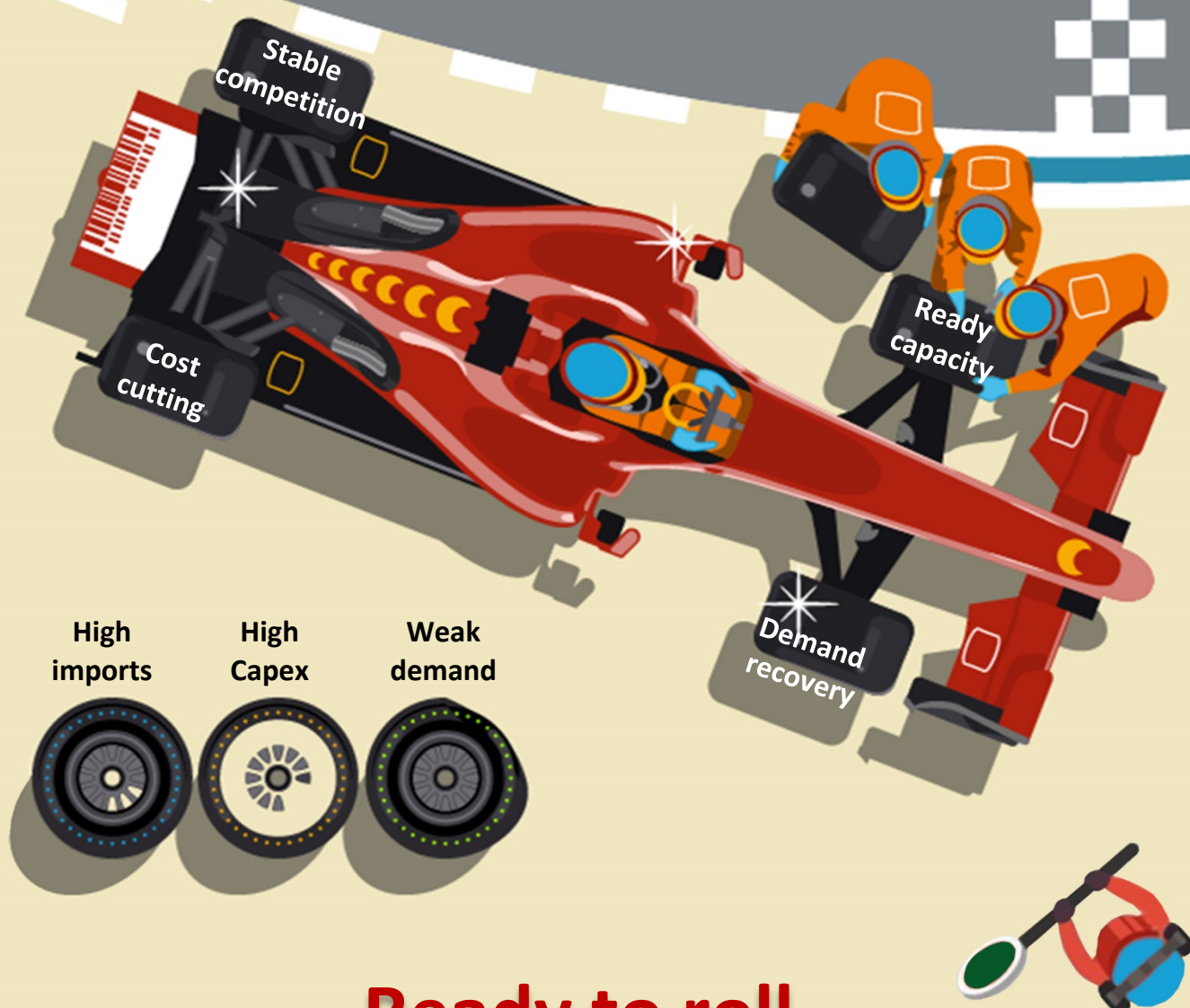


Automobiles: Tyres



Ready to roll

Jinesh Gandhi - Research analyst (Jinesh@MotilalOswal.com)

Research analyst - Vipul Agrawal, CFA - (Vipul.Agrawal@MotilalOswal.com); Aniket Desai (Aniket.Desai@MotilalOswal.com)

Investors are advised to refer through important disclosures made at the last page of the Research Report.

Motilal Oswal research is available on www.motilaloswal.com/Institutional-Equities, Bloomberg, Thomson Reuters, Factset and S&P Capital.

Content: Ready to roll

01

Page #3-6
Summary/Story in charts

02

Page #9
Volume recovery across segments

03

Page #15
TII framework to analyze segments

04

Page #16
2W Tyres: Least competitive,
most profitable

05

Page #18
PCR: Highest growth potential,
pricing power, and capex

06

Page #20
T&B: Good growth ahead in highly
competitive segment

07

Page #24
Framework to evaluate Tyre
companies

08

Page #30
Valuations

09

Page #31
Key risks

Apollo Tyres

Improved competitive positioning
in both India and EU

01

• Page #33

Balkrishna Industries

Aspiring for a bigger share of the global pie

02

• Page #51

Ceat

Stepping up its game

03

• Page #65

MRF

Competition catching up

04

• Page #75

Automobiles: Tyres



Motilal Oswal values your support in the Asiamoney Brokers Poll 2021 for India Research, Sales, Corporate Access and Trading team. We [request your ballot](#).



Companies covered

Apollo Tyres

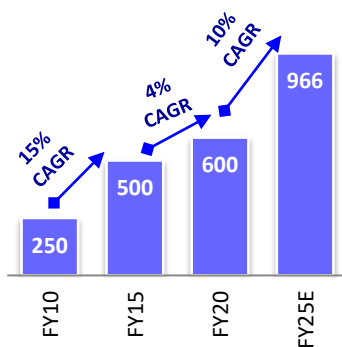
Balkrishna Industries

Ceat

MRF

Expect Tyre industry to grow at 10% CAGR over FY20-25E

■ India Tyre Industry (INR b)



Ready to roll

Return of growth, supported by timely capacity addition | APTY is our top pick

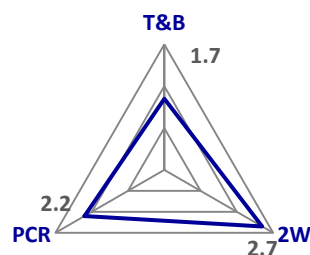
- The Indian Tyre industry is expected to recover from five years of weakness and be on a linear growth path (~12% CAGR over FY21-25E), supported by timely capacity expansion across companies. Improving demand, stable competitive intensity, and peak capex (capex of INR116b over FY22-24E v/s INR135.5b over FY19-21) augurs well for profitability.
- We estimate 2W/PCR/T&B tyre volumes to clock 8%/11%/13% CAGR over FY21-25E. This coupled with a reasonable pricing environment and operating leverage, will enable a recovery in profitability and capital efficiency.
- Against this favorable backdrop, we have built a Tyre Industry Investment (TII) framework to evaluate the attractiveness of various tyre segments as well as companies. Based on our analysis, 2Ws appear to be the best placed segment, followed by PCR. APTY tops our TII framework as it offers a good blend of strong earnings growth and cheap valuations.
- We initiate coverage on three stocks – APTY (Buy), BIL (Neutral), and MRF (Neutral). APTY is our top pick due to benefits from: a) ramp-up of new capacities, b) reduction in capex intensity, c) EU operation turnaround, and d) debt reduction. This translates in the best earnings growth for our Tyre sector universe, which is still available at very attractive valuations.

Recovery in volumes, stable competitive environment to support margins

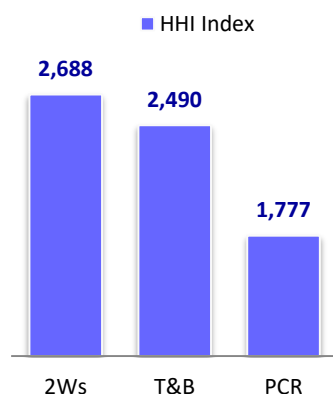
- The Indian Tyre industry is expected to recover from five years of weakness and be on a linear growth path (~12% CAGR over FY21-25E), supported by timely capacity expansion across companies. Sustained recovery in demand from both replacement and OEM segment, coupled with increase in exports would drive 8%/11%/13% volume CAGR over FY21-25E for 2W/PCR/T&B tyres.
- The RM basket witnessed a sharp price decrease in 1HFY21 (~620bp over FY20 average), before the trend reversal from 3QFY21 (RM basket per kg increased by ~10pp in 2H over 1HFY21; the same in 1QFY22 is ~18% higher than its FY21 average). Since Dec'20, Tyre companies have taken a price hike of ~8% till Jun'21. We estimate gross margin for Tyre companies to decline by 80-110bp over FY21-23E.
- This coupled with operating leverage, will enable a recovery in profitability (after impact of higher RM cost in FY22E) and capital efficiency (~190bp over FY21E).
- Capex intensity has peaked out in our view, with cumulative capex for APTY, CEAT and MRF to reduce to ~INR116b over FY22-24E (v/s INR135.5b over FY19-21). FY21 utilization across segments has been 63%-72% as large part of capacities are in ramp-up mode after start of operations over last 12-18 months.

TII for evaluating segments

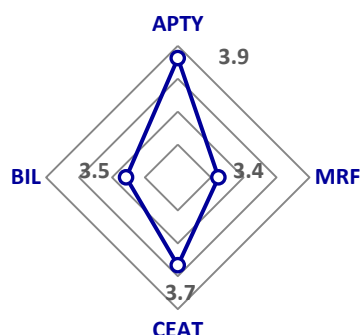
Blended score [scale of three]



The HHI Index suggests high consolidation in 2Ws and TBR



TII framework for companies



Consumer segments of 2W/PCR most preferable

Operating dynamics are different in each segment (T&B, PCR, and 2W/3W) of the Tyre industry. It depends on factors such as end-user mix/preferences, market share concentration, and demand-supply dynamics. For a relative analysis, we have built a framework with growth potential, competitive intensity, incremental capacity, pricing power, customer stickiness, and profitability as key pillars.

- **2W segment ranks first**, scoring high in terms of profitability/capital efficiency, customer stickiness, and competitive intensity. Though it enjoys the highest asset turnover and capital efficiency, it has the greatest capacity addition. 2Ws are at the forefront in terms of the Herfindahl-Hirschman index (HHI) score, indicating this segment enjoys high concentration, with the top three players accounting for 85-90% of the market.
- **PCR segment ranks second**. While the segment has a good growth potential (FY19-23E) and pricing power, it is witnessing a good amount of capacity addition in a fragmented segment (the lowest rank in the HHI Index).
- **T&B segment ranks the lowest**. While the T&B segment is likely to witness the highest growth and the lowest capacity addition, the inherent commercial functionality of the sector and the relevance of 'total cost of ownership' in purchasing decisions restrict customer stickiness, pricing power, and profitability. Also, the risk of imports is the highest in this segment.

APTY is our top pick among mainstream players, CEAT attractive too

We evaluate Tyre companies based on their brand ranking, revenue mix, pricing power, headroom for growth, cost competitiveness, and financial strength. Our framework ranks companies on their relative attractiveness on the aforementioned operating parameters. We assign a 75% weightage to these operating parameters (equal weight for each parameter) and 25% weightage to the valuation score to identify potential winners.

- **APTY our top pick among mainstream players; initiate coverage with a Buy rating**: APTY is geared for the next leg of growth, with sufficient capacity to cater to domestic/European demand. It would benefit from: a) ramp-up of new capacities, b) reduction in capex intensity, c) EU operation turnaround, and d) debt reduction. As compared to its peers, APTY offers the best blend of earnings growth and cheap valuations. The stock trades at 11.9x/9.7x FY22E/FY23E consolidated EPS. We initiate coverage on the stock with a **Buy** rating and a TP of INR300 (12x Sep-23 consolidated EPS v/s 16x/12x five/10 year average P/E).
- **BIL – superior business model fully captured in premium valuations; initiate coverage with a Neutral rating**: BIL ranks the highest among domestic peers in terms of cost competitiveness and financial strength. We expect BIL's outperformance to the industry to continue, with the focus on strengthening its competitive positioning. With a current market share of ~6% in the USD15b global Specialty Tyre segment, BIL aspires to increase this to 10% over the next 4-5 years. We estimate 20%/22%/22% revenue/EBITDA/PAT growth over FY21-23E. Current valuations fairly reflect for its industry leading margin, FCF, and

capital efficiencies, the current valuation premium is excessive. We value BIL at 25x Sep-23 EPS (at a 25%/80% premium to its 5/10 year average P/E of 20x/14x) with a TP of INR2,425. Initiate coverage with a **Neutral** rating.

- **CEAT – Highest potential for growth, maintain Buy:** CEAT's steadfast focus on the B2C segment continues, with a revenue target of 60-65% from the 2W, PCR, and OHT segments. It is backing its market share aspirations in 2W, PCR, and TBR with significant capacity additions. We expect revenue/EBITDA/PAT CAGR of ~16%/15%/7% over FY21-23E. Valuations at 10.9x FY23E consolidated EPS doesn't fully capture ramp-up in new capacities in an improving demand environment, leading to a recovery in margin. We maintain our **Buy** rating with a TP of ~INR1,850 (~13x Sep-23 consolidated EPS).
- **MRF – Dilution in competitive positioning not reflected in premium valuations; initiate coverage with a Neutral rating:** MRF has managed to create a strong brand in major segments of T&B, 2W, and PCR over the years. However, aggressive competition has weakened its competitive positioning, which is also reflected in its dilution of pricing power in the PCR and TBR segments as well as in its superior return ratios. The current valuations at 24.7x/20.7x FY22E/FY23E EPS fairly capture the changing competitive dynamics for MRF. We initiate coverage on MRF with a **Neutral** rating and TP of INR84,000 (20x Sep-23 EPS).

Exhibit 1: Comparative valuation table

	Price (INR)	M-cap (INR b)	Upside (%)	Rating	CAGR (FY21-23E)			P/E		EV/EBITDA		RoE (%)		RoCE (%)	
					Sales	EBITDA	EPS	FY22E	FY23E	FY22E	FY23E	FY22E	FY23E	FY22E	FY23E
APTY	225	143	33	Buy	13.5	16.1	42.2	11.9	9.7	5.4	4.4	9.1	10.4	8.3	9.3
BIL	2,349	454	3	Neutral	20.1	22.0	21.5	31.5	26.1	19.9	16.5	22.1	22.6	19.1	19.9
CEAT	1,427	58	30	Buy	15.7	14.7	6.9	16.4	10.9	7.7	5.7	10.1	13.7	9.0	11.3
MRF	82,067	348	2	Neutral	11.7	10.3	14.8	24.7	20.7	9.8	8.3	10.0	10.8	10.0	11.0

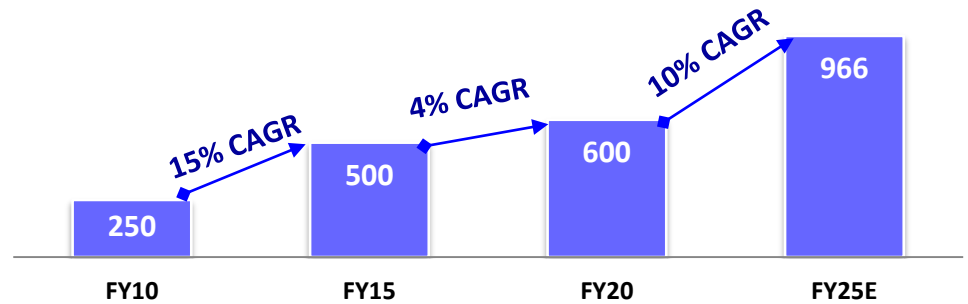
Source: Company, MOFSL



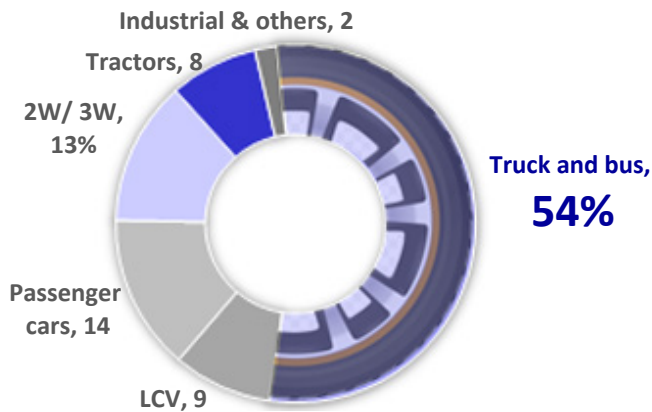
Tyre industry overview

India's Tyre sector grew
9% CAGR over
the last 10 years

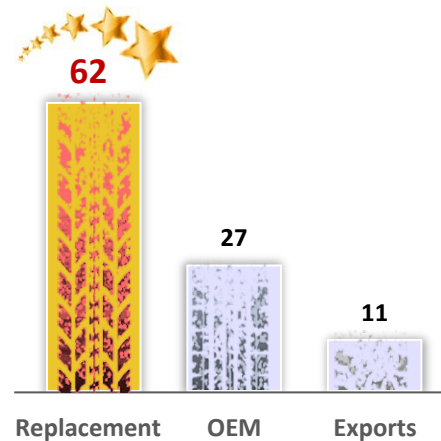
India Tyre Industry (INR b)



T&B is the largest segment, with ~54% revenue share (FY20)

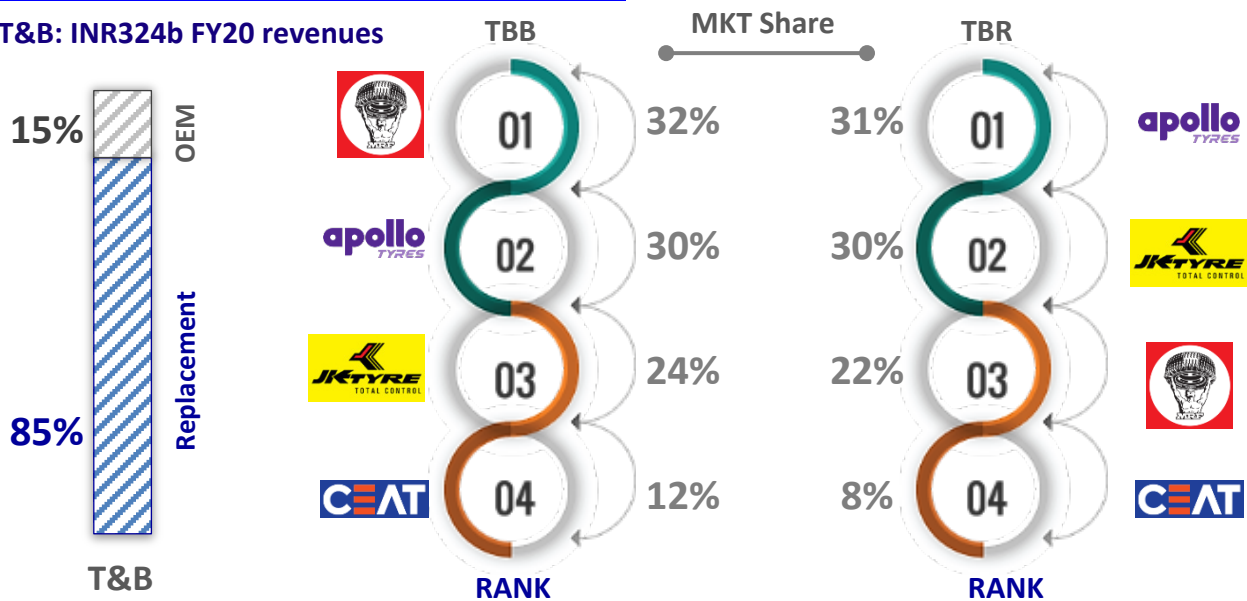


Replacement remains the dominant segment of the industry (FY20, %)



Key segments of the Indian tyre industry

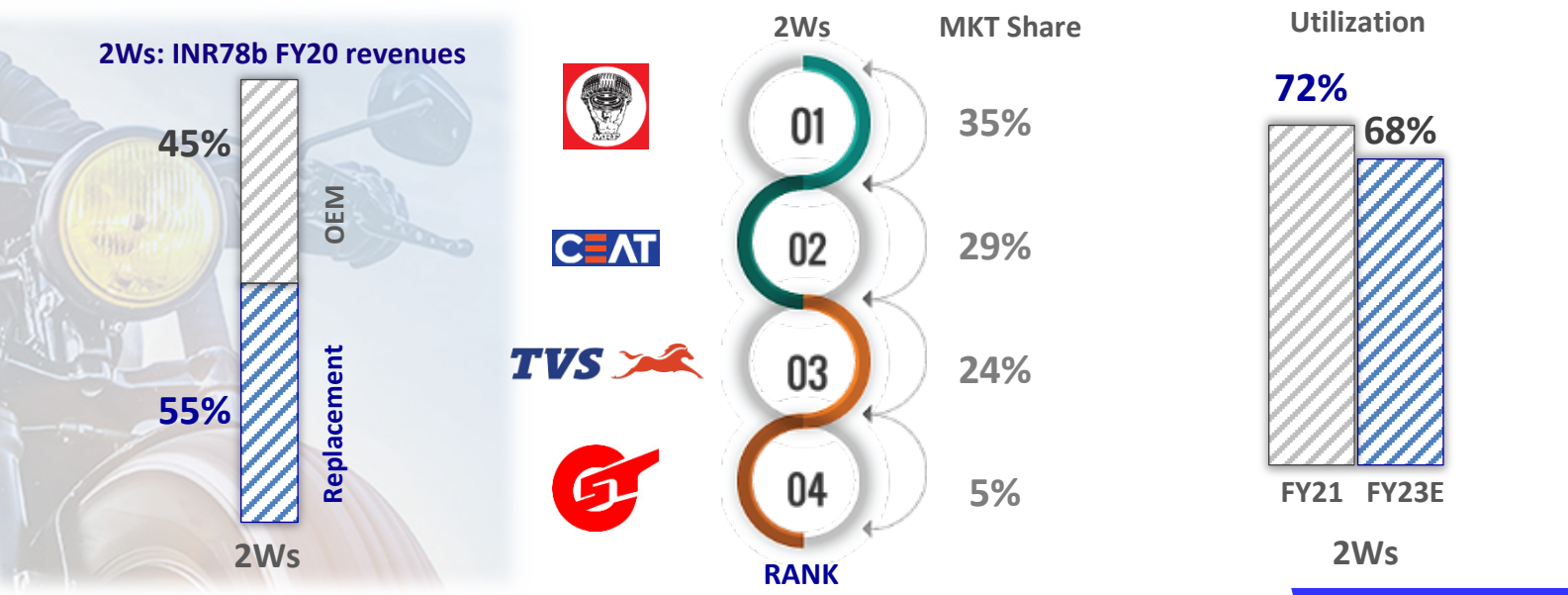
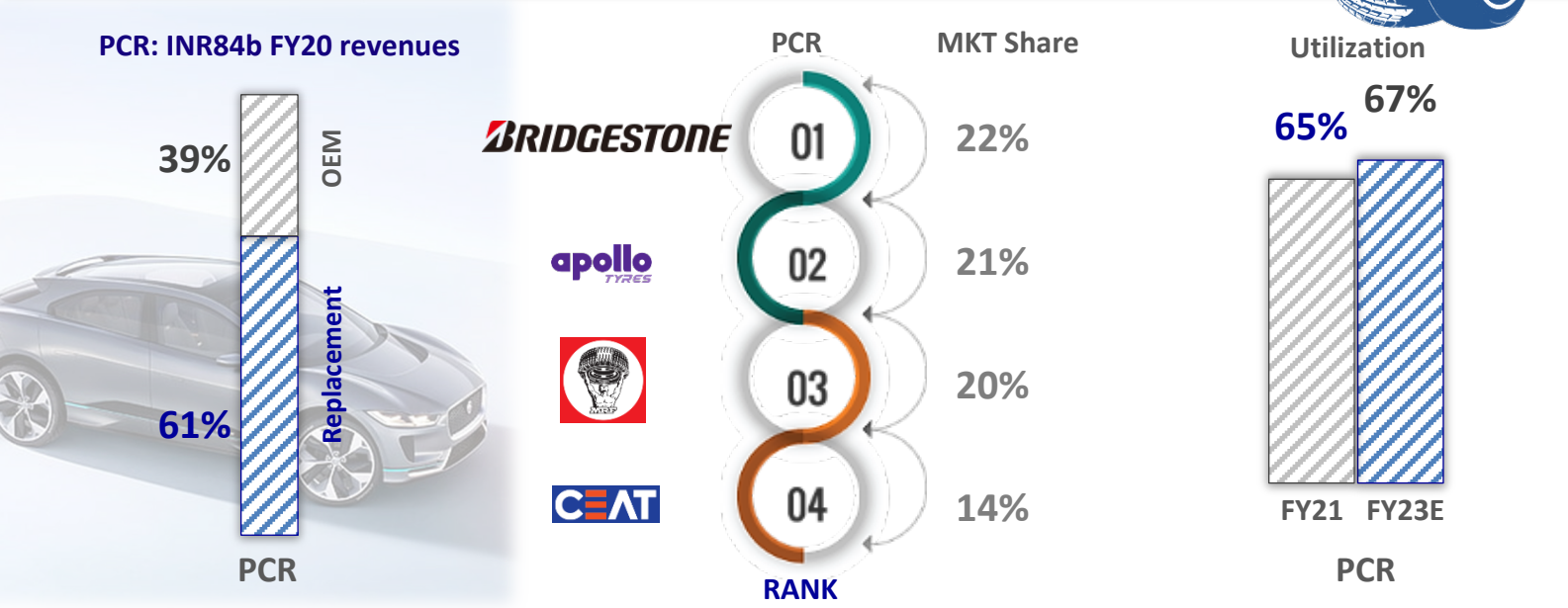
T&B: INR324b FY20 revenues



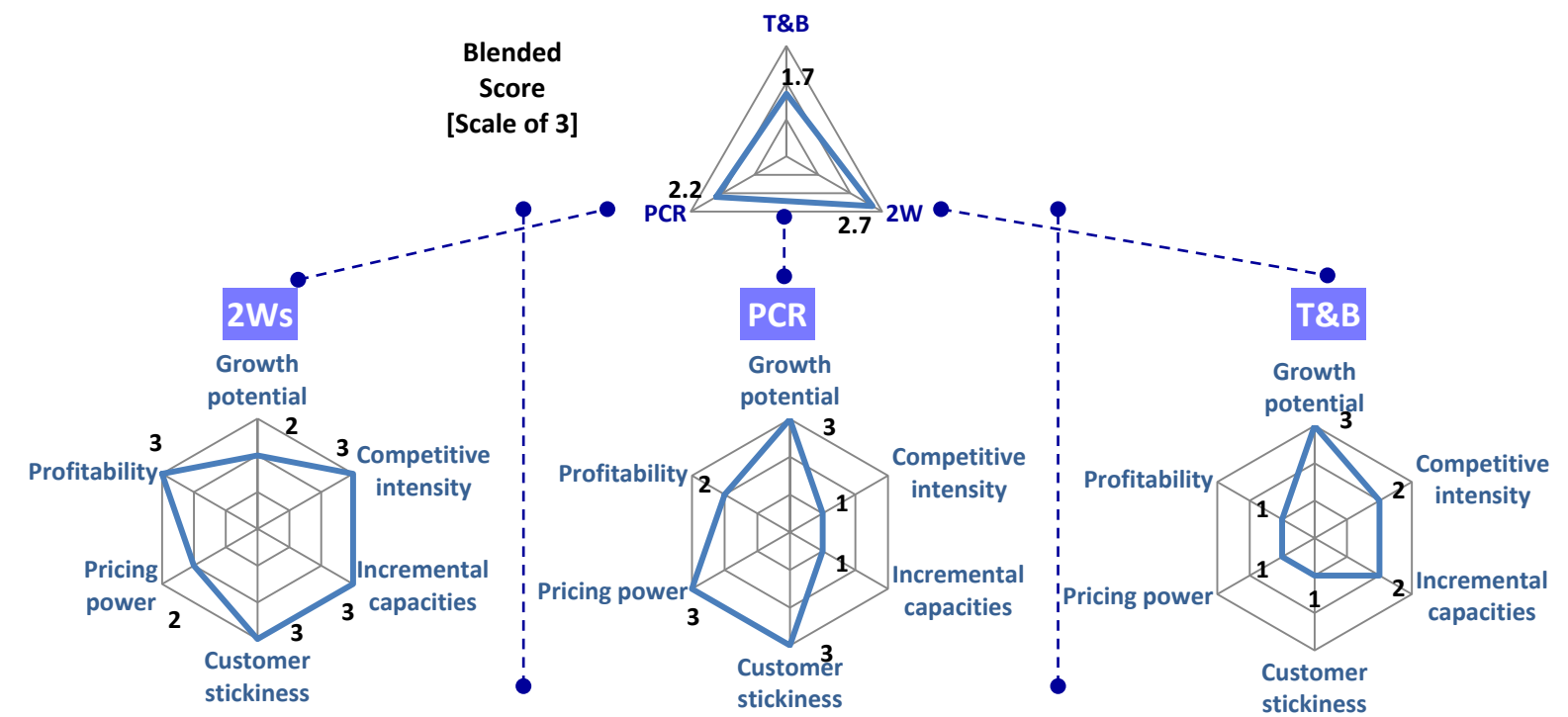
Truck & Bus (T&B)



Key thesis in charts: Ready to roll



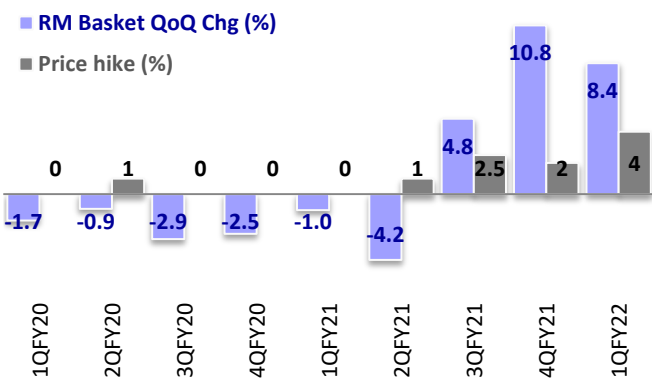
TII framework for evaluating segments of tyre industry



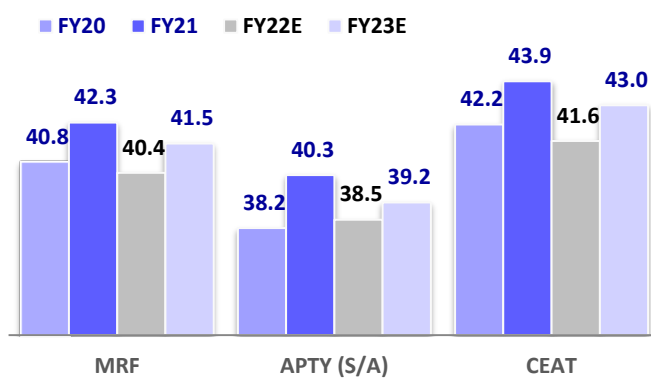


Key thesis in charts: Ready to roll

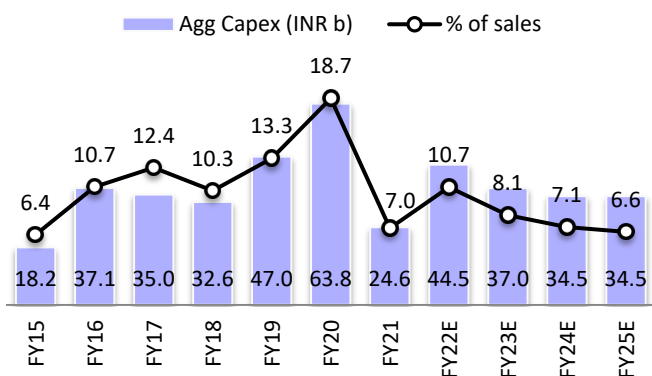
Price increases in replacement has been gradual



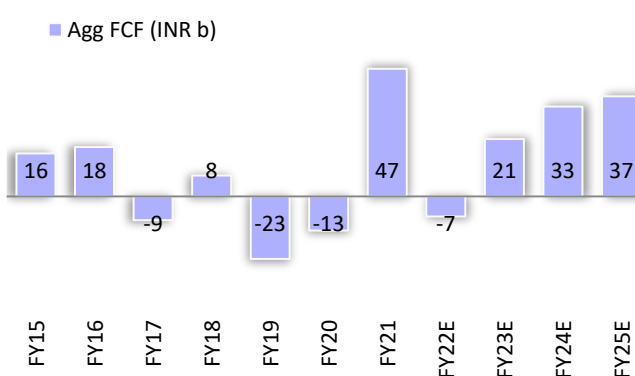
Gross margins to decline over FY21 levels



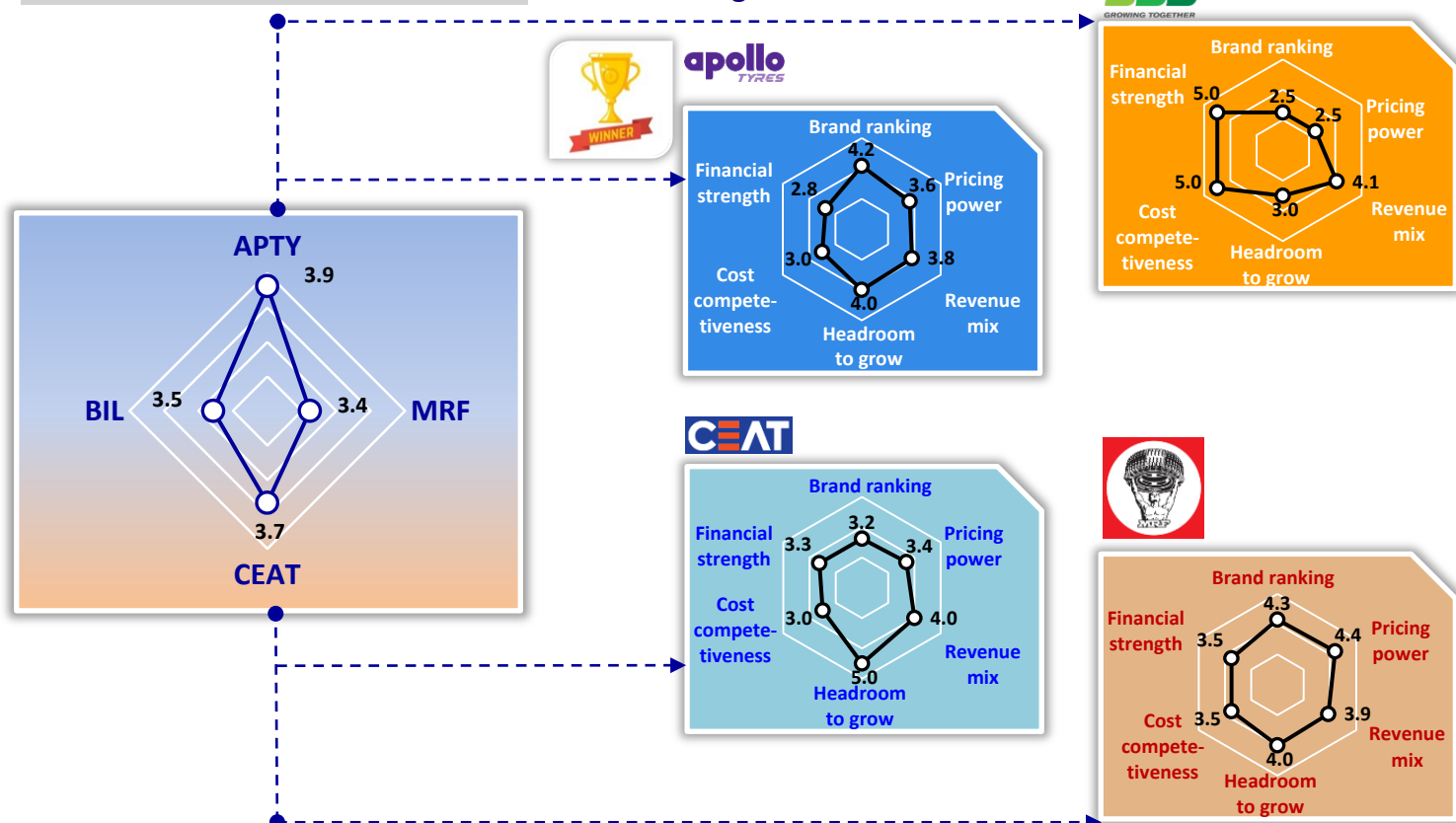
Capex intensity to moderate...



...driving improvement in FCF generation



TII FRAMEWORK FOR THE COMPANIES: APTY Ranks Highest



Volume recovery across segments...

...supported by timely capacity additions

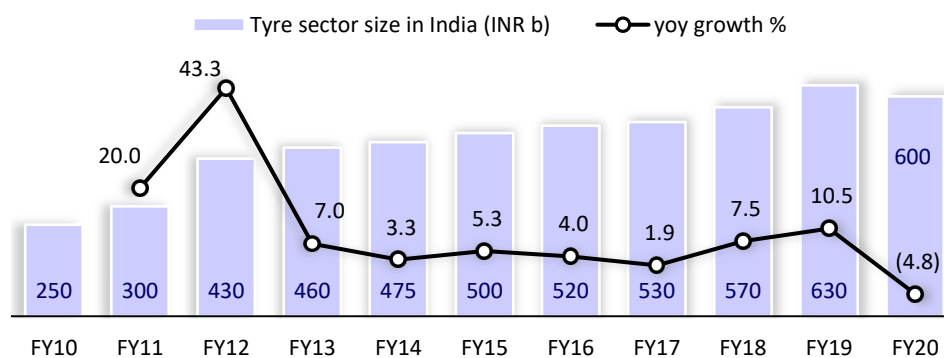
- The Indian Tyre industry is expected to recover from five years of weakness and be on a linear growth path (~12% CAGR over FY21-25E), supported by timely capacity expansion across companies.
- A sustained recovery in demand from both the Replacement and OEM segments, coupled with an increase in exports, would drive 8%/11%/13% volume CAGR over FY21-25E for 2W/PCR/T&B tyres.
- Over the last three years, all relevant players had embarked on capacity additions across segments. They began operations in the last 9-15 months, and are in varied stages of ramp-up. As a result, current utilization across segments range from 63-72%.
- Capex intensity is expected to have peaked out, with cumulative capex for APTY, CEAT, and MRF to reduce to ~INR116b over FY22-24E (or 8.5% of sales v/s 12.9% of sales over FY19-21). We estimate FCF generation to improve substantially over FY22-24E, with aggregate FCF of INR47b (v/s just INR11b over FY19-21).

Volume recovery to sustain across segments

- We expect the volume recovery from 2HFY21 to sustain as the Replacement and OEM segments are expected to recover from a weak demand environment over the last five years.
- The demand environment was impacted over the last five years (~1% volume CAGR over FY16-21), led by weak OEM volumes, a feeble economic environment, impact of GST, and higher imports.
- While OEM demand is expected to see a cyclical recovery over the next 2-3 years, Replacement demand is expected to benefit from pent-up demand, import restrictions, and premiumization witnessed across the Automotive segments in the last five years.
- The Indian Tyre industry is expected to recover from five years of weakness and be on a linear growth path (~12% CAGR over FY21-25E), supported by timely capacity expansion across companies.
- Sustained recovery in demand from both Replacement and OEM segments, coupled with an increase in exports, would drive 8%/11%/13% volume CAGR over FY21-25E for 2W/PCR/T&B tyres.

