Spinning

Sector Study

September 2023

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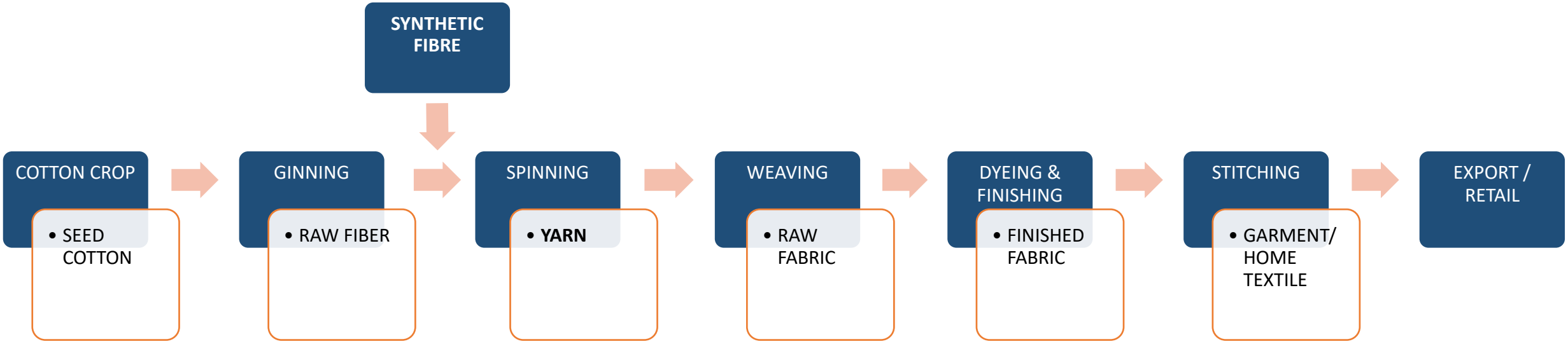
Introduction | Textile Value Chain

- The 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 fibres occurs to produce a continuous web.

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

Drawing: Strengthening of fibres by passing them through rollers.

Roving/Ring Frame: Roving frames carry out process of converting fibres 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 | 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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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. Higher yarn count attracts higher prices.

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)

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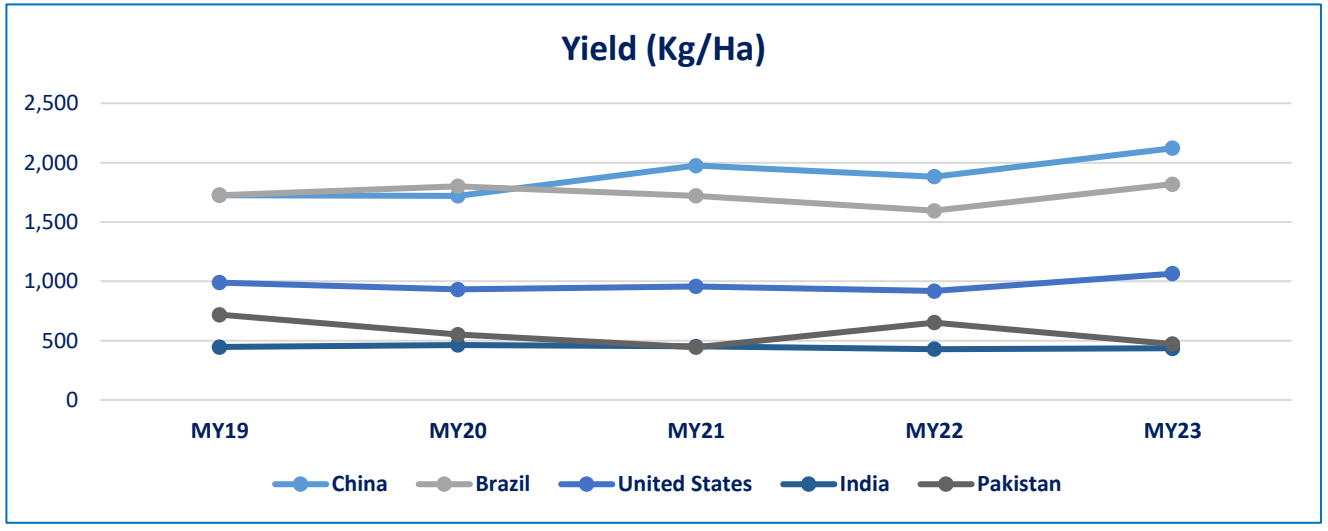
Global | Production & Yield

- During MY23, the global production of cotton stood at ~25.7mln MT as compared to ~25.2mln MT during the SPLY. This translates into a YoY increase in the production of ~2%, where the increase can be attributed to rising production across almost all major cotton producers globally and increasing global yield.
- India and China are the largest cotton producers in the world. China accounted for ~26% (MY22: ~23%) of the total global cotton production in MY23, while India produced ~22% (MY22: ~21%) of the global production level.
- China has experienced a ~14% YoY increase in cotton production in MY23. India's cotton production has also increased by ~6% YoY during MY23.
- The overall global yield of cotton has increased moving from MY22 to MY23. The total yield of the top five cotton producing countries (listed in the table on the right) increased by ~8% YoY in MY23.
- This increase in yield comes from an increase in harvested land for all five countries by ~1% YoY in MY23.

Production (000 MT)	MY19	MY20	MY21	MY22	MY23
China	6,042	5,933	6,423	5,879	6,684
India	5,661	6,205	6,009	5,334	5,661
United States	3,999	4,336	3,181	3,815	3,150
Brazil	2,830	3,000	2,356	2,504	2,983
Pakistan	1,655	1,350	980	1,306	849
Rest of the world	5,549	5,294	5,299	6,354	6,357
Total	**25,736**	**26,118**	**24,248**	**25,192**	**25,684**



**MY='Marketing Year' i.e., Aug-Jul.*

Source: USDA, FAO

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Global | Consumption & Ending Stocks

- The decline in global cotton consumption during MY23 of ~5% was primarily owed to the low demand of cotton by the textile sector.
- China and India remained the largest consumers of cotton, accounting for a cumulative ~54% of global consumption, i.e., ~33% and ~21%, respectively.
- Meanwhile, Pakistan had a relatively stable share of ~9% in global cotton consumption from MY19-22. However, this decreased to ~8% due to recessionary pressures within the country's economy during MY23.
- China's domestic consumption in MY23 increased by ~8% compared to the SPLY due to slowing economic growth and weakening domestic demand.
- Ending stocks rose by ~9% from ~18.7mln MT in MY22 to ~20.5mln MT in MY23. Global production was ~1.8mln MT higher than global consumption.
- China maintains the largest ending stock levels, amounting to ~45% at end of MY23 (MY22: 22%).

World Cotton Consumption (000 MT)					
Countries	**MY19**	**MY20**	**MY21**	**MY22**	**MY23**
China	8,600	7,185	8,709	7,348	7,947
India	5,291	4,355	5,661	5,443	5,117
Pakistan	2,330	2,003	2,330	2,330	1,872
Bangladesh	1,568	1,502	1,851	1,851	1,568
Turkey	1,502	1,437	1,676	1,894	1,589
Other	4,806	3,815	4,015	6,390	5,806
Total	**26,231**	**22,387**	**26,574**	**25,256**	**23,899**

World Ending Stocks (000 MT)					
Countries	**MY19**	**MY20**	**MY21**	**MY22**	**MY23**
China	7,766	8,034	8,546	8,396	8,489
India	1,960	3,676	2,599	2,577	3,451
Pakistan	2,668	3,136	2,421	1,872	2,525
Bangladesh	1,056	1,579	686	816	708
Turkey	543	738	597	419	327
Other	3,434	4,209	4,408	4,652	4,955
Total	**17,427**	**21,372**	**19,257**	**18,732**	**20,455**

MY='Marketing Year' i.e., Aug-Jul.

Source: USDA

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Global | Trade

- During MY23, the global cotton imports grew YoY by ~2%. This increase is reflective of increase for smaller countries, whereas the five biggest cotton importers reduced their cotton imports during the same year.
- In MY23, Bangladesh was the largest importer of cotton with a share of ~15.1% (MY22: ~19%) closely followed by Vietnam with a share in the world imports of ~14.7% (MY22: ~16%).
- The largest exporter of cotton during MY23 was United States, with a share of ~29% (MY22: ~34%), while Australia followed closely with ~18% share (MY22: ~8%).
- The decline in exports of exporting countries has resulted from multiple factors. Texas produces ~40% of U.S. cotton was hit by a strong drought during MY23, which reduced its supply. India grappled with declining international demand as inflation soared in the U.S. and Europe, coupled with droughts in different parts of the country.
- On the other hand, importing countries recorded reduced demand as a result of high inflation and rising textile prices, which resulted from reduced global cotton production and disrupted supply chains.

Exports (000 MT)	MY19	MY20	MY21	MY22	MY23
United States	3,230	3,377	3,560	3,153	2,787
Brazil	1,310	1,946	2,398	1,682	1,449
India	767	697	1,348	827	272
Australia	791	296	344	779	1,350
Greece	295	319	355	311	283
Others	2,853	2,234	2,581	2,520	3,382
Total	**9,246**	**8,954**	**10,586**	**9,378**	**9,523**

Imports (000 MT)	MY19	MY20	MY21	MY22	MY23
China	2,099	1,554	2,800	1,707	1,383
Bangladesh	1,524	1,633	1,807	1,785	1,437
Vietnam	1,509	1,411	1,587	1,444	1,404
Turkey	621	865	1,159	980	936
Pakistan	785	871	1,176	980	980
Others	2,708	2,474	2,073	2,259	3,481
Total	**9,246**	**8,954**	**10,586**	**9,378**	**9,523**

MY='Marketing Year' i.e., Aug-Jul.

Source: USDA

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Global | Outlook

- The global cotton yarn market size was valued at USD~94.4bln in CY22 and is projected to grow from USD~82.8bln in CY23 to USD~100.7bln by CY28, exhibiting a CAGR of ~4.0% during the forecast period.
- China remains the global leader in terms of cotton yarn production and consumption. In MY23, China produced ~6.7mln MT of cotton yarn. Other large cotton yarn producers include India, (~5.6mln MT) and USA (~3.2mln MT). Together, the three countries accounted for ~62% of global cotton yarn production.
- Meanwhile, in MY23, China accounted for ~33% of global cotton yarn consumption at ~7.9mln MT while India accounted for ~21% with ~5.1mln MT.
- As a result, Asia-Pacific is the leading region in the global yarn market, followed by the North American region. Changing consumption patterns, increasing population, disposable incomes, and the rise in demand for clothing along with home furnishing products in Asia-Pacific region are major growth factors for the market.
- In MY23, the spinning industry was subjected to declining production of cotton as climate change affected multiple cotton producing regions and demand for textile also decreased as inflation soared globally, which led to decline in demand for yarn as well.
- 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.

