



# Tyres

Sector Study

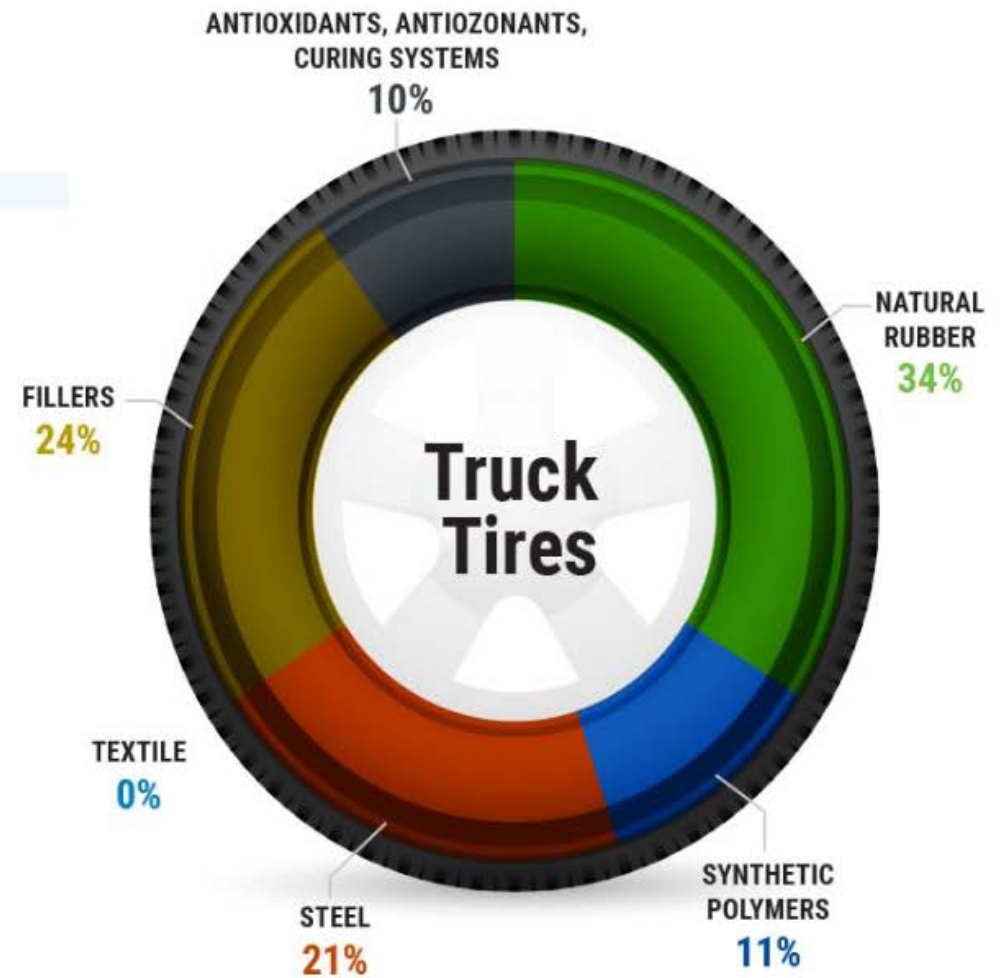
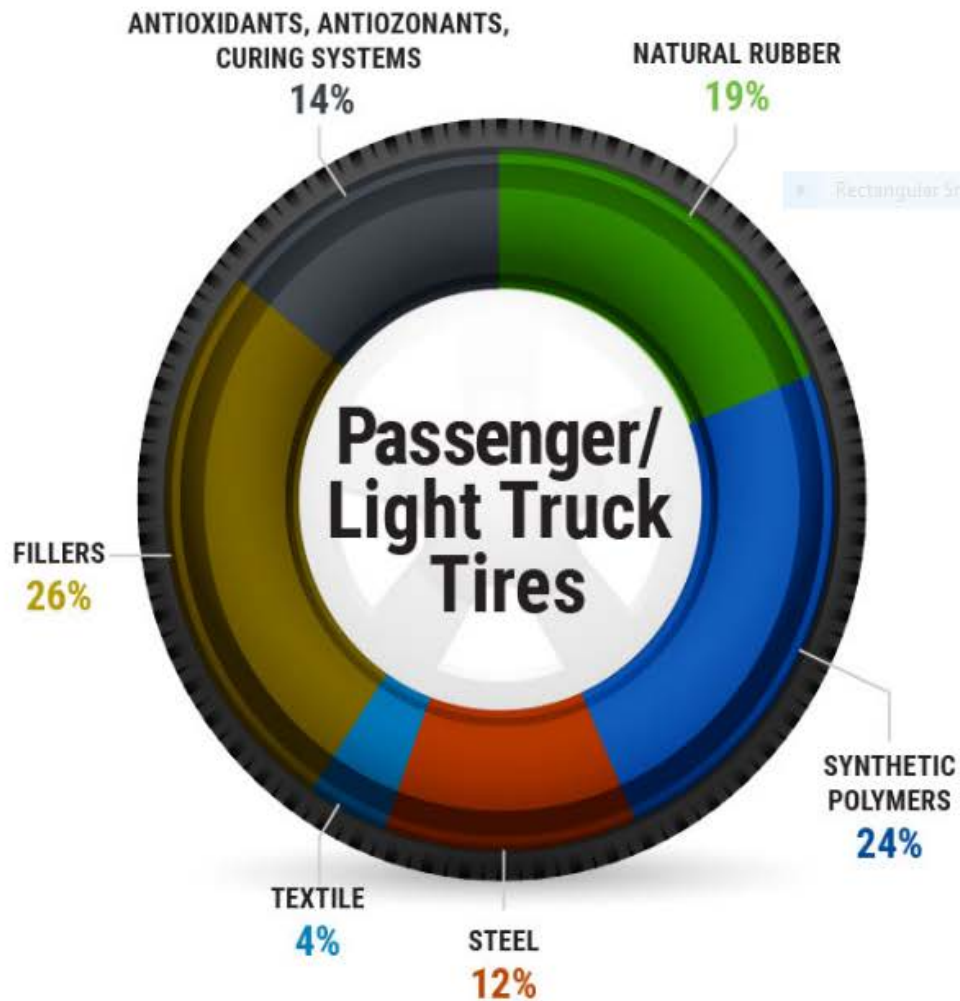
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## Composition of Tyres



\*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)