Tyre industry volumes are estimated to grow by 12% CAGR over FY21-25E driven by a recovery in both Replacement and OEM segments

Exhibit 2: India's Tyre sector clocks 9% CAGR over the last 10 years



Source: ATMA, Companies, MOFSL

Exhibit 3: Expect Indian domestic Tyre industry to grow by 12% CAGR over FY21-25E

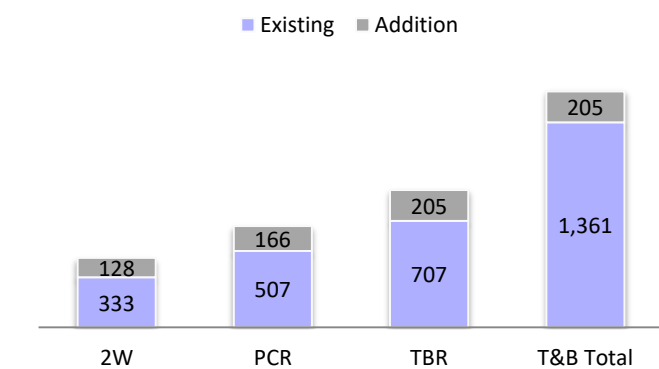
'000 MT	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22E	FY23E	FY24E	FY25E
2Ws	196	207	235	254	278	254	236	265	288	305	322
Growth (%)	21.8	5.8	13.7	7.8	9.5	-8.5	-7.4	12.5	8.8	5.8	5.8
PCR	307	335	353	366	366	348	298	370	399	425	452
Growth (%)	10.8	9.4	5.4	3.5	0.0	-4.8	-14.5	24.2	7.8	6.7	6.2
TBB	478	470	435	426	452	369	365	378	388	395	398
Growth (%)	-6.3	-1.7	-7.5	-2.1	6.2	-18.4	-1.2	3.7	2.5	2.0	0.7
TBR	314	353	355	446	557	473	493	652	787	914	1,009
Growth (%)	31.3	12.3	0.8	25.5	24.8	-15.1	4.2	32.4	20.6	16.3	10.4
Total T&B	792	823	790	872	1,009	842	857	1,030	1,174	1,310	1,407
Growth (%)	5.7	3.8	-3.9	10.3	15.8	-16.6	1.9	20.2	14.0	11.5	7.5
Total Dom. Vols.	1,294	1,365	1,379	1,491	1,653	1,444	1,390	1,665	1,861	2,040	2,182
Growth (%)	9.1	5.5	1.0	8.1	10.8	-12.6	-3.7	19.7	11.8	9.6	6.9

Source: ATMA, Industry, MOFSL

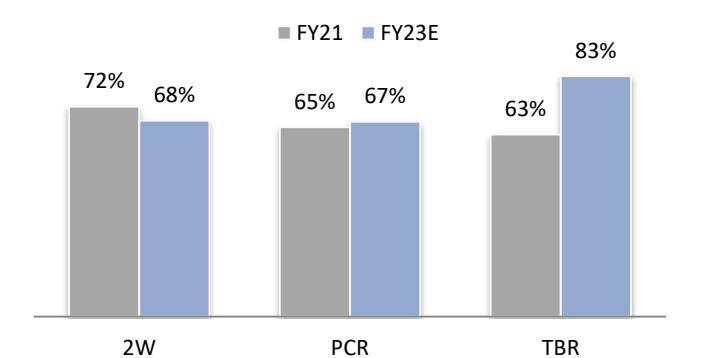
Timely capacity addition to aid recovery

With capacity utilization across segments at 63-72% and ramp-up of recently added capacities, the industry is well prepared for expected growth

- Over the last three years, all relevant players had embarked on capacity additions across segments. They started operations in the last 9-15 months, and are in varied stages of a ramp-up.
- In the 2W Tyre segment, ~15% capacity (of FY18) was added in the last three years. Planned capacity additions stand ~24% of current industry capacity, with a gradual commissioning of capacity. Capacity utilization currently stands ~72%.
- In the PCR segment, ~17% of FY18 capacity got added in the last three years, and a further ~30% addition is planned over FY21 levels. Capacity utilization currently stands ~65% and is expected to improve to 77% by FY25E.
- Overall T&B tyre capacity addition is ~16%, which is the lowest among all segments, as the TBR segment would see ~31% addition over FY21-23E (on the back of a 24% addition over the last three years). Based on our growth forecasts for the TBR segment, utilization would improve to ~100% by FY25 (v/s 63% in FY21).

Exhibit 4: Capacity additions highest in 2Ws ('000 MT)

Source: ATMA, Companies, MOFSL

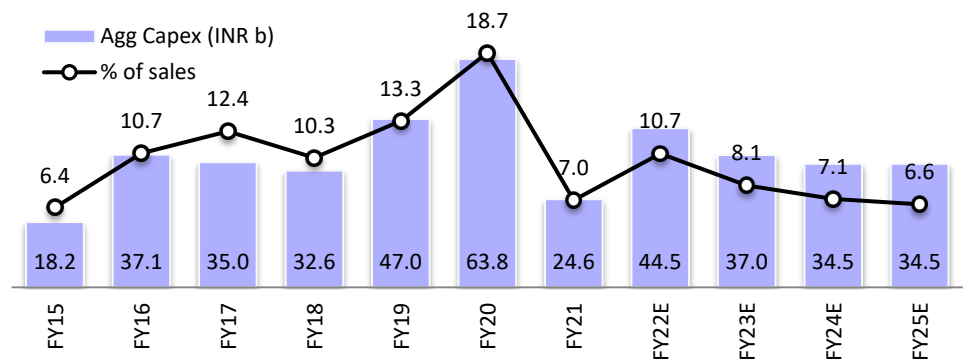
Exhibit 5: Utilization levels to be higher in the TBR segment

Source: ATMA, Companies, MOFSL

Peak capex is behind us, expect FCF to improve

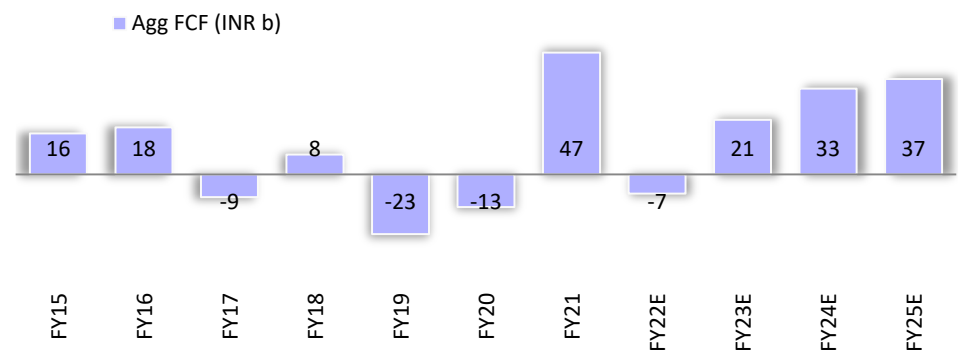
- The Indian Tyre industry has added ~40% capacity over FY19-22E. This entailed substantial capex of ~13% of sales over FY19-21 (aggregate capex of INR135.5b for MRF, APTY, and CEAT).
- Capex intensity is expected to have peaked out, with cumulative capex for APTY, CEAT, and MRF to reduce to ~INR116b over FY22-24E (or 8.5% of sales). While capex would be required in downstream equipment for attaining nameplate capacity, the intensity would be much lower than the last three years.
- We estimate FCF generation to improve substantially over the next three years, with an aggregate FCF of INR47b over FY22-24E (v/s just INR11b over FY19-21).

Exhibit 6: Capex intensity to moderate...



Source: ATMA, Companies, MOFSL

Exhibit 7: ...driving an improvement in FCF generation



Source: ATMA, Companies, MOFSL

RM cost in an inflationary phase

Pricing actions a key monitorable as the pass through is gradual

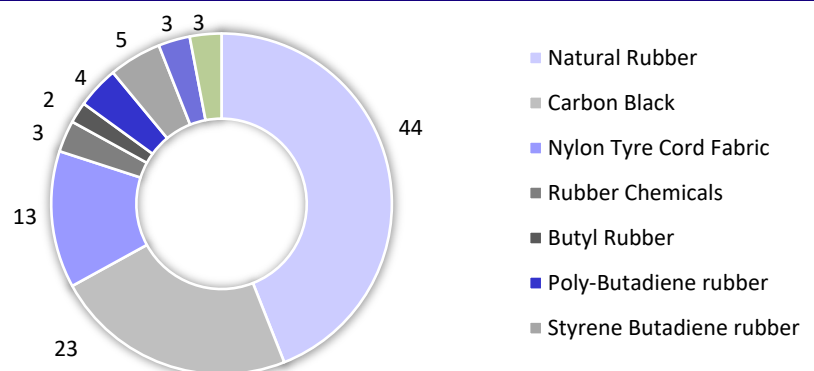
- RM costs and competitive intensity are among the key factors that drive pricing in the Tyre industry.
- Historically, the cost pass through has been gradual as against a spurt in RM prices, resulting in wild swings in the gross margins of Tyre companies.
- The RM basket witnessed a sharp price decrease in 1HFY21 (~620bp over FY20 average), before the trend reversal from 3QFY21 (RM basket per kg increased by ~10pp in 2H over 1HFY21; the same in 1QFY22 is ~18% higher than its FY21 average). Since Dec'20, Tyre companies have taken a price hike of ~9-10% till Jun'21.
- We expect gross margin for Tyre companies to decline by 80-110bp over FY21-23E.

RM cost, competitive intensity drive pricing in most segments

- Natural rubber and crude-related derivatives (like synthetic rubber, carbon black, and nylon tyre cord fabric) are major constituents of RM cost for a tyre.
- Segment-wise dynamics differ significantly. As a result, pricing actions, too, are taken differently across segments. While OEM pricing is linked to the RM basket and the pass through happens with a lag, pricing in the Replacement market is largely driven by competitive intensity in the segment.
- Price hikes are usually taken with a lag and in a staggered manner, and thus, short-term margins may be susceptible to sharp RM cost movements.
 - It is relatively easy to pass on price hikes in Consumer segments like PCR and 2Ws as buying decisions there are based more on brand strength.
 - In the Commercial segment of T&B, where consumers look for quality at a reasonable price, the brand preference is more fungible in nature. It thus becomes key to maintain the same level of pricing difference vis-à-vis competitors. Therefore, taking proactive price hikes by a single manufacturer is difficult.

RM cost is largely dependent on natural rubber/crude derivatives (~44%/45-50% of RM cost)

Exhibit 8: RM constituents by value (%) for the Tyre industry



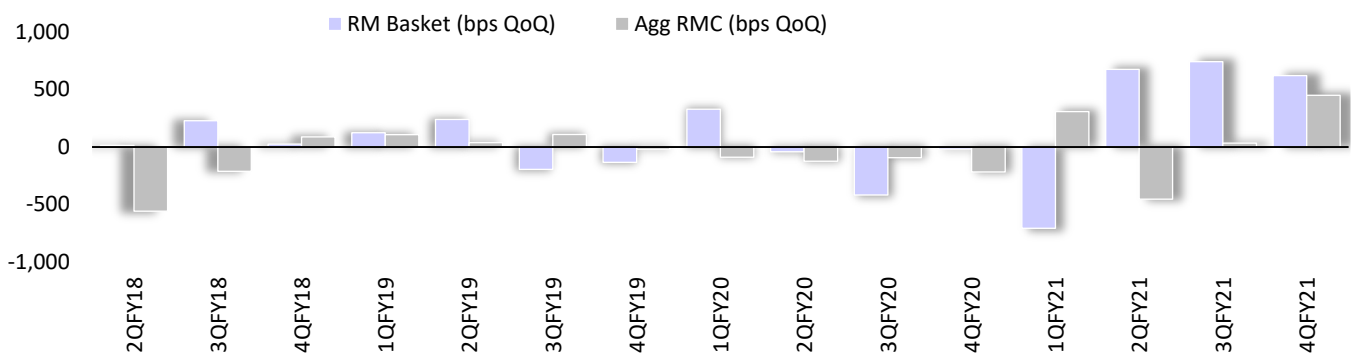
Source: Industry, MOFSL

Price actions usually lag RM price movement

- We analyzed how Tyre manufacturers reacted in the past to RM price movement, noting how price actions lag the RM cost increase, with companies gradually passing on both benefits and impact of cost inflation.
- Interactions with channel partners suggest that price actions have been slow due to intense competition.
- Tyre companies have consistently been taking small price hikes since the price of rubber and crude derivatives started moving up in 3QFY21. The RM basket witnessed a sharp price decrease in 1HFY21 (~620bp over FY20 on an average). However, the trend reversed from 3QFY21 as the RM basket (per kg) increased by ~10pp in 2H over 1HFY21. The same in 1QFY22 is ~18% higher than its FY21 average.
- Since Dec'20, Tyre companies have taken a 9-10% price hike till Jun'21, as against the required price hike of 13-14% to pass on the entire cost inflation.

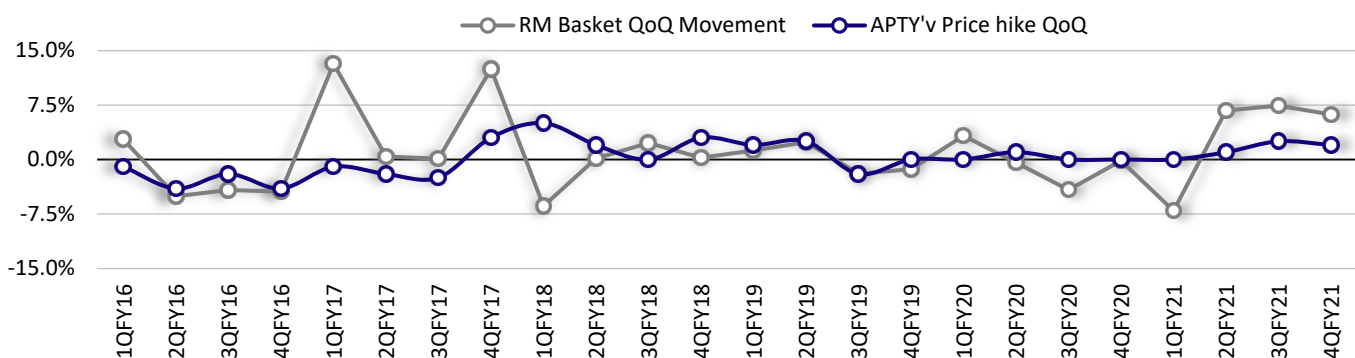
Pass through of commodity cost is linked to competitive and import intensity, and are usually gradual in nature. For a 10% increase in RM basket, a price hike of 5-6% is required

Exhibit 9: Changes in spot prices in the RM basket impacts P&L with a lag



Source: Companies, Bloomberg, MOFSL

Exhibit 10: Price hikes usually occur gradually, resulting in a transitory impact on margins

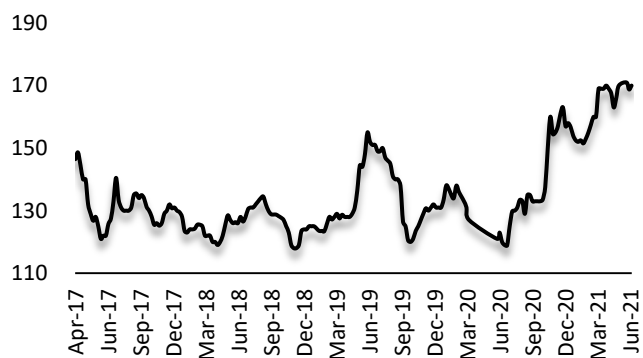


Source: Companies, Bloomberg, MOFSL

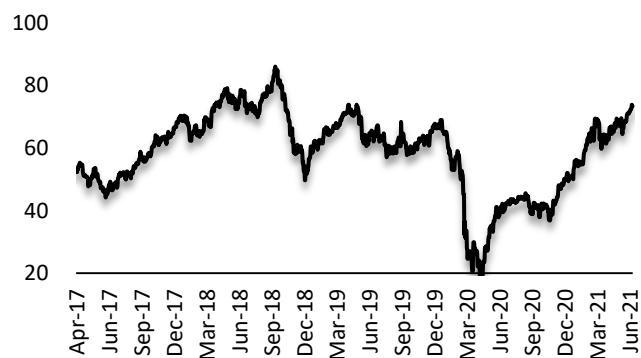
RM cost inflation will restrict margin expansion over FY21-23E

RM basket witnesses 26% inflation since 2QFY21, whereas the corresponding price increases are 9-10%, implying a transitory pressure on margin

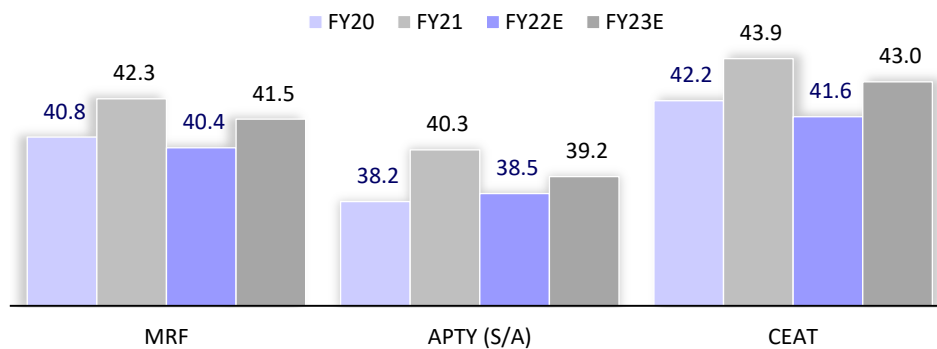
- RM prices have been on an up move after bottoming out in 1HFY21. Natural rubber/crude prices are 28%/57% higher from the lows of 2QFY21 (20%/49% higher v/s its FY21 average).
- Against the ~26% increase in the RM basket since 2QFY21, the price rise in the Replacement market has been 9-10% (v/s a requirement of 13-14%).
- We expect RM cost to stay firm over the next few quarters, and hence estimate an 80-110bp decline in the gross margins of Tyre companies over FY21-23E.

Exhibit 11: Natural rubber (INR/kg Kottayam RSS 4) prices see a sharp rise since 3QFY21


Source: Bloomberg, MOFSL

Exhibit 12: Crude (USD/bbl) sees a sharp recovery since 3QFY21


Source: Bloomberg, MOFSL

Exhibit 13: Expect gross margins to improve for APTY in FY23E and remain stable


Source: Companies, MOFSL

TII framework to analyze segments

Prefer Consumer segments of 2W/PCR given better operating dynamics

The operating dynamics within each segment of the Tyre sector significantly vary depending on factors such as end-user mix/preferences, market share concentration, demand-supply dynamics, among others. Against this backdrop, we believe a relative analysis of major segments would enable us to evaluate our preferences within the Tyre sector. We have, therefore, built a TII framework to gauge the attractiveness of these segments. Following are the key pillars of our framework (each equally weighed):

- **Growth potential:** Refers to both volume and value growth potential for the segment over FY20-23E.
- **Competitive intensity:** Extent of competitive intensity for the segment, based on HHI.
- **Incremental capacity:** Analysis of incremental capacity over FY20-23E, based on existing capacity expansion plans of companies.
- **Customer stickiness:** A function of brand relevance in the segment. Customer stickiness varies based on the end-user mix.
- **Pricing power:** A function of the segment's ability to pass on price hikes/cuts to end-customers.
- **Profitability and capital efficiency:** Profit margin and capital efficiency of each segment.

Exhibit 14: Prefer the Consumer segments of 2W and PCR as they enjoy brand loyalty, pricing power, and better profitability

Based on our analysis, 2Ws appear to be the best placed segment, followed by PCR, due to higher brand salience and resultant better profitability

Parameters [scale of three]	T&B	2W	PCR
Growth potential	3	2	3
Competitive intensity	2	3	1
Incremental capacities	2	3	1
Customer stickiness	1	3	3
Pricing power	1	2	3
Profitability	1	3	2
Blended score [scale of three]	1.7	2.7	2.2

Note: Higher the score better it is

Source: MOFSL

Exhibit 15: 2W segment is the most consolidated as indicated by the HHI score

Segment	HHI	Interpretation
2W	2,688	❖ HHI over 2,500 indicates high concentration
PCR	1,777	❖ Moderate concentration
TBR	2,490	❖ Moderate to high concentration

HHI is a measure of competitive intensity in an Industry; Source: MOFSL

Based on this framework

- We prefer 2Ws as it scores the highest on most parameters – competitive intensity (based on HHI), customer stickiness, and profitability.
- PCR segment ranks second as it scores well on growth potential (supported by the import ban), customer stickiness, and pricing power, but lags 2Ws in terms of incremental capacities and competitive intensity.
- T&B segment ranks the lowest as its B2B nature leads to lower brand loyalty, pricing power, and profitability. However, it scores well on growth potential.

2W Tyres: Least competitive, most profitable

Ranks numero uno as per our framework | Growth profile weaker than others

The 2W segment ranks first in our TII framework to evaluate our segmental preference. It scores high in terms of profitability/capital efficiency, customer stickiness, and competitive intensity. Our analysis suggests that the 2W segment witnesses the highest gross margin (~49%), asset turnover, and capital efficiency across categories. It also ranks the highest based on HHI score, indicating that the segment enjoys high concentration, with the top three players accounting for 85-90% of the market.

Expect ~8% CAGR over FY21-25E

- We expect 8% volume CAGR (on a low base) for 2W/3W Tyre players over FY21-25E, led by both OEM and Replacement segments.
- The OEM segment is likely to deliver ~10% CAGR over FY21-25E, in tandem with the growth in 2W production. The segment is likely to outgrow the trend of the past few years (FY15-20: ~2.6% CAGR) on a low base of FY21.
- The Replacement segment is likely to clock ~7% CAGR over FY21-25E (v/s ~8% CAGR over FY15-20). This is because 2W sales grew ~11% CAGR over FY10-15. This implies sustained demand for replacement tyres over the next few years.

Exhibit 16: Expect 2W/3W segment CAGR of 8% over FY21-25E

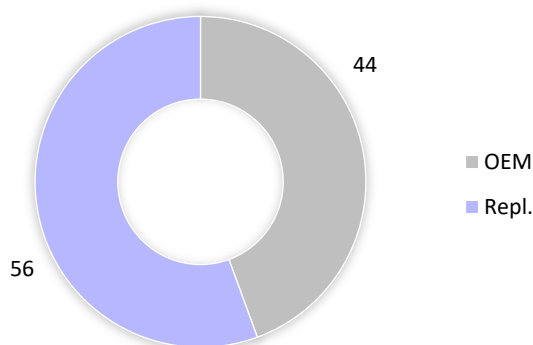
Tyres (m units)	FY16	FY17	FY18	FY19	FY20	FY21	FY22E	FY23E	FY24E	FY25E
OEM sales	40.7	42.2	49.0	52.6	45.2	38.7	45.1	49.7	53.0	56.6
Replacement sales	42.1	51.9	52.5	58.5	56.8	55.5	60.9	65.6	68.9	72.3
Total domestic Consumption	82.8	94.1	101.5	111.1	101.9	94.2	106.0	115.3	121.9	128.9
YoY growth (%)	5.8	13.7	7.8	9.5	(8.3)	(7.4)	12.5	8.8	5.8	5.8

Source: ATMA, Industry, MOFSL

Most consolidated segment, but entry of new players can cause disruption

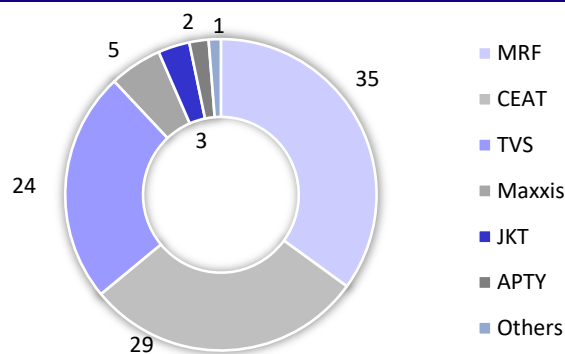
- The 2W segment ranks the highest based on HHI with a score of 2,688 (a score above 2,500 indicates a high concentration in this segment).
- Top three players in this segment command 85-90% market share.
- However, the entry of two new players – APTY and Maxxis Tyres – can potentially change the segment's competitive dynamics going forward.

Exhibit 17: 2W/3W segmental break-up (% , FY20)



Source: ATMA, Industry, MOFSL

Exhibit 18: Top three players command over 85% market share (FY20, %)



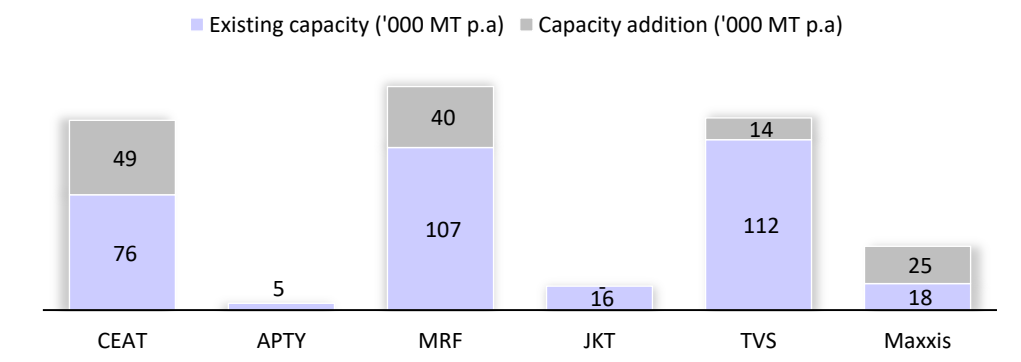
Source: Companies, Industry, MOFSL

The 2W segment would see ~24% capacity addition over FY21-25E, resulting in a dip in utilization

Utilization improvement to be more back ended

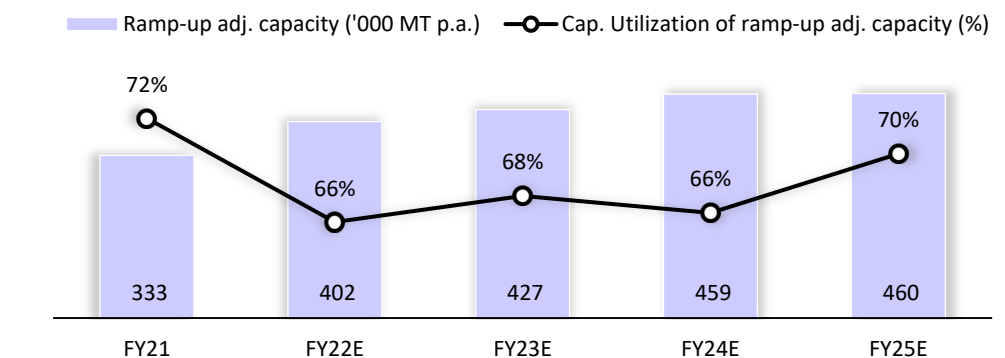
- In the 2W Tyre segment, planned capacity additions stand ~125kMT over FY21-24E. This implies an addition of ~24% to current industry capacity, with a gradual commissioning of capacity.
- Maxxis plans to increase capacity to ~60,000 tyres/day (from 20,000/day at present) over the next 3-5 years. It already supplies to HMSI and is looking to capture 15% market share by CY26. This could threaten the positioning of existing players, particularly stronger players in the OEM segment.
- Current capacity utilization in the 2W segment declined to ~72% due to recent capacity additions and weaker demand. Utilization levels are expected to decline due to capacity additions and then recover to 70% by FY25E.

Exhibit 19: Strong capacity additions from key players



Source: Industry, Companies, MOFSL

Exhibit 20: Utilizations to start improving from FY23E with a completion in ramp-up



Source: Industry, Companies, MOFSL

Higher customer stickiness, pricing power remains moderate

- The 2W segment is seeing higher customer stickiness, a function of the brand-building exercise of companies over the years. With increasing awareness about tyre safety and the focus on quality, we expect brand loyalty to improve from here on.
- Relative to the PCR segment, pricing power remains moderate in the 2W segment.
- Pricing power in the 2W segment is dictated by segment leader MRF. This segment witnessed very few price hikes over the past few years as MRF added capacity. With major capacity addition now behind it, pricing power in this segment is getting better.

PCR: Highest growth potential, pricing power, and capex

Ranks second as per our framework | Low to moderate concentration on HHI

The PCR segment ranks second within our framework to evaluate Tyre segments. While this segment has good growth prospects (FY21-25E), aided by the recent import ban and pricing power, it also faces the risk of a demand-supply mismatch in the future, particularly given the higher fragmentation within this segment.

Expect ~11% volume CAGR over FY21-25E

Expect 11% volume CAGR over FY21-25E, led by ~10%/12% CAGR in Replacement/OEM segments

- We expect ~11% volume CAGR over FY21-25E, led by both the OEM and Replacement segments.
- The PCR segment delivered ~2.6% volume CAGR over FY15-20 due to weakness in both the OEM and Replacement segments.
- While sales growth in the OEM segment is likely to mirror PV industry CAGR of ~12% (over FY21-25E), on a low base of FY21, we expect Replacement sales CAGR of ~10%, led by a large vehicle population, increasing share of fleet within this segment, and import substitution.

Exhibit 21: Expect 11% CAGR for the PCR segment over FY21-25E

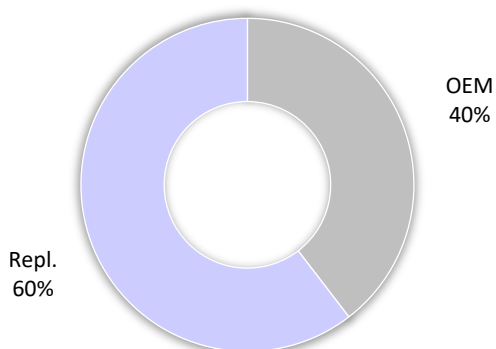
PCR segment (m units)	FY16	FY17	FY18	FY19	FY20	FY21	FY22E	FY23E	FY24E	FY25E
Production	38.7	41.6	42.8	42.8	40.7	38.9	48.4	52.5	56.4	60.4
OEM sales	17.3	19.0	20.1	20.3	17.2	15.6	19.5	21.1	22.7	24.6
Replacement sales	24.7	25.2	25.6	25.5	26.6	21.6	26.7	28.8	30.4	31.9
Total domestic consumption	41.9	44.2	45.7	45.8	43.8	37.2	46.2	49.8	53.2	56.5
YoY growth (%)	9.4	5.4	3.5	0.0	(4.2)	(14.5)	24.2	7.8	6.7	6.2
Imports (included in Replacement sales)	5.6	5.4	6.0	5.8	6.2	1.4	1.4	1.5	1.5	1.5
Imports (% of total domestic consumption)	13.2	12.3	13.1	12.7	14.2	3.7	3.1	2.9	2.8	2.7

Source: ATMA, Industry, MOFSL

Competitive intensity the highest in PCR

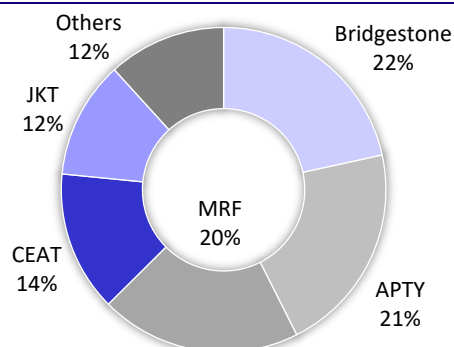
- PCR ranks the lowest based on HHI score, indicating relatively high fragmentation within this segment. The top three players account for just 60% market share (as against over 80% in other segments).
- The HHI score of 1,777 for the PCR segment indicates moderate concentration.

Exhibit 22: Replacement commands ~60% share within the PCR segment (FY20)



Source: ATMA, Industry, MOFSL

Exhibit 23: PCR segment is relatively more fragmented than other segments; top three players account for ~60%

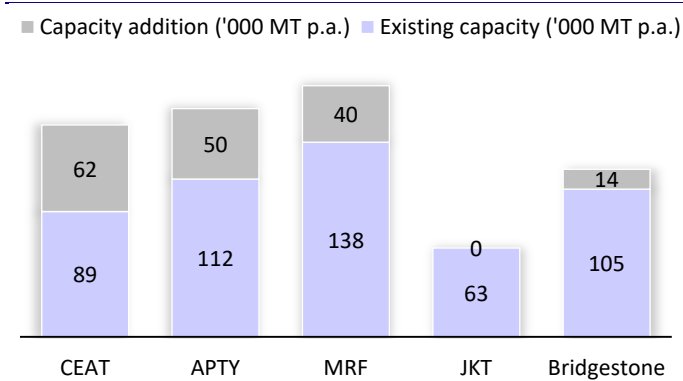


Source: Companies, Industry, MOFSL

Top players adding good capacity over FY21-24E

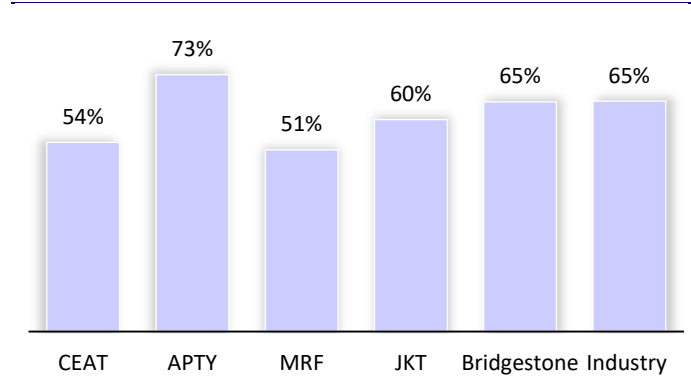
- We analyzed the current/future capacity expansion plans of key PCR players, which together account for 90-95% market share.
- Capacity addition remains rampant across most players (except for JKI). Cumulative capacity of over 160kMT p.a. would be added by players like CEAT, APTY, MRF, and Bridgestone, an increase of ~30% from current levels.
- Capacity utilization in the PCR segment stands ~65%. Based on our growth forecasts, utilization levels are estimated to improve to 77% by FY25E.
- This suggests that there won't be any major capex by industry players in the medium term (as supply outstrips demand).

Exhibit 24: Major capacity is being added by CEAT and APTY (as of FY21)



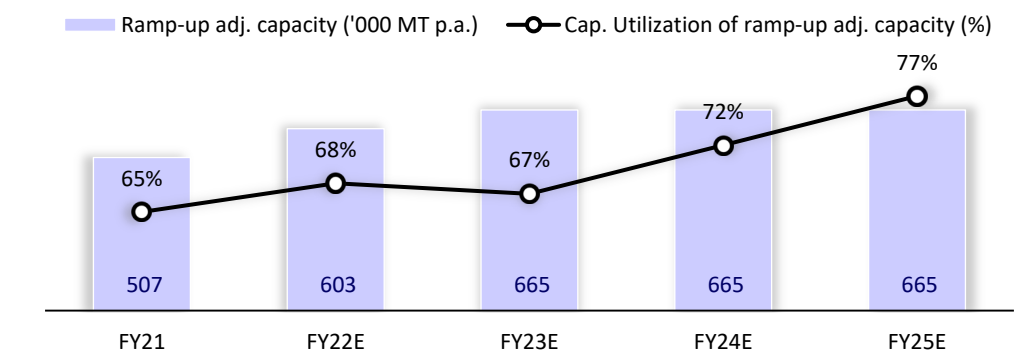
Source: Industry, Companies, MOFSL

Exhibit 25: Utilizations in FY21 impacted by the COVID-19 outbreak



Source: Industry, Companies, MOFSL

Exhibit 26: Analysis of ramp-up adjusted capacity suggests utilizations will remain healthy up to FY25E



Source: Industry, Companies, MOFSL

Higher pricing power and customer stickiness

- The PCR segment enjoys relatively higher pricing power v/s 2W/TBR segments. The focus on branding and quality by major players have significantly improved their pricing power.
- Customer stickiness remains high in PCR relative to T&B as it is in the Consumer segment. In this segment, factors like rub-off impact of OEM fitment, brand awareness, and quality form a key part of the buying decision. The buying decision in the Commercial segment depends largely on pricing and quality. According to a JD Power Survey, 54% customers remain loyal to the OEM-fitted brand while replacing tyres in the PCR segment.

T&B: Good growth ahead in highly competitive segment

Ranks third as per our framework | Least capacity addition across segments

Truck and Bus (T&B) rank the lowest in terms of our preference for sectors. While this segment is expected to witness the lowest capacity addition over FY19-23E, the inherent commercial functionality of the sector and price sensitivity in purchasing decisions restricts customer stickiness, pricing power, and profitability.

Expect T&B segment CAGR of 13% over FY21-25E

Radialization is likely to accelerate further. We expect the share of radials in the T&B segment to rise to 66% by FY25E (from 50% in FY21)

- We expect T&B segment CAGR of 13% over FY21-25E, led by both OEM (32% CAGR) and Replacement (9% CAGR). Replacement demand, accounting for ~85% of volumes, steers growth in the segment, with support from the OEM segment.
- Strong revival in Replacement demand is likely to be driven by an uptick in freight utilization on the back of a pick-up in Infrastructural activity, economic recovery, and the proliferation of the hub and spoke model.
- We expect OEM sales CAGR of 32% over FY21-25E, in line with our M&HCV industry growth estimate.
- Radialization is likely to accelerate further over FY21-25E, with the share of radials in the T&B segment touching ~66% by FY25E (from 50% in FY21). We expect 20% sales CAGR in T&B radials over FY21-25E and T&B bias (TBB) CAGR of 2% (on a low base).
- We expect the share of imports within the T&B segment to remain below 1%, as the allotment of current licenses for tyre imports is restricted to those categories that are not manufactured in India. Most imported tyres in the T&B segment are cheaper substitutes of Indian tyres.