MY='Marketing Year' i.e., Aug-Jul.

Source: Fortune Business Insights, USDA

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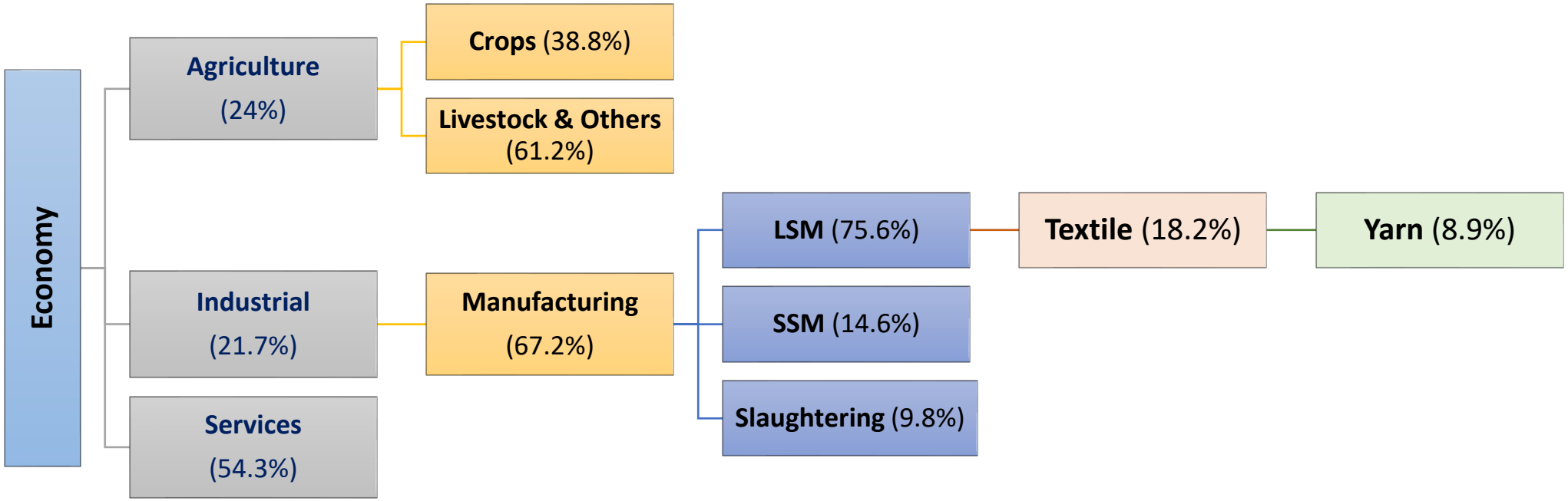
Local | Introduction

- In FY23, Pakistan's GDP (nominal) stood at PKR~79.3trn (FY22: PKR~63.3trn) and posted a growth in real terms of ~0.29% (FY22: ~6.1%). Industrial activities in FY23 represented ~18.5% share of the (constant) GDP.
- Large Scale Manufacturing (LSM) in Pakistan is essential for the economic growth, considering its linkages with other sectors, as it represents ~75.6% value of all manufacturing activities in FY23. The QIM dipped by ~10.3% during FY23 when compared with the same period of last year.
- The textile sector is classified as a Large Scale Manufacturing (LSM) industrial component within the industrial sector. In FY23, the textile industry's weight in the QIM was recorded at ~18.2%. Yarn has ~8.9% share in the textile category of the QIM.



MY='Marketing Year' i.e., Aug-Jul.

Source: Fortune Business Insights, USDA

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Local | Cotton Dynamics

Pakistan's Cotton Supply (000 Bales)						
	FY18	FY19	FY20	FY21	FY22	FY23
Opening Stock	**464**	**987**	**1,136**	**202**	**209**	**174**
Production	11,946	9,861	9,148	7,064	8,329	4,910
Imports	3,519	2,438	3,149	5,035	4,636	4,023
Total Supply	**15,929**	**13,286**	**13,433**	**12,301**	**13,174**	**9,107**
Local Consumption	14,736	12,074	13,155	12,086	12,984	7,254
Exports	206	76	76	6	16	68
Closing Stock	**987**	**1,136**	**202**	**209**	**174**	**1,785**

- The majority of Pakistan's cotton crop is grown in Punjab and Sindh, with KPK and Balochistan sharing a relatively small fraction of total outputs. The two major cotton producing provinces are Punjab (~66%) and Sindh (~33%) based on USDA's recent 3-year average estimate.
- Pakistan's cotton production decreased by ~41% in FY23 (FY22: ~18% growth) as the Aug'22 floods damaged cotton crop in major cotton producing districts like Rajanpur, DG Khan and Taunsa which were worst hit by flood and registered significant crop damages. The post-flood estimates of cotton production are ~4.9mln bales (or ~0.8mln MT) during FY23 as compared to ~8.3mln bales (or ~1.4mln MT) last year.
- FY23 was the second consecutive year when Pakistan's net imports of raw cotton declined after FY15 and FY19. Prior to FY22, cotton imports rose by ~78.1% over the FY17-21 period. However, for the outgoing FY23, estimates suggest a ~15% decline in cotton imports. The decline in imports can likely be explained by the tightening economic conditions faced by the country during 2HFY23, and the resultant lower quantum of imports. Moreover, there was also a slowdown in the global trade for cotton on the back of lower demand.
- The proposed target for cotton crop for FY24 season is ~2.2mln MT (or ~12.7mln bales), of which ~65.3% has been budgeted for Punjab and ~31.3% 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, PES, PCCC, USDA

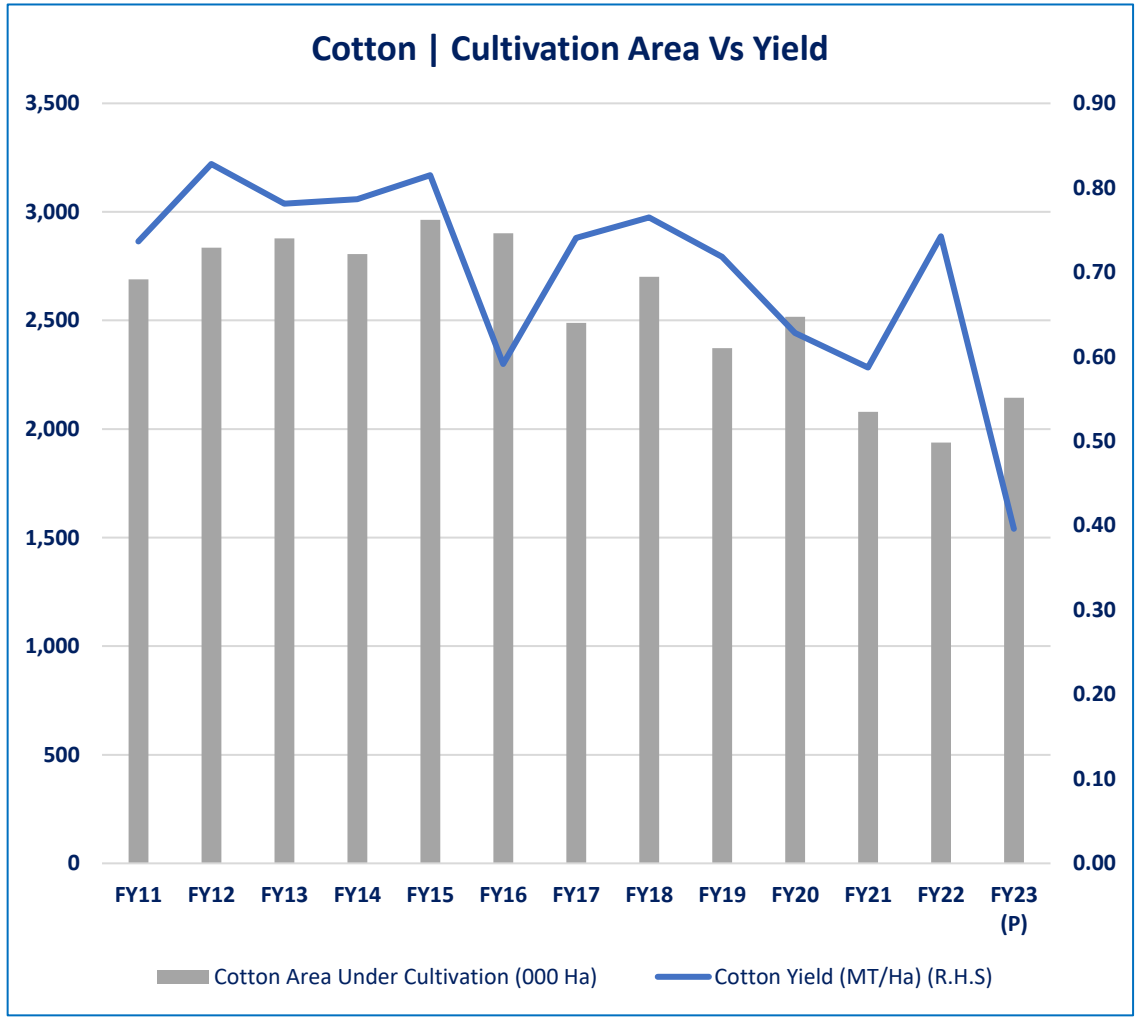
Local | Cultivation Area and Yield

- The decline in cotton yield came despite area under cultivation having increased by ~10.7% in FY23 (FY22: ~-6.8%). The area under cultivation in FY23 Kharif season has been recorded at ~2.1mln hectares, compared to FY22 when the area under cultivation was ~1.9mln hectares.

- Despite ~10.1% increase in area under cultivation, the floods caused a significant damage to cotton crop, with its production declining by ~41% to ~4.9mln bales (SPLY: ~8.3mln bales).

- On the other hand, area under cultivation for Maize grew only by ~4.1%, while that for rice declined by ~15.9% during FY23. Maize and Rice compete directly with cotton for area. However, besides the floods, other factors such as high temperatures and shortage of irrigation water resulted in lower cotton germination, seedlings growth and leaf wilting problems impacting cotton production during Mar-May'23.

- For FY24, production target is set at ~12.7mln bales, with targeted yield set at ~785Kg/Ha. However, area under cultivation is expected to remain stagnant due to Maize and Rice capturing higher local prices, paving way for farmers to make good profits with regards to these crops.



