Spinning

Sector Study

September 2022

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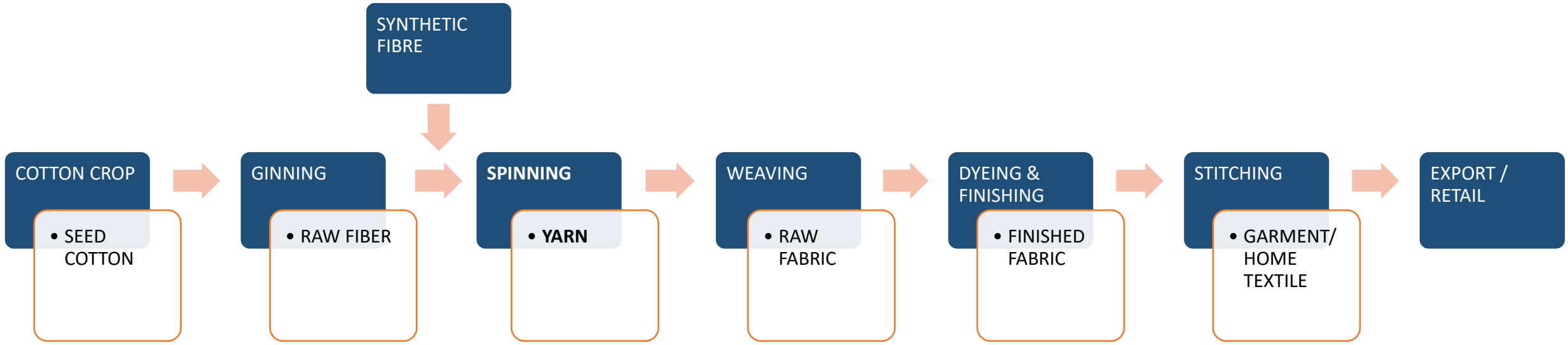
Introduction | Textile Value Chain

- Textile cluster has a relatively large value chain with multiple distinct sectors.
- The following flow chart depicts the major processes along with the output of textile value chain.
- The spinning sector, which processes cotton into yarn, falls towards the beginning of the value chain, also referred to upstream sector in the textile chain. However, there is limited value addition in this segment.



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Introduction | Production Process

Blow Room: the compressed bales are opened, cleaned and blended/mixed according to particular length to form a specific size of lap.

Carding: The lap is shifted to carding machine where cleaning and intermixing of fibers occurs to produce a continuous web.

Combing: Fibres are straightened and arranged in parallel manner and short fibers are separated from long fibers.

Drawing: Strengthening of fibers by passing them through rollers.

Roving/Ring Frame: Roving frames carry out process of converting fibers into low twist lea. Further twisting is done to form yarn of required count and strength.

Cone Winding: Final stage where yarn is wound into cones so that it can be shipped to the customer.

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Introduction | Yarn Count

- Yarn count is a measurement which determines its fineness or coarseness.
- There are two methods of calculation of Yarn Count, Direct and Indirect, with Indirect method more widely practiced.
- The Direct Method uses weight per unit length to determine count with thicker/coarse yarn having higher count. There are various numbering systems as shown in the adjacent table.
- The Indirect Method uses length per unit weight to determine count with finer yarn having higher count. There are various numbering systems as shown in the table.
- The English numbering system is practiced in Pakistan. The unit length of 840 yards is also known as a hank. The number of hanks per lb. of yarn equals the yarn count.
- In Pakistan, yarn is divided between coarse, medium, fine and super fine categories based on count with major production concentrated in coarse and medium count yarns.
- Different dying and chemical processes add value to the product.
- The higher count yarn attracts higher price.

Direct Method		
Numbering System	**Unit of Length**	**Unit of Weight**
Tex System, Tt	1000 m	No. of grams
Denier, D or Td	9000 m	No. of grams
DeciTex, dtex	10,000 m	No. of grams
Millitex, mtex	1000 m	No. of milligrams
Kilotex, ktex	1000 m	No. of kg
Jute Count	14,400 yards	No. of lb.

Indirect Method		
Numbering System	**Unit of Length**	**Unit of Weight**
English cotton count, Ne/S	840 yards	1 lb.
Metric count, Nm	1000m / 1km	1 kg
Woollen Count (YSW)	256 yds.	1 lb.
Woollen Count (Dewsbury)	1 yd.	1 ounce (oz.)
Worsted Count Nek	560 yds.	1 lb.
Linen Count, NeL	300 yds.	1 lb

Yarn Type	Count
Coarse	1s - 20s
Medium	21s - 34s
Fine	36s - 47s
S.Fine	48s - 80s

Source: Yarn Counts & Calculations, Thomas Woodhouse (Oxford Technical Manuals), TCO

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Introduction | Technology & Machines

- Major manufacturers of spinning machines (i.e. spindles & rotor machines) and other textile machinery are based in Germany, Italy, Belgium, Switzerland, China, and Japan.
- Major manufacturing brands include Saurer Schlafhorst GmbH & Co., Toyota, Murata Machinery Limited, Savio Machine Tessilli, Rieter, RIFA Textile Machinery Co. Ltd. Lakshmi Machine Works Limited, among others.
- The efficiency of spinning machines is determined by the number of spindles installed on the machine and its RPM (Rotations Per Minute). More advanced machines have higher RPM, resulting in higher efficiency. The RPM of latest spinning machines from major manufacturers can reach up to ~125,000 - 150,000RPM.
- Overall, the cost of spinning machines depends on number of spindles, RPM and level of automation of back processes. However, import and installation costs are also significant and raise the overall cost for spinning players.
- Almost all machinery used in the sector is imported from Europe and East Asian Countries (mainly China). Further, there is a need for continuous technological BMR to improve efficiency to remain competitive in the international landscape.

Source: Manufacturers' Websites

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Global Overview

- The global market size of spinning industry was estimated at USD~77.3bln in CY21 and is projected to reach USD~99.0bln by the end of CY27 exhibiting a CAGR of ~3.6% during the forecast period.
- China remains the global leader in terms of cotton yarn production and consumption. In CY19, China produced ~6.4mln MT of cotton yarn. Other large cotton yarn producers include India, ~5.3mln MT and Pakistan, ~3.4mln MT. These three countries account for ~72% of global cotton yarn production.
- Meanwhile, China accounted for ~38% of global cotton yarn consumption at ~8.1mln MT while India accounted for ~29% with ~4.3mln MT.
- As a result, Asia-Pacific is the leading region in the global yarn market, which is followed by the North American region. Changing consumption pattern, increasing population, disposable income, the rise in demand for clothing along with home furnishing products in Asia-Pacific region are major growth factors of the market.
- In CY21, the spinning industry recovered strongly as demand rebounded following the re-opening of economies around the globe. Rapid growth in urbanization and increasing requirement of the industries are the major factors that anticipate driving the market growth.
- Moreover, blended varieties of yarn are becoming more common in the market owing to significant features of both artificial and natural yarn thus opening up new growth opportunities in the coming years.

Source: globaltrademag.com, marketwatch.com

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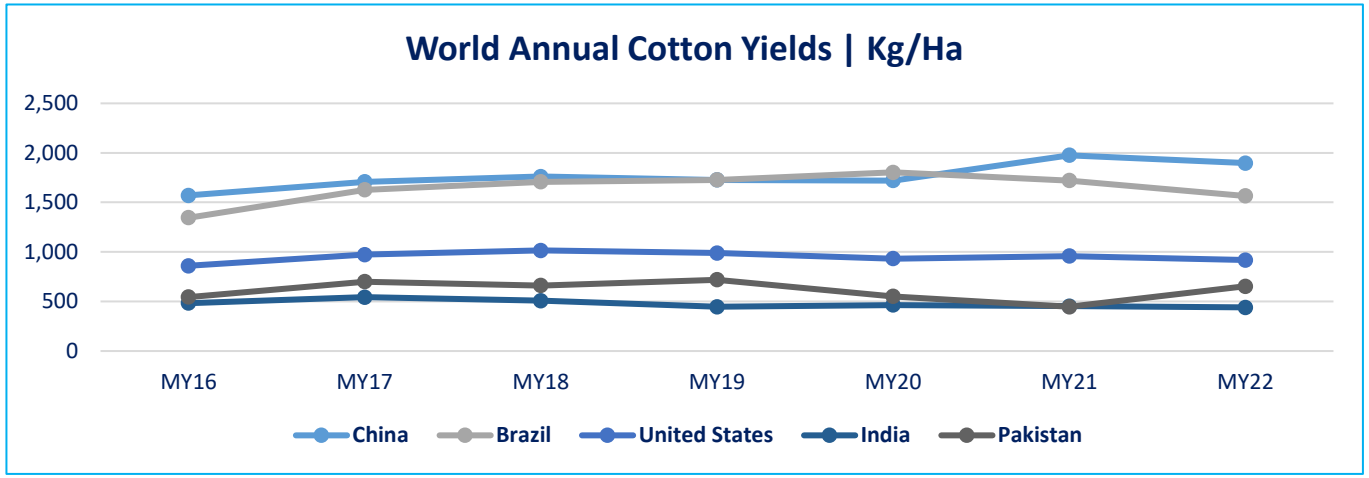
Global Cotton Dynamics | Production & Yield

- During MY22, the global production of cotton stood at ~25.2mln MT as compared to ~24.3mln MT in MY21. This increase of ~4% came on the back of increase of area under cultivation which rose from ~31.4mln Ha. in MY21 to ~32.3mln Ha. in MY22.
- The increase in area is attributable to higher cotton prices which has encouraged devoting area to growing the crop.
- India and China are the largest cotton producers in the world, accounting for ~45% of total production during MY22 (SPLY: ~51%). China has experienced a decline in cotton production due to lower acreage and yields while lower acreage, pest attacks, and erratic weather patterns has reduced India's cotton production by ~11%.
- Meanwhile, the global cotton yield marginally increased by ~1% with Mexico and Peru contributing to the increase.
- Yields have decreased in major cotton producing countries such as USA, Brazil, India and China as climate-related factors and/or pests attacks pose continued threats to standing crops.
- Severe droughts in Texas have resulted in abandonment of cotton fields.

World Cotton Production (000 MT)						
Country	**MY17**	**MY18**	**MY19**	**MY20**	**MY21**	**MY22**
China	4,953	5,987	6,042	5,933	6,423	5,879
India	5,879	6,314	5,661	6,205	6,009	5,334
United States	3,738	4,555	3,999	4,336	3,181	3,815
Brazil	1,289	2,007	2,830	3,000	2,356	2,504
Pakistan	1,528	1,785	1,655	1,350	980	1,306
Rest of The World	5,452	6,340	5,549	5,294	5,229	6,354
Total	**23,226**	**26,988**	**25,736**	**26,118**	**24,248**	**25,192**



Note: MY stands for marketing year which is August to July

Source: USDA

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Global Cotton Dynamics | Import & Export

- During MY22, the trade of cotton slowed down by ~12% (SPLY: growth of ~20%). This negative growth is mainly due to global recessionary conditions and elevated interest rates which have supressed demand.
- In MY22, Bangladesh was the largest importer of cotton with a share of ~19% closely followed by China with a share in world imports ~18%. Other major importers include Vietnam (~16%), Turkey (~13%) and Pakistan (~10%). These countries are among the major producers of finished goods, such as garments and apparel, within the textile value chain.
- United States and Brazil are the largest exporters of cotton, with ~34% and ~18% share in total exports, respectively. Both countries export a significant share of their total cotton production. Meanwhile, India and Australia also have significant shares of ~9% each in total exports, however, this is a relatively small share of production as the majority is consumed locally.
- China's imports have considerably reduced in MY22 from the SPLY and this is partly attributable to the drawdown of non-customs cleared cotton (NCCC) from port warehouses. A build-up of NCCC in MY21 artificially inflated imports relative to demand. This drawdown will mean imports do not reflect demand.

