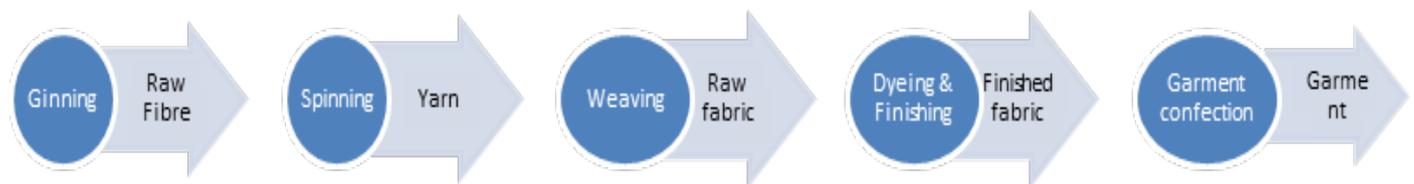


# Textile Weaving

September, 2018

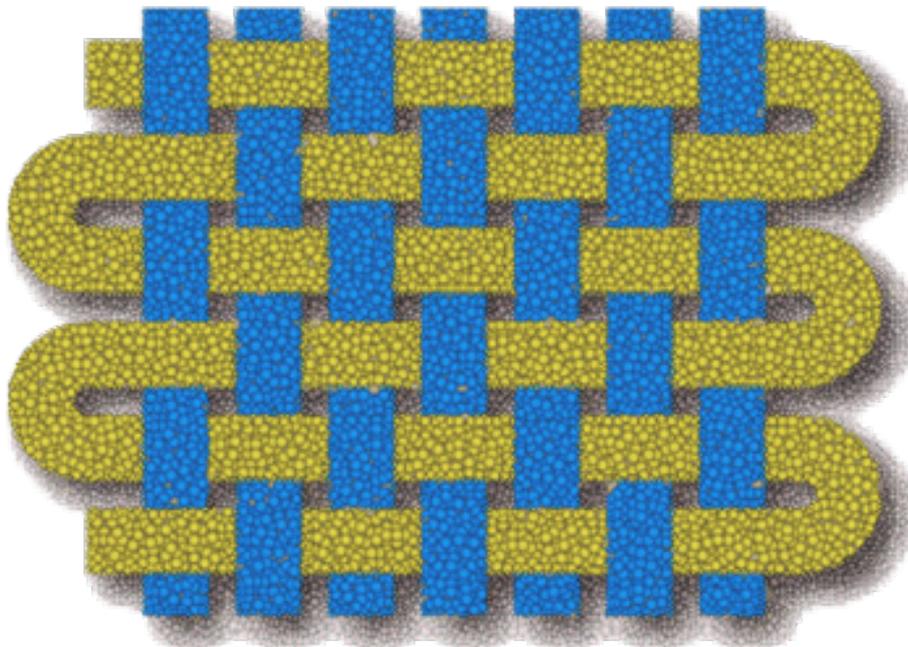
Weaving is defined as the process of conversion of cotton yarn into raw fabric. It can be classified as the third process in the textile value chain illustrated in Figure 1. The value chain broadly consists of six major sub-sectors. The end product of one subsector is an input raw material for next sub-sector (except for dyeing). The weaving process involves several procedures to convert the produced yarn into the end-product. Firstly, the yarn is prepared to be used as 'Warp' yarn and 'Weft' yarn. Woven fabrics consist of two sets of yarns, Warp and Weft, which are interlaced together at 90 degree angle. Warps are the yarns that are placed vertically, while wefts are the yarns that go across the warps. The interlacing process takes place on the weaving machine. Figure 2 depicts warp and weft pattern, while Figure 3 depicts the interlacing process on the looms.

