



Tyres

Sector Study

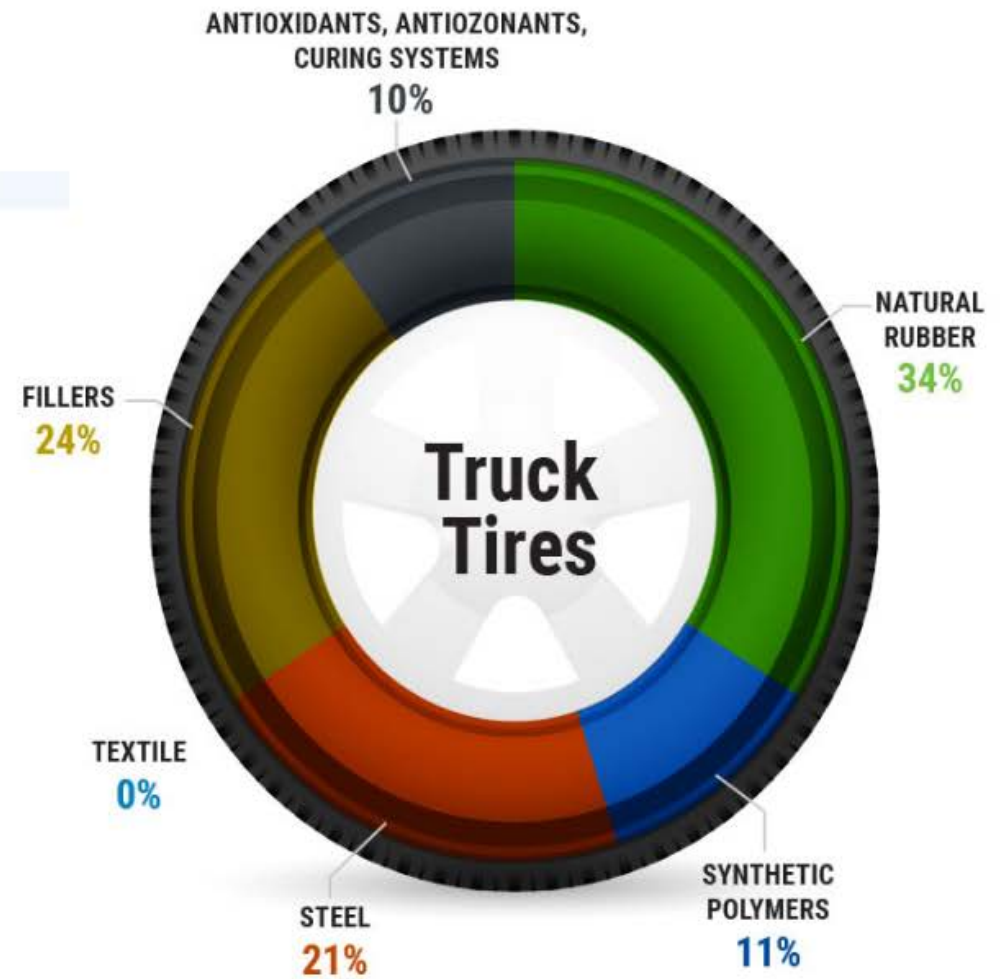
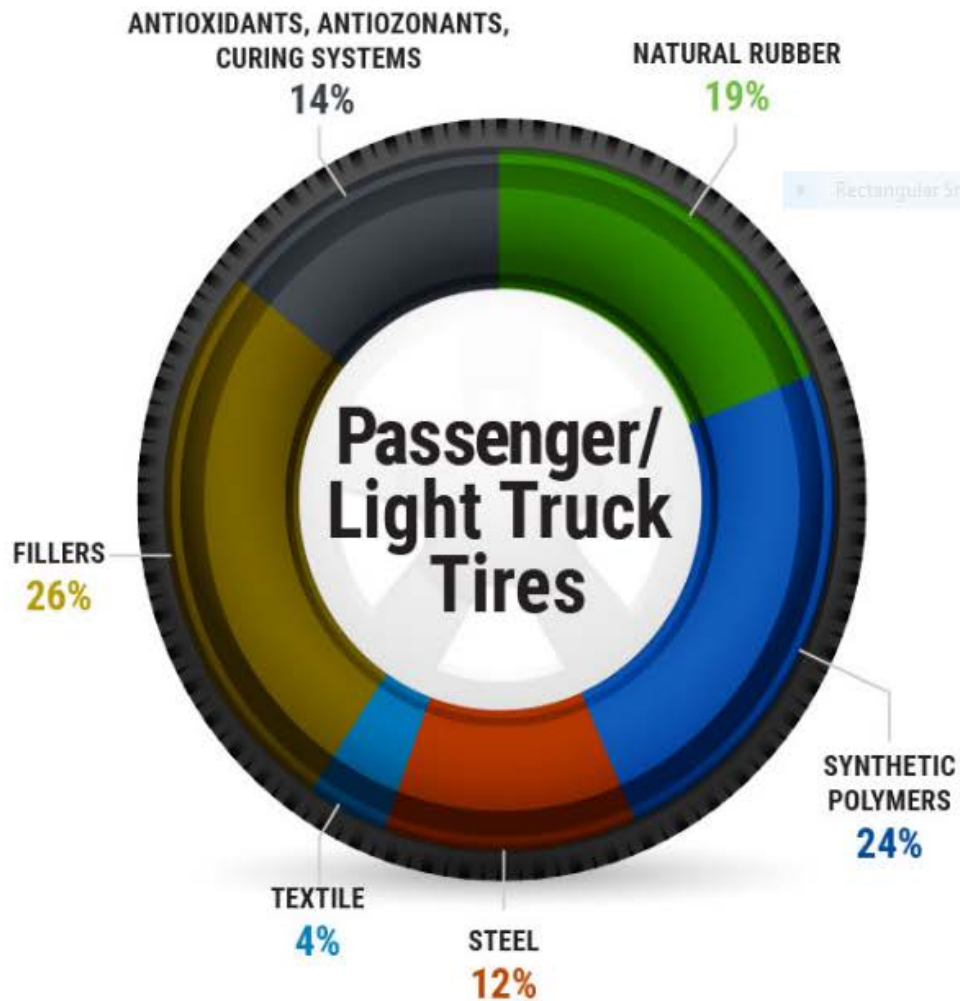
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Composition of Tyres



*Synthetic Polymer is same as Synthetic Rubber



Market Segments

By Design:

- Radial Tyres
- Bias Tyres

By Region:

- North America
- Asia Pacific
- Europe
- Latin America
- Middle East & Africa



By End Use:

- Original Equipment Manufacturers (OEM)
- Replacement Market

By Vehicle Type:

- Passenger Cars
- Light Commercial
- Medium & Heavy Commercial
- Two & Three Wheelers
- Off-the-road (OTR)



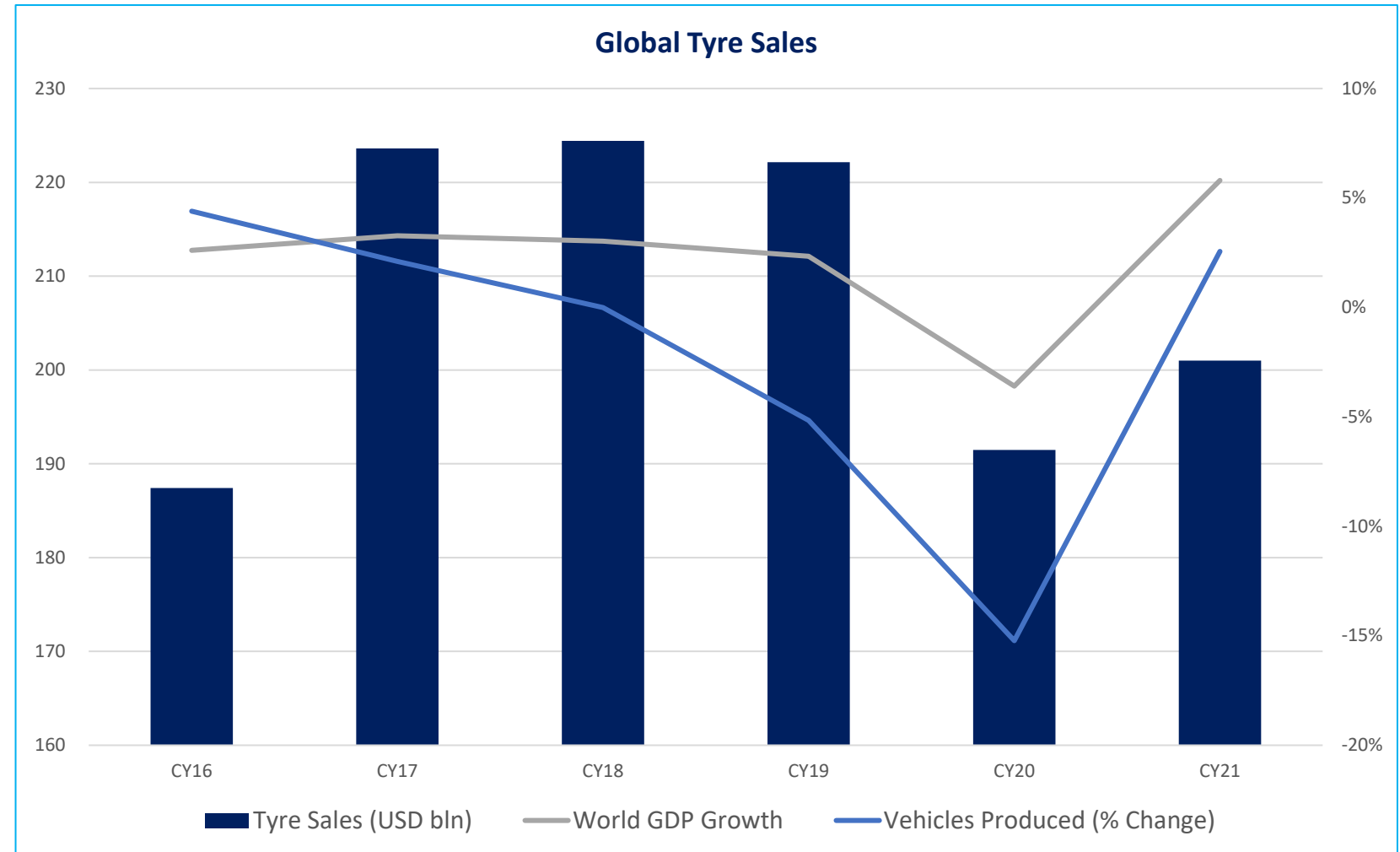
Overview



- Total market size was recorded at USD~201bln in CY21 (USD~191bln in CY20). Global tyre market increased by ~5% in CY21. Escalating sales of automobiles, growing replacement demand and advancement in tyre technology are driving the growth of the global tyre market.
 - The Average CAGR of the Industry, has historically remained at ~4% and is expected to continue a similar trend but with some downside risk, considering slower economic growth across the globe in the second half of CY22.
 - The total volume of tyres produced during CY21 stood at ~3.5bln units as compared to ~3.4bln units in CY21.
-
- Tyre demand is derived mainly from the growth in automobile sector, which, in turn, is dependent upon economic growth, per capita disposable incomes and demand from emerging economies.
 - The industry is dominated by the top four players which make up ~40-45% of the global market in terms of revenue.
 - The demand for light vehicles and thus LVH Tyres has been rapidly increasing over the last five years in emerging economies like China, East Europe, South America, and India.