Source: Economic Survey, 2022-23, USDA

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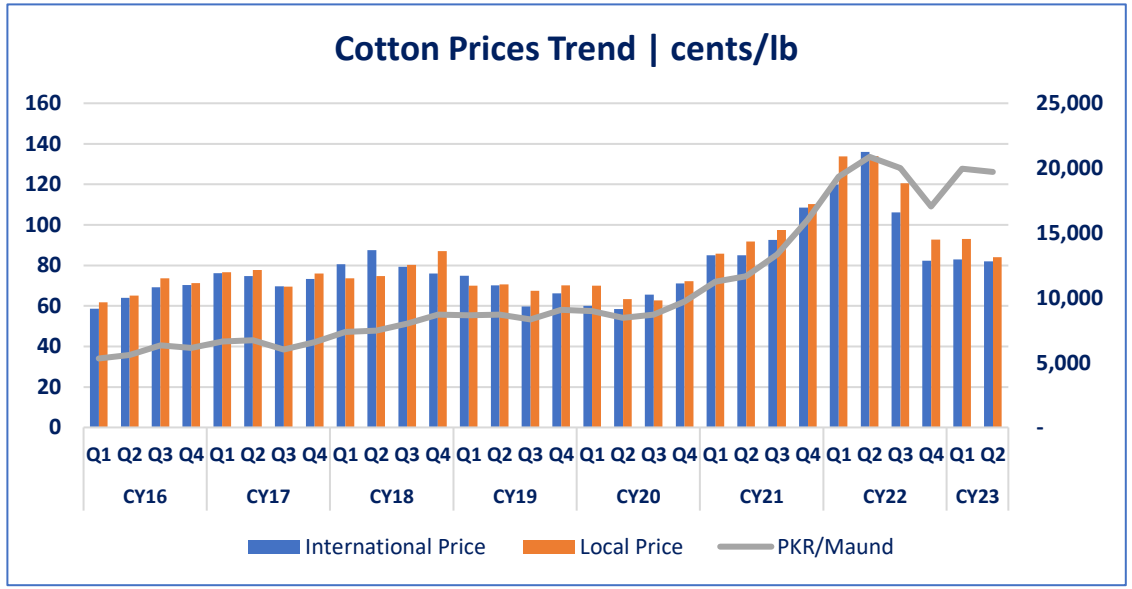
Cotton Dynamics | Prices

- International cotton prices, historically (CY16-20), exhibited a range-bound trend, hovering in the range ~60-80cents/lb. Prices are largely determined by supply-demand factors but can also fluctuate based on unforeseen events. For instance, during the COVID-19 pandemic, international prices had dipped to ~60cents/lb. However, the 1QCY21-2QCY22 period registered the highest levels of ~136cents/lb largely on the back of an uptick in economic activity across the globe.
- A significant variable influencing global cotton prices is the sluggish import demand from China, the world's largest cotton importer and producer, which has built significant stockpiles within the country in the recent past. The price stability of cotton in recent times can also be likely attributed to U.S. ban on textile exports made from cotton harvested in Xinjiang region of China.
- Local cotton prices, on average, exhibited little volatility during CY16-20, growing from PKR~5,846/maund to PKR~8,969/maund during 3QCY20, and hitting lowest levels during 3QCY17 of PKR~6,025/maund. However, prices started registering a steep growth post-CY20 and climbed up a high of PKR~20,862/maund during 2QCY22. Higher local prices moved in tandem with international prices during this time.
- A slight deviation has been observed for local and international prices (cents/lb) during CY23. Cotton price witnessed a downward trend in 1QCY23, owed to sluggish demand from the spinning sector as cotton yarn production fell by ~24% in FY23 YoY basis. In Mar'23, the ECC fixed cotton intervention price at PKR~8,500/40Kg. This has failed to improve market conditions since growers were demanding a higher rate.
- Going forward, cotton prices are expected to continue similar trajectory in the face of lower demand from China and sluggish growth in top cotton-consuming countries.



Average Cotton Prices	FY19	FY20	FY21	FY22	FY23	Jun'23
International (Cents/lb)	76	62	76	114	87	82
Local (Cents/lb)	78	68	78	123	94	83
Local (PKR/maund)	8,604	8,742	10,290	13,476	19,108	19,568

Note: *Cotton Conversion Units - 1 Maund =37.3kg;1 Bale =170kg;1 Bale =4.6 Maund.*

Source: PACRA Database, Ministry of Finance

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Local | Overview

- The Spinning sector comprises ~408 spinning mills in the country, including ~40 composite units and ~368 spinning units. The industry comprises large-scale organized as well as fragmented cottage/small-scale entities.
- The sector has matured over the years and has a long operating history in the country. The market structure can be classified as competitive, with a large number of players producing a relatively homogenous product.
- During FY23, Pakistan's yarn production fell by ~23.6% to ~2.7mln MT (FY22: ~3.5mln MT). During the same period, Yarn exports stood at ~281,225 MT, equivalent to PKR~212bln (or USD~844mln), accounting for ~10.4% of total local production. The export volume reflects a ~16.7% YoY decline when compared with FY22 and can primarily be attributed to soaring energy prices, scarcity of raw material and an overall global decline in demand due to inflationary pressures.
- The export value of yarn in PKR terms also marginally declined YoY by ~0.8% in FY23 likely associated with depreciation of the currency against the USD, as well as overall volumetric decline in yarn exports of Pakistan. Yarn exports contributed ~0.3% to country's total export earnings in FY23 (SPLY: ~3.8%).
- The remaining ~89.6% of locally produced cotton yarn is consumed within the local textile value chain by the Weaving sector. Demand from the local market also remained sluggish as raw material supply was hindered by the Aug'22 flash floods (~41% damage to the local cotton crop) and declining demand for textiles resulted in low upstream demand of yarn.

Particulars	FY21	FY22	FY23
Sector Players	~408 Spinning Mills		
Yarn Production (000 MT)	3,442	3,459	2,695
Export Volume (000 MT)	391	373	288
Export Value (PKR bln)	127	248	214
Contribution to Total Exports (%)	4.0%	3.8%	0.3%
Industry Association	All Pakistan Textile Mills Association (APTMA)		

Source: PBS, PACRA Database

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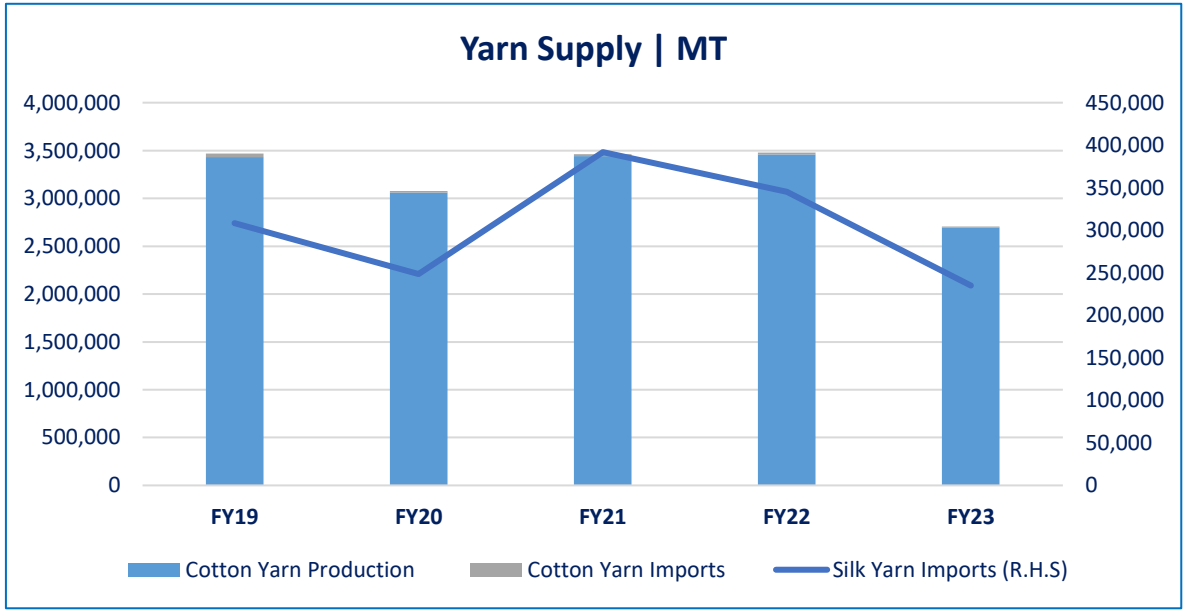
Local | Installed Capacity & Yarn Supply

- There are ~408 spinning units operating in the country with a total of ~13.4mln spindles and ~140,000 rotors installed. Of these, ~9.5mln spindles and ~112,600 rotors are in operation, as of 9MFY23.
- In FY22, the average capacity utilization of spinning units increased by ~11% YoY, while cotton yarn production increased ~0.5% YoY during the same period.
- However, in FY23, cotton yarn production decreased approximately ~23.6% and stood at ~2.7mln MT as the floods reduced supply of cotton, while demand across the textile chain remained sluggish.
- Meanwhile, the import of cotton yarn dipped by ~43% YoY, registering at ~11,000 MT during FY23. Pakistan, on average (FY19-22) imported ~21,000 MT of cotton yarn. The country also imports silk yarn, where imports of the commodity remained on average (FY19-22) at ~306,000 MT and registered ~32% YoY decline during FY23 to stand at ~235,000 MT.
- As a result, the overall supply of yarn declined by ~23% YoY during FY23, reflecting relatively flat demand for the product and a slower local market. Of the total supply, local production accounts for ~90%, while the remaining is met through imports.
- Cotton yarn, holding ~8.9% share in the country's LSMI, registered a decline of ~22% YoY in FY23.

Capacity utilization	FY18	FY19	FY20	FY21	FY22
Spindles Installed (Nos.)	13,409,420	13,409,420	13,409,420	13,409,420	13,409,420
Average Capacity Utilization	91%	88%	83%	76%	87%



Note: Average Capacity Utilization figure is reflective of ~43 listed/rated Spinning players.
For imports of cotton yarn, the following HS Codes have been considered: 5205 and 5206.

Source: PES, PBS, UN Comtrade

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Local | Yarn Supply

Synthetic or blended yarn, which includes Polyester-Viscose and Polyester-Cotton, has the largest share of total yarn production (~40%). Moreover, there is greater production of coarse and medium type yarn as compared to fine and super fine cotton yarn. However, production of yarn has declined ~23.6% YoY to ~2,694,760 MT in FY23.

