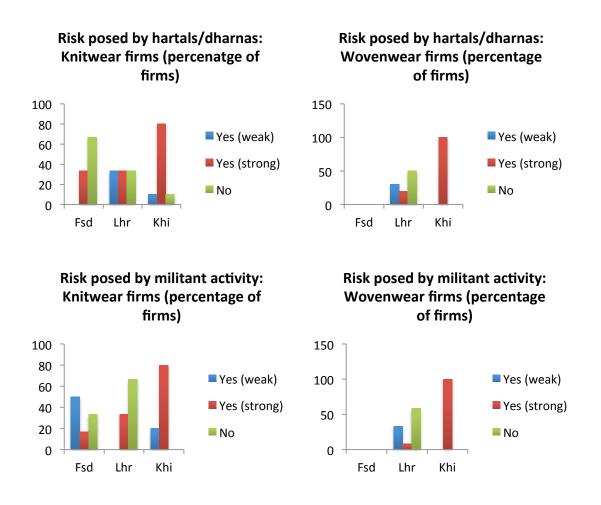
Table 4.5: Country risks (number of firms reporting)

4.5.1 Anatomy of Political Risk

The political risk associated with poor law and order, *hartals/dharnas* and militant activity affects all firms (Figure 4.2). Not surprisingly, Karachi based firms express the strongest political risk associated with all three sources.

Figure 4.2: A typology of political risk





4.5.2 Impact of Political Risk on Buyers

Firms aired their concerns about buyers not coming to Pakistan and pointed this factor as an important risk to growth. As one buying house representative put it, "there are more buyers in the lobby of one hotel in Dhaka in Bangladesh on any given day than in all Pakistan in a month". This has obvious consequences for small and many medium sized firms as they have to rely entirely on local buying houses for getting orders. However, there are consequences even for large, well established firms as if international buyers (including their designers, quality control staff, compliance inspectors, etc.) are unable to travel to Pakistan they cannot assess a firm's ability to deliver in terms of quality, timeliness, etc. This may be mitigated to some extent if the firm has a long track record with the buyer, but for a firm trying to find new buyers to expand or diversify its sales this can be a major problem. In case of new or more complex items, the designers and development staff on both sides have to work closely together before it is approved for production. There are obvious limits on doing this remotely through emails and sending samples back and forth, and that may restrict firms in Pakistan to low to middle end of the value chain. In addition, if the security and law order situation is such that the buyers' think that delays in production or shipment can take place for reasons outside the control of the firm they may not include any firm from Pakistan in their list of "reliable suppliers". Thus the impact of political or country risks on Pakistani firms may take the form of smaller orders, price discounts over competitors and greater variability in demand (first to be affected by any reduction the buyers' sales). That this is happening can be seen from table 4.6 and the comments from some of the firms.

Firm 5, Large, Knits, Lahore: "Nobody comes here. We have created an impression that we are a terrorist. ... They have shifted to India or Bangladesh. We have to travel there and we have to beg for orders. We go there as beggars. They give us the orders which are leftover by these countries"

Firm 12, Knit, Large, Lahore: "The buyers exploit the bad law and order situation in Pakistan quoting low prices"

Firm 16, Knits, Small, Karachi: "My existing two customers left as they were in Karachi when the bomb blasts and killings happened. Their company policy prohibited them from working in Pakistan"

Firm 10, Knits, Medium, Karachi: "The situation in Pakistan is such that as soon as a buyer hears the name of Pakistan he says that we don't want to work with Pakistan. So it took us some time to bring some to Pakistan"

Firm 32, Knits, Medium, Faisalabad: "One of my customers says when I wake up in the morning the first thing I do is read your DAWN newspaper. Whether I read my own newspaper or not, I make sure that I read a Pakistani newspaper. So there is nothing which you can hide from them"

		No effect	Order Reduced Somewhat?	Order Reduced Substantially?	Buyer's Exit	Buyer's Representative: Not coming	Buyer's Representative: Visits Reduced	Buyer's Visits: Unchanged	Finding new Buyers
US base	L	1	2	1	3	3	3	0	2
	S	0	1	1	0	1	2	0	2
EU base	L	3	2	1	1	6	0	0	2

Table 4.6: Effect of political risk on buyers

	S	2	3	0	0	2	2	1	2
US & EU	L	2	2	2	3	2	4	0	4
	S	2	1	3	3	1	3	1	4
Total No. Firms	of	10	11	8	10	15	14	2	16

The first 3 columns is one set, i.e., a firm could chose only one of the 3 choices. For rest of the columns the firms could chose one or more of the choices, i.e., if for a firm some of its buyers exit while some reduced visits – it would be counted in both of those columns. L = Large, S = Small

4.5.3 Firms' Response

Many of the firms have adjusted by having their staff, as well as the owner, travel more frequently to meet the buyers and some have also opened design offices in Europe or USA. But this entails a lot of cost and takes away time from supervision of the production cycle. Furthermore, firms emphasized that their production lines are constantly changing to respond to the changing demand in the market thus requiring frequent exchange between buyers and manufacturers of visits. When that does not happen, they are rendered less competitive internationally.

Firm 32, Knits, Medium, Faisalabad: "Buyers don't get security clearance for Pakistan. They are also faced with life threats. So we go to meet them"

Firm 28, Woven, Large, Karachi: "We have to market our products by going to the buyers and this is a high expense for us. I have been working with eight travel agents at the moment, all top traveling agents. We have three people in the travel department (one just for handling visas) because we travel so much. "

Firm 23, Woven, Large, Karachi: "We can only take along two suitcases with us to Europe so they are not able to see what we are capable of producing even if we travel a lot. Also, given the need to supervise production here, there are limits to how much we can travel. There are frequent changes in design and if the buyer does not visit us frequently it becomes difficult for us to stay on their supply chain. In Bangladesh, their designers for the brands stay for a month, design the product and whatever they develop they sell it to them but that is not the case for Pakistan."

Firm 22, Knits, Large, Karachi: "Buyers used to come themselves. But now we have to travel and it is a lot of cost. The trip to New York on average costs you around Rs. 4-500,000 if you stay in an average hotel. Now what happens is that the buyer tells us to come to New York, Dubai, or Thailand, just for one hour meeting. There are no daily flights. These were the things which were not included in our cost previously but now they have to be included."

Firm 20, Woven, Large, Lahore:"I have to really travel a lot because the customers do not want to come to Pakistan which is my extra cost"

Firm 6, Woven, Large, Lahore: "Whatever conditions may be in Pakistan, we never really face any issues regarding sales. Whether we need to travel or whatever else we need to do to cover it. From our company 7 people travel as of now and we do have a good travel budget." "... I have hired three designers in UK. They go for travel trips to New York or Holland but we have allocated the budget for it"

Firm 18, Knits, Large, Faisalabad: "Today, as we speak, 15-20 of our people are travelling and they deal with the customers as they go along. What affects us is the law and order situation, the post Afghan war scenario, the economic instability and the political issues. Without the difficulties caused by these factors, there would be zero problems for bringing customers to Pakistan. The news regarding Pakistan through the media: social and electronic or through print media is very negative. We have to try to bring them to Pakistan"

Firm 15, Knits, Large, Karachi: ". Buyer does not come. It is an issue yes but you know when an artery is blocked, an alternative route is provided. So we dealt with it. But then again, as I told you that all these things are adding to my cost. If you can get the environment and the situation is right then a garment which I am currently supplying to Walmart at 12 dollars, I will give that at 10 dollars."

5 How Can the Government Help?

Resolving the energy crisis remains at the top of the list of things that most firms said that the government can do to help the industry. Other areas identified by firms for government action/support are: improving customs procedures, expanding workers training, introducing government incentives and ensuring policy consistency, promoting clusters by providing key infrastructure and common facilities, improving law and order to facilitate buyer access, and negotiating market access.

5.1 Customs Procedures

Almost all firms import trimmings and accessories for garments. Many also import yarn or knitted fabrics made from artificial fibers, specialized materials such as Kevlar, dyes and chemicals for washing. Figure 5.1 shows that a vast majority of firms claim that customs procedures inflict costly delays with 7 out of the 33 interviewed firms reporting widespread corruption in customs. However, 6 firms show complete satisfaction with the customs procedure. This point, nevertheless, requires further probing.

Figure 5.1 Firms' View on Customs Procedures

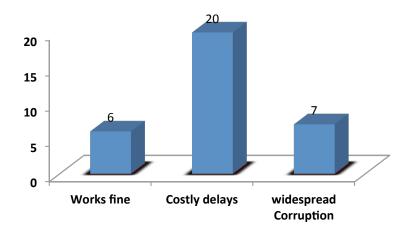
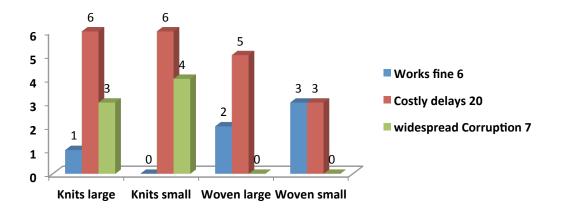


Figure 5.2 shows a fair degree of variation in views on the working of customs across different garment manufacturers. In our sample, firms manufacturing woven-wear were more sanguine about customs. However, knitwear manufacturers have serious concerns. Of the 13 woven-wear firms, 5 have reported that customs work fine while 8 firms state time costs are associated with customs administration. None mention corruption. On the other hand, of the 20 knitwear-manufacturing firms, only one said that customs worked fine. Twelve firms reported costly time delays imposed by compliance with the customs procedures and as many as 7 firms reported corruption. One of the reasons for this difference in experience with customs is the fact that knitwear manufacturers rely much more than woven-wear manufacturers on the use of trimmings and other imported materials to maintain international competitiveness.

Figure 5.2: Probing Firms views on Customs



Delays in customs clearance can at times be very costly, forcing firms to make shipments by air to meet deadlines, as well as damage their reputation of reliability with buyers. Many firms indicate they normally do not compete for orders for which they may need to import fabrics or materials, particularly if they are in any way different from what they use regularly because of the time consuming customs procedures (for details see Box 2). Since many high-end garments, particularly in knitwear, require delicate fabrics or specialized materials, Pakistani exporters are excluded from that segment of the market. Thus one important role garments manufacturers assign to the government are less time costly and corruption ridden customs procedures.

Box 2: A conversation with Central Chairman of PRGEMA (Pakistan Readymade Garments Exporters Association), on custom procedures

it is difficult for the woven garment industry in Pakistan to diversify into items other than denim and twill bottoms exported currently because the textile industry primarily produces low or medium cotton yarn and fabrics made from these. To produce anything other than the items being exported we would have to import the fabric and that is a big problem. Fabric can only be imported under the DTRE [Duty and Tax Remission for Export] scheme. For that purpose we have to apply with all the details of the inputoutput ratios and wastages of the product to Deputy Controller Customs, Lahore. He will take 2 weeks to review the application and then send it to IOCO [Input Output Coefficient Organization] in Karachi. IOCO staff will visit the factory and this process may take 4 to 10 weeks. They will send their recommendation to the Deputy Controller Customs, Lahore, who will then issue the approval to import. In case they have an objection then we have to start the whole process again.

We cannot risk ordering the fabric before the final approval, because the fabric will be here in less than 30 days and if approval has not been received by then it will be stuck at the port. In which case we will incur demurrage and if the application is rejected we will have re-export the fabric at a huge loss. We usually firm up our orders, including prices, 3 to 6 months before shipment and that means we have to start the DTRE process before even making a bid for an item. This is not practical and so we do not bid for items for which fabric is not available locally.

Further on this issue let us hear it directly from the firms:

Firm 1, Medium, Knits, Karachi: Narrating a recent example: "Last week there was a fantastic case in Karachi. One Karachi based vendor, an association member, got an order from Wal-Mart for fleece hoodies (fleece jackets with hoods). The vendor innovated and inserted a gadget compatible with IPhone/IPad in the hood so that the wearer could use the equipment while jogging/walking. The gadget had to be imported. He got the order and imported the gadget but it got stuck in customs. The vendor explained that the gadget was a Walmart order but nobody listened to him. Finally, the Association got involved and the matter was settled, but 50 percent of his goods were air-shipped adding to cost. The mind-set of customs officials needs to be changed."

Firm 22, Large, Knits, Karachi: (The firm that actually received the order) - "We had an order from Brazil and had to face a lot of trouble from customs officials. They stopped our consignment without any reason. Member Customs eventually cleared it up which was nice but that one-month in between was guite worrisome for us. Basically, the innovation was to insert a small gadget on the hoodie, which we were supplying to Walmart. It took us a month to sort everything out. I was negotiating with my customer who was saying to me that if the shipment was not done in five days he was going to cancel the order. Member Customs called the officials in front of me, telling them to facilitate us and that they had been stopped wrongly. Despite his call, they took 7 days. This is our government you see. The document mentions 'others' category so anything can come under 'others'. There is a scheme regarding re-export. We showed it to the customs officer and argued that the item was for re-export. You have our post-dated cheques. [He explained that in the DTRE (Duty Tax Remission for Exports) framework, there is an SRO (Statutory Regulatory Order) with 492 items, which are exported after importing. They assess customs duty on it and take post-dated cheques. The cheques are valid for two years and we have to export the item within those two years. They examine whether the item has been exported and then our cheques are cleared]. We had been doing that for a year and have sent a lot of shipments but then along comes this Customs officer who says that the item falls in the list of electronic items and is not covered by the SRO. They can put the item in the decoration category and also that it can be put in the 'others' category but the officer delayed things unnecessarily. Starting 11th of Muharram [Islamic month] we were running the production plant day and night because we had to ship by 6th of December. Otherwise they would cancel the order. The buyer is bearing the expense of the air shipment. If we have to do it ourselves, it is a huge amount of money"

Firm 6, Large, Woven, Lahore: "A lot of paperwork and indemnities have to be undergone particularly when we have to import raw materials, trimmings or machinery. The import policy is thus particularly restrictive in our perspective. Firm 6 comes under conservative tax regimes and hence tax deduction is done at the source. Since we are paying import duties, most of the time we are owed an annual tax refund [under the duty draw back scheme] and whether this refund falls in the sales tax bracket or the income tax bracket, recovery is difficult. Tax burden in this respect comes to around 10 to 15 percent".

Firm 5, Large, Knits, Lahore: "The government formulated a policy: import against reexport. Now there is so much corruption in that, we are fed up. In import against reexport system, when we import we get it cleared under different sections and when we export we give them a full declaration of the pieces that we exported. It has become another source of corruption. We go to them and ask them to see the export order and ensure that everything has been exported. When we ask for our [post dated] cheques they say that it will require some more money. In DTRE if something is sanctioned then they create problems in literal description of the items. If it is direct dyes or the reactive dyes, now reactive dyes include everything but they say we should write the names. If I do not get them from the source mentioned they say it is not written here so you have to pay duty. Now even 5 percent is a high rate of duty."

Firm 15, Large, Knits, Karachi: "Normally they make us pay duties on these dyes and then give us a drawback refund. Now why should all that be? Let the dyes come duty free"

Firm 20, Large, Woven, Lahore: "First we have to make a bond (at the time of import) then we have to show them that we are exporting and not selling in the local market. In any case 95 to 98 percent of these accessories go back to exports and if you are a major exporter, they should not be putting it in the bond and (giving us) all the hassle. It should be duty free where we should be able to import all our accessories without any duty."

Firm 21, Medium, Knits, Faisalabad: "There are a lot of duties that we have to pay when the customer sends the sample. Every other day when a parcel comes we have to pay duties, which make a bill of almost Rs. 1 lac per month. I don't understand why they are putting so many duties on the exporters. We don't get the desired quality of trimmings here but when we import it we face a lot of problems and it takes a lot of time in custom clearance".