World Cotton Imports (000 MT)

Country	MY17	MY18	MY19	MY20	MY21	MY22
China	1,096	1,243	2,099	1,554	2,800	1,707
Bangladesh	1,481	1,655	1,524	1,633	1,807	1,785
Vietnam	1,197	1,524	1,509	1,411	1,587	1,444
Turkey	838	956	785	1,017	1,160	1,203
Pakistan	506	599	621	865	1,159	936
Rest of The World	3,101	1,798	2,708	2,377	2,073	2,237
Total	**8,246**	**7,916**	**9,246**	**8,857**	**10,586**	**9,312**

World Cotton Exports (000 MT)

Country	MY17	MY18	MY19	MY20	MY21	MY22
United States	3,248	3,545	3,230	3,377	3,560	3,184
Brazil	607	909	1,310	1,946	2,398	1,682
India	991	1,128	767	697	1,348	827
Australia	812	852	791	296	341	849
Greece	221	234	295	319	355	316
Rest of The World	2,367	2,379	2,846	2,234	2,565	2,520
Total	**8,246**	**9,047**	**9,239**	**8,869**	**10,567**	**9,378**

Source: USDA

Global Cotton Dynamics | Consumption & Ending Stocks

- The decline in global cotton consumption during MY22 of ~2% was primarily due to uncertainty in global macroeconomic environment.
- China and India are the largest consumers of cotton, accounting for a cumulative ~52% of global consumption. Meanwhile, Pakistan has had a relatively stable share of ~9% in global cotton consumption from MY17 to MY22.
- China's domestic consumption in MY22 fell by ~7.5% compared to the SPLY due to slowing economic growth & weakening domestic demand.
- Global cotton consumption marginally fell in MY22 by ~2% owing to weaker demand for textile and apparel products which in turn has reduced mill consumption.
- Ending stocks in MY22 fell by ~796,000 MT as mill consumption exceeded production by ~818,000 MT.
- China maintains the largest ending stock levels, amounting to ~43% of global cotton ending stocks. However, China's ending stock level fell mainly due to a national policy plan to purchase stocks of ginners which were being held for a prolonged duration owing to lower downstream orders from the spinning sector.

World Cotton Consumption (000 MT)

Country	MY17	MY18	MY19	MY20	MY21	MY22
China	8,382	8,927	8,600	7,185	8,709	8,056
India	5,302	5,258	5,291	4,355	5,661	5,443
Pakistan	2,243	2,373	2,330	2,003	2,330	2,330
Bangladesh	1,481	1,633	1,568	1,502	1,851	1,851
Turkey	1,448	1,644	1,502	1,437	1,676	1,894
Rest of World	6,459	4,938	4,806	3,815	4,015	4,015
Total	**25,315**	**26,754**	**26,231**	**22,387**	**26,574**	**26,010**

World Cotton Ending Stocks (000 MT)

Country	MY17	MY18	MY19	MY20	MY21	MY22
China	9,998	8,272	7,766	8,034	8,546	7,884
India	1,716	2,009	1,960	3,676	2,599	1,924
Brazil	1,509	1,885	2,668	3,136	2,421	2,772
United States	599	914	1,056	1,579	686	816
Pakistan	504	616	543	738	597	390
Rest of World	3,151	3,871	3,434	4,209	4,408	4,675
Total	**17,477**	**17,657**	**17,427**	**21,372**	**19,257**	**18,461**

Source: USDA

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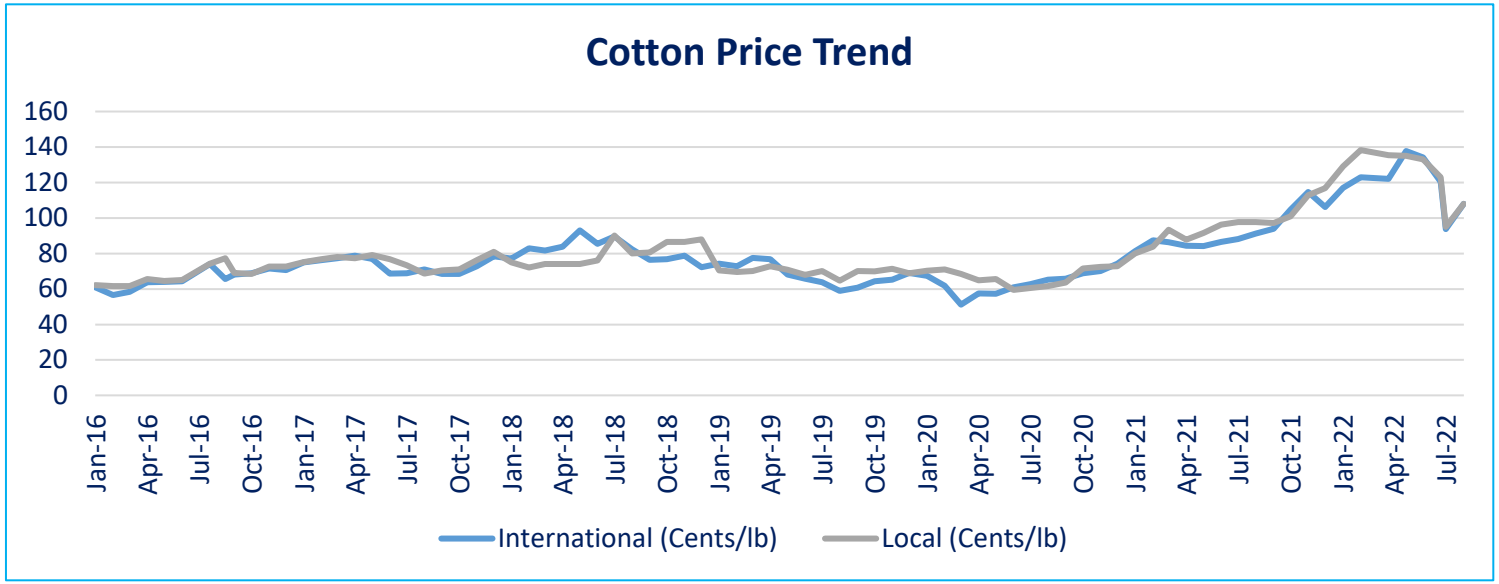
Global Cotton Dynamics | Global versus Local Industry Prices

- International cotton futures prices peaked until Apr-22 touching 134 cents/lb. Monthly future prices have since eased but continue to remain elevated with the average international price recording at 125 cents/lb in the 8MCY22 period compared to historical price averages.
- Globally, elevated cotton prices are due to climate change wrecking havoc across the top cotton growers – namely India, Brazil and US – and constraining supply.
- Local average cotton prices are higher in the 8MCY22 period compared to the SPLY by ~36.9% and this was due to expectations of supply-side constraints after the August-22 flash floods.
- Local cotton prices surged to an annual peak of PKR~23,000 per maund towards the end of August-22. Prices have declined since then but remain elevated with a 15-day average of PKR~21,864 per maund for the month of September-22.
- Moreover, global freight rates have been continuously rising which has served to increase the cost of importing cotton by industry players.



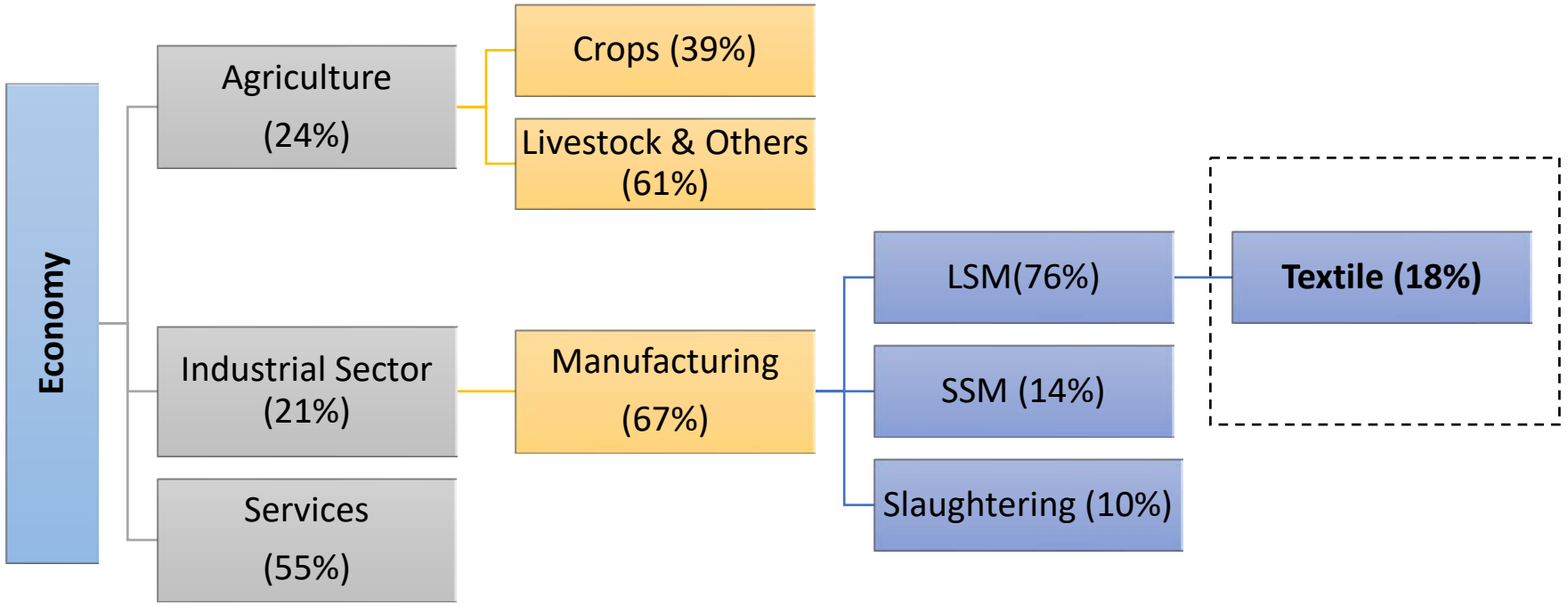
Average Cotton Prices	CY17	CY18	CY19	CY20	CY21	8MCY22
International (Cents/lb)	73	82	68	64	92	119
Local (Cents/lb)	75	80	70	67	96	125
Local (PKR/maund)	6,521	7,971	8,721	8,923	13,036	19,746

Cotton Unit Conversion	
Unit	Conversion
Cotton Unit Conversion	37.3kg
Unit	170kg
1 Maund	4.6 Maunds

Source: PCCC, Economic Survey 2021-22, US Department of Agriculture (Foreign Agriculture Service)

Local Economy and Textile Industry | An Overview

- In FY22, Pakistan's GDP (nominal) stood at PKR~66.9trn (FY21: PKR~55.8trn) and posted a growth in real terms of ~6.0% (FY21: ~5.7%). Industrial activities in FY22 represented ~19% share in the GDP while manufacturing activities represent a ~76% value addition in industrial activities.
- Large Scale Manufacturing (LSM) in Pakistan is essential for economic growth considering its linkages with other sectors, as it represented ~76% value of all manufacturing activities in FY22. The LSM grew by ~11.7% in FY22 (FY21: ~11.3%).
- The textile sector is classified as a Large Scale Manufacturing (LSM) industrial component within the industrial sector. In FY21 and FY22, the textile industry's weight in the QIM was ~18.2%.
- Spinning is an upstream sector in the textile value chain.