Production of Yarn (MT)	FY19	FY20	FY21	FY22
Coarse	790,223	707,732	792,771	795,510
Medium	823,784	735,970	826,441	830,098
Fine	395,655	350,824	350,824	345,874
Super Fine	85,699	75,891	85,975	86,404
Synthetic/Blended	1,335,929	1,179,211	1,385,574	1,383,496
Total	**3,431,290**	**3,049,628**	**3,441,585**	**3,458,740**

**Production figures for individual yarn categories is estimated using actual total production figures from FY21 (ratio of product wise yarn production to total production) for FY22.*

Source: PBS, TCO

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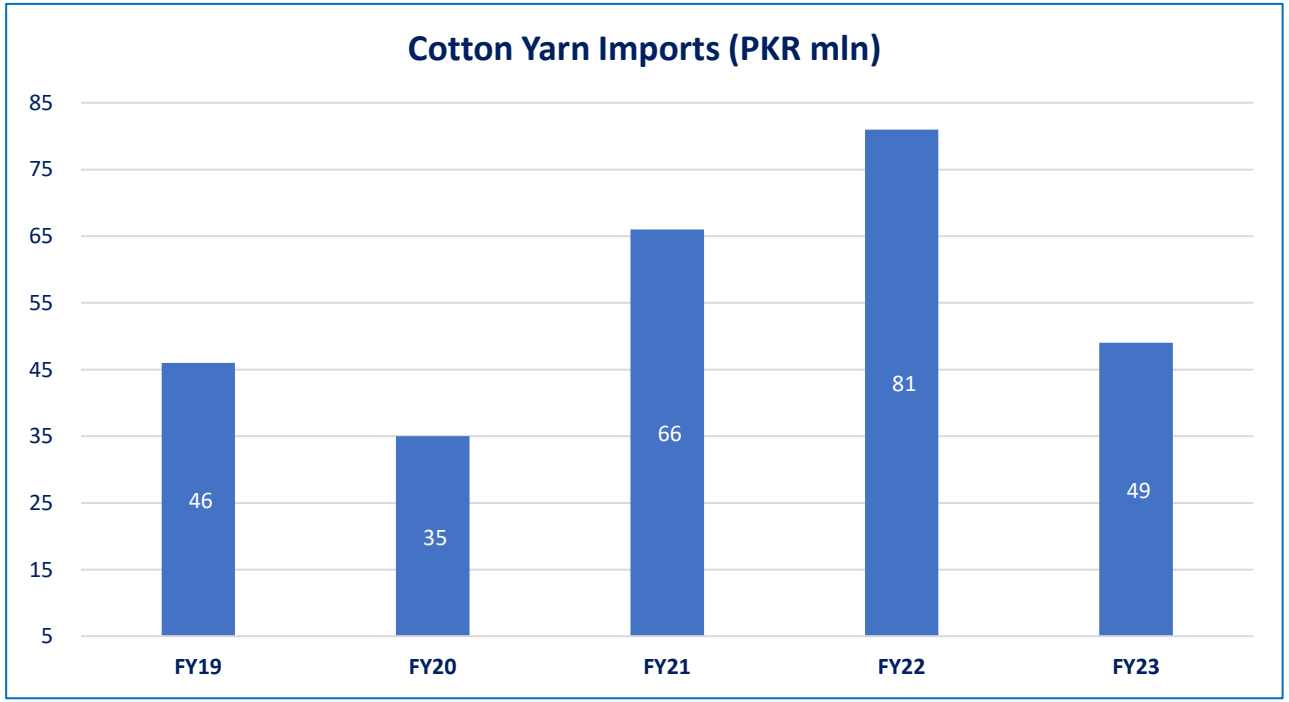
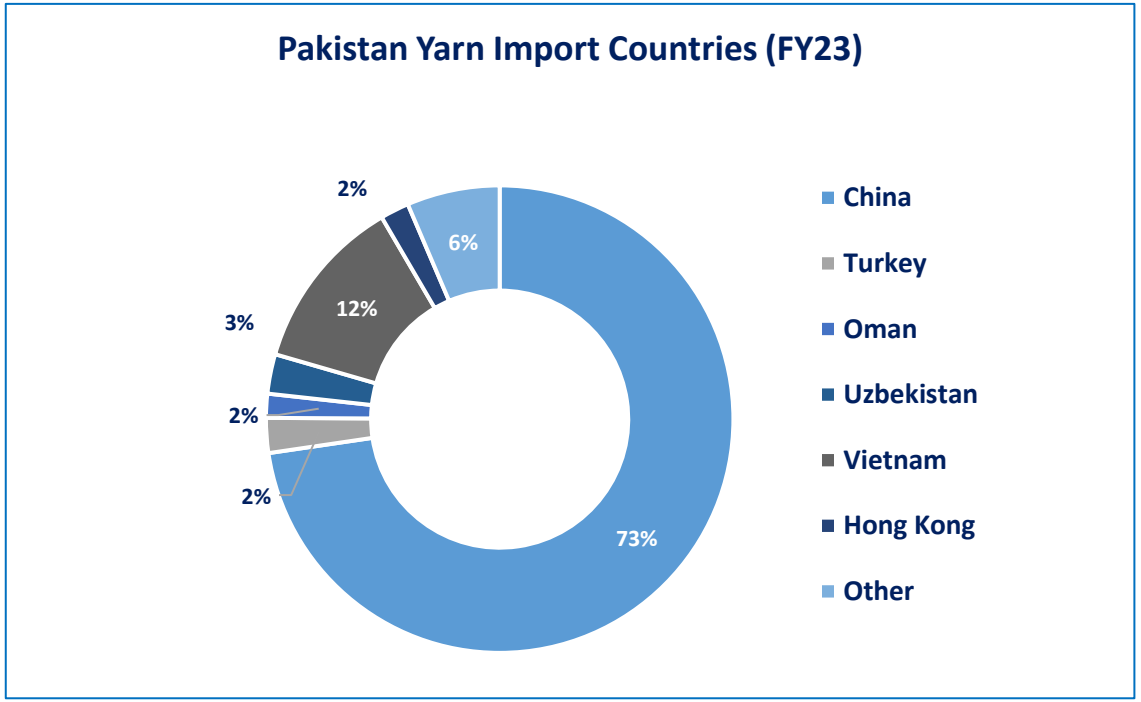
Yarn | Imports

- Pakistan import of yarn declined by ~41% YoY in FY23 and stood at PKR~49mln in FY23, which is down from PKR~81mln in FY22. This reduction in imports resulted from reduced demand for cotton products.
- There was one change in Pakistan's top six trading partners for import of yarn, moving from FY22 to FY23, wherein Egypt dropped out (~3% share in FY22) and was replaced instead by Hong Kong, with the latter holding ~2% share in Pakistan's total cotton imports.
- Cotton yarn imports from China had a share of ~47% in FY22. These increased to ~73% of Pakistan's total yarn imports in FY23. Turkey's share of yarn imports was ~21% in FY22, which declined to ~2% in FY22. Pakistan's second largest trading partner in FY23 was Vietnam with a ~12% share.





Note: Shares of countries in Pakistan's Yarn Imports are value-based.

Source: PBS, SBP

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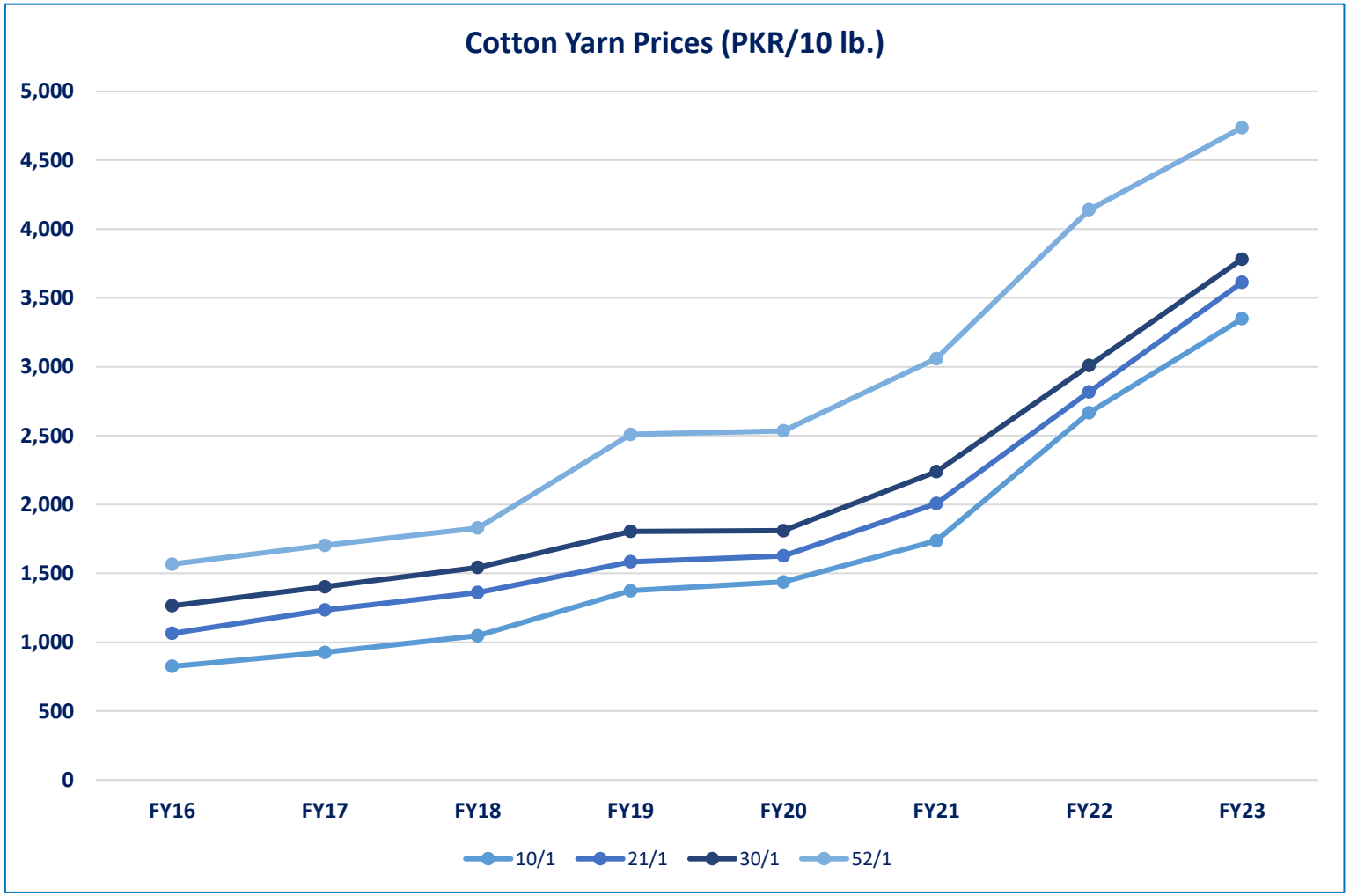
Local | Yarn Prices

- Prices of cotton yarn have been on a rising trend in the recent years. For the majority part of FY22, local and international cotton prices had been increasing leading to an increase in yarn prices. This trend continued into FY23. This also served to increase the cost for the spinning sector, as share of raw materials increased in the cost breakup, discussed later in the report.
- Flood-hit Pakistan failed to meet its cotton production target and experienced a shortfall of ~55%, leading to a shortage in the market as production declined and, as a result, prices rose. Where average price across all thread counts in FY23 rose by ~23% YoY and recorded at PKR ~3,923/10 lb, this increase was lower than ~43% increase in FY22.