Firm 28, Large, Woven, Karachi: "This [the duty structure that exists in Pakistan] is a big obstacle for lead times and lot of profitability and competitiveness is also foregone. Simplified rules for imports are required. Generally problems lie with those who are not

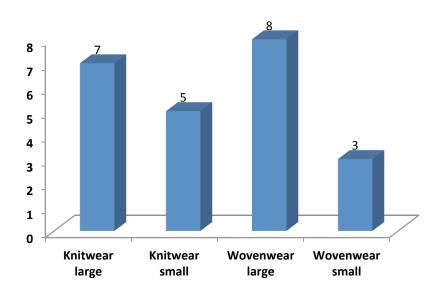
a bonded warehouse where we are allowed duty free imports. The duty problems should be addressed by undertaking the following steps"

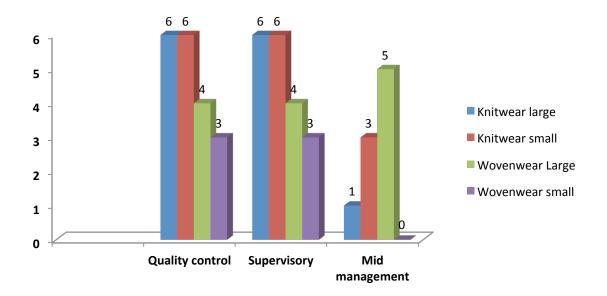
Firm 30, Large, Woven, Lahore: "Normally we have to import for re-export for which we have to fill in the bond. Getting the bonds cleared by the government remains a big issue. Hence importing is a big problem."

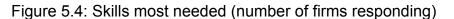
5.2 Bridging the Skills Gap

The paucity of skills is highlighted by many firms as shown in Figure 5.3. Furthermore, skills that are in greatest demand are shown in Figure 5.4. These include quality control and overall supervisory staff. The larger firms also expressed strong need for middle management staff.

Figure 5.3: Skills Training Centers are Needed







Probing further on the needed skills during the interviews, revealed a strong preference for Public Private Partnerships (PPPs) in identifying critical skills needed in garments manufacturing and designing accordingly state of the art courses to be delivered on premises while using machinery embodying current technology. However, most small and medium firms were reluctant to bear even a portion of the cost of training because of the high worker turnover, particularly at the shop-floor level. This is the usual experience in industrial clusters where the availability of specialized skills is a positive externality, but under-investment in skills development by individual firms is even greater than for the industry in general. This is one area where government intervention or subsidies are needed and are also economically justified.

The state of the existing training infrastructure and the support needed from the government is best expressed by the firms directly.

Firm 34's Training Initiative: "Last year, we established a female training institute with TEVTA (Technical Educational and Vocational Training Authority) where 100 trainees graduate every 3 months. They are given a certificate and are free to go anywhere they want. They can come back to work for us in our plant as well. They are given a monthly stipend during training and a job guarantee for once they graduate. We wanted to increase the number of female workers as opposed to male workers. TEVTA only provides the teachers and the principal, we ourselves provide the rest. It's a unique program. We have designed the curriculum entirely. We have an industrial engineering department that is headed by a Sri Lankan. We acquired the curriculum that was taught at a highly successful garment factory in Sri Lanka. Usually the machines that the students use in the training institute are outdated – not the vintage they have to work on

after the training. But here we have provided the exact same modern/up-dated machines to be used for training as we use in our plant. Because we were ourselves so vested in the entire project and because it benefits the industry and the society as well, we did a lot of campaigning for social mobilization – went to the doorsteps of people explaining how the training would help them. For this a lot of push or momentum was required from our side. There was no complementary initiative from the government's side. We should have more TEVTA-type projects. We should study deeply the Sir Lankan model and standardize the curriculum taught there. We actually had the TEVTA trainers over and we trained them first ourselves before they went on to train new people."

PHMA (Pakistan Hosiery Manufacturers Association) Institute described by Firm 1, Medium, Knit, Karachi: "I am also running the PHMA's training institute here in Karachi and I was saying to my colleagues that we should close it down. We were getting nothing out of it. Nobody was willing to come to get the training. People are not willing to make careers in textiles. Somebody told me that we will get those funds so we should provide free training. I said I am against free training because otherwise there will be no motivation for the trainees. This is unfortunately the mindset of our country"

PHMA described by Firm 22, Large, Knits, Karachi: "And luckily or unluckily I am the Chairman of that institute. We have been running that institute from the last three years. We are not getting any support from the factories. The factory owners are not that proactive. We are incurring losses in the institute because people are not willing to come here. If the training is free, people will come. We have expense for Rs. 4 lacs (per month), which is modest. If the government puts Rs 2 to 3 crores in the bank as an endowment for us, we will be fine. In fact, the government has already given us a Rs. 2 crore endowment that generates Rs. 2 lac per month, but the expenses are for Rs. 4 lac a month and we incur a loss of Rs. 2 lac, which PHMA is paying. PHMA wants me to generate income out of the training institute, which I can't. Best is to get additional endowment. Then our institute will be self-sufficient".

Firm 20, Large, Woven, Lahore: "Let's say if the firm wants to hire 500 people, I just train them myself. I cannot have 500 trained stitching people who know how to handle the garment. There are hardly any institutes where they can get this training. So our costs go high." "Training centers should be established so that trained labor is readily available".

Firm 28, Large, Woven, Karachi: "In Pakistan, middle management is lacking. We do have TIP (Textile Institute of Pakistan), which is giving a degree but there is still a dearth of middle management. Not only that, we can't even find sewing machine operators and laundry processing people etc."

Firm 2, Medium, Knits, Karachi: "We need to start training at the grassroots level, an initiative that needs to taken at the government level by established PPPs. Mostly people learn through contact (relatives in business) but it is different if the workers are trained at school. There is no proper certification and there are no rules being followed." "There should be government officials going to factories and training the workers because it makes no sense to have compliant factories and not a complaint labor."

Firm 23, Woven, Large, Karachi: "Middle management is lacking in the whole industry. It is difficult for us to get skilled professionals in this field although we try to appoint a lot of TIPIANS [Textile Institute of Pakistan graduates] as well. You can say that the environment is such that the professionals feel it is difficult to adjust here. They want to implement what they have learnt and in the system, which is prevailing, they just cannot adjust. Now the factories are trying to hire TIPIANS, graduates from IBA [Institute of Business Administration], LUMS [Lahore University of Management Sciences] and we are hopeful that things will improve in the next 5 to 6 years but at the moment we are having problems."

5.3 Government Incentives and Policy Consistency

Most firms said that currently there are no government incentives for the garments industry. In fiscal year 2005-06, the government had provided a compensatory rebate as R&D support at a rate of 6 percent of export value to the garments industry, but this support was discontinued from 2008. While the scheme, which was implemented through the State Bank of Pakistan, seemed to have worked very well in the early years, many firms complained that their claims from 2007-08 were still pending. In the years 2005 to 2007, the government also introduced various other measures to facilitate exports including reimbursement of apportion of the fee for obtaining quality standard certifications or testing done abroad and the cost of setting up exporters' offices/retail outlets overseas or in-house effluent treatment plants. However, funding for all these measures dried up in 2008-09 and many firms complained of unpaid claims for expenses incurred in these areas by firms in response to the incentives. The views on government incentives are best summed up as follows:

"When firms negotiate prices with buyers, they do so six months in advance and take into account any government incentives promised, and if the government does not deliver, firm's ability to compete is compromised".

Firm 5, Large, Knits, Lahore: "The previous government made an announcement that we want to facilitate the exporters by providing them with a testing facility. One such scheme was introduced whereby testing done by labs, which were credible or located abroad would be financially supported by the government. All exports utilizing such testing facility would be certified and the cost of certification would be borne by the

government. The actual scheme worked differently. Some well-connected people were able to get the money after certification. Others had to pay a bribe to get the funds. The rate of bribe has gone up from 2.5 percent to almost 48 percent of the total due amount. For a company like mine the total amount owed to me would be Rs1 crore to Rs1.5 crore over the years. Now we had not accounted for that in our pricing decision because we thought that we would recover our costs. There are various types of testing: fabric testing and color testing, for example, and the government has not given any money back. The standard response is that there is no money. The Ministry of Finance is not giving it."

"Now we are linked with the Ministry of Textile [previously textiles were handled by the Ministry of Industries] which came up with a new policy [in 2009] that will run up to 2014. Not a single clause of the policy has been implemented. Another idea the government borrowed from India was that whoever starts up a new line of business would have access to funds at the rate of 5 percent. The idea was to promote innovation and upgrade technology. Two years have gone by and there is no implementation. Policies should be made to be implemented otherwise manufacturers cannot do proper costing of their products."

Firm 33, Large, Woven, Lahore: "The government is not offering anything. The little support in case of R&D rebate, export re-finance or sales tax is paper money for record purpose but hardly given back to the firms"

Firm 27, Knits, Small, Karachi: "R&D and other schemes are always welcome but even if they are implemented, they are not sustainable and renders costing obsolete." "We don't have technocrats running the government but feudal lords so I don't expect my government to do much."

5.3.1 Promoting Clusters

Most of the garment industry in Pakistan is located in and around Karachi, Lahore and Faisalabad. However, these are large cities and there are several areas in each where garment firms are concentrated. Only some of these clusters are in industrial estates set up by the government. However, in all clusters, firms look to the government for the provision of basic infrastructure that promotes cluster formation and the agglomeration economies that flow from it. But in practice, there is a significant difference in the quality of infrastructure available between formal and informal clusters, as well as between various industrial estates. For example, firms located at the Quaid-e-Azam Industrial estate in Lahore are provided uninterrupted power supply during the day, while other industrial clusters which have sprung up (such as in Glaxo Town, Lahore) are still not declared an industrial estate and have power supply similar to residential consumers, i.e., 1 hour outage (load shedding) every 1 or 2 hours throughout the day. Roads are

also critical in functioning of clusters. Firms point out the poor state of roads in different clusters as for example between SITE and the Korangi Industrial Estates in Karachi. In Lahore the roads are in bad shape in the undeclared industrial estates. Provision of security against crime and fire hazards, as we shall see in firm interviews, also matters.

Firm 11, Small, Woven, Lahore: "Actually we have an advantage in this regard ever since we have moved to this (Quaid-e-Azam) industrial estate. We get uninterrupted electricity supply till 6pm.Here there is load shedding from 6 pm to 12pm. So we are not affected that much. Recently, we were affected because of the unscheduled load shedding in which electricity was being shut off every hour and we calculated then that the average cost became very high. We would be better off paying higher prices to WAPDA, provided we get uninterrupted electricity."

Firm 6, Large, Woven, Lahore: "For us the location of the garments industry is so important that it defines the success or failure of a factory. They have built up a Textile City in Sundar [Industrial Estate in Lahore] and say that we should move there. All of my labor is from this area. How can I move there? Half of the labor would just leave me if I move, even if I give them transportation facility."

Firm 30, Large, Woven, Lahore: "The government can define the industrial area and it should then have all the facilities to tackle with accidents such as fires etc. But the thing is see there are 40 to 45 factories here and God forbid if there is a fire accident here, with this kind of road, you can well imagine how long it will take the fire brigade to reach here".

Firm 15, Large, Knits, Karachi: "I am also the Chairman of the Karachi Garment City. It is on 300 acres and it is a 100 percent federal government funded project. How can I bring people to invest in an area, which is further away from Port Qasim [the second port at Karachi]? You cannot provide security even in SITE or in the Korangi industrial estates that are already well-established".

Firm 10, Medium, Knits, Karachi: "SITE and Korangi are the two industrial estates: the oldest and the biggest [in Karachi] but you can see the state of the roads. Not just the roads, the maximum number of mobile snatching is done on this road [leading to the factory]. From 5 to 8 pm if you are going on a speed of [close to] 0 km/hr on this road because of the state the road is in, a person knocks on your window and you have to give away your mobile. The police station is hardly at a distance of 0.5 km and the SHO [Station House Officer] knows it too. Basically the government is not willing to ensure law enforcement. The SITE association has given applications time and again for the roads to be improved but things have not changed."

Firm 1, Medium, Knits, Karachi: "Well, just go beyond our factory, there is virtually no road there. It is pathetic. We used to take pride in SITE saying that it is the oldest and

biggest industrial estate. Now we take pride that we have "Mohenjo Daro" [ruins of the ancient Indus Valley Civilization Capitol] here."

Importance of Common Facilities

Several firms highlighted the importance of providing common facilities such as water treatment plants. There are economies of scale in the provision of such infrastructure. It is a critical compliance requirement by the buyers and can be prohibitively expensive for any single firm to invest in.

Firm 17, Medium, Woven/Knits, Lahore: "Water treatment plants should be common. One of the main entry barriers in this industry is that small mills have to put up their own water treatment plants. There are examples in the world where they have put up 5 to 7 common water treatment plants and have their industrial zones there. Let's suppose this is the industrial area and government can say that all water intensive industry should be built here no matter which industry it is and then they can put big water treatment plants and the zone is then certified. In Turkey, they have a whole village certified for organic cotton, even the fields are certified for organic cotton. At the moment the local government says that every factory should have its own water treatment plant. It is not possible because the cost of running a water treatment plant is so high. We are already dealing with power shortages privately. If the government can certify treatment facilities and spreads the word that firms are fully compliant, the cluster will attract a lot of investment"

Firm 6, Large, Woven, Lahore: "If facilities like common water treatment plant, common electricity generation etc. is provided [at least] to the smaller players, then an improvement can be brought about. They should install common water treatment plants. We went to a meeting with the government to ask them if they can install a common water treatment plant on the rain drain passing by and they said that it has polluted water coming from India so why should we clean Indian waters. If every single factory builds up its own water treatment plant then the economies of scale would not be achieved and it would be extremely expensive."

Firm 20, Large, Woven, Lahore: "For example in Bangladesh, the government provides a combined water treatment plant to the garments businesses because. If I have to work with LEVIS, I need to have a full-fledged water treatment plant to be in compliance. This is the requirement by all the brands. So by government's initiative [in Bangladesh], they have constructed one big water treatment plant. On the other hand, my company has to fulfill such requirements on its own. I am doing it because it is also required for my denim business. But let's say if the government makes one water

treatment plant on this road [where I am located]it is going to benefit, Firm 33, ShahKaam, Ammar Textiles and myself."

Firm 28, Woven, Large, Karachi: "We have our own RO [Reverse Osmosis] plants as we can afford it but many smaller players can't. The bigger players are okay but the smaller firms are not being promoted."

Firm 5, Large, Knits, Lahore: "Take the export based industry's effluent treatment. In Pakistan, people discharge industrial waste in canals and rivers. But in garments the buyer says that if you have to supply to customers, you have to have a water treatment plant. These are the specifications according to which you have to discharge waste in the river/canal. In other countries, there is a common water treatment plant, which is used by the industry. There is no such concept in Pakistan. We are fighting for a common water treatment plant in this industrial area. There are a lot of industries here: garments, automobile parts, and pharmaceuticals. So we have done a lot of work on it and have conducted a survey. Initial cost came out to be of Rs. 60 crore, now it has gone up to Rs. 95 crore. How can small firms afford such investment?"