Source: PBS

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Local Industry | Overview

- The spinning sector comprises ~477 spinning mills in the country and the sector is largely organized.
- The sector is at a mature stage and has a long operating history in the country. The market structure is competitive, with a large number of players making a relatively homogenous product.
- During FY22, Pakistan's yarn production grew by a minor ~0.5% to ~3.5mln MT. Yarn production was the same at ~3.5mln MT in FY21.
- Yarn exports stood at ~336,000 MT, equivalent to PKR~214bln in FY22 accounting for ~9.5% of total production. This export volume reflects a ~14.1% decrease in quantity from FY21 while the USD to PKR rate depreciated by ~29.8% indicating the growth in PKR revenue mainly due to favourable exchange rate movement. Geographically, there is significant export concentration with the majority of exports made to China.
- The remaining ~90.5% of locally produced cotton yarn is used within the local textile value chain by the weaving sector. Demand from the local market marginally grew during the year as the entire textile value chain, particularly the spinning sector, as evidenced from the LSM, shows an annual ~0.5% increase in the production of yarn. Flat global and local demand are the principal reasons for the minor increase. As per the PCGA report for 15 September, 2022 the arrivals of bales to spinning factories was ~2.2mln bales which is ~-18.6% lower than the previous year.
- The estimated market size for cotton yarn, excluding blended and synthetic yarn, stood at PKR~1,340bln, a growth of ~44% as compared to PKR~927bln in FY21. The growth came on the back of increase in prices of cotton yarn which experienced average increase of ~43% during FY22 while volumetric yarn production increased by a minor ~0.5% in FY22.

Sector Overview	FY20	FY21	FY22
Sector Players	~477 Spinning Mills		
Yarn Production (000 MT)	3,060	3,442	3,459
Yarn Export Volume (000 MT)	413	391	336
Yarn Export Value (PKR bln)	123	127	214
Industry Association	All Pakistan Textile Mills Association		

Source: SBP, PBS, TCO

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Local Industry | Cotton Dynamics

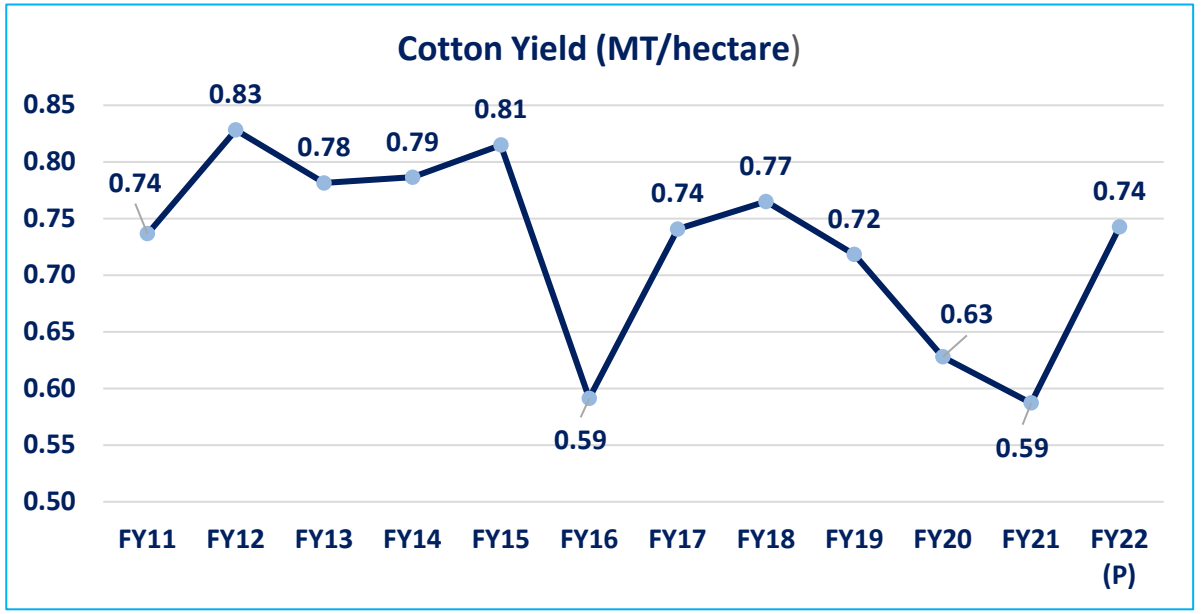
Pakistan's Cotton Supply (MT 000s)							
	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Opening Stock	**93**	**2**	**79**	**168**	**193**	**34**	**35**
Production	1,688	1,816	2,033	1,678	1,557	1,202	1,890*
Imports	417	506	599	415	536	857	776
Total supply	**2,198**	**2,324**	**2,711**	**2,261**	**2,286**	**2,093**	**2,701**
Local consumption	2,147	2,220	2,508	2,055	2.239	2,057	2,210*
Exports	49	25	35	13	13	1	3
Closing stock	**2**	**79**	**168**	**193**	**34**	**35**	**488**

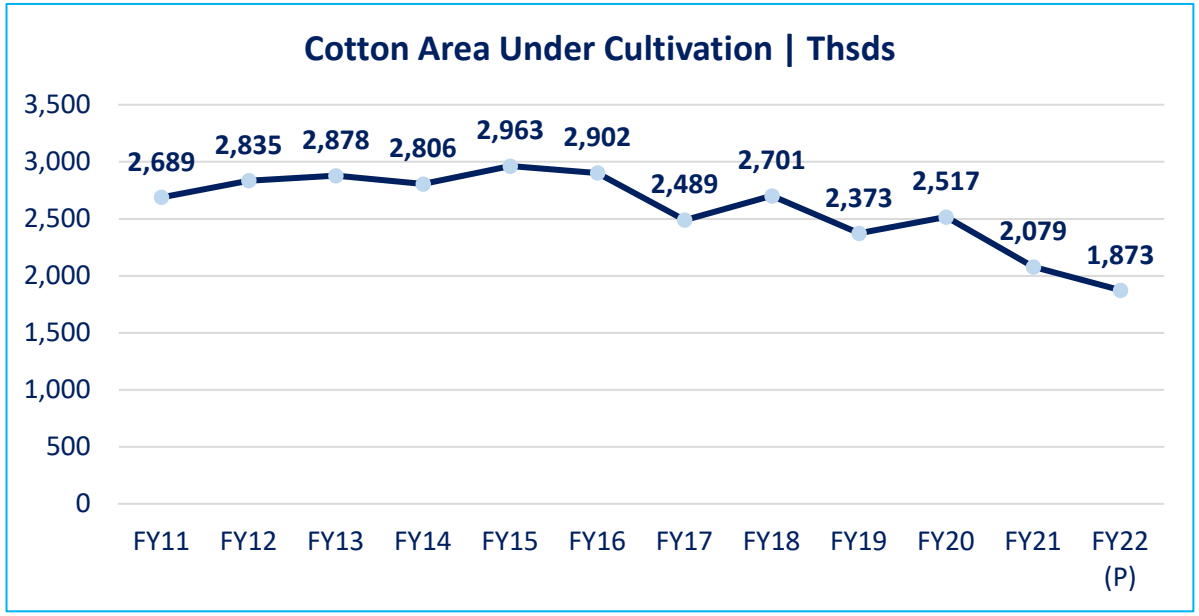
- The majority of Pakistan's crop is grown in Punjab and Sindh with the KPK and Balochistan sharing a relatively small fraction of total outputs.
- Pakistan's cotton production increased by ~57.3% in 9MFY22 (FY21: ~-22.8%) due to an improvement in yield by ~25.4% (FY21: ~-6.3%), conducive weather conditions, smooth input supplies, and better crop management practices.
- Despite these promising results, Pakistan missed its cotton production target for 2021-22 owing to drought, high temperatures and dry weather at the start of the season.
- FY22 was the first year Pakistan's net imports of raw cotton declined after the years FY15 and FY19. Prior to FY22, cotton imports rose by ~78.1% over the FY17-FY21 period. The ~9.5% decline can be attributable to the significant currency depreciation serving to increased import prices.
- Prior to the monsoon (Aug-22) flash floods, the then proposed cotton crop target for the 2022-23 season was ~1,908mln MT (or ~11.03mln bales) of which ~59.8% had been budgeted for Punjab and ~36.3% for Sindh and the remainder for KPK and Balochistan.

**Production and consumption data has been prorated based on 9 months production data*
Mill consumption data has been calculated based on average cotton consumption