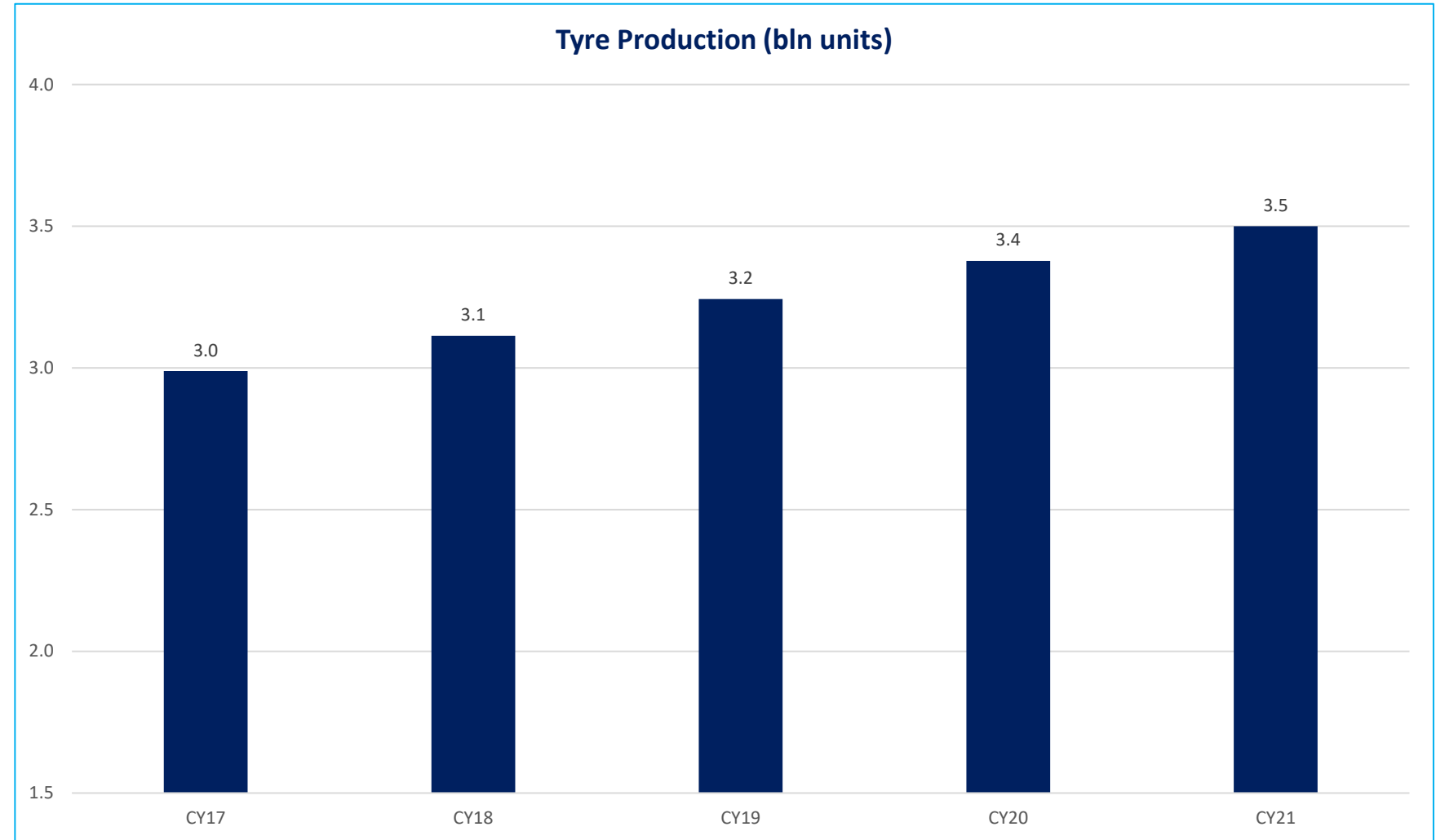
Automobiles & Tyre Correlation

- The global tyre industry derives its demand from the global automobile industry.
- During CY21, global tyre sales stood at USD~201bln, exhibiting an increase of ~5% from USD~191bln in the previous year. A similar increase of ~3% was witnessed in the global production of motor vehicles during CY21.
- In CY21, the resumption in economic activity across the globe bolstered the demand for both automobiles and tyres.
- However, with rising inflation, political unrest and lingering on COVID-19, the global economy is experiencing sharper than expected slowdown and GDP forecasts (IMF Oct'22 Outlook) for CY22 and CY23 hover around ~3.2% and ~2.7% respectively. Based on these estimates, the global tyre industry is also expected to witness some downside risks in its recovered growth.

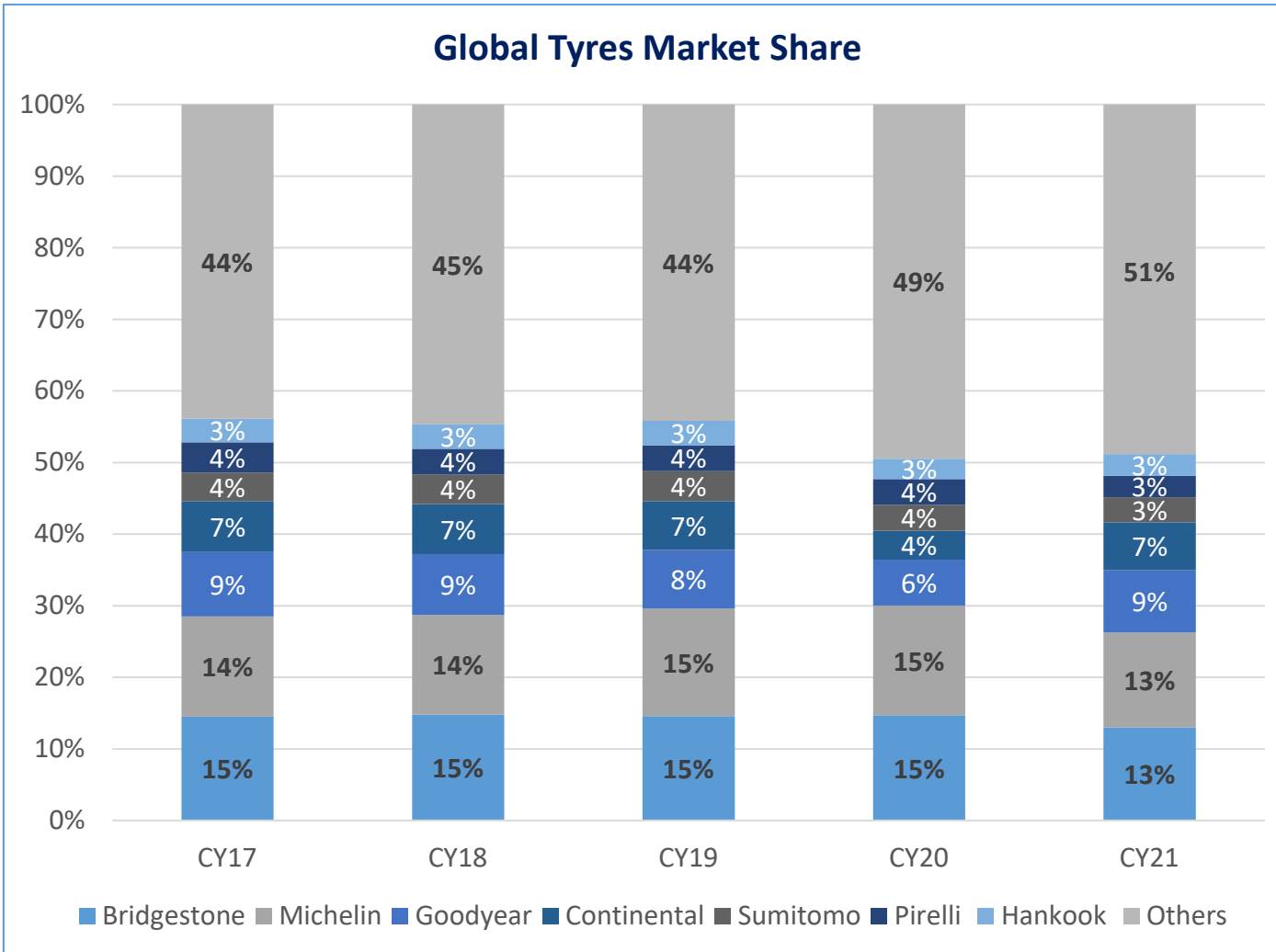


Production

- In CY21, global tyre production reached ~3.5bln units, exhibiting a CAGR of ~4% during a 5 year period.
- The largest regional share is occupied by Asia & Pacific region with Japan and China being the major players and contributing ~49% to total global production in CY21.
- North & South America have a combined share of ~33% in total global tyre production while the rest of the world, including Europe, Africa and the Middle East, account for ~18% of global production.