5.4 Law and Order and Facilitating Buyer Visits

Firms, especially those located in Karachi, reported severe adverse consequences of the prevailing law and order situation for the business. They offered a number of suggestions for mitigating the impact of the law and order problems afflicting them. One innovative idea for addressing the reluctance of international buyers to visit Pakistan was for the government to focus on special buyers, "the gold card companies" that place annual orders of US\$ 50 million or more in Pakistan. Representatives of such companies should be treated as state guests and provided level of exceptional state security and given visa on arrival. The government could also look at picking up the travel insurance cost of such buyers. Suggestions were also made to strengthen the role of Pakistan's embassies in facilitating travel by buyers and promoting Pakistani garments.

Firm 22, Large, Knits, Karachi: "But Karachi has other issues as well, internal issues which are beyond the control of even Zardari Sb. [the President]. The law and order situation in Karachi is in a bad state. Somebody was giving me an example that if I tell you that you will get a free shop in Lyyari will you go there? Absolutely not. We don't even go to Lyyari for a visit. Same is true for international buyers. They still come to Lahore but nobody comes to Karachi."

Firm 22, Large, Knits, Karachi: "The government should lobby for selected customers and invite their delegations as state guests and take them for a visit to the factories under state security. Once the customer sees our factory then he does not have to go

back and forth. They don't have the time. Also because of internet, everything is so fast that they upload something and we can download and work accordingly. That will help in my view. But the first visit to the factory is essential."

Firm 20, Large, Woven, Lahore: "I know a lot of my customers have problems in getting a Pakistani visa. Our embassies are not helpful. I think the visa should be on arrival. The government can make a list of all such companies in advance and facilitate invitation letters that our embassies can honor. This way, potential buyers can avoid unnecessary hassle for getting the Pakistani visa. The second thing is that we should ask them if they have any security problems and then give them security protocol. I think if the government offers them the protocol, the cost of travel insurance would automatically go down. Provide them with some police cars and it is not going to cost them anything. Even if one customer buys something worth 100 million dollars somewhere, you can imagine how much employment that would generate, how much foreign exchange would be earned and the value addition that we can get here in Pakistan or even 50 million dollar, give them a gold card. Invite them and tell them that we are providing you with a new facility which is called the gold card facility and if any of your employees wants to come to Pakistan, they will be provided a range of facilities."

Firm 23, Large, Woven, Karachi: "We should make better use of the commercial attaches in our embassies since they have all the contacts. In 2013, we are focusing on South America, targeting buyers in Brazil, Argentina and Mexico. The commercial attaches can play a very important role. They have information on how much a customer is buying from where and where his inclination is etc. They need to promote Pakistani products and organize exhibitions in the embassy. The commercial attaches are generally good and competent, they only need to be better organized and required to put in more effort."

5.5 Negotiating Market Access

Many of the firms said that one of the main reasons why garment industry in Bangladesh has done so much better than in Pakistan is the duty free access it has to the EU market and lower duties in the US market. They pointed out that Pakistan has several times in the past failed to seize opportunities to get better access to the EU and US markets. For example, following 9/11, the US had offered duty free access to Pakistan for garments, but the government insisted on duty free access for all textiles and US withdrew the offer and instead the Trade and Investment Framework Agreement (TIFA) was signed in 2003 to enhance bilateral economic relations. Since then, negotiations have dragged on for a Bilateral Investment Treaty (BIT) with the US. Similarly, EU had offered preferential access to Pakistani exports following the massive floods in 2010, but again the negotiations dragged for a long time and only in 2012 was

duty free access provided for a few items most of which the garment industry in Pakistan does not currently export. Last year, Pakistan became eligible for EU's GSP plus scheme starting 2014. Pakistan has submitted its application and negotiations are currently underway. Most firms said that if Pakistan gets GSP plus status it will be a major boost for the garment industry, but based on past records some of the firms are skeptical as can be seen from their comments.

Firm 4, Medium, Knits/Woven, Faisalabad: "GSP is needed otherwise it's impossible to compete with Bangladesh".

Firm 23, Large, Woven, Karachi: "The government should negotiate for duty free access in EU which can help the business grow.

Firm 14, Large, Knits, Faisalabad: "Pakistan lacks diplomatic skills. Pakistan should push for a fast track system like Panama and strive to negotiate Trade and Investment Agreement (TIFA), Bilateral Investment Treaty (BIT) and then Free Trade Agreement (FTA) with the United States".

Firm 32, Knits, Medium, Faisalabad: "Negotiating agreements with the US and European governments for duty free advantages to incentivize the local garment manufacturers will make our products more competitive in the global market because of good quality and price".

Firm 19, Small, Woven, Lahore: "GSP is a grave concern as it is stripping Pakistan off its potential orders with all the business flowing to Bangladesh. GSP is highly recommended as China is shifting its production from textile to high value added products. This window opportunity can be availed nicely if we have GSP".

Firm 6, Large, Woven, Lahore: "Weak government to government negotiation skills have affected the market access for Pakistan. The need is felt for the provision of level playing ground with Bangladesh, which has been given a duty free advantage to Europe".

Firm 28, Large, Woven, Karachi: "Something should be done about the GSP in 2014. If we get GSP plus then the industry will survive otherwise the situation is not quite right. There is some investment going on in the industry these days because buyers are expecting that in 2014 we will get the GSP and they are investing right now. They are going to take a chance for one-year investment because if we get GSP Plus in 2014 we will get some share from the existing manufacturers."

Firm 15, Large, Knits, Karachi: "I can tell you that because of this one act my exports will go up by 15 percent to 18 percent and in a year's time. If we qualify for the GSP

Plus on a permanent basis, which we hope we will, then we will need to make a lot of investment in our industry to cope with the increased demand"

Firm 18, Large, Knits, Faisalabad: "Six to seven years back Europe was considering making Bangladesh [exports] not tax free. Their Prime Minister was Haseena Wajid (or Khalida Zia may be) and she stayed in EU for 12 days to ensure this does not happen. Because Bangladesh has to face the floods and people are very poor there. In Pakistan, who cares for us? Nobody."

Firm 1, Medium, Knits, Karachi: "Despite the GSP negotiations, Pakistan might not be able to fully make use of the opportunity because of its internal issues. In 2014 what my fear is that even if EU opens up for us, we might not be able to cope up with them [the additional demand] because of our internal issues, because of our energy issues".

Firm 21, Medium, Knits, Faisalabad: "For Pakistan they are saying that are chances of GSP plus in 2014 but let's see if the industry survives till then. You can record it and write it somewhere, 50 percent of the industry will be closed by then".

Firm 27, Small, Knits. Karachi: "GSP will help: I don't think we will get it because we won't be able to honor it, nor will the government diligently pursue it or put the message across eloquently. Like I said we do not have technocrats."

6 Annexure

Firm 1

Basic details: S.I.T.E., Off. Estate Avenue, Karachi.

It has 400 employees and operates with 250 stitching machines. In the stitching operations department, workers are paid by rate per piece while in the finishing, packing and inspection department, workers are on monthly salaries. Women constitute 10-15% of the work force. The export value of the company for garments in the fiscal year 2011 was \$4 million and export value of fabric in 2011 was worth \$12 million.

History: It was established in 1990 as a small dye house to cater to local vendors, who provided the fabric. The company entered into fabric manufacturing in the year 1996 and began garment manufacturing in 2006. Today it is producing 30,000 tons of fabric per day and is still providing commercial dyeing services to local garment manufacturers.

Current Activities and Products: Firm 1 is the largest manufacturer of knitted fabric in the country. The fabric is sold locally and is also exported to Bangladesh and Srilanka for EU.

Organization and Management: It is a private limited, family owned company. There are three directors in the company who are based in Karachi. Mr. Salem Parekh specializes in finance, marketing and the exports while his partner focuses on production. Overall, IT has a proficient management team. The company's General Manager Production is a qualified Textile Engineer. Two Charted Accountants are working for the company in the accounts department.

Firms Capabilities: Firm 1 is one of the main exporters of dyed knit fabrics ready to cut and is internationally competitive with all other countries who manufacture garments ranging from West Indies, Brazil, South America, Central America, Bangladesh, India, Sri Lanka, Jordon & Kenya

Competition: Firm 1 faces competition from Bangladesh in its export market.

Supply Chain: The supply chain for Firm 1 starts with the procurement of yarn. The company has its own spinning operations but to save costs yarn is procured from outside. The next stage is knitting all of which is subcontracted. Dyeing is done in house and so are cutting and stitching. The company imports trimmings used in the garment manufacturing from the customer nominated sources.

Basic details: Address: Karachi.

It employs approximately 300 workers who operate a total of 200 machines. 25 of the workers receive a fixed salary while the remaining are paid by the piece. Women constitute 15% of the workforce.

Current Activities and Products: It manufactures a total of 80,000 garments per month. Products range from hoodies to polo t-shirts.

Organization and Management: Firm 2 is a family owned business. The directors separately manage departments such as Finance, Operations etc. Middle Management employees are hired from outside of the family but they have little role in the decision making process. Most of these managers were previously regular workers later promoted to managerial position with a fixed salary.

Firms Capabilities: The firm is fully compliant according to international standards and is resilient enough to face challenges like energy crises, interest payments, bad law and order etc.

Competition: Bangladesh is considered to be a competitor.

Supply Chain: The supply chain starts with yarn, which is procured locally from premium spinning mills. It then undergoes knitting and dyeing, which are outsourced. Cutting, stitching, packing, finishing are performed in-house.

Basic details: Firm 3 is located in the industrial area of Kot Lakpat in Lahore. It has 290 employees whom only 2% are women due to owner's religious beliefs. 200 employees work in stitching and are on piece rate while 90 supervisors are paid a fixed salary. It is following a CMT (Cut, Make, Trim) model with over 150 machines. The revenue for the year 2011 was Rs. 35 million.

History: The business has a status of proprietor. The owner joined Ferrugson after completing his CA in 1998 but later decided to get into textile. Initially he started off with getting orders from a sourcing buyer in the US and getting them manufactured from other factories. This practice continued from years 2003-2004.

Later in 2004-2005, new machinery was added and the company expanded to exporting its products. Firm 3 also shifted from a commercial shopping area to an Industrial area for security and reliable energy supplies. Until recently, the company is solely acting as an outsourcing and CMT unit for other large exporters like Firm 7, Firm 33 etc. The reasons being that exports are stressful and subject to fluctuations and constraints both internally and externally, while CMT is like a service with not much investment needed. Also the job is to ensure time and quality to the exporter in contrast to procuring raw material, adhering to strict compliance laws, arranging for freight, establishing relation and looking for buyers, and take care of the product from start to finish. etc Whereas in CMT the exporters provides all the inputs, designs and instructions and retrieves the product once iť's stitched and does the washing itself. The company started off with 3-40 and late expanded to 200 machines with a total capacity of 1 million pieces per year.

Current Activities and Products: The firm excels at making woven with the major product being denim jeans and minor being tops.

Organization and Management: The entire firm is owned by one individual and makes most of the decisions. Some day-to-day decision-making power has been delegated to the managers or supervisors who have been in the company for long. The distinguished departments are Cut, Stitch and Trim/Quality audit and supervisors are installed at every step to monitor quality.

Firms Capabilities: The firm has a total capacity of 1 million pieces and mostly makes semi-fashionable garments. It's the biggest CMT firm in Lahore.

Competition: Bangladesh is competition as all the orders go there and the remaining, which Bangladesh can't manage come to Pakistan.

Supply Chain: The exporters provides with the inputs (Fabric, Trimmings, cutting tools etc.) as well as the design specification. The fabric is then cut, stitched, trimmed and inspected for quality after it is sent back to the exporter who washes and packs it. Some of the trimmings are imported but that all depends on the exporter on what he gives, firm 3 is only responsible for manufacturing whatever is given to it.

Basic details: Firm 4 was established in 1975 and is located in Nishatabad, Faisalabd. It currently employs 1521 workers; women constitute to be 70% of the workforce. 85% of the workforce receives a fixed salary while 15% are paid by the piece rate. Firm 4 is a fully integrated firm with 2000 stitching machines, installed enabling it to produce 3, 00,000 meters/day of fabric. However due to internal and external crisis, only the apparel and spinning unit are functional with only 500 operational stitching machines. Knitted fabric for the apparel unit comes from Firm 18, a commitment based on family ties supplying 5 tons of dyed cloth per day. The revenue recorded for the year 2011 was Rs 1.2 billion.

History: The leadership of the firm has a history in textile where the forefathers were involved in ginning before the partition of Pakistan (prior to 1947). This background knowledge formed the basis of the textile business. In 1975 after the nationalization of industries by Zulfiqar Ali Bhutto, a bleaching plant was set up providing white fabric. The focus of the company from day one was high quality where the best chemicals were used. Although the firm charged a high price, due to their excellent quality standards, orders kept on increasing. Later in 1980, Firm 4 decided to dive into exports and the first container was shipped in 1985 to the Far East. At that time fabric was bought, bleached and manufactured in-house. Exports portfolio included bed linens as well as garments following a ratio of 75:25 respectively; the reason being that the quota system specified certain items and the company cashed in on opportunities, which were quota free (e.g aprons).

The company assessed the issues of recession and quota amounts, the firm decided to establish its own brand in 1997. Firm 4 went through a massive expansionary phase in 2003-2005 after the government announced that in order for the industries to remain competent, they should increase their capacities as the quota system will phase out. Hence the capacity was increased to 300,000 meters per day. The company was at its peak performance in 2006-2007 after which it declined mainly due to the energy crisis and cotton price hike eating up all the industry cash flow. Low business activity can be assessed by comparing the workforce count, which totaled to 15,000 in 2006 while it has been reduced to mere 3000 in 2011. These numbers reflect the workforce of all the departments; Ginning, Spinning and manufacturing. Apparels is the only source of exports currently amounting to \$10 million while it used to \$35-40 million during the peak years (2006-2007). Comparing the peak year's revenue to that of now, the figures dropped from \$ 160 million to\$20 million.

Home textile and spinning had to close down for a while which have been revived now but on a small scale. Apparel was the only division whose production was not halted due to ethical responsibility of providing employment to the needy. Also the commitment from Firm 18 enabled the firm to continue the apparel despite the gas shortage. Spinning unit's operations has resumed since 2011 and is functioning smoothly.

Current Activities and Products: Firm 4 manufacturers both knitted (60%) and woven (40%) apparels as well as home textiles. It produces light-weight shirts for the USA

market and night suits for Europe. In bottoms, twill is the main fabric used. Tops are also manufactured depending on the orders of the buyers.

Organization and Management: it's a public limited listed company, about 90% of the equity is family owned. Each unit is a separate entity with one umbrellas name with separate segmentation. Instead of doing one account, each department has its separate account with profit centers; the reason being that the processing industry is highly dependent on gas and suffers due to energy crisis. Last year 180 days were without gas, hence it's better to keep departments separate and let then function independent of each other.

Firms Capabilities: Firm 4 was the first women labor employer providing pick and drop service to 3500 woven in. It is also involved in taking the initiative of growing BCI and licensed with a barcode and sticker. The ginning process is aimed to be contaminated free; trying to control moisture as much as possible. The cotton grown has s staple length of 40 counts.

Competition: Bangladesh is regarded as a competitor due to its cost effectiveness; however it produces low end products.

Supply Chain: Although the firm is completely integrated, for now not all the departments are running. Yarn comes from the family fields; this yarn is sent to Firm 18 for knitting and dyeing. Once the dyed fabric enters the factory, it undergoes cutting, stitching, trimmings all the way up to finishing.

Not all yarn is coming from the family fields, in case of special textures; yarn can be procured from elsewhere. Sometimes knitting and dyeing are also outsourced apart from Firm 18 depending on the order size. No major problem occurs in terms of delivery times or quality as the name of the company compels the commercial units to respect deadlines.