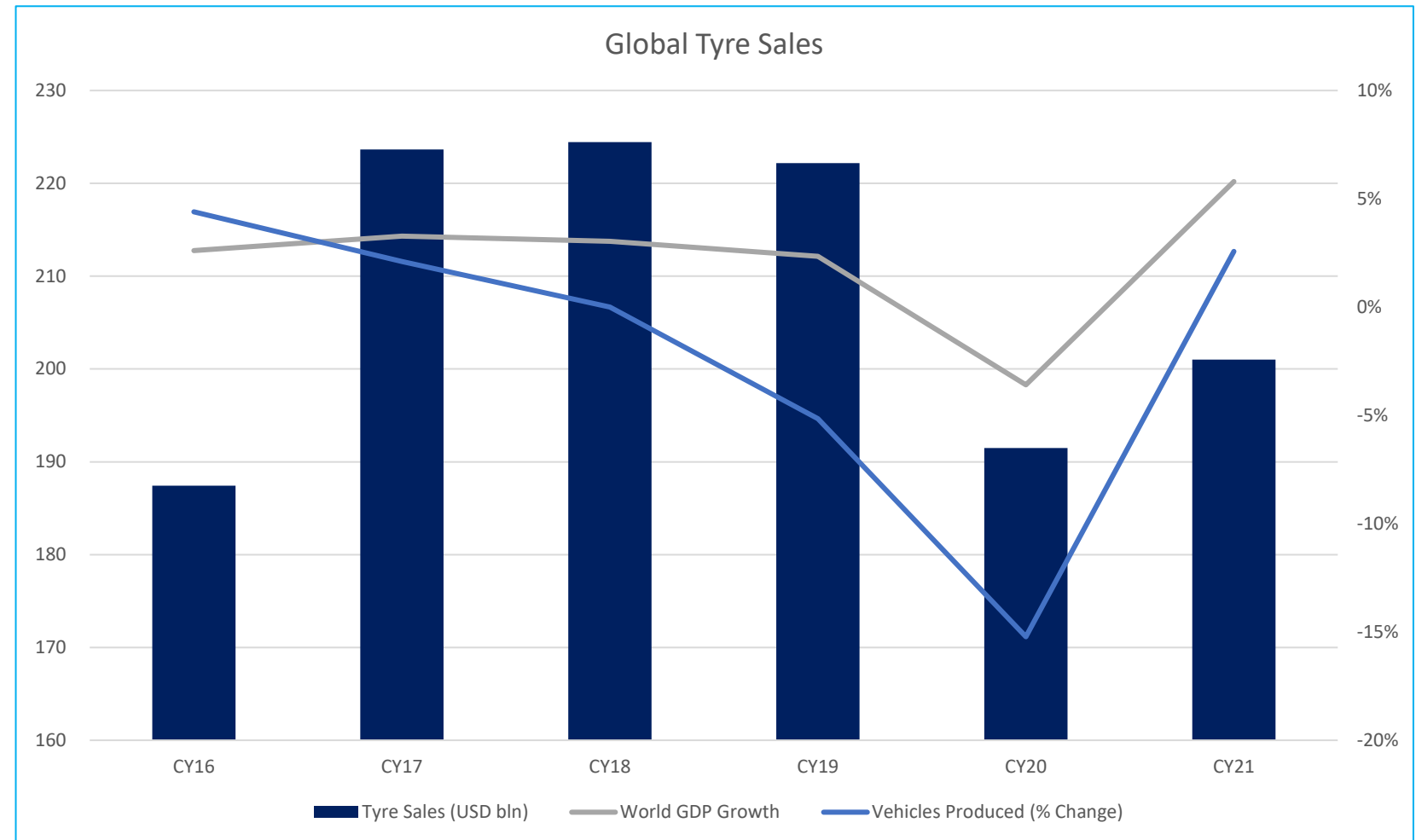
## Overview



- Total market size was recorded at USD~201bln in CY21 (USD~191 billion in CY20). Global tire market increased by ~5% in CY21 escalating sales of automobiles, growing replacement demand and advancement in tire technology are driving the growth of the global tire market.
  - The Average CAGR of the Industry, has historically remained at ~4% and is expected to continue a similar trend. Demand is expected to recover resulting in the resumption of economic activity across the globe.
  - The total volume of tyres produced during CY21 stood at ~3.5bln units as compared to ~3.4bln units in the previous year.
- 
- 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.

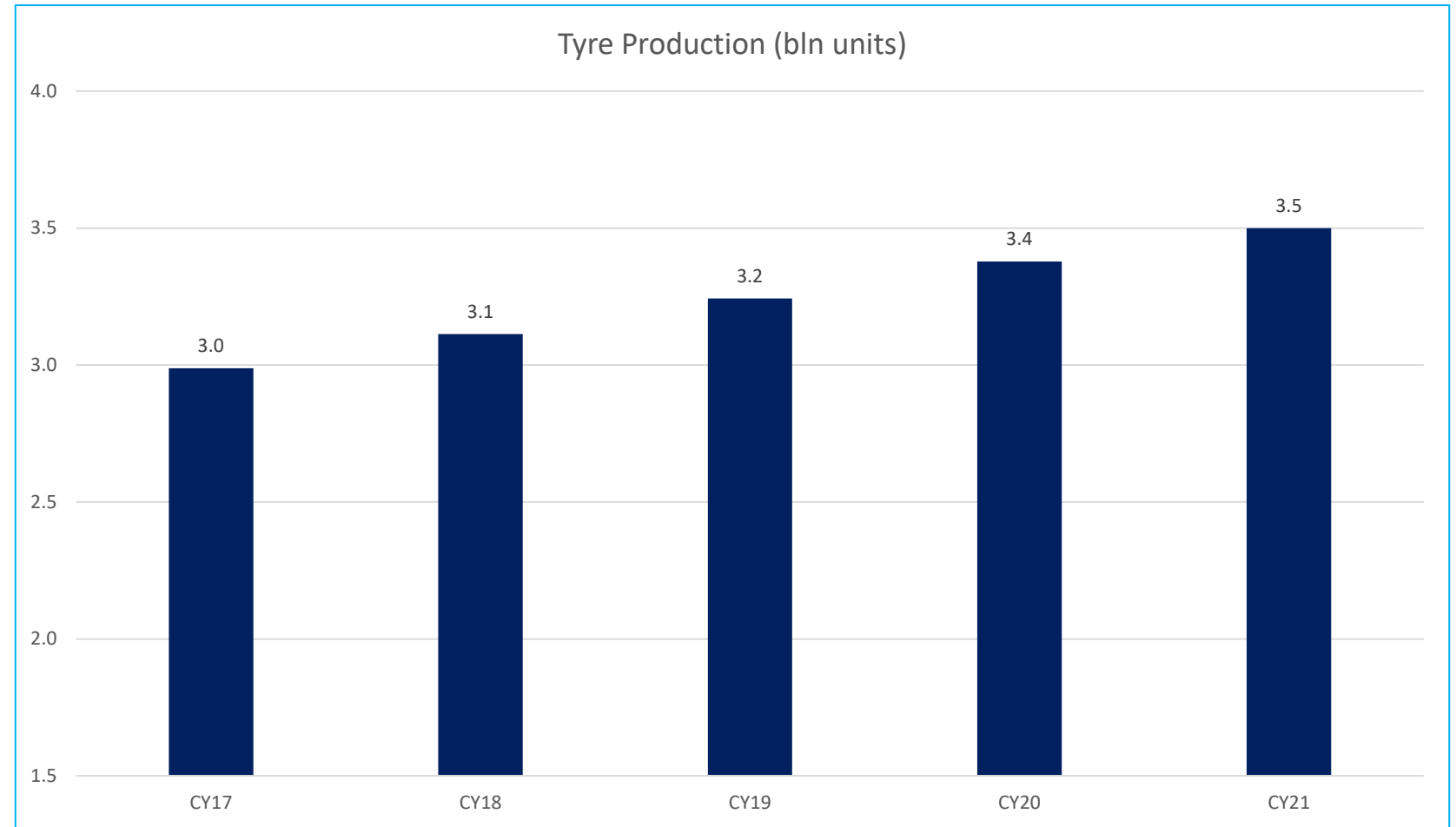
## Automobiles & Tyre Correlation

- 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 .
- Going forward, the resumption in economic activity across the globe is expected to bolster demand for both automobiles and tyres.

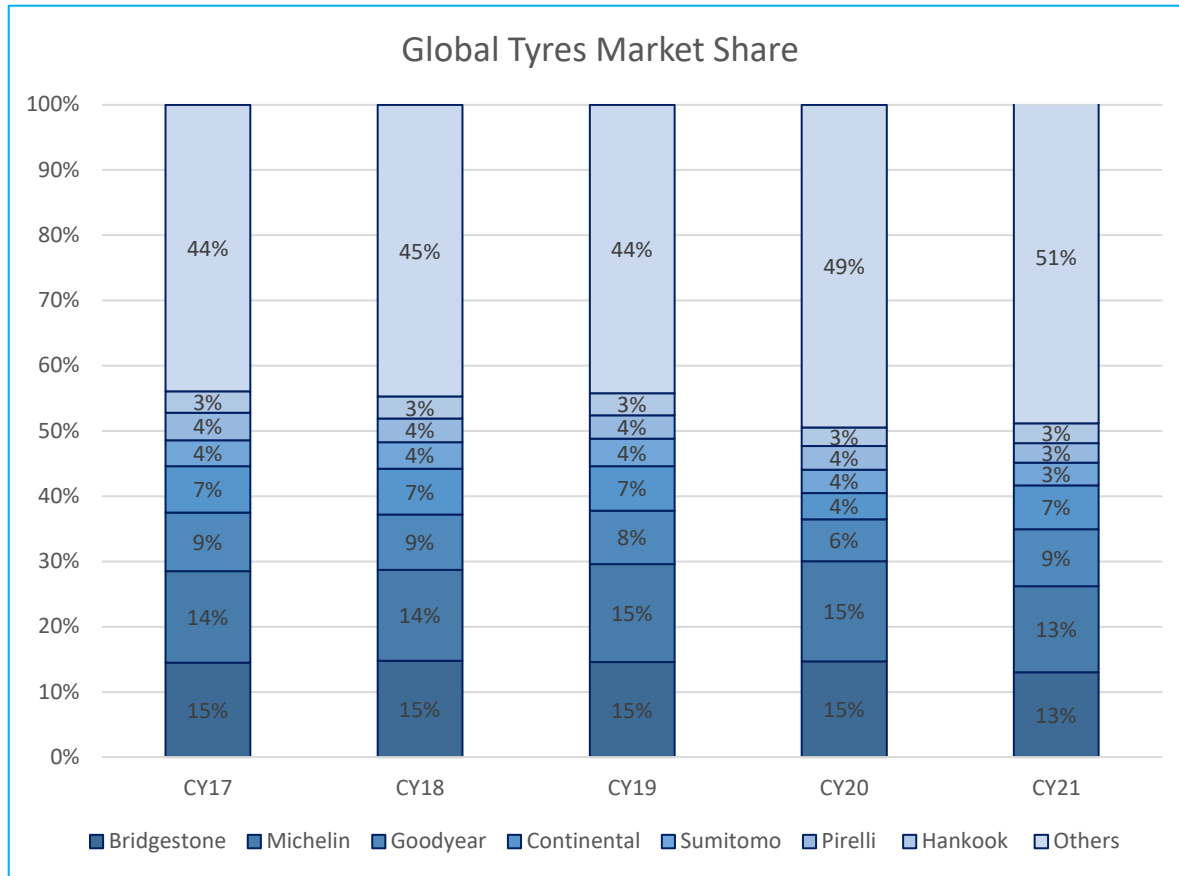


## Production

- 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 contributed ~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, accounts 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