Note: *FY23 cotton yarn prices are prorated from 7MFY23 data.*

Source: PBS, PCCC, Economic Survey 2021-22

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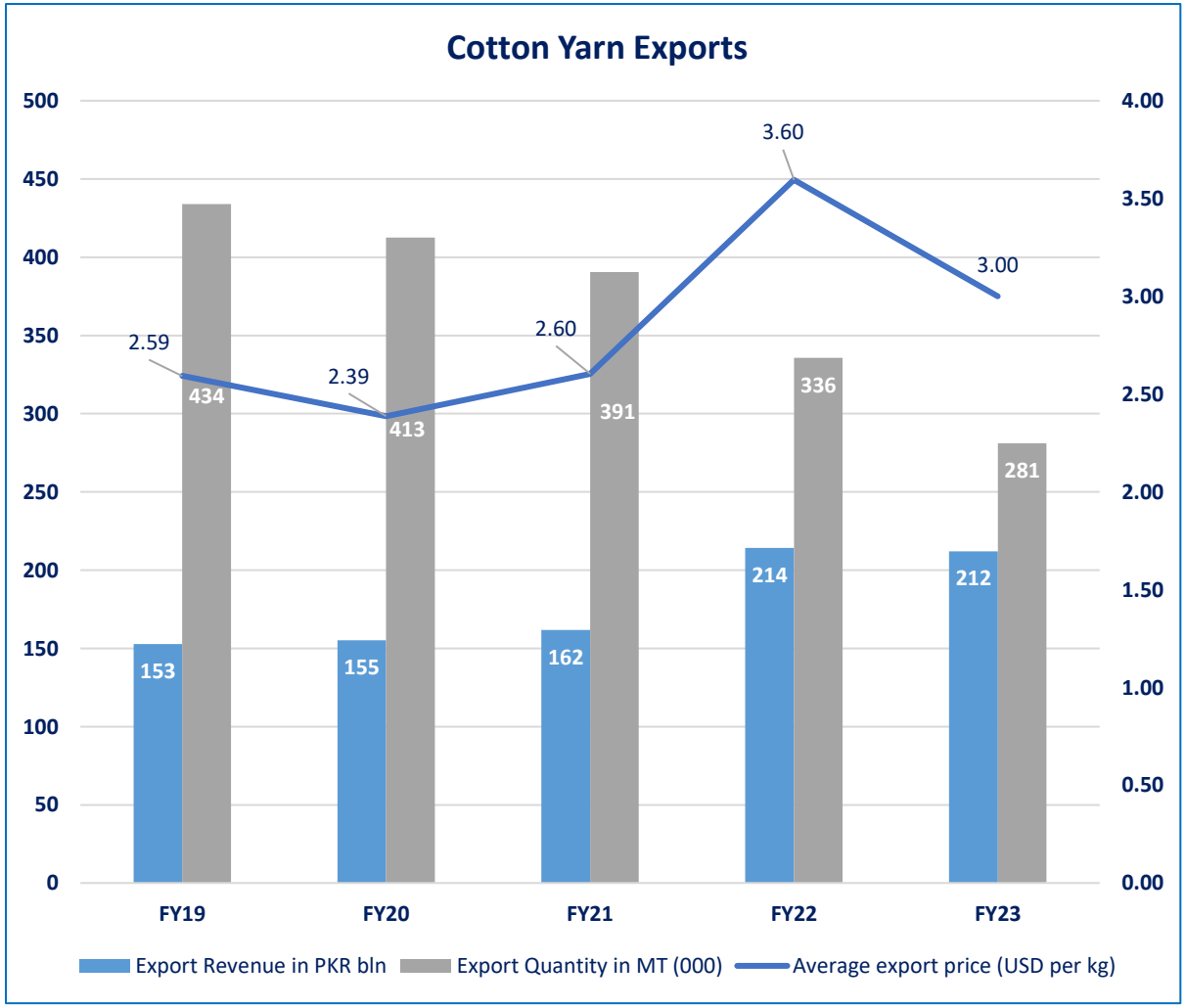
Yarn | Exports

- During FY23, the export of yarn decreased in value terms by ~1% in value terms from the SPLY (FY22 growth: ~32%).
- This decline in exports is a result of declined cotton production due to heavy floods in FY22, which reduced cotton supply.
- As a result, the quantity exported declined YoY by ~16%. The decline in exports also came on the back of declining demand for textiles in the global market, which ultimately reduced the demand for yarn.
- On the other hand, the revenue earned in PKR terms registered only a slight decline of ~0.9%, reflecting PKR depreciation against the greenback. During FY23, the PKR slipped ~39% against the USD (FY22: ~11% depreciation) and likely rendered exports cheap in the international market.
- The average export price of yarn decreased from USD~3.6/Kg in FY22 to USD~3.0/Kg in FY23. This can also be attributed to lower demand in the global commodity market.
- Lower global demand, coupled with the floods of 1QFY23, lowered Pakistan's yarn exports to the rest of the world.

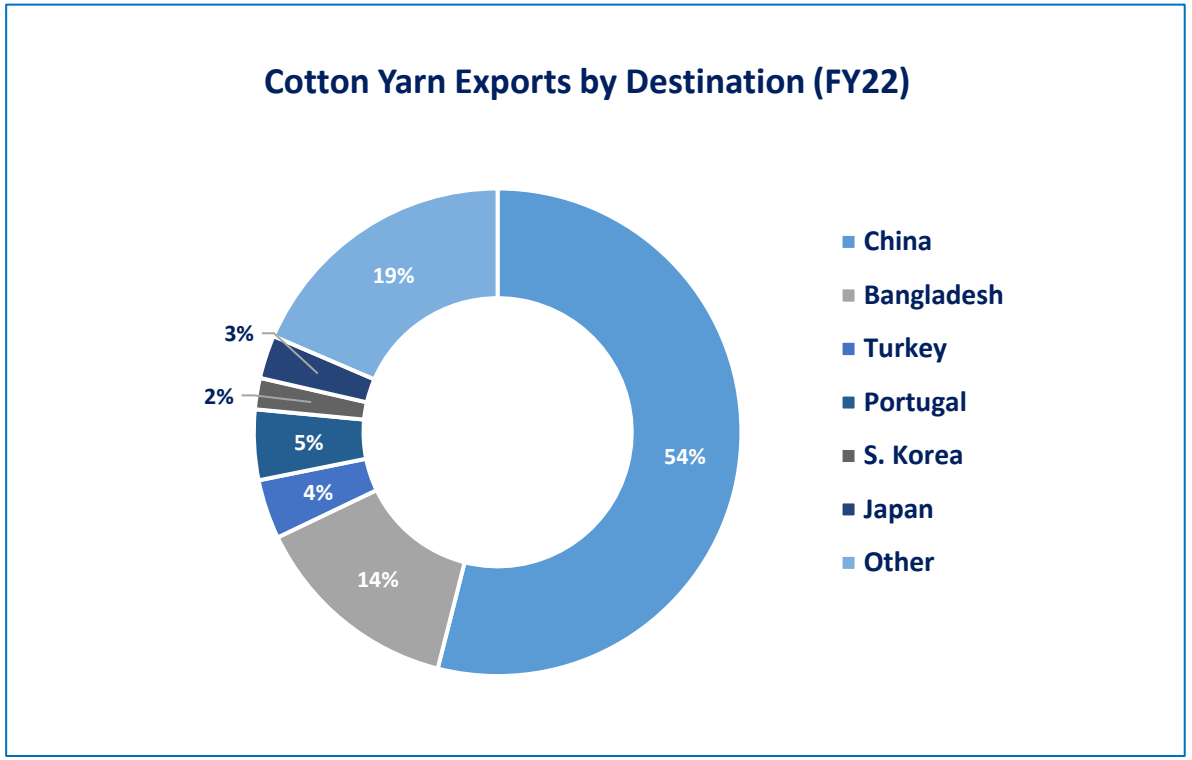


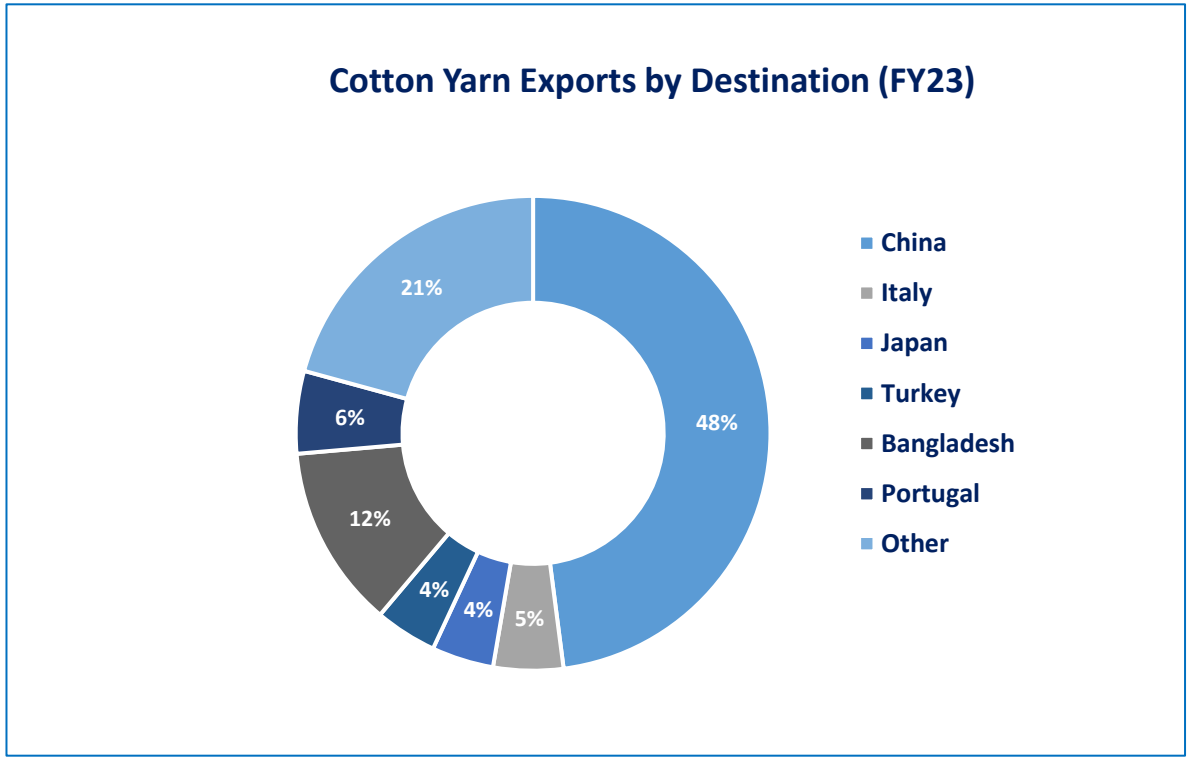
Source: PBS

Spinning

Yarn | Export Destinations

- Pakistan's exports of yarn are largely concentrated towards China which accounted for ~48% of total yarn exports during FY23. However, this is a decline from ~54% in FY22.
- Other export destinations include Bangladesh and Turkey, which accounted for ~12% and ~4% of Pakistan's total yarn exports, respectively. Both countries hold significant positions in the global textile industry.