Embellishment or trimmings are imported mostly nominated by the customer and because the market for trimmings is not well developed in Pakistan. The procedure to import is specifies hence there are no major hindrances.

The products styling are a combination of both the buyer and the manufacturer. Usually the garments are high fashionable and complicated to make hence the product design teams have been hired at the New York and UAE offices.

Business is done through buying house as some of them have been nominated by the buyers. Overall their role can be regarded as positive.

Basic details: Firm 5, located at Quaid-e Azam Industrial Estate, Lahore was established in 1987. The group has 6000 employees in total and operates with 1200 stitching machines. In the stitching and clipping operation, the workers are paid by the piece rate while in other departments workers are on salaries. Females constitute 10-15% of the work force. The export value of the company for the fiscal year 2011 was Rs. 3-4 billion in the garment manufacturing facility. The company is vertically integrated with its own spinning, yarn dyeing, knitting and garment manufacturing facility.

History: The Company was started in 1987. The company had modest beginnings where it started from 5 to 6 knitting machines and a small garment manufacturing facility. Over a period of time the company has worked upon its infrastructure. They entered into spinning in year 2000. Today they have two spinning units, a yarn dyeing unit, two knitting units and four garment manufacturing facilities. The company not only exports garments, it also exports yarn, dyed yarn and fabric to US, Europe and Sri Lanka. Yarn production for the company is 28 million pounds per annum, 65% of which is exported and the rest is consumed in house and sold locally. The knitted capacity of the company today is of 85-90 machines and the dyeing capacity is of 60 tons. The company also has an in house embroidery facility with 10-12 machines.

Current Activities and Products: Firm 5 operates in the knitted genre and is a manufacturer and an exporter of outerwear such as polo shirts, sweatshirts, fleece jackets for both ladies and gents and jogging suits.

Organization and Management: Firm 5 is a family owned business. However it has a professional management operational within the company. It has a separate accounts department and in the manufacturing facility special emphasis is made on the quality of the product being produced. To this end, the company has multiple layers of inspections after the cutting, clipping, pressing and packing. On the marketing side, his son is actively involved.

Firms Capabilities: Firm 5 was the first company to manufacture for NIKE when it came to Pakistan in early 1990s. The company is also World Wide Responsible Apparel Production WRAP certified and also has a number of other certifications, which makes it compliant for its customers. More over the company also engages in research and development to develop various designs for its customers.

Competition: The Company faces competition from Bangladesh in its export market

Supply Chain: The supply chain for the company starts from the procurement of yarn. The company produces 100% cotton yarn and for blend such as polyester cotton or polyester it has to import yarn from abroad. After the yarn dyeing and the knitting, the fabric goes into cutting, stitching and clipping stages. The garment is packed and then exported to the customer. There are a number of layers of checking in the manufacturing process. There are table checkers which check the fabric after it is cut then there are intermediate checkers to supervise the Stitchers and then there are super checkers who check the garment after pressing to see if the number of stitches,

the placement of the buttons and that of the pockets is correct or not. The company imports accessories such as buttons, threads, labels, price stickers and zippers from customer nominated sources.

Basic details: Firm 6, located on Kamahan Attari Road, 16-km, Off Ferozepur Road, Lahore was established in 1998. The company employees 2000 workers and females constitute 8-10% of the labor force. 40% of the workers are paid by piece rate and 60% are on salaries. The export value for the company for the fiscal year 2011 was 40 million \$.

History: The Director of the company is a mechanical engineer from University of Engineering and Technology, Lahore. He graduated from there in 1995 and later completed his MBA from Lahore University of Management Sciences (LUMS) in 1998. The factory and the warehouse were bought the same year. Firm 6 has three partners in the company. The other two partners are also LUMS graduates from classes of 1999 and 1995. The company had modest beginnings but today in Firm 6 is one the fastest growing company in the sector.

Current Activities and Products: Firm 5 basically operates in woven genre and manufactures a variety of products such as trousers, shorts, skirts and jackets.

Organization and Management: Firm 5 is a partnership between three people however the company plans to evolve into a professional company in a time span of 5-10 year. However it still has a dedicated management team through which the company has developed its profitability capability. According to the firm "You can ask around, that who is making 3-400,000 pieces on an order size of 3-4000. I make hundred styles in a month. But for that I need management and backup accordingly. If people need 4 people I need 6-7 people for this."

Firms Capabilities: Harvard University in consultation with the U.S Embassy as part of the Micro Portal Initiative, nominated a club of the twenty-five fastest growing companies and Firm 6 was ranked as 19th in that club in Pakistan; perhaps it was the only one in textiles. Also the company has hired designers in U.K who travel all around the world to see the latest trends in the market so that a product can be taken to the customer, which is in trend in the market currently.

Competition: Firm 6 faces competition from Bangladesh in its export market

Supply Chain: The supply chain for Firm 6 starts from the procurement of denim fabric. The next processes include cutting, stitching, embroidery embellishments and washing: all of which are done in house. Firm 6 purchases raw materials like fabric and trimmings such as buttons, zips rivets from customer nominated sources.

Basic Detail: Firm 7 was founded in 1993 and is located in Pindi Bhattian, an area close to the textile city Faisalabad, Pakistan. It employs 3000 workers comprising of both piece rate and fixed salaried payment methods. Women are also part of the workforce with mostly paid on a piece rate basis. It's export value for last year was approximately \$10million. Firm 7 is recognized as a vertically integrated unit.

History: Firm 7 started at a much smaller scale in 1993 producing only 12 million meters of fabric and 8million basic garments with low Standard Minute Value(SMV) (7.5 mins). At present Firm 7 produces 16 million meters of fabric and 10 million garments but highly complex and fashionable pieces with higher SMV(17.5 mins) hence greater value addition. It was involved in a partnership with an international buying house called Greenwood that helped capture the world market. However this collaboration was abandoned in 2004 due the perception of the country and instable government as well as the incompetency of the buying house in promoting a balanced image of Pakistan.

During the 90'sthe international garment processing was divided amongst different countries and Firm 7 pitched the idea of manufacturing a complete garment under one roof. Greenhouse showed interest and collaborated. However due to their weak marketing strategy their offer was not well accepted amongst the foreign buyers. Finally in 2004 firm 7 decided to take charge of it marketing taking it 4 years to consolidate. The strategy was not to compete in markets/products that involved competition with India, Pakistan, Bangladesh, China but focus on high-end customer and product base.

By 2002 Firm 7's vision changed and adopted a 0% fabric and 100% finished garment approach. Reason for this change was the realization of value addition at every stage even if it was small. Moreover in the same year a retail business in Istanbul was set-up to produce 160,000 garments/month. Retail business was established on the pre-text that in order to be a global company one needs to look at that supply chain and retail force; set up small plants and business close to markets and cities where the fashion market exist. Since its major export market is Europe, Istanbul within close proximity to the fashion business (Europe)

Overall the company is doing well and recognized as a vertical integrated unit. Some problems were faced during the cotton shock that hit Pakistan but given the difficult times, the company has still managed to perform well.

Current Activities and Products: It produces both denim and non-denim woven bottoms which are exported to the European markets and some of the best brands in the world.

Firms Capabilities: It prides on the fact that its products are high in value. Its philosophy is today's fashion is tomorrow's bulk hence setting up units close to the leading fashion markets, consolidating a position and later using the blue prints to produce in cost effective regions. Access to capital, knowledge and refusal to sub-contract are some of the reasons contributing towards its success.

Competition: Firm 7 faces competition from Bangladesh and Turkey in terms of cost effectiveness and a comprehensive supply chain respectively.

Supply Chain: All the manufacturing procedures starting from knitting of yarn to packing are performed in house.

Basic details: Firm 8 was established in early 80's and is located in Karachi. It has a total employment of 4000 workers, 50% of which are on piece rate while the remaining receive fixed salaries. The company also has a different payment policy towards its permanent employees to incentivize them through piece rate basis to increase productivity. The firm is a fully integrated unit starting from yarn and performing all the procedures till packing. Some part of the knitting is outsourced due to shortage of in house knitting machines as well as the abundant amount of commercial knitting units.

History: Initially Firm 1 started off with buying fabric and making garments. In late 80's and early 90's the company decided to investment in a fabric mill as well. Then the firm started to increase it's own fabric production and kept going vertical. Since 1999, the company has been expanding its fabric making and garments production capacity. The firm has been expanding consistently every year. In 2005, they were producing 300,000 pieces, now they are manufacturing 700,000 pieces. Capacities in knitting, dyeing and stitching production have been increased every year.

Current Activities and Products: The firm makes highly embroidery garments mostly comprising of Jackets, hoodies and polo T-shirts. It is the only one licensed to supply to VF Corporation and also does some work for Walmart as well. The firm has its own marketing team to promote its business and does not need the services of a buying house.

Organization and Management: It's a family owned business. The firm has a CEO (owner), and his son is the managing director, both the father and son come and go but the decision making process is handled by the marketing and operations directors. The management and ownership are separate.

Firms Capabilities: The firm is platinum certified for WRAP (Worldwide Responsible Apparel Producer). It is Pakistan's 5th largest firm in terms of units produced.

Competition: Major competitors include China and Bangladesh.

Supply Chain: Yarn is purchased, then knitting, dyeing, cutting, stitching embroidery, packing are performed. Cotton yarn is procured locally while for knitting machines needles have to be imported. Polyester varn is imported from China and Taiwan. The firm enjoys good relations with particular yarn mills who provide good quality yarn on time. Trimmings are bought locally or imported from China depending on the quality of the indigenous products. Most of the designing of the garment is relegated by the little innovation or reverse flow of information customer and occurs. The firm deals directly with its customer VF Corporation and other brands are also approached through the VF.

Basic details: Firm 9 was established in 1990 as a sourcing firm that later took the shape of a manufacturing unit. It is located 31 km off ferozepur road, an area now recognized as the industrial estate. It employs 70 workers; 35 of which are on piece rate while 25 receive a fixed salary. Firm 9 has 60 machines and is not vertically integrated, instead procures denim fabric and then processes it into a finished product (jeans trousers) with the exception of washing which is outsourced. Total revenue recorded for last year exceeded Rs. 160 million

History: The size of the business can be classified as small with the owner acting as a CEO and managing Director. CEO entered the textile industry in 1998 as an employee at an outsourcing company. Throughout his work experience he was able to acquire information on the textile industry and eventually set up his own business in 2002 as a sourcing company dealing with ladies high fashion jeans. The same customer buying ladies jeans introduced and motivated the company to experiment with other types of products.

In 2007 CEO along with one other partner decided to engage in manufacturing, looking after the operations side while partner dealt with marketing. Unfortunately the partnership could not last due to differences between the two individuals and CEO acquired his own plant in 2010, which is operational to date. It managed to increase its capacity from 16 to 60 machines within a time frame of 2 years. Firm 9 has two sides to its exports; one is supervised by the CEO while a large part of the manufacturing is done for a firm in Sialkot; revenue shares being 8.7 million and 150 million respectively.

Current Activities and Products: Firm 9 has captured the niche market producing denim biker jeans.

Organization and Management: The firm's owner is its CEO, making the strategies and taking the important decisions. The managerial positions are mostly held by employees who have been working in the firm for a long time and have slowly and gradually promoted to higher levels.

Firms Capabilities: The firm has successfully managed to target a niche market, producing a sophisticated and a high end product with a special lining of bullet proof fabric known as kevlar. Despite the law and order situation, the firm is able to receive substantial orders and retain customers.

Competition: Due to the different nature of the product, the firm does not face strict competitions from firms or countries. Nevertheless the threat remains from cheap duplicate fabric similar to Kevlar, which can bring down the demand and pricing of the original product.

Supply Chain: Denim fabric and bulletproof material are procured, the fabric then undergoes cutting, stitching, washing, trimmings, pressing, quality and packing. Denim is procured from local mills while kevlar is imported through agents and so are the

accessories; DuPont in an international supplier for kevlar. Some of the accessories are bought from Karachi, it depends on the product as well the demands of the customer.

Most of the designs are relegated by the customer but the firm has to invest in R&D to create the exact copy of the sample sent. Firm's marketing is a combination of direct interaction with the customer, word of mouth and foreign buying houses through some personal links.

Basic details: Firm 10, located in S.I.T.E. Karachi was established in 1997. The company has 750 employees and operates with 325 stitching machines. 100% of the shop floor workers are paid by piece rate. The company had kept female workers on salary in its prior operations however due a few ethical issues amongst the workers the department was eventually phased out. Currently the company does not employ any female worker however in near future the company wants to hire female workers in a separate unit on 200 stitching machines. The export value of the company for the fiscal year 2011 was 9.527 million \$.

History: The company is run by the CEO and his brother. Their father was a senior Vice Executive in a bank and before he retired, they started the business by taking loan from the bank. CEO's brother started the company in 1997 and he joined in 1998. Initially they did not have any unit of their own so they were getting the manufacturing done by CMTs by investing in their machinery. At one point in time 20 CMT units were working for them. They used to procure yarn and get it knitted into fabric commercially and stitching would be done commercially too. In 2001 on their mother's request they started to phase out the dealing on interest for religious reasons and by 2005 they were completing out of the dealing with banks. In 2006 the first unit was bought and in 2007 the second unit was bought as well. The first unit was located in Aurangi Town Karachi as it was near the labor pool but because of the sectarian issues in the area they had to wind up that operation to move to their current location. In 2011 they opened up their US office: a showroom in New York and an office in Chicago. CEO's brother is looking after the office in New York while he is looking after the business in Pakistan.

Current Activities and Products: Firm 10 is mainly into value added knitted products which includes both the knitted tops and bottoms

Organization and Management: Firm 10 is a family owned business run by the three family members. CEO takes care of the local operations in Pakistan whereas his brother generates the overseas orders and keeps a look out for the new development in the world market. His father looks after the finance. Overall the company also has specialists in various departments. The Factory has a knitting manager and also has a merchandising manager. The company also has a Quality Assurance department headed by a separate official specifically hired for the department.

Firms Capabilities: Firm 10 is SA8000 compliant and because of its product quality it has been able to divert customers from Bangladesh which had been working there for the last twenty years.

Competition: Firm 10 faces competition from Bangladesh in its export market

Supply Chain: The supply chain for Firm 10 starts with yarn. The yarn is then converted into knitted fabric. Firm 10 knits the fabric in house as well gets it done commercially. This is because Firm 10 has kept specialized knitting machines in house so basic knitting is being done by commercial knitting units for cost advantages. The company also outsources for dyeing in a well-equipped dyeing house. The garment

then enters the Cutting and the Stitching stage, which is done in house. Thereafter the garments are packed after checking and pressing. For the production process, the company gets the trimmings such as polyester threads from local suppliers. In rare case it also imports from Hong Kong. Following is a value chain described by Firm 10 for their knitted product:

Basic details: Firm 11, located at Kot Lakh Pat Industrial Estate, Lahore was established in 2002. The company has 80-100 employees, which constitutes 2% female workers. Workers are paid by the piece rate in stitching, pressing, clipping and packing whereas the workers in washing are paid by the pay roll. The exports for the company in the fiscal year 2011 were Rs. 66 million

History: The owner of the company went to UK when he was 16 years old with his sister. He is a totally self-made person where he built a warehouse business. The Company was importing clothing from China and other countries and also purchasing some locally and then supplying to small stores in UK. The company specialized in childrenwear, especially the girl's children wear. In 2002, he came to Pakistan and established local manufacturing operations, which was started in Iqbal Town, Lahore and later moved to Kot Lakh Pat Industrial Estate, Lahore in 2010. The first year of production in this estate was January 2011.