Market Share



Top Tyre Producers	Headquarters
Bridgestone	Japan
Michelin	France
Goodyear	USA
Continental	Germany
Sumitomo	Japan
Pirelli	Italy
Hankook	South Korea

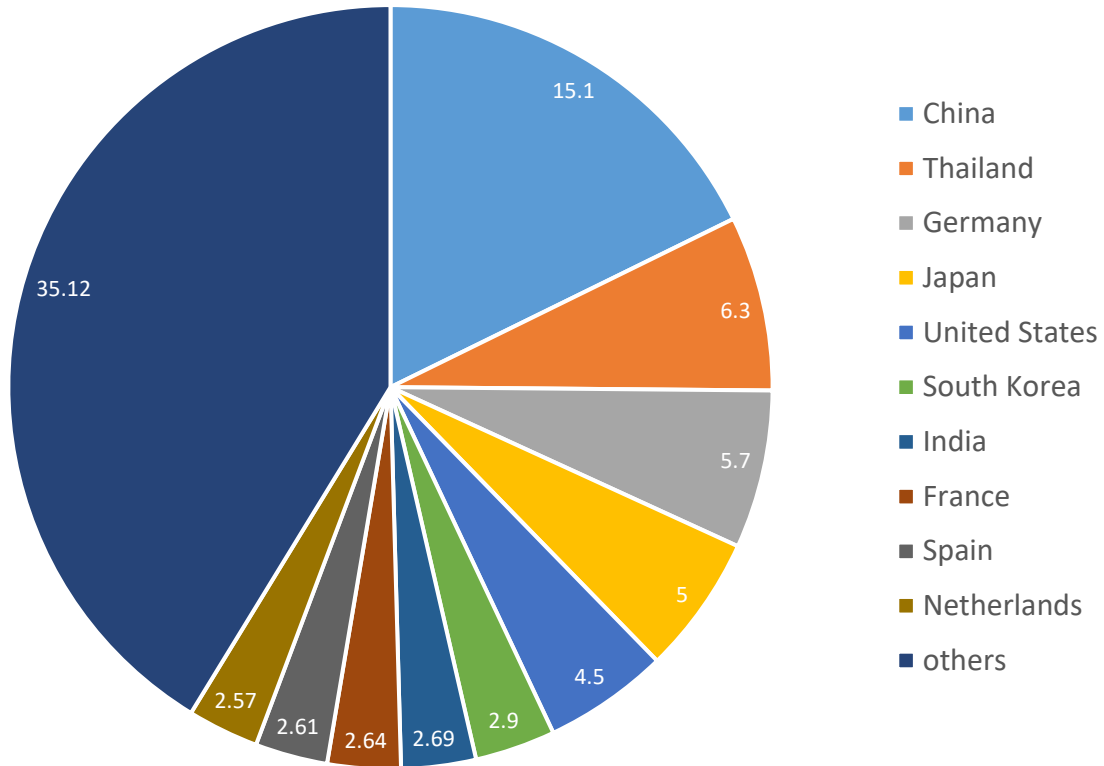
Exports

- The global export of new rubber tyres totalled USD~85bln in CY21, increasing ~22% from the previous year. The largest share in exports is held by China, contributing ~18% to the total exports.

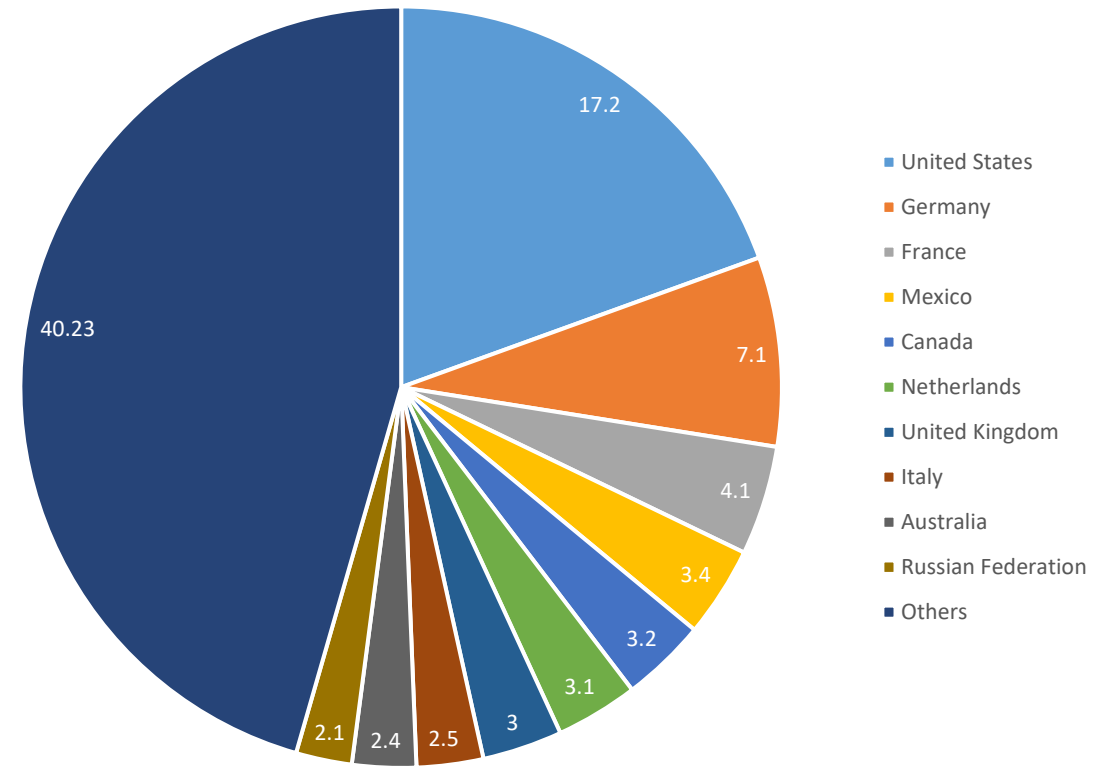
World Exports (USD bln)	CY17	CY18	CY19	CY20	CY21
China	14.16	15.11	14.80	13.30	15.10
Thailand	4.39	4.90	5.60	5.20	6.30
Germany	5.89	6.02	5.70	4.90	5.70
Japan	4.85	5.10	5.20	4.10	5.00
United States	4.66	5.09	5.00	4.00	4.50
South Korea	3.44	3.47	3.30	2.80	2.90
France	2.56	2.77	2.70	2.25	2.64
Spain	2.22	2.50	2.40	2.21	2.61
Netherlands	2.37	2.30	2.51	2.10	2.57
Poland	2.14	2.39	2.10	2.00	2.48
Other	29.34	31.16	29.69	26.84	35.12
World Total	76.02	80.81	79.00	69.70	84.92