Exhibit 27: Expect T&B segment CAGR of 13% over FY20-25E

T&B segment (m units)	FY16	FY17	FY18	FY19	FY20	FY21	FY22E	FY23E	FY24E	FY25E
Production	16.8	16.3	18.0	20.8	18.0	18.4	21.6	24.1	26.5	28.3
Imports	1.5	1.6	1.2	0.8	0.6	0.2	0.0	0.0	0.0	0.0
OEM sales	3.2	3.3	3.6	4.2	2.4	1.7	2.6	3.4	4.4	5.1
Replacement sales	13.1	12.3	13.2	15.2	13.7	14.6	16.6	18.3	19.6	20.6
Total domestic consumption	16.3	15.6	16.9	19.3	16.1	16.3	19.3	21.7	24.0	25.7
YoY growth (%)	2.9	(4.5)	8.4	14.4	(16.8)	1.5	18.2	12.7	10.6	6.8
Imports (% of domestic consumption)	9.2	10.4	6.8	4.4	3.7	1.1	0.2	0.2	0.1	0.1
Total dom. consumption ('000 MT)	822.6	790.2	871.6	1008.9	841.5	857.2	1030.3	1174.1	1309.7	1407.4
Gr (%)	3.8	-3.9	10.3	15.8	-16.6	1.9	20.2	14.0	11.5	7.5

Source: ATMA, Industry, MOFSL

Exhibit 28: Expect TBR segment CAGR of 20% (FY21-25E), with the share of radial tyres rising to 66% by FY25E

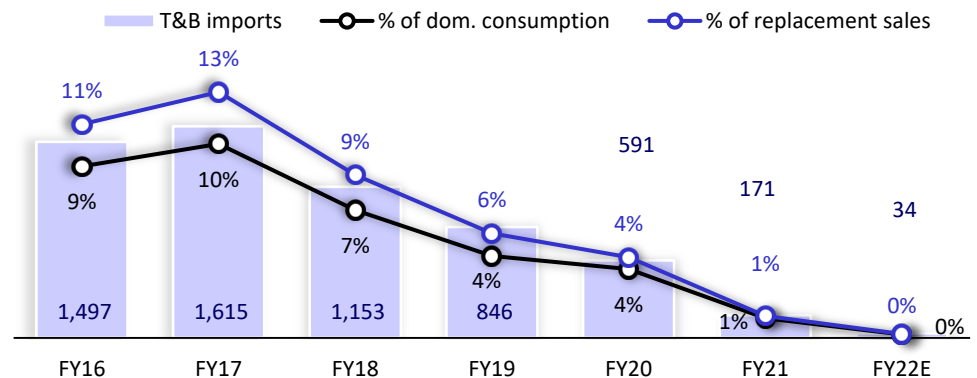
m units	FY16	FY17	FY18	FY19	FY20	FY21	FY22E	FY23E	FY24E	FY25E
TBR	5.9	5.9	7.4	9.3	7.9	8.2	10.9	13.1	15.2	16.8
YoY growth (%)	12.3	0.8	25.5	24.8	(15.1)	4.2	32.4	20.6	16.3	10.4
OEM	2.3	2.2	2.6	3.0	1.8	1.3	2.1	2.8	3.9	4.5
Replacement	3.6	3.7	4.9	6.3	6.1	6.9	8.8	10.3	11.4	12.4

Source: ATMA, Industry, MOFSL

Exhibit 29: Expect TBB segment to grow at 2% CAGR over FY21-25E

m units	FY16	FY17	FY18	FY19	FY20	FY21	FY22E	FY23E	FY24E	FY25E
TBB	10.4	9.7	9.5	10.1	8.2	8.2	8.5	8.7	8.9	9.0
YoY growth (%)	(1.7)	(7.5)	(2.1)	6.2	(18.4)	2.0	4.0	2.5	2.0	0.7
OEM	0.9	1.1	1.1	1.2	0.6	0.4	0.5	0.6	0.6	0.7
Replacement	9.5	8.6	8.4	8.9	7.6	7.8	8.0	8.1	8.3	8.3

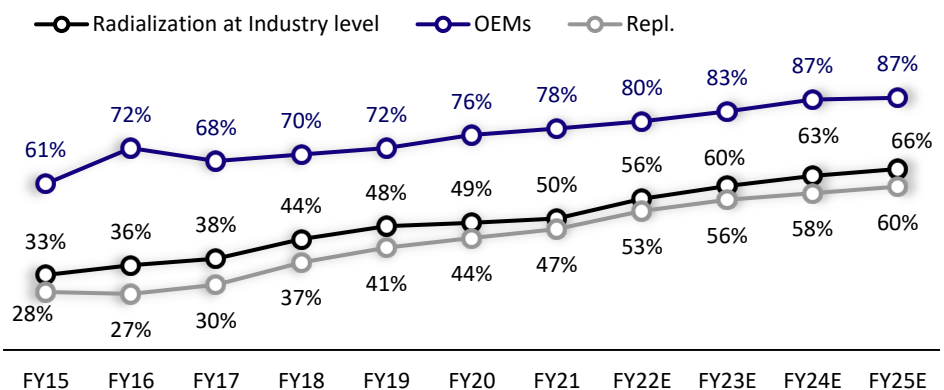
Source: ATMA, Industry, MOFSL

Exhibit 30: T&B imports turn insignificant after the ban in Jun'20

Source: ATMA, Industry, MOFSL

Radialization to accelerate further, expect ~66% share by FY25E

- With a contribution of ~50% in FY21, radial is now at par with bias tyres in the T&B segment in the Replacement market. While radialization in OEMs is ~78%, it is much lower (at 47%) in the Replacement segment.
- We expect radialization to gather pace further, led by increased industry capacity and higher awareness in the Replacement market. We expect radialization in the T&B segment to rise to ~66% by FY25E.
- The share of radial tyres in the Replacement T&B segment is likely to touch ~60% by FY25E, led by higher radialization at OEMs gradually reflecting in the Replacement market and increasing awareness among fleet operators about lower total cost of ownership of radial tyres. This would be supported by increased industry capacity of TBR tyres.
- The share of radial tyres in OEM T&B sales is likely to touch ~87% by FY24E and plateau at ~87% as bias tyres will remain more suitable for certain applications.

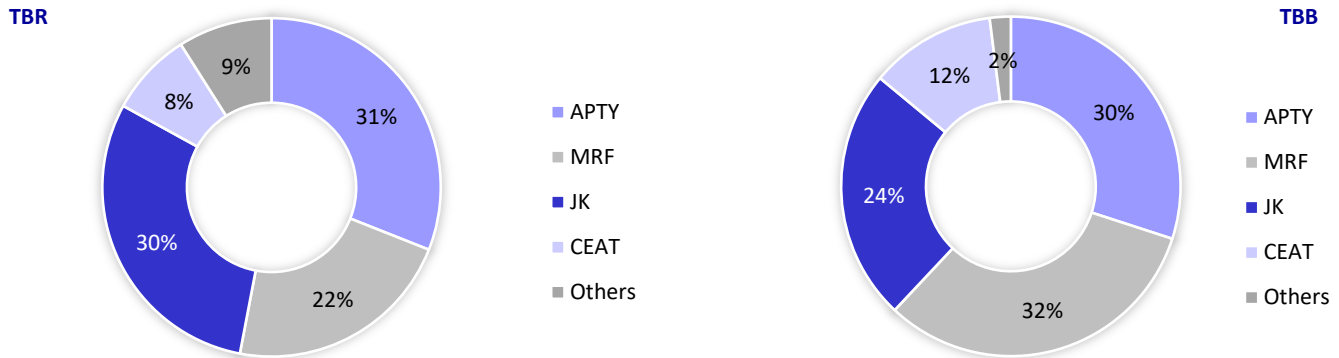
Exhibit 31: Radial tyres set to attain ~66% share in the T&B segment by FY25E

Source: Industry, ATMA, MOFSL

Moderate competitive intensity based on HHI

- T&B ranks second in terms of competitive intensity, indicating that the segment is moderately concentrated. The top three players account for over 80% market share in the TBR/TBB segment.
- T&B's HHI score is 2,490, which indicates moderate to high concentration.

Exhibit 32: Both TBR (left) and TBB (right) segments are moderately concentrated, with the top three players accounting for over 80% market share



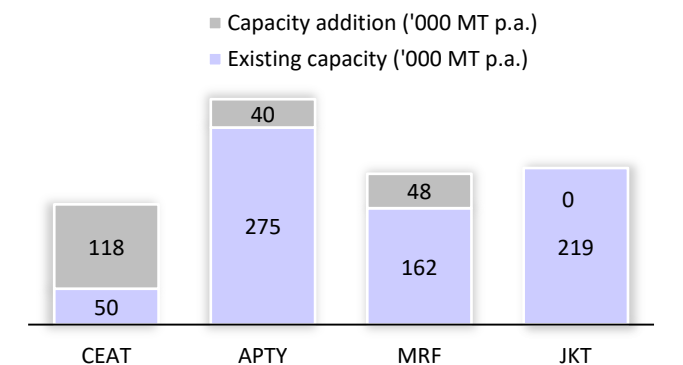
Source: Industry, Companies, MOFSL

Higher capacity addition in TBR to meet radialization trend

Capacity addition is reflecting a radialization trend, with 27% TBR capacity addition, which implies an overall T&B capacity addition of 16%

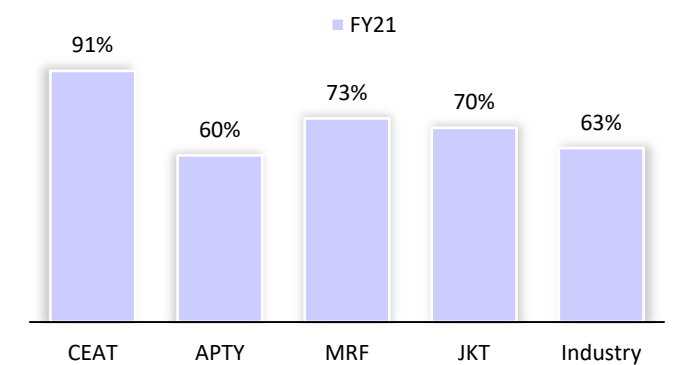
- An analysis of existing TBR capacities of the top four players, accounting for ~90% market share (APTY, JKI, MRF, and CEAT), suggests that they are cumulatively adding ~27% additional capacity over FY21-25E.
- On an overall T&B tyre basis, capacity addition is ~16%, which is the lowest among all segments.
- Based on our growth forecasts for the TBR segment, assuming a cumulative market share for these key players is maintained, utilization would improve to ~100% by FY25 (v/s 63% in FY21).
- This suggests that the incremental capacity would barely meet incremental demand, auguring well for pricing power.
- We do not anticipate any capacity addition in the TBB segment.

Exhibit 33: Except CEAT, capacity addition is limited in TBR



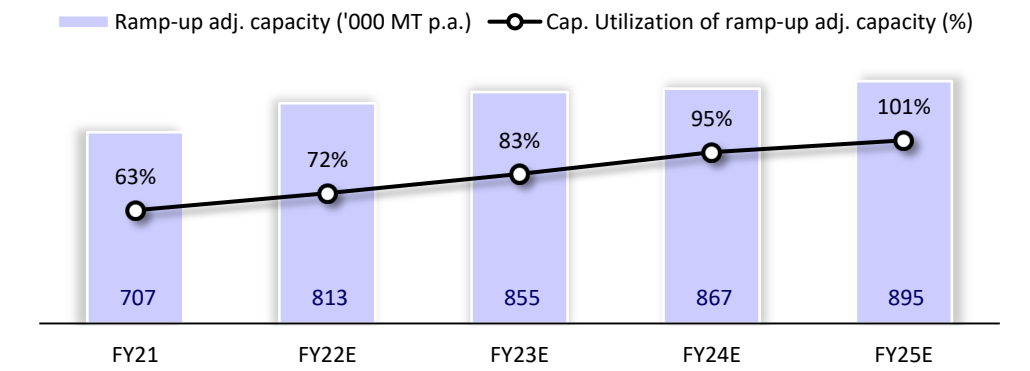
Source: Companies, MOFSL

Exhibit 34: TBR capacity utilizations are relatively higher



Source: Industry, Companies, MOFSL

Exhibit 35: Analysis of a ramp-up in adjusted capacity suggests growth capex may be required from FY23E onwards



Source: Industry, Companies, MOFSL

B2B customer profile results in weak pricing power and margins

- In the T&B segment, the preference is for quality at a reasonable price, and the choice is driven largely by the total cost of ownership. This, in turn, dilutes customer stickiness for any particular brand.
- Over the past few years, the TBR segment witnessed the highest price hikes. In the current environment, despite a sharp increase in RM cost and higher capacity utilization, we see resistance across players in the T&B segment (v/s PCR and 2Ws) in hiking prices, so as to gain market share. The TBB segment is the last to witness pricing action due to oversupply within the industry. Hence, pricing power would be the lowest for the T&B segment.
- T&B is the least profitable segment for Tyre companies. Our analysis suggests that margins for the TBR and TBB segment is lower than those of PCR and 2W, with TBB faring worse than TBR.
- We expect TBB margins to remain under pressure as the industry faces excess capacity, given the pace of radialization.

Imports remain a key risk

- In Sep'17, the Government of India re-imposed anti-dumping duty (ADD) on the import of new Chinese T&B radials for a period of five years. ADD ranges between USD245.35/t and USD452.33/t, depending on the producer and exporter.
- This led to Chinese TBR imports, which were as high as ~30% of total domestic TBR consumption, becoming costlier, providing a level playing field with Indian T&B Tyre manufacturers.
- While ADD is applicable up to Sep'22, non-extension or revocation any time before that would severely impact the competitiveness of domestic players, especially during current times, when capacity addition remains high.

Framework to evaluate Tyre companies

Prefer APTY and CEAT over BIL and MRF

- We evaluate Tyre companies based on brand ranking, pricing power, revenue mix, headroom for growth, cost competitiveness, and financial strength.
- Our framework ranks companies on their relative attractiveness on operating parameters.
- We assign a 75% weightage to these operating parameters (equal weight for each parameter) and 25% weightage to the valuation score to identify stocks poised for outperformance.
- APTY and CEAT offer a favorable trade-off of growth and attractive valuations.

Exhibit 36: APTY emerges as our top pick in the sector

Rating scale [five]	MRF	APTY	CEAT	BIL
Brand ranking	4.3	4.2	3.2	2.5
Pricing power	4.4	3.6	3.4	2.5
Revenue mix	3.9	3.8	4.0	4.1
Headroom to grow	4.0	4.0	5.0	3.0
Cost competitiveness	3.5	3.0	3.0	5.0
Financial strength	3.5	2.8	3.3	5.0
Operating parameters [75% weightage]	3.9	3.6	3.6	3.7
Valuation score [25% weightage]	2.0	5.0	4.0	3.0
Blended score	3.4	3.9	3.7	3.5

Source: Company, MOFSL

Brand ranking

- We evaluate companies based on their brand ranking in individual segments of PCR, 2W, TBR, TBB, LCV, and others.
- We weight their brand ranking within each of these segments with their revenue mix to arrive at a final score.
- Based on this parameter, MRF occupies the top spot due to its strong brand image across segments. APTY ranks second due to its negligible presence in the 2W segment.
- BIL ranks the lowest due to its positioning as a Tier II player in the global OHT segment.

Exhibit 37: MRF ranks numero uno, APTY a close second

Rating scale [five]	MRF	APTY*	CEAT	BIL
Brand ranking	4.3	4.2	3.2	2.5

*APTY including EU operations; Source: Company, MOFSL

Exhibit 38: MRF best placed on brand rankings across segments

Brand rankings	TBR	TBB	PCR	2Ws/3Ws	LCV
MRF	3.0	5.0	4.5	5.0	4.0
APTY	5.0	4.5	4.5	2.0	4.0
CEAT	2.0	3.0	3.5	4.0	4.0
JKI	4.0	4.0	3.0	3.0	3.0
Bridgestone	NA	NA	5.0	NA	NA
TVST	NA	NA	NA	3.5	NA

Source: Company, MOFSL

MRF's ZLX ad with Virat Kohli as brand ambassador



APTY's campaign with Mr. Sachin Tendulkar



Click on the images for the video

CEAT's SecuraDrive campaign with Mr. Aamir Khan



CEAT's puncture safe tyres campaign



Click on the images for the video

Pricing power

- We evaluate companies based on their pricing power and ability to pass on price hikes within each segment. This is then weighted against revenue contribution from that particular segment to arrive at a blended score.
- MRF ranks higher on this parameter as it has pricing power across most segments, particularly in Consumer segments.
- APTY has relatively strong pricing power in the TBR segment and is improving its positioning in PCR as well.
- BIL ranks lower on this parameter as it is generally a price taker in the global OHT market.

Exhibit 39: MRF enjoys strong pricing power across most segments

Rating scale [five]	MRF	APTY *	CEAT	BIL
Pricing power	4.4	3.6	3.4	2.5

*APTY including EU operations; Source: Company, MOFSL

Exhibit 40: Overview of pricing power of key players across segments

Pricing power	TBR	TBB	PCR	2W/3W
MRF	4.0	5.0	4.0	5.0
APTY	5.0	4.0	3.5	2.0
CEAT	2.0	3.0	3.5	4.0
JKI	3.5	3.5	3.0	2.0
Bridgestone	NA	NA	5.0	NA
Michelin	NA	NA	5.0	NA
TVST	NA	NA	NA	3.0

Source: Company, MOFSL

Exhibit 41: MRF enjoys a strong brand ranking and pricing power across most segments

MRF	TBR	TBB	PCR	2W/3W	Farm	Blended ranking
Brand ranking						
Rating	3.0	5.0	4.5	5.0	4.0	
Revenue mix	23%	22%	19%	22%	7%	
Blended score	0.7	1.1	0.9	1.1	0.3	4.3
Pricing power						
Rating	4.0	5.0	4.0	5.0	3.5	
Revenue mix	23%	22%	19%	22%	7%	
Blended score	0.9	1.1	0.8	1.1	0.3	4.4

Source: Company, MOFSL

Exhibit 42: APTY enjoys a dominant brand image and pricing power in TBR and PCR, but EU operations weighs on the score

APTY	TBR	TBB	PCR	2W/ 3W	Farm	Vredestein PCR	Vredestein Agri	Blended ranking
Brand ranking								
Rating	5.0	4.5	4.5	2.0	3.5	3.5	3.0	
Revenue mix	26%	16%	12%	0%	7%	26%	7%	
Blended score	1.3	0.7	0.5	-	0.3	0.9	0.2	4.2
Pricing power								
Rating	5.0	4.0	3.5	2.0	3.5	2.5	2.0	
Revenue mix	26%	16%	12%	0%	7%	26%	7%	
Blended score	1.3	0.6	0.4	-	0.3	0.6	0.1	3.6

Source: Company, MOFSL

Exhibit 43: CEAT strongest in the 2W/3W segment, relatively weak positioning elsewhere

CEAT	TBR	TBB	PCR	2W/3W	Farm	Blended Ranking
Brand ranking						
Rating	2.0	3.0	3.5	4.0	2.0	
Revenue mix	14%	17%	15%	31%	12%	
Blended score	0.3	0.5	0.5	1.2	0.2	3.2
Pricing power						
Rating	2.0	3.5	3.5	4.0	3.0	
Revenue mix	14%	17%	15%	31%	12%	
Blended score	0.3	0.6	0.5	1.2	0.4	3.4

Source: Company, MOFSL

Revenue mix

- **We evaluate companies on their revenue mix within:**
 - **OEM, Replacement, and exports:** We assign a ranking of two/five to OEMs/Replacement, which is weighted against their revenue contribution from each of these segments.
 - **Inter-segment, i.e. Consumer segments (2W, PCR), v/s Commercial segment (T&B):** Score of each segment is weighted against their revenue contribution from each of these segments.
- **We prefer companies with a lower concentration of the T&B segment and higher share from Consumer segments of 2W and PCR. We also prefer companies with a higher share from Replacement.**
- **Based on this analysis, CEAT fares slightly better than others.**

Exhibit 44: BIL ranks marginally higher than CEAT in terms of the revenue mix

	MRF	APTY*	CEAT	BIL
Based on end-user segment	4.3	4.3	4.2	4.1
Based on vehicle segments	3.5	3.4	3.8	4.0
Average ranking based on revenue mix	3.9	3.8	4.0	4.1

*APTY including EU operations; Source: Company, MOFSL

Exhibit 45: Ranking based on end-user segmentation is similar across companies

	MRF	APTY	CEAT	BIL
OEM [two]	0.5	0.5	0.5	0.6
Replacement [five]	3.8	3.8	3.7	3.5
Blended score [five]	4.3	4.3	4.2	4.1

Source: Company, MOFSL

Exhibit 46: Revenue mix is broadly similar across companies (%)

Revenue mix	MRF	APTY	CEAT	BIL
OEM	25	25	26	26
Replacement	75	75	74	74

Source: Company, MOFSL

Exhibit 47: Segmental score is assigned based on our preference for segments, which is then weighed with the revenue mix of each company

	MRF	APTY	CEAT	BIL
TBR [three]	0.7	0.8	0.4	-
TBB [two]	0.4	0.3	0.3	-
LCV [3.5]	0.3	0.2	0.4	-
PCR [four]	0.8	1.5	0.6	-
2W [five]	1.1	0.1	1.6	-
Farm and others [four]	0.3	0.5	0.5	4.0
Blended score	3.5	3.4	3.8	4.0

Source: Company, MOFSL

Exhibit 48: Revenue mix of companies across segments (%)

	MRF	APTY	CEAT	BIL
TBR	23	26	14	0
TBB	22	16	17	0
LCV	7	5	11	0
PCR	19	38	15	0
2W	22	1	31	0
Farm and others	7	13	12	100

Source: Company, MOFSL

Headroom to grow

- Companies are evaluated based on their headroom to grow and preparedness in this aspect over the next few years.
- To evaluate this, we look at capex spends over the past three years and planned capex over the next three years, along with capacity utilization based on current production on fully expanded capacity.
- Our analysis suggests that CEAT, MRF, and APTY have higher headroom to grow over the next few years.
- CEAT's aggressive capacity addition would set the path for growth in all segments.
- Major capex undertaken over the past three years, along with planned future capacity, gives APTY headroom to grow, both in its Indian and European operations.
- BIL's lower score is due to the primary nature of its capex. The entire capex would only translate to 20% addition in capacity.

Exhibit 49: CEAT has the highest headroom to grow based on recent and upcoming capacity additions

	Capex (FY21-23E), INR b	Revenue (FY21), INR b	Cumulative capex as a percentage of revenue (%)	Addition to gross block (%)	Capacity utilization* (%)	Ranking #
MRF	38.5	162	24	31	50	4
CEAT	27.9	76	37	56	45	5
APTY *	46.0	173	27	19	53	4
BIL	27.7	58	48	58	68	3

*FY21 production divided by fully expanded capacity; Source: Company, MOFSL

Cost competitiveness

- We evaluate companies based on their cost structure, for which we compare their gross and EBITDA margins.
- BIL ranks highest on this parameter due to its significantly superior gross margin of 59.9% (FY21). On EBITDA margin too, it ranks higher than peers. Backward integration into carbon black further increases its cost advantage v/s peers. The company enjoys a natural hedge against a depreciating INR due to a higher proportion of exports.
- CEAT fares poorly on the basis of cost competitiveness, with the lowest EBITDA margin among Tyre manufacturers.
- Despite enjoying a superior gross margin (due to EU operations), APTY scores low on cost competitiveness due to lower utilization in India/EU and higher fixed cost structure in EU operations.

Exhibit 50: BIL has the most competitive structure, with a superior gross/EBITDA/EBIT margin (FY21)

	Gross margin (%)	EBITDA margin (%)	EBIT margin (%)	Ranking
MRF	42.3	18.2	11.1	3.5
CEAT	43.9	12.9	8.5	3.0
APTY*	45.6	15.5	7.9	3.0
BIL	59.9	31.1	23.9	5.0

*APTY including EU operations; Source: Company, MOFSL

Financial strength

- We evaluate companies on the basis of their current and projected (FY23E) return ratios: asset turnover, net debt, and cash flow ratios.
- We then rank the companies for both years, with equal weightage for each year.
- Based on this analysis, we prefer BIL due to its consistently higher return ratios, low leverage, and higher cash conversion ratios.
- The financial strength of CEAT and APTY is expected to improve by FY23E, but it would still be sub-par compared to BIL and MRF.

Exhibit 51: BIL ranks the highest on financial strength due to its superior return ratios

Rating scale [five]	MRF	APTY*	CEAT	BIL
Financial strength	3.5	2.8	3.3	5.0

*APTY including EU operations; Source: Company, MOFSL

Exhibit 52: Currently, BIL is best placed in terms of financial strength (FY21)

Financial strength	RoE (%)	RoCE (%)	RoIC (%)	Asset turnover ratio (x)	Net debt-to-equity (x)	CFO conversion, Avg. FY19-21 (%)	FCF/PAT, Avg. FY19-21 (%)	FY21 ranking [five]
MRF	10.0	10.0	14.1	1.0	(0.3)	121	60	3.5
CEAT	14.9	12.2	14.6	1.5	0.4	128	0	3.0
APTY	6.2	5.7	5.9	1.0	0.3	100	-10	2.5
BIL	21.4	18.3	22.5	0.8	(0.1)	96	31	5.0

Exhibit 53: BIL tops in terms of FY23E ranking due to likely improvement in return ratios as capacity utilization improves

Financial strength	RoE (%)	RoCE (%)	RoIC (%)	Asset turnover ratio (x)	Net debt-to-equity ratio (x)	CFO conversion (%)	FCF/PAT (%)	FY23E ranking [five]
MRF	10.8	11.0	15.7	1.1	(0.3)	57	46	3.5
CEAT	13.7	11.3	11.7	1.6	0.4	122	76	3.5
APTY	10.4	9.3	10.5	1.2	0.1	105	145	3.0
BIL	22.6	19.9	27.6	0.9	(0.2)	94	55	5.0

Source: Company, MOFSL

Valuations

- APTY stands out due to its attractive valuations. It is the cheapest stock, despite its superior earnings growth and improving return ratio profile.
- CEAT enjoys superior revenue and EBITDA growth among its domestic focused peers. However, recent capacity additions (in the ramp-up phase) are acting as a drag on earnings. Despite this, valuations are quite reasonable.

Exhibit 54: APTY is the cheapest stock within the Tyre pack on an FY23E basis

Valuation	APTY	BIL	CEAT	MRF
P/E	9.7	26.1	10.9	20.7
P/B	1.0	5.5	1.4	2.1
EV/EBITDA	4.0	17.0	5.7	8.3
RoE (%)	10.4	22.6	13.7	10.8
RoCE (%)	9.3	19.9	11.3	11.0
Revenue CAGR over FY21-23E (%)	13.5	20.1	15.7	11.7
EBITDA CAGR over FY21-23E (%)	16.1	22.0	14.7	10.3
PAT CAGR over FY21-23E (%)	42.2	21.5	6.9	14.8
PEG	0.2	1.2	1.6	1.4

Source: Company, MOFSL

Exhibit 55: Comparative valuation table

	Price (INR)	M-cap (INR b)	Upside (%)	Rating	CAGR (FY21-23E)			P/E		EV/EBITDA		RoE (%)		RoCE (%)	
					Sales	EBITDA	EPS	FY22E	FY23E	FY22E	FY23E	FY22E	FY23E	FY22E	FY23E
APTY	225	143	33	Buy	13.5	16.1	42.2	11.9	9.7	5.4	4.4	9.1	10.4	8.3	9.3
BIL	2,349	454	3	Neutral	20.1	22.0	21.5	31.5	26.1	19.9	16.5	22.1	22.6	19.1	19.9
CEAT	1,427	58	30	Buy	15.7	14.7	6.9	16.4	10.9	7.7	5.7	10.1	13.7	9.0	11.3
MRF	82,067	348	2	Neutral	11.7	10.3	14.8	24.7	20.7	9.8	8.3	10.0	10.8	10.0	11.0

Source: Company, MOFSL

Exhibit 56: Comparative valuation of global peers

		CY20-22E CAGR			RoE (%)			P/E (x)			EV/EBITDA (x)		
Company (USD b)	M-cap	Sales	EPS		CY20	CY21E	CY22E	CY20	CY21E	CY22E	CY20	CY21E	CY22E
Bridgestone Corp	30.5	4.1	LTP		-1.0	12.3	11.2	NA	11.1	12.5	8.0	5.6	5.0
Sumitomo Rubber Industries	3.5	7.4	23.3		4.9	7.0	7.4	10.3	11.8	10.9	4.2	5.3	5.0
Toyo Tire Corp	2.9	8.6	83.4		5.3	15.5	15.1	20.7	8.8	8.1	5.5	5.5	5.0
Yokohama Rubber Co Ltd	3.4	6.4	21.9		6.3	11.5	8.4	9.3	6.6	8.7	5.3	4.8	5.3
Kumho Tire Co Inc	1.7	17.6	LTP		-6.7	-0.8	8.8	NA	NA	17.7	11.3	12.7	9.1
Nexen Tire Corp	0.8	14.1	LTP		-1.0	4.7	5.8	NA	12.7	9.8	6.8	6.2	5.6
Michelin (Cgde)	28.6	9.7	80.3		4.9	12.2	13.2	29.8	14.7	12.1	7.0	6.2	5.7
Hankook Tire & Technology Co	5.5	9.6	33.1		5.1	7.9	7.9	13.0	10.4	9.8	3.9	4.4	4.3
Cheng Shin Rubber Ind Co Ltd	5.2	12.1	16.6		7.6	9.0	9.3	23.8	19.4	18.9	8.4	7.6	7.7
Goodyear Tire & Rubber Co	4.5	19.7	LTP		-33.8	8.9	14.9	NA	13.3	8.1	18.4	5.5	4.5
Nokian Renkaat Oyj	5.8	13.4	73.0		5.2	13.4	15.3	46.5	23.1	19.8	14.4	11.8	10.6
Continental Ag	27.6	8.2	LTP		-7.0	11.1	15.0	NA	15.7	10.2	12.9	5.4	4.5
Trelleborg AB	6.6	5.9	25.7		9.3	11.9	12.2	18.3	15.0	13.7	9.7	9.7	9.0
Pirelli	5.7	12.1	286.7		0.6	5.9	8.4	147.8	14.6	10.6	11.0	8.8	7.7

Source: Bloomberg

Key risks

- **Imports from China:** In Sep'17, the Government of India re-imposed ADD on imports of new Chinese T&B radial tyres for a five-year period. This led to Chinese TBR imports, which were as high as ~30% of total domestic TBR consumption, becoming costlier, providing a level-playing field with Indian T&B Tyre manufacturers. Non-extension of ADD, or its revocation, would severely impact domestic players, especially in the current scenario of considerable capacity addition.
- **Competitive intensity:** The Tyre sector is witnessing intense competition, with almost all players undertaking huge capacity additions in pursuit of market share. Under the circumstance, where demand remains subdued, we might see heightened competitive intensity, impacting profitability for the sector.

Tyres: Ready to roll



Apollo Tyres

BSE Sensex

52,553

S&P CNX

15,752

CMP: INR225

TP: INR300 (+33%)

Buy



Stock Info

Bloomberg	APTY IN
Equity Shares (m)	635
M.Cap.(INRb)/(USDb)	143.1 / 1.9
52-Week Range (INR)	261 / 106
1, 6, 12 Rel. Per (%)	-1/13/64
12M Avg Val (INR M)	1849
Free float (%)	62.4

Financial Snapshot (INR b)

Y/E March	FY21	FY22E	FY23E
Sales	172.8	204.8	222.8
EBITDA	26.8	32.3	36.2
Adj. PAT	6.6	10.8	13.3
EPS (Rs)	11.5	18.9	23.3
EPS Growth (%)	38.1	64.5	23.0
BV/Share (INR)	200.0	214.9	233.7

Ratios

RoE (%)	6.2	9.1	10.4
RoCE (%)	5.7	8.3	9.3
Payout (%)	57.2	21.2	19.3

Valuations

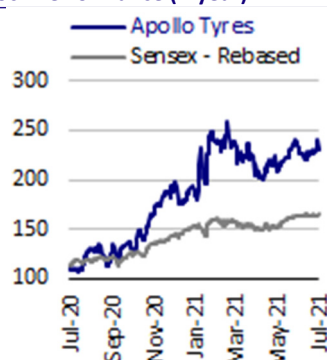
P/E (x)	19.6	11.9	9.7
P/BV (x)	1.1	1.0	1.0
Div. Yield (%)	1.6	1.8	2.0
FCF Yield (%)	10.0	3.1	15.0

Shareholding pattern (%)

As On	Jun-21	Mar-21	Jun-20
Promoter	37.6	37.3	41.7
DII	17.2	13.1	19.9
FII	22.9	24.3	19.7
Others	22.3	25.3	18.7

FII Includes depository receipts

Stock Performance (1-year)



Improved competitive positioning in both India and EU

Strong EPS growth and Balance Sheet deleveraging to drive re-rating

Ranks highest in our TII framework

- APTY offers a favorable balance of strong earnings growth and attractive valuations. It ranks the highest in our TII framework of evaluating Tyre companies, with a score of 3.9 (scale of five).
- While APTY doesn't rank on top in any of the operational parameters, it is a close second in brand ranking and headroom to grow. Moreover, its valuations are the most attractive relative to MRF, CEAT, and BIL.

India – Strong competitive positioning; good headroom for growth

- Over the last five years, APTY has considerably strengthened its competitive positioning in the Indian market in the T&B/PCR segment (5pp/6pp market share gain over FY17 to 30%/21% in FY21). As a result, it has achieved market leadership in T&B and is a close second in PCR.
- On a fully expanded capacity by FY22-end, APTY's utilization in PCR/TBR is estimated at 71%/65%. This, coupled with the recently commissioned AP plant, has scope to replicate capacity at lower cost.
- India revenue is estimated to grow by ~14% CAGR over FY21-23E, with FY23E EBITDA margin estimated to decline 70bp (to 15.8%) over FY21 levels. However, operating leverage and Balance Sheet deleveraging would drive 24% PAT CAGR in the India business.

European operations turnaround to support margin

- PCR capacity at the Hungary plant is undergoing a ramp up to 5.5m by FY22-end from 5.1m p.a at present. It was operating at 75% utilization in 4QFY21.
- The planned PCR capacity transfer from the Netherlands to the Hungary plant would further leverage its low-cost structure, with the revenue contribution of the Hungary plant likely to rise materially.
- Restructuring/specialization of the Netherlands plant, coupled with a ramp-up (75% utilization) in the more efficient Hungary plant (conversion at less than 0.2x that of the Netherlands plant and minimum wages less than 0.3x), would drive ~300bp EBITDA margin expansion (over FY21) to 15.5% in FY23E and be positive at the PAT level.

Valuation and view

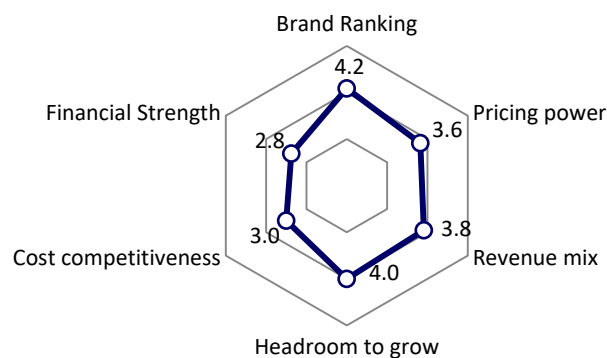
- APTY is geared up for the next leg of growth, with sufficient capacity to cater to domestic/European demand. With capex for Phase I of the AP plant concluding in FY22E, the increase in capacity utilization will generate higher cash flows and further deleverage the Balance Sheet.
- Compared to its peers, APTY offers the best blend of earnings growth and cheap valuations. The stock trades at 11.9x/9.7x FY22E/FY23E consolidated EPS. We initiate coverage on the stock with a Buy rating and a TP of INR300 (12x Sep-23E consolidated EPS v/s 16x/12x its 5/10 year average P/E).

Ranks highest within our TII framework

Blend of strong earnings growth and attractive valuations

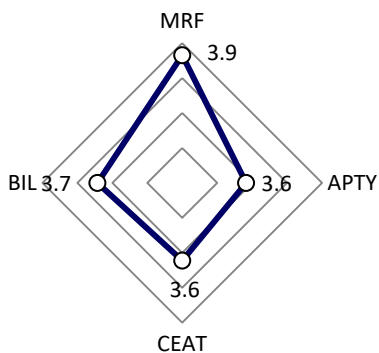
- APTY offers a favorable balance of strong earnings growth and attractive valuations. It ranks highest in our TII framework of evaluating Tyre companies, with a score of 3.9 (scale of five).
- While APTY doesn't rank on top in any of the operational parameters, it is a close second in brand ranking and headroom to grow. Moreover, valuations are attractive relative to MRF, CEAT, and BIL.
- It ranks a distant second in pricing behind MRF, largely due to its EU operations. For its India operations, APTY is close second on pricing power.

Exhibit 57: APTY scores high in terms of brand ranking and headroom to grow



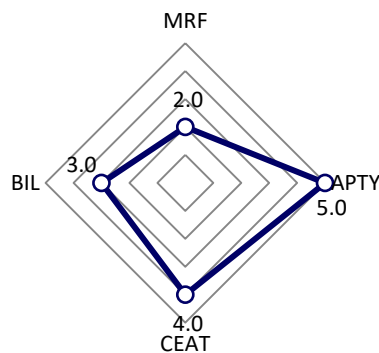
Source: MOFSL

Exhibit 58: APTY ranks low based on operating parameters, partly due to its EU operations



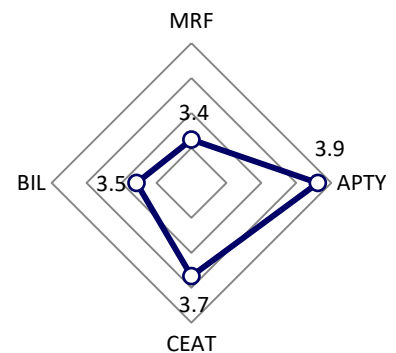
Source: MOFSL

Exhibit 59: However, it ranks numero uno based on current valuations

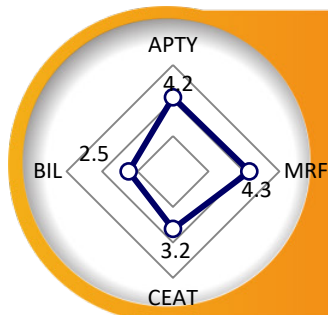


Source: MOFSL

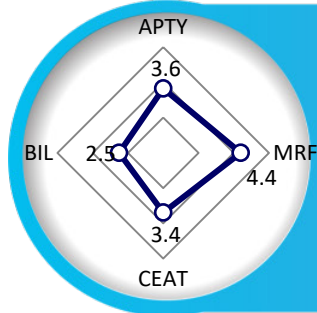
Exhibit 60: APTY ranks topmost on good operating metrics at attractive valuations



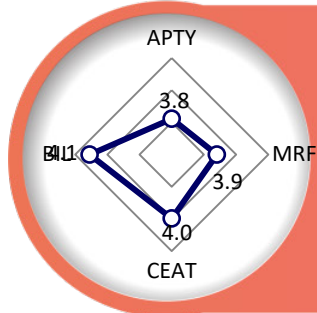
Source: MOFSL

**#1: Brand ranking**

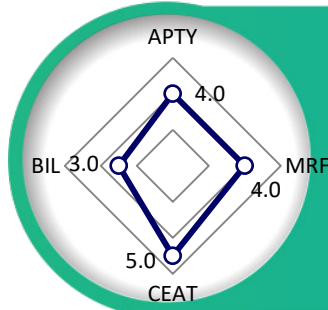
- ❖ APTY closely competes with MRF in terms of brand ranking, owing to its strong identity in the T&B and PCR segments.
- ❖ It is among the top two players in the T&B segment, with ~31% market share, owing to its delivery of quality products at a good price point.
- ❖ Within PCR, APTY has improved its brand ranking significantly over the past few years, led by its focus on product innovation, improving quality, and increasing penetration with key OEMs.

**#2: Pricing power**

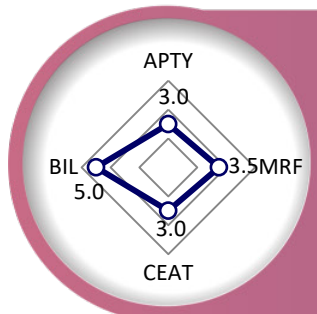
- ❖ APTY enjoys pricing power in the TBR segment due to its leadership position and superior quality product offerings. Pricing power in the TBB segment is fairly decent, but MRF dictates pricing here.
- ❖ In the PCR segment, its pricing power remains stronger than CEAT and JKI, but is weaker than MRF and Bridgestone.
- ❖ It doesn't enjoy pricing power in the EU due to its relatively small presence there and is a price taker.
- ❖ On an overall basis, APTY lags behind MRF in terms of pricing power due to its relatively weak positioning in the PCR segment.

**#3: Revenue mix**

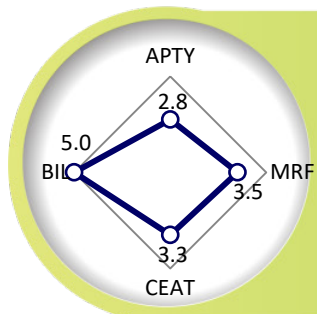
- ❖ APTY ranks third in terms of revenue mix to BIL and CEAT.
- ❖ Of the four Tyre companies, APTY has the highest (~75%) contribution from the Replacement segment.
- ❖ It also has a higher concentration in the CV segment (~61%) vis-à-vis its peers.
- ❖ Negligible presence in 2Ws is also weighing down on its overall score.

**#4: Headroom to grow**

- ❖ APTY has undertaken significant steps over the last three years towards its Hungary operations, and expansion in Andhra Pradesh (AP) and Chennai.
- ❖ Ramp-up in Hungary PCR and TBR capacity would ensure that APTY has significant room to grow in its EU operations, without the requirement of any major capex up to FY23.
- ❖ In India, PCR capacity will increase to 52k tyres/day (v/s 38k currently), post completion of the ramp up in capacity in AP by FY22-end.
- ❖ Ongoing ramp-up in TBR capacity would further boost capacity to 15k tyres/day (v/s current capacity of 13k). This provides ample opportunity for APTY to grow organically over FY21-23E.