Current Activities and Products: The Company specializes in girl's clothing catering to girls aged 8-16 years of age a little bit for the younger children as well. They also moved into some ladies wear. 90% of the stuff is cottons, mostly jeans and 10-20% tops are also manufactured by Firm 11.

Organization and Management: The Company is a family owned business but also has a professional management operational within the company. The interviewee is the General Manager Finance who had been with the company from the last 8-9 years. Also as narrated by him most of workers have stayed with the company ever since the company is started

Firms Capabilities: The firm engages in sophisticated processes in washing to give the garment some fancy finishes and hence this adds value to the product manufactured. They recently introduced random washing to their production process, which completely changes the look of the garment. Other fancy finishes include plassing, stone washing and tinting.

Competition: The Company faces competition from India and Bangladesh in its export market

Supply Chain: The supply chain for Firm 11 starts from the procurement of fabric. They take the fabric in a dyed form. If not then they get it dyed themselves. Once they have the fabric, it goes through the washing tests then they cut it and it goes on to production. After production, it is inspected and once the inspection is complete, it goes into washing and finally into finishing processes. Finishing includes clipping, pressing etc. Then finally (it is checked for) quality and then it is packed. Firm 11 does not import any accessories. These are bought from mills in Karachi because ever since they stated they have been procuring the accessories from Karachi.

Basic details: Firm 12 is located 31 km off Ferozpur Road, Lahore and was established in 1991. It currently employs 3200 workers, out of which 2200 are salaried while 1000 are on piece rate. Firm 12 is vertically integrated with 1100 stitching machines, while knitting and dyeing capacity is measured in terms of capacity; 12 tons/days and 17 tons/day respectively. Revenue for last year was Rs 3.4 billion

History: The managing director after his graduation started working on different projects, one being textile so access to information was possible. In 1989 the he joined one of his colleagues to set up a small knitwear unit and in 1990 he joined Firm 12 with his cousins. It started off with a very small knitting unit for gray fabric for commercial purposes. Later in 1992 a small weaving unit was added realizing the inevitability of having a vertical unit to survive. At that time the capacity was 200,000 pieces per month (average size unit or large size unit). The firm also embarked on growing at least a little more that the rate of inflation, which has always been a double-digit figure in Pakistan.

Before setting up the unit, the Managing Director went to Europe and Far East to see manufacturing. Firm 12 was the first one to put openend finishing and completely automated dyeing house which later on became semi-automated due to lack of skill and will on my part of the workers and management respectively.

Since marketing was not a problem in 90's, the firm invested heavily on buying quotas , the total amount being Rs 540 million during the quota regime. The firm was lucky to find nice customers (Gap, Bershka etc). Although the firm's major customer was and still GAP, it has worked with several others like Polo, CHAPS, AMERICAN EAGLE and stores like J.C PENNY, MACYS, COSCO.

In 1999 the firm acquired another textile unit called Buksh group. Essentially the new unit has been closed for a while but was equipped with advanced machinery. The timing coincided with some labor and religious problems causing unpleasant incidents at the existing plant and hence seemed like a good investment to diffuse the tension and have access to good machinery. The new firms had some errands, which required some repair but then an 9/11 happened. From a profit of \$120 million in 2000, the company incurred a loss of \$280 million in 2001. American Eagle; a highly patriotic brand was Firm 12's major buyers, but after 9/11 they refused to buy anything from the Middle East region including Pakistan.

Since then the company has been struggling and constantly marked by internal and external distortions be it the energy crisis or the shortage of buyers.

Current Activities and Products: The firm produces all kinds of knitted apparel. Gap was and is it major customer. Firm 12 is also licensed for brands like Slazenger, HangTen, Wrangler, Jockey etc.

Organization and Management: It's a family owned business with 3 directors. However only one is the Managing Director making all the decisions while the other two silent partners. The manager's report to the Managing Director and most of the senior management has been with the firm since its inception or the start of the individual's career.

Firms Capabilities: The firm was the first one to install a fully automated dyeing which unfortunately could not work to it's fullest capacity. It is fully complaint.

Competition: Bangladesh is regarded as the firms biggest competitor whose cost effectiveness is difficult to compete with. On the national scale, most of the knitwear units have dwindles over time.

Supply Chain: The supply chain is as follows: yarn and chemicals are procured chemicals and converted into grey fabric. Then fabric is dyed, depending on the garment printing or embroidery maybe done. Later comes in cutting, stitching, washing and packing.

Raw materials include yarn, chemicals, buttons, threads, zips and accessories with a combination of imported or local depending on the quality available in the local market and if the customers makes it own nominations.

The company does not work through buying houses but through the buyer's office. It is of the opinion that buying houses are not honest with either the buyer or the manufacturer focusing only at making sales.

Basic details: Firm 13 was established in 1991 and is located in Karachi. It employs a total of 800 workers with a combination of fixed and piece rate employees. All the procedures ranging from yarn knitting to packing are performed in house and hence can be categorized as vertically integrated unit with 600 stitching machines.

History: Firm 13 started in 1992 as a commercial knitting house. Once it entered the knitting business, the strategy makers realized that the knitting industry was in decline. It was then decided to explore the commercial dyeing business and eventually became a commercial dyeing house for knits only. Although it was the quota regime the company managed to be amongst the three big dyeing houses in terms of quality and capacity. In 2002, when the news of quota abandonment had come out, the company decided to go into garment exports. The difference between an exporter and non-exporter is that the former take a balance sheet risk, invest your own money into knitting, dyeing etc while a non-exporter (commercial dyeing house etc) invests only in machinery and is provided by all the inputs by its customer. In 2000 we added a garments exports unit. Firm 13 is part of the larger company Bonanza.

Current Activities and Products: The company produces knitwear; the major products being promotion T-shirts. Most of the exports go to United States.

Organization and Management: It's a family owned business run by fathers and uncles. Dyeing house is looked after by one family member and the garment unit by another. Decision making is combined. Management and ownership is the same. In Pakistan whoever tries to manage knits professionally failed. Firm's other groups are being managed professionally but not the garment one.

Competition: The firm considers Bangladesh to be its major competitor

Supply Chain: Raw materials comprise of Cotton and polyester yarn and in trimmings its mainly zips. Yarn is procured from the spinning mills which undergoes the following; Knitting, dyeing, CMT and Packing. The marketing is done directly with the customers with no intermediaries involved. Buying houses do not facilitate but aim at getting irrespective of the form's capability damaging the individual's and country's reputation.

Basic details: Firm 14 was established in 1990 and is located on Millat Road, Dhanola, Faisalabad-Pakistan. It has 1200 employees out of which 500 are stitchers; women constitute 2% of the workforce. The supervisors, quality control, knitting dyeing, cutting personnel receive a fixed salary while the stitchers are paid on piece rate. Firm 14 is a fully integrated firm starting from knitting yarn and going all the way till packing and houses 500 stitching machines. Revenue recorded for the year 2011 was Rs 1.6 billion.

History: The current Managing Director is a medicine doctor by profession and was forced to enter the family business of knitting fabric after his father's death. Since the knitting plant did not require much time or effort, the Managing Director decided to pursue something more challenging and value added deciding to integrate vertically. He went out in other countries looking for niches and markets with string barriers to entry.

An office was set up in 2008 in the United States to service the American customers. Initially the company was operating from the Pakistan office as there was no manpower at the American office. Later the firm's customers required more services or a greater product portfolio; a customer wanted Firm 14 to fill up the racks and hence a chance to fill the shelves. Slowly and gradually Firm 14 went forward by eliminating the customer's vendor base by providing extra services and positioning themselves. These extra services were adding value as well as consolidating the business base. Then in 2012 the company launched its own label of fashionable garments catering to the age group between 15-21 years. This label is a discount brand but Firm 14 also has a high end brand. Designers are hired in America and Pakistan for styling. The company also manufactures garments for other brands, the most significant being the lvy Leagues. The brand is solely for sale in the US but some of our exports do go to Europe. We also have non-brand-business.

Current Activities and Products: Firm 14's expertiselie in knitwear producing hoodies for Ivy Leagues. Moreover it also manufactures fashionable garments for its own discount brand as well as retail brands.

Organization and Management: It's a family owned business headed by the older brother who is a managing director while the younger brother is also the director. There are mangers that have been with the firm for long and highly experienced. The company faces a dearth in finding skilled middle management hence most of the decisions and strategies are communicated in a top down approach

Firms Capabilities: In terms of cost Firm 14 is not effective, but they have somehow created efficiency in the value chain by providing value added services. Secondly, they have the license to provide hoodies to Ivy Leagues, which is a difficult market to enter and works conscientiously to look for more niche markets. Firm 14 puts is putting immense effort in improving the efficiency level of its workforce by hiring specialists to closely study the aptitude of the workers (creativity versus instructions oriented). With the help of this identification, the company would make the transition from replicated and standard products towards innovated and high quality products while fully utilizing the respective capacities of the workers.

Competition: Since the company is dealing with niche markets and differentiated products it does not directly face any competition but generally in terms of cost effectiveness, Bangladesh and China can be considered as such.

Supply Chain: The raw material is yarn, which is procured from local mills. The yarn is knitted then it undergoes dyeing, cutting, embroidery and printing (if required), stitching, trimmings, finishing and then packing. At times knitting and stitching are outsourced if the need be; also if the garment requires embroidery or printing, that too are outsourced. 90% of the trimmings are local while the imported ones depending on customer nominations come from Hong Kong or China.

The company does play a role in innovating and regularly consults the CBI website for the latest trends and colors. It is also in the transitory phase of orienting itself towards innovating and high quality products.

The firm has its own office in the United States to deal with the customers and market themselves. The Managing Director makes an effort to look for new markets and products.

Basic details: Firm 15, located in Clifton Karachi was established in 1985-1986. The company has 1700-1800 employees and operates with 1300 stitching machines. In 2008 Firm 15's engaged in a UNDP training program and the female workers thus trained are now running a production unit at Firm 15. The export value for the company in the fiscal year 2011 was 45 million \$. The company is semi vertically integrated with its own ginning, knitting, dyeing and garment manufacturing facility. It does not have its own spinning.

History: The chairman of the Firm 15 established The Company in 1985. They have been in the garment manufacturing since the last 26 years and have come a long way in terms of their growth; starting from a few dozens in Chairman's words to millions of garment pieces. The 1300 stitching machines that the company owns today have the capacity to produce 750,000 garment pieces a month. The company is very conscious about it growth learning from the closure of the industries in Lahore due to excessive bank borrowing. That is why the company is completely self-financed. In Chairman's words: "If we hand over the industry tomorrow to our children, we are fine. We are not earning for the bank. That is the prime thing. The day you start earning for the bank is the day when you are approaching to close it off." They had made some investment in Nooriyabad on an area of 50 acres in order to establish spinning facility but seeing the trend of the interest rates, the decision was postponed. It is one of the few companies who have their own ginning as well: the organic cotton, which they grow in the area of Vinder in Balochistan.

Current Activities and Products: The Company mainly operates in the knitted genre and manufactures all sorts of knitted garments like knitted tops, skirts, leggings, bottoms, fleece and coats

Organization and Management: The Company is a family owned business but have professional and skilled management designated in all departments. Since it values quality the most, it has strong checks at every stage of its manufacturing process starting from the raw material inspection right up to the packing stage. It has a separate accounts department operational and also has a marketing department from where the managers frequently travel to meet with the customers.

Firms Capabilities: Firm 15 is well aware of is corporate social responsibility. Towards this end, they have employed the local people in the area of Vinder, Balochistan where organic cotton is being grown and have also build three primary schools and a secondary school in the area which did not had any school previously. More over the Company is (World Wide Responsible Apparel Production) WRAP certified, Global Organic Textile Standard (GOTS) certified and is also certified for a number of customers such as WalMart, Addidas, Sears, Primark etc.

Competition: The Company faces competition from Bangladesh and India in its export market

Supply Chain: The supply chain starts from the procurement of yarn, which is both imported and manufactured out of the organic cotton grown by the company for which it outsources to complaint spinning units. The next step is knitting all of which is done in house. The fabric is then dyed and then it goes through the cutting, stitching and finishing stages. All these processes are done in house. The company buys accessories such as hangers, labels etc. from customer nominated sources.

Basic details: Firm 16 is located in Korangi, Karachi and was established in 1992. Till last year it employed 250 workers with the male female ratio 80:20; majority being stitchers getting paid on a piece rate basis. Due to the low business activity, the company does not have any labor apart from the one needed for maintenance. It houses 550 machines and with facilities ranging from knitting and weaving up to packing with the exception of washing and dyeing.

History: The ownership of the company has a background from Bombay and was into the textiles business for long. The acting finance director was invited by his uncle in early 1990s to come to Karachi and leap into textile. The unit for Firm 16 was founded in 1992 but later shifted to the present location in Korangi. Initially the firm flourished, exports were really good, providing garments to Walmart, Nautica and Walt Disney. However the firm is facing a hard time right now and closed its garments line in October 2012 and only focusing on knitting and weaving cloth commercially. The shut down came was a step-by-step procedure influenced by various global and local distortions. Downfall started in 2003-2004 when orders reduced in number due to the competition faced by China as well as the company's failure to invest in technology. Back in 2003-2004 an uncertain atmosphere about garments has set in as well the bank's stringent lending policy; these two factors attributed to the firm's inability to upgrade and hence received fewer orders. Then a printing machine by the octopus printing was a selling point for the firm but because the paint used was a source of allergies, its demand finished resulted in one of the firm's major buyer Walt Disney pulling out.

The quota was not a set-back for the firm as it never produced huge quantities to be affected by the abolishment of the quota regime. Gradually after 2003-2004, the firm stopped operating its embroidery machines, then printing, then stopped exporting one and half years and functioned as a CMT model up until October 2012 when the management of Firm 16 decided to shut down and explore other business avenues. Reasons for sluggish activity include shortage of orders, absence of buyers, cost competition faced from Bangladesh and China, energy crisis and lagging behind in technology. The company is a struggling phase searching for order use its CMT facilitates to cover the overheads. High interest payments for the loans taken initially taken also account for the downfall, increasing the expense level and reducing cost competitiveness.

Current Activities and Products: Firm 16 is currently manufacturing both knitted and woven fabric for commercial purposes but not running the garments unit. During its peak years, the firm used to produce T-shirts, Polo shirts and night suits, baby products and bathrobes.

Organization and Management: It's a family owned business where the senior member of the family (uncle) looks after the finance department while the nephews manage operations, administrations etc. There used to be separate departments for but now it has been reduced to marketing and finance as a separate of petro sourcing is also being managed by the same firm. The higher management who happens to be family is responsible for the major decisions being taken.

Firms Capabilities: The firm has huge premises with all the facilities to knit/weave cloth and add value till packing (with exception of dyeing).

Competition: Major competitors are China and Bangladesh whose low prices are hard to match due to local distortions (energy, law and order, labor strikes etc) prevalent in the Pakistan.

Supply Chain: During the operations years, yarn was the major raw material procured from the mills depending on the quantity and quality required. Trimmings included zips, buttons, leather button etc which, were imported or acquired locally depending on the customer's nominations, availability in the local market and quality of it. Replication model was mostly followed where the buyer presented a piece and asked for a quotation; later the sample was developed by the firm and sent for approval.

Almost 60% of the business was happening through buying-houses as the company could not afford to hire marketing personnel at enormous salaries.

Basic details: Firm 17, located on Quaid-e-Azam Industrial Estate, Kot Lakhpat, Lahore was established in 2004. The company has 400 employees and females constitute 25-30% of the labor force. Entire workforce is on salaries. The export value for the company for the fiscal year 2011 was USD 4 million.