Country Wise Trade

Tyre Exports by Country

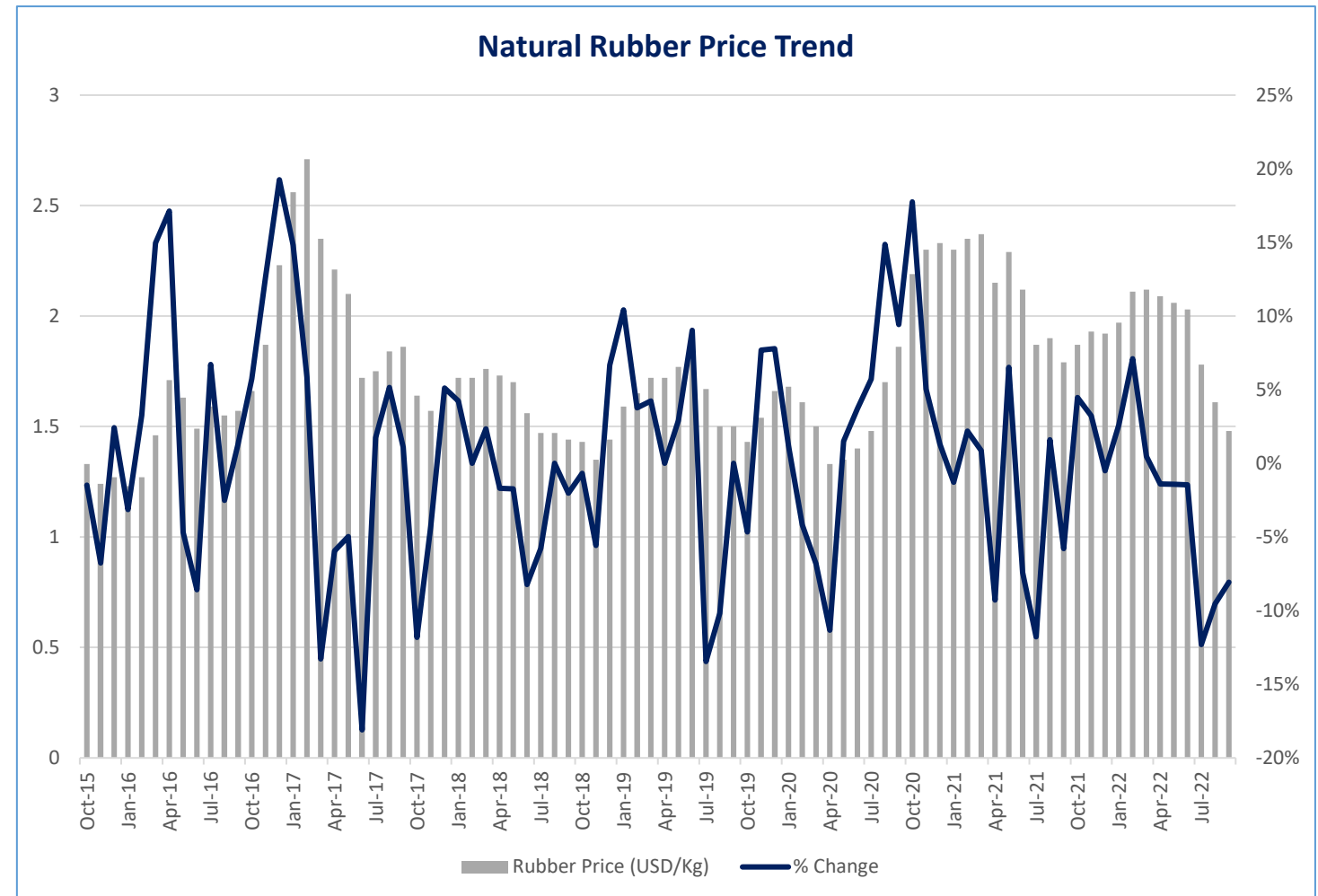


Tyres Imports by Country



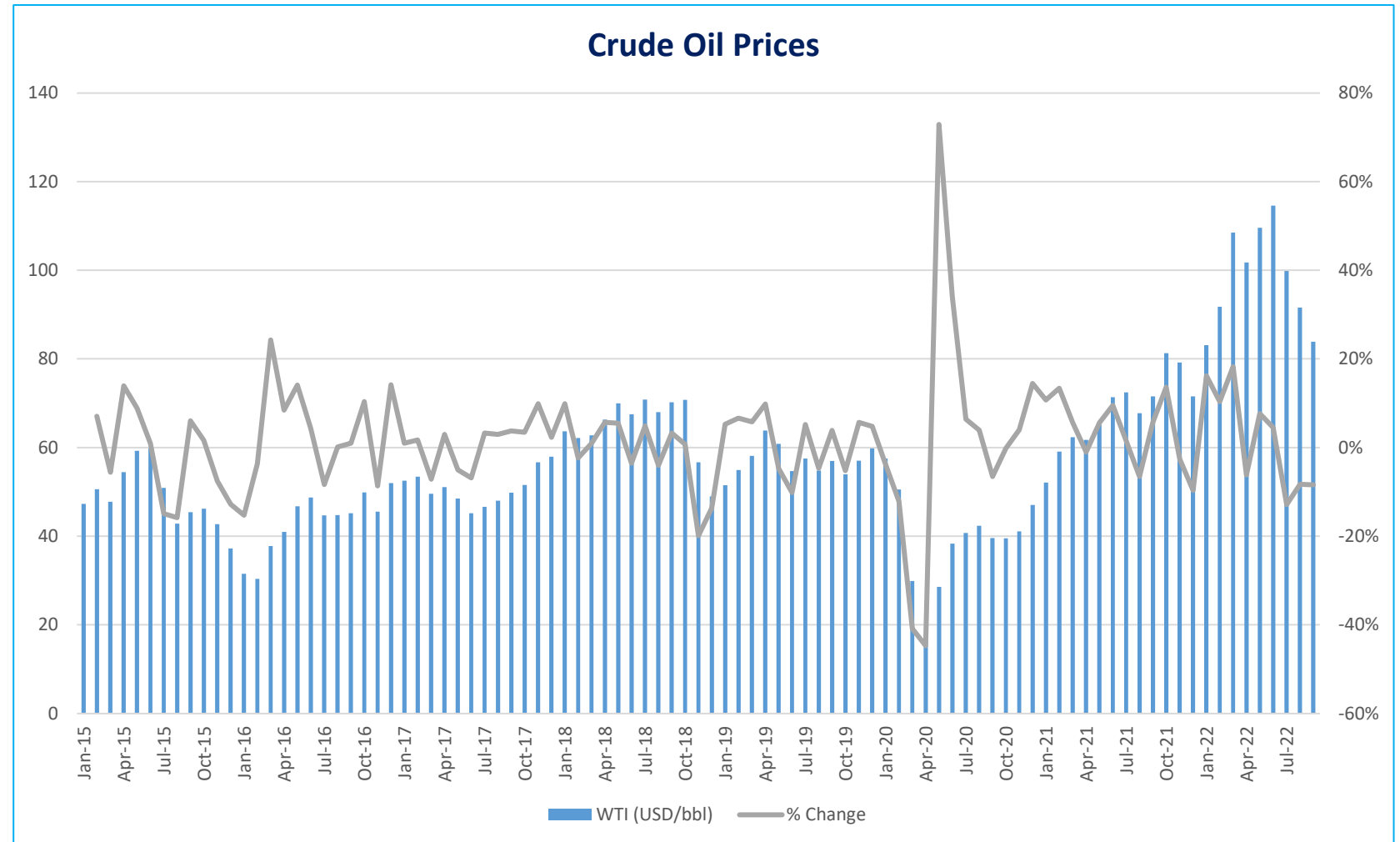
Natural Rubber Price

- Natural rubber prices on the global market are highly erratic and are influenced by factors such as supply and demand.
- Since the 1HCY21, prices have seen a growing trend as a result of resurgent demand from the tyre industry, particularly from China, where manufacturing operations have accelerated as China depends on imports to meet its needs for natural rubber. In addition, rubber plays a crucial role in the manufacture of latex gloves, belts, catheters, and other industrial durables, the demand for which has driven up the price of rubber.
- However, the current Russia-Ukraine situation is continuing to cause volatility due to disruptions in supply and demand. On the supply side, unfavorable weather and labor shortages brought on by border restrictions are hurting the world's output of rubber.
- The price of natural rubber stood at USD~1.48 per kg in Sep'22. Future price increases are anticipated as a result of rising environmental awareness because natural rubber is made from plants, biodegrades, is renewable, and has less of an impact on the environment than synthetic rubber.



Crude Oil Price

- Synthetic rubber, which is a key component of various types of tyres, is a derivative of crude oil. Therefore, its pricing remains exposed to the vicissitudes in International crude oil price.
- Crude oil, being a highly price vulnerable commodity, experienced a steep recovery in CY21 on account of re-opening of economies following vaccination drives and demand resumption across the globe.
- Since 1QCY22, the prices have exhibited volatility owing to ongoing Russia-Ukraine crises.
- Price of WTI crude oil currently stands at USD~84/bbl. Looking forward, prices are expected to remain range-bound due to reduced global demand but on the contrary, supply constraints as well, with OPEC+ announcing to implement only modest boost in production.



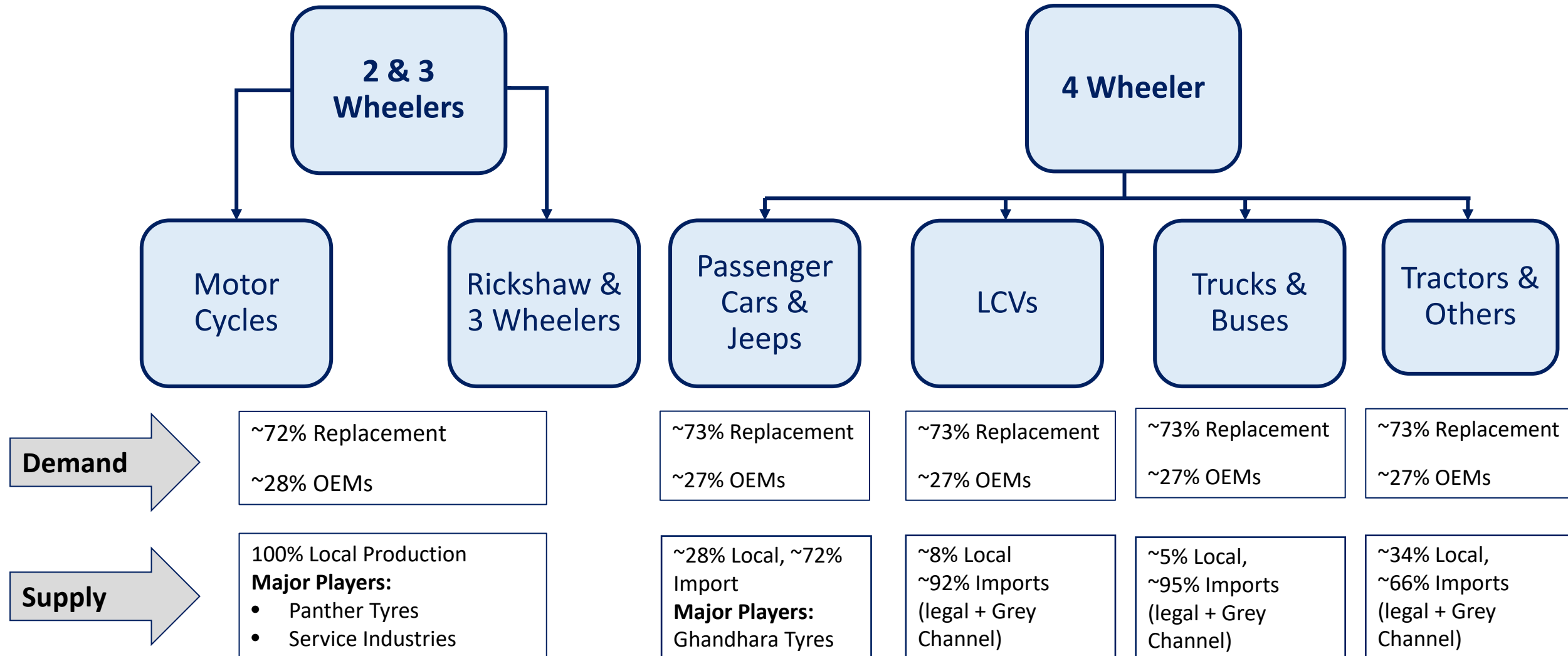
Overview

- In FY22 Pakistan's Tyre sector made an estimated sale of ~44mln units (FY21: ~41mln units), depicting a growth rate of ~8% YoY, on the revenue side the sector's top (listed players) generated approximated cumulative revenues of PKR~79mln (FY21: PKR~72mln).
- In addition, growing preference for nitrogen gas in car tyres to produce sustainable and durable tyres is providing impetus to domestic rubber tyre industry. The import of tyres and tubes during FY22 has decreased to PKR~41bln as compared to PKR~60bln in FY21. The decrease is attributable to imposition of taxes on imports to support domestic manufacturers and improved balance of trade deficit. However, tyres procured through grey channels still account for a considerable share of the tyres market particularly in the 4 wheel category.
- The tyres sector can be broadly segmented into the OEM and replacement markets. The average share of replacement market is ~80%, however this varies for each type of tyre.
- With respect to types of tyres, the sector can also be categorized according to 2 or 3 wheel segment and 4 wheel segment. The 4 wheel segment has further categories such as passenger cars, LCVs, buses and trucks.
- The demand for 2 and 3 wheel segment is entirely catered to by local production where players such as Panther Tyres and Service Industries hold significant market shares. Meanwhile, Ghandhara Tyres is the only local producer of tyres for passenger cars, although the market is significantly dominated by Imports.