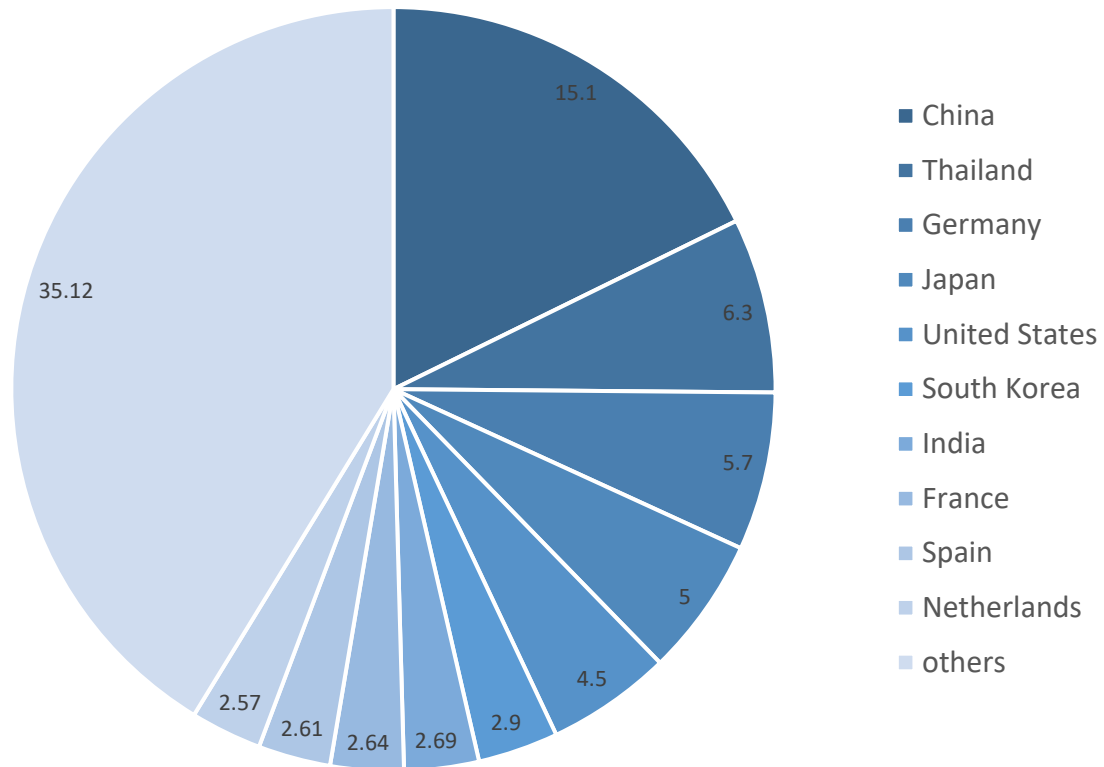
## Exports

- 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.

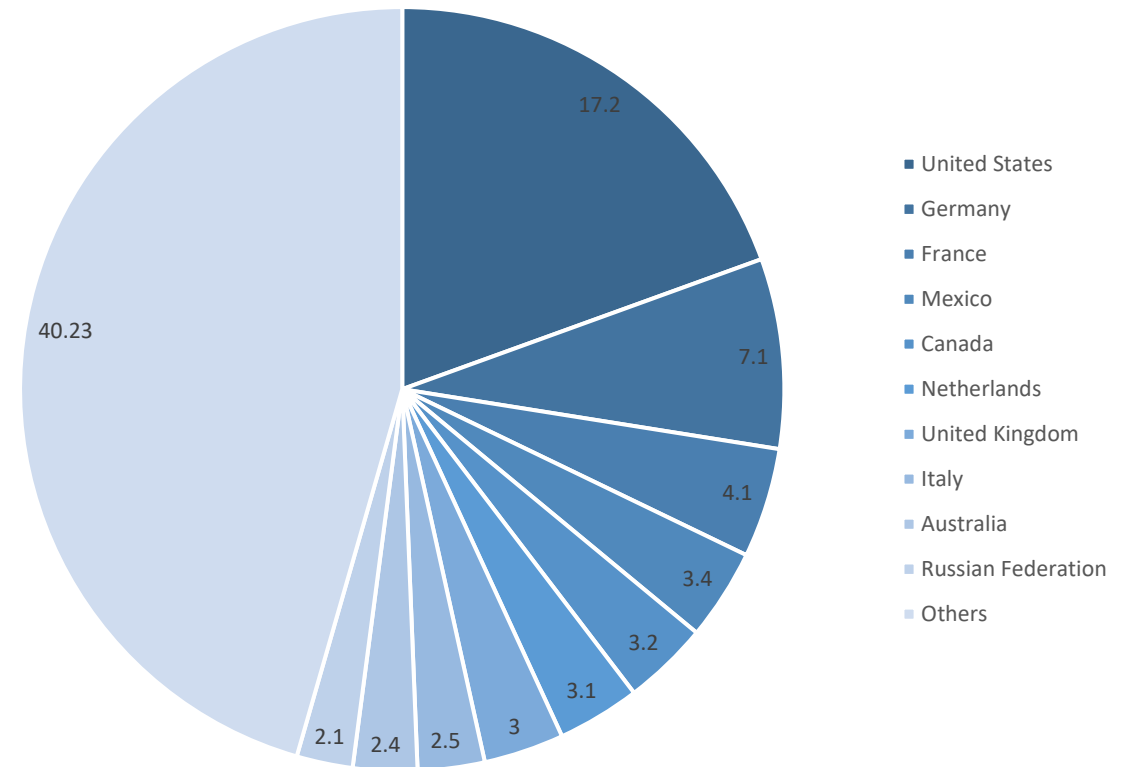
World Exports (USD bln)	CY17	CY18	CY19	CY20	CY21
China	14.16	15.11	14.80	13.30	15.10
Thailand	4.39	4.90	5.60	5.20	6.30
Germany	5.89	6.02	5.70	4.90	5.70
Japan	4.85	5.10	5.20	4.10	5.00
United States	4.66	5.09	5.00	4.00	4.50
South Korea	3.44	3.47	3.30	2.80	2.90
France	2.56	2.77	2.70	2.25	2.64
Spain	2.22	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
<b>World Total</b>	<b>76.02</b>	<b>80.81</b>	<b>79.00</b>	<b>69.70</b>	<b>84.92</b>