History: The CEO of the company is a gold medalist, MBA graduate. He joined Ammar textiles, Lahore as a management trainee in 1993 and left in 2001 as the marketing head. In 2001 he joined Firm 7 as Assistant Vice President Marketing and within a couple of months his portfolio was increased to Assistant Vice President Commercial. In 2004 he left Firm 7 and started his own company by the name of Firm 17. Initially he started with sourcing business because of a major disagreement with the sourcing companies in Pakistan but later he entered directly into manufacturing. In 2004 he had already realized the importance of making organic cotton products because he felt that this would bring credibility to Pakistan. In the beginning, the company got an order from LLBean, a high standard U.S traditional manufacturing company and the order, which was produced for it was highly appreciated for its complexity and quality. There was no turning back thereafter. Today Firm 17 is producing 60,000 pieces (per month) of organic cotton products for the same customer. CEO also saw the potential for Pakistan in the woven division and thereafter starting manufacturing woven shirts for LEVIS. Today Firm 17 is manufacturing 50,000 garments pieces a month for LEVIS.

Current Activities and Products: Firm 17 operates in both knits and woven and also in other miscellaneous items such as bags, head scarves etc. The distribution of products is 40%, 40% and 20% respectively.

Organization and Management: The Company values quality and originality of the product more than anything else and therefore the organization of the company is such that it helps develop personalized relationships with its workers.

Firms Capabilities: Firm 17 inculcates in its employees a vision to represent Pakistan with great pride so that a quality product can be produced, which is able to compete with the best in the world. The company is Global Organic Textile Standard Certified, has Organic Exchange Certification for organic cotton blended products and also has the qualification and compliance as Levi's Strauss's global vendor. Moreover the company has got the highest ratings by STR USA's company on compliance to social, workplace health and safety, production systems. Firm 17 is involved in the manufacturing of innovative and sustainable products and designers are also hired for the purpose. Firm 17 also shoulders the responsibility for manufacturing and developing the supply chain for their brand Shubinak, which has organic, hand-embroidered and sustainable products, with the aim of promoting craftsmen skills of the area of Chitral. The Shubinak shops are functional in Lahore, Pakistan and in Edmonton, Canada. Another shop is going to be operational soon in Malaysia

Competition: Firm 17 faces competition from Bangladesh and Turkey in its export market

Supply Chain: The supply chain for Firm 17 for their woven product starts with the procurement of fabric, which is sourced locally. The fabric can be dyed already depending of the kind of product being produced which is then converted into a stitched shirt or other products as per the best standards required by the customers. Then the product is shipped to the customer. In knitted products, Firm 17 buys yarns from the spinners and get it knitted themselves then they get it dyed. If required then the printing is done at this stage which is available in house. Next stages in the value chain are cutting, stitching and finishing. As required by the export order, accessories are imported, if these are unavailable in Pakistan of the right quality.

Basic details: Firm 18, located at 32 km Sheikhupura Road, Faisalabad was established in 1984. The company has 21000 employees and has one of the largest knitting set up in Pakistan with 450 circular and flat knit machines and more than 6000 stitching machines. In the stitching operation, the workers are paid by the piece rate while in finishing, packing and inspection department, workers are on salaries. Females constitute 30% of the work force. The export value of the company for the fiscal year 2011 was USD 240 million. The company is vertically integrated with its own spinning, knitting, processing and garment manufacturing facility.

History: Firm 18 was incorporated in 1984 as spinning unit. The current owner of the company took over his fathers company in 1993 (after his father passed away) and added three more spinning mills to the set up. He took the business towards value-added sector. He disposed-off three of his spinning mills and started to add the next processes of the chain such as knitting. In 1995 sewing was also added. In 1995, Firm 18 became a vertically integrated mill when POLO Ralph Lauren shook hands with them for the first time. There has been a tremendous growth for the company ever since. In the year 2000 MTM went from 150 machines to 400 machines, which were increased to 1700-1800 machines in 2003. Customer base also kept on growing. In 2003 Russell Corporation gave them a huge program regarding the fall (season) fleece. By 2006 MTM had penetrated quite a lot in the retail stores and in that they were dealing with retail stores such as WalMart and JC Penny. By 2009 they had gone into value-added production for AmberCrombie and Filtch and with others as well and requirement for the sewing machines kept on growing.

Current Activities and Products: Firm 18 manufactures yarn with a wide variety of specifications and knitted fabrics ranging from 100% cotton to blends of cotton. In the garment manufacturing, it operates in the knitted genre and manufactures loungewear, sleepwear, sportswear, underwear and outerwear.

Organization and Management: Firm 18 is a family owned business but has fostered long term relationship with its management. The director operations at Firm 18, has been with this group for the last 17 years out of which almost 12 years he has been in the garment sector with Firm 18. The two marketing heads in MTM had also been working for the last 15-20 years. Both of them were hired as trainees after their MBA and today they are the General Managers Marketing.

Firms Capabilities: Firm 18 is well versed with the importance of innovation and research and development. To this end they have done a lot of work in fabric development of what is termed as performance fabrics. To illustrate they have developed a water repellent application for the fabric, which makes a garment waterproof. Another innovation of the kind is the wicking technique, which absorbs the sweat in the fabric and leaves no stains on the garment itself. MTM has also gained recognition amongst its customers for it quality production and on time delivery. In 2002 they became the best global vendor for JC Penny

Competition: Firm 18 faces competition from Bangladesh and India in its export market

Supply Chain: The supply chain for Firm 18 starts with yarn. The yarn is then converted into a knitted fabric. MTM knits 45-50% of their fabric in house and outsources for the rest to units in Lahore, Multan and Faisalabad. This is because of the wide variety of products manufactured by the company, which makes it unviable to keep all kinds of knitting machines in house. The requirement for the knitting varies by the season. The next major area is dyeing and finishing, where the company engages in the R&D as well. The garment then enters the Cutting and Stitching stage after which the garments are packed. For the production process, the company has to import trimmings such as polyester threads from China or as nominated by the customers. The company has also developed local suppliers for packaging materials and cartons, which have long been with them and have also been approved by their customers.

Basic details: Firm 19 is located in Lahore and was established in 1991. It currently employs 800 workers half of which are on piece rate. Firm 19 has 400 stitching machines and starts with acquiring fabric going till the end procedure of packing.

History: The inception of this firm took place in 1991, there were 3 directors. This firm has had upheavals, sometime the market is good and sometimes it's not. In 1997, Firm 19 decided to cater to the US market but quota harmed them due to which the firm decided to focus on the European market. The company underwent a major expansionary phase in 2003 escalating its capital from Rs 1.3 million to Rs 600 million.

Current Activities and Products: firm 19 caters to two different sectors. One involved making uniform for the purpose of defence and providing it to the army while the second sector pertains to mainstream knitted apparel; major products include denim jeans while skirts and tops are some of the minor tops.

Organization and Management: The CEO delegates the decisions to his most senior manager. It's a family owned business with the senior manager playing some role in the decision making process. The management has some leverage in the strategy making process of the firm

Firms Capabilities: Firm 19 is one of the few firms directly supplying to the army. It also has the capability to develop steady and durable fabric materials suitable for the defense sector.

Competition: Competition is faced by some local firms who replicate the new fabric innovated by Firm 19 supplied to the army. This copying happens due to the absence of patent; while Bangladesh in an international competitor when talking about the mainstream apparel.

Supply Chain: The raw material for the army uniforms is carbon fibre imported from either Europe or Hong Kong depending on the ease of availability and price; knitting is outsourced to a firm in Karachi. Denim for mainstream apparel procured from Karachi. Once the fabric enters the factory, all the remaining procedures including cutting, stitching, shading, trimming, washing and packing are performed in house. Reverse flow of information seldom occurs as the customer is has a clear idea of the designs and demands an exact copy of the prototype expected. However sometimes fabric developed by the product development team is also appreciated.

Since the nature of the product is different, direct dealing with the customers is the mode of marketing. Buying houses can play a positive role provided they are professional.

Basic details: Firm 20, located on 3.5 km off Bhoptian Chowk, Raiwind Road, Lahore was established in 1989. The company has 4100 employees, 3000 of whom are stitchers. 70% of the workers are paid by piece rate while the rest are on salaries. The company plans to switch this mix towards 100% salaries in order to achieve better productivity and quality. Females constitute 30% of the work force. The export value of the company for the fiscal year 2011 was USD 100 million out of which USD 10 million was the export value for garments. The company is vertically integrated with its own spinning, weaving and garment manufacturing facility.

History: Firm 20 was started by the owner and his brother in 1989 after the owner completed his graduation degree from the US. His brother was with his father at that time, doing fabric business by the name of Great Fabric Exports. So with his experience of three to four years in fabrics business, they then decided to enter into garments manufacturing. This was because they realized at that time that there is hardly any value addition in Pakistan and things like knitting facilities, dyeing facilities were not very developed so there was a lot of room for growth in this business. Initially they started off with knitwear and continued with it till 2009 after which they pulled out of it. The facility was closed down on purpose because they realized that till 2005 Pakistan was getting an advantage of the quota. But when the quota was finished and the market was open they felt that they would not be able to compete well in the knitwear business mainly because of the issues in Pakistan such as the market access and unskilled labor. As of today, they have two denim plants: one in Karachi and the other one in Lahore. Also they have a state of the art jeans manufacturing facility in Karachi. A second garment manufacturing facility was also established in Lahore in 2009 but as of today the jeans manufacturing is only carried out in Karachi due to cheap labor availability. Two years ago, Firm 20 also established a spinning unit in Lahore.

Current Activities and Products: Firm 20 manufactures yarn and denim fabric with a wide variety of specifications and various finishes. In the garment manufacturing it operates in the woven genre and manufactures denim jeans.

Organization and Management: Firm 20 is a family owned business. Owner's brother handles the finance department and the head office in Karachi. Another brother is responsible for the operations in Karachi.

Firms Capabilities: Firm 20 has earned its reputation for producing quality products and on time delivery. It has been receiving a performance award by its customer TARGET store consecutively from the last five years. The company also has a number of certifications for its denim fabric production. Moreover the company is also Global Organic Textile Standard Certified. Firm 20 also has a design team which is based in Florence, Italy and proposes latest designs keeping in line with the customer needs and latest trends in the market.

Competition: Firm 20 faces competition from Bangladesh in its export market

Supply Chain: The supply chain for Firm 20 starts with cotton. It is then converted into yarn and then the denim fabric and eventually garments are manufactured out of it. The cotton which costs around 80c when converted into fabric attains a value of USD 3 according to the CEO which when converted into garments attains a value of USD 7. For the production process, the company has to import trimmings such as leather patches, zips, labels and hand tags etc. from China or as nominated by the customers.

Basic details: Firm 21, located at Millat industrial estate Off Millat Road, Faisalabad was established in 1994. The company has 400 employees and operates with 200 stitching machines. In the stitching operation, the workers are paid by the piece rate while in inspection department, workers are on salaries. From the beginning of the company the company has not hired many female workers due to social constraints faced by females in late working hours. The export value of the company for the fiscal year 2011 was Rs. 18 crore.

History: The Director of firm 21 completed his graduation in 1990 and thereafter did a post-graduate Diploma in Computer Science. He joined Jagauar (Pvt) limited, Faisalabad as Marketing Executive in 1992 and left in 1994. The company is a partnership between two families. Firm 21 started on a very small scale with 20-25 machines. One of the partners was already in this business producing locally for other factories. Later when the current director joined the business with his marketing experience the company started to gain orders within a month and hence started to export thereafter. The factory was on rent initially but then they bought a land and started operations at their current location in 2005. Crisis for the company started from 2009 as a few of its customers went bankrupt and it had to take loans as the goods had been already manufactured in stocks and heavy expenses were incurred by the company. This was further aggravated by the worsening situation of energy crisis prevalent in the country.

Current Activities and Products: The Company operated in the knitting genre and is a manufactured and exporter of knitted garments mostly knitted tops

Organization and Management: Firm 21 is a partnership firm between four partners but the roles and responsibilities have been specifically assigned to individuals. The organizational structure is formalized overall. Each department is headed by a Director and then there are managers working under his supervision. The company has been able to foster long standing relationships with its managerial staff most of whom have been working with them for a long time

Firms Capabilities: The company is certified for the Inditex Group & Cortefiel Group in Spain under which there are stores like Zara Burshka and Springfield. The company is also WRAP certified which is Worldwide Responsible Accredited Production: a certification for social compliance.

Competition: Firm 21 faces competition from Turkey in its export market

Supply Chain: The supply chain for Firm 21 starts with the procurement of yarn from the mills locally, which is then sent to knitting units for knitting. They also have some in house knitting facility but it does not cover their entire production. For dyeing the company uses the services of the commercial dyeing houses in Lahore and Faisalabad. Once the fabric is ready the rest of the process is done in house. The next stages include cutting stitching, pressing and packing. The company also has an in house printing facility, which can be done according to the requirement of the garment. The

company imports accessories such as the hand tags, security tags, labels and zips from Zara's nominated sources.

Basic details: Firm 22, located at Sector 28, Korangi Industrial, Karachi was established in 2003. The company has 2000 employees and operates with 400 stitching machines. In the stitching operation, the workers are paid by the piece rate while in finishing, packing and inspection department, workers are on salaries. Females constitute 15% of the work force. The export value of the company for the fiscal year 2011 was USD 12-14 million.

History: The CEO of the company completed his graduation in 1989. His family had the business of PVC pipes previously in Dhaka. After the fall of Dhaka they moved to Karachi and started with PVC pipes business here. After he completed his graduation, his father suggested to him to focus on other businesses such as Textile. He entered the knitwear business as a partnership company on a small scale in 1992. In 2003 he had differences with his partner and hence they separated. So he made another factory in 2003 in SITE and did a partnership and then in 2009 the initial unit that he had built in 1992 went bankrupt. So he bought the same unit in Korangi Industrial Estate. Today he has two units operational: one in SITE and one in Korangi Industrial Estate. Firm 22 is a completely self-financed company from the very beginning. When the second unit was bought some loan was taken from the bank but it was paid off within the next six months.

Current Activities and Products: The Company operates in the knitted genre and mainly manufactures knitted tops.

Organization and Management: Firm 22 is a partnership company between two partners. The company however has an experienced management operational within the company. On the production side they have been hiring people from Honduras. This year they have hired a production head from Honduras whose specialization is in Industrial Engineering. Marketing, however is handled by the owners themselves.

Firms Capabilities: Firm 22 has a strong accounting system. They have an ORACLE based accounting system and they do the job order costing on it. They assign a number to every order and do all the expenses according to that job order

Competition: The Company faces competition from Bangladesh and Vietnam in its export market

Supply Chain: The supply chain for firm 22 starts from the procurement of yarn, which is then sent for knitting commercially. Some of the knitting is also done in house as the company has collar knitting and jacquard machines. Also the company has an in house dyeing facility. Once the fabric is dyed it goes through the cutting, stitching and the finishing stages all of which are in house as well. The company purchases the trimmings such as Labels, Care labels; Threads, Heat Seal, Hand Tags, Polybags and Cartons locally.

Basic details: Firm 23, located at Sector 27, Korangi Industrial Area, Karachi was established in 1986-87. The company has 10,000 employees in the whole group and operates with 3500 stitching machines. In the three units that the company has, two units have workers on piece rate and in the third unit they are paid by salaries. This is to offer competition within the system and to achieve cost efficiency. Females constitute 30% of the labor force. The export value of the company for the fiscal year 2011 was USD 80 million. The company is semi vertically integrated, as it does not have its own spinning mill however it has its own weaving, washing, dyeing and garment manufacturing facility.