Sector Overview	FY20	FY21	FY22
Market Size [Estimate] (in mln units)	39	41	44
Import Value (PKR bln)	17	60	41
Import Volume (mln Units)	2.5	7.1	5.5
Industry Association	Pakistan Association of Automotive Parts & Accessories Manufacturers		

Tyres | Local Industry

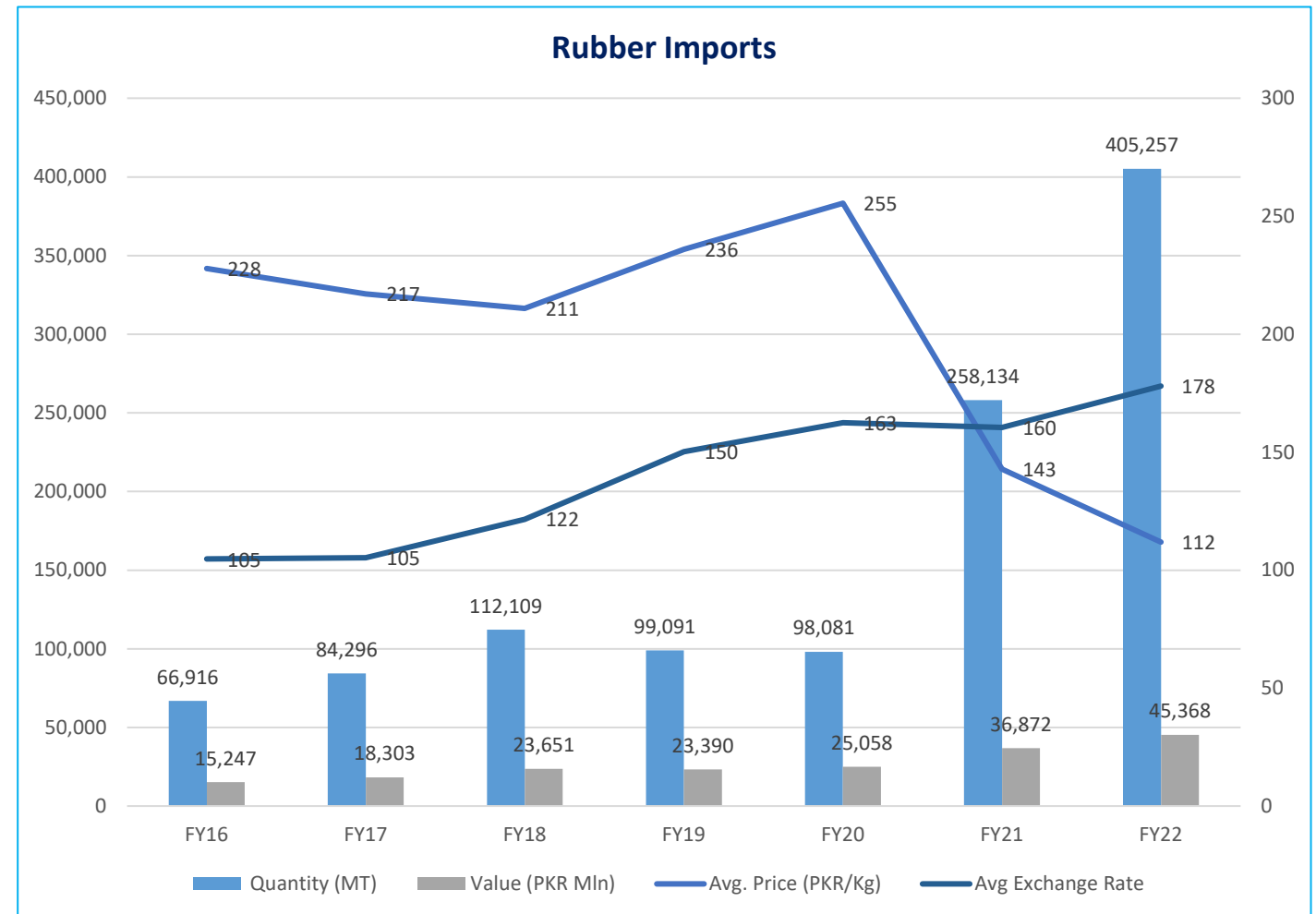
Industry Structure



Note: Percentages are based on assumptions.

Raw Material

- The major raw material used in the production of tyres is rubber, both natural and synthetic.
- There was a massive increase of ~163% in the quantitative imports of all types of rubber, from ~98,000 MT in FY20 to ~258,134 MT in FY21. The increase in value terms was lower, although still significant at ~47%, rising from PKR~25bIn in FY20 to PKR~37bIn in FY21.
- In FY22 also, rubber imports grew exorbitantly by ~57% quantity wise, while in PKR terms, the imports went up by ~23%. The growth is largely associated to demand driving factors.
- The increased demand from the automobile industry likely drove up the raw material imports, as automobile production and sales both picked up during FY21 and a large part of FY22. The demand is expected to soften in FY23.
- The decline in average import price was also a key element, falling from PKR~255 per Kg in FY20 to PKR~143 per kg in FY21. This decline is partially attributable to low crude oil prices during the 1HFY21, since it is a major driver of synthetic rubber prices.

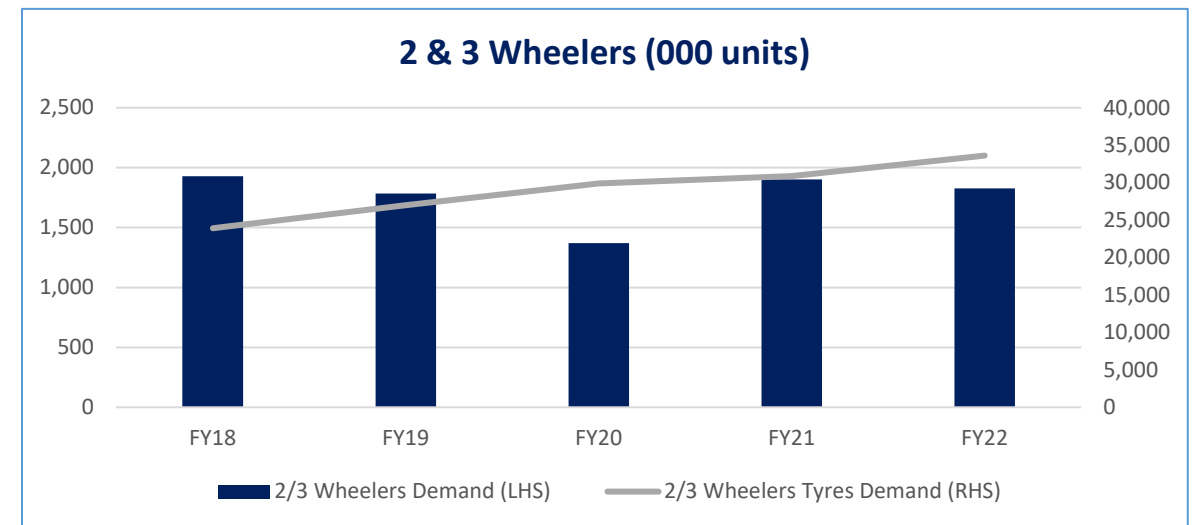
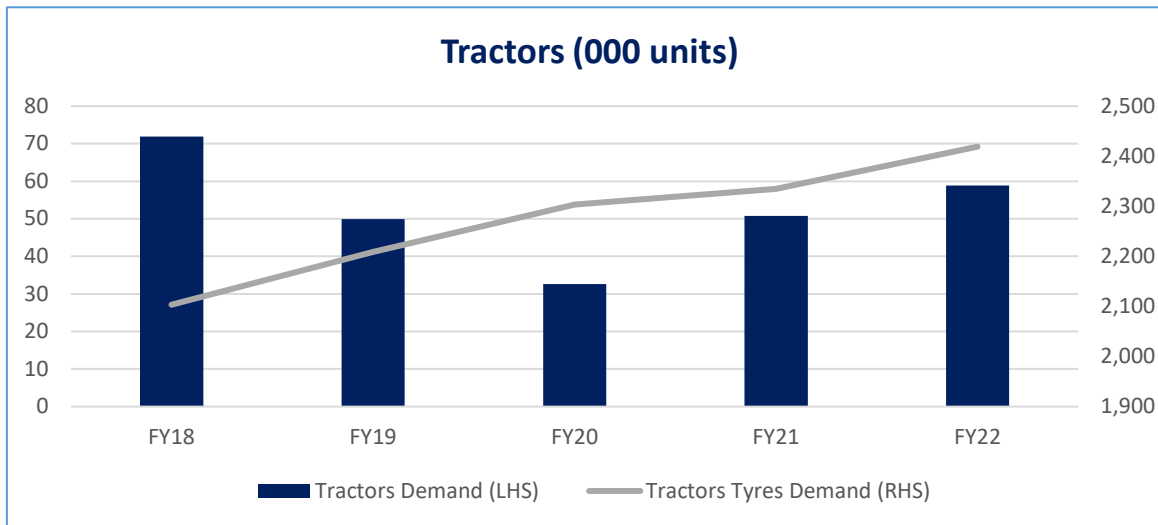
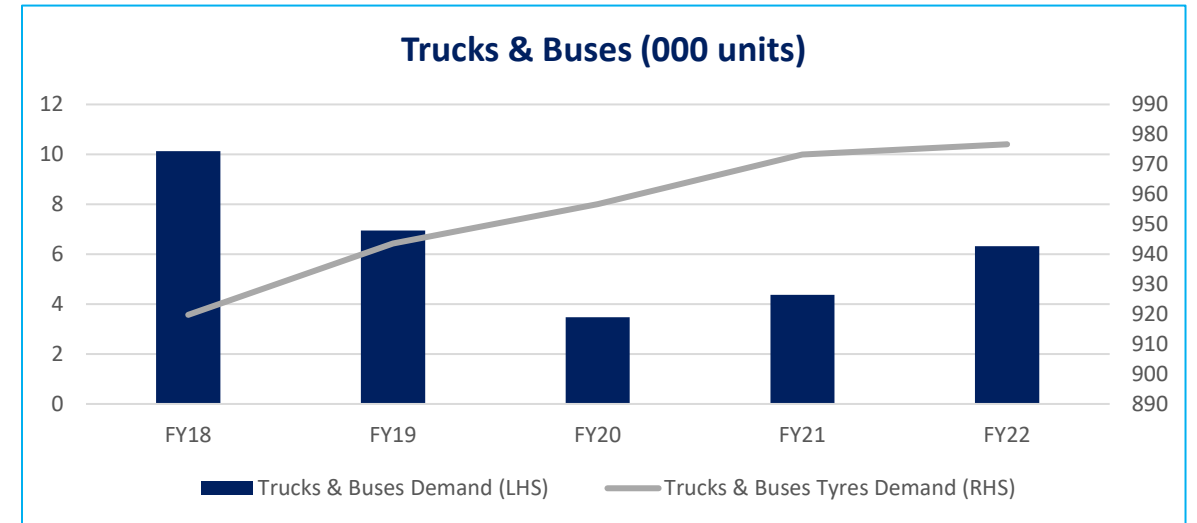
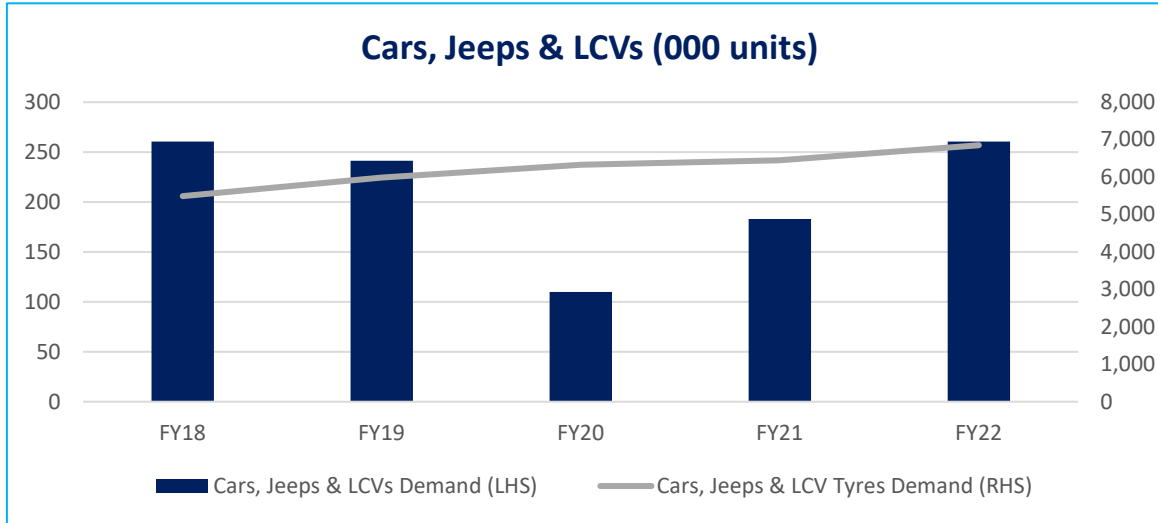