## Country Wise Trade

Tyre Exports by Country

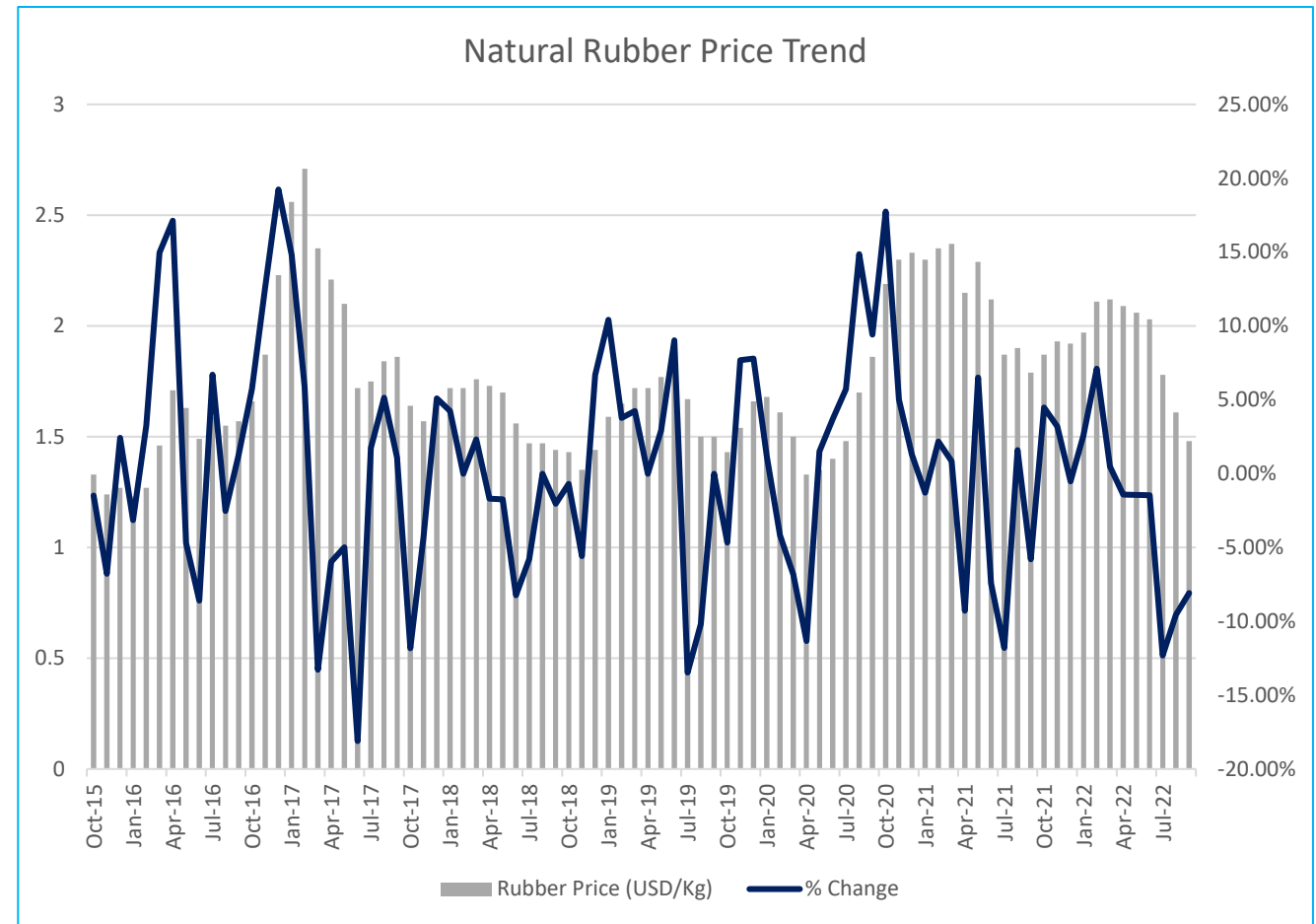


Tyres Imports by Country



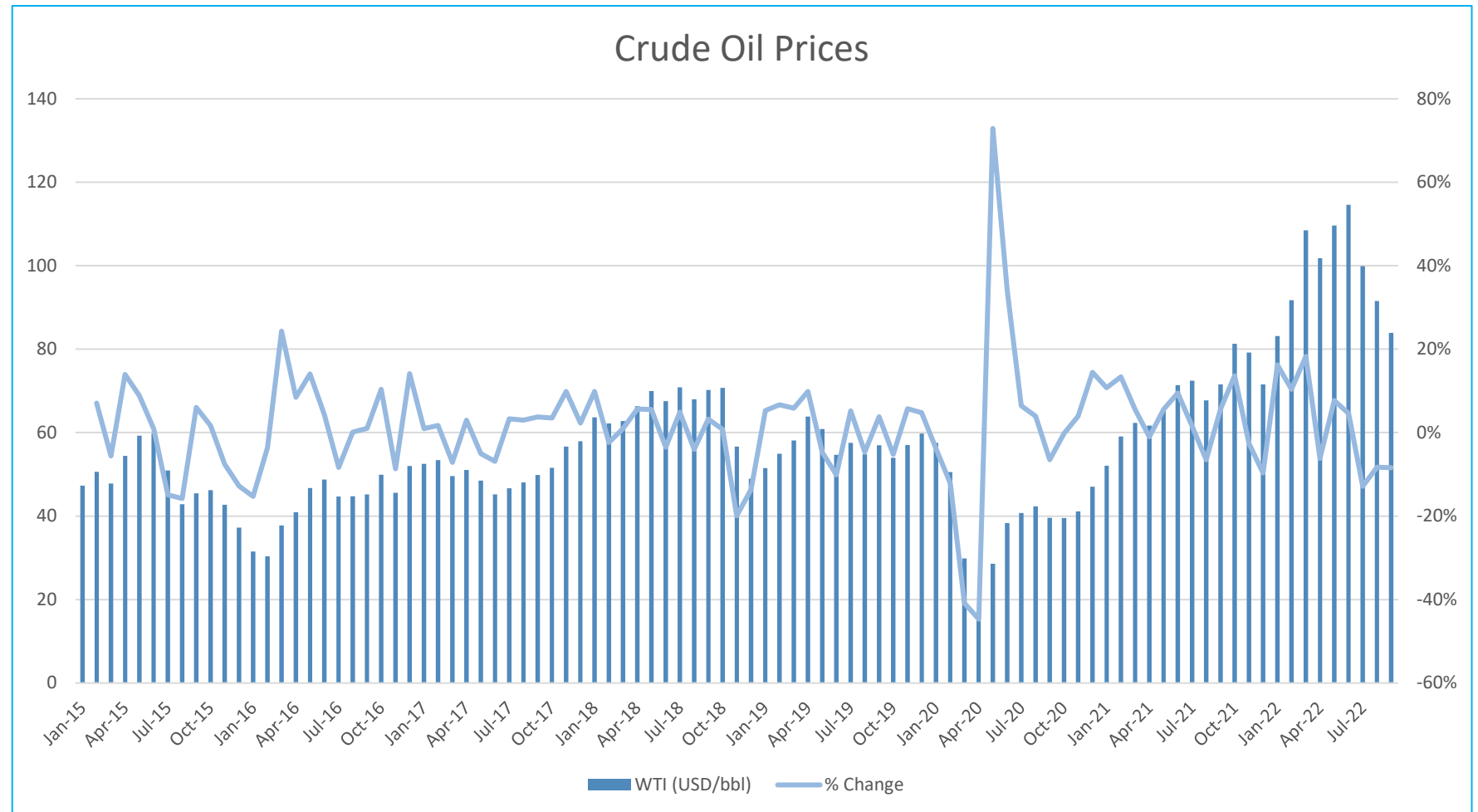
## Natural Rubber Price

- 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 historic volatility during CY21 due to the ongoing tension in Europe between Russia and Ukraine.
- Moreover, prices have exhibited an overall increasing trend since the start of CY21.
- Price of WTI crude oil currently stands at USD~84/bbl. Looking forward, prices are expected to continue to increase due to supply constraints with OPEC+ announcing to implement only modest boost in production.