History: The interviewee was is Manager R&D at Firm 23. He did his BSc (Hons) in Textile Sciences in 2002 and worked in the industry for five years. He went to Anees Textiles Faisalabad and was working there as Manager printing. Then he went to UK to pursue his MSc in International Fashion marketing from Glasgow University. He joined Firm 23 almost two years ago as the product that fascinated him the most was denim. Firm 23, established in 1986-87 started off as a small unit. They used to produce shirts and men's jeans initially. Mid 90s was the time when it actually flourished. Throughout the world the growth rate in the denim industry was enormous at that time. That is when they start establishing their infrastructure. They established their own stitching units and their own washing plant as well. Over the years there has been an improvement in the number of clients as well. Today Firm 23 is dealing with almost over 50 clients whereas it started off with 3 to 4 clients only. Initially Firm 23 only had garments manufacturing facility and a washing plant. Now they have their own fabric mill as well.

Current Activities and Products: Firm 23 operates in the woven genre and manufactures high end denim jeans

Organization and Management: Firm 23 started off as a family concern with a top down approach in its management. However the company has evolved in terms of developing is professional management. The structure is such that they have one CEO and then they have levels of Directors. There are four directors, which are looking after the Operations Washing, Stitching units, finance, and exports. Then there are General Managers: GM finance, GM operations, GM washing, GM plants who looks after the denim mills and then there are supervisors, line supervisors, etc. According to the CEO, the best thing about Firm 23 now is that the responsibility and the decision making is delegated to the management.

Firms Capabilities: Firm 23 was amongst the very few companies who installed a monitoring system in order to get a clear visibility of actually what is happening in the system. The company is also exploring new market avenues. It aims to enter the South American market in 2013 and has also opened up an office in Australia to explore the market there

Competition: Firm 23 faces competition from Bangladesh, India and China in its export market for garments.

Supply Chain: The supply chain for Firm 23 starts from the procurement of yarn, which is then dyed and weaved into fabric. Once the fabric is ready then it is goes through stitching and washing. After washing it goes into finishing after which it goes for the packing and then it is delivered to the customer. The company prefers to buy the accessories such as zips, rivets and buttons locally. The idea is to support the local industry. For metal trims the quality produced in Pakistan is not as good as China so they buy these from China.

Basic details: Firm 24, located at Green Town, Millat Road, Faisalabad was established in 1988-89 The company has 675 employees and operates with 400-450 stitching machines. In the stitching operation, the workers are paid by the piece rate while in dyeing, knitting and the checking departments, workers are on salaries. Females constitute 30-40% of the work force. The export value of the company for the fiscal year 2011 was Rs. 27 crore. The company is semi vertically integrated with its own knitting, dyeing and garment manufacturing facility.

History: The Company was started by two brothers in 1988-89. The company had modest beginning where it started from 5 machines but gradually the company built upon its infrastructure and today it has its own knitting, dyeing and garment manufacturing facilities. The company is 100% export oriented and the strength of the company lies in the manufacture of polyester based garments apart from the manufacture of cotton-based products.

Current Activities and Products: The Company caters to the schools in England and manufactures school uniforms particularly rugby shirts as rugby is a major sport for children in UK.

Organization and Management: Firm 24 is a family owned, partnership firm with two brothers as being partners in the company: each having 50% of the shares. There are several departments operational within the Company. There is a separate accounts department in the company. Also there is a manufacturing department where the roles and responsibilities of various tasks are assigned to specific individuals. There are designated personnel to take care of the requirement of the fabric, the dyeing program for fabric dyeing, making the technical sheets before the garment is cut. Then there is an auditing department to check the garments at various stages. Marketing is seen by the two brothers themselves.

Firms Capabilities: Their strength is in a niche line and a niche market namely the schools in UK. Firm 24 is a quality-oriented company and wishes to continue with its niche line as the company feels that a lot of profit margin potential exists in this particular market. The new trends in the market are seen which then helps them in design development. Many times, the customers also give them the design directions. The company has recently opened up an office in Madrid Spain and also has launched its own brand by the name of Dot Shot to cater to the Spanish market.

Competition: Firm 24 faces competition from China in its export market.

Supply Chain: The supply chain for the company starts with the procurement yarn: 65% of which is sourced from China and 35% is purchased locally from Ruppali. The yarn is then knitted into a fabric for which, the company has a separate knitting facility. The fabric is then dyed and it is cut according to the technical sheet specifying the requirement of the garment. After cutting, auditing is done to see if there is any damaged piece, which is then replaced. Also special processes such as embroidery or printing can be done at this stage as well as once the garment is manufactured

completely. After cutting, the fabric goes into stitching which is followed by the clipping. After the final checking and packing, the garments are ready to be exported. The company uses trimmings such as zips, twill tapes and labels, which are sourced locally.

Basic details: Firm 25 established its garments unit in 2007 in the industrial state of city Karachi. The total number of employees amount to 125 out which more than 70% are on piece rate while the rest are salaried. 120 machines are installed in the factory, mostly comprising of stitching machines. The firm procures yarn it and performs all the procedures in house in house till packing with the exception of washing/dyeing and knitting which are outsourced due to heavy investment in washing equipment.

Firm's revenue for last year was ranged between Rs. 120 to 150 million.

History: Firm 25 initially started by setting a commercial washing unit for woven in 1980. The garments unit came into inception much later in 2007 when the owner's son finished his studies and ready to join his father in the business. However both the washing and garments units are separate due to the nature of the industries; woven and knitting respectively. Since 2007, the firm has been running both its units successfully overcoming problems faced due to its small size, bad law and order and energy shortages.

Current Activities and Products: Major products include knitted T-shirts.

Organization and Management: The organization structure is family owned where the father oversees the washing unit and the costing while the son heads the operations of the garments unit. Management is hired but they have little or no role in the decision or the strategy making process.

Competition: The company's major competitors include Bangladesh.

Supply Chain: The value chain starts with buying yarn, knitting and dyeing are outsourced while cutting, printing, stitching and then finishing are all performed in house. Knitting and dyeing are outsourced. Yarn is acquired from mills through brokers while the trimmings are nominated by the customer. They mostly come from China. Import of trimmings can be time consuming due to poor custom clearance and unnecessary time delays, which prolong the lead time of the garment.

The customer usually sends a sample of the garment required and Firm 25 replicate a copy; there is hardly any reverse flow of information. Firm 25 receives all of its orders through buying house, as it's a small factory working to establish a customer's base. However the owners feel the role of buying house are becoming increasingly dangerous who are loyal and skewed towards the buyers only abandoning the manufacturers at any time and pressing for unreasonable demands e.g air shipment etc.

Basic details: Firm 26 is located in the Industrial SITE area of Karachi and was established in 1990. It employs a total of 300 workers; 250 of which are stitchers paid on piece rate basis while the remaining workers consisting of supervisors and quality check personnel receive a fixed salary. Women constitute to be 10% of the workforce. The company is not fully integrated with a total of 350 machines available for CMT and embroidery while knitting, dyeing and printing are outsourced. Revenue recorded for the fiscal year 2011 was Rs 220 million.

History: Firm 26 was formed in collaboration with three business partners. The business started off with 23 machines dealing with towels attracting some big brands. This gave the firm a good start and after consolidating a market base, they shifted to garments. Currently the 350 machines have a capacity to produce 10,000 dozens per month but the number may vary depending on the design of the garments; less in the case of high fashionable clothing.

Till 2005, due to the quota regime, the buyers had no choice but to come to Pakistan for the specific items listed but once quota ended, China entered giving tough competition due to its cost effectiveness. Later the GSP status allotted to Bangladesh along with the other internal subsidies, rebates etc, further reduce orders in Pakistan. Recently the recession in America and Europe also contributed to fewer orders to the extent that Firm 26 is operating at 50% capacity but the business activity seems to have picked up pace starting October 2012.

Although Firm 26 outsources quite a few of its operations and acknowledges the benefits of a vertical integrated model (control over quality, reduced transportation costs, timely deliveries), the company is short of capital and orders to make such huge investments. Moreover knitting and dyeing commercial units are readily available offering credit facility.

Firm 26 have also been exploring the market for plain white bed sheets for hotels to utilize its idle capacity.

Current Activities and Products: Firm 26 produces knitted tops and bottoms. The major export market is the United States while some percentage is also sent to Europe.

Organization and Management: The managing Director makes all the major decisions and devises strategies. Although managers have been hired but due to the nature and perception of the textile business; factory as the workplace, less glamorous, presence required at the operations site, very few graduates are drawn towards this field. Hence most of the management has little education mostly learning on the job. Therefore managers cannot be delegated authority due to their limited capacity.

"I make all the decisions although we have managers. In the garment sector, it's hard to find educated individuals and most of the people have little education and mostly learn on the job. I don't expect my managers to make decisions on their own."

Competition: The firm faces competition from China and Bangladesh.

Supply Chain: Yarn is procured from local mills and sent for knitting and then dyeing. Procuring yarn is troublesome due to its volatile price and the firm has marked certain mills. Outsourcing knitting and dyeing have some inherent problems with the fabric changing in behavior or defects in color shades. Quality is monitored by Firm 26's supervisors. Once the colored fabric enters the house, it undergoes cutting, stitching, trimmings and packing. Depending on the garment specifications, embroidery or printing may be performed; the latter being outsourced.

Trimmings like buttons and zips, labels have to be imported sometimes. The common practice is that the buyer sends a sample and depending on the quality available in the local market, they are either procured locally or imported from Hong Kong. No major problems are faced in importing.

85% of the business comes through buying houses while some customers also communicate directly. Looking at the bad law and order situation, buyers are hesitant to come to Pakistan and hence buying house act on their behalf.

Basic details: Firm 27 was established in 1974 and is situated at Gabol Town, Sector 16-B, FB Area, Karachi. It currently employs a total of 300 workers with the stitchers paid by the piece rate while the others receive a fixed salary. The workforce is male dominated due to security concerns and bad law and order situation. The firm has all the equipment to be a fully vertically integrated unit but due to a 10 month shut down in the year 2012, some of the machinery is undergoing upgrading. It has 550 stitching machines, a dyeing capacity 300,000 kilo per month while knitting scales up to 800,000 kilo per month. Due to excess dyeing capacity, Firm 27 does some commercial washing for other units while the shortage in knitting capacity is met through outsourcing. Due to the annihilation of operations last year, no revenue was recorded, production however has resumed again with approximately USD 2.5 million revenue calculated for the fiscal year 2013.

History: The factory was established 40 years ago, focusing only on manufacturing fabric and home textiles like towels until 1978, when a garments' unit was added. Both the home textile and garment units were being run simultaneously until 1980's, when the firm decided to strictly stick to garment manufacturing. The growth path of the firm was reasonably good until 9/11. Firm 27 also had operations in UAE, Jordan and Mexico and later switched from Dubai to Jordan after 9/11 as the Americans did not want anything from the Arab States. Problems mainly occurred after 9/11 because Sine's biggest customer at that time was the American Eagle; a very patriotic American brand refusing to buy from Arabs or the Muslim region. For home textile the firm operated in Mexico but mostly faced difficulties with International ventures and is only willing to pursue a project if a family member is running the international office. The main reason for shutting down was an internal financial which was resolved by bank negotiations; cooperation extended by the banks has enabled the firm to resume operations. Previously the firm remained closed for 10 month and resumed activity in October 2010. It plans to expand it revenue by the factor of 2 every subsequent year.

Current Activities and Products: Firm 27 bed sheets, knitted sheets and knitwear of all kinds.

Organization and Management: It's a family owned business where business strategies are made and discussed by family members.

Firms Capabilities: The firm is equipped with advanced machinery undergoing some upgrading. It is fully compliant according to international standards.

Competition: International competitors include Bangladesh and India; the former because of GSP and latter for its longer staple length cotton enabling it to producer finer cloth compared to Pakistan.

Supply Chain: The value chain starts with yarn then knitting, then processing like dyeing and printing, stitching, quality checking and packing. The raw materials include yarn, trimmings and different items for packaging; all are procured locally unless stated otherwise by the customer demanding imported trimmings.

Firm 27 replicates and works on the designs instructed by the customer. Buyers are approached directly as the firm feels buying houses make no significant contribution to sales. 15% of the business is approached through buying houses; an approach taken when experimenting with different and new styles, with standard products the company prefers to meets its clients at fairs.

Basic details: Firm 28 Ltd located at 26-A S.M.C.H. Society, Shahrah-e-Faisal Karachi was established on March 12, 1984. The company has 15000 employees in the whole group, 12000 of whom are employed in the garment manufacturing facility. 90% of the workers are on pay roll whereas 10% of the work force is paid by the piece rate. Females constitute 50% of the work force. The export value for Firm 28 in the fiscal year 2011 was USD 176 million with the export of 14.6 million garment pieces per annum and fabric export of 19.6 million meter per annum. Firm 28 is a vertically integrated company with its own spinning, weaving and garments manufacturing facility. It also has a state of the art laundry facility.

History: It is a family owned private company. The company had modest beginnings but due to vision of the owners the company has been growing every year. Today Firm 28 produces 15 million jeans annually and produce 3.5 million meter of denim fabric both for export and in-house consumption, which is more than 50%. The company has four garment manufacturing units and two washing plants as well.

Current Activities and Products: Firm 28 mainly operates in the woven genre and is a manufacturer and an exporter of fashion jeans and all bottoms.

Organization and Management: Firm 28's structure is such that there are divisions at various levels. One is the head office division, which is the corporate office. Second is garment division, which has General Manager Marketing and has GMs for different factories. Within a factory there are various departments such as cutting, stitching and finishing departments. In sewing they have sewing managers, floor in charge, and a production manager. Similarly in finishing they have a finishing manager. Washing is a separate entity so it has a separate GM, separate senior manager, separate floor in charge. The group also has a GM finance that also looks after the garment division. But there are separate teams for accounts, finance and audit where they have hired qualified Charted Accountants and Cost Accountants.

Firms Capabilities: Firm 28 has made a huge investment in developing its Research and Development department; 5 times that of other garment factories according to GM Marketing, Mr. Ismail Ahmed. They also have hired the foreign expertise towards this end for their garment manufacturing as well as the fabric manufacturing facilities. Also foreseeing the energy crisis that the country is going through the company has incurred a huge investment in the form of fixed deposit to Karachi Electric Supply Company as they have bought load from it. Also they have maintained three independent quality departments as the company feels that on time delivery and the right quality is the key to success in this business. The company has an office in Istanbul, Turkey where the R&D staff stays for fifteen days in a month to look at the latest trends in the market, which are the further developed and marketing is done accordingly.

Competition: Firm 28 faces competition from Bangladesh, Vietnam and Cambodia in its export market.

Supply Chain: The supply chain for Firm 28 starts from the procurement of raw cotton. Yarn manufacturing, weaving and garment manufacturing is done in house 95% of the time. The orders are outsourced only in case of emergency. The company uses a wide variety of accessories such as zippers, buttons, labels, tags, threads, fancy threads, some specialized packing materials etc. and many times these have to imported due to non- availability locally or due to customer nominations.

Export: The export market for Firm 28 is mainly Europe. It caters to some of the best retails stores and brands around the world such as Zara, Mango and C&A

Basic details: Firm 28, located at Quaid-e-Azam industrial Estate Kot Lakhpat , Lahore was established in 1992. The company has 60-70 employees and operates with 70-80 stitching machines. Workers are paid by the piece rate and females constitute 25% of the work force. The export value of the company for the fiscal year 2011 was Rs 70 million approximately.