Source: PBS, Economic Survey, 2021-22, PCCC

Cotton Dynamics| Cultivation Area and Yield

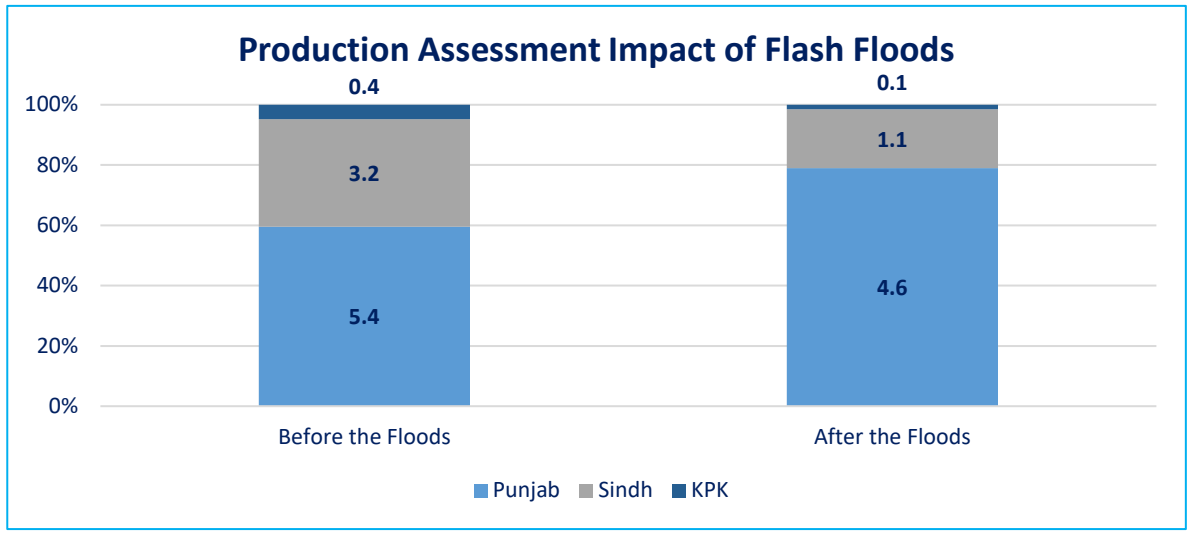


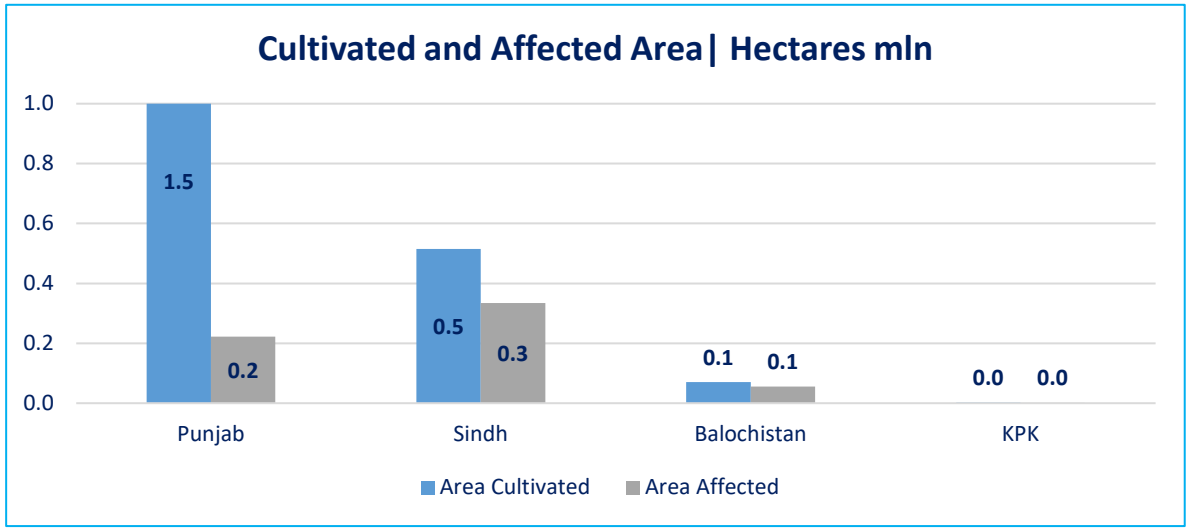


- The improvement in cotton yield comes despite the fact that the area under cultivation decreased by ~9.9% (FY21 decrease: ~-17.4%). The area under cultivation in FY23' Kharif season has been recorded at ~2mln hectares (based on Punjab's first estimate), a ~6.9% increase from FY22 when the area under cultivation was ~1.87mln hectares.
- Climate change related factors - heat wave and unprecedented water shortages at sowing time, March-22 onwards, and replacement of cotton by other crops, such as sugarcane and maize, explain the decline in area under cultivation in FY22.
- For FY23, prior to the flashfloods, the sowing of the cotton crop for the 2022-23 season was complete in Punjab and was in its final stages in Sindh. The cultivated area of cotton in Punjab is ~1.49mln hectares (comprising ~81.5% of the target), ~16.1% higher than previous year, while sowing area in Sindh was registered at ~0.52mln hectares (comprising ~80.8% of the target), ~13.0% lower than the previous year.

Source: Economic Survey, 2021-22, PCCC's July-22 Monthly Cotton Price Review

Cotton Dynamics | Monsoon-22 Flashfloods





- The Aug-22 flashfloods were led by unprecedented rainfalls which surpassed Pakistan's 30 years average rainfall spells of ~136.5mm by ~186.2%. Nearly one-third of Pakistan's geographical area was submerged under flood waters.
- The natural disaster has had a significant impact to standing crops including the Kharif cotton crop. While Balochistan's area under cultivation has been the most severly hit – nearly ~80% affected – the greatest damage in terms of land cultivated area has been Sindh followed by Punjab.
- It is pertinent to note that the cotton production assessment before the floods was ~9.0mln bales but after the floods, this figure estimate has been revised downwards to ~5.8mln bales which amounts to a loss of ~3.2mln bales (~55%).
- The estimated yield lost will now need to be imported and with an international cotton price of ~USD 446.25/bale. Pakistan's import bill can rise by an estimated USD~1,428mln due to cotton imports.
- Given that ~70% of cost of sales comprise of raw material which amounted to PKR~8,056mln* in FY22, industry players can expect to see their raw material costs rise by ~17%, denting their margins.

**Based on PACRA's internal database*

Note: Cotton prices are based on September 23, 2022 prices

Source: Economic Survey, 2021-22, PCCC's July-22 Daily and Monthly Cotton Price Review, NDMA

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Installed Capacity & Utilization

- There are ~477 spinning units operating in the country with a total number of spindles standing at ~13.4mln. Out of these ~11.3mln spindles are in operation.
- The average capacity utilization of spinning units declined in FY21.
- Capacity utilization in FY22 is expected to further decline due to a decrease in local and export demand in light of global recession and heightened local inflationary conditions.

Capacity utilization	FY17	FY18	FY19	FY20	FY21
Spindles Installed	13,409,420	13,409,420	13,409,420	13,409,420	13,409,420
Average Capacity Utilization	85%	91%	88%	83%	76%

Note: Average Capacity Utilization figure is reflective of ~50 listed/rated Spinning players

Source: TCO, Economic Survey

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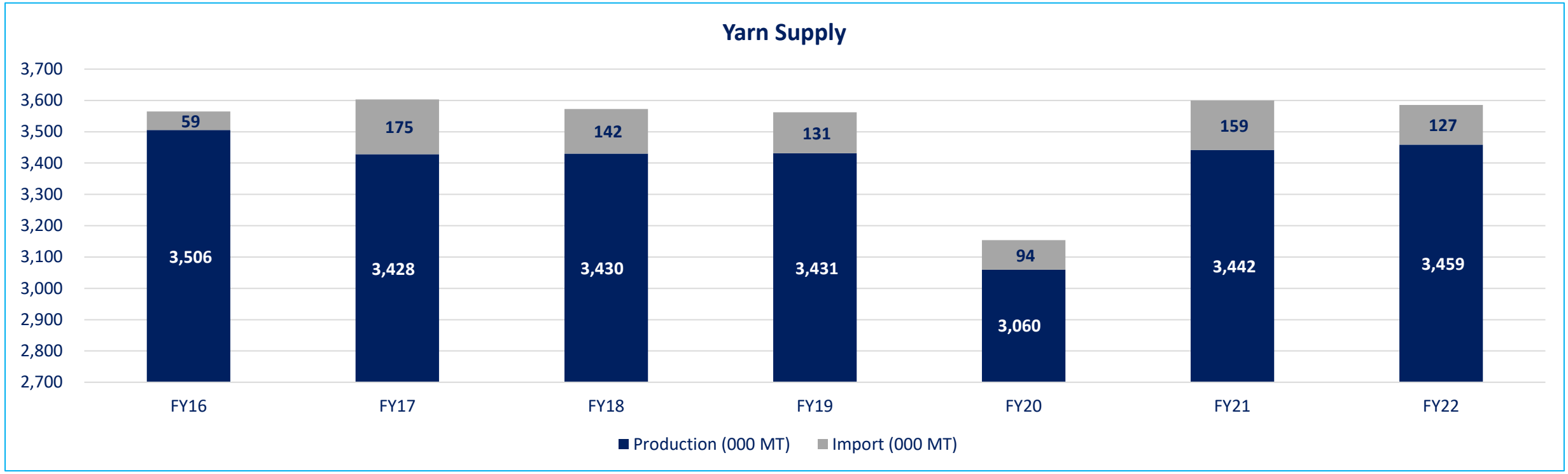
Yarn Supply



- The production of yarn increased approximately ~0.5% during FY22 and stood at ~3.5mln MT as local inflationary pressures and a global economic recession has resulted in a reduction in demand.
- Meanwhile, import of yarn reached approximately ~127,000 MT which reflects a decline of ~20.2%
- As a result, overall supply of yarn has dipped by ~0.4% from the SPLY reflecting relatively flat demand for the product.

Note: Import quantity is estimated based on average prices and value figures

Source: PBS, SBP

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Yarn Production

- During FY22, ~3.5mln MT of yarn of various types was produced in the country, almost same quantity as in FY21. The relatively growth of ~0.5% was due to lower local and export demand.
- A majority of the yarn produced is of coarse or medium count, with ~25% and ~26% share in total production respectively. Meanwhile, ~43% of the yarn produced is blended or synthetic yarn made by blending cotton with materials such as polyester and nylon.

Production of Yarn (MT)	FY17	FY18	FY19	FY20	FY21	FY22
Coarse	788,897	837,396	790,555	710,125	874,331	878,690
Medium	822,737	703,729	824,130	738,459	911,464	916,009
Fine	394,228	425,780	395,822	352,010	94,820	95,292
Super Fine	85,701	115,135	85,734	76,148	83,699	84,116
Synthetic/Blended	1,336,949	1,348,010	1,336,490	1,183.20	1,477,271	1,484,635
Total	**3,428,073**	**3,430,050**	**3,431,390**	**3,059,942**	**3,441,585**	**3,458,740**

Source: TCO, PBS

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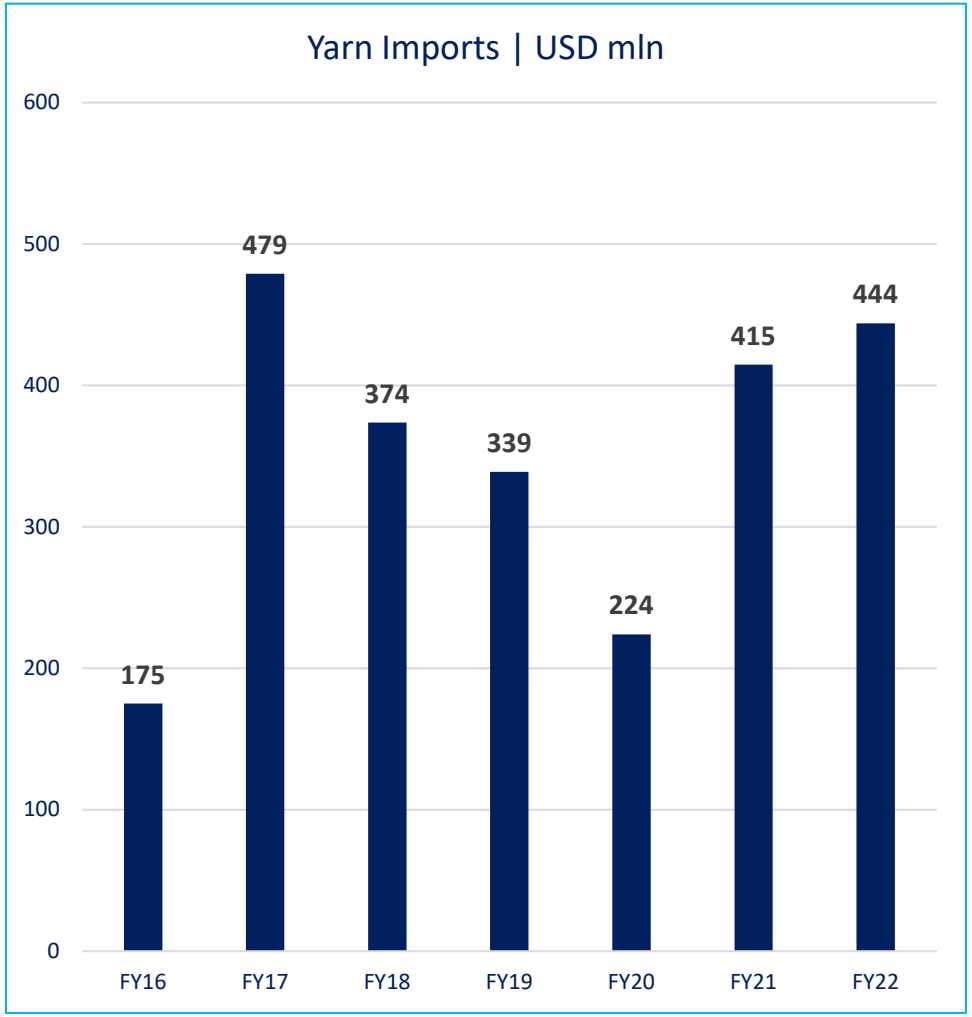
Yarn Imports

- Pakistan's import of cotton yarn exhibited a moderate increase of ~7.1% in FY22 (SPLY: ~85.3%). Two factors were instrumental in the lower growth observed. Firstly, local cotton yield was higher this year compared to the previous years resulting in mills using local cotton for production.
- Secondly, demand forces weakened toward the second half of the fiscal year as outlined in the report. This resulted in a lower demand by textile players compared to the SPLY.
- During FY22, ~49% of yarn imported was from China. Other major import countries include Turkey (~12%), Oman (~7%) and Uzbekistan (~9%). In previous years, India was the largest source of yarn imports, however trade from India has ceased since FY19 due to political reasons.