Source: SBP

Spinning

Local | Business Risk

- **Decline in Local Cotton Production:** Cotton harvest declined by a hefty ~34% YoY in Apr'23 falling to ~4.9mln bales from ~7.4mln bales during SPLY. This is the most significant risk to impact the textile sector as damage to local crop will mean more cotton will need to be imported and with the presently high PKR/USD exchange rate, sourcing raw material from overseas will hurt the bottom lines of industry players. Due to high cost of production, Pakistani textile exports are losing their competitiveness to other regional rivals.

- **Dependency on Cotton Imports:** The Aug'22 floods are estimated to have destroyed ~40% of cotton crop. This increased the dependency on imports; raw material constitutes ~71% of the sector's direct costs and thus the sector remains vulnerable to fluctuations in the price of the raw material which is at a low level. Profitability depends on sector players' ability to continue to pass on the increased price impact.

- **Low Level of Value Addition:** Although, the increased demand has increased the overall profitability of the sector, it remains a low value addition sector with historically narrow margins. Pakistan's textile exports are low-priced, and closely follow cotton price trends. Recent drops in USD/lb cotton prices will lead to farmers getting a lower price for cotton acting as a disincentive for growing cotton and instead shifting to other cash crops.

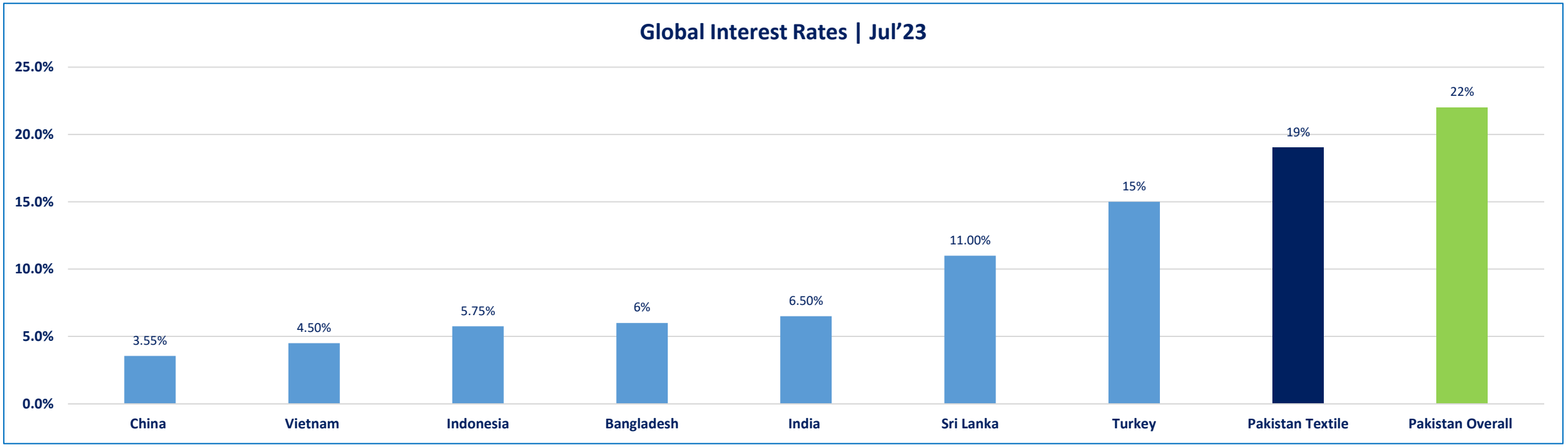
- **High Energy Costs:** The government no longer provides the textile industry with RLNG at a subsidized rate. Price of energy for Pakistani industry stands above the regional average for countries such as India, Bangladesh and Vietnam which reduced the competitiveness of Pakistan's exports. Furthermore, the withdrawal of the RCET has forced smaller mill owners to close down businesses. As of Oct'22, APTMA reports ~1,600 mills have been forced to shut down as a result due to the rising power tariff.

- **Disruption in Electricity and Gas Supply:** The Spinning sector depends on an uninterrupted supply of electricity and gas. During FY23, interruptions in energy supply and curtailment of gas supply meant that the industry output was affected.

- **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, the regional competition continues post-pandemic.

Spinning

Interest Rates | Regional Comparison

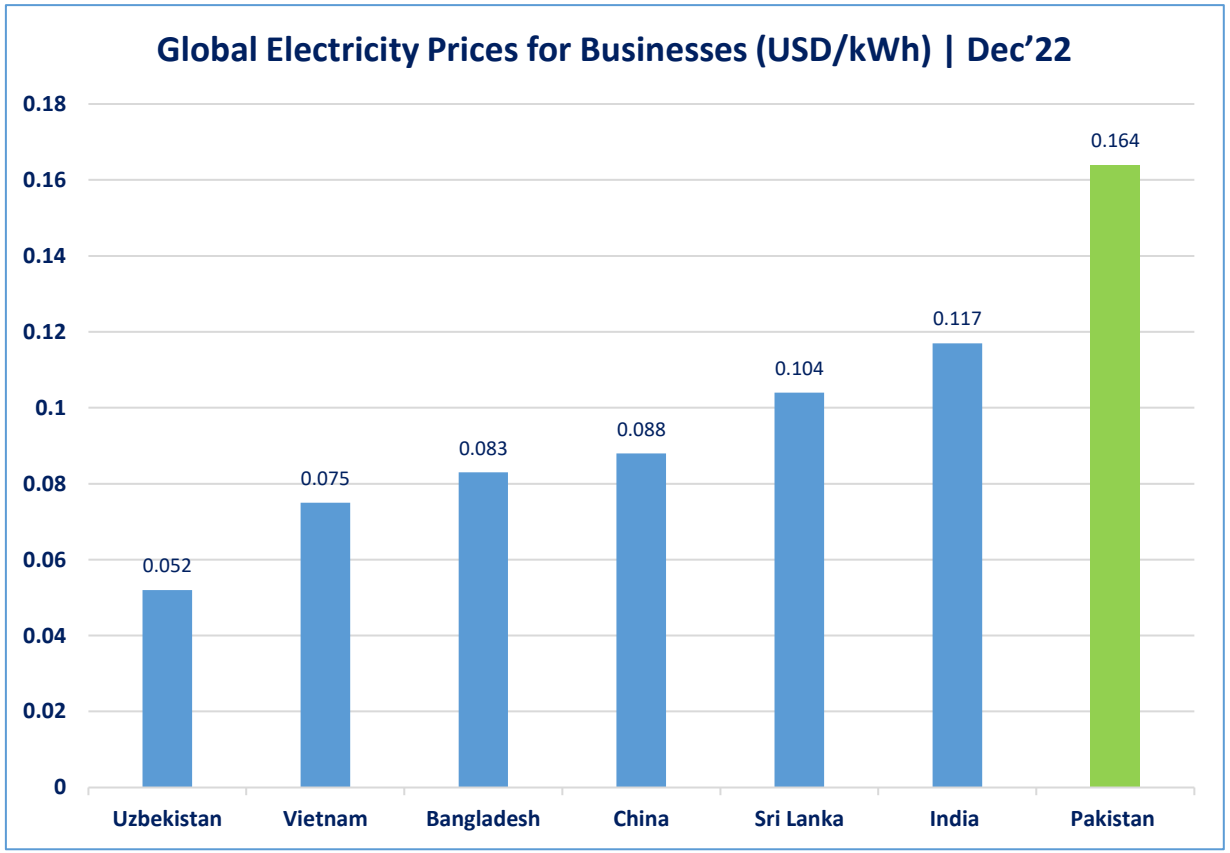


- With the recent hike in policy rate to ~22% in May'23, Pakistan has the highest interest rate in the region. In comparison, many regional countries either cut their policy rates or held them consistent. The high cost of borrowing acts as a barrier to investments in various sectors.
- The textile sector is a beneficiary of subsidized financing facilities from the SBP in the form of short-term Export Refinance Facility (ERF) and Long-Term Financing Facility (LTFF). In Jul'22, the SBP announced that any subsequent revisions in the LTFF and EFR rates will be linked to policy rate revisions such that the difference between the former two rates and the latter is maintained at ~5%; this difference was reduced to 3% in Dec'22.

Source: PACRA Internal Database

Electricity Prices | Regional Comparison

- Pakistan's 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 used to provide 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, this has now been discontinued as of Mar'23, despite government's pledge to provide electricity at PKR~19.99/kWh for Export-Oriented Units until Jun'23. 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. Furthermore, in the winter season, gas provided to the sector is further curtailed.
- There is also a severe lack of gas and RLNG due to declining reserves and high prices caused by Russia-Ukraine situation. According to NEPRA calculations, the cost of electricity is ~8.1cents/kWh and excluding cross-subsidies plus transmission and distribution cost makes a total of ~9.3cents/kWh, for FY22.