History: The CEO of the company started this business twenty years ago. He also has a family history of being in the knitwear business. His grandfather used to supply uniforms to the Pakistani Army in 1960's. When his grandfather died, his father could not handle the business and so the business was closed down. When he completed his studies his father got in touch with a friend of his who was a contactor and used to supply vests to the Pakistani Army. He had a few machines at that time and he encouraged him to collaborate with him for this business. CEO worked with him for some time before leaving for Sharjah for a job. Upon his father's request he quit his job in Sharjah and retuned back to Pakistan to restart his business. When he started he only had 4-5 hosiery machines and as a smaller unit he also became part of the industry. Later he kept on adding machines as the profits were generated and reinvested in the business.

Current Activities and Products: The Company manufactures sports uniforms for the players of American football and American baseball and supplies these to a US based customer.

Organization and Management: Firm 29 is operating at a small scale with 60-70 employees so at the moment it is a self-owned company.

Firms Capabilities: Firm 29 tailored its product according to the requirement of its customer. Initially when the company was a CMT unit, it used to manufacture cotton based products such as T-shirts, polo shirts, sweat shirts etc. But ever since the company came across its US customer the company has developed its specialization in the sports wear products. Also Firm 29 is planning to launch its own brand in the market by the name of Care Sports and intends to hire designers for this purpose.

Competition: Firm 29 faces competition from African countries in its export market as the customer with whom the company is dealing with also gives some of the orders to Africa.

Supply Chain: The supply chain of Firm 29 start with the procurement of yarn from mills such as Ruppali in Karachi. Sometimes yarn is also imported from China through importers in Karachi. The yarn is then knitted for which Firm 29 has a separate factory. The knit unit not only does the knitting for Firm 29 but also does so commercially for other factories. The knitted fabric is then sent for dyeing in a commercial dyeing unit in Gujranwala. Once the dyed fabric gets back to the factory, it is stitched and checked for the quality. The finishing and the packing are done thereafter after which the garment is ready to be exported. The trimmings used in the garment manufacturing are sourced locally.

Basic details: Firm 39, located at 20 km Ferozepur Road Glaxo Town Lahore, was established in 1998. The company has 1600 employees and operates with 600 stitching machines. Workers in the stitching department are paid by the piece rate where as in the other departments they are paid by salaries. Females constitute 6% of the labor force. The export value of the company for the fiscal year 2011 was USD 25 million.

History: The history of the company can be traced back to the brand Leeds, which was founded in 1977 and used to manufactured 100% wool sweater, pants and Shalwar Qameez for the local market. It was a family owned company owned. Several other companies were formed under the umbrella: such as US Denim, United Apparel and Firm 30. One of the owners was working with Firm 33 but then he left the company to take over the responsibility of Firm 30 International in 1998 which was already supplying in the local market back then and also used to manufacture for other factories on CMT basis. Then in 2001 Firm 30 entered the export market and since then it is catering to 100 % export of woven bottom wear.

Current Activities and Products: Firm 30 mainly operates in the woven genre and is a manufacturer and exporter of bottom wear

Organization and Management: Firm 30 is a family owned company. In the beginning of the company had four partners. The company however has been able to foster longstanding relationship with its top-level management since most of them have long been with the company.

Firms Capabilities: The Company has invested in developing its research and development capacity. In the last one and a half year they have hired designers, two of whom are local and one is based in England. They initiate the designs, which are then sent to the customers for approvals. They also have an in house washing facility where they are able to give various finishes to their garments. Some of the main effects include, sand blasting, oven effects and baking effects

Competition: Firm 30 International faces competition from Bangladesh in its export market for garments.

Supply Chain: The supply chain for Firm 30 starts from the procurement of denim fabric. Once the fabric is in house, it is not outsourced usually for any other process. Be it printing, embroidery or washing, everything is being worked upon inside the factory. However in order to meet the order deadline, the factory sometimes has to outsource to other CMT units. Mostly it is done in the stitching process. The company imports accessories such as zips and buttons used in the garment manufacturing from China.

Basic Detail: Firm 31 was established in 1976 and is located on Millat Road, Faisalabad. It employs a total of 3500 workers in the garments unit, most of which are paid by the piece rate. Women constitute to be 5% of the workforce. It is a vertically integrated firm with 1500 stitching machines. The revenue recorded for garments exports was USD 80 million.

History: Firm 31 has been part of the textile sector for decades, however the senior leadership did not pursue exports until 1977, when the first container was shipped to Kuwait. In 1998 a dyeing plant was added after realizing the importance of being vertical integrated; a requirement to be cost effective as well as efficient especially when faced with price cuts.

Comparing the business dynamics of 1970 to those of now (2012), prices quoted include higher profit margins, customers were cooperative etc. These factors can be attributed to the lack of awareness as well as weak mechanisms available for check and balance e.g. little testing of dyes, shrinkage and working condition. Hence business activity flourished. While now apart from just the increase in the knowledge of the buyer, the energy crisis and terror threats have dampened the business activity in Pakistan. These distortions forced Firm 31 to set up a factory in Bangladesh (2008) as it was also suggested by the buyer. The factory in Bangladesh is owned by Firm 31 and has made it easier for the buyers to visit, otherwise the leadership had to travel incessantly or communicate via skype to discuss orders.

The transition to Bangladesh was more or less smooth minus a few minor problems. The business is running well as the labor in Bangladesh is professional and skilled. Also the government mechanism is fair and supportive.

The main head office is located is in Dubai while other small offices exist in Germany, England United States etc.

In 2012, Firm 31 acquired a big textile group by the name of *Jaguar* to expand its capacity and remove any reliance on outsourcing.

Current Activities and Products: The product portfolio is vast; knitted garments of all styles are provided to brands like Zara, DHS, WalMart, McDonalds, Mercedes Benz, socks are provided to high ends brands like D&G, Boss.

Organization and Management: Firm 31 is a family owned business with 3 Directors; brothers. One brother looks after production and international purchase while the other after finance.

Firms Capabilities: Firm 31 is privileged enough to cater to a lot of high-end brands. It is the only textile company in Pakistan to own a factory in Bangladesh. It was recently awarded the license to supply drinking water to the citizens of Pakistan by the Water authorities. For water treatment, Firm 31 makes use of reverse osmosis to treat water.

Competition: The Company does not face direct competition as it has its own factory established in Bangladesh.

Supply Chain: Yarn is bought from local mills, and then it undergoes knitting, dyeing, cutting, stitching, trimmings and packing. Inspection checks are installed at each and every stage to maintain quality be it fabric finishing, dyeing color, sufficient stitches per inch, shrinkage etc.

Trimmings are imported from China as the quality available in Pakistan is not very high, the differences in quality might be low but it's a contributor towards value addition. Trimmings are bought by making contacts at exhibitions and the management is on a constant lookout for new suppliers Thread is also imported as the Pakistani one keeps breaking off. Importing process in tedious, including duties, customs etc..

In times of high demand, stitching may be outsourced and the experience has been bad; maintaining quality was the biggest problem. Also the outsourced units are not complaint enough, which puts an added pressure to first make them complaint before outsourcing.

For now the company replicated the designs given by the buyers and feels innovation is important is the firm has its own brand.

All the business is done through direct communication with the clients. The buying houses are loyal to the client, blackmail the manufacturers, pin point unnecessary faults to reduce the quoted price and gain higher commission rates.

Basic details: Firm 32, located at Khayaban Colony No.3, Madina Town Faisalabad was established in 1989. The company has 500 workers and operates with 850 machines in total, which includes the knitting and the dyeing facilities. Females constitute 5% of their work force. In cut-to-pack production processes the workers are paid by the piece rates but in other departments workers are paid by salaries. The export value of the company for the fiscal year 2011 was Rs 1 billion. The company is semi-vertically integrated with its own dyeing, knitting and garment manufacturing facility.

History: The Director of the company is in this business since 2009. He completed his BSc (Hons) from North Carolina State University in Textile Apparel management with a concentration on Supply Chain Management. After his graduation, he joined his family business by the name of Firm 32. The company was started by Director's father in 1997/98 on a small scale with 150 machines. It was started off as a stitching facility and had cutting to packing processes in house. As of today Firm 32 has its own dyeing and knitting unit as well as the garment manufacturing facility.

Current Activities and Products: Firm 32 operates in the knitted genre and manufactures a wide variety of knitted products such as T-shirts, polo shirts, trousers, hoodies and sweatshirts

Organization and Management: Firm 32 is a family owned business basically managed by the director and his brother.

Firms Capabilities: Firm 32 lost one of his customers Aero Postale due to the trust deficit that the customer had developed with the buying house with whom Firm 32 was dealing with. Even though the company had to face problems in filling up the capacities after the customer was lost, new customers are being added and the company is hopeful to get to full capacity in the next 6-7 months. This is because marketing responsibility is now taken up by the Director himself. Also Firm 32 feels it has the capability to survive under crisis because it does not owe any money to the bank. In the director's words, "I don't owe the bank a single penny. It is all self-financed. So even in bad times I have the ability to survive. But not all companies are like this".

Competition: Firm 32 faces competition from Bangladesh in its export market

Supply Chain: The supply chain of Firm 32 start from the procurement of yarn, which is then knitted and dyed in house. This completes the finished fabric like jersey or fleece. Once the fabric is ready then it is shifted to the second unit where other processes are done. These include Cutting, Stitching, finishing, packing, embroidery and other embellishments as required and then it is ready to be exported. Firm 32 buys 100% of its yarn from the local mills because of the good quality being produced. The company buys accessories such as twill tapes or the applic from the local sources as well.

Basic details: Firm 33 was established in 1975 and has four manufacturing units in total; all in Lahore. Total employment measures up to 14,000 workers, 23% of which are stitchers who are paid by the piece rate. Women constitute to be 2.5% of the workforce and are employed in the Trimmings' department. Firm 33 is completely integrated with all the machines installed in house; very rarely is stitching outsourced or fabric bought in case of peak seasons. A total of 4,500 stitching machines have been installed. The revenue recorded for the year 2011 from the apparel unit was \$120 million while that from denim was USD 60 million.

History: Firm 33 was founded by 2 brothers who started off on a very scale, saving up from the very start and eventually building 4 units. Financing of these 4 units has coming from the owners with no reliance on loans.

The company has experienced immense growth in the past 5 years (2007-2012), increasing its capacity from 8 million piece/year to 14 million piece/year. Firm 33 has an annual growth rate of 8%, beyond which it feels would be too dangerous to grow, keeping in mind the business risks, uncertainty of orders, deficiency of skilled manpower and the internal management structure.

However despite all the internal and external distortion, the company has managed to flourish and contribute to Pakistan's export of garments. Firm 33 has marketing offices and design teams in London and other cities of Europe. This helps in image building and staying abreast with the ongoing trends. Experts from Turkey and Sri Lanka have been hired who train and equip the local workforce with the right tools need to compete in the international arena.

The company is also experimenting with another model of providing working capital and Raw material to smaller firms who in return would help Firm 33 fulfill its orders and take care of quality. This model in its planning stage and will be executed after all the necessary feasibility work has been completed.

Current Activities and Products: Firm 33 manufactures denim bottoms as well as all sorts of knitted garments for its Apparel range.

Organization and Management: Firm 33 is the private limited with 10 shareholders; the shareholders being family members. The CEO is the owner making most of the important decisions, however accountability and decision making also lies within the hands of the management which has vast experience in the field of textiles. The younger generation of the ownership is gradually entering the managerial area and engaging itself. Hence the company is in a transitory phase of transferring management to the owners.

Firms Capabilities: The Company is providing some of the leading brands like Lewis, Next, Marks & Spencer etc. It is a firm fully complaint as per the international standards. Moreover it has managed to retain orders despite the law and order problem and delivers high quality products on time at cost effective rates.

Competition: Bangladesh is regarded to be a competitor due to its cheap and energy costs as well the status granted by Europe. All these factors give Bangladesh the edge over cost effectiveness making it an attractive destination for European buyers.

Supply Chain: Yarn is procured locally which then undergoes, knitting, dyeing/washing, stitching and all the way up to a finished product. Some customers also cash on bulk discounts when buying fabric from China and instruct Firm 33 to make use of that certain Chinese fabric. In times of high demand, denim fabric may be procured from fabric suppliers while stitching outsourced to smaller units.

Due to the undeveloped nature of the trimmings market in Pakistan; accessories are imported with reasonable ease. Choice of the trimmings source depends on customer nominations as well the price and quality.

The company has its own designs teams that researches on current trends and designs are presented to the buyers who pick and choose according to their liking. In some circumstances, the buyers' model may also be replicated.

90% of the business dealings are done directly with the customer as the company has a strong marketing unit. Buying houses have little to offer to Firm 33, however in cases where the buying house's can contribute, consultation is sought.

Basic Details: Firm 34 was established in 1951 while the Garments unit was set up in 2007 and is located Off 22 K.M. Ferozepur Road, Lahore. It currently employs a total of 20,000 workers out of which 3000 are part of the garments unit. Women constitute to be 25% of the workforce. It is a vertically integrated unit with facilities ranging from spinning, weaving, dyeing, cutting, stitching and finishing. In terms of capacity utilizations, it's fully recognized and produced 5,873,178 garment pieces in the year 2010-2011. Revenue recorded from the sale of garments amount to be \$350 million for the fiscal year 2010-2011.

History: Established in 1951, Firm 34 has grown tremendously in the past few years. Traditionally a capital-intensive business and due to its nature ownership: family owned: and it shied away from investing in the final end of the business, garments. However in 2005, the idea of putting up a garment unit was proposed. Since the company has no previous experience in garments, a joint venture with Gulf Garments (in Bahrain) was launched. The factory was built by 2007 but this joint venture did not last for long and difficulties were experiences. Firm 34 leadership had had the choice of either to sell the plant or run it themselves; latter opted. In 2008, the company started making money and created a lot of synergy between its other units (weaving, dying, finishing) as well as synergy for the customers.

Current Activities and Products: The Company produces a wide range of woven products. It provides to some of the big brands like Levis Strauss, Dockers, Gap Inc, Top Man, Conbipel etc.

Organization and Management: Firm 34 has been acquired from Firm 34 which is family-owned, however it has other partners as well. The management is separate from the ownership with all the separate departments.

Firms Capabilities: Despite all the internal and external distortions, the company has experienced positive growth at different levels annually. It provides some of the prestigious brands in the world and has the license for Better Cotton Initiative. Firm 34 has earned a reputation for high quality, while investing in product development broaden its customer's base and diversify its product portfolio. The company has successfully installed a managed inventory system with some of its customers.

Competition: Bangladesh is considered to be a competitor; one reason being the low wage rate. A worker in Bangladesh is paid at most USD 75/ month while the FOB of denim jeans in USD 8.99. Apart from Bangladesh China can also regarded be a competitor, the problem also rises due to perception, where Pakistan is the last option for buyers.

Supply Chain: The raw material for the garments unit is finished fabric; 50%-60% of this fabric is procured from Firm 34 while the remaining is imported from Hong Kong, China and India. Once the fabric enters the house, it undergoes washing/dyeing (depending on the requirements), cutting, stitching, trimmings and all the way up to packing. No major problems are incurred in importing as the Company has strong

systems in place. In terms of trimmings, the quality can be issue especially from some small firms. Firm 34 invests heavily in Research and development, innovating new styles and keeping abreast of the latest trends.

Lewis one of Firm 34 major buyers have a strong presence in Pakistan. The company has a positive view of buying house as they help bring business to Pakistan which otherwise is hard. According to Firm 34's buying houses can play a huge role in alleviating uncertainty in demand for manufacturers, bring buyers and increase customers' confidence about Pakistan's products and improves its perception. Most people don't know Pakistan from garments point of view, this gap can be reduces through buying houses.

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