**#5: Cost competitiveness**

- ❖ APTY ranks lower on this parameter as EBIT margin remains lower than MRF and BIL.
- ❖ Among domestic peers, MRF beats APTY in terms of EBITDA and EBIT margin due to its relatively strong pricing power across segments.
- ❖ Gross margin (consolidated) is the highest for APTY as compared to MRF and CEAT, but consolidated EBIT margin is much lower.

**#6: Financial strength**

- ❖ APTY ranks the lowest v/s MRF, BIL, and CEAT in terms of financial strength due to its sub-par return ratios.
- ❖ Net debt is higher for APTY at 0.3x currently (0.1x by FY23E) as compared to MRF and BIL, which are both net cash.
- ❖ We expect a significant improvement in APTY's financial positioning over the next few years, led by higher capacity utilization, increased cash flow, deleveraging, higher profitability as the Hungary plant ramps up, and restructuring in the Netherlands.

India: Strengthened competitive position in PCR and TBR

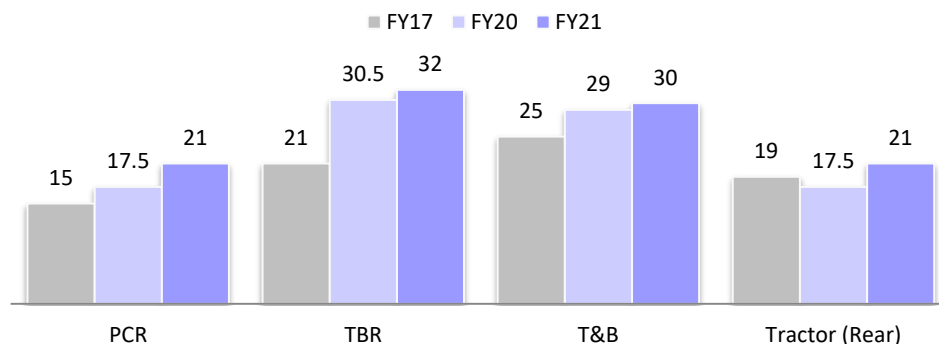
Good headroom for growth and low cost expansion at the AP plant

- Over the last five years, APTY has considerably strengthened its competitive positioning in the Indian market. In the T&B segment, it has emerged as the market leader, with a market share gain of 5pp over FY17 to 30% in FY21, benefitting from radialization (TBR market share gain of ~11pp to 32%).
- In PCR, it has considerably narrowed down the gap v/s the market leader by gaining 6pp. Its share stood at 21% in FY21, which is 100-200bp lower than the market leader. In Agri Tyres (rear Tractor tyre), its market share improved by ~2pp over FY17 to 21%.
- On a fully expanded capacity by FY22-end, APTY's utilization in PCR/TBR is estimated at 71%/65%. Considering 4QFY21 utilization level for all India plants (excluding AP) stands at 85-90%, APTY has adequate capacity for the next 2-2.5 years of growth. The AP plant, spread over 256 acres, has a modular layout and capacity can be replicated at relatively low cost.
- After a strong performance in FY21, we expect standalone EBITDA margin to decline by ~70bp over FY21 to ~15.8% in FY23E. This is on account of higher commodity cost. Our estimates are yet to factor in supplies of PCR from India to the EU. However, operating leverage would result in a 50bp decline in EBIT margin, whereas the Balance Sheet deleveraging is driving 120bp expansion in EBT margin over FY21-23E.

Improving competitive positioning in PCR and TBR

- Over the last five years, APTY has considerably strengthened its competitive positioning in the Indian market through focus on product development, enabling market share gains in both the OEM and Replacement segment.
- It has consolidated its position in T&B tyres, with a market share gain of 5pp over FY17 to 30% in FY21, benefitting from radialization. In TBR, APTY witnessed a very high (~11pp) market share gain to 32%. By leveraging the radialization trend, APTY has gained market leadership in the TBR and T&B segment.
- In PCR, it has considerably narrowed down the gap vis-à-vis the market leader over the last four years. Its market share in PCR has increased to 21% in FY21 from 15% in FY17, which is 100-200bp lower than the market leader.
- In Agri Tyres (rear Tractor tyre), APTY's market share has improved by ~2pp over FY17 to 21%.
- APTY's market share gain continued in FY21, benefitting from import ban, resulting in market share gains of 150bp/350bp/350bp in TBR/PCR/Agri.

Exhibit 61: Market share: APTY gains leadership in TBR and is a close second in PCR

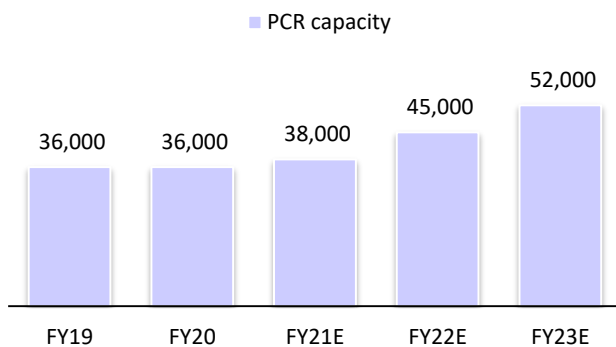


Source: Company, MOFSL

Good headroom for growth and low cost expansion at the AP plant

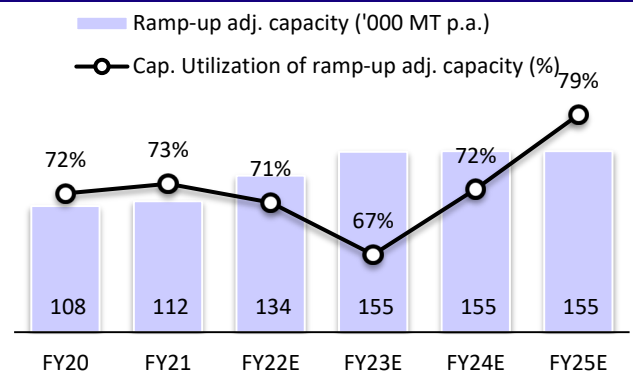
- APTY has invested ~INR63b in India since FY18, including INR22b for the AP plant till FY21. While commercial production at the AP plant began from Sep'20, full ramp-up of Phase I is expected over the next 12-18 months.
- PCR/TBR capacities would be ramped up to 15k/3k tyres per day (from ~5k/1.2k per day at present) by FY22-end.
- This will increase overall PCR/TBR capacity by 25-30%/14-16% (from 4QFY21 levels) to ~50k/~15k tyres per day.
- On a fully expanded capacity by FY22-end, APTY's utilization in PCR/TBR is estimated at 71%/65%. Considering 4QFY21 utilization levels for all India plants (excluding AP) is at 85-90%, APTY has adequate capacity for the next 2-2.5 years of growth. The AP plant, spread over 256 acres, has a modular layout and the capacity can be replicated at a relatively lower cost.
- We estimate 10% volume CAGR over FY21-23E, led by strong growth in the TBR and PCR segment, coupled with an improvement in price realization of 3%CAGR. We estimate ~14% revenue CAGR over FY21-23E.

Exhibit 62: To complete ramp-up its PCR capacity by FY22-end (tyres per day), with full benefit in FY23...



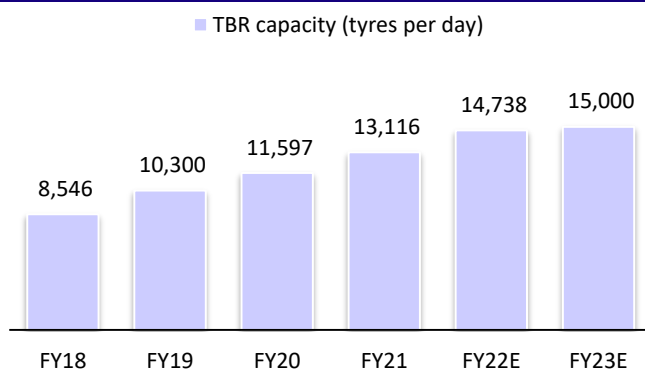
Source: Company, MOFSL

Exhibit 63: ...which provides enough headroom to grow over the next 2-3 years from current capacity levels



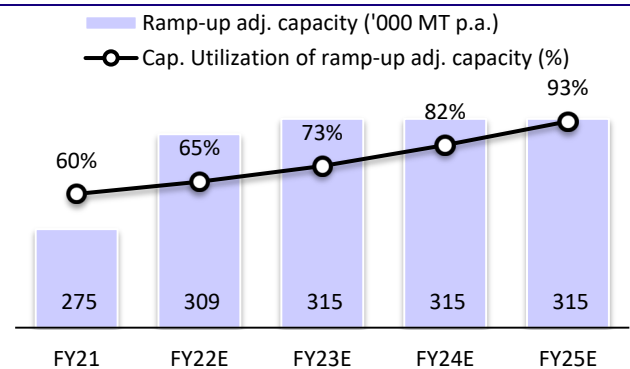
Source: Company, MOFSL

Exhibit 64: Capacity addition in TBR to see full ramp-up of the AP plant by FY22-end...



Source: Company, MOFSL

Exhibit 65: ...offering reasonable headroom to grow over the next 2-3 years in the TBR segment

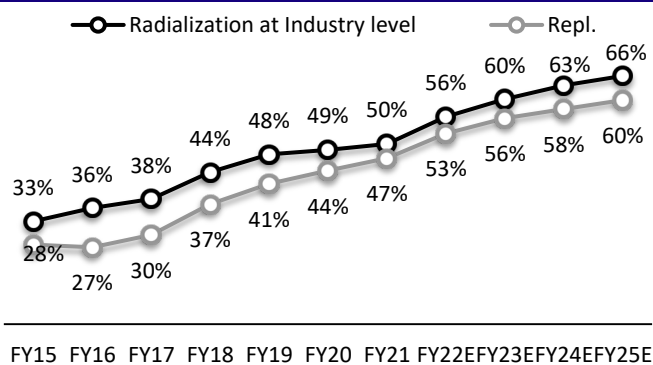


Source: Company, MOFSL

APTY is the biggest beneficiary of radialization

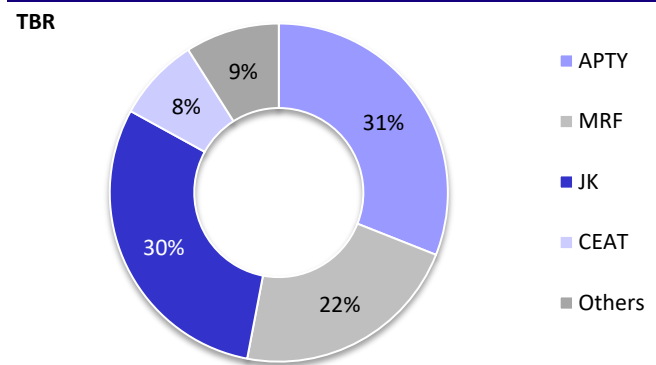
- APTY has been one of the key beneficiaries of radialization in India's CV Tyre industry. Through significant investments in R&D over the past years, APTY has commanded leadership in this segment, thereby enjoying strong brand equity and pricing power.
- APTY has consistently improved its market share in the TBR segment. The same currently stands ~31%.
- We expect the radialization trend to touch new highs, particularly in the Replacement segment, of 60% by FY25E (from 47% in FY21).
- Radialization is likely to accelerate further over FY21-25E, with the share of radials in the T&B segment touching ~66% by FY25E (from 50% in FY21). We expect 20% T&B radial sales CAGR over FY21-25E and TBB CAGR of 2% (on a low base).

Exhibit 66: Radial tyres set to attain ~66% share by FY25E in the T&B segment



Source: Company, MOFSL

Exhibit 67: APTY, being the market leader, benefits the most from this trend, particularly in the Replacement market



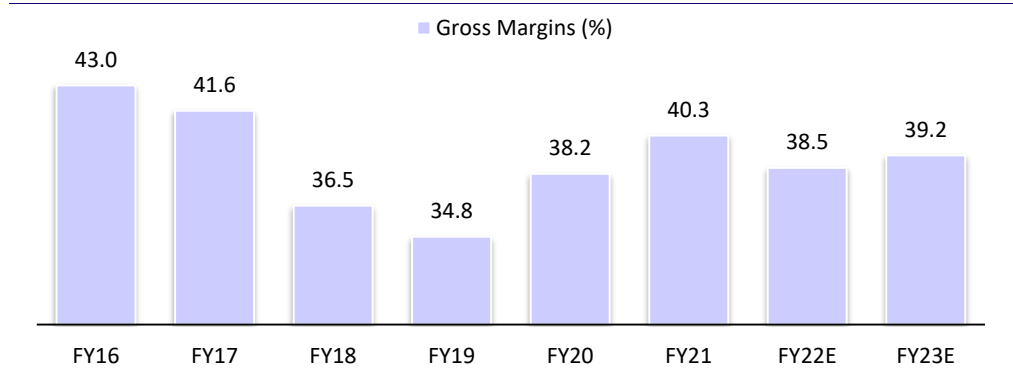
Source: Company, MOFSL

Price increases and operating leverage to dilute the impact of cost inflation

- APTY's India business has several levers for supporting margin and diluting the impact of RM cost inflation. These include: a) operating leverage, b) increasing share of the most efficient AP plant, and c) likely benefit from PCR exports to the EU with PLI benefits.
- In 2HFY21, APTY witnessed the impact of commissioning of the AP plant, as fixed cost got apportioned on lower volumes. Over the next two years, as the AP plant gets fully utilized, we expect it to drive material operating leverage as well as benefit from higher efficiencies (with the highest automation in its India operations).
- APTY is planning to supply over 3m PCR tyres to its EU business from Hungary and India operations as it has decreased (~90%) the plant capacity in the Netherlands. A part of this 3m PCR tyres which would be exported from India, would potentially benefit from the PLI scheme for exports.
- After a strong performance in FY21, we estimate standalone EBITDA margin to decline by ~70bp over FY21 to ~15.8% in FY23E. This is primarily on account of higher commodity cost. Our estimates are yet to factor in supplies of PCR from India to the EU.

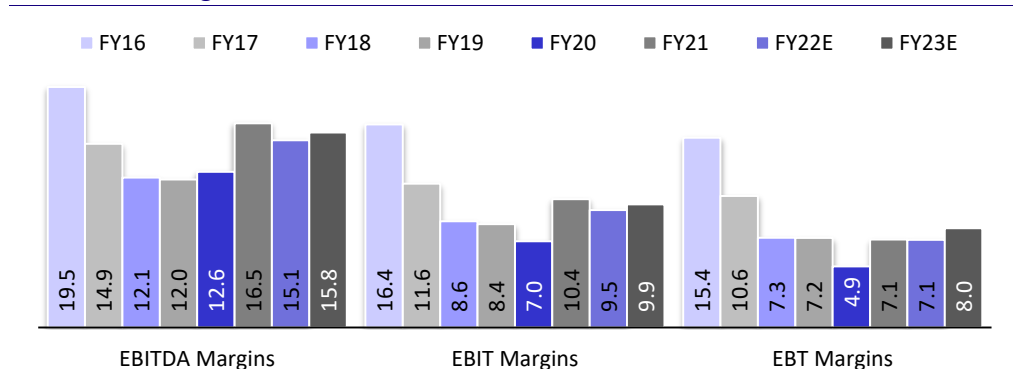
- Operating leverage would result in a 50bp decline in EBIT margin, whereas Balance Sheet deleveraging is driving 120bp expansion in EBT margin over FY21-23E.

Exhibit 68: Expect gross margin for APTY's India business to decline 110bp over FY21 to 39.2% in FY23E...



Source: Company, MOFSL

Exhibit 69: ... however positive operating leverage to decline the impact to 70bp/50bp in EBITDA/EBIT margin



Source: Company, MOFSL

Turnaround in its European operations to support margin...

...driven by a ramp-up in Hungary and restructuring in the Netherlands

- APTY (through Vredestein) has been continually improving its product mix in favor of UHP/UUHP tyres. The share of UHP tyres (17") within PCR stands at 36% v/s 20% five years back. It is gaining traction in targeted premium OEMs, which would further support brand building and its journey towards premiumization.
- PCR capacity at its Hungary plant would be further ramped up to 5.5m by FY22-end from 5.1m p.a at present. It was operating at 75% utilization in 4QFY21.
- The planned PCR capacity transfer from the Netherlands to the Hungary plant would further leverage its low-cost structure, with the revenue contribution of the Hungary plant likely to rise materially.
- Restructuring/specialization of the Netherlands plant, coupled with a ramp-up (75% utilization) in the more efficient Hungary plant (conversion at less than 0.2x that of the Netherlands plant and minimum wages less than 0.3x), would drive ~300bp EBITDA margin expansion (over FY21) to 15.5% in FY23E and be positive at the PAT level.

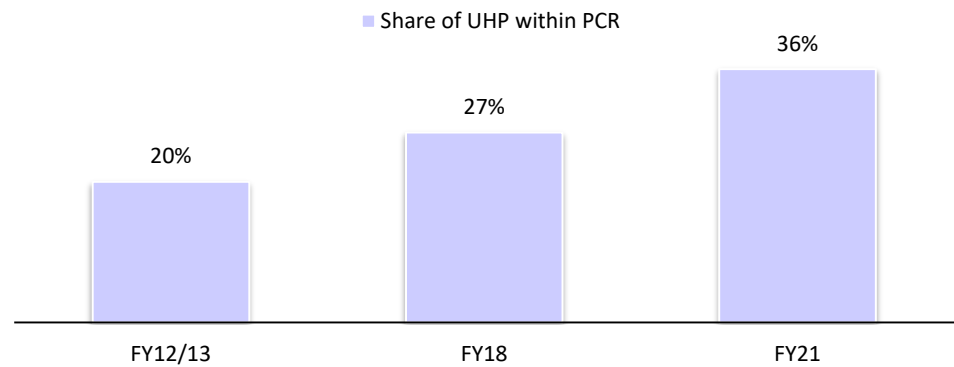
Premiumization to remain a focus area

- APTY (through Vredestein) has been continually improving its product mix in favor of UHP/UUHP tyres. The share of UHP tyres (17") within PCR now stands at 36% v/s 20% five years back.
- It is also extending its premium segment portfolio by introducing UHP tyres across summer/winter and all season segments.
- APTY's UHP products have been well received by the market as reflected in its market share gains. This is also reflected in consistent podium finishes at various test agencies. These podium positions are key drivers of improvement in market share, price positioning, and profitability.
- It is gaining traction in targeted premium OEMs, which would further support brand building and journey towards premiumization.

Exhibit 70: Vredestein has been consistently achieving podium positions in Europe

Date	Test Agency	Recommendation	Position	Tyre Model
Apr-20	ADAC	Recommendable	4th	Vredestein Vorti
Apr-20	AutoBild Top 50	Exemplary	4th+5th	Vorti and Aspire XP
Apr-20	AutoBild Allrad	Exemplary	3rd	Vredestein Ultrac Satin
Apr-20	AutoBild Sportscars	Good	4th	Vredestein Vorti
Apr-20	AutoMotorSport	Good	4th	Vredestein Vorti
Sep-20	Consumer Reports	Recommendable	2nd	Vredestein Hltrac
Sep-20	Consumer Reports	Recommendable	3rd	Vredestein Pinza AT
Sep-20	ADAC	Recommendable	3rd	Vredestein Wintrac Pro
Sep-20	AutoMotorSport	Exemplary	3rd	Vredestein Wintrac Pro
Sep-20	AutoBild Top 32	Exemplary	2nd	Vredestein Quattrac
Oct-20	AutoBild Allrad	Exemplary	3rd	Vredestein Wintrac Pro
Oct-20	AutoBild Sportscars	Exemplary	4th	Vredestein Wintrac Pro
Nov-20	AutoBild Allrad	WINNER	1st	Vredestein Quattrac
Feb-21	Gutefahrt	Good	4th	Vredestein Ultrac Satin
Mar-21	AutoBild Sportscars	Good	4th	Vredestein Vorti R
Mar-21	AutoBild	Good	5th	Vredestein Vorti

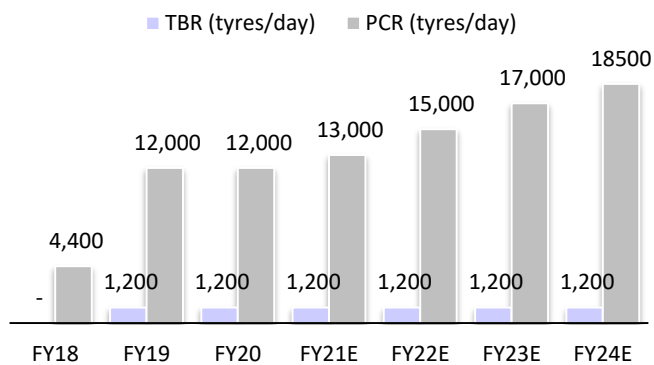
Source: Company

Exhibit 71: Share of premium tyres increases over the years

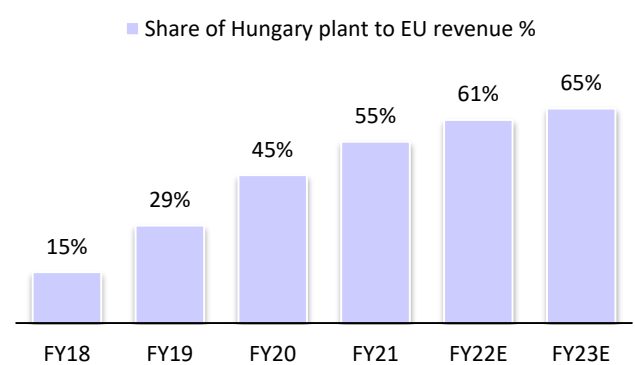
Source: Company, MOFSL

Efficient Hungary plant to drive revenue growth

- PCR capacity at its Hungary plant would be ramped up further to 5.5m by FY22-end from 5.1m p.a at present. It was operating at 75% utilization in 4QFY21.
- TBR capacity (450k p.a) at this plant is running at lower utilization levels and could surprise positively. It has been seeding the European market with its TBR tyres. With new capacity in place, it expects to make healthy inroads in this segment.
- The planned PCR capacity transfer to Hungary from the Netherlands plant would further leverage its low-cost structure, with revenue contribution from the Hungary plant likely to rise to 65% by FY23E from 55% in FY21 (without factoring in benefits of a shift in production from the Netherlands plant).

Exhibit 72: Capacity ramp-up at the Hungary plant underway...

Source: Company, MOFSL

Exhibit 73: ...resulting in increasing share within EU operations

Source: Company, MOFSL

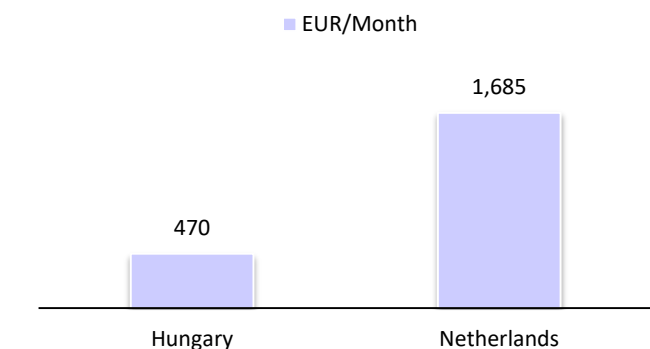
Ramp-up in Hungary, restructuring in the Netherlands to drive margin

- APTY's margin in the European business has been on a downtrend over the past five years, impacted by startup/ramp-up costs at the Hungary plant, cost related to compliance with label requirements and R&D, streamlining of operations for OEM homologations, and in general slowdown in the PCR Tyre industry. As a result, margin shrank to 8% in FY20 from 16.8% in FY15.
- It recently completed restructuring of its 100-year old plant in the Netherlands by converting it into a specialized plant focusing on Agri and high-end PCR (suitable for a smaller batch and higher manual work). This would result in a

90% reduction in capacity at the Netherlands plant to 0.5m tyres p.a, which would be largely (over 3m tyres) catered by its Hungary and India plants.

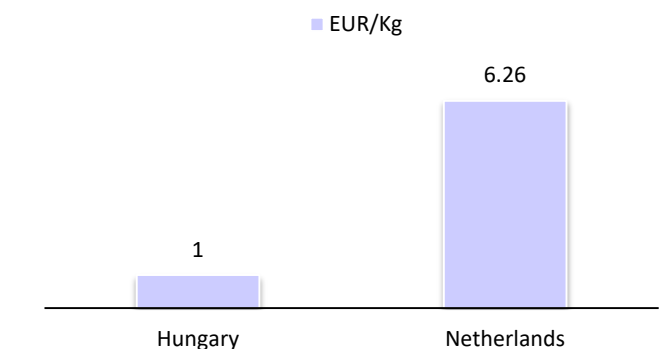
- This, coupled with a ramp-up (75% utilization) in the more efficient Hungary plant (conversion at less than 0.2x that of the Netherlands plant and minimum wages less than 0.3x), has resulted in a sharp margin improvement in its EU operations in 2HFY21 (~15.4% EBITDA margin).
- This margin improvement in 2HFY21 is without the full saving benefits of EUR50m due to reduction in headcount at its plant in the Netherlands.
- We expect EBITDA margin to expand by ~300bp to 15.5% for its EU operations in FY23E (after factoring in cost inflation in 1HFY22E). This will result in EU operations turning PAT positive from FY22E onwards.

Exhibit 74: Minimum wages in Hungary less than 0.3x that of the Netherlands plant



Source: Industry, MOFSL

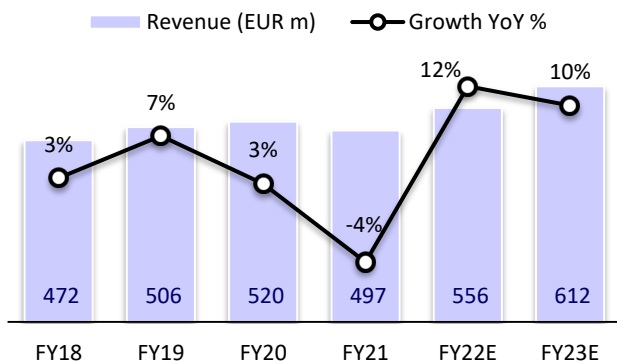
Exhibit 75: Conversion cost at the Hungary plant is less than 0.2x that of the Netherlands plant



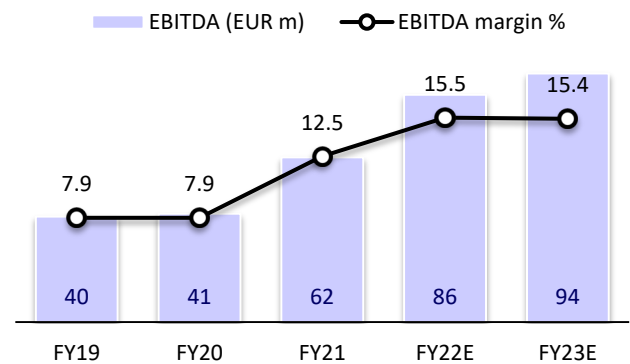
Source: Company, MOFSL

Limited capex needs in the near term

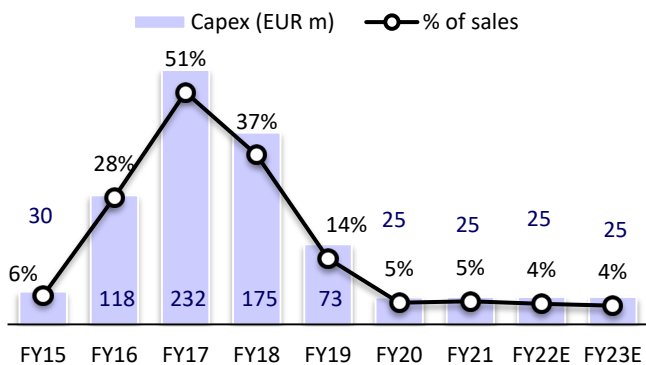
- With capex for its Hungary plant completed, EU operations have good headroom to grow from current capacities. The next leg of capacity expansion at its Hungary plant would be brownfield to expand its PCR and TBR capacity, but we do not foresee any need for this until FY24.
- Its current capacity at Hungary is 5.1m tyres p.a, which would be expanded to 5.5m tyres by FY22-end. With a small capex for debottlenecking, annual capacity at the Hungary plant can be increased by 0.5m units to 6m units. This, coupled with the Netherlands plant capacity of 0.5m p.a, gives it a total capacity of 6.5m p.a. Its EU operations will be supported by exports from India to the EU.
- We are factoring in an annual capex of EUR25m for FY22E/FY23E.

Exhibit 76: Accelerated revenue growth aided by market recovery and available capacity...

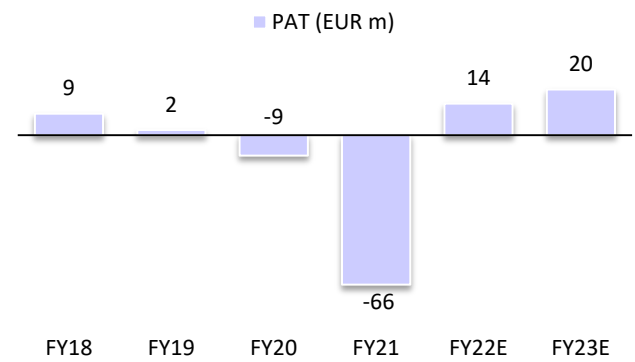
Source: Company, MOFSL

Exhibit 77: ...with margin expanding by 300bp over FY21 due to ramp-up in Hungary and restructuring in the Netherlands

Source: Company, MOFSL

Exhibit 78: Capex intensity to remain low

Source: Company, MOFSL

Exhibit 79: Expect operations to turn profitable by FY22E

Source: Company, MOFSL

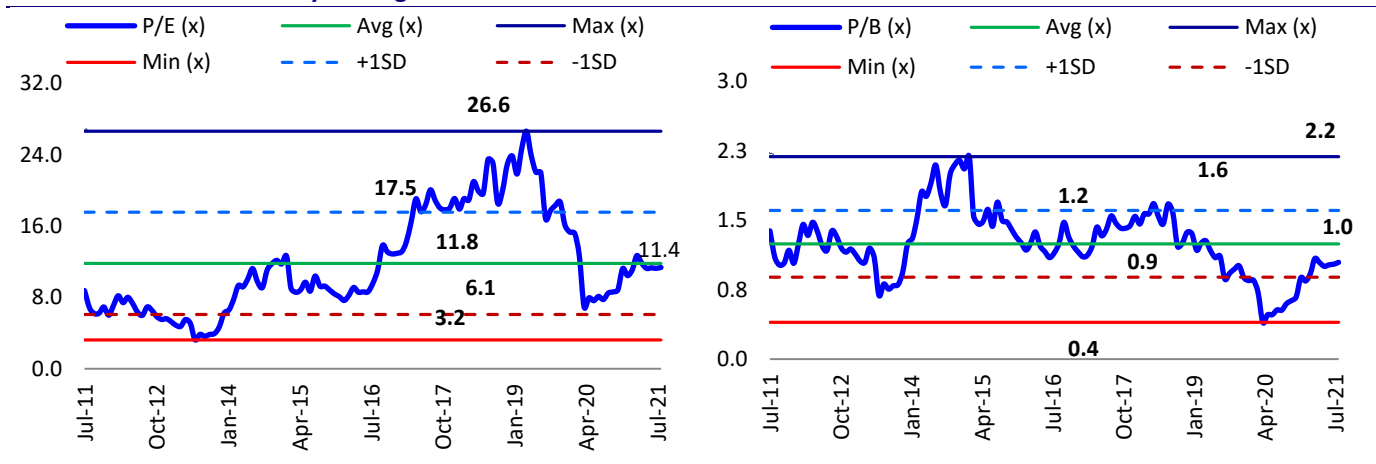
Valuations and view

Strong growth, with an improvement in capital efficiency

- **India well placed for growth:** APTY is well placed, with strong competitive positioning as well as ready capacities to benefit from a strong recovery in TBR and PCR in both the OEM and Replacement segment. On a fully expanded capacity by FY22-end, its PCR/TBR utilization is estimated at 71%/65%. We estimate 10% volume CAGR over FY21-23E, led by strong growth in the TBR and PCR segment and 3% CAGR improvement in price realizations. We estimate ~14% revenue CAGR over FY21-23E. APTY's India business has several levers for supporting margin and diluting the impact of RM cost inflation. These include: a) operating leverage, b) increasing share of the most efficient AP plant (not factored in), and c) likely benefit from PCR exports to the EU, with PLI benefits (not factored in). While we expect a 70bp decline in FY23E EBITDA margin (to 15.8%) over FY21 levels, operating leverage and Balance Sheet deleveraging would drive 24% PAT CAGR in the India business.
- **EU – worst behind it:** Its EU operations are all set for a turnaround, led by strategic initiatives at both the front (product side) and back end (Hungary plant and restructuring in the Netherlands). With improved competitiveness, APTY has gained market share in the Replacement segment and made inroads with OEMs. With a further ramp-up at the low-cost Hungary plant and specialization at the Netherlands plant, we estimate 11% revenue CAGR over FY21-23E (on a low base) and ~300bp EBITDA margin expansion to 15.5% by FY23E. We estimate EU operations to turn profitable by FY22E. Our estimates do not factor in benefits from the transfer of over 3m tyres to the Hungary and India plant.
- **Leaner Balance Sheet augurs well for future growth capex:** APTY raised funds through a preferential placement to an arm of Warburg Pincus. In Feb'20, it issued compulsory convertible preference shares (already converted to equity), equivalent to 9.93% stake in the company for INR10.8b, at INR1,713/share. Post this fund infusion as well as FY21 FCF (post interest) of ~INR9.5b, consolidated net debt stood at INR28.8b as of Mar'21 (from INR58b as of Mar'20). Even after factoring in a negative FCF in FY22E, net debt would be comfortable at 0.3x/0.1x equity for FY22E/FY23E and 1x/0.5x EBITDA.
- **Expect ~40% consolidated PAT CAGR over FY21-23E:** Driven by strong growth across its Indian and European operations, APTY is likely to deliver 14% revenue CAGR over FY21-23E. We estimate gross margin to trend downward by ~130bp over FY21-23E (44.4% in FY20). Benefit from the restructuring of its EU operations and operating leverage in India and EU would drive a 50bp consolidated EBITDA margin expansion to 16%. This implies a 15% EBITDA CAGR over FY21-23E. With a reduction in interest cost due to the debt reduction, we estimate an adjusted PAT CAGR of ~40% over FY21-23E. As a result, we estimate a 380bp improvement in RoE over FY21 to ~10% in FY23E.
- **Initiate coverage with a Buy rating and a TP of INR300/share:** APTY is geared for the next leg of growth, with sufficient capacity to cater to demand from India and Europe. With capex for Phase I of the AP plant concluding in FY22E, increase in capacity utilization will generate higher cash flows and further deleverage its Balance Sheet. As compared to its peers, APTY offers the best blend of earnings

growth and cheap valuations. The stock trades at 11.9x/9.7x FY22E/FY23E consolidated EPS. We value APTY at 12x Sep-23E EPS (v/s a 5/10 year average P/E multiple of ~16x/12x). We initiate coverage on the stock with a Buy rating and a TP of INR300.

