European Tire Manufacturers

Data points remain mixed, but H2 should be better than H1

Price Objective Change

16 August 2023

Equity
Europe
Autos/Car Manufacturers

BofA Data Analytics

Volumes near inflection, raw mat tailwinds accelerate

1H'23 was shaped by lower volume and cost headwinds. But pricing remained strong, driven by positive carry-over effects from increases enacted in 2022. For 2H'23 the volume outlook is slightly improved: LV replacement tires should inflect, but truck tires look to remain weak. Forex is becoming a significant headwind. Raw material tailwinds will kick-in and pricing should stay positive, albeit at a lower level, as carry-over effects fade. Contractual pass-through of raw mat savings should only start to weigh strongly from FY24E. Thus, tire producer margins should be higher in H2 vs. H1, unless volumes stay weaker than expected. The main volume risks are: 1) a resurgence of Asian imports; and 2) a mild winter, as these inventories remain high. For '24, we worry most about pricing, even in premium tires as the market is aligned for a classic prisoner's dilemma.

US import data: encouraging signs of channel destocking

Asian tire imports are a key risk for western tire-makers, especially during downturns as consumers search for lower priced alternatives. While they do not compete directly in premium segments, down-trading is typical during economic downturns, particularly in N. America. Global maritime constraints that spanned 2020-1H'22 limited imports, but a strong resurgence in 1H'22 overwhelmed dealer channels and ushered in a destocking phase from 4Q'22. Recent data (Jan-July'23), shows a reprieve for the US market, as imports have declined by -22% YTD. Encouragingly, the pace slowed even further in Jul'23 to -30%y/y (-10%m/m). Import levels are now tracking c9% below pre-Covid. Data on miles-driven also continues to improve, with Jun'23 reaching above pre-Covid levels for the first time. Both factors are encouraging for RT demand in H2 onwards.

But imports to Europe rise, frustrating destocking efforts

The picture is less positive in Europe, however. The month of May (latest data point) saw the import of 14.6m tires, higher than any other May month on record (Exhibit 54), +5% y/y on an already elevated year-ago base (Exhibit 55). YTD, imports are only -1% (Exhibit 56 - Exhibit 57), 5ppts stronger than the market which has declined by 6%. More worryingly, May'23 volumes perpetuate an accelerating trend observed from Dec'22, signalling the potential for continued market share losses for European producers. H1 earnings reflected that Goodyear (not covered), Nokian & Conti lost the most share.

Positive Pirelli, cautious Michelin, Nokian. Neutral Conti

We remain at Buy on Pirelli, driven mainly by above consensus forecasts (FY23-24E: 4.8%/7.7%), a positive view on its position as an EV beneficiary and an undemanding valuation. We're broadly in-line with consensus for Michelin but worry about volume weakness in CV tires and sizable M&A flagged by the company. We do, however see it more as a relative Underperform, with limited downside. Nokian's turn-around post its Russia exit has significant execution risk and we see it's valuation as expensive - we stay at Underperform. We continue to await signs of a turnaround at Continental's Auto Tech business, after being disappointed again in Q2 and hence, stay at Neutral. We revise our POs and estimates.

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Ratings and Price Objectives

Company	Rating	PO (new)	PO (old)	% chng
Continental	Neutral	€75	€76	-1%
Conti - ADR	Neutral	8.20	8.26	-1%
Michelin	Underperform,	€27.4	€26	5%
Michelin ADR	Underperform,	$15.0	$12.6	19%
Nokian	Underperform,	€7.2	€7.4	-3%
Pirelli	Buy	€6.0	€5.8	4%

Earnings estimate changes (€/sh)

Period	FY23 EPS		FY24 EPS	
Company	New	Old	New	Old
Continental	6.65	6.98	8.8	8.63
Michelin	3.06	2.95	3.13	2.83
Nokian*	-2.22	0.09	0.31	0.09
Pirelli	0.60	0.58	0.66	0.64

*Nokian EPS is reported diluted

Source: BofA Global Research estimates

Refer to important disclosures on page 40 to 43. Analyst Certification on page 39. Price Objective Basis/Risk on page 37.
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Please see Acronyms list on page 36.

Outlook for key drivers in 2H'23E

Volumes: headwinds ease in H2, but remain negative

Volumes in replacement tire markets (70-75% of tire volumes) in Europe and the US declined significantly in 1H23, by c-6% in LVs and c12% in Trucks. While the comparative base for H2 is much easier, the 1H23 exit run-rate (Jun'23), still suggests that volumes could again be negative in H2, by c-1.5% in LVs and c-7% in Trucks. For OE tires (20-25% of volumes), the recovery in global LV production was a positive offset in H1 as volumes improved by +11% y/y. However, for H2 LVP is expected to be flat y/y. A similar dynamic is expected for new truck builds. Accordingly, at a company level we forecast H2/FY23 group volumes as follows: Michelin: -1.6%/-2.6%; Pirelli -0.2%/-1.1%; Continental (Tires) +0.4%/-2.5% and for Nokian -21%/-26% (including contract manufactured tires). In our view key volume risks include: 1) Mild weather conditions, impacting winter tires where dealer inventories are still too high; 2) a further normalisation in truck RTs, where volumes remain well above pre-Covid levels in North America; and 3) a resurgence in Asian tire imports into the US (-22% YTD), or a sustained inflow in Europe (-1% YTD).