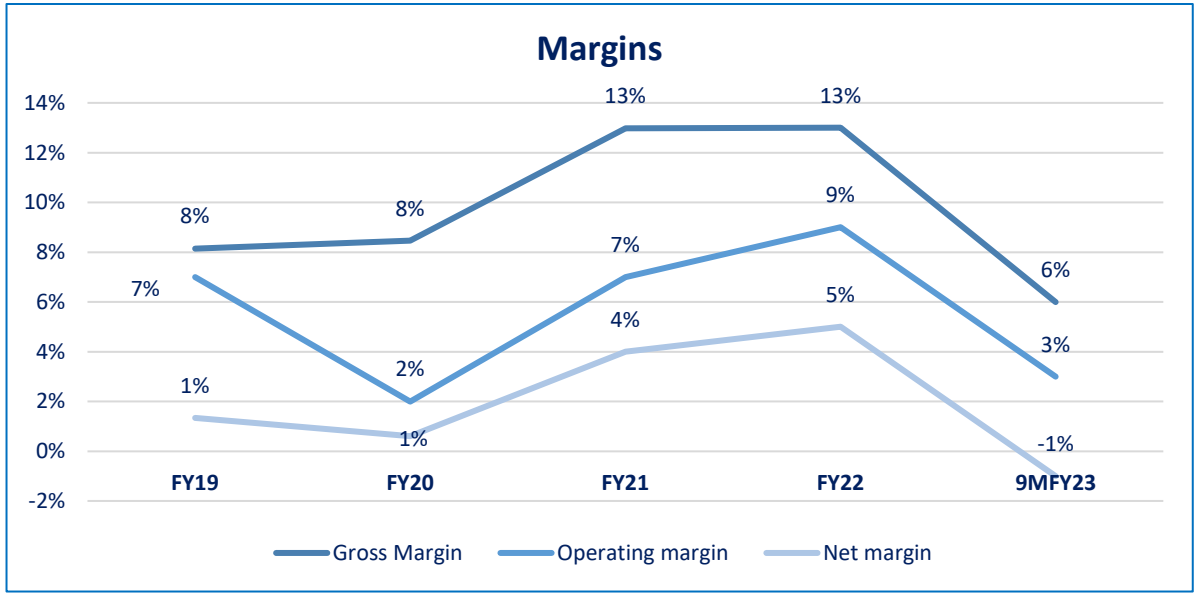
- Withdrawal of the RCET of PKR~19.99/kWh and a gas tariff of USD~9/MMBTU for gas/RLNG in Punjab has resulted in closure of Punjab-based textiles due to reliance on grid electricity at over PKR~40/kWh, making them uncompetitive in the global market. The revocation of RCET is expected to render more than ~50% of Pakistan's installed capacity in the Punjab-based industry non-operational and may amount to a loss of USD~10bln yearly exports.

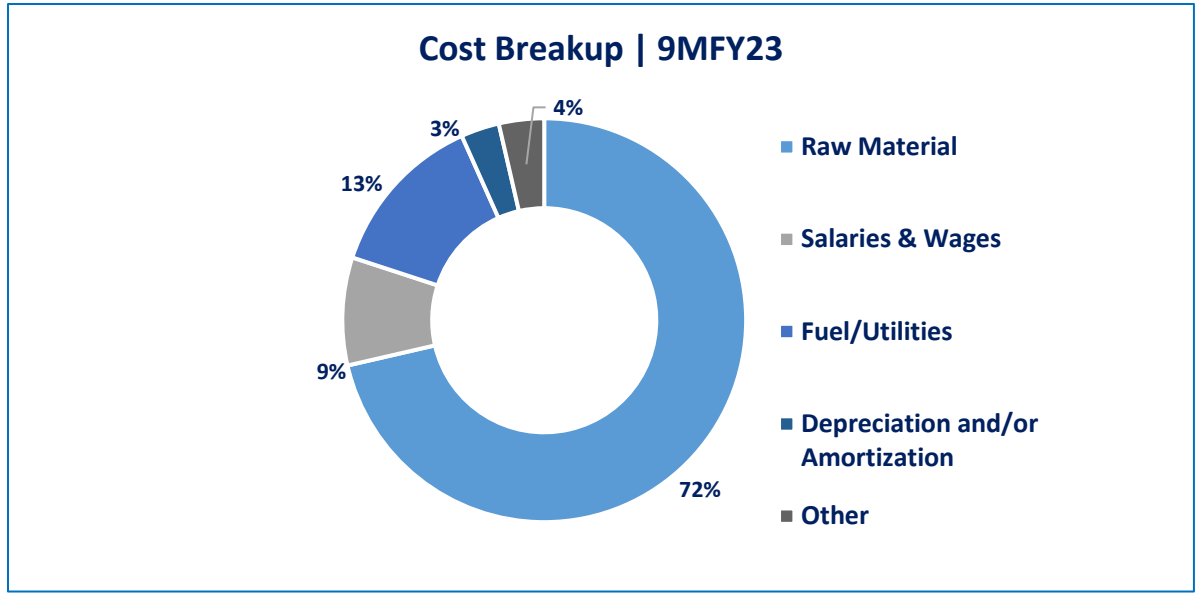
Source: PACRA Internal Database

Spinning

Business Risk | Margins & Cost Structure

- Over the last four years (FY19-22), the spinning sector's average gross margin have stood at ~11% while average net margins were recorded at 2% over the same period.
- During 9MFY23, average gross profit margin decreased from ~13% in FY22 to ~6%. This can be attributed to the rising cost of cotton as floods wreaked havoc during FY22 and its destructive effects carried over into 9MFY23. Average operating profit margins declined from ~9% to ~3%. Net profit margins fell from ~5% to ~-1%. This resulted from the effects of the floods, coupled with higher finance costs for the companies.
- Looking at the cost breakup of spinning companies in 9MFY23, raw materials made up ~72% of the entire cost, resulting from higher cotton prices. It was followed by fuel at ~13% and salaries and wages at ~9%.





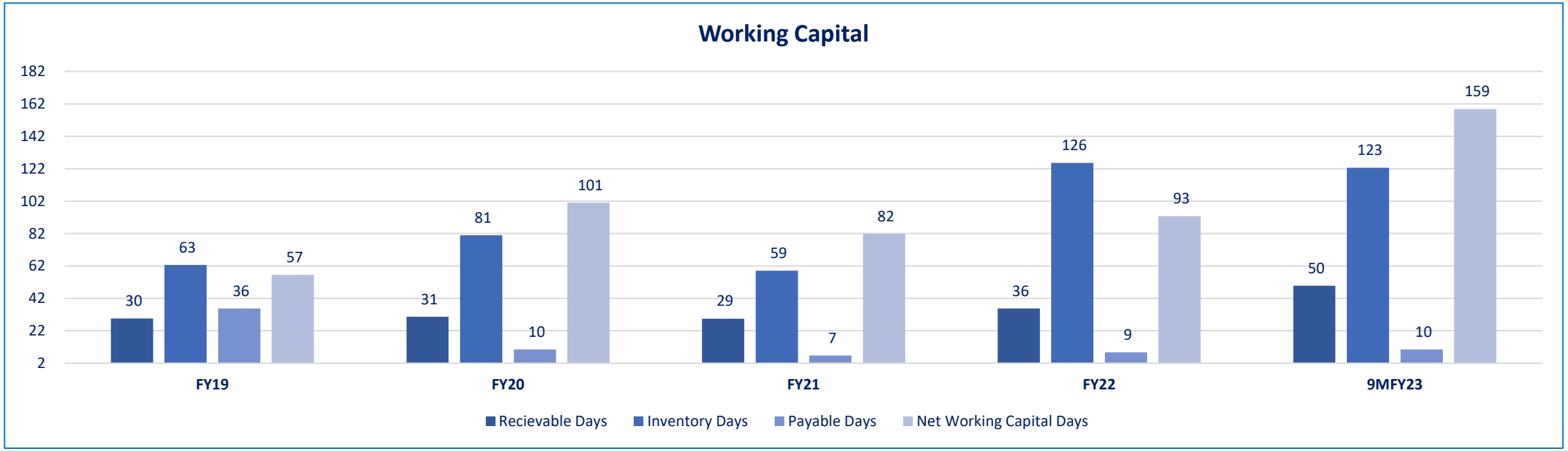
Note: *Margins and cost break up are reflective of ~43 listed/rated spinning sector players..*

Source: PACRA Database

Spinning

Financial Risk | Working Capital

- Within the sector's working capital, inventory consists mostly of raw material and finished goods, with work-in-process making a small contribution.
- The sector's average receivable days stood at ~50 days in 9MFY23. This is up from ~36 days in FY22. The average inventory days were ~126 days in FY22 and decreased to ~123 days in 9MFY23. Payable days in FY22 were ~9 days which increased to ~10 days in 9MFY23. Similarly, the average net working capital days for FY22 were ~93 days and these increased to ~159 days in 9MFY23.
- These hinderances in payables and receivables result from the supply chain disruptions within textiles, caused by the floods of FY22. Many players within the organized mill segment are integrated with group companies, resulting in more efficient working capital management.



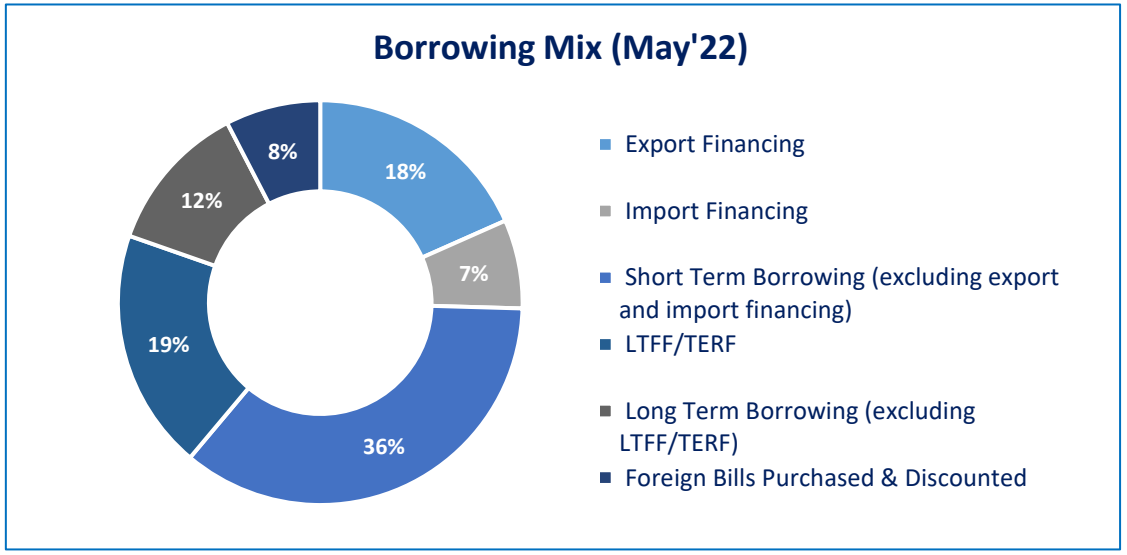
Note: *Margins and cost break up are reflective of ~43 listed/rated spinning sector players..*