Exhibit 80: APTY is currently trading near is LPA



Source: MOFSL

SWOT analysis



Bulls and Bear Case

Exhibit 81: APTY: Scenario Analysis

Consolidated INR m	Base			Bull			Bear		
	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E
India revenue	1,40,502	1,51,448	1,61,888	1,45,230	1,59,753	1,75,728	1,37,097	1,45,323	1,52,589
Growth (%)	21	8	7	25	10	10	18	6	5
EU revenue	64,276	71,343	75,533	65,131	72,296	78,079	62,300	67,284	70,648
Growth (%)	13	11	6	15	11	8	10	8	5
Revenue	2,04,778	2,22,791	2,37,421	2,10,361	2,32,049	2,53,808	1,99,397	2,12,607	2,23,237
Growth (%)	18	9	7	22	10	9	15	7	5
India EBITDA margin (%)	15.1	15.8	15.9	15.5	16.5	16.5	14.5	15.0	15.0
EU EBITDA margin (%)	17.2	17.2	17.2	17.5	17.4	17.4	16.5	16.5	16.5
EBITDA	32,349	36,158	38,712	33,909	38,859	42,493	30,159	32,900	34,545
EPS (INR)	18.9	23.3	26.2	21.0	26.8	31.1	16.0	19.0	20.7
Growth (%)	64	23	13	82	28	16	39	19	9
RoE (%)	9.1	10.4	10.7	10.1	11.7	12.3	7.8	8.7	8.8
Target P/E (x)		12	12		14	14		10	10
TP		281	318		375	436		190	207
Upside CAGR (%)		25	19		67	39		-16	-4
Remarks				Strong Replacement demand in PCR and T&B in India; the EU is benefitting from full Hungary ramp-up and supplies from India			Weak Replacement demand in PCR and T&B; Key risk: PCR demand doesn't pick-up in EU		
				Moderation in RM prices and lower competitive intensity			Higher RM prices and competitive intensity		

Source: MOFSL

Operating metrics

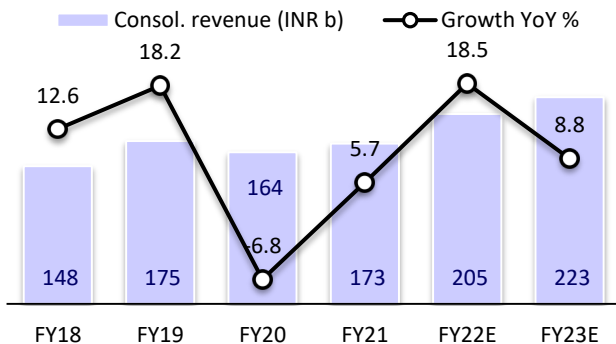
Exhibit 82: Snapshot of the revenue model

Particulars (INR m)	FY17	FY18	FY19	FY20	FY21	FY22E	FY23E
Standalone							
TBR	25,203	33,761	45,699	42,313	40,865	53,089	59,842
YoY growth	-7%	34%	35%	-7%	-3%	30%	13%
TBB	27,560	27,529	30,466	25,933	28,398	31,306	31,306
YoY growth	-4%	0%	11%	-15%	10%	10%	0%
LCV	7,934	9,349	8,463	8,666	7,948	9,840	10,913
YoY growth	19%	18%	-9%	2%	-8%	24%	11%
PCR	17,609	20,776	21,761	19,499	19,303	23,939	25,854
YoY growth	13%	18%	5%	-10%	-1%	24%	8%
Farm and others	9,861	12,466	14,507	11,916	17,032	19,137	20,094
YoY growth	19%	26%	16%	-18%	43%	12%	5%
Revenue from sales of tyres	88,167	1,03,881	1,20,896	1,08,327	1,13,545	1,37,311	1,48,009
YoY growth	2.3%	17.8%	16.4%	-10.4%	4.8%	20.9%	7.8%
Total other operating income	1,171	1,688	2,642	2,293	2,639	3,191	3,440
Standalone revenue	89,338	1,05,569	1,23,538	1,10,620	1,16,184	1,40,502	1,51,448
YoY growth	2.0%	18.2%	17.0%	-10.5%	5.0%	20.9%	7.8%
EU							
Passenger Cars	28,215	29,527	32,422	32,859	34,291	40,222	44,720
Agri + others	5,374	6,048	6,404	6,655	5,326	5,542	6,573
TBR	-	-	1,201	2,080	3,253	3,384	3,884
EU Revenue	33,589	35,574	40,027	41,594	42,870	49,148	55,176
YoY growth	9.7%	5.9%	12.5%	3.9%	3.1%	14.6%	12.3%
Others	8,874	7,285	11,924	11,288	13,766	15,128	16,167
Consolidated Revenue	1,31,800	1,48,429	1,75,488	1,63,502	1,72,820	2,04,778	2,22,791
YoY growth	11.2%	12.6%	18.2%	-6.8%	5.7%	18.5%	8.8%

Source: Company, MOFSL

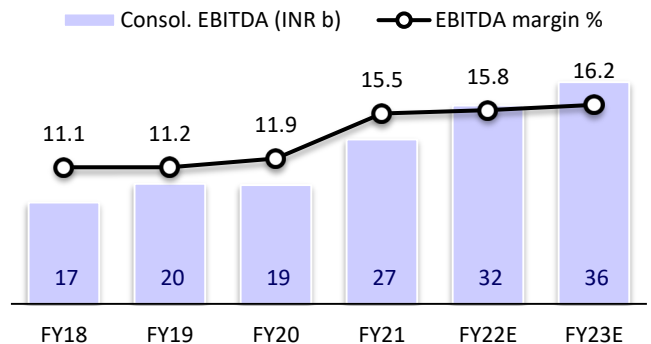
Story in charts

Exhibit 83: Expect consolidated revenue CAGR of 14% over FY21-23E



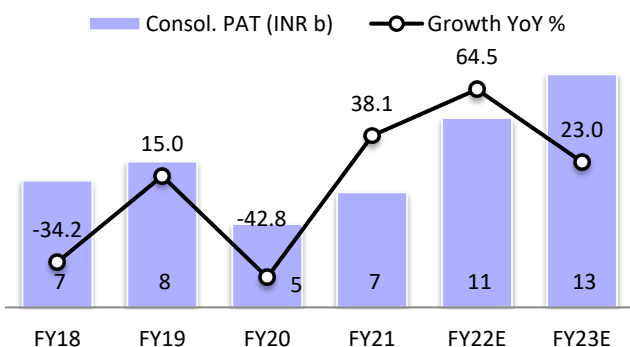
Source: Company, MOFSL

Exhibit 84: Expect consolidated EBITDA CAGR of ~15% over FY21-23E; margin to remain flat due to RM cost pressures



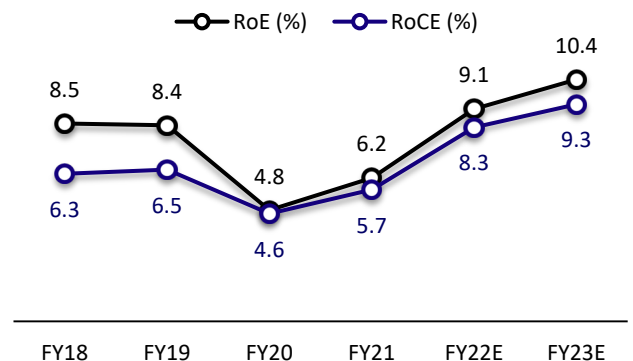
Source: Company, MOFSL

Exhibit 85: Expect consolidated PAT CAGR of 40% over FY21-23E



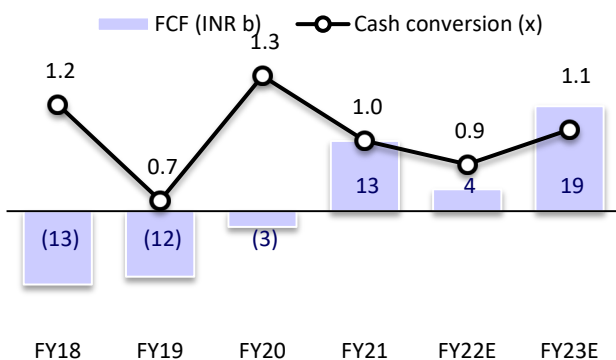
Source: Company, MOFSL

Exhibit 86: Expect gradual improvement in RoE/RoCE over FY21-23E



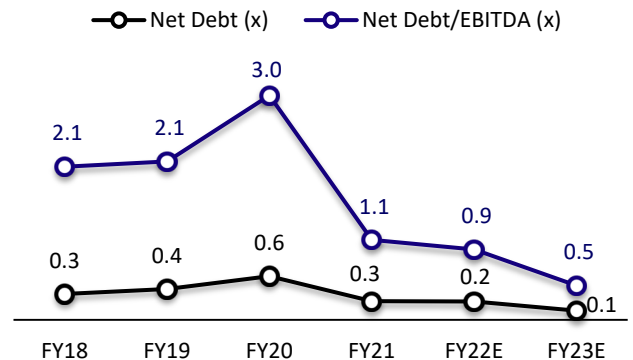
Source: Company, MOFSL

Exhibit 87: FCF turns positive in FY21 after an elongated period of high capex



Source: Company, MOFSL

Exhibit 88: Net debt to reduce to 0.1x equity in FY23E



Source: Company, MOFSL

Financials and valuations

Consolidated Income Statement

(INR m)

Y/E March	FY18	FY19	FY20	FY21	FY22E	FY23E
Total Income from Operations	1,48,429	1,75,488	1,63,502	1,72,820	2,04,778	2,22,791
Change (%)	12.6	18.2	-6.8	5.7	18.5	8.8
EBITDA	16,536	19,586	19,387	26,825	32,349	36,158
EBITDA Margin (%)	11.1	11.2	11.9	15.5	15.8	16.2
Depreciation	5,926	8,127	11,381	13,150	14,504	15,566
EBIT	10,610	11,460	8,006	13,675	17,845	20,592
EBIT Margin (%)	7.1	6.5	4.9	7.9	8.7	9.2
Int. and Finance Charges	1,629	1,811	2,808	4,430	4,140	3,534
Other Income	1,142	1,231	237	1,294	621	658
PBT bef. EO Exp.	10,123	10,880	5,434	10,539	14,326	17,717
EO Items	0	2,000	0	4,927	0	0
PBT after EO Exp.	10,123	8,880	5,434	5,612	14,326	17,717
Total Tax	2,884	2,083	670	2,110	3,510	4,411
Tax Rate (%)	28.5	23.5	12.3	37.6	24.5	24.9
Minority Interest	0	0	0	0	0	0
Reported PAT	7,239	6,797	4,764	3,502	10,815	13,305
Adjusted PAT	7,239	8,328	4,764	6,576	10,815	13,305
Change (%)	-34.2	15.0	-42.8	38.1	64.5	23.0

Consolidated Balance Sheet

(INR m)

Y/E March	FY18	FY19	FY20	FY21	FY22E	FY23E
Equity Share Capital	572	572	572	635	635	635
Total Reserves	97,195	99,826	98,728	1,13,796	1,22,323	1,33,054
Net Worth	97,767	1,00,398	99,300	1,14,431	1,22,958	1,33,689
Total Loans	53,321	47,210	65,799	51,115	46,692	39,681
Deferred Tax Liabilities	7,433	7,707	7,032	7,020	7,020	7,020
Capital Employed	1,58,521	1,55,315	1,72,131	1,72,567	1,76,671	1,80,390
Gross Block	1,72,196	1,93,899	2,42,083	2,64,875	2,83,833	3,00,816
Less: Accum. Deprn.	70,226	78,352	89,734	1,02,883	1,17,387	1,32,953
Net Fixed Assets	1,01,970	1,15,547	1,52,350	1,61,992	1,66,446	1,67,863
Goodwill on Consolidation	2,061	1,993	2,134	2,204	2,204	2,204
Capital WIP	23,041	15,393	16,420	11,065	12,319	9,592
Total Investments	13,425	60	194	1,096	195	195
Curr. Assets, Loans and Adv.	60,080	68,516	60,957	82,088	85,625	98,582
Inventory	29,454	34,841	32,069	33,185	39,273	42,727
Account Receivables	14,350	13,144	9,399	13,808	14,026	15,260
Cash and Bank Balance	5,992	5,627	7,496	21,458	16,168	23,015
Loans and Advances	10,285	14,905	11,993	13,637	16,159	17,580
Curr. Liability and Prov.	42,056	46,194	59,924	85,878	90,118	98,045
Account Payables	24,471	20,665	23,090	28,067	33,662	36,623
Other Current Liabilities	13,439	20,593	31,699	53,371	51,195	55,698
Provisions	4,146	4,936	5,134	4,440	5,261	5,724
Net Current Assets	18,024	22,322	1,033	-3,790	-4,493	537
Appl. of Funds	1,58,521	1,55,315	1,72,131	1,72,567	1,76,671	1,80,390

Financials and valuations

Ratios

Y/E March	FY18	FY19	FY20	FY21	FY22E	FY23E
Basic (INR)						
EPS	12.7	14.6	8.3	11.5	18.9	23.3
Cash EPS	23.0	28.8	28.2	34.5	44.3	50.5
BV/Share	170.9	175.5	173.6	200.0	214.9	233.7
DPS	2.7	3.0	6.2	3.5	4.0	4.5
Payout (%)	25.4	30.4	90.5	57.2	21.2	19.3
Valuation (x)						
P/E	17.8	15.5	27.1	19.6	11.9	9.7
P/BV	1.3	1.3	1.3	1.1	1.0	1.0
EV/Sales	1.2	1.0	1.1	0.9	0.8	0.7
EV/EBITDA	10.7	8.7	9.7	5.9	4.9	4.0
Dividend Yield (%)	1.2	1.3	2.8	1.6	1.8	2.0
FCF per share	-23.6	-21.0	-5.0	22.6	7.1	33.8
Return Ratios (%)						
RoE	8.5	8.4	4.8	6.2	9.1	10.4
RoCE	6.3	6.5	4.6	5.7	8.3	9.3
RoIC	7.6	7.0	5.0	5.9	9.4	10.5
Working Capital Ratios						
Fixed Asset Turnover (x)	0.9	0.9	0.7	0.7	0.7	0.7
Asset Turnover (x)	0.9	1.1	0.9	1.0	1.2	1.2
Inventory (Days)	72	72	72	70	70	70
Debtor (Days)	35	27	21	29	25	25
Creditor (Days)	60	43	52	59	60	60
Leverage Ratio (x)						
Current Ratio	1.4	1.5	1.0	1.0	1.0	1.0
Interest Coverage Ratio	6.5	6.3	2.9	3.1	4.3	5.8
Net Debt/Equity	0.3	0.4	0.6	0.2	0.2	0.1

Consolidated Cash Flow Statement

(INR m)

Y/E March	FY18	FY19	FY20	FY21	FY22E	FY23E
OP/(Loss) before Tax	10,123	8,881	5,434	5,612	14,326	17,717
Depreciation	5,926	8,127	11,381	13,150	14,504	15,566
Interest and Finance Charges	1,629	1,811	2,808	4,430	3,519	2,876
Direct Taxes Paid	-2,465	-2,199	-925	-2,035	-3,510	-4,411
(Inc.)/Dec. in WC	3,154	-5,433	7,996	4,616	-4,587	1,817
CF from Operations	18,367	11,187	26,695	25,772	24,251	33,564
Others	-1,170	-476	-1,522	-1,303	0	0
CF from Operations incl. EO	17,197	10,711	25,174	24,469	24,251	33,564
(Inc.)/Dec. in FA	-30,672	-22,740	-28,055	-11,563	-20,211	-14,256
Free Cash Flow	-13,475	-12,028	-2,881	12,906	4,040	19,309
(Pur.)/Sale of Investments	-9,315	11,366	-134	-12,547	901	0
Others	1,358	1,414	230	667	621	658
CF from Investments	-38,628	-9,959	-27,959	-23,443	-18,689	-13,598
Issue of Shares	14,761	0	0	10,800	0	0
Inc./(Dec.) in Debt	11,608	3,265	13,863	-3,222	-4,423	-7,011
Interest Paid	-1,323	-1,819	-2,232	-3,407	-4,140	-3,534
Dividend Paid	-1,838	-2,069	-4,310	0	-2,288	-2,574
Others	2,838	-314	-2,810	-2,626	0	0
CF from Fin. Activity	26,046	-936	4,510	1,545	-10,852	-13,120
Inc./Dec. in Cash	4,615	-184	1,725	2,571	-5,290	6,847
Opening Balance	191	4,806	4,622	6,347	8,918	3,628
Closing Balance	4,806	4,622	6,347	8,918	3,628	10,475

Balkrishna Industries

BSE Sensex

52,553

S&P CNX

15,752

CMP: INR2,349

TP: INR2,425 (+3%)

Neutral



Stock Info

Bloomberg	BIL IN
Equity Shares (m)	193
M.Cap.(INRb)/(USD\$)	453.5 / 6.1
52-Week Range (INR)	2404 / 1230
1, 6, 12 Rel. Per (%)	2/37/45
12M Avg Val (INR M)	1374
Free float (%)	41.7

Financial Snapshot (INR b)

Y/E March	FY21	FY22E	FY23E
Sales	57.7	71.4	83.2
EBITDA	17.9	22.4	26.7
Adj. PAT	11.8	14.4	17.4
EPS (INR)	60.9	74.5	89.9
EPS Growth (%)	22.7	22.3	20.7
BV/Share (INR)	310.4	364.9	429.7

Ratios

RoE (%)	21.4	22.1	22.6
RoCE (%)	18.3	19.1	19.9
Payout (%)	27.9	26.9	27.8

Valuations

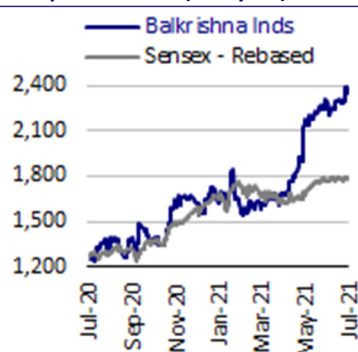
P/E (x)	38.6	31.5	26.1
P/BV (x)	7.6	6.4	5.5
Div. yield (%)	0.7	0.9	1.1
FCF yield (%)	0.9	1.4	2.1

Shareholding pattern (%)

As On	Mar-21	Dec-20	Mar-20
Promoter	58.3	58.3	58.3
DII	14.6	15.0	17.8
FII	14.4	15.5	11.9
Others	12.7	11.2	12.0

FII Includes depository receipts

Stock performance (one-year)



Aspiring for a bigger share of the global pie

Investing for the next phase of growth while improving competitiveness

BIL ranks third in our TII framework

- BIL ranks third in our TII framework to evaluate Tyre companies. It scores 3.7 based on operating parameters, while on valuations it scores a three.
- It ranks highest in terms of cost competitiveness and financial strength. However, it lags behind domestic peers in terms of brand ranking, pricing power, and headroom to grow.
- Premium valuations fairly reflect for its industry leading margins, FCF, and capital efficiencies.

Gaining a larger share of the growth pie

- BIL's served industries (Agri) are witnessing a sharp increase in underlying commodity prices. This augurs well for demand for both Agri and OTR tyres.
- It aspires to increase its market share to 10% from 6% at present by: a) ramping-up in the OTR segment, which is much larger than Agri Tyres, b) strengthening its presence in North America and RoW markets, and c) gaining share with OEMs.
- BIL has been a relatively late entrant in both the OTR segment (67% of the industry, but 33% for the company) and the US market (25-30% for the industry, but 13% for the company) – both large opportunities where it has a huge headroom to grow.

Capex concerns overdone

- BIL's capex outlay for the next two years is ~INR19b, with INR8b for increasing capacity by 17%, INR6.5b for carbon black capacity expansion, and INR4.5b for modernization.
- While carbon black expansion could have been phased out, considering it has adequate capacity to meet requirements over the next three years, we believe modernization capex will aid improvement in quality as well as cost competitiveness for BIL, especially ahead of the planned ramp-up in OTR and the US market.
- Despite the increase, capex intensity (as a percentage of sales) shall decline to ~12% over next two years from 15-16% in the last two years. This will result in a sharp improvement in FCF generation over the next two years.

Valuations factor in a focused business model

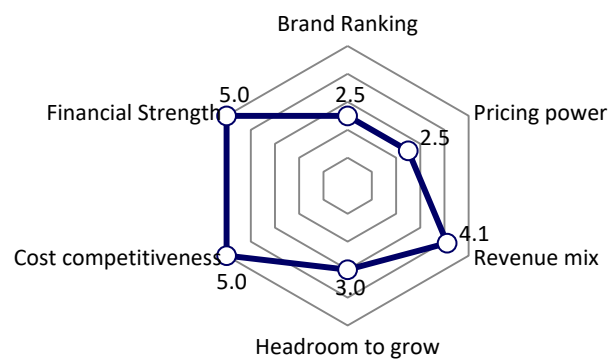
- BIL ranks highest among domestic peers in terms of cost competitiveness and financial strength. In terms of valuation, it trades at a substantial premium to its mainstream peers.
- We estimate BIL's revenue/EBITDA/PAT to grow at 20%/22%/22% over FY21-23E. Even though the capex benefit is not expected to reflect materially till FY23E, we estimate RoCE to improve 160bp over FY21 to ~19.9% in FY23E.
- Though it deserves premium valuations due to its industry-leading margin, FCF, and capital efficiencies, the current valuation premium is excessive. We initiate coverage with a **Neutral** rating and a TP of INR2,425 per share (25x Sep-23E EPS, at a 25%/80% premium to its five/10-year average P/E).

Valuation premium reflects a focused business model...

...industry-leading margin, FCF, and capital efficiencies

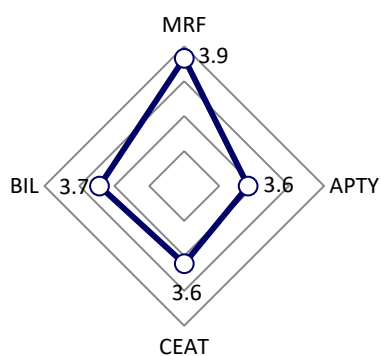
- BIL ranks third in our TII framework to evaluate Tyre companies. It scores 3.7 based on operating parameters, while on valuations it scores a three.
- It ranks highest in terms of cost competitiveness and financial strength. However, it lags behind domestic peers in terms of brand ranking, pricing power, and headroom to grow.
- We have looked at its positioning within the global OHT segment, while evaluating BIL in terms of operating parameters.
- In terms of valuation, BIL trades at substantial premium to APTY/CEAT. Premium valuations fairly reflect for its industry leading margins, FCF, and capital efficiencies.

Exhibit 89: BIL ranks high in terms of financial strength and cost competitiveness



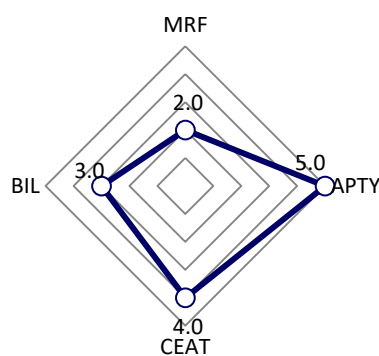
Source: Company, MOFSL

Exhibit 90: BIL ranks second based on operating parameters



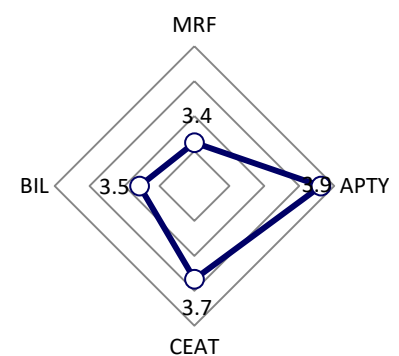
Source: MOFSL

Exhibit 91: BIL ranks third on current valuations

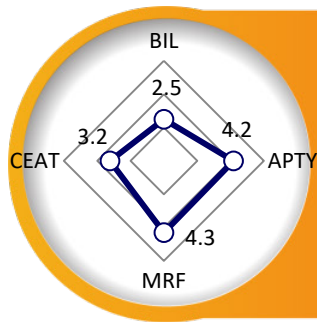


Source: MOFSL

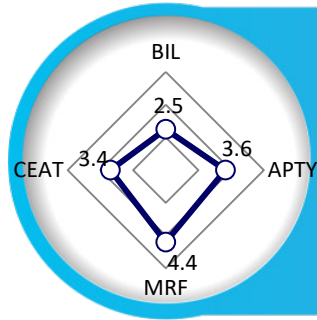
Exhibit 92: Overall, BIL lands in the last quartile as valuations remain unattractive



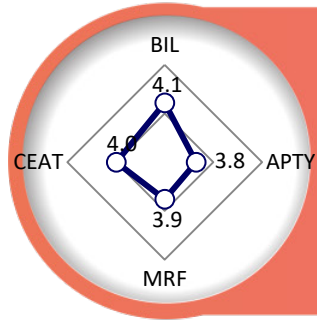
Source: MOFSL

**#1: Brand ranking**

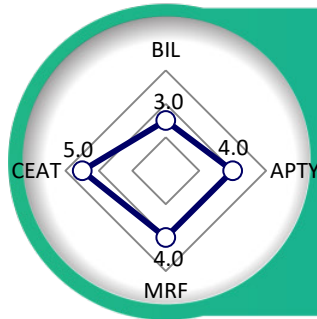
- ❖ BIL ranks low in terms of brand ranking due to its positioning of being a low-cost Tier II OHT player globally. While it has improved its price positioning over the years, it is still considered a Tier II brand.
- ❖ It has been increasing its investments towards brand building in its key markets.
- ❖ BIL has significant scope to improve its positioning in select markets of Agri and OTR.

**#2: Pricing power**

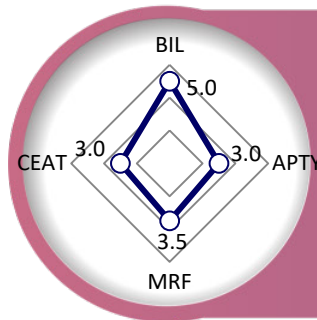
- ❖ BIL ranks low in terms of pricing power. In the global OHT market, pricing power is in the hands of Tier I players like Michelin, Goodyear, and Bridgestone.
- ❖ Among Tier II players, Titan and Trelleborg enjoy relatively higher pricing power.
- ❖ With a focus on increasing brand awareness through improving its presence with OEMs and via marketing, BIL would be able to improve its pricing power eventually.

**#3: Revenue mix**

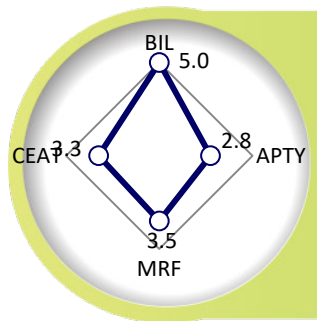
- ❖ BIL's revenue mix is skewed towards Agriculture tyres (64%), which is a relatively less cyclical v/s the OTR segment.
- ❖ However, the cyclicity impact would be lower for BIL, since it possesses huge headroom to increase its market share within these segments.
- ❖ It enjoys a healthy share from the Replacement segment (~75%).
- ❖ BIL is well diversified in terms of geographies, with a presence across India, Europe, North America, and Australia.

**#4: Headroom to grow**

- ❖ While BIL has headroom to grow by improving its capacity utilization (79% in FY20), new capacity addition is ~17%, leaving lower headroom to grow post FY23E.
- ❖ Although it is incurring significant capex over FY21-23E, much of this capex would be towards modernization of existing capacity and expansion of carbon black capacity.

**#5: Cost competitiveness**

- ❖ BIL ranks highest in terms of cost competitiveness, given its competitive edge in labor costs, backward integration, and efficient operations.
- ❖ It is investing towards modernizing its three plants, which will enable further efficiency gains.
- ❖ BIL enjoys a natural hedge against currency (imported RM is 40-50% of total RM for domestic peers), as it derives significant revenue from exports (77%).

**#6: Financial strength**

- ❖ BIL ranks highest in terms of financial strength due to its superior return ratios and net cash Balance Sheet.
- ❖ It also has the highest margin among its peers.
- ❖ With improving capacity utilization, return ratios should trend further upwards.

Gaining a larger share of a growing pie

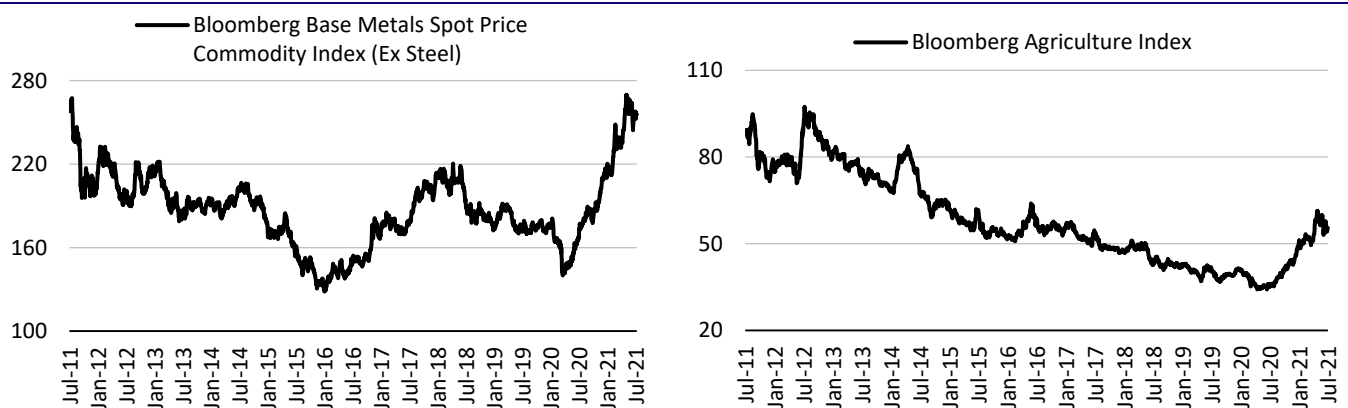
Demand tailwinds and market share gain to translate into strong revenue

- BIL's served industries (Agri) are witnessing a sharp increase in underlying commodity prices. This augurs well for demand for both Agri and OTR tyres.
- It aspires to increase its market share to 10% from 6% at present by: a) ramping-up in the OTR segment, which is much larger than Agri Tyres, b) strengthening its presence in North America and RoW markets, and c) gaining share with OEMs.
- BIL has been a relatively late entrant in the OTR segment and the US market – both large opportunities, where it has a huge headroom to grow by plugging gaps in its product portfolio as well as by ramping up with OEMs. The OTR segment constitutes ~67% of the industry, but only 33% for BIL, whereas the US market is 25-30% of the global Specialty Tyre industry, but only ~13% for BIL.
- We expect volumes/revenue to grow by ~13%/~20% CAGR over FY21-23E.

Strong commodity prices to drive sharp growth for both Agri and OTR tyres

- BIL primarily operates in the Agriculture tyre/Off-the-Road (OTR) segment (~64%/32% of volumes). The latter caters to the Mining, Industrial, and Construction Equipment segments.
- Globally, prices for both agricultural as well as metal commodities have seen a sharp increase in the last six months, driving an improvement in the outlook for the end-user segment (Agri and Mining industry). This, coupled with a robust demand for housing in the EU/US as well as focus on Infrastructure, augurs well for the Construction industry.
- The Agri Machinery industry in North America/South America/EU is expected to rise by 25%/20%/10% in CY21 (Source: Deere & Co).
- We expect the Specialty Tyre industry to grow at 6-8% CAGR (on a low base of FY21) over the next three years.

Exhibit 93: Sharp increase in metal and Agri commodity prices augur well for a pick-up in demand for OTR and Agri Tyres



Source: Bloomberg, MOFSL

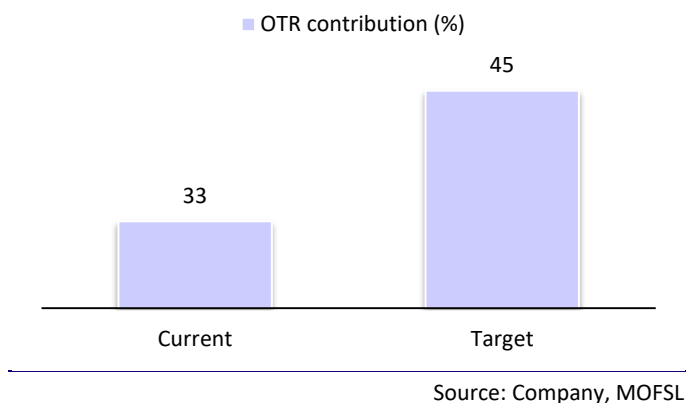
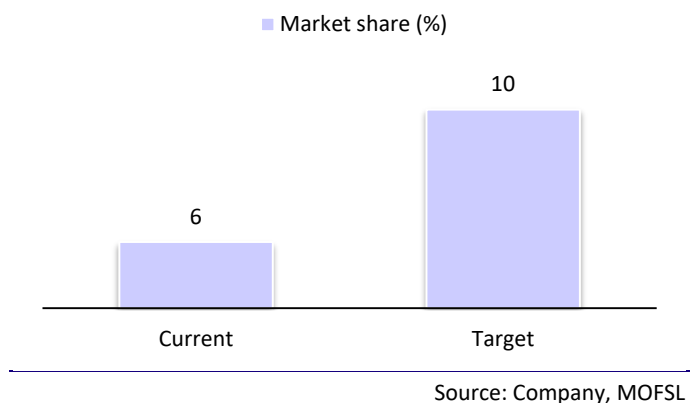
Exhibit 94: Commentary of key industry participants

Company	Commentary
Caterpillar	<ul style="list-style-type: none"> ❖ North America will continue to benefit from strong Residential demand. Nonresidential Construction is recovering at a gradual pace, with the Infrastructure segment recovering faster than Nonresidential Building. Demand is strong in China on the back of government spending on Infra. ❖ Oil and Gas should continue to slowly improve from lower levels as customers remain disciplined with their capex spend. ❖ Industrial is expected to grow, with activity strengthening across most applications. In Transportation, Rail and Marine are expected to see slight improvements from the first quarter, although on a low base. ❖ Demand in both Mining and Heavy Construction and Quarry and Aggregates is expected to increase due to supportive commodity prices and the restart of investments that were delayed last year.
Michelin	<ul style="list-style-type: none"> ❖ For Specialties, market growth is still expected to be between 8% and 12% in CY21, with a stronger growth in Agri, Construction, and Material Handling. ❖ Rising cost of raw material is beneficial for a premium player like Michelin as it can pass on the price increase easily as compared to its Asian peers. Rising logistic costs is another concern. ❖ Mining grew, but it was unlike other segments.
Trelleborg	<ul style="list-style-type: none"> ❖ It is seeing strong demand for Agri Tyres and Aftermarket. Material Handling and Construction is likely to pick up as OEM have a strong order book. It expects industrialization and mechanization in Agri to continue. The company is facing freight challenges, but the situation is manageable.
Agco	<ul style="list-style-type: none"> ❖ It expects a 10-12% rise in production in CY21 (v/s CY20). North America: Higher commodity prices and farmer sentiment have led to an increase in sales. Replacement demand for an aged fleet of larger equipment is expected to drive most of the increase. ❖ It expects North American industry unit sales to rise ~15% in CY21 v/s CY20. Industry demand in Western Europe is expected to remain strong and grow modestly in CY21. Elevated commodity prices and favorable exchange rates are expected to support additional growth in South America during CY21 as farmers continue to replace aging equipment. Total industry demand in South America is expected to improve by 5-10% from CY20 levels.
Titan International	<ul style="list-style-type: none"> ❖ It sees strong demand for Agri from South America and Brazil, and has a strong order book in Construction and Agri segments. The company is seeing robust demand for Earth Moving Equipment. The Aftermarket business in North and South America is doing well. It has taken appropriate price increases to mitigate rising input costs.

Source: Companies, Industry, MOFSL

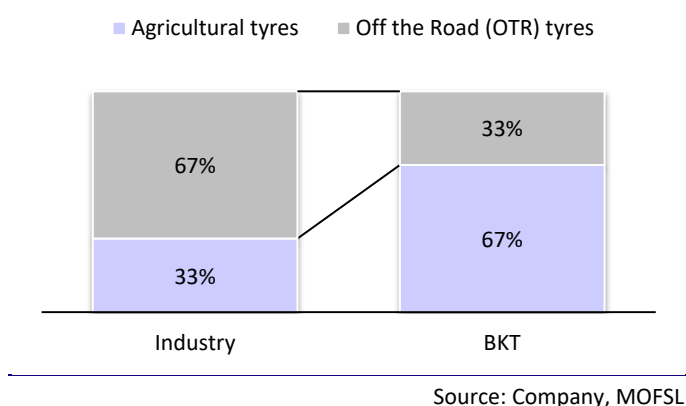
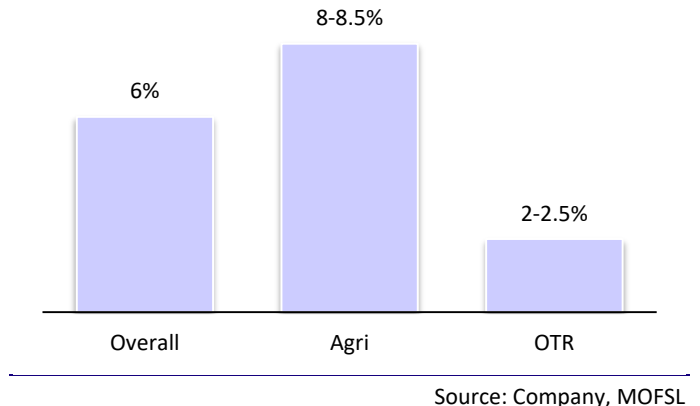
All critical success factors in place to grow faster

- BIL has a well-established competitive advantage, which has enabled consistent market share gains. Its competitive advantage is driven by: a) competitive cost and pricing, b) consistent product portfolio expansion, and c) expanding reach.
- BIL's strategy to grow faster than the industry pivots around: a) ramp-up in the OTR segment, which is much larger than Agri Tyres, b) strengthening its presence in North America and RoW markets, and c) gaining share with OEMs.
- This should help BIL to attain its targeted market share of 10% (v/s 6% at present) of the USD15b global Off-Highway Tyre (OHT) segment.
- A granular look at the industry suggests that BIL is relatively stronger in the USD5b Agriculture tyre market, with 8-8.5% market share. In the bigger OTR segment (Mining/Construction/Industrial), the size of which is estimated to be ~USD10b, BIL has a meager presence with a 2-2.5% market share. It has identified gaps in its product portfolio and is taking several strategic initiatives to strengthen these areas.

Exhibit 95: BIL is targeting higher contribution from OTR...**Exhibit 96: ...and 10% share of the Specialty Tyre industry**

Focus is on tapping a larger share of the global OTR segment

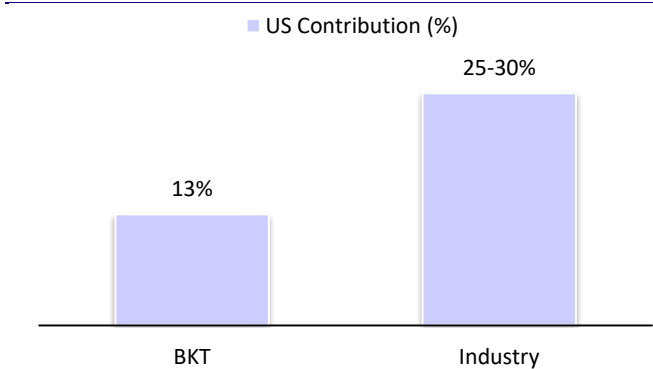
- BIL started catering to the USD10b OTR segment much later in CY07. This segment has a high gestation period, but presents large opportunities to BIL. The company has steadily made inroads. Within the OTR segment, it foresees huge opportunities in the Mining segment in North America, where it is severely under-represented. BIL has a two-pronged approach to grow in this segment via: a) product portfolio expansion and b) making inroads with OEMs.
- It is continuously bridging gaps in its product offerings in the Mining segment. BIL started manufacturing ultra-large mining tyres at its Bhuj plant in CY16. It recently began manufacturing 51" and 57" ultra large all steel giant tyres to further expand its coverage in this segment. Till date, it was manufacturing tyres up to 49", while the market leader has a product range up to 63".
- With the launch of its ultra-large mining tyres, BIL has successfully completed the cumbersome evaluation process of OEMs and has strengthened its position with them.
- The Replacement opportunity in this segment is very lucrative. The average life of Mining/Construction tyres spans 9-15/18-24 months.

Exhibit 97: BIL's contribution from the OTR segment is much lower than the industry...**Exhibit 98: ...reflecting in substantially lower market share for BIL in this segment**

Strengthening its presence in the US

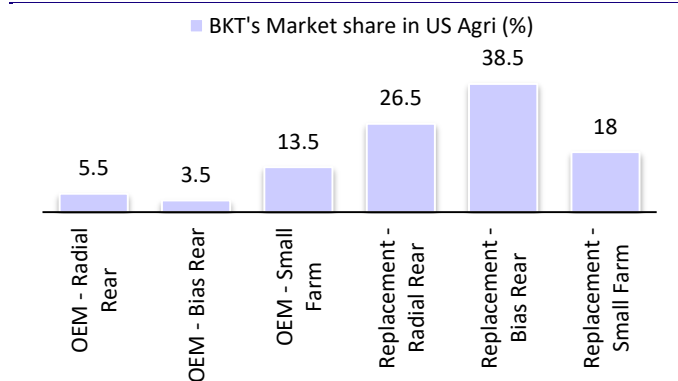
- BIL has a relatively weaker presence in the US Specialty Tyre market as it entered this market much later in CY07-08. However, the real push came only towards CY13, when it had new capacity available in Bhuj.
- The US market contributed ~13% to BIL's FY21 volumes as against 25-30% of the Specialty Tyre industry.
- Despite being a late entrant, BIL has established a strong presence in the US Agri Tyres market, with a market share of 7-10%, and over 25% in the Agri Replacement market.
- With a focus on ramping-up in the OTR segment and manufacture of ultra large tyres, BIL's US business would get a major boost as it has a much lower presence in the US OTR market.

Exhibit 99: BIL has a much lower contribution from the US market than the industry...



Source: Industry, Company, MOFSL

Exhibit 100: ...but has a good presence in the Agri segment

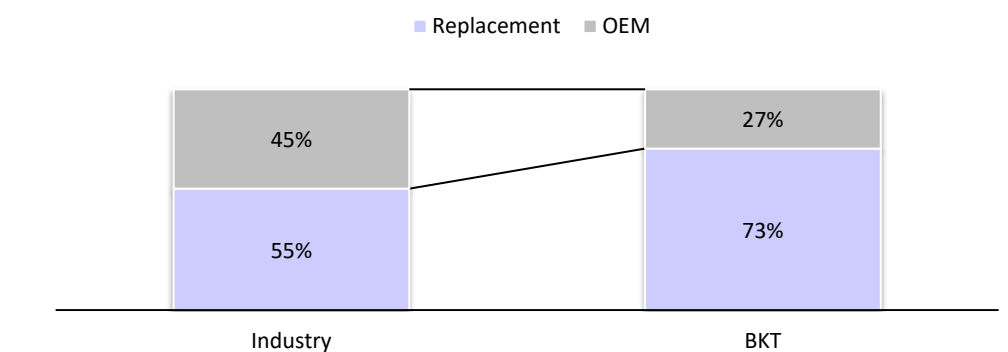


Source: Industry, MOFSL

Strengthening roots with OEMs

- BIL's focus is on increasing its presence among OEMs in the global OHT segment. OEMs account for ~45% of the market, but just 23% for BIL. It has ~2% market share in the OEM segment.
- The strategy of improving market share in the OEM segment will reap long-term benefits for BIL as it aids in improving brand visibility, creating brand value, and pull factor.
- Contrary to the general belief for BIL, margin does not vary materially between the OEM and Replacement segments. Hence, we do not estimate any margin dilution due to increasing share of OEMs.

Exhibit 101: BIL has a much lower volume v/s the industry



Source: Company, MOFSL

Capex concerns overdone

Investing for the next phase of growth as well as improving competitiveness

- BIL has chalked out a capex of ~INR19b over the next two years. Of this, INR8b would be allocated towards setting up of new capacity, INR6.5b for carbon black capacity expansion, and INR4.5b for plant automation. Hence, incremental capacity would be ~17%.
- While carbon black expansion could have been phased out, considering it has adequate capacity to meet requirements over the next three years, we believe modernization capex will aid improvement in quality as well as cost competitiveness for BIL, especially ahead of the planned ramp-up in the OTR and US market.
- Despite the increase, capex intensity (as a percentage of sales) shall decline to ~12% over next two years from 15-16% in the last two years. This will result in a sharp improvement in FCF generation over the next two years.