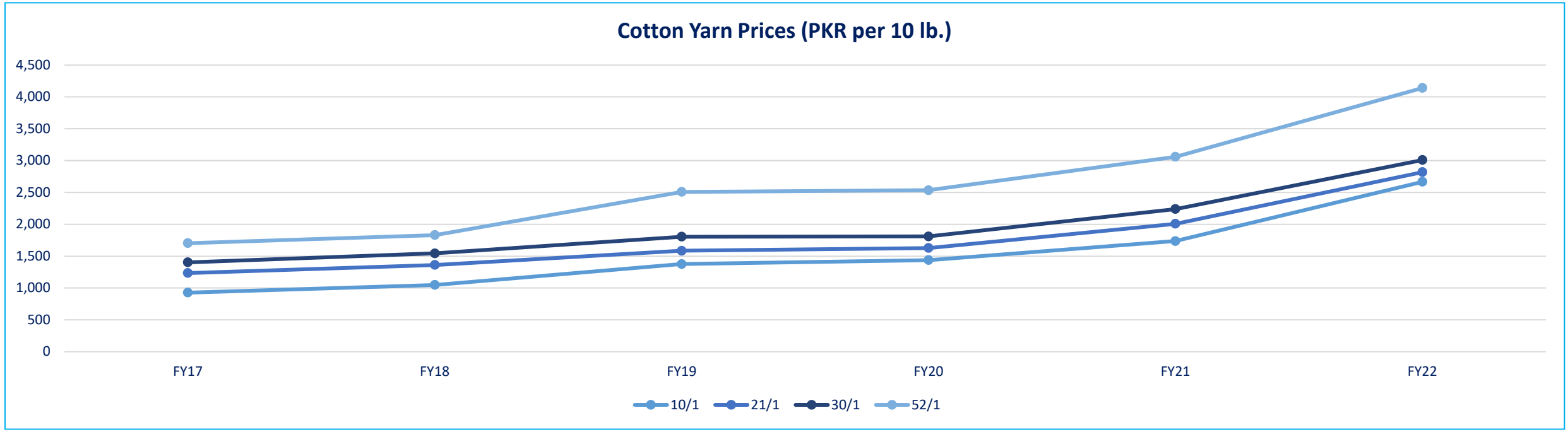
Import Destinations	FY20		FY21		FY22	
Countries	Value (000 USD)	%	Value (000 USD)	%	Value (000 USD)	%
China	136,024	61%	194,873	47%	219,377	49%
Turkey	21,892	10%	60,724	15%	52,128	12%
Oman	12,296	5%	50,037	12%	29,451	7%
Uzbekistan	5,604	3%	36,794	9%	39,680	9%
Egypt	5,238	2%	12,993	3%	11,665	3%
India	20,790	9%	0	0%	0	0%
Other	22,291	10%	59,319	14%	91,716	21%
Total	**224,135**	**100%**	**414,470**	**100%**	**444,017**	**100%**



Source: PBS

Spinning

Local Industry | Yarn Prices



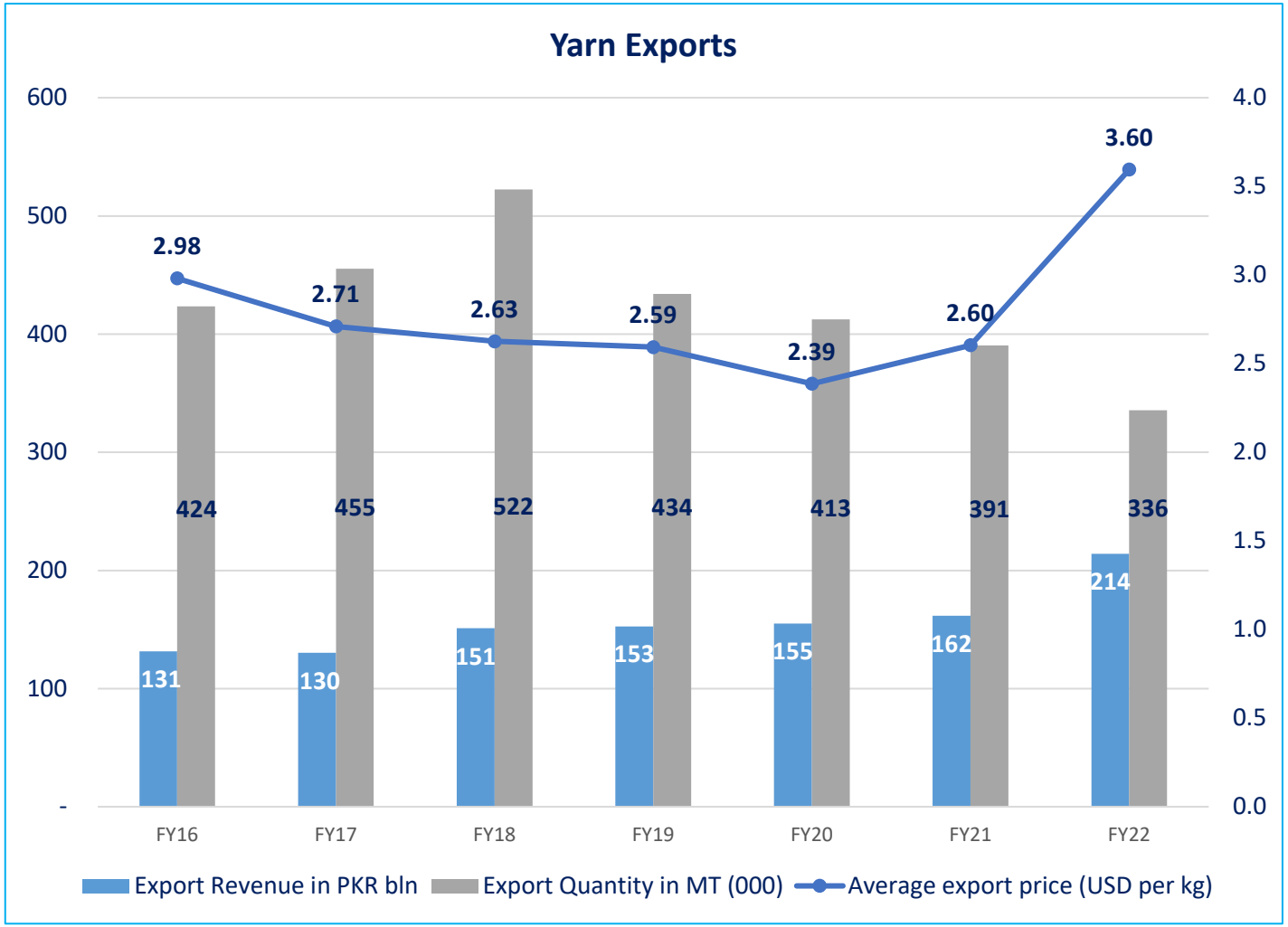
- Prices of cotton yarn have been on a rising trend in recent years. For the majority part of FY22, local and international cotton prices have been increasing leading to an increase in yarn prices. This also served to increase the cost for the spinning sector.
- In the local market, the inability of locally grown cotton to meet the production demand of spinning mills meant that cotton needed to be imported. The import growth, though relatively lower, serves to increase the cost of raw material for local players. In addition, the significant depreciation of the PKR relative to USD over FY22 period in contrast to FY21 meant that cotton was imported at significantly higher prices in PKR.

Source: PBS, PCCC, Economic Survey 2021-22

Spinning

Yarn Exports

- During FY22, the export of yarn increased in value terms by ~32.4% from the SPLY (FY21 growth: ~4.3%).
- However, export quantity has been experiencing a continued declining trend from FY18 with a CAGR of ~-10.5%. In FY22, exports declined by ~14% (FY21 decline: ~-5%). This clearly shows that while total production, in volumetric terms did marginally increase in FY22, export demand fell. Therefore, the ~32.4% increase in PKR export revenues was due to PKR depreciation against the USD.
- Meanwhile, average export price of yarn continued moving upwards from FY21 level and rose by ~38.5%. Increase in yarn export price during FY22 was driven by higher cotton prices globally, significant USD to PKR depreciation, and disruptions in supply chains.
- During FY22, the export of yarn contributed ~6.2% to the country's total textile exports which amounted to ~37.8% of the country's total exports.



Source: PBS

Spinning

Export Destinations

- Pakistan's export of yarn are largely concentrated towards China which accounted for ~54% of total yarn exports during FY22.
- Other export destinations include Bangladesh and Turkey, which accounted for ~14% and ~4% of Pakistan's total yarn exports, respectively. Both countries have significant positions in the global textile industry.

Export Destinations	FY20		FY21		FY22	
Countries	Value (000 USD)	%	Value (000 USD)	%	Value (000 USD)	%
China	734,446	68%	632,712	69%	647,509	54%
Bangladesh	69,853	6%	69,569	8%	167,390	14%
Turkey	52,692	5%	34,993	4%	47,279	4%
Portugal	39,916	4%	31,094	3%	55,987	5%
S. Korea	20,382	2%	22,153	2%	24,904	2%
Japan	25,669	2%	20,174	2%	34,486	2%
Others	137,856	13%	111,014	12%	222,568	3%
Total	**1,080,814**	**100%**	**921,709**	**100%**	**1,200,123**	**100%**

Source: TDAP, SBP

Spinning

Business Risk

- **Decline in local cotton production:** Pakistan missed its cotton production target this year by ~2.2mln bales as final cotton output stood at ~8.3mln bales. However, the production was higher compared to the previous year in which production was reduced from ~8.0mln bales down to ~5.0mln bales, due to severe impact of pest attacks and climate change. While the current season's crop production estimate stands at ~9.3mln bales, the actual production is expected to fall sharply as the flash floods in August-22 have destroyed an estimated ~3.5mln of cotton bales.

- **Rising raw material prices:** The shortage in supply of cotton in local and international markets has resulted in significant price increase. Raw material constitutes ~70% of the sector's direct costs and thus profitability depends on the players' ability to continue to pass on the increased price impact.