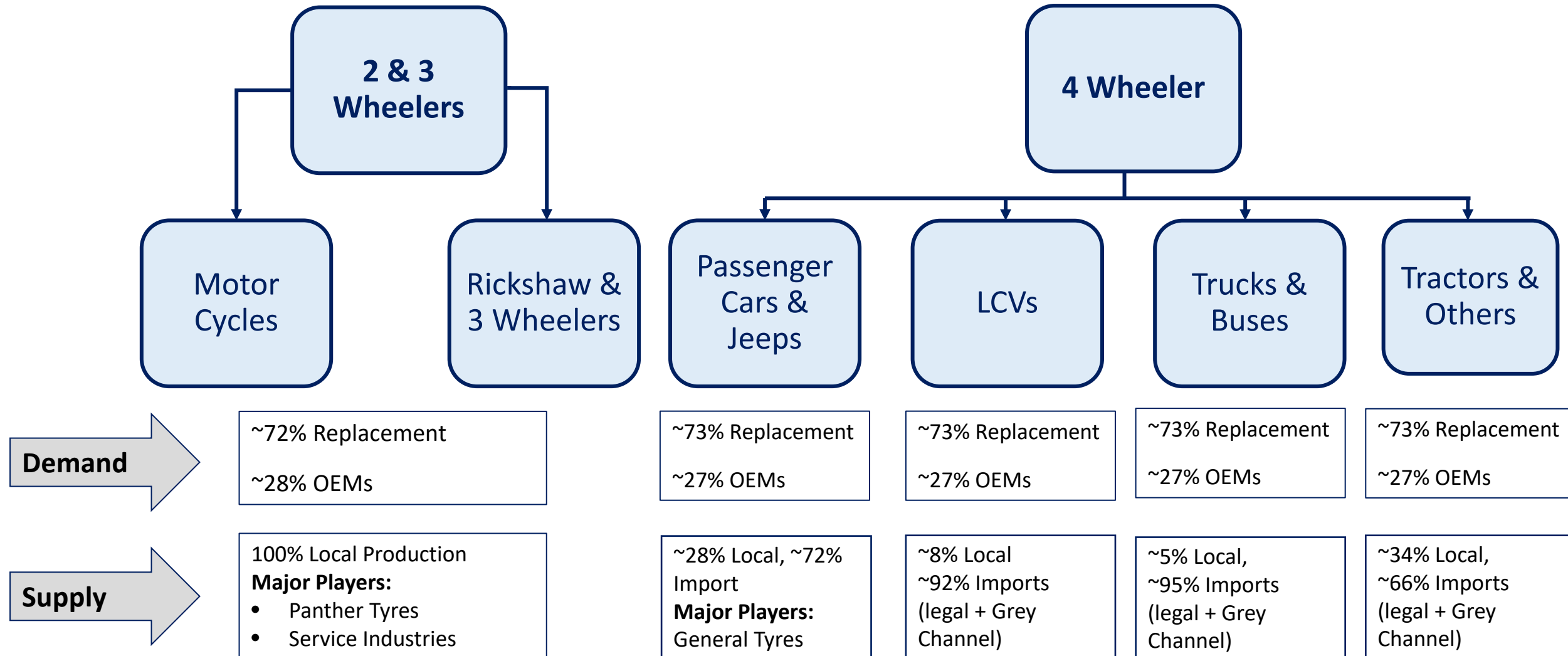


## Overview

- Pakistan's tyre sector had an approximate market size of PKR~70bln in FY22 (excluding imports), growing ~10% from PKR~64bln in FY21. The growth can be attributed to various infrastructural projects, in addition vehicle manufacturing has increased in Pakistan. This has been incrementing the demand for tyres, thereby augmenting the growth of the market.
- In addition, growing preference for nitrogen gas in car tyres to produce sustainable and durable tyres is providing impetus to Pakistan 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, General Tyres is the only local producer of tyres for passenger cars, although it amounts to a moderate market share as there is significant presence of imports.

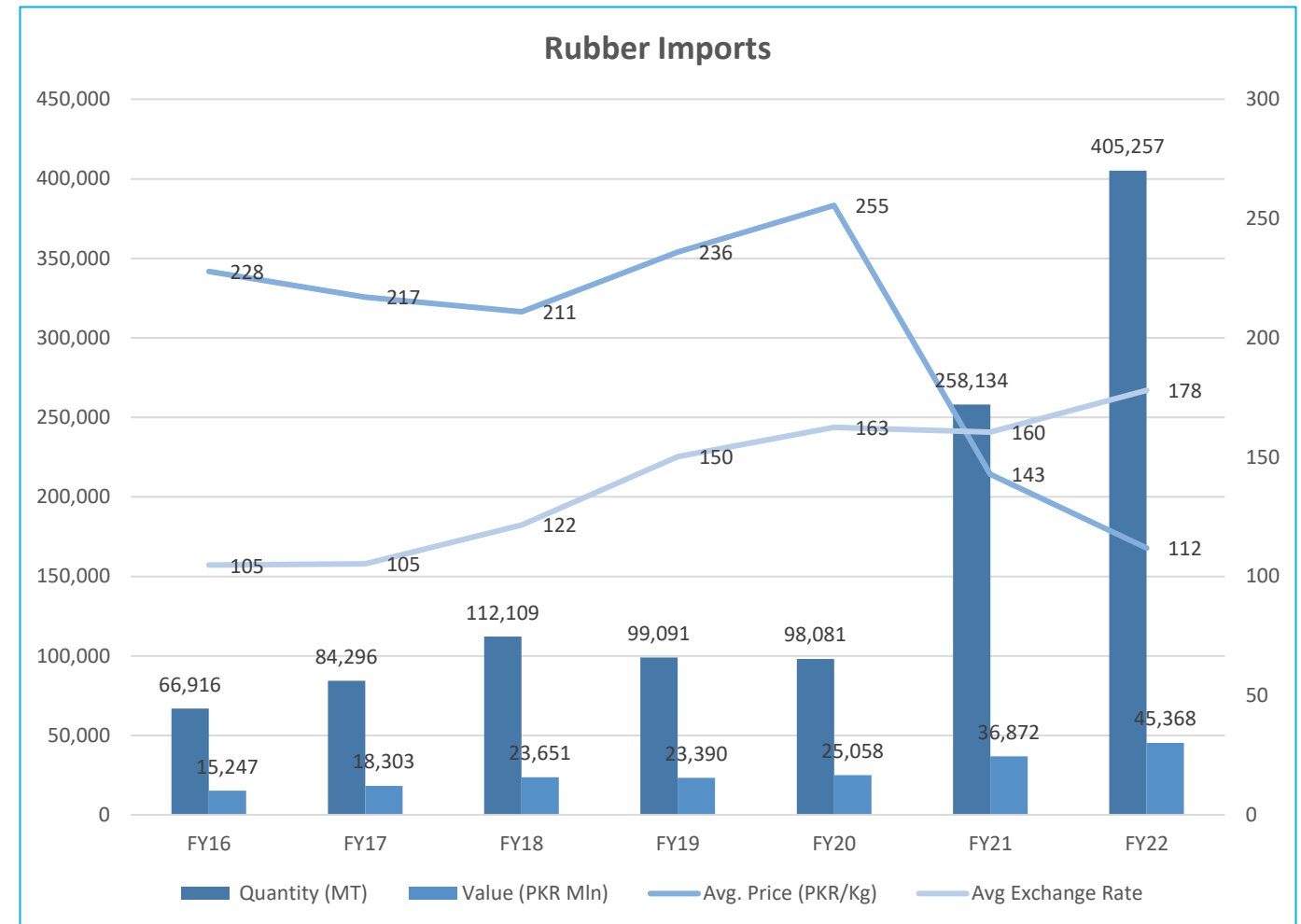
Sector Overview	FY20	FY21	FY22
Market Size [Estimate] (PKR bln)	45	64	70
Import Value (PKR bln)	17	60	41
Import Volume (mln Units)	2.5	7.1	5.5
Industry Association	Pakistan Association of Automotive Parts & Accessories Manufacturers		

## Industry Structure



## 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 more muted, although still significant at ~47%, rising from PKR~25bIn in FY20 to PKR~37bIn in FY21.
- The increased demand from the automobile industry likely drove up the raw material imports, as automobile production and sales both picked up during FY21, strengthened further by low interest rate environment which increased demand for auto-financing.
- 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.