Brownfield expansion at the Bhuj plant

- BIL plans to invest INR8b for a brownfield capacity expansion at the Bhuj plant, which will add ~50,000mtpa capacity, taking the total achievable capacity to 335,000mtpa. The same is expected to be completed by 2HFY23.
- **Rationale:** Growth capex is required to cater to growing demand and achieve its 10% market share aspiration, which would require a capacity of ~450,000mtpa (v/s current capacity of 285,000mtpa).
- **Our view:** The increased capacity would cater to the growth momentum and provide headroom to grow and grab any opportunity. While the Bhuj plant has infrastructure for more capacity additions, BIL is increasing capacity in small batches without putting any pressure on its Balance Sheet.

Carbon black capacity expansion much ahead of its time

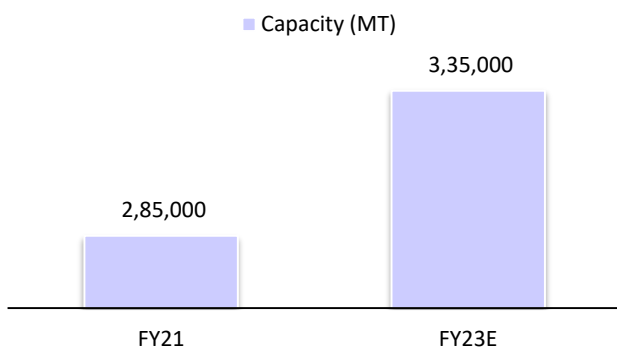
- BIL plans to invest INR6.5b to increase carbon black capacity to 200,000mtpa (v/s 115,000mtpa at present), including 30,000mtpa of a high value advanced carbon material and a power plant. The same is expected to be completed by 1HFY23.
- **Rationale:** At full tyre capacity of 335,000t, it would require 110-115mtpa of carbon black to achieve 100% utilization. Therefore, BIL needs the new carbon black capacity to be future ready, as post commissioning, 25-30% of capacity will be available for third-party sales (from 170,000t after removing 30,000mtpa of high value advanced carbon material).
- **Our view:** BIL could have matched the timing of carbon black capacity with the next leg of capacity addition above 335,000mtpa. However, carbon black capacity is important to maintain its low-cost model and reap long-term benefits, without having any material negative impact on financials in the transitory period.

Modernization of Rajasthan and Bhuj plants

- BIL would invest INR4.5b towards modernization, automation, and technology upgradation of equipment and material handling at Rajasthan (two plants) and the Bhuj plant.

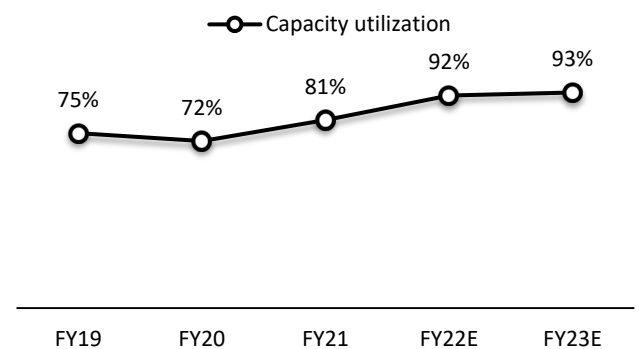
- **Rationale:** It is necessary to improve quality and efficiency of the two plants in Rajasthan (set up in CY01 and CY06) and at the Bhuj plant. It has a payback period of five years and would enhance its margin profile. It would be used to increase radialization and reduce manual touch points in material handling and movement.
- **Our view:** We are not too concerned by this capex as it's a regular activity and is distributed between three plants (v/s earlier capex of INR5b only for upgrading the Waluj plant). Also, the two Rajasthan plants are quite old (established in CY01 and CY06). As it aspires to ramp-up in OTR and US, this capex can potentially provide consistency in quality as well as further improve cost competitiveness for BIL.

Exhibit 102: Capacity to increase by ~17% in FY23E, led by Bhuj plant capacity additions...



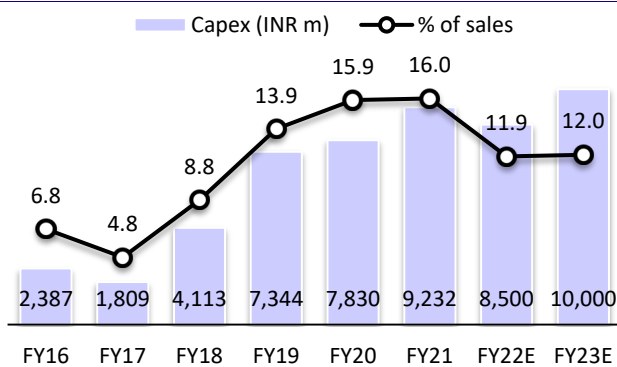
Source: Company, MOFSL

Exhibit 103: ...and keep enough headroom for growth beyond FY23E



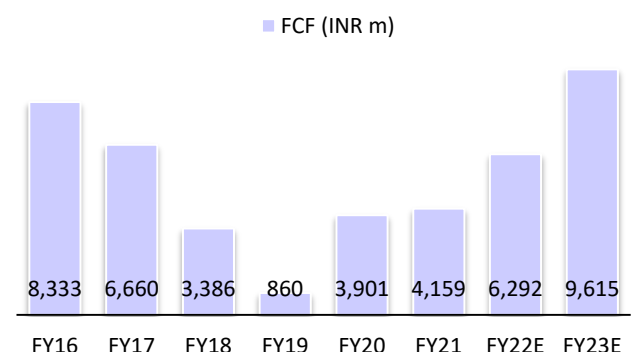
Source: Company, MOFSL

Exhibit 104: Capex intensity (as a percentage of sales) to moderate...



Source: Company, MOFSL

Exhibit 105: ... and drive a sharp improvement in FCF



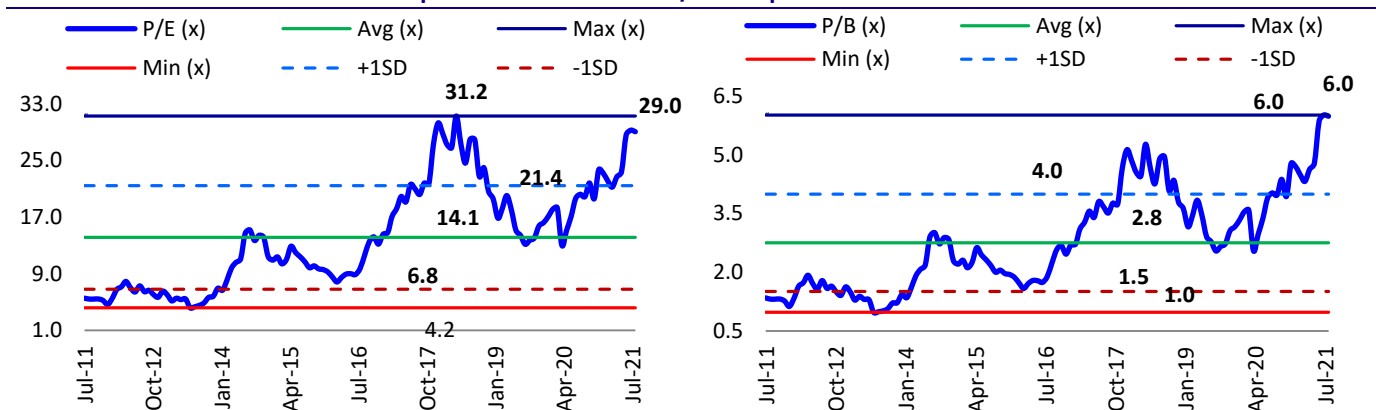
Source: Company, MOFSL

Valuation and view

Huge opportunity size, strong competitive positioning

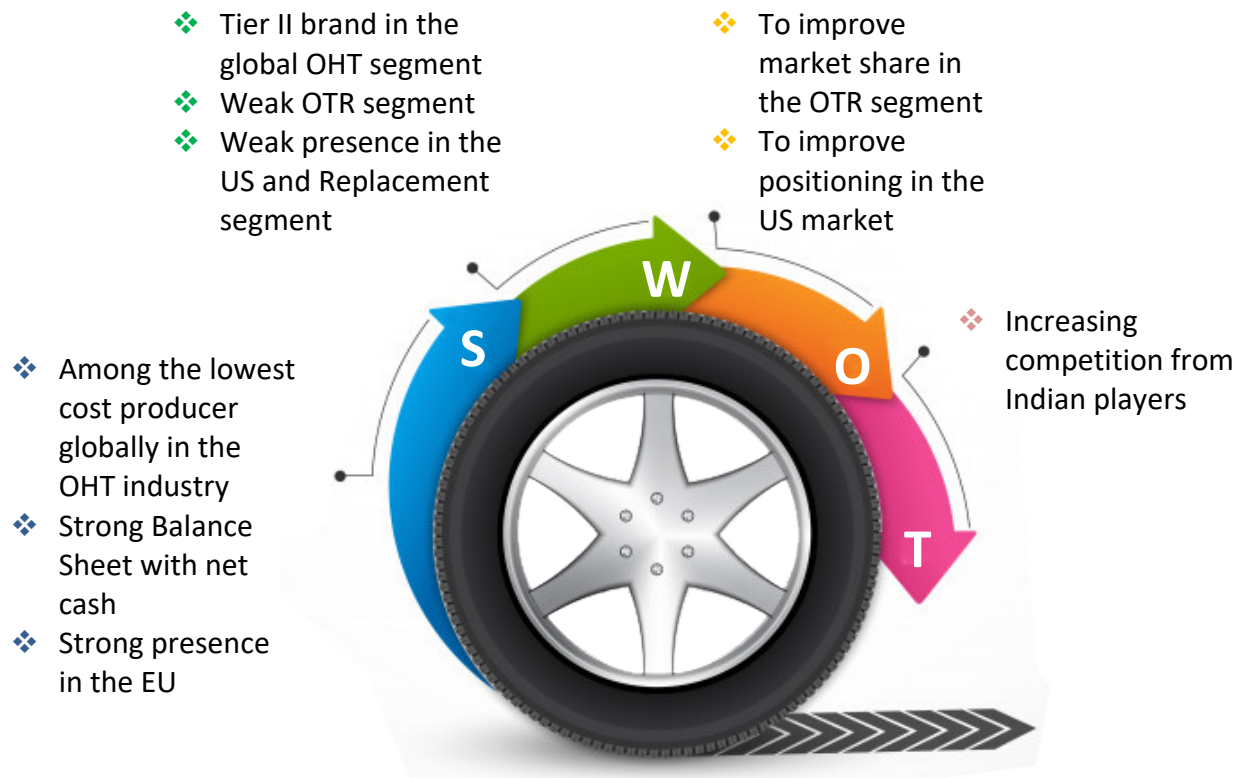
- Profitable market share gains to continue:** We expect BIL's outperformance to the industry to continue, with scope to strengthen its competitive positioning. BIL has a well-established competitive advantage, which has enabled consistent market share gains. Its competitive advantage is driven by: a) competitive cost and pricing, b) consistent product portfolio expansion, and c) expanding reach. With a current market share of ~6% in the USD15b global Specialty Tyre segment, BIL aspires to increase this to 10% over the next 4-5 years by: a) ramping-up in OTR segment, which is much larger than Agri Tyres, b) strengthening its presence in North America and RoW markets, and c) gaining share with OEMs. We estimate ~13%/~20% volume/revenue CAGR over FY21-23E.
- Investing to further improve competitiveness:** BIL has chalked out a capex of ~INR19b over the next two years. It would allocate INR8b towards setting up new capacity, INR6.5b for carbon black capacity expansion, and INR4.5b for plant automation. Hence, incremental capacity would be ~17%. Despite the increase, capex intensity (as a percentage of sales) will reduce to 10-12% over the next two years from 15-16% in last two years. This, in turn, is resulting in a sharp improvement in FCF generation over the next two years.
- Earnings growth to pick-up:** We estimate revenue/EBITDA/PAT for BIL to grow at 20%/22%/22% over FY21-23E. We expect ~100bp improvement in EBITDA margin over FY21-23E, led by improving mix and operating leverage. Despite a capex plan of INR19b, we expect FCF generation to improve (to INR9.6b in FY23E) and cash on the Balance Sheet to rise to ~INR13.5b. Even though the benefit of this capex is not expected to reflect materially till FY23E, we expect RoCE to improve by 160bp over FY21 to ~19.9% in FY23E.
- Valuations factor in a focused business model:** BIL ranks highest among domestic peers in terms of cost competitiveness and financial strength. In terms of valuation, it trades at a substantial premium to its mainstream peers. Premium valuations fairly reflect for its industry leading margins, FCF, and capital efficiencies. We value BIL at 25x Sep-23E EPS (at a 25%/80% premium to its five/10-year average P/E, with a TP of INR2,425. We initiate coverage with a **Neutral** rating.

Exhibit 106: BIL trades at substantial premium to its LPA of P/E multiple



Source: MOFSL

SWOT analysis



Bulls and Bear Case

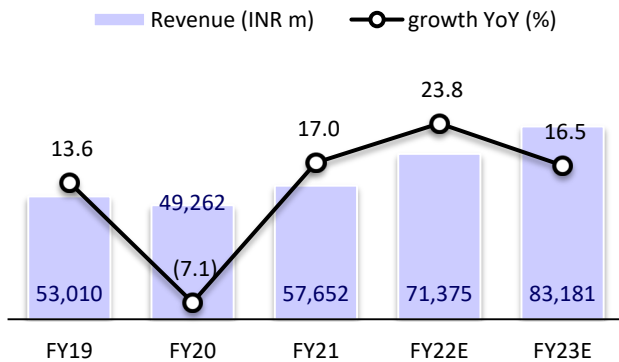
Exhibit 107: BIL: Scenario Analysis

INR m	Base			Bull			Bear		
	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E
Volumes (MT)	2,61,288	2,88,209	3,10,880	2,68,015	3,00,176	3,30,194	2,49,844	2,67,333	2,83,373
Growth (%)	15	10	8	18	12	10	10	7	6
Realizations (INR/t)	2,73,167	2,88,613	3,02,084	2,74,133	2,90,581	3,08,016	2,66,518	2,77,179	2,85,494
Growth (%)	7.6	5.7	4.7	8	6	6	5	4	3
Revenue	71,375	83,181	93,912	73,472	87,225	1,01,705	66,588	74,099	80,901
Growth (%)	24	17	13	27	19	17	16	11	9
EBITDA Margin (%)	31.4	32.1	32.7	32.0	32.5	33.0	30.0	31.0	31.0
EPS (INR)	74.5	89.9	104.3	79	96	116	65	75	82
Growth (%)	22	21	16	29	22	20	7	16	9
RoE (%)	22.1	22.6	22.3	23.2	23.8	23.9	19.5	19.8	19.1
Target P/E (x)		25	25		28	28		22	22
TP		2,242	2,603		2,698	3,238		1,657	1,813
Upside CAGR (%)		-5	5		15	17		-29	-12
Remarks				Strong recovery in the Farm and OTR segment, with ramp-up in the US; carbon black fully ramps-up, contributing additional revenue			Demand recovery moderates, with slower ramp-up in the US; slow ramp-up in carbon black		
				Moderation in RM prices and benefits of modernization			High RM prices and adverse forex		

Source: MOFSL

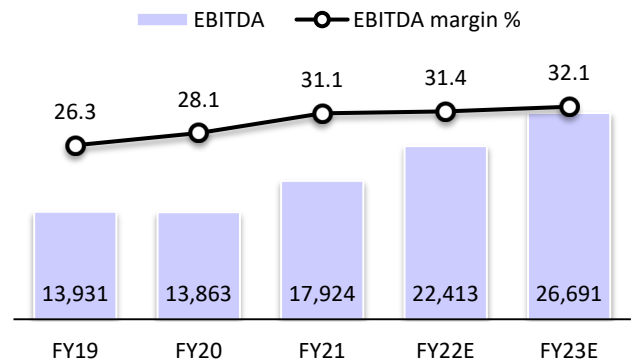
Story in charts

Exhibit 108: Revenue to grow ~20% CAGR over FY21-23E



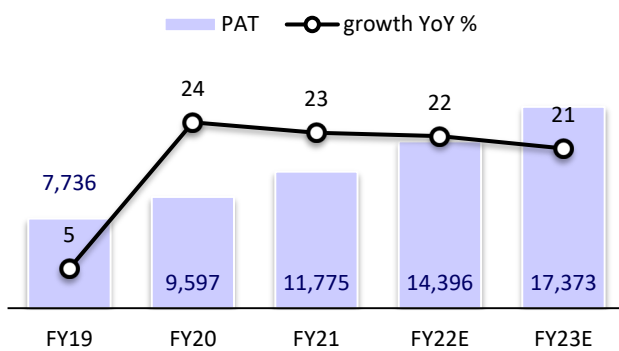
Source: Company, MOFSL

Exhibit 109: EBITDA margin to expand by 100bp over FY21-23E



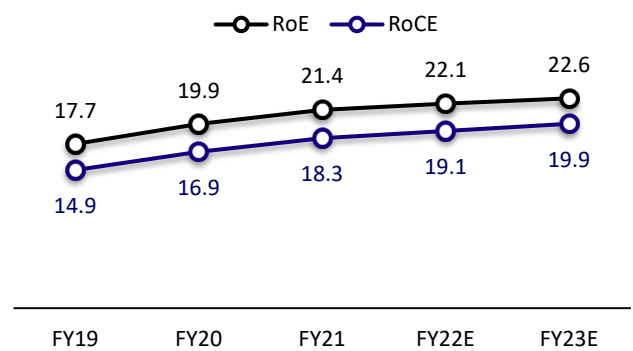
Source: Company, MOFSL

Exhibit 110: PAT to grow ~22% CAGR over FY21-23E



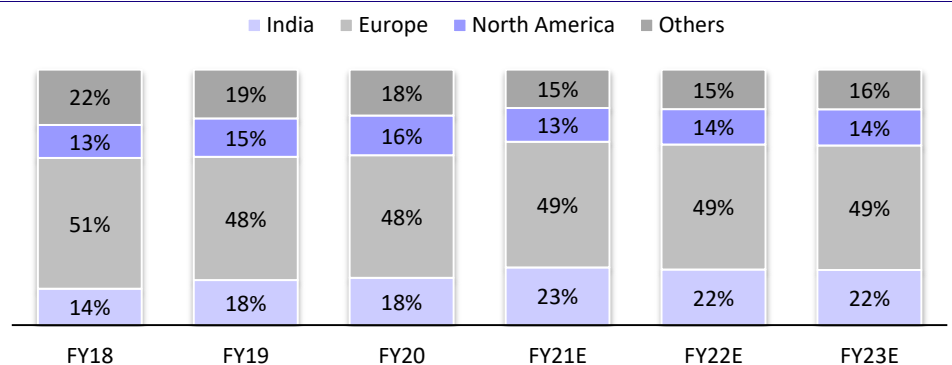
Source: Company, MOFSL

Exhibit 111: RoE to expand despite ongoing capex



Source: Company, MOFSL

Exhibit 112: Market mix can potentially improve towards India and US



Source: Company, MOFSL

Financials and valuations

Consolidated Income Statement

(INR m)

Y/E March	FY18	FY19	FY20	FY21	FY22E	FY23E
Adj. Net Revenue	46,648	53,010	49,262	57,652	71,375	83,181
Change (%)	23.0	13.6	-7.1	17.0	23.8	16.5
EBITDA	13,226	13,931	13,863	17,924	22,413	26,691
EBITDA Margin (%)	28.4	26.3	28.1	31.1	31.4	32.1
Depreciation	3,114	3,326	3,736	4,163	4,550	5,168
EBIT	10,112	10,605	10,126	13,761	17,864	21,523
EBIT Margin (%)	21.7	20.0	20.6	23.9	25.0	25.9
Int. and Finance Charges	139	111	89	114	105	110
Other Income	1,188	1,272	1,358	1,902	1,251	1,529
PBT bef. EO Exp.	11,160	11,766	11,395	15,549	19,010	22,941
EO Items	0	0	0	0	0	0
PBT after EO Exp.	11,160	11,766	11,395	15,549	19,010	22,941
Eff. Tax Rate (%)	34.1	34.2	15.8	24.3	24.3	24.3
Reported PAT	7,358	7,736	9,597	11,775	14,396	17,373
Adjusted PAT	7,358	7,736	9,597	11,775	14,396	17,373
Change (%)	2.6	5.1	24.0	22.7	22.3	20.7

Consolidated Balance Sheet

(INR m)

Y/E March	FY18	FY19	FY20	FY21	FY22E	FY23E
Equity Share Capital	387	387	387	387	387	387
Total Reserves	40,447	46,150	49,696	59,612	70,142	82,683
Net Worth	40,834	46,537	50,083	59,998	70,528	83,069
Total Loans	8,675	8,796	9,316	10,006	11,006	11,006
Deferred Tax Liabilities	3,289	3,255	1,783	2,035	2,035	2,035
Capital Employed	52,797	58,588	61,182	72,039	83,569	96,110
Gross Block	36,950	39,355	48,210	52,954	58,009	74,509
Less: Accum. Deprn.	8,966	12,264	15,992	20,115	24,664	29,833
Net Fixed Assets	27,985	27,091	32,218	32,839	33,345	44,677
Capital WIP	1,183	6,004	5,866	8,555	12,000	5,500
Investment property	511	772	857	864	864	864
Total Investments	11,027	10,826	10,625	14,177	14,177	14,177
Curr. Assets, Loans and Adv.	18,077	20,099	18,498	25,230	33,365	42,758
Inventory	6,189	7,587	6,156	9,397	10,755	11,395
Account Receivables	4,796	5,171	5,899	7,536	8,800	10,255
Cash and Bank Balance	334	656	691	780	5,011	10,853
Loans and Advances	6,758	6,684	5,752	7,517	8,800	10,255
Curr. Liability and Prov.	5,985	6,202	6,882	9,626	10,181	11,865
Account Payables	4,093	3,861	3,837	6,550	6,844	7,976
Other Current Liabilities	1,688	2,073	2,746	2,750	2,933	3,418
Provisions	204	267	299	326	404	471
Net Current Assets	12,093	13,897	11,616	15,604	23,184	30,893
Appl. of Funds	52,797	58,589	61,182	72,039	83,569	96,110

E: MOFSL estimates

Financials and valuations

Ratios

Y/E March	FY18	FY19	FY20	FY21	FY22E	FY23E
Basic (INR)						
EPS	38.1	40.0	49.6	60.9	74.5	89.9
BV/Share	211.2	240.7	259.1	310.4	364.9	429.7
DPS	5.3	7.5	22.0	17.0	20.0	25.0
Payout (%)	16.6	22.6	53.4	27.9	26.9	27.8
Valuation (x)						
P/E	61.7	58.7	47.3	38.6	31.5	26.1
P/BV	11.1	9.8	9.1	7.6	6.4	5.5
EV/Sales	9.9	8.7	9.4	8.0	6.4	5.5
EV/EBITDA	35.0	33.2	33.4	25.8	20.5	17.0
Dividend yield (%)	0.2	0.3	0.9	0.7	0.9	1.1
FCF per share	17.5	4.4	20.2	21.5	32.5	49.7
Return Ratios (%)						
RoE	19.3	17.7	19.9	21.4	22.1	22.6
RoCE	15.1	14.9	16.9	18.3	19.1	19.9
RoIC	17.0	17.1	20.0	22.5	26.8	27.6
Working Capital Ratios						
Fixed Asset Turnover (x)	1.3	1.3	1.0	1.1	1.2	1.1
Asset Turnover (x)	0.9	0.9	0.8	0.8	0.9	0.9
Inventory (Days)	48	52	46	59	55	50
Debtor (Days)	38	36	44	48	45	45
Creditor (Days)	32	27	28	41	35	35
Leverage Ratio (x)						
Net Debt/Equity	-0.1	-0.1	0.0	-0.1	-0.1	-0.2

Consolidated Cash Flow Statement

(INR m)

Y/E March	FY18	FY19	FY20	FY21	FY22E	FY23E
OP/(Loss) before Tax	11,160	11,766	11,395	15,549	19,010	22,941
Depreciation	3,114	3,326	3,736	4,163	4,550	5,168
Interest and Finance Charges	68	49	-135	-289	-805	-1,060
Direct Taxes Paid	-3,873	-4,076	-2,884	-3,510	-4,614	-5,568
(Inc.)/Dec. in WC	-2,154	-1,934	544	-1,273	-3,349	-1,866
Others	-816	-927	-924	-1,250	0	0
CF from Operations incl. EO	7,499	8,204	11,731	13,390	14,792	19,615
(Inc.)/Dec. in FA	-4,113	-7,344	-7,830	-9,232	-8,500	-10,000
Free Cash Flow	3,386	860	3,901	4,159	6,292	9,615
(Pur.)/Sale of Investments	3,094	877	863	-2,891	0	0
Others	96	108	190	388	910	1,170
CF from Investments	-923	-6,360	-6,778	-11,734	-7,590	-8,830
Issue of Shares	0	0	0	0	0	0
Inc./(Dec.) in Debt	-5,185	213	279	857	1,000	0
Interest Paid	-140	-115	-88	-114	-105	-110
Dividend Paid	-1,212	-1,745	-5,126	-2,316	-3,866	-4,833
Others	0	0	-13	-3	0	0
CF from Fin. Activity	-6,538	-1,647	-4,947	-1,575	-2,971	-4,943
Inc/Dec of Cash	39	198	7	81	4,231	5,842
Opening Balance	226	265	462	468	549	4,780
Closing Balance	265	462	468	549	4,780	10,622

CEATBSE SENSEX
52,553S&P CNX
15,752**Stock Info**

Bloomberg	CEAT IN
Equity Shares (m)	40
M.Cap.(INRb)/(USD\$)	58.6 / 0.8
52-Week Range (INR)	1763 / 835
1, 6, 12 Rel. Per (%)	5/7/21
12M Avg Val (INR M)	421
Free float (%)	53.2

Financials Snapshot (INR b)

Y/E MARCH	FY21	FY22E	FY23E
Sales	76.1	88.1	101.9
EBITDA	9.8	9.8	12.9
EBITDA Margin (%)	12.9	11.1	12.7
Adj. PAT	4.6	3.5	5.3
EPS (INR)	114.3	86.7	130.5
EPS Gr. (%)	100.2	-24.1	50.4
BV/Sh. (INR)	820	895	1,013

Ratios

RoE (%)	12.5	16.4	10.9
RoCE (%)	1.7	1.6	1.4
Payout (%)	1.3	0.8	0.8

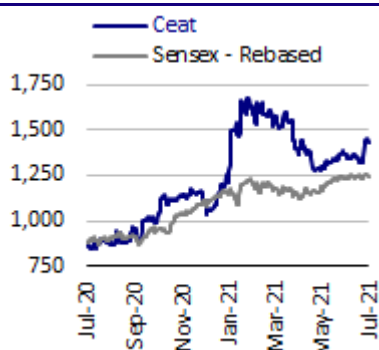
Valuations

P/E (x)	12.6	16.6	11.0
P/BV (x)	1.8	1.6	1.4
Div. Yield (%)	1.3	0.8	0.8
FCF Yield (%)	12.4	-3.5	6.9

Shareholding pattern (%)

As On	Mar-21	Dec-20	Mar-20
Promoter	46.8	46.8	46.7
DII	13.7	14.8	8.9
FII	27.0	24.5	28.2
Others	12.6	13.9	16.2

FII Includes depository receipts

Stock performance (one-year)**CMP: INR1,426****TP: INR1,850 (+30%)****Buy****Stepping up its game****Most aggressive expansion to support market share aspirations****Steadfast focus on B2C remains**

- CEAT has identified strategic focus areas of 2Ws, PCR, and OHT, which are high-margin segments v/s the T&B space. It is targeting up to 60% contribution from these focus areas over the next 4-5 years, which would also reflect positively on the company's operating performance.
- It plans to maintain stronghold in the 2W segment (at 28-30%) and expand its dominance in PCR (to 20% from 13-15% at present).
- In 2Ws, it is looking to boost its market share by investing in network, brand, and products (white spaces and innovation).
- In PCR, it gained ~3pp market share to 13-14% in FY21. Its strategy to take market share to 20% pivots on: a) ramping-up in premium sizes (over 15"), b) multiple platforms, and c) benefit of higher share with OEMs on brand visibility for replacement (further 5pp market share gain expected to 20% over the next 18-24 months).
- CEAT has strategically invested over INR7.5b (or ~2.5% of sales) over the last five years towards marketing and brand building in focus areas of 2Ws and PVs. This would help in supporting market share aspirations and improve its brand equity and pricing power.

Most aggressive capex among peers to support its B2C aspirations

- CEAT has significant capacity expansion plans, with a cumulative capex of ~INR50.2b (across segments) over FY19-23E (v/s FY19 gross block of INR37.7b). The move is aimed at supporting its aspirations in the B2C segment as well as maintaining its market share in the T&B space.
- It has added capacity across segments, with substantial additions in TBR/PCR/2Ws/OHT (~4x/~140%/~65%/~35% increase).
- A segmental analysis of capacity addition suggests that capex is required to improve its presence in the PCR segment, challenge leaders in the 2W segment, and maintain its position in the T&B space (via a shift to TBR).

Capex intensity and debt to peak out in FY22

- With the recent announcement of new TBR capacity of 190tp (at an investment of INR12b, spread over 3-4 years), we expect capex intensity to peak out in FY22E as residual capex for earlier capacity starts tapering off from FY22E.
- We estimate FY22E/FY23E capex at INR11.5b/INR10b. As a percentage of sales, capex stands at 13%/10% for FY22E/FY23E.
- Higher capex and weaker operating performance in FY22E would result in negative FCFF (~INR2.2b) and increase net debt to ~INR17.8b (v/s INR13.8b in FY21 v/s INR18.5b in FY20). We expect an improvement in FY23E FCFF (INR4b) and net debt (INR15.8b).

- Despite the increase in net debt, it would remain at a reasonable 0.5x/1.9x FY22E equity/EBITDA.

Earnings growth curtailed by higher interest and depreciation

- We expect revenue to grow at 16% CAGR over FY21-23E, with EBITDA margin declining by 20bp over FY21-23E to 12.7% in FY23E.
- While we estimate 15% EBITDA CAGR over FY21-23E, increase in depreciation and interest due to capitalization of a large part of the capex would restrict PAT CAGR to 7%.
- Considering a gradual ramp-up of new capacities, we estimate RoE to decline by 120bp over FY21 to 13.7% in FY23E.

Maintain Buy with a TP of INR1,850/share

- The near term outlook is challenging, impacted by demand weakness due to COVID-19 and sharp RM cost inflation. The latter will be gradually passed on over the next 2-3 quarters as demand returns post the impact from COVID-19 pandemic.
- A cyclical recovery in both OEMs and Replacement will enable faster absorption of new capacities and drive operating leverage benefits. We expect revenue/EBITDA/PAT CAGR of ~16%/15%/7% over FY21-23E.
- Valuations at 10.9x FY23E consolidated EPS doesn't fully capture in a ramp-up of new capacities in improving demand environment, leading to a recovery in margin. We maintain our **Buy** rating with a TP of ~INR1,850/share (~13x Sep'23E consolidated EPS).

Ranks second in our TII framework...

...led by highest headroom for growth, better mix, and attractive valuations

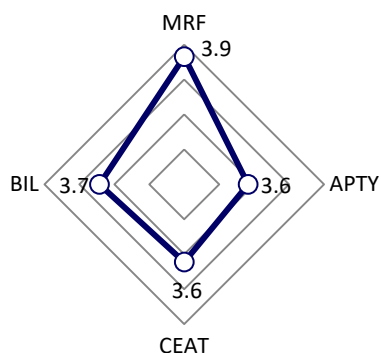
- CEAT ranks second within our evaluation framework for Tyre companies, with an overall score of 3.7. It scores 3.6 based on operating parameters, while scoring four on valuations.
- CEAT ranks highest in terms of headroom to grow, due to aggressive capacity addition, and second in revenue mix, led by higher contribution from the Consumer segments of PCR and 2Ws.
- CEAT enjoys a superior revenue and EBITDA growth among its domestic-focused peers. However, recent capacity additions in the ramp-up phase are acting as a drag on earnings. Despite this, valuations are quite reasonable.

Exhibit 113: CEAT ranks high in terms of headroom to grow and revenue mix



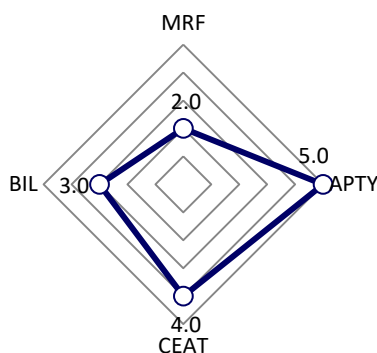
Source: Company, MOFSL

Exhibit 114: CEAT ranks lowest based on operating parameters



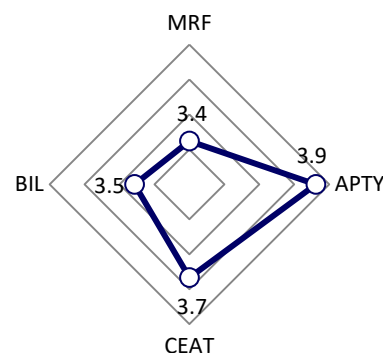
Source: MOFSL

Exhibit 115: Valuations for CEAT are attractive

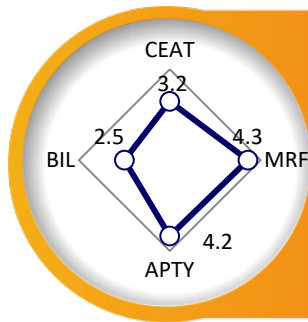


Source: MOFSL

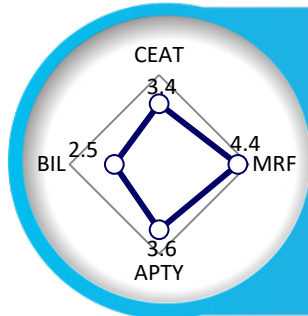
Exhibit 116: CEAT ranks second overall



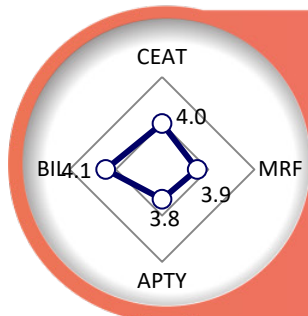
Source: MOFSL

**#1: Brand ranking**

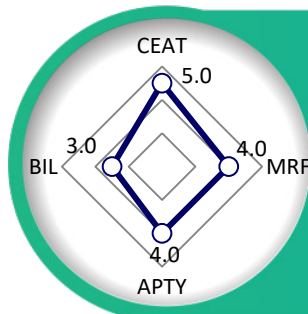
- ❖ CEAT has been consistently investing in marketing and advertising to increase its brand equity, which has paid off rich dividends in the Consumer segments of 2W and PCR.
- ❖ While CEAT has a stronger brand equity in the 2W and PCR segments, its brand equity in the TBR and Farm segments is significantly weak compared to its peers.
- ❖ CEAT's strong brand equity in the Consumer segment is a prerequisite to meet its market share aspirations, particularly in the lucrative Replacement segment.

**#2: Pricing power**

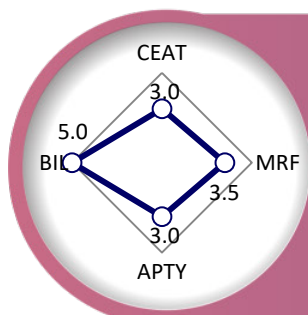
- ❖ CEAT enjoys pricing power in 2Ws due to its good positioning within the segment. Brand creation has played a huge role in it attaining pricing power in this segment.
- ❖ In the PCR segment, CEAT's pricing power is lower than peers like MRF, APTY, and Bridgestone.
- ❖ CEAT's pricing power is relatively weak in the T&B segment due to its smaller presence in this space. T&B segment is dominated by APTY, JKI, and MRF.

**#3: Revenue mix**

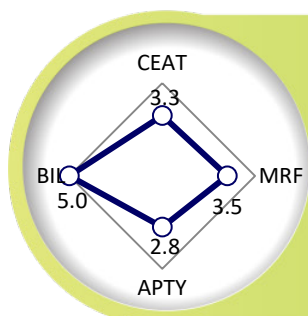
- ❖ CEAT ranks highest in terms of revenue mix due to its relatively greater share from the higher margin Consumer segments of 2W and PCR.
- ❖ Around 75% of its revenue accrues from the Replacement segment, which is encouraging.
- ❖ Exports have the highest share in its revenue mix at 12%, a higher growth potential (targeting 3x in five years), and helps in diversifying its dependency on the domestic segment.

**#4: Headroom to grow**

- ❖ CEAT ranks numero uno in terms of headroom to grow as it is more than doubling capacity.
- ❖ CEAT's capex is the most aggressive v/s its peers, with a cumulative capex (across segments) over FY19-23E at INR50.2b (v/s FY19 gross block of INR37.7b).
- ❖ It has added capacity across segments, with substantial additions in TBR/PCR/2Ws/OHT (~4x/~140%/~65%/~35% increase).

**#5: Cost competitiveness**

- ❖ CEAT ranks the lowest in terms of cost competitiveness.
- ❖ Its gross margin is the lowest in the industry, reflective of its lack of pricing power in segments like T&B and PCR, and partial outsourcing of 2W tyres.
- ❖ CEAT also has the lowest EBIT margin among peers, which is partly due to the lower scale of its operations, as well as higher investment in brand building and the impact of bunching-up of capex (higher depreciation as a percentage of sales).

**#6: Financial strength**

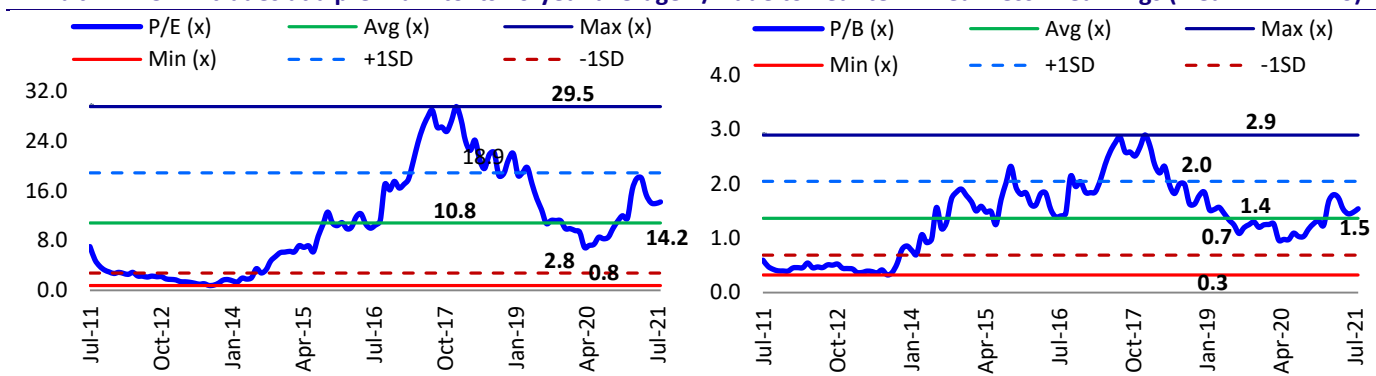
- ❖ CEAT ranks third in terms of financial strength due to its higher leverage and lower RoIC.
- ❖ However, asset turnover is highest for CEAT due to its higher concentration in the Consumer segments and part outsourcing of 2W tyres.
- ❖ We expect CEAT's RoE to recover going forward, led by operating leverage and improving asset turns. We expect net debt-to-equity to touch a peak of 0.5x in FY22E before declining.