**Figure 1: Textile value chain**

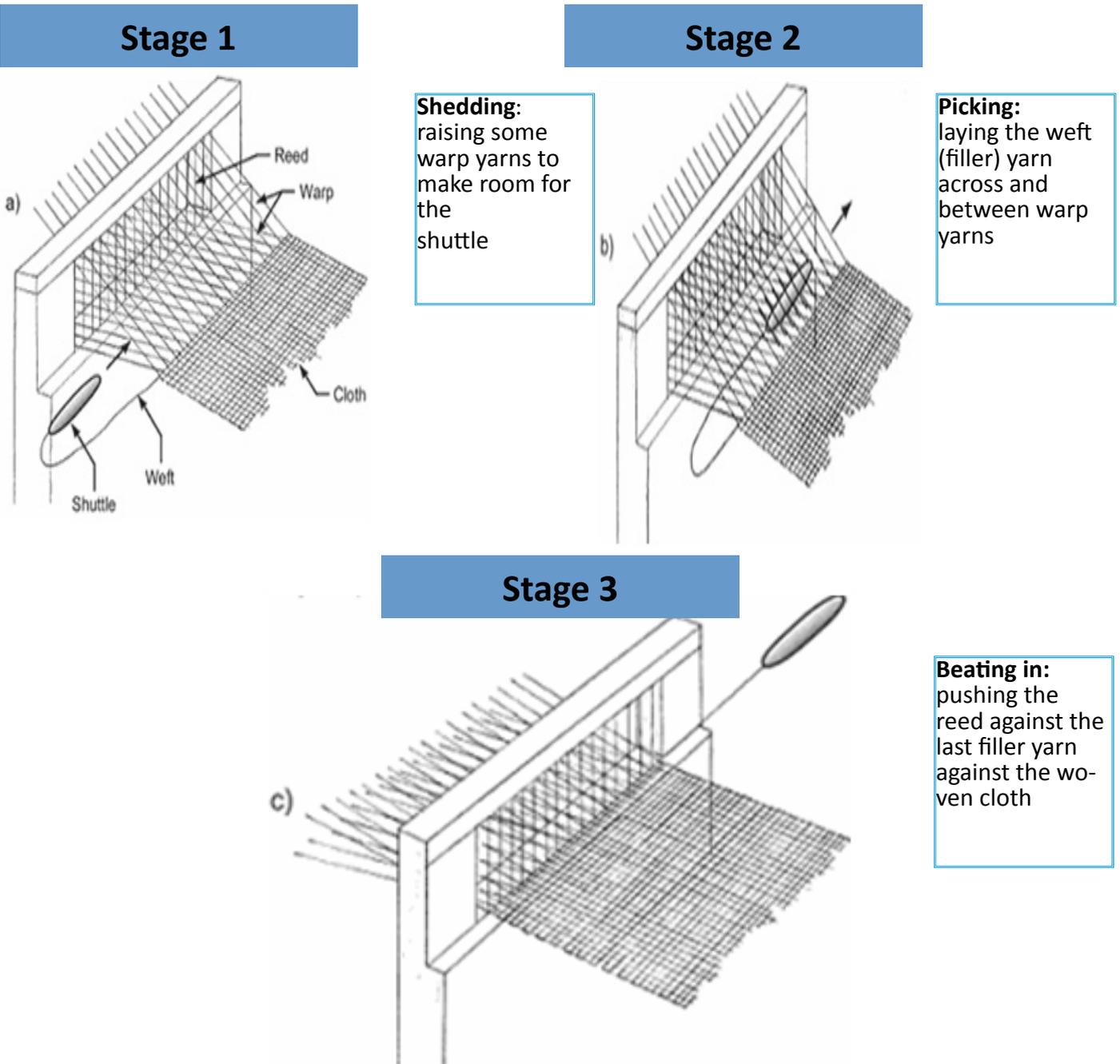


**Figure 2: Warp and weft pattern<sup>1</sup>**

"Warps are passed from south to north, wefts are passed right to left"



1. Source: [www.textileschool.com](http://www.textileschool.com)

Figure 3: Interlacing process<sup>2</sup>

Many textile companies in Pakistan are primarily engaged in production of cotton greige fabric (grey fabric), which is a key intermediate product for production of many other types of textiles. Types of greige cloth also vary depending upon yarn weight, number of threads used in the weft and warp, and the interlacing pattern of selected yarns. In majority of the cases, customer's requirements dictate the type of greige cloth produced by a company.

Since Pakistan is the 5th largest producer of cotton in the world, it possesses an intrinsic advantage in terms of the availability of raw material. However, the country continues to import cotton from other countries due to lower staple length cotton produced within the country. Staple length refers to the average length of a group of fibres in case of cotton. Staple length is an important criterion for spinning fibre, as shorter fibres are more difficult to spin than longer ones. Short fibres result in more hairy yarns. The higher the staple length, the finer is the quality of yarn. Moreover, Pakistan is also ranked 3rd in the world in terms of the yarn production, a key input for weaving sector.