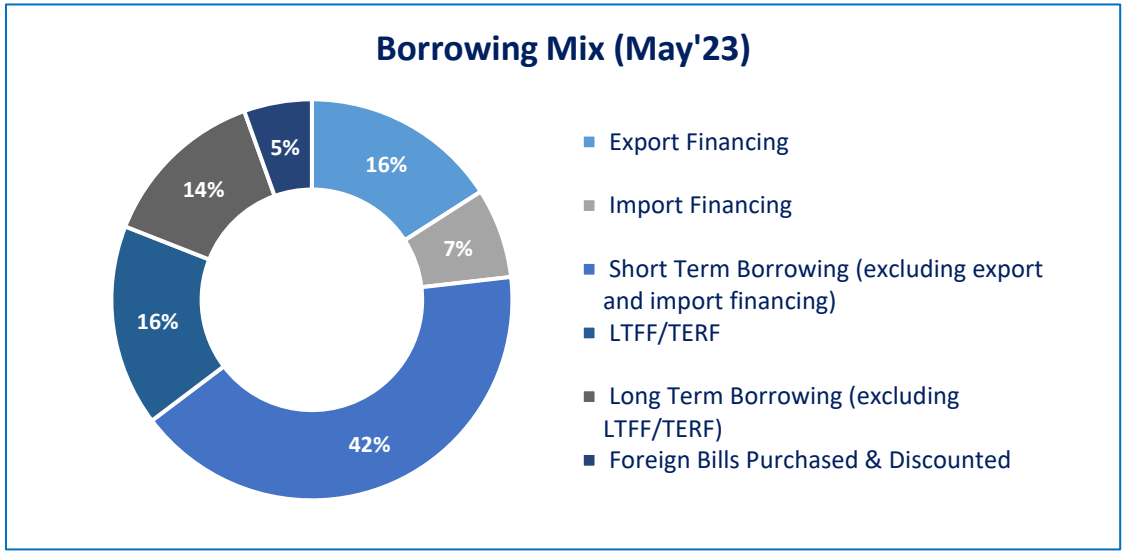
Source: PSX, PACRA Database

Spinning

Financial Risk | Borrowing Mix

- The total borrowing of spinning sector stood at PKR~582bln as at End-May-23 as compared to PKR~520bln as at End-May-22. The largest share is occupied by short-term borrowing at normal rates. It stood at PKR~376bln in May'23 and accounted for ~42% of total borrowing.
- The sector avails discounted financing, which includes Export Finance Scheme (EFS) at rate of 13%, as well as Long Term Finance Facility (LTFF) at rate of 13%. These rates were increased in Dec'22 from 11% per annum, each. As a result, the share of LTFF/TERF decreased from ~19% in May'22 to ~16% in May'23.
- In addition, the SBP decided to link the concessionary financing rates to the policy rate so that they could adjust automatically. The gap between the two stands at 3%, down from 5%, as of Dec'22.
- Discounted financing accounts made up ~8% of the borrowing mix in May'22 and this decreased to ~5% in May'23. Export financing reduced from ~18% in May'22 to ~16% in May'23. Together, these reflect lower export quantum, as stated earlier,





Source: SBP

Spinning

Duty Structure

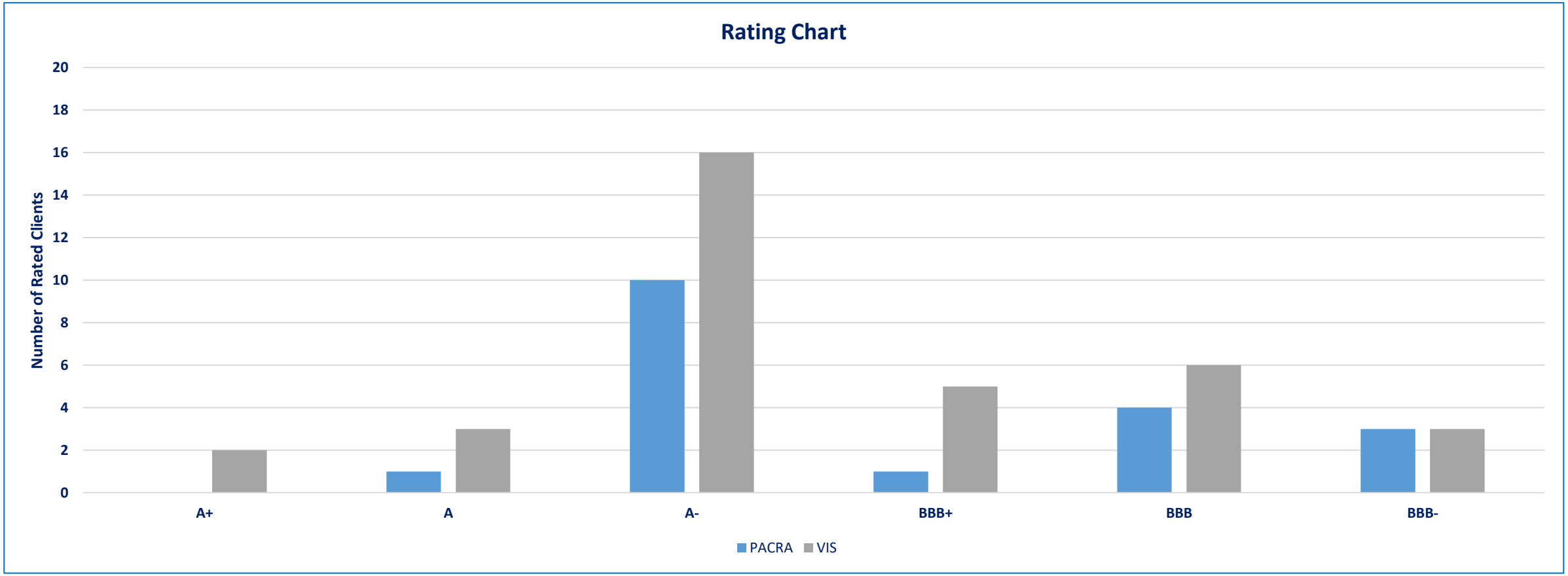
PCT Code	Description	Custom Duty		Additional Custom Duty		Regulatory Duty		Total	
		FY23	FY24	FY23	FY24	FY23	FY24	FY23	FY24
52.01	Cotton, not carded or combed	0%	0%	2%	2%	0%	0%	2%	2%
52.03	Cotton, carded or combed	0%	0%	2%	2%	0%	0%	2%	2%
52.05	Cotton yarn (other than sewing thread), containing 85% or more by weight of cotton, not put up for retail sale	11%	11%	2%	2%	0%	0%	13%	13%
52.06	Cotton yarn (other than sewing thread), containing less than 85% by weight of cotton, not put up for retail sale	11%	11%	2%	2%	0%	0%	13%	13%
52.07	Cotton Yarn (other than sewing thread) put up for retail sale	11%	11%	2%	2%	0%	0%	13%	13%
54.02	Synthetic Filament Yarn (other than sewing thread), not put up for retail sale (includes polyester and nylon)	11%	11%	2%	2%	0%	0%	13%	13%
54.03	Artificial Filament Yarn (other than sewing thread), not put up for retail sale (includes viscose rayon)	0%	0%	2%	2%	0%	0%	2%	2%

Source: FBR, Trade Information Portal

Spinning

Rating Chart

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



Spinning

SWOT Analysis

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

- Low value addition/commodity product
- Periodic imposition of import duties on import of cotton
- Lower focus on synthetic fibres
- 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: WATCH

- The spinning sector is closely linked with the cotton and textile industries, which influence yarn's supply and demand. Both these industries were severely impacted during FY23, and subsequently so was the spinning industry. Heavy floods during 1QFY23 reduced Pakistan's cotton production YoY by ~35%. This reduced raw material supply for yarn and yarn production reduced by ~22%. In addition to this, contractionary economic policies like high interest rates and global economic slowdown reduced demand for textile products and, by extension, that for cotton yarn yarn as well.
- Meanwhile, the import of cotton yarn dipped by ~43% YoY, registering at ~11,000 MT during FY23. Pakistan, on average (FY19-22) imported ~21,000 MT of cotton yarn. The country also imports silk yarn, where imports of the commodity remained on average (FY19-22) at ~306,000 MT and registered ~32% YoY decline during FY23 to stand at ~235,000 MT. As a result, the overall supply of yarn declined by ~23% YoY during FY23, reflecting relatively flat demand for the product and a slower local market. Of the total supply, local production accounts for ~90%, while the remaining is met through imports. Cotton yarn, holding ~8.9% share in the country's LSMI, registered a decline of ~22% YoY in FY23.
- Higher production costs also posed a challenge for the spinning sector. Raw material costs increased from ~70% in FY22 to ~72% in 9MFY23. This was caused by shortage of cotton as global production had declined during this period. The spinning industry was also subjected to other challenges, like higher energy costs as the share of fuel in cost of production increased from ~11% in FY22 to ~13% in 9MFY23. Accordingly, during 9MFY23, sector's average gross profit margin decreased from ~13% in FY22 to ~6% in 9MFY23. Operating profit margins declined from ~9% to ~3%, while net profit margins fell from ~5% to ~-1%. Declining profits resulted from reduced demand and higher cost of production.
- Pakistan's acreage increased from ~2,144 thousand hectares against ~1,937 thousand hectares last year but climate and rains hindered growth in production. Climate change is an issue that will continue to pose a challenge to the growth of agriculture in Pakistan, and hence, the growth of cotton production too.
- At a global level, cotton production is forecast to rebound ~36% to ~5.3mln bales in FY24. The economic outlook presented by the IMF forecasts a decline in inflation from ~8.7% in CY22 to ~6.8% in CY23. This provides for a favorable outlook of demand for yarn rebounding as economies recover. However, keeping in view the challenges persisting in the local economy in the form of high interest rates, increasing energy prices and removal of subsidies, the textile value chain, and by extension, Spinning sector, is likely to exhibit further slowdown in overall performance in FY23-24. Moreover, the country's growth forecast remains low in the range ~2-3% and is likely to reflect in the sluggish growth across most sectors of the economy, including Spinning sector. Therefore, the Sector is placed on Watch.

Source: PES, IMF, USDA, PACRA Internal Database

Bibliography

- State Bank of Pakistan (SBP)
- Pakistan Bureau of Statistics (PBS)
- PACRA Database
- Pakistan Economic Survey
- Trading Economics
- Textile Commissioner Organization (TCO)
- Pakistan Central Cotton Committee (PCCC)
- Federal Board of Revenue (FBR)
- Pakistan Stock Exchange (PSX)
- United States Department of Agriculture (USDA)
- All Pakistan Textile Manufacturers' Association (APTMA)
- Trade Information Portal

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