Valuations and view

Valuations attractive despite adverse impact from the ongoing capex

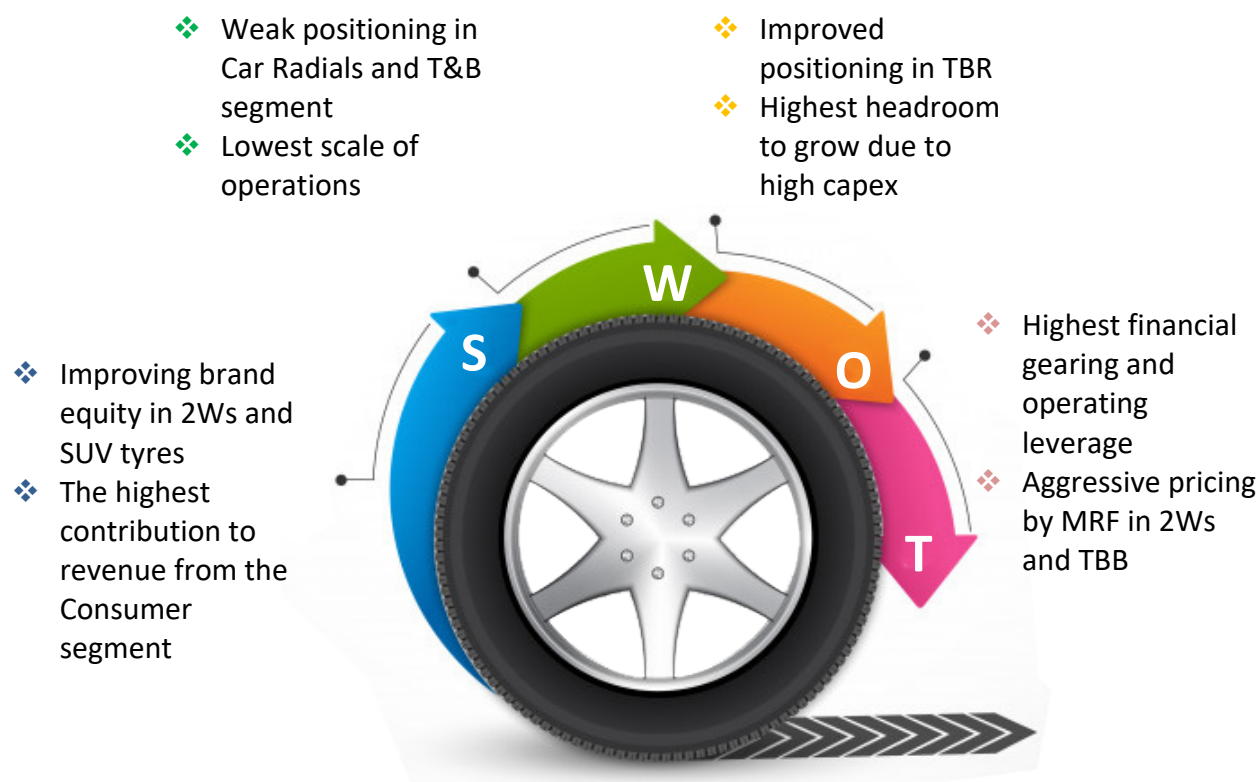
- Focus on improving brand equity to drive market share gains:** CEAT has laid a strong emphasis on effective marketing and branding of its products. To position its products competitively, it has developed creative ad campaigns based on extensive research/consumer insights and invested in innovative marketing programs. Since the 2W and Passenger Car segments are consumer-facing, factors such as brand loyalty, visibility, and recall go a long way in creating replacement market demand and improving market share, which would in turn benefit its margin profile.
- Ramp up in strategic focus areas to continue:** The management has identified the 2W, Passenger Car, and OTR (truck/off-road) tyre segments as strategic focus areas, given their ability to boost margin and to lower its dependence on the Truck segment. Revenue contribution from these focus areas has increased significantly over the years (to 48% in FY18 from 20% in FY10). With the ongoing capex plan, contribution from these focus areas could scale up to 60-65% over the next 4-5 years, which would reflect positively in its operating performance.
- Growth capex to increase capacity by ~50%:** CEAT has lined up ~INR50.2b in capex over FY19-23E to increase its capacity by ~50%, with an aim to support its B2C aspirations as well as maintain its market share in the T&B segment. With a large part of the capex behind (INR28.7b) and capacity ready, it has substantial headroom to grow from its current capacity. This is not fully reflected in our FY22E/FY23E estimate.
- Maintain Buy with a TP of INR1,850/share:** The near term outlook is challenging, impacted by weakness in demand due to the COVID-19 outbreak and sharp RM cost inflation. The latter will be gradually passed on over the next 2-3 quarters as demand returns and the impact from the COVID-19 pandemic abates. However, a cyclical recovery in both OEM and Replacement will enable faster absorption of new capacities and drive benefit of operating leverage. We expect revenue/EBITDA/PAT CAGR of ~16%/15%/7% over FY21-23E. Valuations at 10.9x FY23E consolidated EPS doesn't fully capture ramp-up of new capacities in an improving demand environment, leading to a recovery in margin. We value CEAT at 13x Sep-23 EPS (v/s 17x/11x its five/10-year average P/E) to arrive at our TP of INR1,850/share. We maintain our **Buy** rating.

Exhibit 117: CEAT trades at a premium to its 10-year average P/E due to near term weakness in earnings (weak FY22E EPS)



Source: MOFSL

SWOT analysis



Bulls and Bear Case

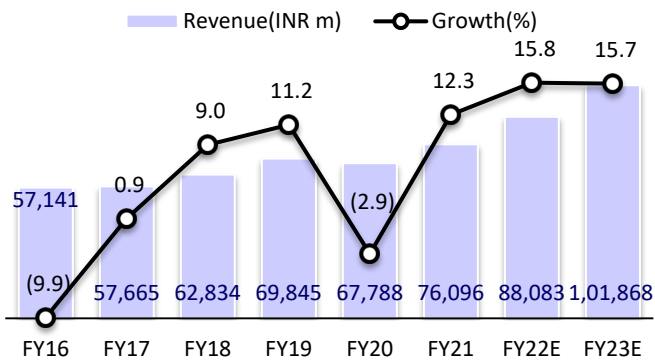
Exhibit 118: CEAT: Scenario Analysis

INR m	Base			Bull			Bear		
	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E
Revenue	88,083	1,01,868	1,12,131	91,315	107,752	120,682	85,228	95,455	102,137
Growth (%)	16	16	10	20	18	12	12	12	7
EBITDA Margin (%)	11.1	12.7	13.1	12.0	13.0	13.5	10.5	11.0	11.0
EPS (INR)	87	130	155	108	150	183	72	86	96
Growth (%)	-24	50	19	-5	39	22	-37	20	11
RoE (%)	10.1	13.7	14.3	12.5	15.2	16.1	8.4	9.4	9.6
Target P/E (x)		13	13		15	15		13	13
TP		1,696	2,020		2,251	2,747		1,117	1,243
Upside CAGR (%)		19	19		58	39		-22	-7
Remarks				Strong Replacement demand in 2Ws and PCR Moderation in RM prices, and a supportive, competitive environment			Weak Replacement demand for 2Ws, PCR, and T&B High RM prices and competitive intensity		

Source: MOFSL

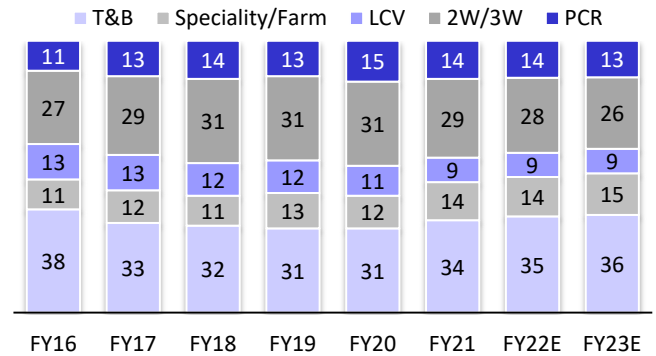
Story in charts

Exhibit 119: Revenue and growth trend



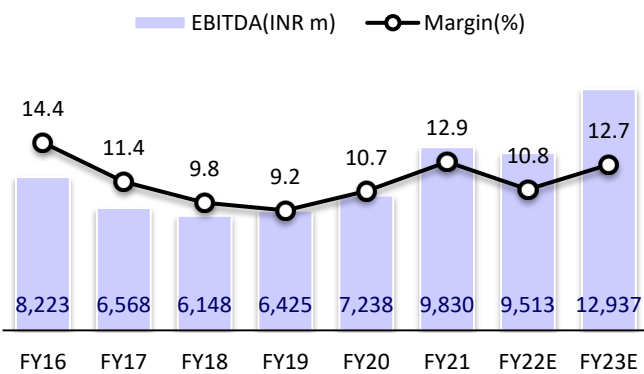
Source: MOFSL, Company

Exhibit 120: Trend in segment mix



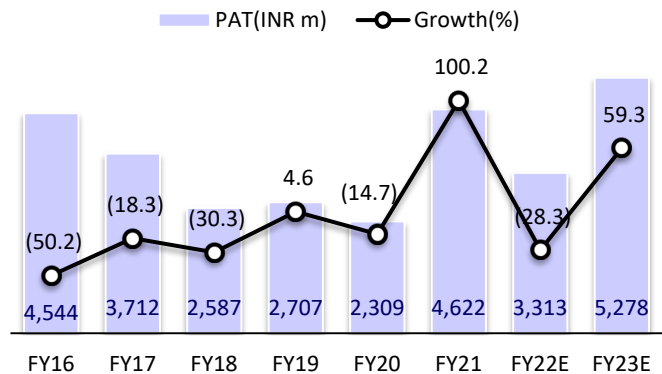
Source: MOFSL, Company

Exhibit 121: EBITDA and EBITDA margin trend



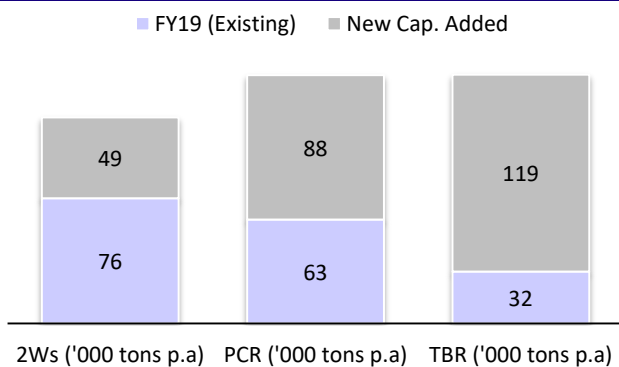
Source: MOFSL, Company

Exhibit 122: PAT and PAT growth trend



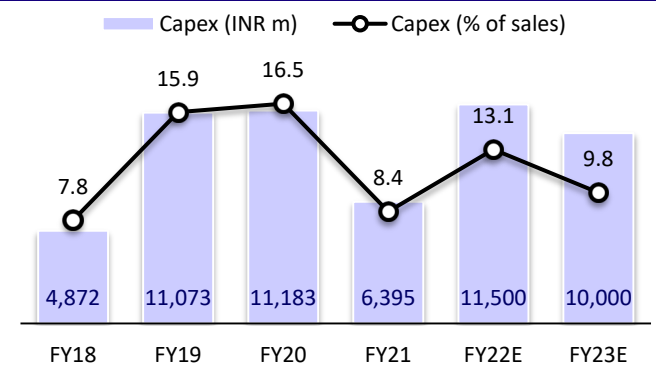
Source: MOFSL, Company

Exhibit 123: Significant capacity additions across segments



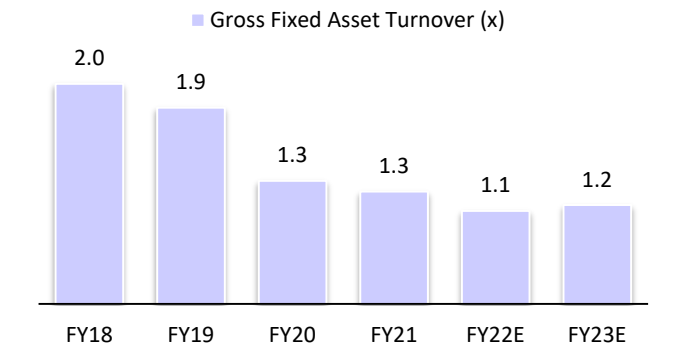
Source: MOFSL, Company

Exhibit 124: Expect capex intensity to moderate only from FY23E...



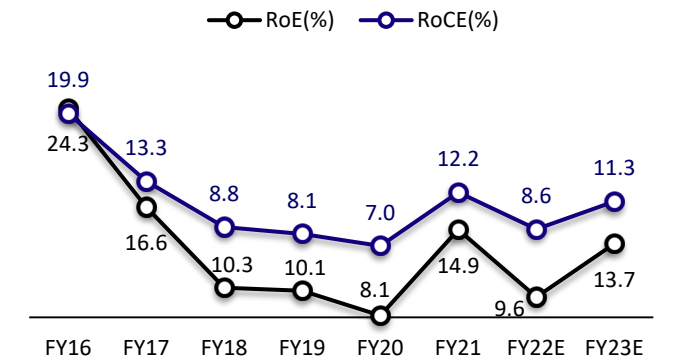
Source: MOFSL, Company

Exhibit 125: ...resulting in lower fixed asset turn in the ramp-up phase...



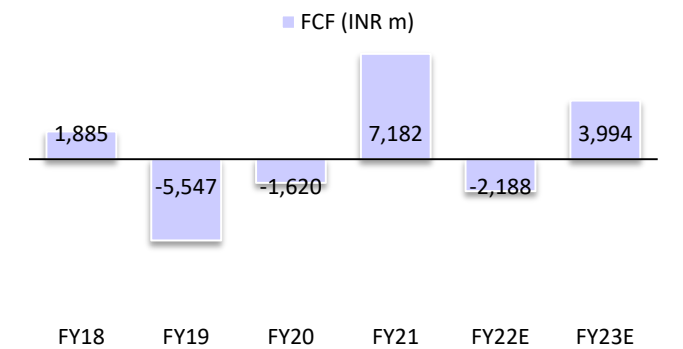
Source: MOFSL, Company

Exhibit 126: ...and keep capital efficiencies under check till FY22E



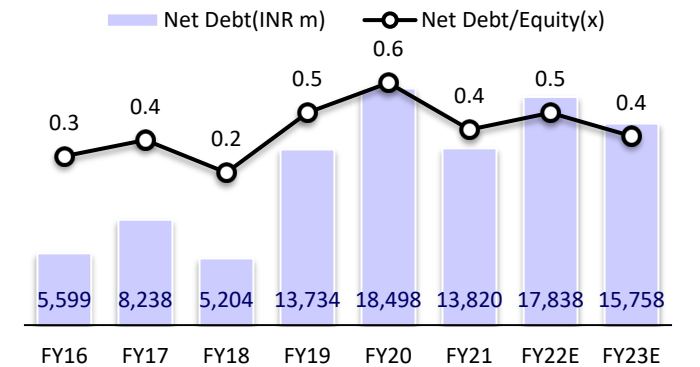
Source: MOFSL, Company

Exhibit 127: FCFF to turn positive sustainably from FY23E



Source: MOFSL, Company

Exhibit 128: Expect net debt to peak in FY22E



Source: MOFSL, Company

Financials and valuations

Consolidated - Income Statement

(INR M)

Y/E March	FY18	FY19	FY20	FY21	FY22E	FY23E
Net Revenues from Ops	62,834	69,845	67,788	76,096	88,083	1,01,868
Change (%)	9.0	11.2	-2.9	12.3	15.8	15.7
EBITDA	6,148	6,425	7,238	9,830	9,777	12,937
EBITDA Margin (%)	9.8	9.2	10.7	12.9	11.1	12.7
Depreciation	1,686	1,927	2,765	3,396	3,761	4,447
EBIT	4,462	4,498	4,473	6,433	6,016	8,490
EBIT Margin (%)	7.1	6.4	6.6	8.5	6.8	8.3
Int. and Finance Charges	974	880	1,509	1,755	1,725	1,868
Other Income	295	390	205	138	180	240
PBT bef. EO Exp.	3,783	4,008	3,169	4,816	4,471	6,862
EO Items	-340	-297	5	-341	0	0
PBT after EO Exp.	3,443	3,711	3,174	4,476	4,471	6,862
Total Tax	1,340	1,402	1,046	516	1,163	1,784
Tax Rate (%)	38.9	37.8	33.0	11.5	26.0	26.0
Minority Int./Share JV PAT	-277	-213	-184	-361	-200	-200
Reported PAT	2,380	2,522	2,312	4,320	3,509	5,278
Adjusted PAT	2,587	2,707	2,309	4,622	3,509	5,278
Change (%)	-30.3	4.6	-14.7	100.2	-24.1	50.4
Margin (%)	4.1	3.9	3.4	6.1	4.0	5.2

Consolidated - Balance Sheet

(INR M)

Y/E March	FY18	FY19	FY20	FY21	FY22E	FY23E
Equity Share Capital	405	405	405	405	405	405
Total Reserves	25,656	27,257	28,675	32,758	35,782	40,574
Net Worth	26,061	27,661	29,079	33,163	36,186	40,979
Minority Interest	234	238	237	232	232	232
Total Loans	6,467	14,469	18,772	14,180	18,680	18,680
Deferred Tax Liabilities	1,893	2,198	2,744	2,800	2,800	2,800
Capital Employed	34,655	44,566	50,832	50,376	57,899	62,692
Gross Block	31,123	37,663	50,231	59,663	77,092	86,092
Less: Accum. Deprn.	4,030	5,868	8,633	12,029	15,790	20,237
Net Fixed Assets	27,092	31,795	41,598	47,634	61,302	65,855
Goodwill on Consolidation	0	0	0	0	0	0
Capital WIP	3,100	8,329	10,685	7,929	2,000	3,000
Total Investments	2,135	1,814	1,837	2,101	2,101	2,101
Curr. Assets, Loans&Adv.	19,137	22,111	19,410	23,652	27,162	31,380
Inventory	7,846	10,056	9,257	11,299	13,301	13,400
Account Receivables	7,472	7,064	6,744	9,216	8,446	9,768
Cash and Bank Balance	863	735	274	361	1,010	3,118
Loans and Advances	2,956	4,256	3,135	2,776	4,404	5,093
Curr. Liability & Prov.	16,810	19,484	22,697	30,940	34,666	39,645
Account Payables	8,705	10,529	11,948	19,478	21,454	24,364
Other Current Liabilities	7,257	7,566	9,114	9,921	11,451	13,243
Provisions	848	1,389	1,635	1,541	1,762	2,037
Net Current Assets	2,328	2,627	-3,288	-7,288	-7,504	-8,265
Appl. of Funds	34,655	44,566	50,832	50,376	57,899	62,692

E: MOFSL Estimates

Financials and valuations

Ratios

Y/E March	FY18	FY19	FY20	FY21	FY22E	FY23E
Basic (INR)						
EPS	64.0	66.9	57.1	114.3	86.7	130.5
Cash EPS	105.6	114.6	125.4	198.2	179.7	240.4
BV/Share	644.3	683.8	718.9	819.8	894.6	1,013.1
DPS	11.5	12.0	12.0	18.0	12.0	12.0
Payout (%)	23.6	23.2	25.3	16.9	13.8	9.2
Valuation (x)						
P/E	22.3	21.3	25.0	12.5	16.4	10.9
Cash P/E	13.5	12.5	11.4	7.2	7.9	5.9
P/BV	2.2	2.1	2.0	1.7	1.6	1.4
EV/Sales	1.0	1.0	1.1	0.9	0.9	0.7
EV/EBITDA	10.3	11.1	10.5	7.3	7.7	5.7
Dividend Yield (%)	0.8	0.8	0.8	1.3	0.8	0.8
Return Ratios (%)						
RoE	10.3	10.1	8.1	14.9	10.1	13.7
RoCE	8.8	8.1	7.0	12.2	9.0	11.3
RoIC	9.4	9.0	8.4	14.6	9.6	11.7
Working Capital Ratios						
Fixed Asset Turnover (x)	2.0	1.9	1.3	1.3	1.1	1.2
Asset Turnover (x)	1.8	1.6	1.3	1.5	1.5	1.6
Inventory (Days)	46	53	50	54	55	48
Debtor (Days)	43	37	36	44	35	35
Creditor (Days)	51	55	64	93	89	87
Leverage Ratio (x)						
Current Ratio	1.1	1.1	0.9	0.8	0.8	0.8
Interest Cover Ratio	4.6	5.1	3.0	3.7	3.5	4.5
Net Debt/Equity	0.2	0.5	0.6	0.4	0.5	0.4

Consolidated - Cash Flow Statement

(INR Million)

Y/E March	FY18	FY19	FY20	FY21	FY22E	FY23E
OP/(Loss) before Tax	3,443	3,560	2,871	4,476	4,471	6,862
Depreciation	1,686	1,927	2,765	3,396	3,761	4,447
Interest & Finance Charges	974	880	1,509	1,755	1,545	1,628
Direct Taxes Paid	-979	-808	-181	-512	-1,163	-1,784
(Inc)/Dec in WC	1,667	235	2,582	4,516	865	2,868
CF from Operations	6,791	5,794	9,546	13,631	9,480	14,021
Others	-34	-267	17	-54	0	0
CF from Operating incl EO	6,757	5,527	9,563	13,577	9,480	14,021
(Inc)/Dec in FA	-4,872	-11,073	-11,183	-6,395	-11,500	-10,000
Free Cash Flow	1,885	-5,547	-1,620	7,182	-2,020	4,021
(Pur)/Sale of Investments	376	320	9	-27	0	0
Others	345	236	419	241	180	240
CF from Investments	-4,151	-10,517	-10,755	-6,181	-11,320	-9,760
Issue of Shares	0	0	0	0	0	0
Inc/(Dec) in Debt	-523	6,260	3,854	-5,677	4,500	0
Interest Paid	-973	-889	-1,925	-1,628	-1,725	-1,868
Dividend Paid	-528	-526	-1,139	-4	-485	-485
Others	-1	0	0	0	200	200
CF from Fin. Activity	-2,025	4,844	790	-7,309	2,489	-2,153
Inc/Dec of Cash	582	-146	-402	87	649	2,108
Opening Balance	240	822	675	274	361	1,010
Closing Balance	822	675	274	361	1,010	3,118

MRFBSE SENSEX
52,553S&P CNX
15,752**CMP: INR82,067****TP: INR84,000 (+2%)****Neutral****Stock Info**

Bloomberg	MRF IN
Equity Shares (m)	4
M.Cap.(INRb)/(USDb)	348.7 / 4.7
52-Week Range (INR)	98576 / 55360
1, 6, 12 Rel. Per (%)	-1/-12/-16
12M Avg Val (INR M)	2358
Free float (%)	72.2

Financials Snapshot (INR b)

Y/E MARCH	FY21	FY22E	FY23E
Sales	161.6	188.2	201.6
EBITDA	29.4	31.2	35.8
Adj. PAT	12.8	14.1	16.8
EPS (INR)	3,012	3,321	3,973
EPS Gr. (%)	-10.2	10.3	19.6
BV/Sh. (INR)	31,636	34,807	38,579

Ratios

RoE (%)	10.0	10.0	10.8
RoCE (%)	10.0	10.0	11.0
Payout (%)	5.0	4.5	5.0

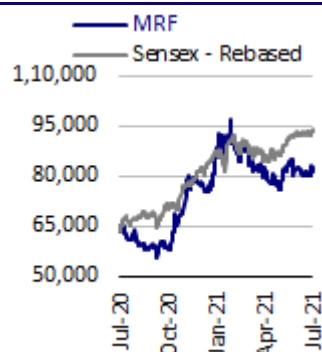
Valuations

P/E (x)	27.2	24.7	20.7
P/BV (x)	2.6	2.4	2.1
Div. Yield (%)	0.2	0.2	0.2
FCF Yield (%)	10.0	0.9	2.2

Shareholding pattern (%)

As On	Mar-21	Dec-20	Mar-20
Promoter	27.8	27.8	27.9
DII	14.3	15.2	17.8
FII	13.5	12.7	5.3
Others	44.4	44.3	49.1

FII Includes depository receipts

Stock performance (one-year)**Competition catching up****Valuation doesn't fully reflect dilution in its competitive positioning****Strong franchise with a leadership across major segments**

- MRF has managed to create a strong brand in major segments of T&B, 2Ws, and PCR over the years, which has enabled it to gain pricing power.
- It is the largest domestic tyre company, with a revenue market share of 27% (FY20). It enjoys market leadership in 2Ws, TBB, and Agri Tyres and ranks third in the PCR and TBR segment.
- However, aggressive competition in the recent past has diluted MRFs stronghold in the PCR and T&B segment, and narrowed the gap in the 2W space.

Higher exposure to TBB and weaker position in TBR doesn't bode well

- While MRF has been a dominant player in the TBB segment, it is playing catch up in the TBR segment. This is reflected in its market share, which stands ~32% in TBB, but lower at 22% in TBR.
- Higher dependency (20-22% of revenue) on this segment doesn't bode well for MRF, since TBB volumes are expected to grow less than 3% CAGR over FY21-23E and decline post that.

Dilution in superior capital efficiency

- MRF's superiority over peers in terms of profitability has diluted over the last 3-4 years. However, our channel checks suggest it still remains at a premium to peers in the respective segments. Adding capacity in the lower profitability TBR segment would also be an overhang on margin.
- We estimate ~10% EBITDA CAGR over FY21-23E, with margin contracting ~40bp to 17.8%. Operating leverage and lower interest expense would translate into 15% PAT CAGR.
- However, the cash drag is impacting capital efficiencies, with RoCE at 11% in FY23E (up 100bp over FY21 levels).

Valuation and view

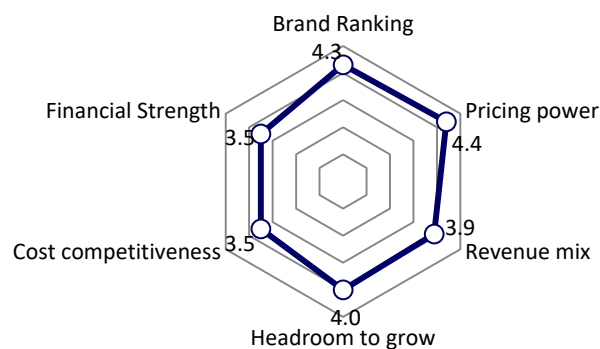
- We expect EBITDA to grow ~10% CAGR over FY21-23E, with margin contracting ~40bp to 17.8%. PAT growth would be stronger (~15% CAGR) over FY21-23E.
- MRF's competitive positioning within the sector has weakened, which is also reflected in its dilution of pricing power in the PCR and TBR segment as well as erosion of its superior return ratios.
- The current valuations at 24.7x/20.7x FY22E/FY23E EPS fairly capture the changing competitive dynamics for MRF. We initiate coverage on MRF with a **Neutral** rating and TP of INR84,000 (20x Sep-23E EPS).

Ranks last in our TII framework

Valuations factor in superior operating parameters

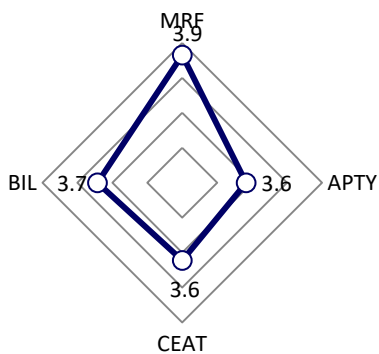
- MRF ranks highest in terms of operating performance among peers, given its leadership in the domestic Tyre sector and well-diversified presence across segments.
- It ranks numero uno in brand ranking and pricing power. The only parameter where MRF lags is the revenue mix (higher T&B contribution) and financial strength (net cash Balance Sheet, but weak return ratios).
- In terms of valuation, MRF trades at a premium of ~100% to APTY/CEAT. Considering the dilution in competitive positioning and profitability/return ratios, the current valuation premium is not sustainable.

Exhibit 129: MRF ranks high in terms of brand ranking and pricing power



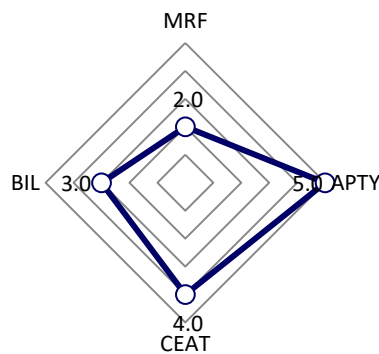
Source: MOFSL

Exhibit 130: MRF ranks numero uno based on operating parameters



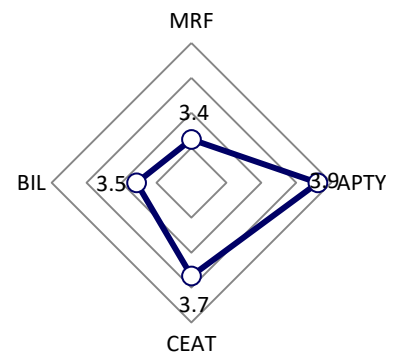
Source: MOFSL

Exhibit 131: MRF ranks lowest based on current valuations

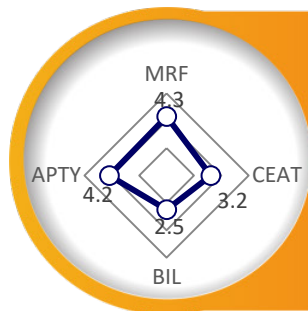


Source: MOFSL

Exhibit 132: Strong operating metrics captured in the steep valuations

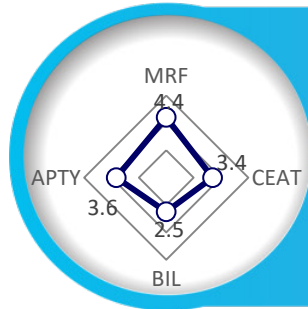


Source: MOFSL



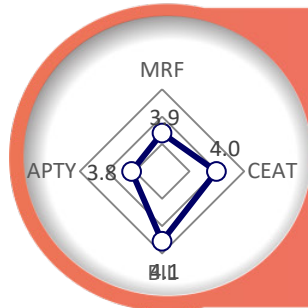
#1: Brand ranking

- ❖ MRF ranks highest in terms of brand ranking across segments, particularly in 2Ws, PCR, and TBB.
- ❖ The MRF brand is particularly eminent in the Replacement segment for 2Ws and PCR. While it is the market leader in 2Ws/TBB, with a 35%/32% market share, it is among the top three players in PCR/TBR, with a 20%/22% market share.
- ❖ The only segment where MRF lacks in terms of brand ranking is the TBR segment, where it is a late entrant and other companies like APTY and JKI have established themselves.



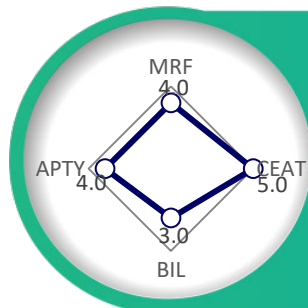
#2: Pricing power

- ❖ MRF enjoys higher pricing power across most segments, and has been known to be the price maker within the sector.
- ❖ Its pricing power is particularly strong in 2Ws, TBB, and PCR, though competition is trying to wrest some control over pricing in 2Ws and PCR.
- ❖ MRF's pricing power is comparatively weaker in the TBR segment.



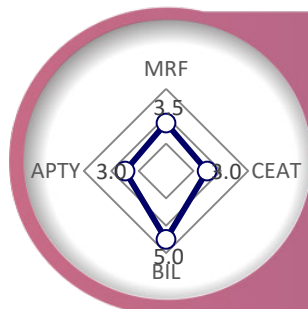
#3: Revenue mix

- ❖ The OEM replacement mix is mostly similar for all these companies, and hence they rank equally in this aspect.
- ❖ In terms of revenue mix within vehicle segments, MRF and APTY derive a relatively higher share from the CV segment, unlike CEAT, which derives a higher share from Consumer segments of 2W and PCR.
- ❖ MRF also lacks in terms of geographical diversification as its share of exports is the lowest.



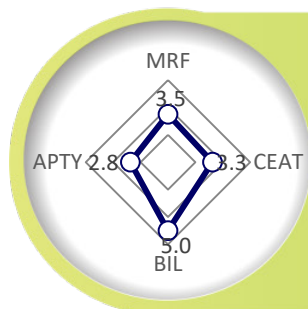
#4: Headroom to grow

- ❖ MRF ranks a joint second with APTY in terms of headroom to grow.
- ❖ This comes on the back of already lower utilizations (60-65%) and capex intensity over FY21-23E.
- ❖ MRF is believed to be adding capacity across 2Ws, PCR, and TBR segments. However, the quantum of capacity addition is lower v/s the aggressive expansion of APTY, CEAT, and Maxxis.
- ❖ We estimate ~12% revenue CAGR over FY21-23E v/s 14%/16% for APTY/CEAT.



#5: Cost competitiveness

- ❖ MRF ranks slightly higher than domestic peers like CEAT and APTY in terms of cost competitiveness. However, it ranks lower than BIL in this aspect.
- ❖ MRF's EBITDA margin has been consistently higher than CEAT and APTY.
- ❖ The consistently higher margin could be attributable to its relatively stronger pricing power and benefits of scale.



#6: Financial strength

- ❖ MRF ranks second in terms of financial strength, outnumbered by BIL in this aspect.
- ❖ It also has the strongest Balance Sheet, being net cash, despite higher capex spends over the last two years.
- ❖ While MRF used to enjoy superior RoE/RoCE, the gap has narrowed in the last couple of years.

Well-diversified presence

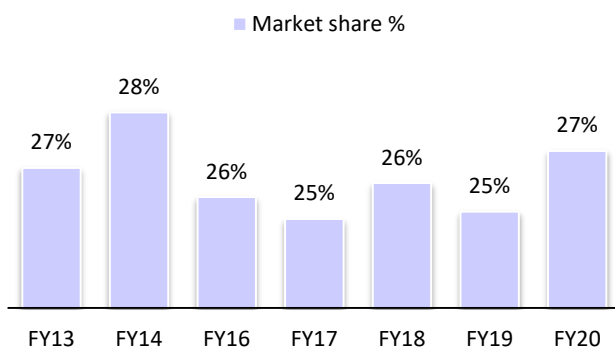
Among the top three brands across segments

- MRF is the largest domestic tyre company, with a revenue market share of 27% (FY20). It enjoys market leadership in 2Ws, TBB, and Agri Tyres, and ranks third in the PCR and TBR segment.
- While MRF has been a dominant player in the TBB segment, it is playing catch up in the TBR segment. This is reflected in its market share, which stands ~32% in TBB, but lower at 22% in TBR. Higher dependency (20-22% of revenue) on this segment doesn't bode well for MRF, since TBB volumes are expected to grow less than 3% CAGR over FY21-23E and decline post that.
- MRF incurred a capex of ~INR55.6b over FY19-21. We estimate a capex of INR15b p.a over FY22-23E and expect MRF to add: a) 150tpd 2W capacity, b) 150tpd PCR capacity, and c) 180tpd TBR capacity.
- We expect revenue/EBITDA to grow ~12%/~10% CAGR over FY21-23E, with margin contracting by ~40bp to 17.8%. This would translate into 15% PAT CAGR. However, the cash drag is impacting capital efficiencies, with RoCE at 11% in FY23E (up 100bp over FY21 levels).

Best among equals

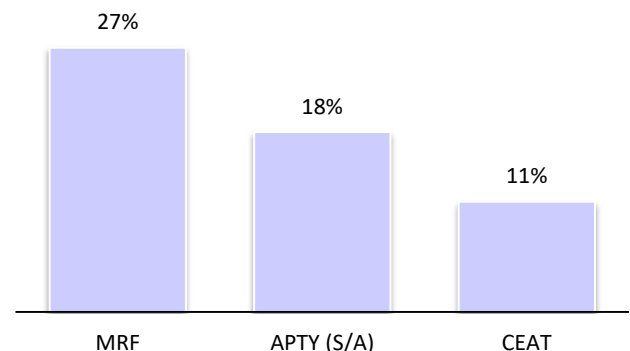
- MRF is the largest domestic tyre company, with a revenue market share of 27% (FY20).
- It enjoys leadership position across major tyre segments, being among the top three brands in terms of market share across segments.
 - 26% market share in the T&B segment (ranks third).
 - 20% market share in the Passenger Car segment (ranks third).
 - 35% market share in the 2W segment (numero uno player).
- Among domestic peers, MRF ranks highest in terms of brand equity and pricing power across segments.

Exhibit 133: MRF regains its lost revenue market share

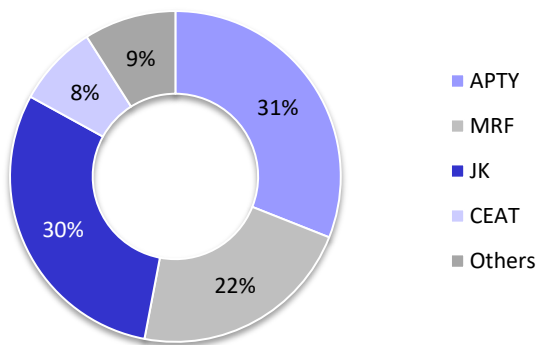


Source: Industry, MOFSL

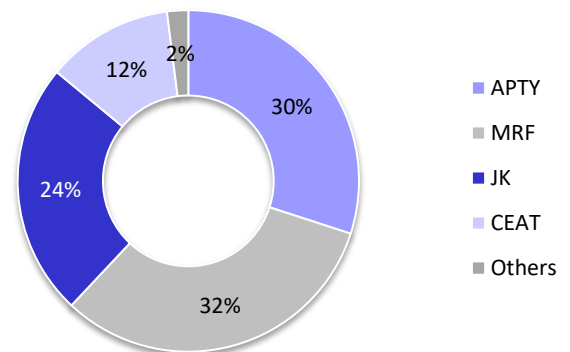
Exhibit 134: MRF is still numero uno based on revenue market share



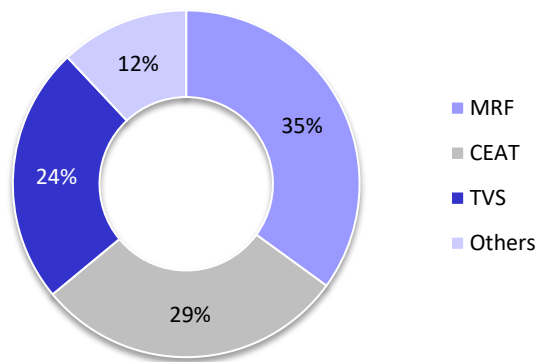
Source: Companies, MOFSL

Exhibit 135: MRF among the top three players in TBR

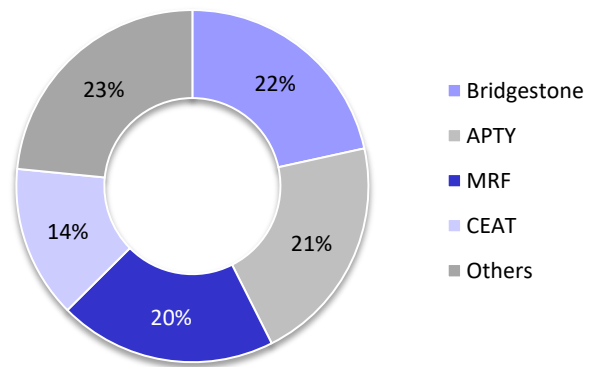
Source: Industry, MOFSL

Exhibit 136: MRF enjoys leadership in the TBB segment

Source: Industry, MOFSL

Exhibit 137: MRF is numero uno in 2Ws

Source: Industry, MOFSL

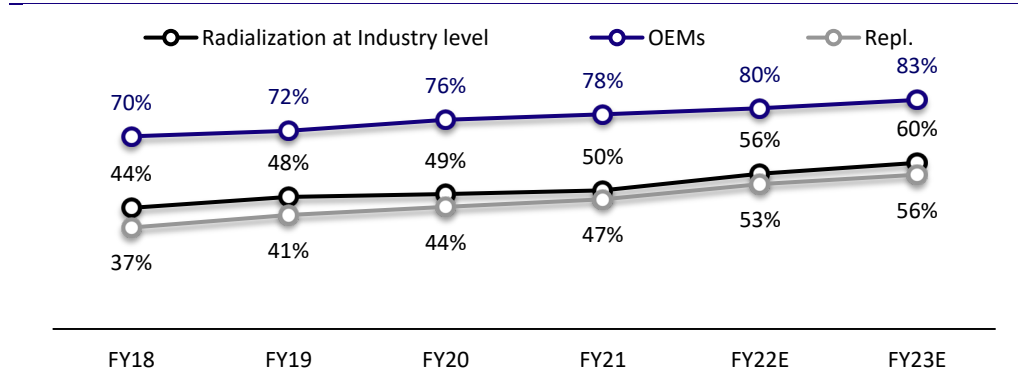
Exhibit 138: MRF enjoys ~20% market share in the PCR segment

Source: Industry, MOFSL

Weaker positioning in the TBR segment a cause for concern

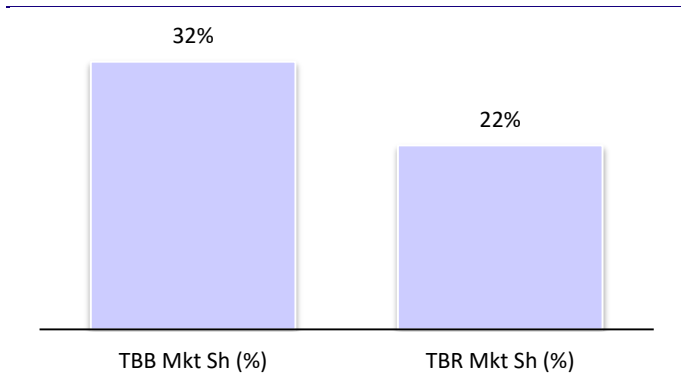
- While MRF has been a dominant player in the TBB segment, it is playing catch up in the TBR segment. This is reflected in its market share, which stands ~32% in TBB, but lower at 22% in TBR.
- In terms of brand image and pricing power, MRF's positioning is weaker in the TBR segment, outpaced by APTY.
- Radialization is expected to gather pace in the T&B segment, particularly within the Replacement market, where MRF is dominant. The share of radial tyres within T&B is expected to increase to 56% by FY23E (from 47% in FY21). With new capacity coming online, MRF would be able to participate in this growth and defend its market position.
- MRF also derives relatively higher revenue share from the TBB segment (20-22%) v/s its peers (17-19%). Higher dependency on this segment doesn't bode well for MRF, since TBB volumes are expected to grow less than 3% CAGR over FY21-23E and decline post that.