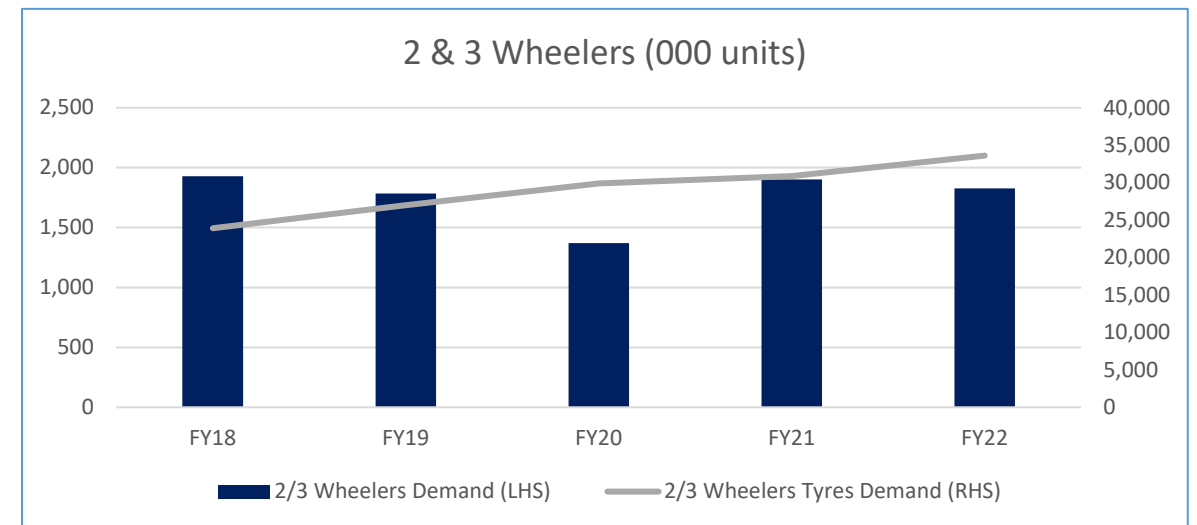
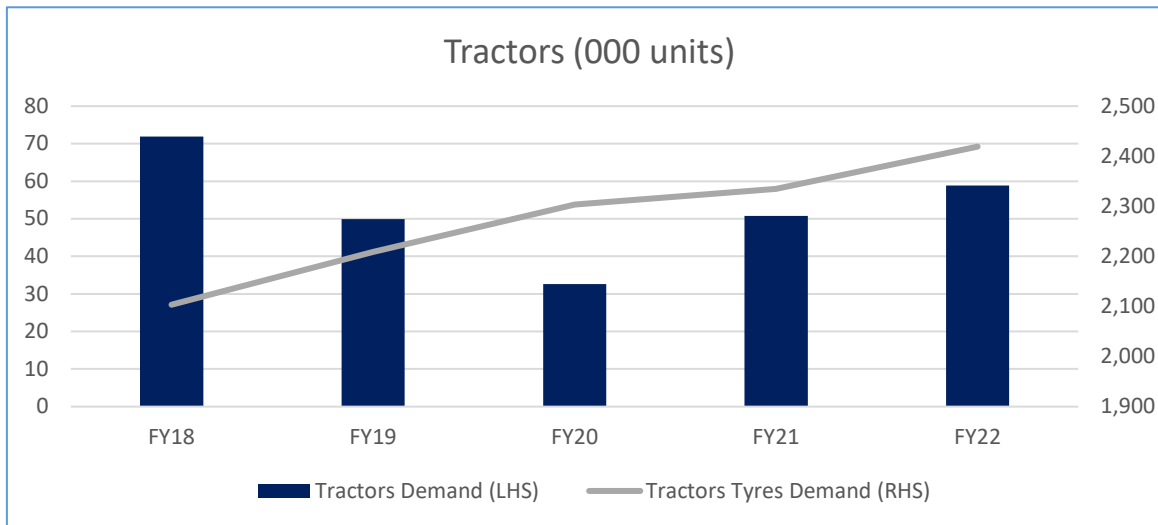
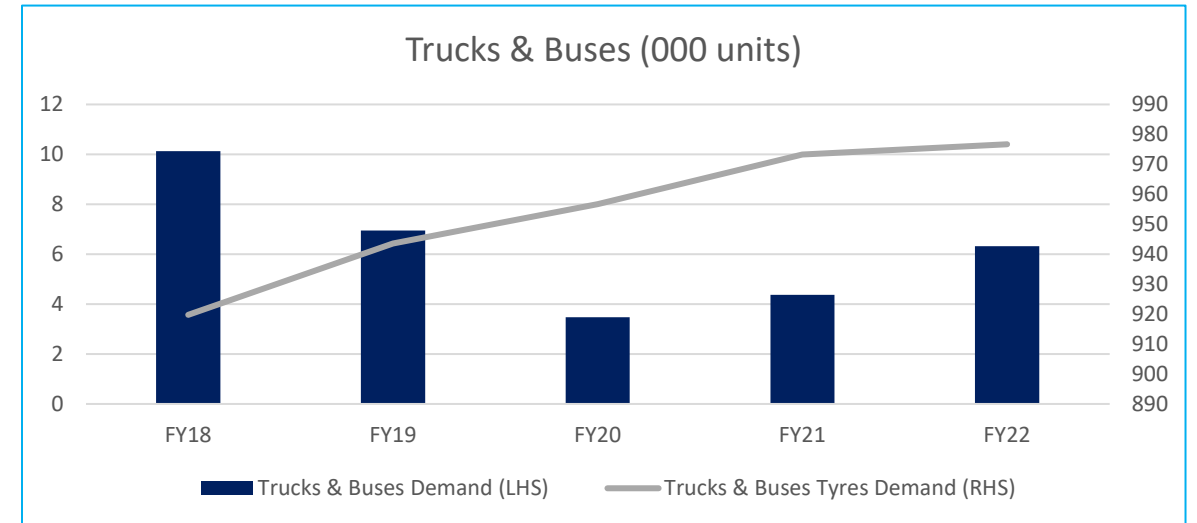
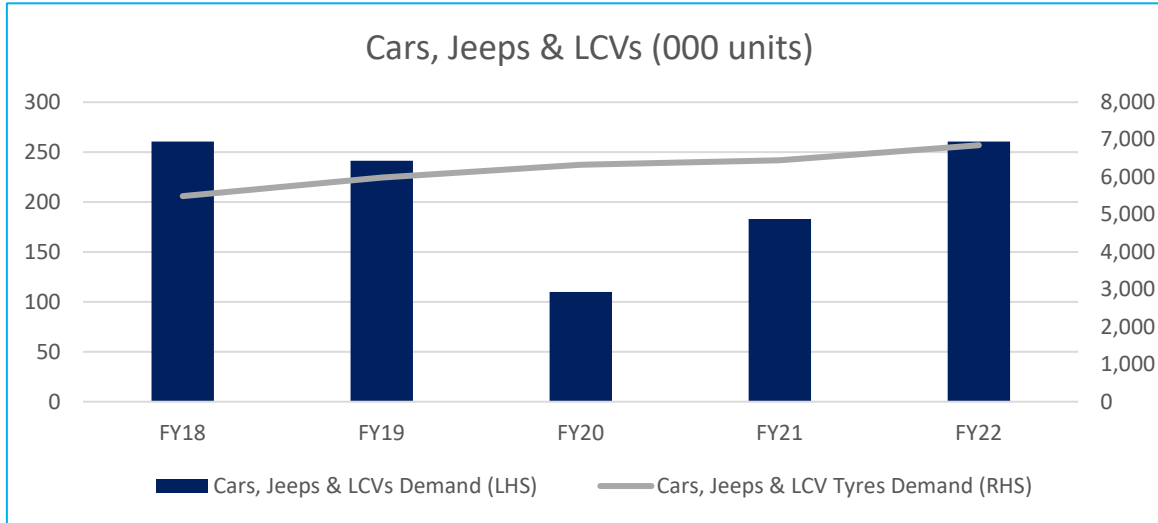
## Demand

CY21	2 & 3 Wheelers	Passenger Cars & Jeeps	LCVs	Trucks & Buses	Tractors & Others	TOTAL
<b>Registered Motor Vehicles (Units)</b>	25,755,509	4,185,698	171,638	552,314	1,890,051	32,383,572
<b>Estimated Tyres (Units)</b>	52,488,799	16,742,,792	686,552	2,209,256	7,560,204	79,001,051
<b>Market Categories</b>						
Replacement Market	72%	73%	94%	89%	85%	
OEM	28%	27%	6%	11%	15%	
Replacement Cycle   Years <i>*Assumption</i>	2	5	5	5	5	
<b>Tyres Demand</b>						
Replacement Market	18,895,968	2,444,448	1202,983	403,521	1,285,235	23,029,171
OEMs	14,696,864	4,520,554	171,638	191,652	1,134,031	20,543,101
<b>Total Demand (Units)</b>	<b>33,592,831</b>	<b>6,965,001</b>	<b>274,621</b>	<b>595,173</b>	<b>2,419,265</b>	<b>43,572,271</b>
<b>Total Demand – CY20 (Units)</b>	<b>23,646,752</b>	<b>3,772,835</b>	<b>171,231</b>	<b>549,801</b>	<b>9,119,875</b>	<b>37,260,494</b>

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:

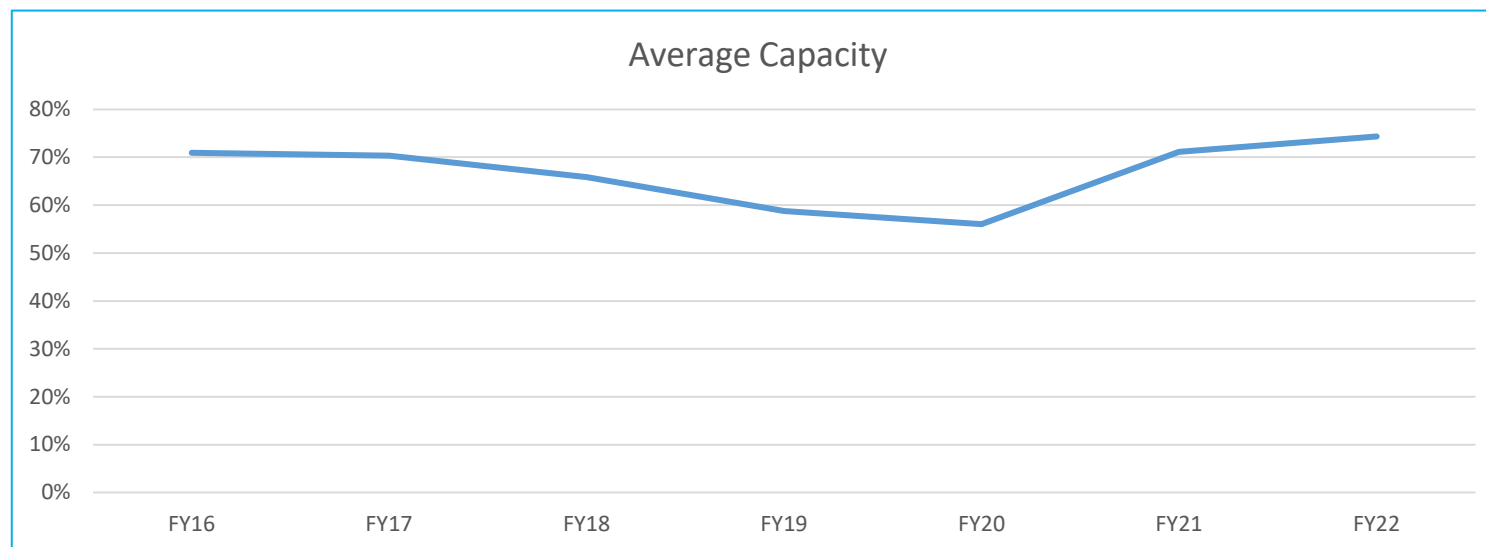
CY20	2 & 3 Wheelers	Passenger Cars & Jeeps	LCVs	Trucks & Buses	Tractors & Others	Total
Local Sales	100%	28%	8%	5%	34%	35%
Imports (Legal Channels)	0%	24%	19%	13%	9%	13%
Grey Channel	0%	48%	73%	82%	57%	52%
<b>UNITS</b>						
Local Sales	33,592,831	1,870,230	13,621	48,833	120,963	17,535,368
Imports (Legal Channels)	-	1,603,055	32,350	126,966	314,504	4,884,853
Grey Channel	-	3,206,110	124,293	800,865	1,983,798	21,418,200
<b>Total Units</b>	<b>33,592,831</b>	<b>6,679,396</b>	<b>170,265</b>	<b>976,664</b>	<b>2,419,265</b>	<b>43,838,422</b>