Demand

CY21	2 & 3 Wheelers	Passenger Cars & Jeeps	LCVs	Trucks & Buses	Tractors & Others	TOTAL
Registered Motor Vehicles (Units)	25,755,509	4,185,698	171,638	552,314	1,890,051	32,383,572
Estimated Tyres (Units)	52,488,799	16,742,792	686,552	3,313,884	7,560,204	80,792,231
Market Categories						
Replacement Market	72%	73%	94%	89%	85%	
OEM	28%	27%	6%	11%	15%	
Replacement Cycle Years <i>*Assumption</i>	2	5	5	5	5	
Tyres Demand						
Replacement Market	24,186,838	4,875,959	160,049	869,231	2,056,375	32,148,453
OEMs	9,405,993	1,803,437	10,216	107,433	362,890	11,689,968
Total Demand (Units)	33,592,831	6,679,396	170,265	976,664	2,419,265	43,838,422
Total Demand – CY20 (Units)	30,869,048	6,277,997	169,861	973,237	2,334,688	39,554,219

Total Demand assumes standard replacement cycles for different categories of tyres, which can vary. This demand is catered through local sales & imports.

Automobile & Tyre Demand



Note: Tyres demand is based on calendar year (CY), Assumptions in previous slide regarding market segmentation and replacement cycle were used to estimate tyre demand.

Tyre Supply is met through local sales & imports in Pakistan:

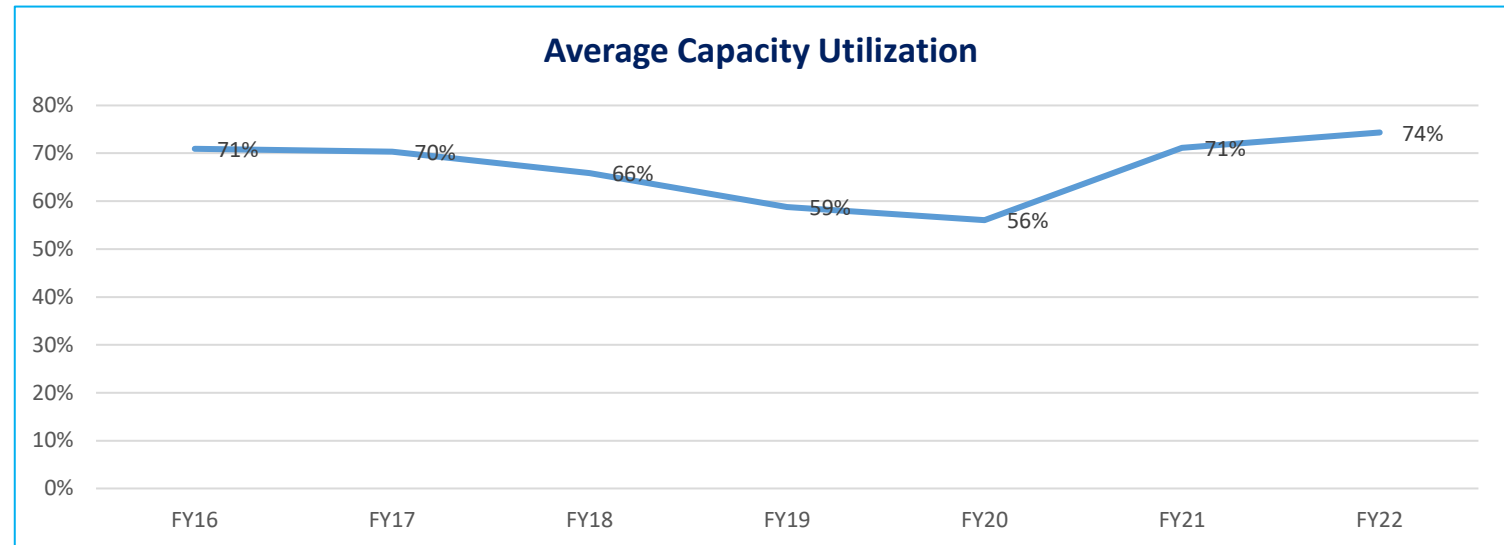
FY22	2 & 3 Wheelers	Passenger Cars & Jeeps	LCVs	Trucks & Buses	Tractors & Others	Total
Local Sales	100%	29%	8%	5%	5%	40%
Imports (Legal Channels)	0%	25%	19%	13%	13%	11%
Grey Channel	0%	50%	73%	82%	82%	49%
UNITS						
Local Sales	33,592,831	1,950,200	13,621	48,833	120,963	17,535,368
Imports (Legal Channels)	-	1,671,600	32,350	126,966	314,504	4,884,853
Grey Channel	-	3,343,201	124,293	800,865	1,983,798	21,418,200
Total Units	33,592,831	6,679,396	170,265	976,664	2,419,265	43,838,422

- Local production caters to the entirety of demand in 2 and 3 wheeler segment which is the largest in unit terms.
- However, imports (legal and grey channel) dominate in value terms as they have dominant contribution to all other segments which are also relatively higher priced.

Capacity & Utilization

- The top players within the tyres sector have achieved significant capacity enhancements in the past few years.
- While total installed capacity increased by ~4% in FY22. The capacity utilization increased to ~74% as compared to ~71% in FY21.
- Additionally, an increase in policy rates lowers demand for autos through borrowing, which has a detrimental effect on the demand for tires.

Tyres Capacity Installed					
	FY18	FY19	FY20	FY21	FY22
General Tyres	3,558,862	3,933,850	3,947,553	3,969,656	4,279,815
Panther Tyres	7,965,000	7,650,000	8,100,000	8,100,000	8,107,500
Servis Industries	17,053,960	18,534,780	19,114,360	19,406,624	20,428,253
Total Capacity	28,577,822	30,118,630	31,161,913	31,476,280	32,815,568

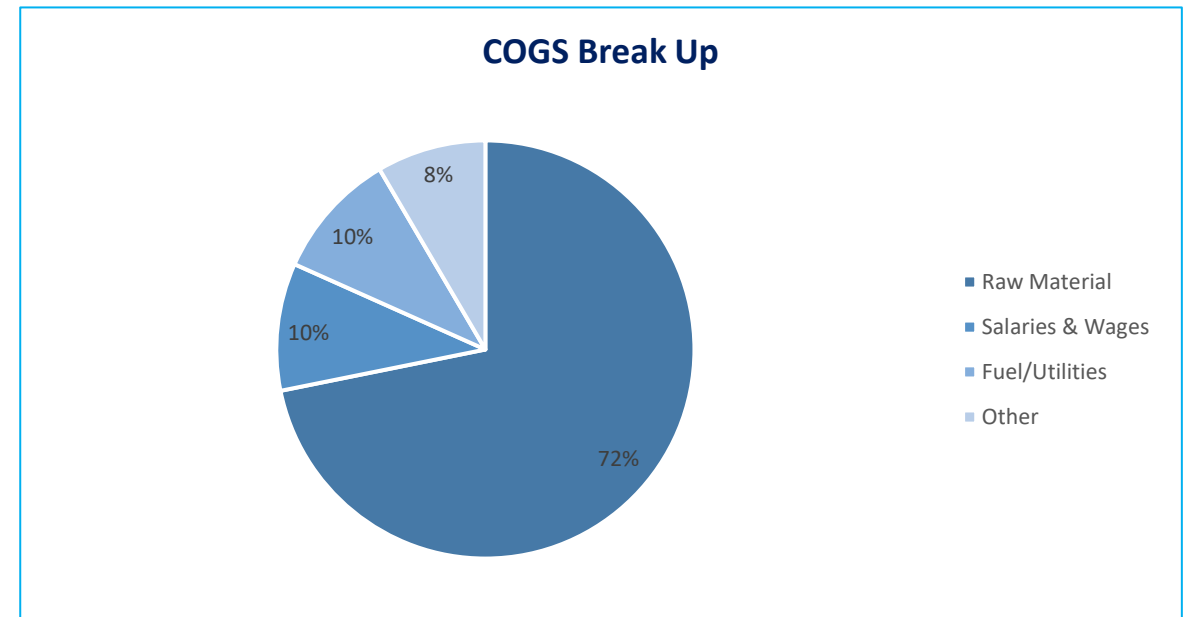
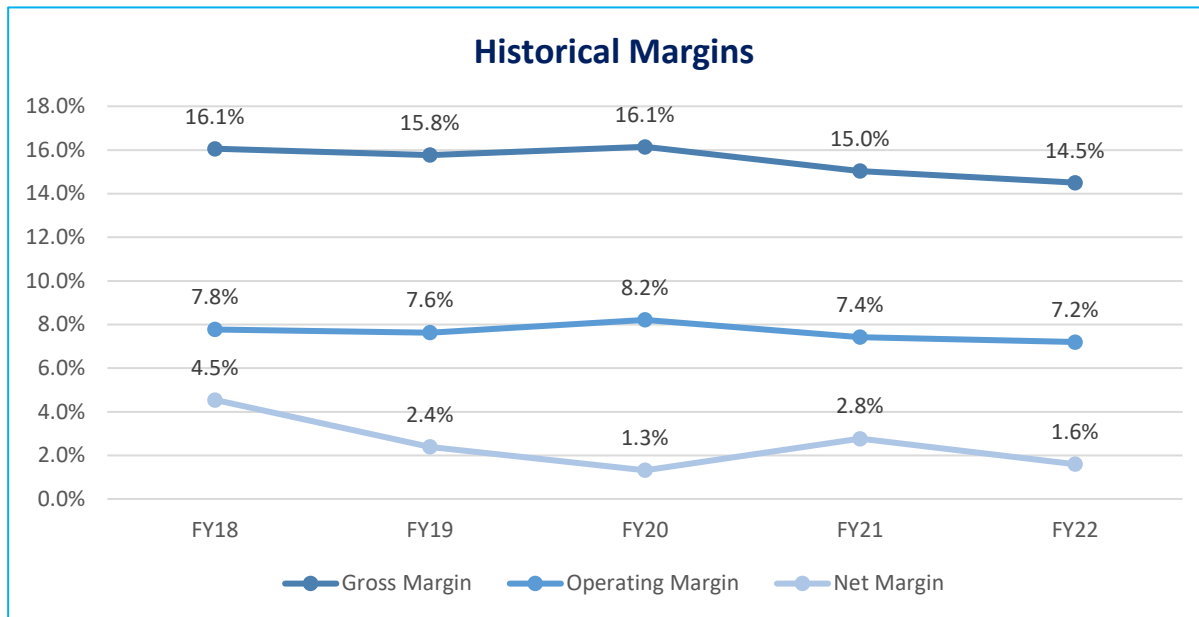