Exhibit 139: Radialization gathering pace in the Replacement segment could hurt MRF's positioning



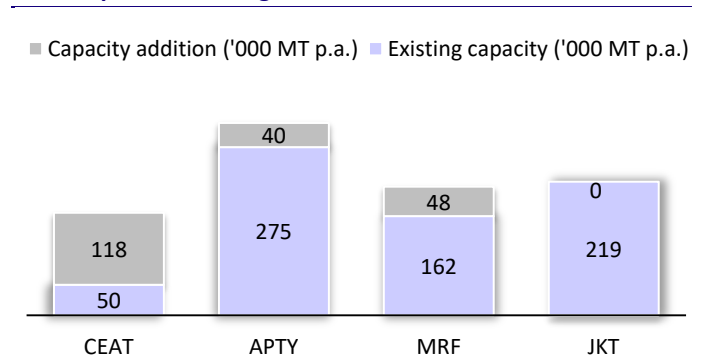
Source: Industry, MOFSL

Exhibit 140: MRF's positioning in the TBR segment remains weak



Source: Industry, MOFSL

Exhibit 141: MRF's capacity addition in the TBR segment is low despite current high utilizations



Source: Industry, Companies, MOFSL

Growth would be in line with industry growth

- MRF has been susceptible to competitive intensity within the industry, losing market share over the past few years.
- We expect MRF to sustain its current market share, with the ongoing capacity addition (42% capacity addition over FY20). Hence, we expect it to grow in line with industry growth.
- We expect revenue to grow by ~12% CAGR over FY21-23E, benefitting from its strong presence in the Replacement segment, which is expected to grow faster than the OEM segment.

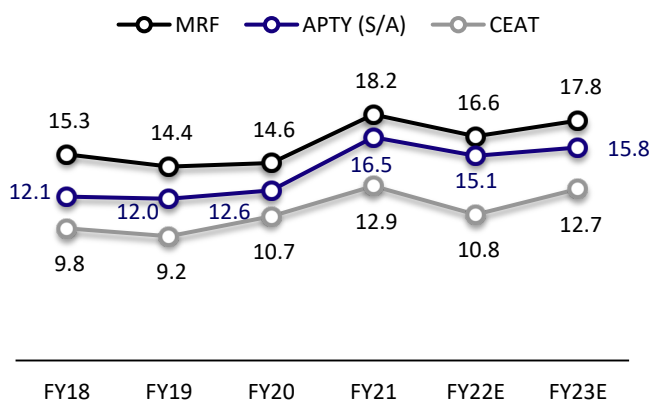
Profitability to remain under pressure over FY21-23E

- MRF's superiority over peers in terms of profitability has diluted over the last 3-4 years. However, our channel checks suggest it still remains at a premium to its peers in the respective segments.
- Adding capacity in the lower profitability TBR segment would also be an overhang on margin.
- We estimate ~10% EBITDA CAGR over FY21-23E, with margin contracting ~40bp to 17.8%. This would translate into 15% PAT CAGR.

Balance Sheet to remain net cash despite higher capex

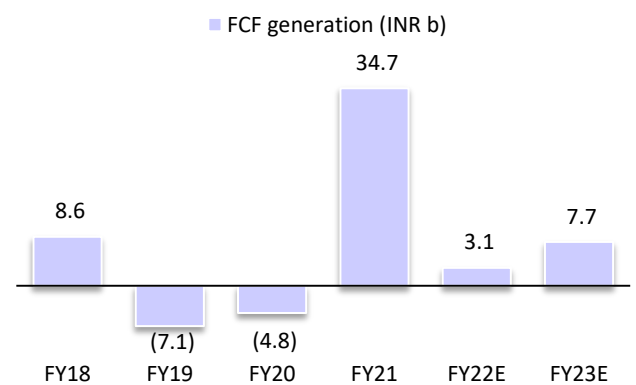
- MRF incurred a capex of ~INR55.6b over FY19-21. We estimate a capex of INR15b p.a over FY22-23E and expect MRF to add: a) 150tpd 2W capacity, b) 150tpd PCR capacity, and c) 180tpd TBR capacity.
- Despite such a high capex, MRF's Balance Sheet would see further accretion to net cash in FY22E/FY23E over FY21 net cash of ~INR40b.
- However, the cash drag is impacting capital efficiencies, with RoCE at 11% in FY23E (up 100bp over FY21 levels).

Exhibit 142: Over the years, MRF has largely maintained its superior profitability due to pricing power and scale benefit



Source: Companies, MOFSL

Exhibit 143: FCF generation has been consistent for MRF over periods of capacity addition



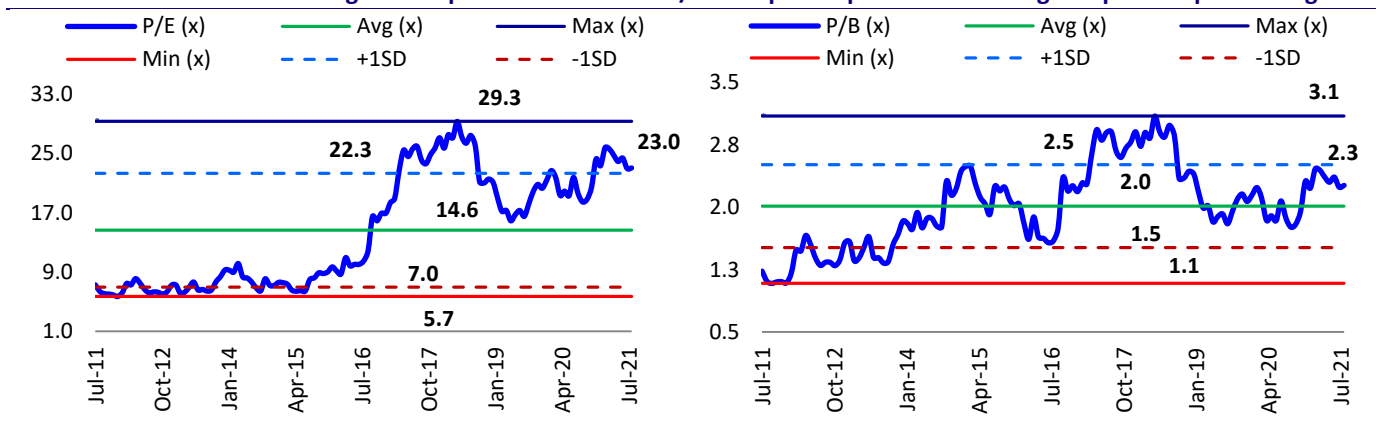
Source: Company, MOFSL

Valuations and view

Strong franchise, but valuations keeps upside capped

- **Well diversified presence, with leadership across major segments:** MRF's leadership across major segments of T&B, 2Ws, and PCR has led to the creation of a strong brand and pricing power. It enjoys market leadership in 2W, TBB, and Agri tyres, and is among the top three players in PCR and TBR. This has translated into MRF having the highest profitability and superior ratios.
- **Dilution in competitive positioning:** However, aggressive competition in the recent past has dethroned MRF from the top spot in the PCR and T&B segment, and resulted in an overall market share loss. With new capacity coming in, MRF should be able to defend its market position. Higher exposure to the TBB segment, which is expected to have muted growth, makes it vulnerable to the trend of radialization in the T&B segment. We expect ~12% revenue CAGR over FY21-23E due to healthy Replacement demand.
- **Margin/RoE to remain under pressure:** The recent capex, leading to lower capacity utilization, will keep margin and RoE under check over FY21-23E. We expect EBITDA to grow ~10% CAGR over FY21-23E, with margin contracting ~40bp to 17.8%. PAT growth would be stronger (~15% CAGR) over FY21-23E.
- **Steep valuations do not factor in downside risk:** MRF's competitive positioning within the sector has weakened over the past few years, which is also reflected in the dilution of pricing power in the PCR and TBR segment. This, coupled with the impact of capex carried out over the last three years, has resulted in a substantial dilution in its superior return ratios. The current valuations at 24.7x/20.7x FY22E/FY23E EPS fairly capture the changing competitive dynamics for MRF. We initiate coverage on MRF with a Neutral rating, valuing it at 20x Sep-23E EPS (v/s 21.5x/14.5x its five/10-year average P/E) to arrive at our TP of INR84,000.

Exhibit 144: MRF trades at a significant premium to its LPA P/E multiple despite its weakening competitive positioning



Source: MOFSL

SWOT Analysis



Bulls and Bear Case

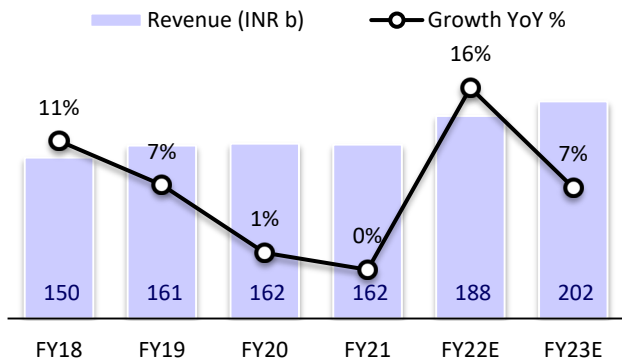
Exhibit 145: MRF: Scenario Analysis

	Base			Bull			Bear		
INR m	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E
Revenue	1,88,184	2,01,638	2,14,859	1,93,958	2,17,233	2,38,957	1,81,028	1,90,079	1,99,583
Growth (%)	16	7	7	20	12	10	12	5	5
EBITDA Margin (%)	16.6	17.8	18.2	17.0	18.2	18.2	16.0	17.0	17.0
EPS (INR)	3,321	3,973	4,450	3,625	4,623	5,214	2,925	3,362	3,545
Growth (%)	10	20	12	20	28	13	-3	15	5
RoE (%)	10.0	10.8	10.9	10.9	12.4	12.4	8.9	9.3	9.0
Target P/E (x)		20	20		22	22		18	18
TP		84,000	88,964		1,01,703	1,14,700		60,520	63,809
Upside CAGR (%)		2	4		24	18		-26	-12
Remarks				Strong Replacement demand in 2Ws and PCR Moderation in RM prices and supportive competitive environment			Weak Replacement demand for 2Ws, PCR, and T&B High RM prices and competitive intensity		

Source: MOFSL

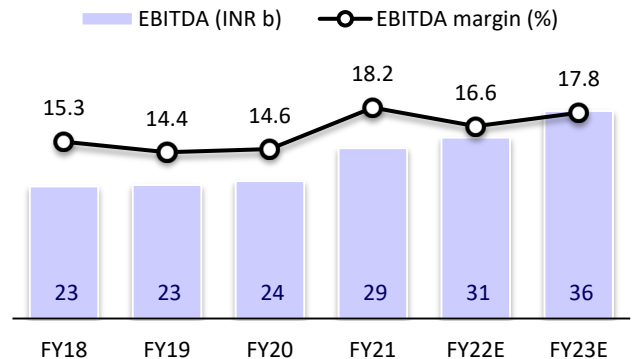
Story in charts

Exhibit 146: Expect revenue to grow ~12% CAGR over FY21-23E



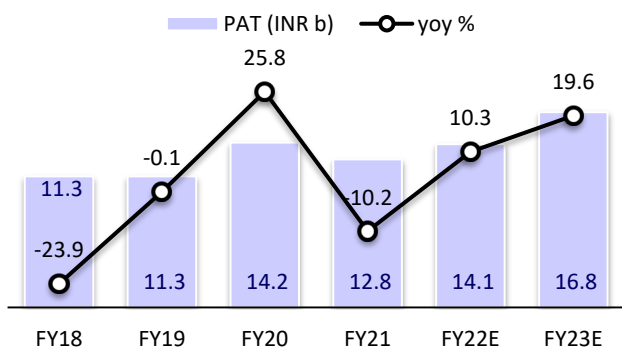
Source: Company, MOFSL

Exhibit 147: Expect EBITDA to grow ~10% CAGR over FY21-23E, margin to contract by 40bp to 17.8%



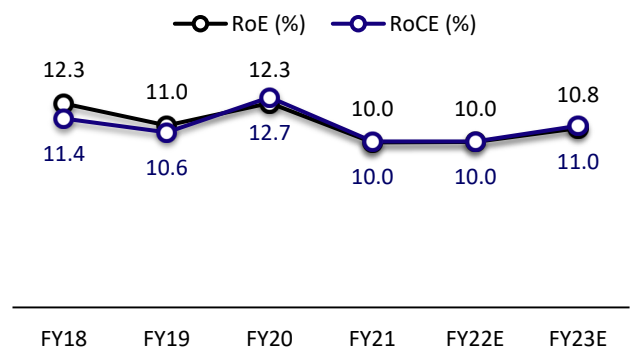
Source: Company, MOFSL

Exhibit 148: Expect 15% PAT CAGR over FY21-23E



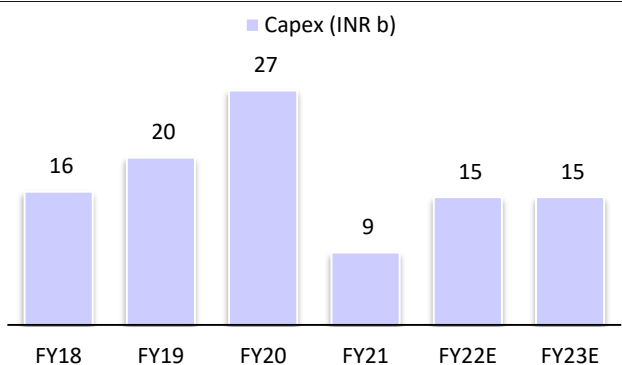
Source: Company, MOFSL

Exhibit 149: Capital efficiency to remain weak



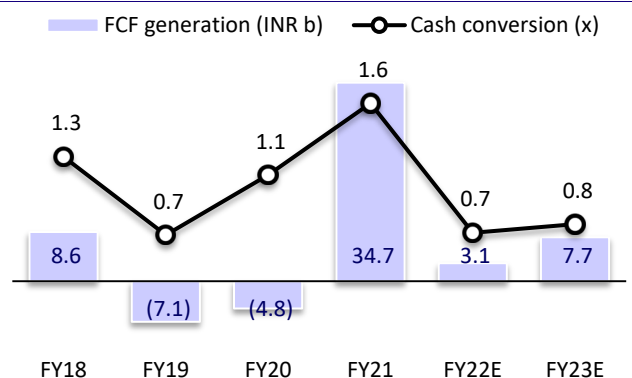
Source: Company, MOFSL

Exhibit 150: Capex spending over FY21-23E should be largely towards a ramp up in capacity



Source: Company, MOFSL

Exhibit 151: FCF generation to be consistently positive



Source: Company, MOFSL

Financials and valuations

Consolidated Income Statement

INR m

Y/E March	FY18	FY19	FY20	FY21	FY22E	FY23E
Total Income from Operations	1,49,544	1,60,625	1,62,394	1,61,632	1,88,184	2,01,638
Change (%)	11.5	7.4	1.1	-0.5	16.4	7.1
EBITDA	22,818	23,054	23,740	29,423	31,230	35,811
EBITDA Margin (%)	15.3	14.4	14.6	18.2	16.6	17.8
Depreciation	7,067	8,076	9,823	11,408	12,900	14,190
EBIT	15,751	14,978	13,917	18,016	18,330	21,621
EBIT Margin (%)	10.5	9.3	8.6	11.1	9.7	10.7
Int. and Finance Charges	2,531	2,673	2,928	2,747	2,576	2,448
Other Income	3,307	4,217	3,354	2,099	3,273	3,589
PBT bef. EO Exp.	16,527	16,522	14,343	17,368	19,027	22,762
EO Items	0	0	0	0	0	0
PBT after EO Exp.	16,527	16,522	14,343	17,368	19,027	22,762
Tax Rate (%)	31.5	31.6	0.8	26.5	26.0	26.0
Reported PAT	11,316	11,306	14,226	12,771	14,080	16,844
Adjusted PAT	11,316	11,306	14,226	12,771	14,080	16,844
Change (%)	-23.9	-0.1	25.8	-10.2	10.3	19.6

Consolidated Balance Sheet

Y/E March	FY18	FY19	FY20	FY21	FY22E	FY23E
Equity Share Capital	42	42	42	42	42	42
Total Reserves	97,340	1,08,331	1,22,105	1,34,094	1,47,538	1,63,535
Net Worth	97,382	1,08,374	1,22,147	1,34,137	1,47,581	1,63,577
Deferred Tax Liabilities	6,198	8,402	4,289	3,802	3,802	3,802
Total Loans	21,636	21,024	18,375	20,398	16,398	12,399
Capital Employed	1,25,218	1,37,801	1,44,812	1,58,339	1,67,783	1,79,780
Gross Block	79,709	94,725	1,25,384	1,42,502	1,57,502	1,72,502
Less: Accum. Deprn.	18,787	26,863	36,687	48,094	60,994	75,184
Net Fixed Assets	60,922	67,862	88,698	94,408	96,507	97,317
Capital WIP	10,789	14,035	17,409	10,022	10,022	10,022
Total Investments	41,450	38,547	15,193	58,740	58,740	58,740
Curr. Assets, Loans, and Adv.	51,621	63,969	73,123	62,649	65,976	74,203
Inventory	21,973	29,932	29,052	29,388	27,951	29,531
Account Receivables	21,499	23,827	22,994	22,543	26,810	28,726
Cash and Bank Balance	2,337	1,045	11,811	1,694	904	4,897
Loans and Advances	5,812	9,164	9,266	9,024	10,311	11,049
Curr. Liability and Prov.	39,567	46,612	49,611	67,480	63,463	60,503
Account Payables	15,685	17,094	19,053	34,414	25,801	20,444
Other Current Liabilities	20,924	26,235	27,097	28,915	33,512	35,908
Provisions	2,958	3,284	3,461	4,150	4,150	4,150
Net Current Assets	12,054	17,357	23,512	-4,831	2,513	13,700
Appl. of Funds	1,25,218	1,37,801	1,44,812	1,58,339	1,67,783	1,79,780

E: MOFSL estimates

Financials and valuations

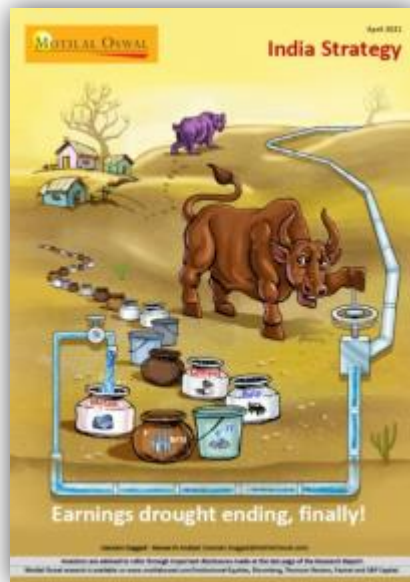
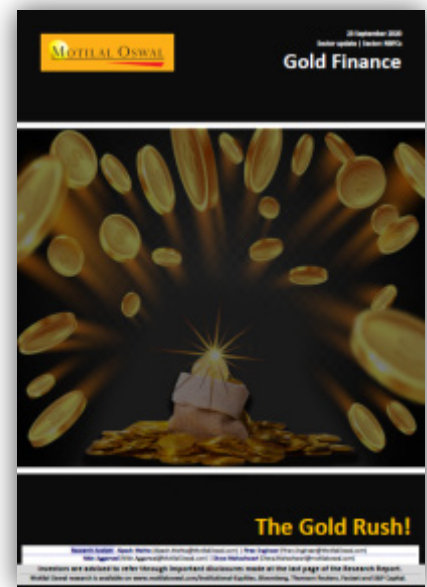
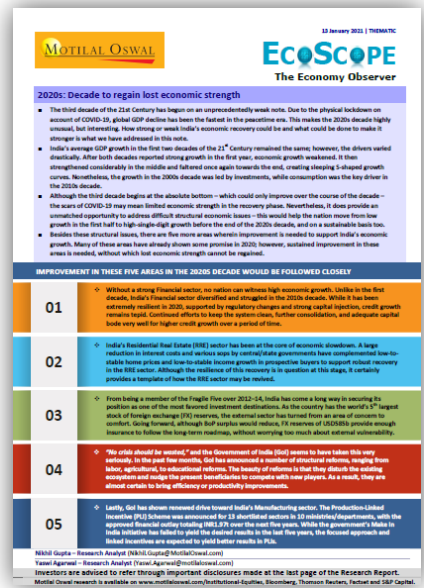
Ratios

Y/E March	FY18	FY19	FY20	FY21	FY22E	FY23E
Basic (INR)						
EPS	2,669	2,667	3,355	3,012	3,321	3,973
Cash EPS	4,336	4,571	5,672	5,702	6,363	7,319
BV/Share	22,967	25,560	28,808	31,636	34,807	38,579
FCF per share	2,032	-1,676	-1,126	8,191	743	1,816
DPS	60	60	65	150	150	200
Payout (%)	2.7	2.7	2.3	5.0	4.5	5.0
Valuation (x)						
P/E	30.7	30.8	24.5	27.2	24.7	20.7
P/BV	3.6	3.2	2.8	2.6	2.4	2.1
EV/Sales	2.2	2.1	2.1	1.9	1.6	1.5
EV/EBITDA	14.3	14.3	14.3	10.5	9.8	8.3
Dividend Yield (%)	0.1	0.1	0.1	0.2	0.2	0.2
Return Ratios (%)						
RoE	12.3	11.0	12.3	10.0	10.0	10.8
RoCE	11.4	10.6	12.7	10.0	10.0	11.0
RoIC	15.4	13.2	15.0	14.1	14.6	15.7
Working Capital Ratios						
Fixed Asset Turnover (x)	1.9	1.7	1.3	1.1	1.2	1.2
Asset Turnover (x)	1.2	1.2	1.1	1.0	1.1	1.1
Working Cap. Turnover (Days)	24	37	26	-15	3	16
Leverage Ratio (x)						
Current Ratio	1.3	1.4	1.5	0.9	1.0	1.2
Interest Coverage Ratio	6.2	5.6	4.8	6.6	7.1	8.8
Net Debt-to-Equity (x)	-0.2	-0.2	-0.1	-0.3	-0.3	-0.3

Consolidated Cash Flow Statement

Y/E March	FY18	FY19	FY20	FY21	FY22E	FY23E
INR m						
OP/(Loss) before Tax	16,527	16,522	14,343	17,368	19,027	22,762
Depreciation	7,067	8,076	9,823	11,408	12,900	14,190
Interest and Finance Charges	2,531	2,673	2,928	2,747	2,576	2,448
Direct Taxes Paid	-4,751	-4,156	-4,418	-5,168	-4,947	-5,918
(Inc.)/Dec. in WC	5,289	-7,844	2,285	18,222	-8,134	-7,194
Others	-2,408	-2,742	-2,235	-1,331	-3,273	-3,589
CF from Operations incl. EO	24,255	12,529	22,726	43,246	18,149	22,699
(Inc.)/Dec. in FA	-15,640	-19,633	-27,499	-8,516	-15,000	-15,000
Free Cash Flow	8,615	-7,105	-4,773	34,730	3,149	7,699
(Pur.)/Sale of Investments	-5,309	5,960	25,852	-43,336	0	0
Others	685	-189	10	989	3,299	3,589
CF from Investments	-20,264	-13,862	-1,637	-50,862	-11,701	-11,411
Issue of Shares	0	0	0	0	0	1
Inc./(Dec.) in Debt	-1,325	3,523	-6,347	1,435	-4,000	-3,999
Interest Paid	-2,541	-2,702	-2,809	-2,540	-2,576	-2,448
Dividend Paid	-306	-307	-307	-424	-636	-848
Others	-354	-93	-861	-971	0	0
CF from Fin. Activity	-4,526	422	-10,324	-2,500	-7,212	-7,294
Inc./Dec. in Cash	-535	-911	10,766	-10,117	-764	3,994
Opening Balance	2,465	1,931	1,019	11,785	1,668	904
Closing Balance	1,931	1,020	11,785	1,668	904	4,898

THEMATIC/STRATEGY RESEARCH GALLERY



NOTES

Disclosures:

The following Disclosures are being made in compliance with the SEBI Research Analyst Regulations 2014 (herein after referred to as the Regulations).

Motilal Oswal Financial Services Ltd. (MOFSL) is a SEBI Registered Research Analyst having registration no. INH000000412. MOFSL, the Research Entity (RE) as defined in the Regulations, is engaged in the business of providing Stock broking services, Investment Advisory Services, Depository participant services & distribution of various financial products. MOFSL is a subsidiary company of Passionate Investment Management Pvt. Ltd., (PIMPL). MOFSL is a listed public company, the details in respect of which are available on www.motilaloswal.com. MOFSL (erstwhile Motilal Oswal Securities Limited - MOSL) is registered with the Securities & Exchange Board of India (SEBI) and is a registered Trading Member with National Stock Exchange of India Ltd. (NSE) and Bombay Stock Exchange Limited (BSE), Multi Commodity Exchange of India Limited (MCX) and National Commodity & Derivatives Exchange Limited (NCDEX) for its stock broking activities & is Depository participant with Central Depository Services Limited (CDSL) National Securities Depository Limited (NSDL), NERL, COMRIS and CCRL and is member of Association of Mutual Funds of India (AMFI) for distribution of financial products and Insurance Regulatory & Development Authority of India (IRDA) as Corporate Agent for insurance products. Details of associate entities of Motilal Oswal Financial Services Limited are available on the website at <http://online.reports.motilaloswal.com/Dormant/documents/Associate%20Details.pdf>

Details of pending Enquiry Proceedings of Motilal Oswal Financial Services Limited are available on the website at <https://galaxy.motilaloswal.com/ResearchAnalyst/PublishViewLitigation.aspx>

MOFSL, its associates, Research Analyst or their relative may have any financial interest in the subject company. MOFSL and/or its associates and/or Research Analyst may have actual/beneficial ownership of 1% or more securities in the subject company in the past 12 months. MOFSL and its associate company(ies), their directors and Research Analyst and their relatives may; (a) from time to time, have a long or short position in, act as principal in, and buy or sell the securities or derivatives thereof of companies mentioned herein. (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies) or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report. Research Analyst may have served as director/officer, etc. in the subject company in the past 12 months. MOFSL and/or its associates may have received any compensation from the subject company in the past 12 months.

In the past 12 months, MOFSL or any of its associates may have:

- managed or co-managed public offering of securities from subject company of this research report,
- received compensation for investment banking or merchant banking or brokerage services from subject company of this research report,
- received compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company of this research report.
- Subject Company may have been a client of MOFSL or its associates in the past 12 months.

MOFSL and its associates have not received any compensation or other benefits from the subject company or third party in connection with the research report. To enhance transparency, MOFSL has incorporated a Disclosure of Interest Statement in this document. This should, however, not be treated as endorsement of the views expressed in the report. MOFSL and / or its affiliates do and seek to do business including investment banking with companies covered in its research reports. As a result, the recipients of this report should be aware that MOFSL may have a potential conflict of interest that may affect the objectivity of this report. Compensation of Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions. Above disclosures include beneficial holdings lying in demat account of MOFSL which are opened for proprietary investments only. While calculating beneficial holdings, it does not consider demat accounts which are opened in name of MOFSL for other purposes (i.e holding client securities, collaterals, error trades etc.). MOFSL also earns DP income from clients which are not considered in above disclosures. Above disclosures include beneficial holdings lying in demat account of MOFSL which are opened for proprietary investments only. While calculating beneficial holdings, it does not consider demat accounts which are opened in name of MOFSL for other purposes (i.e holding client securities, collaterals, error trades etc.). MOFSL also earns DP income from clients which are not considered in above disclosures.

Terms & Conditions:

This report has been prepared by MOFSL and is meant for sole use by the recipient and not for circulation. The report and information contained herein is strictly confidential and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of MOFSL. The report is based on the facts, figures and information that are considered true, correct, reliable and accurate. The intent of this report is not recommendatory in nature. The information is obtained from publicly available media or other sources believed to be reliable. Such information has not been independently verified and no guaranty, representation of warranty, express or implied, is made as to its accuracy, completeness or correctness. All such information and opinions are subject to change without notice. The report is prepared solely for informational purpose and does not constitute an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments for the clients. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. MOFSL will not treat recipients as customers by virtue of their receiving this report.

Analyst Certification

The views expressed in this research report accurately reflect the personal views of the analyst(s) about the subject securities or issues, and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations and views expressed by research analyst(s) in this report.

Disclosure of Interest Statement**Companies where there is interest**

Analyst ownership of the stock

No

A graph of daily closing prices of securities is available at www.nseindia.com, www.bseindia.com. Research Analyst views on Subject Company may vary based on Fundamental research and Technical Research. Proprietary trading desk of MOFSL or its associates maintains arm's length distance with Research Team as all the activities are segregated from MOFSL research activity and therefore it can have an independent view with regards to subject company for which Research Team have expressed their views.

Regional Disclosures (outside India)

This report is not directed or intended for distribution to or use by any person or entity resident in a state, country or any jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL & its group companies to registration or licensing requirements within such jurisdictions.

For Hong Kong:

This report is distributed in Hong Kong by Motilal Oswal capital Markets (Hong Kong) Private Limited, a licensed corporation (CE AYY-301) licensed and regulated by the Hong Kong Securities and Futures Commission (SFC) pursuant to the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong) "SFO". As per SEBI (Research Analyst Regulations) 2014 Motilal Oswal Financial Services Limited (SEBI Reg No. INH000000412) has an agreement with Motilal Oswal capital Markets (Hong Kong) Private Limited for distribution of research report in Hong Kong. This report is intended for distribution only to "Professional Investors" as defined in Part I of Schedule 1 to SFO. Any investment or investment activity to which this document relates is only available to professional investor and will be engaged only with professional investors." Nothing here is an offer or solicitation of these securities, products and services in any jurisdiction where their offer or sale is not qualified or exempt from registration. The Indian Analyst(s) who compile this report is/are not located in Hong Kong & are not conducting Research Analysis in Hong Kong.

For U.S.:

Motilal Oswal Financial Services Limited (MOFSL) is not a registered broker - dealer under the U.S. Securities Exchange Act of 1934, as amended (the "1934 act") and under applicable state laws in the United States. In addition MOFSL is not a registered investment adviser under the U.S. Investment Advisers Act of 1940, as amended (the "Advisers Act") and together with the 1934 Act, the "Acts", and under applicable state laws in the United States. Accordingly, in the absence of specific exemption under the Acts, any brokerage and investment services provided by MOFSL, including the products and services described herein are not available to or intended for U.S. persons. This report is intended for distribution only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the Exchange Act and interpretations thereof by SEC (henceforth referred to as "major institutional investors"). This document must not be acted on or relied on by persons who are not major institutional investors. Any investment or investment activity to which this document relates is only available to major institutional investors and will be engaged in only with major institutional investors. In reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act") and interpretations thereof by the U.S. Securities and Exchange Commission ("SEC") in order to conduct business with Institutional Investors based in the U.S., MOFSL has entered into a chaperoning agreement with a U.S. registered broker-dealer, Motilal Oswal Securities International Private Limited. ("MOSIPL"). Any business interaction pursuant to this report will have to be executed within the provisions of this chaperoning agreement.

The Research Analysts contributing to the report may not be registered /qualified as research analyst with FINRA. Such research analyst may not be associated persons of the U.S. registered broker-dealer, MOSIPL, and therefore, may not be subject to NASD rule 2711 and NYSE Rule 472 restrictions on communication with a subject company, public appearances and trading securities held by a research analyst account.

For Singapore:

In Singapore, this report is being distributed by Motilal Oswal Capital Markets Singapore Pte Ltd ("MOCMSPL") (Co.Reg. NO. 201129401Z) which is a holder of a capital markets services license and an exempt financial adviser in Singapore, as per the approved agreement under Paragraph 9 of Third Schedule of Securities and Futures Act (CAP 289) and Paragraph 11 of First Schedule of Financial Advisors Act (CAP 110) provided to MOCMSPL by Monetary Authority of Singapore. Persons in Singapore should contact MOCMSPL in respect of any matter arising from, or in connection with this report/publication/communication. This report is distributed solely to persons who qualify as "Institutional Investors", of which some of whom may consist of "accredited" institutional investors as defined in section 4A(1) of the Securities and Futures Act, Chapter 289 of Singapore ("the SFA"). Accordingly, if a Singapore person is not or ceases to be such an institutional investor, such Singapore Person must immediately discontinue any use of this Report and inform MOCMSPL.

Disclaimer: The report and information contained herein is strictly confidential and meant solely for the selected recipient and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent. This report and information herein is solely for informational purpose and may not be used or considered as an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments. Nothing in this report constitutes investment, legal, accounting and tax advice or a representation that any investment or strategy is suitable or appropriate to your specific circumstances. The securities discussed and opinions expressed in this report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and needs of specific recipient. This may not be taken in substitution for the exercise of independent judgment by any recipient. Each recipient of this document should make such investigations as it deems necessary to arrive at an independent evaluation of an investment in the securities of companies referred to in this document (including the merits and risks involved), and should consult its own advisors to determine the merits and risks of such an investment. The investment discussed or views expressed may not be suitable for all investors. Certain transactions -including those involving futures, options, another derivative products as well as non-investment grade securities - involve substantial risk and are not suitable for all investors. No representation or warranty, express or implied, is made as to the accuracy, completeness or fairness of the information and opinions contained in this document. The Disclosures of Interest Statement incorporated in this document is provided solely to enhance the transparency and should not be treated as endorsement of the views expressed in the report. This information is subject to change without any prior notice. The Company reserves the right to make modifications and alternations to this statement as may be required from time to time without any prior approval. MOFSL, its associates, their directors and the employees may from time to time, effect or have effected an own account transaction in, or deal as principal or agent in or for the securities mentioned in this document. They may perform or seek to perform investment banking or other services for, or solicit investment banking or other business from, any company referred to in this report. Each of these entities functions as a separate, distinct and independent of each other. The recipient should take this into account before interpreting the document. This report has been prepared on the basis of information that is already available in publicly accessible media or developed through analysis of MOFSL. The views expressed are those of the analyst, and the Company may or may not subscribe to all the views expressed therein. This document is being supplied to you solely for your information and may not be reproduced, redistributed or passed on, directly or indirectly, to any other person or published, copied, in whole or in part, for any purpose. This report is not directed or intended for distribution to, or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL to any registration or licensing requirement within such jurisdiction. The securities described herein may or may not be eligible for sale in all jurisdictions or to certain category of investors. Persons in whose possession this document may come are required to inform themselves of and to observe such restriction. Neither the Firm, not its directors, employees, agents or representatives shall be liable for any damages whether direct or indirect, incidental, special or consequential including lost revenue or lost profits that may arise from or in connection with the use of the information. The person accessing this information specifically agrees to exempt MOFSL or any of its affiliates or employees from, any and all responsibility/liability arising from such misuse and agrees not to hold MOFSL or any of its affiliates or employees responsible for any such misuse and further agrees to hold MOFSL or any of its affiliates or employees free and harmless from all losses, costs, damages, expenses that may be suffered by the person accessing this information due to any errors and delays.

Registered Office Address: Motilal Oswal Tower, Rahimtullah Sayani Road, Opposite Parel ST Depot, Prabhadevi, Mumbai-400025; Tel No.: 022 71934200/ 022-71934263; Website www.motilaloswal.com.

CIN No.: L67190MH2005PLC153397. Correspondence Office Address: Palm Spring Centre, 2nd Floor, Palm Court Complex, New Link Road, Malad(West), Mumbai- 400 064. Tel No: 022 7188 1000.

Registration Nos.: Motilal Oswal Financial Services Limited (MOFSL)*: INZ000158836(BSE/NSE/MCX/NCDEX); CDSL and NSDL: IN-DP-16-2015; Research Analyst: INH000000412. AMFI: ARN - 146822; Investment Adviser: INA000007100; Insurance Corporate Agent: CA0579; PMS: INP000006712. Motilal Oswal Asset Management Company Ltd. (MOAMC): PMS (Registration No.: INP000000670); PMS and Mutual Funds are offered through MOAMC which is group company of MOFSL. Motilal Oswal Wealth Management Ltd. (MOWML): PMS (Registration No.: INP000004409) is offered through MOWML, which is a group company of MOFSL. Motilal Oswal Financial Services Limited is a distributor of Mutual Funds, PMS, Fixed Deposit, Bond, NCDs, Insurance Products and IPOs. Real Estate is offered through Motilal Oswal Real Estate Investment Advisors II Pvt. Ltd. which is a group company of MOFSL. Private Equity is offered through Motilal Oswal Private Equity Investment Advisors Pvt. Ltd which is a group company of MOFSL. Research & Advisory services is backed by proper research. Please read the Risk Disclosure Document prescribed by the Stock Exchanges carefully before investing. There is no assurance or guarantee of the returns. Investment in securities market is subject to market risk, read all the related documents carefully before investing. Details of Compliance Officer: Name: Neeraj Agarwal, Email ID: na@motilaloswal.com, Contact No.: 022-71881085.

* MOSL has been amalgamated with Motilal Oswal Financial Services Limited (MOFSL) w.e.f August 21, 2018 pursuant to order dated July 30, 2018 issued by Hon'ble National Company Law Tribunal, Mumbai Bench.