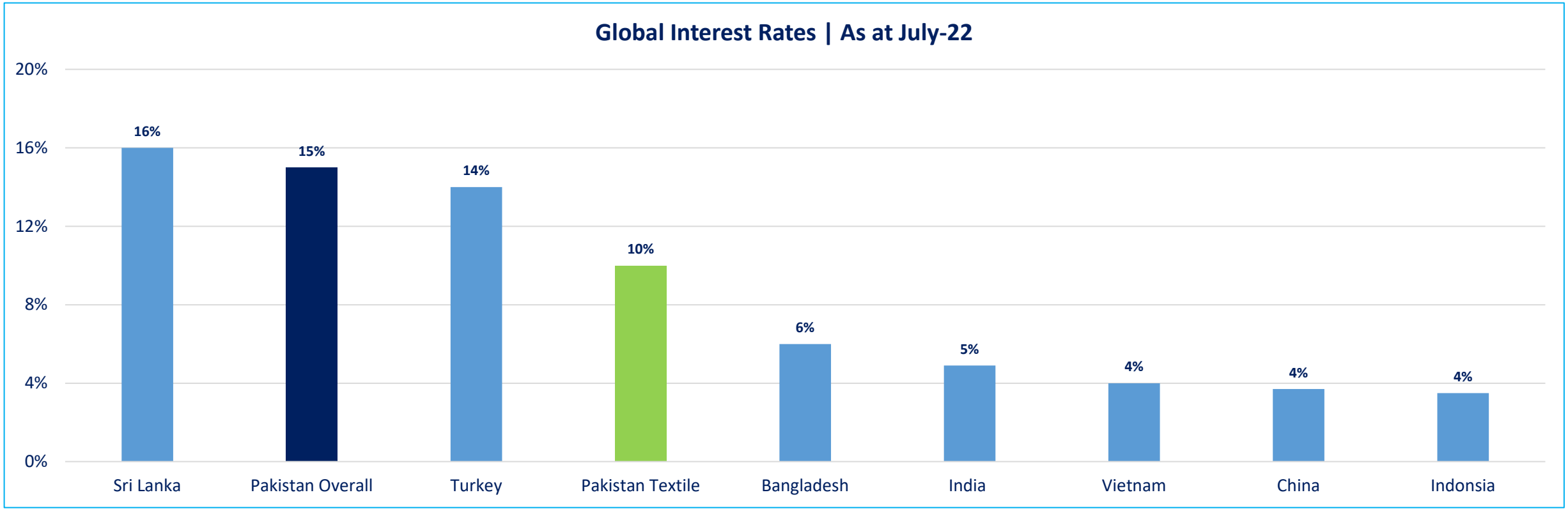
- **Low level of value addition:** Although, the increased demand in past year has increased the overall profitability of the sector, it remains a low value addition sector with historically narrow margins.

- **High Energy Costs:** The government provides the textile industry with subsidized RLNG at USD~9.0 per mmbtu, which increased from USD~6.5 per mmbtu on August 1, 2022, and electricity at USD~9.0 cents per kwh. These rates are above the regional average for countries such as India, Bangladesh and Vietnam which reduced the competitiveness of Pakistan's yarn exports.

- **Disruption in electricity and gas supply:** The spinning sector depends on an uninterrupted supply of electricity and gas. Loadshedding of energy supply and curtailment of gas supply meant that the industry was unable to meet its export orders on a timely basis, which resulted in a loss of revenue.

- **High level of regional competition:** Pakistan's textile exporters have traditionally faced a high level of competition from regional players such as Bangladesh and Vietnam which has driven down the average export prices and margins in previous years. Although, many regional players were severely impacted by the COVID-19 pandemic which benefited Pakistan, the regional competition continues post the pandemic.

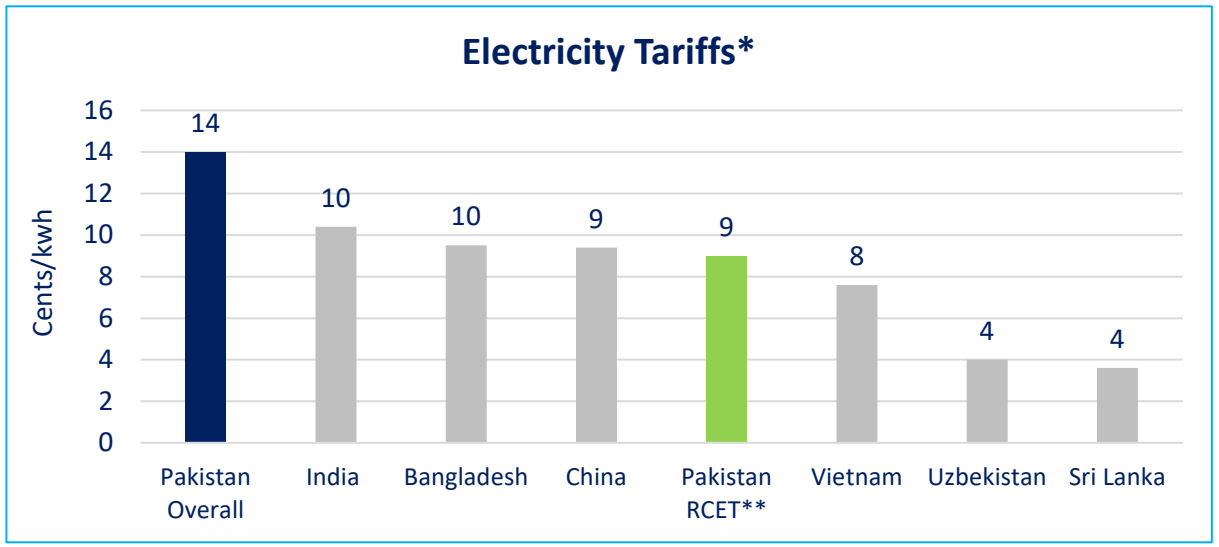
Local Industry | Regional Cost Comparison

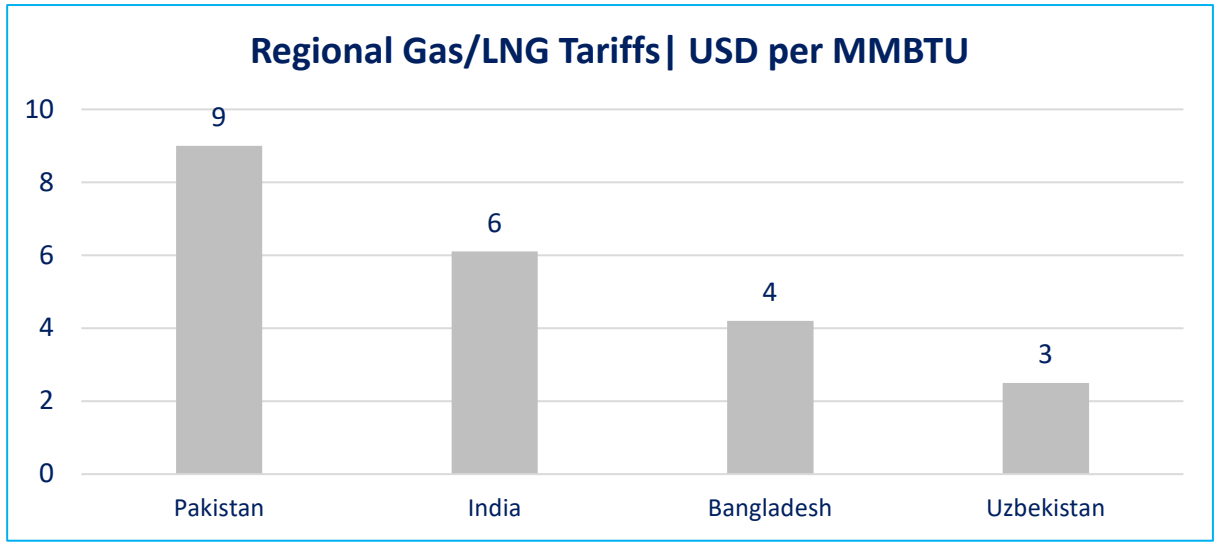


- Pakistan has the second highest interest rate in the region after Sri Lanka. The high cost of borrowing acts as a barrier to investments in various sectors. Garments, on the contrary, falls in the ambit of export sector which has access to subsidized financing facilities from the SBP in the form of short term Export Refinance Facility (ERF) and Long Term Financing Facility (LTFF). On a regional level, Sri Lanka and Turkey have the lowest borrowing rate.

Source: Trading Economics, globalpetrolprices.com, APTMA, OGRA

Electricity and Gas Tariffs | Local Issues and a Regional Comparison





- Pakistani businesses face a competitive disadvantage when it comes to comparing national and regional electricity tariffs. Energy costs have a significant share in the final conversion costs of textile mills and these costs cannot be ignored for achieving a competitive edge.
- The government provides subsidized electricity and gas at internationally competitive prices or at regionally competitive energy tariffs** (RCET) to the five export-oriented sectors of the economy including the textile cluster. However, these RCETs are still higher when compared to tariffs in Vietnam, Uzbekistan and Sri Lanka. Disruptions in the supply of electricity from the national grid (loadshedding and fluctuations) due to obsolete infrastructure and disconnection of gas supply make it challenging to rely on these energy supply sources.
- RCET for the textile sector amounts to 9 cents/kwh while gas rates have been increased to USD9.0 from USD6.5 per mmbtu in light of higher import prices for RLNG which is being sold at a retail price of USD~18.0 per MMBTU in July-22.
- Gas remains the major or only source of energy for ~75% of the textile industry which consumes only ~8% of the national gas supply. Therefore, any disconnection of gas has severe consequences for the local textile industry and export orders. In FY21, total gas supply was 4,300 MMCFD out of which 368 MMCFD was consumed by the textile industry. Compared to regional players, the local textile industry's gas/LNG tariff is significantly higher.

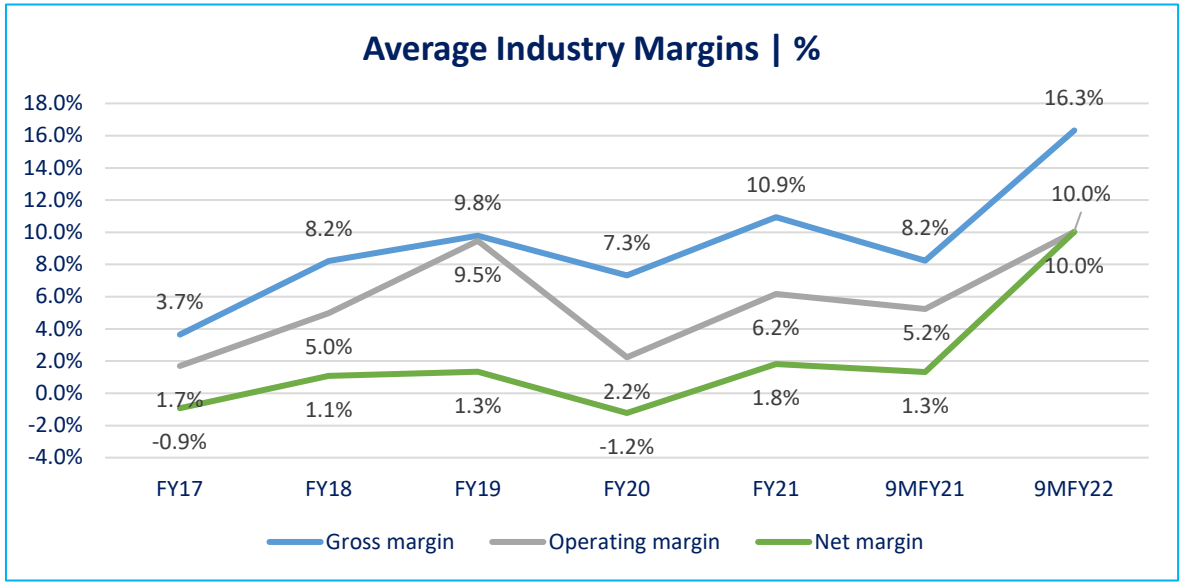
**Pakistan's figures are based on CY21 figures*