2. Source: [www.textileschool.com](http://www.textileschool.com)

Figure 4: Major Cotton producing countries<sup>3</sup>

Cotton production (1000 Metric Tons)				
	2014-15	2015-16	2016-17	2017-18*
<b>India</b>	6,423	5,639	5,879	6,205
<b>China</b>	6,532	4,790	4,953	5,987
<b>USA</b>	3,553	2,806	3,738	4,555
<b>Brazil</b>	1,524	1,285	1,524	1,894
<b>Pakistan</b>	2,308	1,524	1,676	1,785
<b>Australia</b>	501	621	882	1,045
<b>Turkey</b>	697	577	697	871

\*Source: www.statistica.com

### Industry Structure & Production

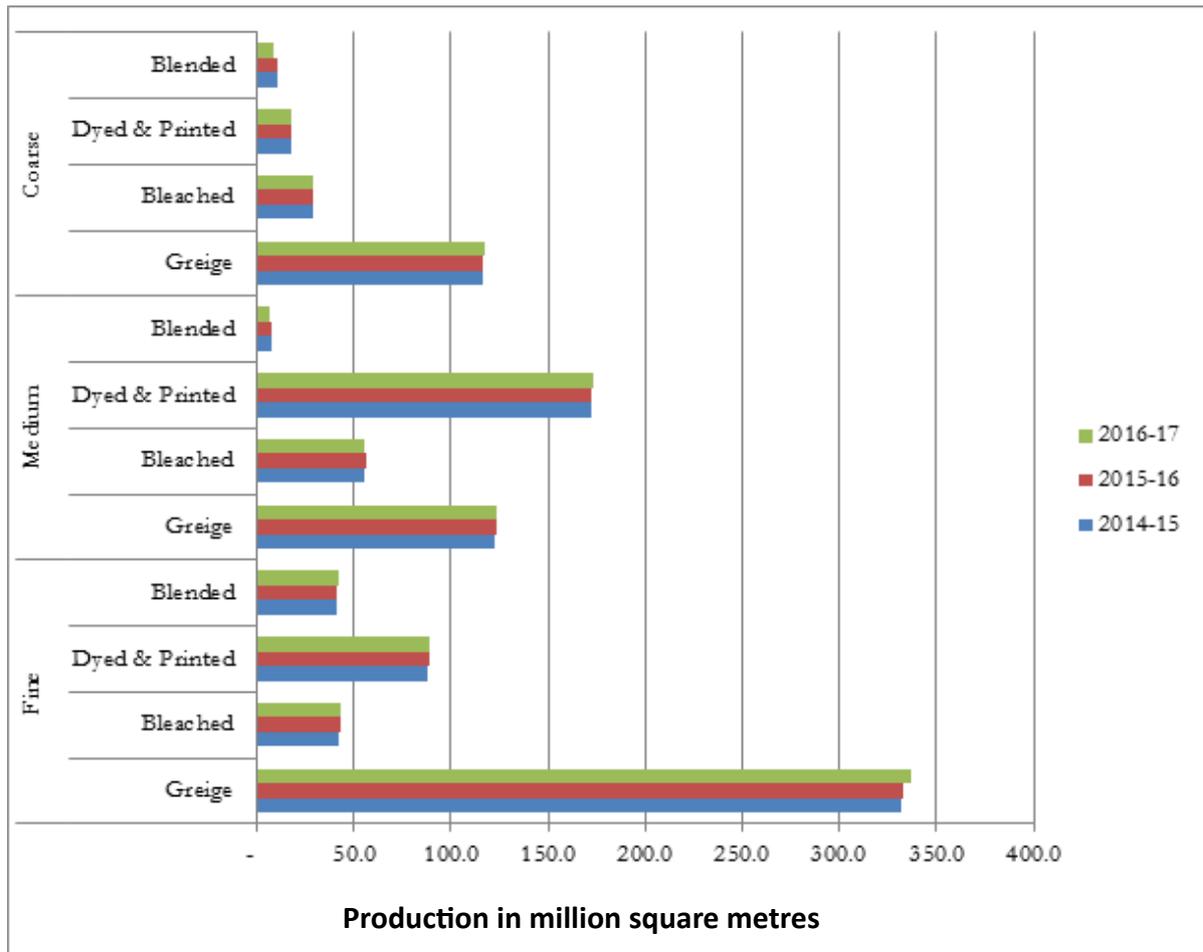
Weaving sector in Pakistan is broadly divided into two sub-sectors: organized mill sector and unorganized non-mill sector. Unorganized non-mill sector primarily comprises small units with approximately 50 to 100 looms contained in single premises as a part of one unit, whereas organized sector includes large textile mills. The unorganized non-mill sector deploys low level of technology and, hence, offers lower productivity and quality. Resultantly, the cloth produced by non-mill sector is unable to court a high price in the international markets. However, non-mill sector continues to dominate in terms of the overall cloth production in the country, as the organized sector mill owners seemingly made transition to the spinning sector rather than making investments to modernize the weaving sector. Since statistics pertaining to the non-mill sector are not available, industry experts estimate that non-mill loom sector accounts for more than 90% of the total fabric production. Figure 4 presents installed and working looms and total cloth production of the organized mill sector. The organized mill sector primarily seeks to procure orders for fine fabric rather than medium and coarse fabric as the margins on the former are higher vis-à-vis the margins on latter types of cloth.