Business Risk

- **Demand:** The tyres sector derives its demand from the auto industry. In previous years, slow down in automobile demand also had a detrimental impact on the demand for tyres. However, there is limited impact as the OEM market is a relatively smaller segment as compared to the replacement market segment, where demand is less volatile and not linked to the auto industry.
- **Impact of interest rates:** The increase in automobile demand is expected to fall because of the higher interest rate environment as there is lower demand of auto financing. This also translates into lower demand for tyres from OEMs segment. SBP focus on to moderate demand growth by reducing maximum auto financing tenure from 7 to 5 years and increasing minimum down payment to 30% from 15% will also restrict demand for tyres.
- **Raw material:** The tyre sector's raw materials, such as rubber and carbon black, are largely imported and the sector has to deal with volatile prices and exchange rate risk. Recent devaluation in the currency, combined with higher global freight costs, will lead to higher prices of imported raw material and put pressure on margins.
- **Grey channel:** The players operating in 4 wheel segments, such as passenger cars, LCVs and bus segments, occupy considerably lower presence in the market as compared to imported tyres. Tyres imported through grey channels in particular dominate these segments leading to a high level of competition. Recently, the government has made concerted efforts through strict enforcement and border management to curb the smuggling of various goods. This is likely to benefit local manufacturers who may be able to increase their market shares in these segments.

Margins & Cost Structure

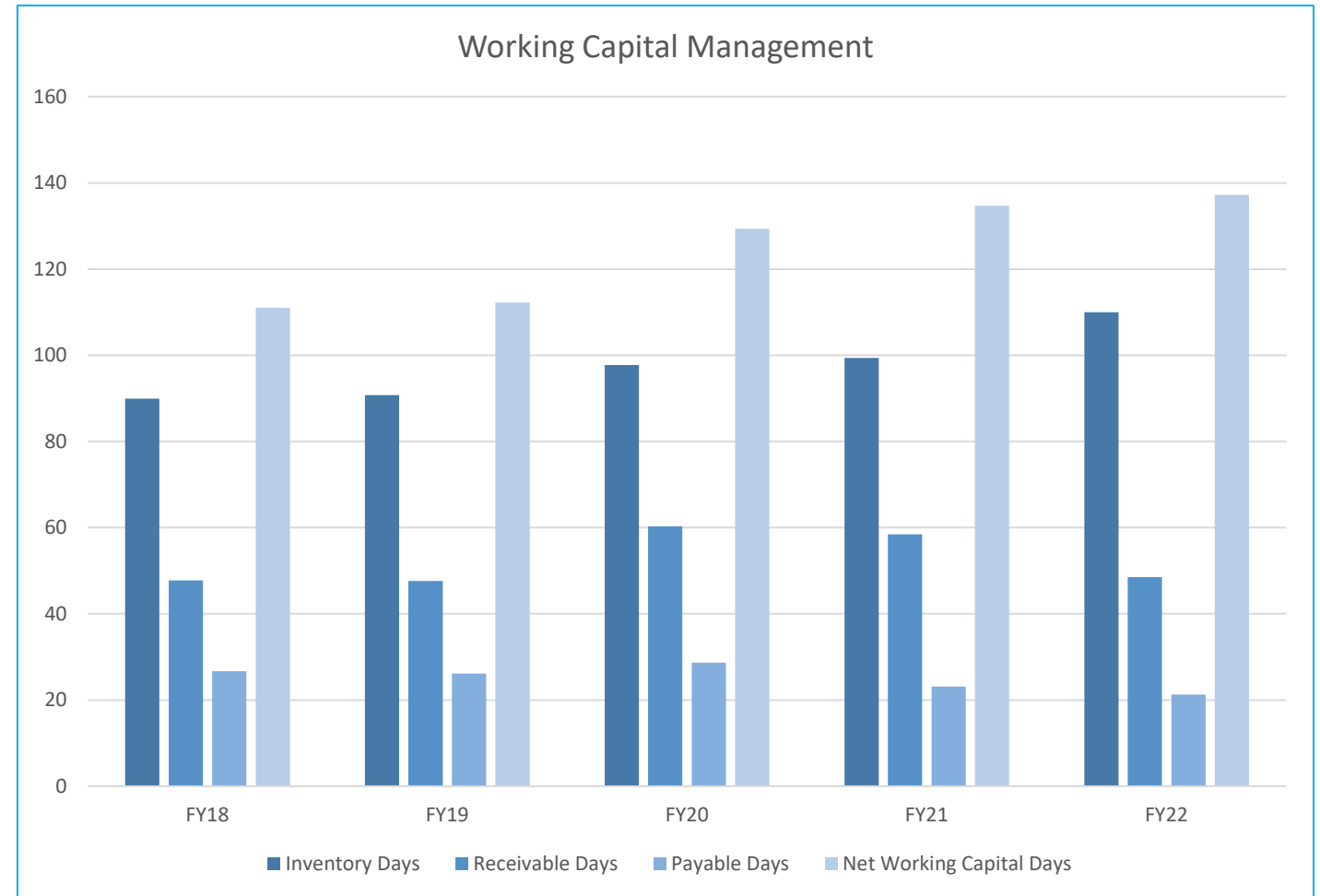
- The tyre sector’s average margins have remained relatively stable in recent years. The five year (FY18-FY22) average for gross margin stood at ~15% while the average net margins for the same period clocked in around ~3%.
- The presence of imported tyres as well as price elasticity, particularly in 4 wheel segment creates pressure on margins as it is difficult to maintain volumes, specially of high-priced units, if prices are increased. On the other hand, 2 & 3 wheeler market is less price sensitive and import dependency is lower too.
- During FY22, both gross margins and net margin stayed at where they were in FY21 at ~15% YoY and ~7% .Raw material is the most significant component of the sector’s direct costs (~72%). The sector’s raw material consists of materials such as natural and synthetic rubber, carbon black and other chemicals.





Financial Risk – Working Capital

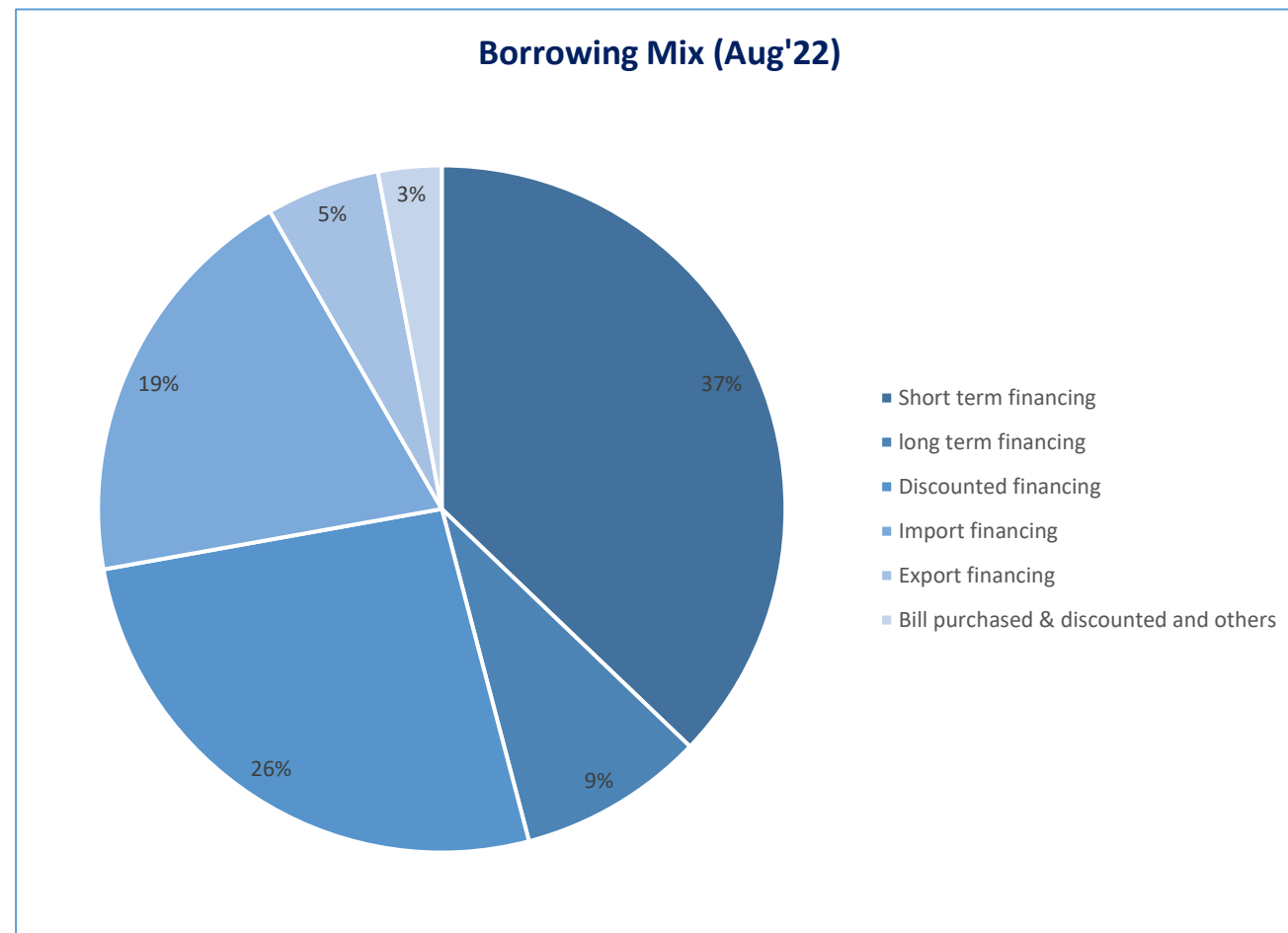
- The tyre sector's working capital is largely a function of inventory and trade receivables and is financed through a combination of short term borrowing and internal capital.
- The tyre sector's average net working capital cycle in the last five years has averaged around 131 days. The rising trend in inventory days is mainly because inventory pile up because of low demand due exponential increase in policy rate especially in 2HFY22.
- During FY22, the net working capital days stood at 166 days, relatively higher as compared to 135 days in FY21.