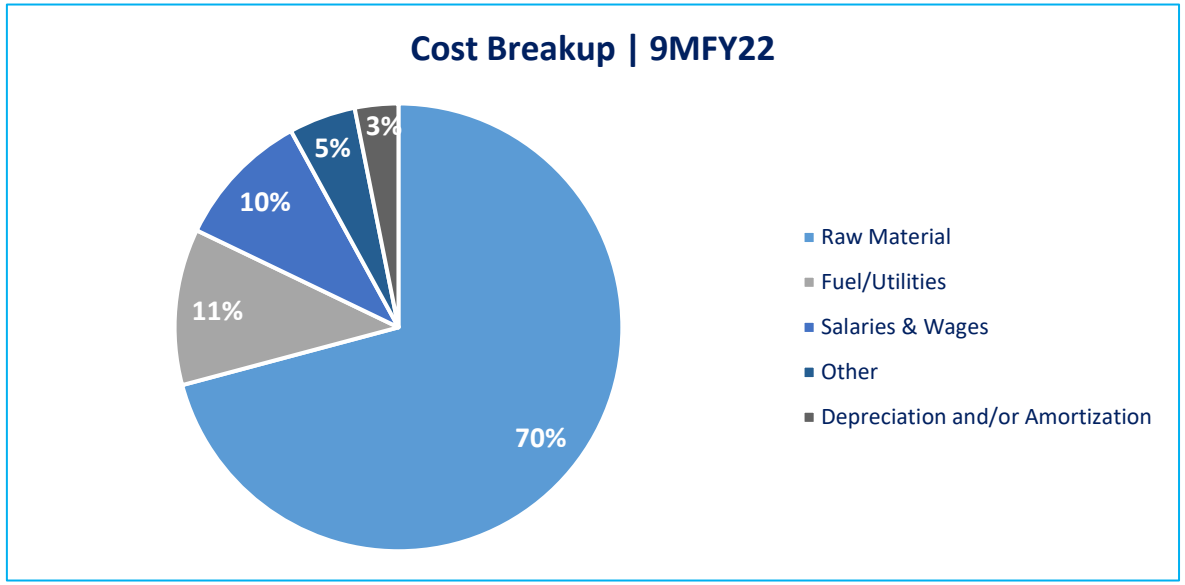
Source: Trading Economics, globalpetrolprices.com, APTMA, OGRA

Spinning

Margins & Cost Structure

- Over the last five fiscal years (FY17-FY21), the spinning sector's average gross margin have stood at ~8% while average net margins were 0.4% over the same period. The historically low margins are reflective of the low level of value addition by the sector.
- During 9MFY22, margins improved significantly, with gross margins standing at ~16% as compared to ~8% in the SPLY while net margins stood at ~10% as compared to 1.3% (SPLY). The improvement in margins came on the back of higher global and local post-pandemic demand and significant increase in yarn prices.
- The largest component within direct costs is raw material, i.e. cotton, which constitutes ~70% of total manufacturing costs. During FY22, despite average local cotton prices increasing by ~68% from the SPLY, cotton yarn prices also increased by ~43% leading to better margins. Going forward, in light of the damaged cotton crop due to flooding, and shortage propelling to import cotton at higher rates, the sector margins are expected to suppress, which could adversely impact the performance of the sector.





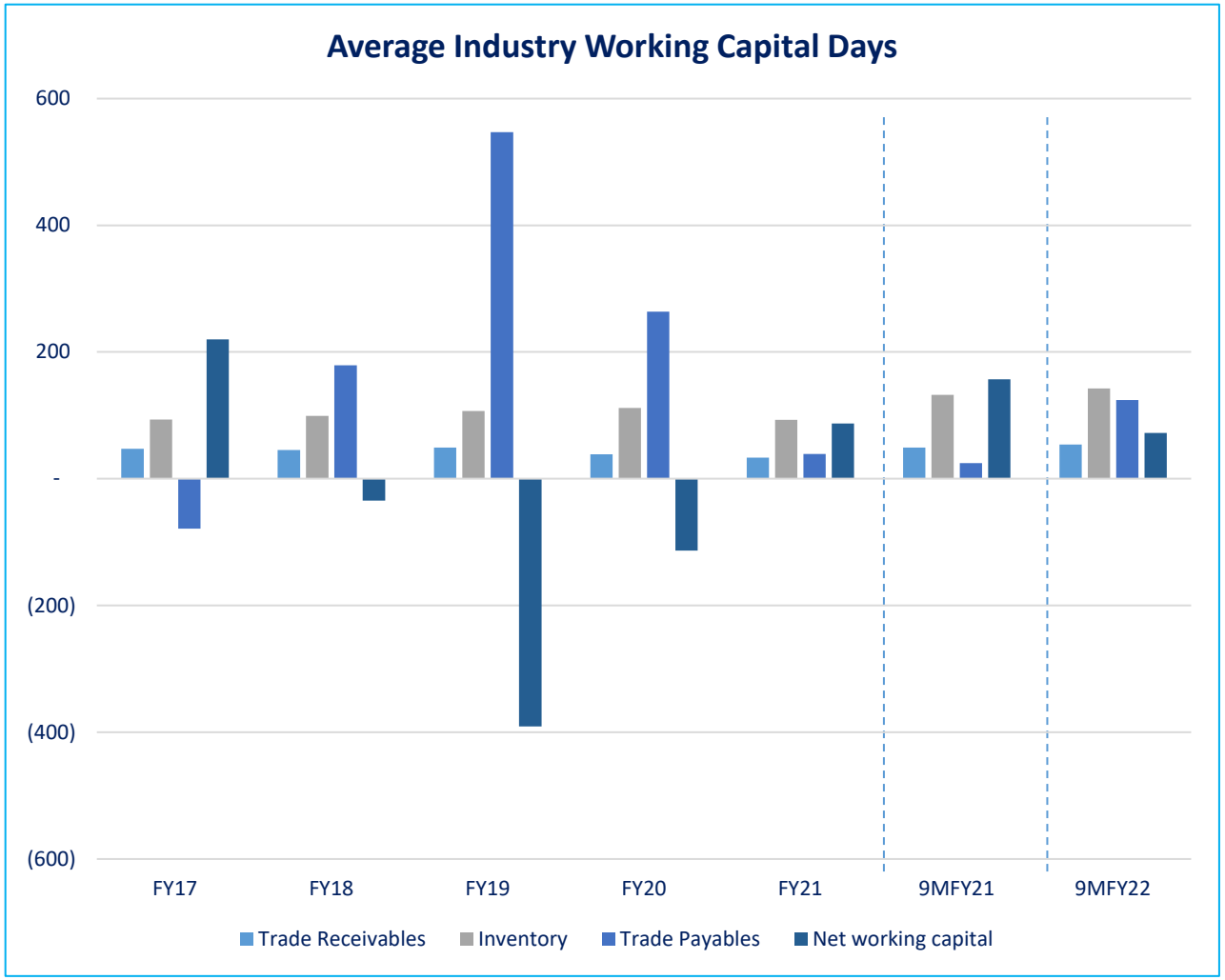
Note: Margins and cost break up are reflective of ~47 listed/rated spinning players

Source: PACRA Database

Spinning

Financial Risk – Working Capital

- The sector's working capital primarily comprises inventory and trade payables. Within the industry's working capital, inventory consists mostly of raw material and finished goods, with work-in-process making a small contribution.
- The industry's average working capital cycle average stood at ~72 days in the 9MFY22 reflecting a decrease of ~85 days from the SPLY. This increase comes of the back of longer build-up of payables, which increased by ~99 days from the SPLY.
- The build-up of payables could potentially indicate credit problems if sales continue to fall, input costs rise which could mean that players may be unable to repay any working capital loans which are issued at high interest rates.
- The inventory days have increased by ~11 days in the 9MFY22 period from the SPLY owing to expectation of greater demand of orders.
- Many players within the organized mill segment are integrated with group companies, resulting in more efficient working capital management.

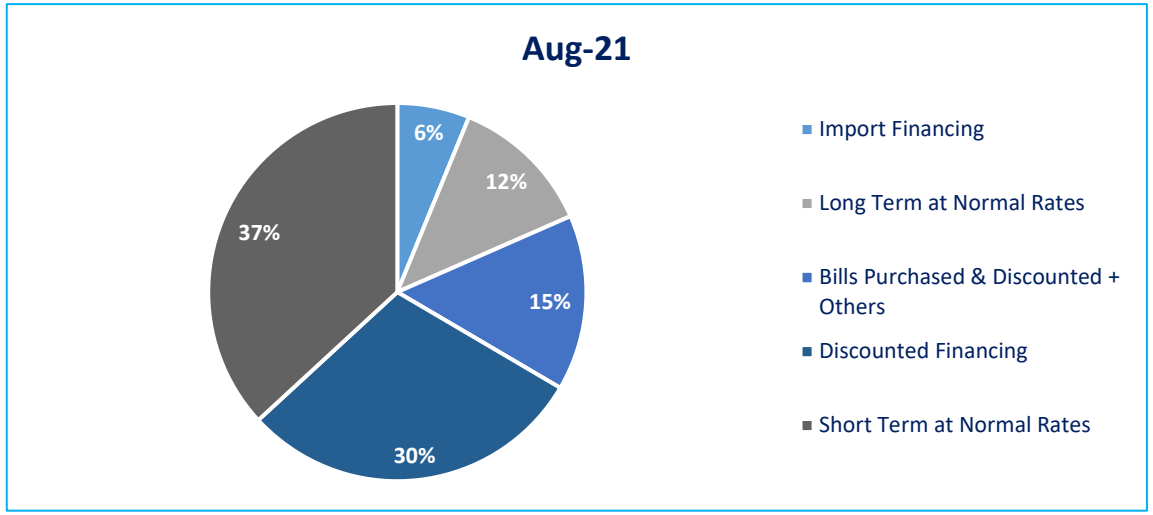


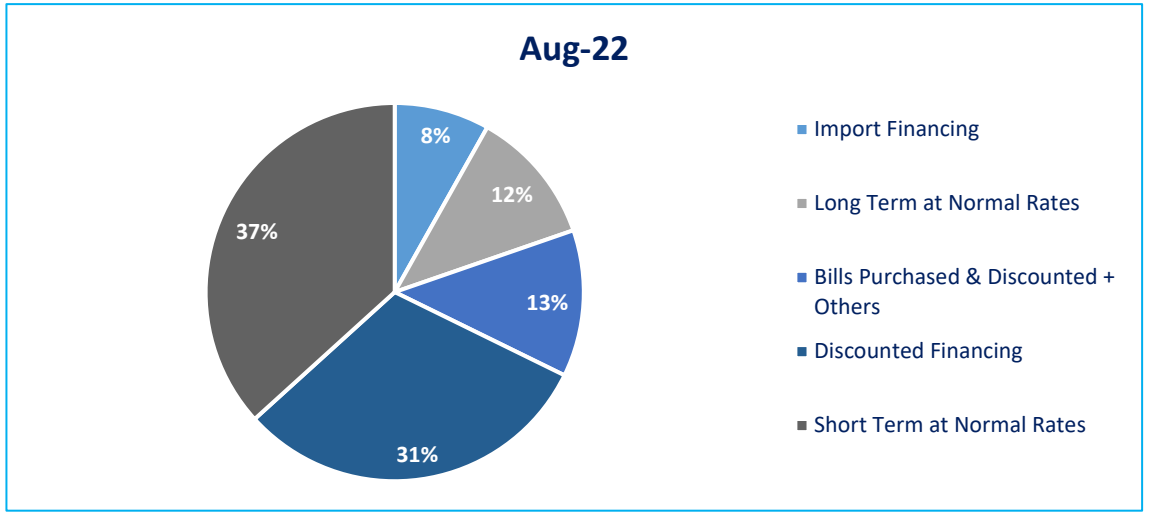
Note: Working capital cycle is reflective of ~47 listed/rated spinning players