Figure 5: Key statistics of cotton textiles (mills sector)<sup>4</sup>

	2014-15	2015-16	2016-17	2017-18 (Provisional)
No. of looms installed (in thousands)	7,934	8,188	9,084	9,014
No. of working looms (in thousands)	5,234	5,488	6,384	6,037
Total cloth production (in millions square meters)	1,037	1,039	1,043	1,044

3. Source: United States Department of Agriculture (except for 2017-18 data)

4. Source: Textile Commissioner Organization Karachi

Figure 6: Composition of products produced<sup>5</sup>

### Exports

Importance of the textile sector is illustrated by the fact that this sector contributes more than half of Pakistan's total exports. On average, textile products accounted for 59% of the country's total exports during the last three years. Cotton fabric exports represented approximately 18% of the country's total exports on average during the same period. Figure 6 depicts the total cotton fabric exports of the country during the last three years.

Figure 7: Exports of Cotton fabrics<sup>6</sup>

	Quantity (in million square meters)	Value (in Rs. millions)
2014-2015	1,502	266,744
2015-2016	1,741	231,037
2016-2017	1,655	215,547
2017-2018	1,989	242,429

5. Source: Pakistan Bureau of Statistics

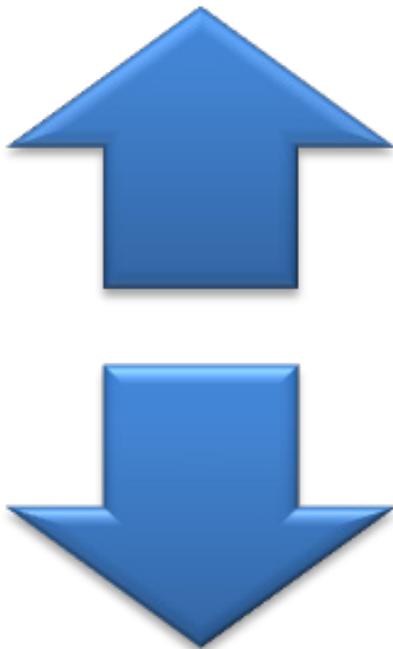
6. Source: Pakistan Bureau of Statistics

The demand for textiles apparel in the world was around US\$1.2 trillion at end-2018 and it is projected to increase at a CAGR of 2% during the next 4 years. Given the positive demand outlook, Pakistan has significant opportunity to earn foreign exchange through textile exports. However, several issues including lack of investment, high input costs, etc. have plagued the weaving sector and Pakistan's market share in world textile exports has witnessed a decreasing trend in the period from 2014 to 2017. On the other hand, world market share of regional competitors such as India and Bangladesh has grown during the same period. In view of the increased regional competition and issues faced by manufacturers operating in the textile weaving segment in Pakistan, favorable government policies will be key in unlocking untapped potential of this segment.