- 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
<b>Total Capacity</b>	<b>28,577,822</b>	<b>30,118,630</b>	<b>31,161,913</b>	<b>31,476,280</b>	<b>32,815,568</b>

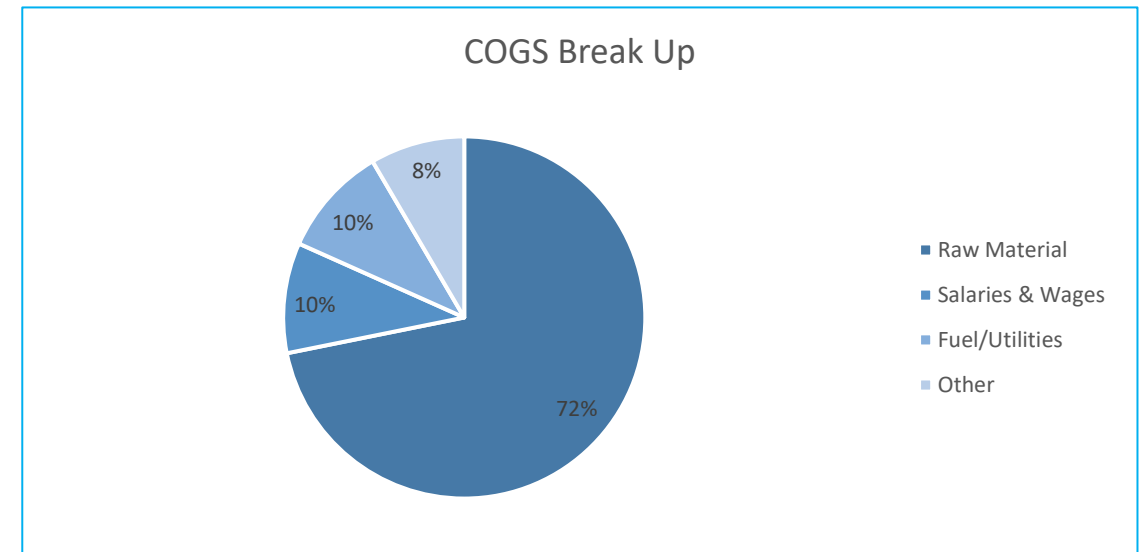
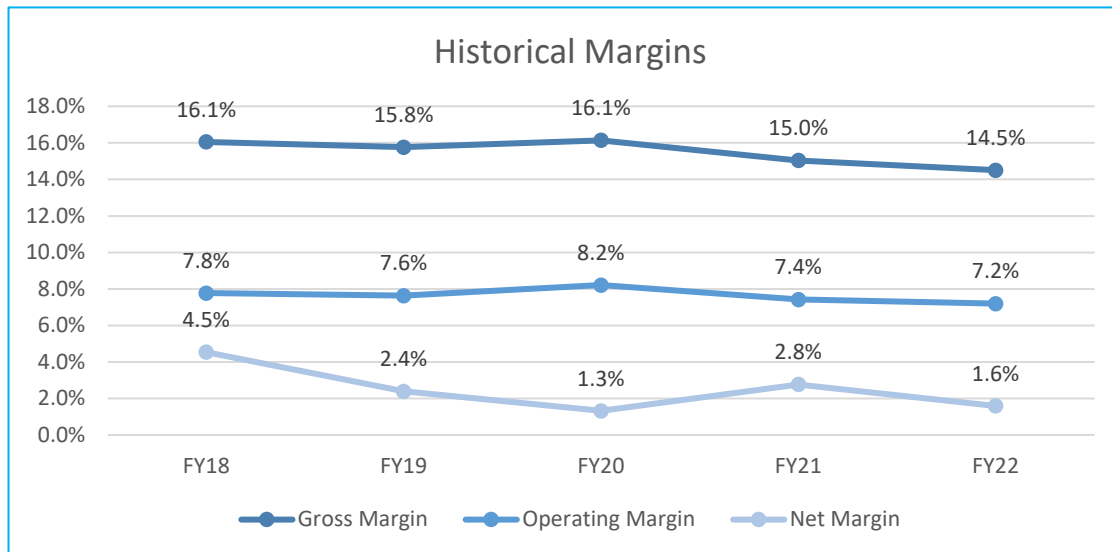


## Business Risk

- **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

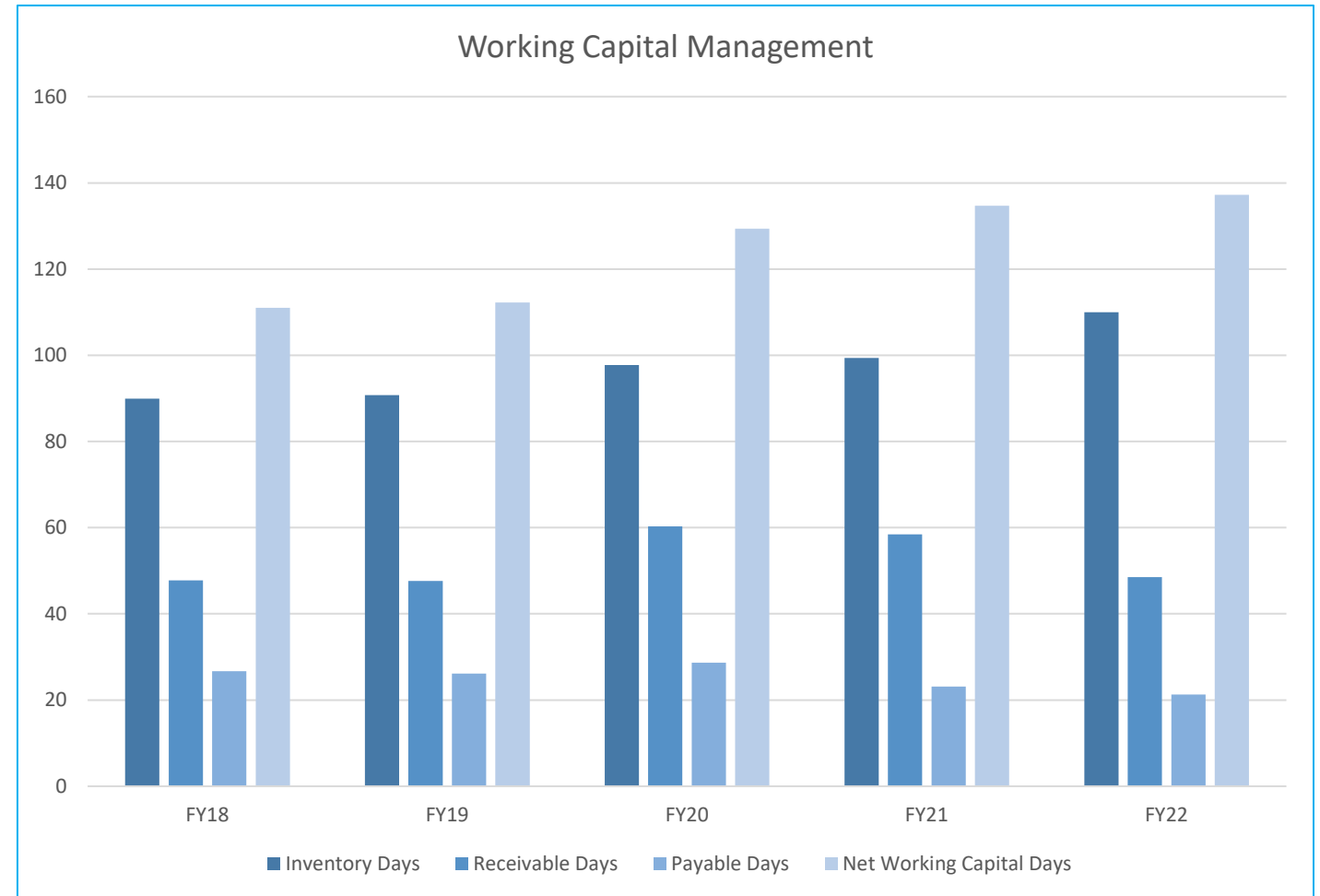
- The tyre sector's average margins have remained relatively stable in recent years. The five year (FY18-FY22) average for gross margin stood at ~15% while the average net margins for the same period clocked in around ~3%.
- The presence of imported tyres as well as price elasticity, particularly in 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