Source: PSX, PACRA Database

Spinning

Financial Risk – Borrowing Mix





- The total borrowing of spinning sector stood at PKR~536bln as at End-Aug-22 as compared to PKR~432bln as at End-Aug-21.
- The largest share is occupied by short term borrowing at normal rates which stands at PKR~197bln and accounts for ~37% of total borrowing.
- The sector avails discounted financing, which includes Export Finance Scheme (EFS) at rate of 7.5%, as well as Long Term Finance Facility (LTFF) and Long-term Financing Facility (LTFF) at rate of 7.0%. These rates were increased in May-22 from 5.5% and 5.0% per annum, respectively.
- In addition, the SBP decided to link the concessionary financing rates to the policy rate so that they could adjust automatically.
- Discounted financing accounts for ~37% of the sector's borrowings and stood at PKR~166bln as at End-Aug-22 (EFS: PKR~63bln, LTFF/TERF: PKR~104bln).
- The overall textile industry's infection ratio stood at ~8.3% in Jun-22, almost similar as of Mar-22 when it was ~8.6%. However, the infection ratio still remains elevated in comparison to overall banking credit NPL which stood at ~7.5% in Jun-22.

Source: SBP

Spinning

Regulatory Framework

- With respect to Income Tax, the spinning sector is under the Normal Tax Regime (NTR). Further, the sector is also subject to Minimum Tax @ 1.5% of turnover, if tax liability under NTR is lower than minimum tax. However, the additional tax paid under minimum tax is adjustable against future tax liabilities for the next 5 years.
- In FY22 finance bill, a super tax was introduced and will be imposed at a rate of 10% on textile manufacturers whose income exceeds PKR~300bln.
- In addition, sales tax of 17% is applicable on both the raw material, i.e. cotton and finished goods, i.e. yarn. In addition to Sales Tax, there is Advance Tax of 1% applicable on the import of these products. However, the amount of Advance Tax is adjustable against final income tax liability.
- The sector receives discounted financing from SBP under the Export Finance Scheme (EFS) and the Long Term Financing Facility (LTFF).
- In response to the COVID-19 pandemic, SBP introduced several measures intended to provide relief to the industries. These measures included loan extension and refinancing, loan for payment of employee salaries and wages and facilitation of new investment, expansion and BMR activities through the Temporary Economic Refinance Facility (TERF).
- In addition, SBP also increased the monetary policy rate by 250 bps to 12.25% in April-22 and a further 150 basis points to 13.25% in May-22 which has led to an increase in financing costs. The policy rate was further revised by a further 175 basis points to 15.00% in July-22.
- All Pakistan Textile Mill Association (APTMA) acts as the national trade association of textile cluster in the country.

Source: SBP

Spinning

Custom Duty Structure

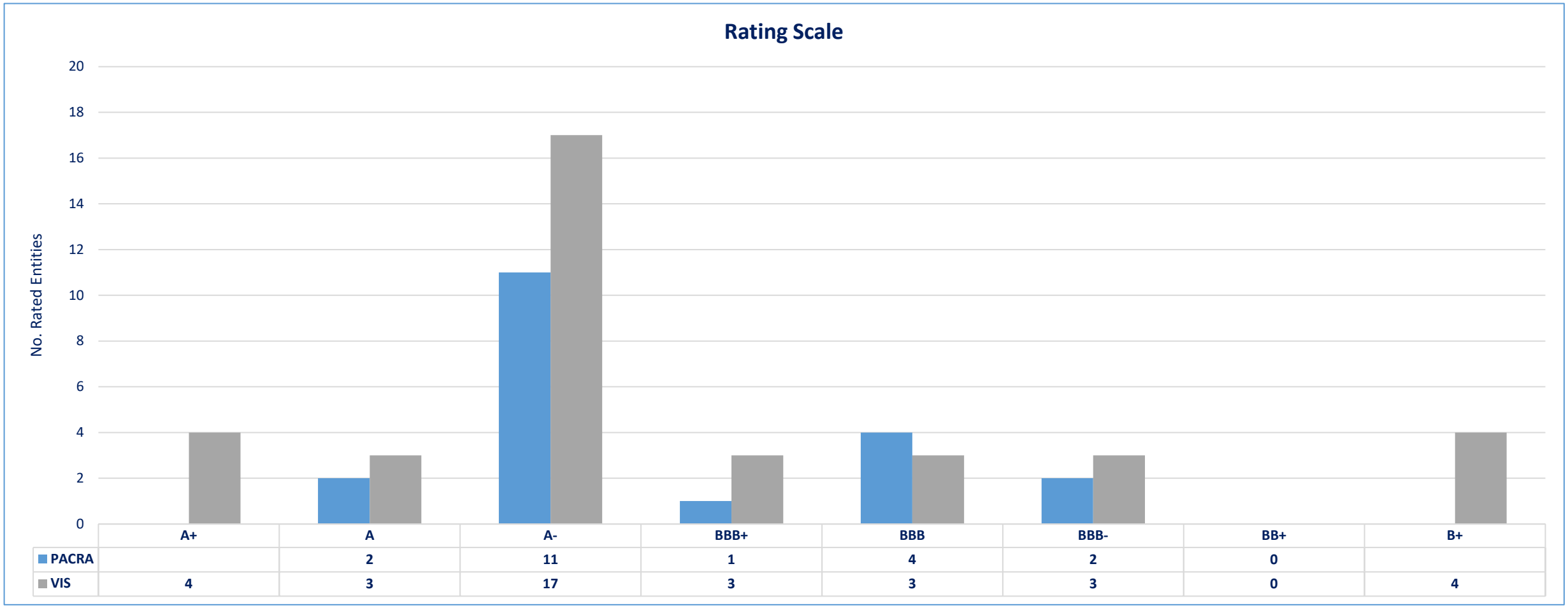
PCT Code	Description	Custom Duty		Additional Custom Duty		Regulatory Duty		Total	
		FY23	FY22	FY23	FY22	FY23	FY22	FY23	FY22
52.01	Cotton, not carded or combed	0%	0%	0%	0%	0%	0%	0%	0%
52.03	Cotton, carded or combed	0%	0%	0%	0%	0%	0%	0%	0%
52.05	Cotton yarn (other than sewing thread), containing 85% or more by weight of cotton, not put up for retail sale	11%	0%	0%	0%	0%	0%	11%	0%
52.06	Cotton yarn (other than sewing thread), containing less than 85% by weight of cotton, not put up for retail sale	11%	0%	0%	0%	0%	0%	11%	0%
52.07	Cotton Yarn (other than sewing thread) put up for retail sale	11%	0%	0%	0%	0%	0%	11%	0%
54.02	Synthetic Filament Yarn (other than sewing thread), not put up for retail sale (includes polyester and nylon)	0-11%	0-11%	0-2%	0-2%	0-2%	0-2%	0-15%	0-15%
54.03	Artificial Filament Yarn (other than sewing thread), not put up for retail sale (includes viscose rayon)	0-11%	0-11%	0-2%	0-2%	0%	0%	0-13%	0-13%

Source: FBR

Spinning

Rating Curve

- PACRA rates 20 spinning players with a long term rating bandwidth ranging from BB+ to A.



	A+	A	A-	BBB+	BBB	BBB-	BB+	B+
PACRA		2	11	1	4	2	0	
VIS	4	3	17	3	3	3	0	4

Spinning

SWOT Analysis

- Large installed capacity
- Integrated into textile value chain as key raw material
- Government protection from tariff & duty structure
- Strong sector association resulting in high lobbying power
- Mature and long-standing textile sector

- Low BMR resulting in technological obsolescence
- Low value addition/commodity product
- Periodic imposition of import duties on import of cotton
- Lower focus on synthetic fibers
- Restrictions on sales to unorganized segment creating hurdles

- Geographical export concentration
- Intense competition from regional players in international market
- Strong bargaining power of buyers
- Possible withdrawal of subsidies on electricity and gas
- Higher duties in imports
- Climate change and pest attack threats on cotton crop

- Forward and horizontal integration to produce value added and differentiated products
- Opportunity to increase efficiency through technological upgrade
- Special Economic Zones provide incentives to sector

Spinning

Outlook: Negative

- The textile industry is one of the most important industries to Pakistan's economy. In FY22, textile exports contributed ~60.7% to the country exports (FY21: ~60.9%).
- During FY22, the spinning sector's fabric exports grew by ~32.4% to PKR~214bln from PKR~162bln in FY21. Higher cotton prices and exchange rate depreciation helped boost export revenues in PKR terms.
- However, global recession following interest rate hikes has dampened the demand for textile exports and this reduced demand trend is expected to persist in the near-term. On the domestic front, high inflation (which peaked at ~27% in July-22) has curbed domestic demand. This trend is likely to persist for the foreseeable future.
- The Aug-22 flash floods have resulted in a ~55% loss in local cotton production, and a downward revision of target production from ~9.0mln bales. This means greater import costs due to rising international cotton prices and a depreciating PKR versus the USD will significantly squeeze local players' margins.
- Global supply chain constrains due to climate-related factors and/or pest attacks has resulted in a reduction in cotton production targets for major cotton growers such as the US, Brazil and India. This will only serve to increase global cotton prices moving forward an increase in import costs for spinning players.
- Rising global freight costs is also expected to increase the cost of importing raw material for manufacturers.
- While the Government has facilitated textile exporters with RCET rates, the recent increase in RLNG tariffs will serve to increase sector production costs and reduce margins. In recent developments, the Cabinet Division has signed a corrigendum indicating a likely reversal of the reduced electricity tariff, which was otherwise approved in Jul-22. Should the reversal of the RCET policy materialize, sector production costs will considerably increase and serve to adversely impact profitability margins for the sector.
- The decision taken by the State Bank of Pakistan (SBP) to increase the policy rate during FY22 has increased the borrowing costs for the sector. Moreover, an increase in the EFS and LTFF rates and policy rate in July-22 will further increase financing costs for a sector which is important to Pakistan's GDP growth.
- In addition, the increase in custom duty and the imposition of a super tax can also hurt the bottom line of players operating in the spinning sector.
- Interruptions in gas supply during the end of FY22 meant that the spinning sector lost out on some export orders. However, this issue has since been resolved.
- Despite the present global and domestic challenges faced by the spinning sector, the contribution of the sector to industrial growth and its importance is undebatable. The Sector is currently assigned a "negative" outlook due to the prevalent conditions discussed above. However, it is believed that once the global and local economy recovers from its present slowdown, the industry will experience an increase in export and domestic orders.

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