Financial Risk – Borrowing Mix

- The total borrowing of the tyre sector stands at PKR~35,676mln as at End-Aug'22, as compared to PKR~20,089mln as at End-Aug-21.
- The increase of ~78% in total borrowing came on the back of significant increase in export financing which stands at PKR~1063.26mln as at End-Aug'22 and contributes ~5% to total borrowing. Previously, export borrowing was only ~1% of total borrowing in Aug'21
- The largest component in total borrowing is short term borrowing at normal rates which stands at PKR~13,254mln as at End-Aug'22 (End-Aug'21: PKR~8,7155mln) and accounts for ~37% of total borrowing.
- The average leveraging for the tyre sector stands at ~58% (moderately leveraged)



Regulatory Framework

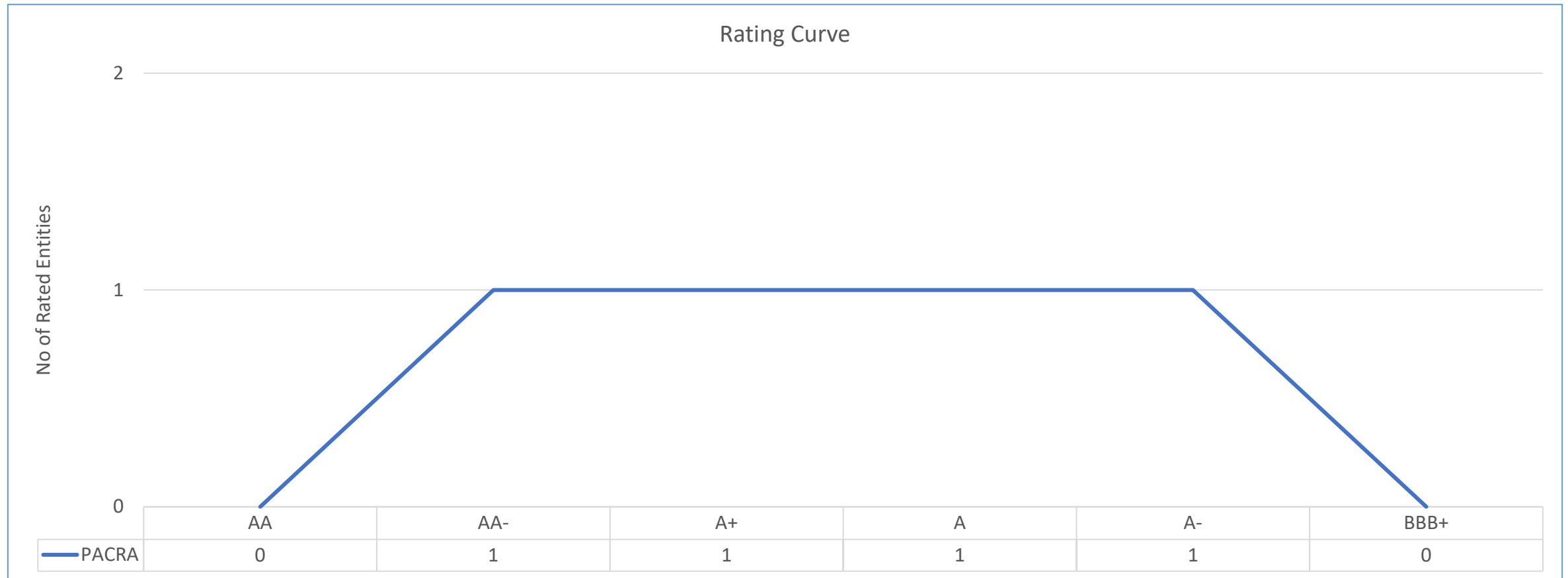
- With respect to Income Tax, the tyre sector is under the Normal Tax Regime (NTR). Further, the sector is also subject to Minimum Tax @ 1.5% of turnover, if tax liability under NTR is lower than minimum tax. However, the additional tax paid under minimum tax is adjustable against future tax liabilities for the next 5 years.
- In addition, sales tax of 17% is applicable on both the raw material, i.e. rubber and carbon black, as well as finished goods, i.e. tyres. 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.
- In addition, SBP increased the monetary policy rate to 15% which increases the sector's finance costs. The policy rate has recently been increased.
- There have been no changes in the custom duty structure applicable for the sector which provides protection to the local manufacturers.
- Although some tyre manufacturers are members of Pakistan Association of Automotive Parts & Accessories Manufacturers, there is no dedicated industry representative body for local tyre manufacturers. Moreover, the Pakistan Tyre Importers & Dealers Association is the representative body for tyre importers.

Custom Duty Structure

PCT Code	Description	Custom Duty		Additional Custom Duty		Regulatory Duty		Total	
		FY23	FY22	FY23	FY22	FY23	FY22	FY23	FY22
Raw Materials									
28.03	Carbon Black (Rubber Grade)	16%	16%	4%	4%	0%	0%	20%	20%
40.01	Natural Rubber	0%	0%	0%	0%	0%	0%	0%	0%
40.02	Synthetic Rubber	0%	0%	0%	0%	0%	0%	0%	0%
Finished Goods									
4011.1	Tyres - Used on motor cars	16%	16%	4%	4%	20%	20%	40%	40%
4011.2011	Tyres - Used on Light Trucks	16%	16%	4%	4%	20%	20%	40%	40%
4011.2091	Tyres - Used on Buses	3%	3%	2%	2%	25%	25%	30%	30%
4011.4	Motorcycle Tyres	20%	20%	6%	6%	0%	0%	26%	26%
4011.7	Tyres - Used on Agricultural Machines	20%	20%	6%	6%	0%	0%	26%	26%
40.13	Inner Tubes	3-20%	3-20%	2-7%	2-7%	0%	0%	5-27%	5-27%

Rating Curve

- PACRA rates 4 entities in the tyre sector with a long term rating bandwidth of A- to AA-.





SWOT Analysis

- Availability of ample capacity to meet any increase in demand.
- Effective and efficient labor market.
- Government incentives and favorable policies for auto and allied industries.

Strengths

Weaknesses

- Reliance on imported raw material with volatile prices and exchange rate risk
- Partial dependence on automobile industry
- Low market share of local producers in 4 Wheeler segment.

- Devaluation of currency and volatile imported raw material prices.
- Significant competition from import segment.

Threats

Opportunities

- Growth in Pakistan's urban population
- Recovery in overall economic conditions
- Custom duty structure which protects local manufacturers.
- Greater border controls, leading to less competition from grey channel

Outlook: Negative

- Pakistan's economy posted an impressive growth rate of ~6.0% (FY21: 5.7%) in FY22 and the LSM sector by 9MFY22 end posted a growth rate of ~26% YoY. The tyres sector holds ~0.24% weightage in the LSM and contemporaneously kept pace with the previous year's production numbers; however at FY22 end, the scenario turned around and total tyre production declined by ~16% YoY.
- Similarly by the end of FY22, the LSM index dipped by ~14% within the last quarter only, as major economic vulnerabilities (i.e., Global supply chain disruptions, high inflation levels and economic overheating) became prevalent both locally and internationally. Similar to many central banks, the SBP has maintained a hawkish stance, keeping the interest rates high.
- Subsequently due to high financing rates, price hikes and component shortages became inevitable; vehicle sales and production of all categories in Pakistan have experienced massive declines in the 1QFY23; car sales have dipped by ~50%, Jeep & Pickups by ~48%, Trucks & Buses by ~45%, tractors by ~30% and 2/3 wheelers by ~35%. Subdued vehicle sales and production has negative implications for the OEM market where volumes may suffer.
- While the replacement market, representing ~72% share of the tyre market is dominated by imports and grey channel sales which keeps the local manufacturers pricing power under pressure. Moreover, the legally imported tyres are often under invoiced negating protection tariffs. On the other side, the local manufacturers take the load of duties and taxes on the import of raw material which further aggravates their competitive position.
- Given the macroeconomic vulnerabilities, mounting cost pressures (PKR devaluation of ~37%, keeping import cost high) subdued production and demand in the automotive sector, adverse economic impact of recent floods and high volatility in natural and synthetic rubber prices, the tyre industry's profitability and financial stability are expected to remain under check in the in the short term.

- State Bank of Pakistan (SBP)
- Pakistan Bureau of Statistics (PBS)
- PACRA Database
- Economic Survey
- Pakistan Automotive Manufacturers Association (PAMA)
- Dawn News (<https://www.dawn.com/news/1623855>, <https://www.dawn.com/news/1648050>)
- Federal Board of Revenue (FBR)
- Pakistan Stock Exchange (PSX)
- Investing.com
- Trading Economics
- Singapore Commodity Exchange
- Statista
- World Bank
- Bridgestone
- Worldstopexporters.com (<https://www.worldstopexports.com/rubber-tires-exports-country/>)
- Tyrepress.com
- Expert Market Research (<https://www.expertmarketresearch.com/reports/tire-market#:~:text=In%202020%2C%20the%20global%20demand,4111.02%20million%20units%20by%202026.>)

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