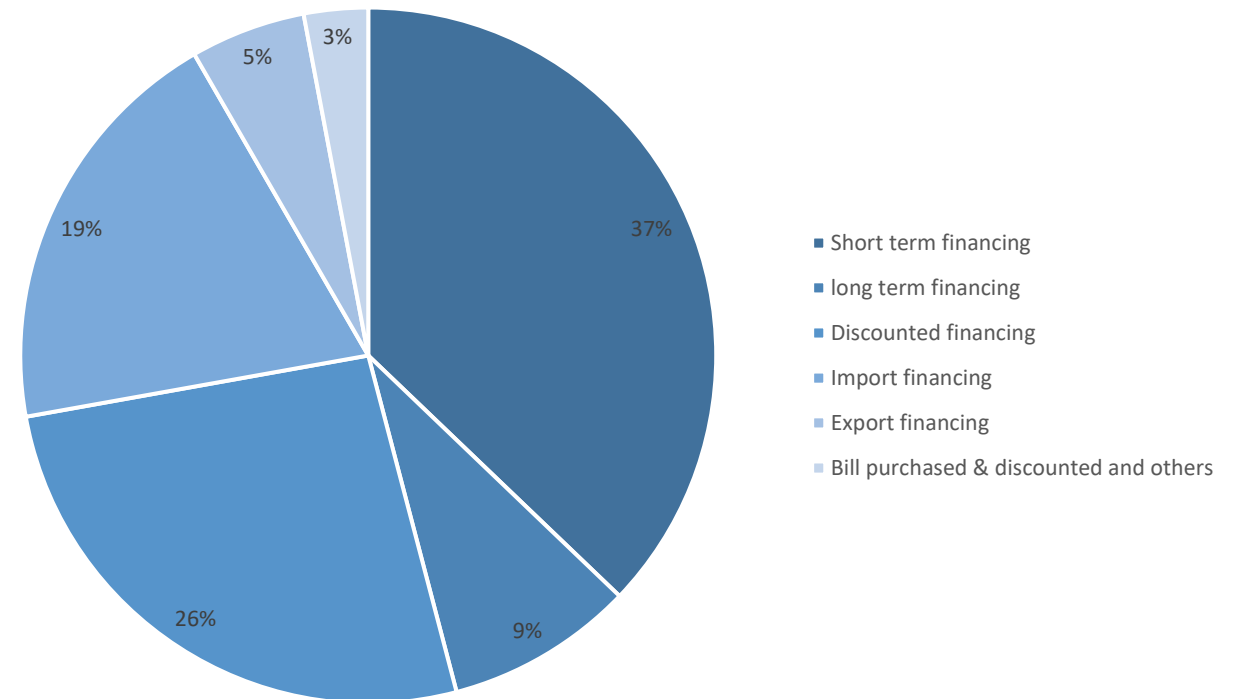
- The tyre sector's working capital is largely a function of inventory and trade receivables and is financed through a combination of short term borrowing and internal capital.
- The tyre sector's average net working capital cycle in the last five years has averaged around 131 days. The rising trend 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)

Borrowing Mix (Aug'22)



## 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.

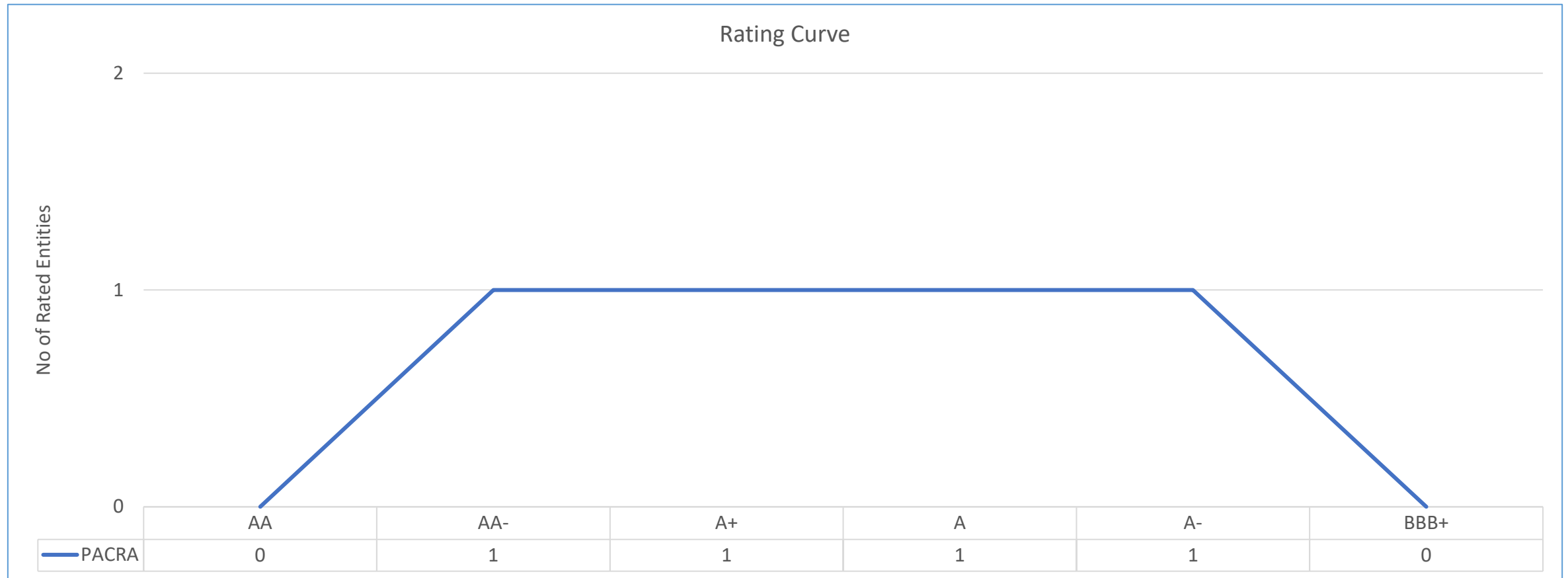


## Custom Duty Structure

PCT Code	Description	Custom Duty		Additional Custom Duty		Regulatory Duty		Total	
		FY23	FY22	FY23	FY22	FY23	FY22	FY23	FY22
<b>Raw Materials</b>									
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%
<b>Finished Goods</b>									
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 dependance 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: STABLE

- The domestic economy has started to gradually recover from the impact of the COVID-19 pandemic which slowed down industrial activities and brought various businesses to a halt. Despite steady increase in the rate of vaccinations, uncertainty regarding the pandemic remains which may hinder economic activity.
- The economic recovery is exhibited by the GDP growth of ~3.9% during FY21 (based on provisional figures). Among the contributors of GDP growth is industrial activity which has picked up in various sectors with the Large Scale Manufacturing Industries output increasing ~15% YoY during FY21.
- During FY21, the production and sales of automobiles recovered significantly, exhibiting an increase of ~41% as compared to the previous year which was negatively impacted by the pandemic. This in turn also boosted the demand for tyres particularly in the OEM segment.
- Meanwhile, local tyre producers continue to face significant competition in the 4 wheeler segment from imports, through both legal and grey channels. During FY21, imports of tyres and tubes stood at PKR~60bln as compared to PKR~17bln in FY20. The increase came on the back of higher automobile and tyre demand as well as restriction of grey channels as a result of government measures for stricter enforcement and border management in order to curb smuggling of goods.
- Meanwhile, the low interest rate environment continues although SBP has recently slightly increased the Monetary Policy Rate by 25 basis points to 7.25%. Any further increases are expected to be gradual. However, SBP has also introduced measures to restrict demand for auto financing which includes reduction of maximum finance period from 7 to 5 years and increase in minimum down payment from 15% to 30%.
- In addition, there has been significant currency depreciation since the start of current fiscal year with exchange rate rising ~8% in the period. This will increase the costs of both imported raw materials as well as finished goods, going forward.

- 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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