The following chart indicates key challenges and positive developments during recent years in this segment:

**Figure 9: Key challenges and positive developments**



- **Pakistani rupee depreciation**
  - **Low interest rates**
  - **Prime Minister Textile Package**
- 
- **Lack of investment**
  - **Liquidity constraints**
  - **High input costs**
  - **Lack of product customization**

## Key challenges

**Lack of investment:** The weaving sector has potential to perform better provided that investment in machinery and new technology is undertaken. As evident from Figure 4, around only 70% of the total installed looms were operational in 2016-17, the rest remained non-operational due to either high input costs or faults in machinery. Moreover, recent rupee depreciation has made it much harder for mill owners to import latest machinery from other countries. Consequently, unorganized mill sector, which accounts for majority of cotton cloth production, continues to deploy outdated machinery.

**Liquidity constraints:** In the past, Government of Pakistan (GoP) has provided incentives to local millers such as rebates in order to boost exports. However, such incentives have resulted in higher payables owed by the government to the millers, resulting in curtailed liquidity profile of players. Presently, the amount of tax refunds is still considerable and this issue remains a key priority of the newly elected government in the country.

**High Input Costs:** Energy costs bear sizeable weightage in the overall weaving process. Textile companies in Pakistan receive electricity at the cost of Rs. 10.5/kWh, while electricity cost to textile companies in regional countries including Bangladesh is approximately Rs. 7/kWh. Similarly, system gas is provided to textile producers at a cost of Rs 600/MMBTU in Pakistan in comparison to the lower cost of Rs. 400/MMBTU borne by companies in Bangladesh. Such factors increase the cost of goods manufactured and hurt regional competitiveness.

**Lack of product customization:** One key issue of the sector is its inflexibility to respond to changes in consumer preferences. Given the increased competition, it is expected that textile exporters will take notice of the shift in consumer demand paradigm in key export markets and respond accordingly.

## Positive Developments

**Prime Minister's Textile Package:** With the aim of increasing exports, the Prime Minister had announced exports package worth Rs. 180b for five major exports sectors of Pakistan including Textile, Leather, Sports Goods, Surgical Goods, and Carpets. Salient features of the pertaining to textile exports were as follows:

1. Enhanced rebates on total FOB value: Yarn (4%: PkR12bn), Fibre (5%: PkR2bn), Home Textiles/Made-ups (6%: PkR39bn), and Garments (7%: PkR58bn),
2. Removal of sales tax (5%) on cotton imports.
3. Removal of GST on import of textile machinery.
4. Elimination of custom duty (CD) on man-made fibre.

The package was effective from January 2017 till June 2018 and rebate eligibility criteria specified that companies with growth equal to or higher than 10% in exports in FY18 vis-à-vis FY17 are eligible for such rebates. This textile package was identical to export promotion schemes offered to textile mills in India and Bangladesh and both countries depicted healthy growth rates in exports during the first three years of these schemes. Given the importance of textile sector in terms of exports, such export boosting initiatives shall also be a key focus of the government.

**Currency Depreciation:** Recent depreciation of the Pakistani rupee has provided much needed relief for the textile exporters operating in the weaving segment as the exports are deemed less expensive by the countries importing from Pakistan in case of such an event. Although this development has also negatively impacted companies which import raw material and machinery from other countries, industry experts believe that margins of most companies are expected to improve on the back of this development.

**Interest rates:** Given the low interest rates in the country in the past few years, textile owners witnessed reduction in the finance costs in order to facilitate their business expansion plans. Resultantly, loans acquired by the textile sector depicted an upward trend on timeline basis. Figure 8 provides the details of the bank loans provided to the textile sub-segments.

**Figure 10: Loans provided to the textile industry (outstanding position at the end of the month)**

(Rs. in millions)	June-16	June-17
Spinning segment	259.1	282.2
Weaving segment	110.6	140.6
Finishing products	98.7	116.2
Total	468.4	539.0

In view of increasing interest rates, finance cost post FY18 is expected to increase. Although relief is available to the export oriented textile manufacturers in the form long term finance facility (LTFF). Textile exporters may avail loans under this scheme for a maximum period of 10 years to facilitate export of machinery.

#### **Analysts Contacts**

##### **Jazib Ahmed, CFA**

Senior Manager

jazib.ahmed@jcrvis.com.pk

##### **Narendar Shankar Lal**

Manager

narendar.shankar@jcrvis.com.pk