Price/mix: price increases fading but no signs of declines

Since Jan'23 no further price increases have been implemented by premium tire makers. However, they have still been benefitting significantly from (double-digit) carry-over effects. Tire price indicators (Exhibit 19) reflect a sharp decline in price inflation but are yet to turn negative – congruent with comments by companies on sustained pricing discipline. Accordingly, for 2H'23E we expect carry over effects to fade but remain positive. Some tire makers have however lost more market share than others in holding prices firm and factory efficiency have declined close to or below tolerance levels. Therefore, we see risk that these players could break rank and cut prices to regain some volume. The emergence of strong raw material tailwinds in 2H'23 would partly fund this. Indexation on OEM volumes is likely to start weighing in 4Q'23 but will only have minor effects. From 2024, we estimate that indexation could provide a headwind of c1ppt. At a company level, for 2H'23/FY23 we forecast a price/mix of: Michelin: 1.5%/5.2%, Pirelli: +4%/+8.1%; Continental (Tires) +2.8%/+6.5% and for Nokian +4.1%/+8.7%.

Exhibit 1: Key sales and EBIT bridge items for 2023

2022 saw price/mix tailwinds of close to 20%, but should ease to mid-high single-digit levels in 2023 and low single digits in 2H'23. We expect volume weakness to continue into 3Q'23. Forex becomes a headwind in '23 after providing a strong tailwind in 2022. Cost inflation as a percentage of sales eases dramatically in 2023.

Bridge item	FY22	1Q23	2Q23	1H23	3Q23E	4Q23E	2H23E	FY23E
Price-Mix as % of prior sales								
Conti - Tires	18.1%	13.5%	7.7%	10.6%	3.0%	2.6%	2.8%	6.5%
Michelin*	13.7%	12.3%	6.7%	9.4%	3.2%	-0.2%	1.5%	5.2%
Pirelli	19.7%	15.1%	10.2%	12.5%	5.2%	2.5%	3.9%	8.1%
Nokian	19.8%	17.1%	8.7%	12.8%	4.5%	3.5%	4.1%	8.7%
Volumes as % of prior sales								
Conti - Tires	-2.7%	-8.6%	-2.8%	-5.7%	-1.8%	2.6%	0.4%	-2.5%
Michelin*	-2.0%	-6.6%	-1.0%	-3.7%	-2.1%	-1.2%	-1.6%	-2.6%
Pirelli	-1.0%	-3.1%	-1.1%	-2.1%	-2.8%	3.0%	-0.2%	-1.1%
Nokian	-25.2%	-44.8%	-16.1%	-30.0%	-27.5%	-12.2%	-21.3%	-25.9%
FX as % of prior sales								
Conti - Tires	3.0%	0.2%	-2.5%	-1.2%	-3.7%	-2.9%	-3.3%	-2.3%
Michelin	6.2%	0.8%	-2.7%	-1.0%	-3.6%	-4.0%	-3.8%	-2.5%
Pirelli	5.4%	-0.3%	-5.4%	-3.0%	-7.8%	-11.7%	-9.6%	-6.4%
Nokian	8.3%	-1.0%	-2.4%	-1.7%	-2.5%	-2.7%	-2.6%	-2.1%
Cost inflation as % of current sales								
Conti - Tires	-14.3%	-9.3%	-3.2%	-6.2%	1.3%	1.6%	1.4%	-2.3%
Michelin*	-8.5%			-4.6%			0.3%	-2.1%
Pirelli	-13.2%	-9.0%	-6.2%	-7.6%	-1.8%	0.1%	-0.9%	-4.4%
Nokian	-21.6%	-56.3%	-51.6%	-53.8%	-4.4%	14.6%	4.9%	-14.8%

Source: BofA Global Research estimates, company data. *Michelin only reports costs and EBIT semesterly and cost inflation includes management bonus provisions and SG&A. Excluding these production cost inflation = -€156m. **Nokian includes the impact of volume declines due to a cessation of exports from Russia in July 2022 and a full exit in 2023, affecting per unit costs.

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Cost inflation rapidly declining. Raw mat tailwinds kick-in

In our last Tire publication, we argued that tire makers had taken overly cautious cost assumptions in formulating '23 guides, particularly on raw materials. At 1H23 earnings, companies have revised down cost guidance as expected (i.e. Michelin now guides for a €200m headwind vs prev. €600-1bn). For tire makers, changes in raw material prices typically take 4-6 months to reflect in cost of goods sold. In 2022/23, the lag has been longer (6-8 months) due to higher safety inventories built on supply chain and energy shortage fears. Accordingly, while spot commodity prices declined strongly since from 3Q'22, tailwinds are only now starting to reflect. Spot prices have continued to decline, suggesting that tailwinds will possibly even extend into 2H'24. In EUR terms, our proprietary raw material tracker reflects input costs down by c-18% ytd and, at spot prices, by -28%. Ocean freight costs are also a tailwind. While rates had already corrected sharply in 2H'22, the benefit is also lagged due to annual contracts. While spot rates have ticked up recently, they remain -76% y/y.

Asian imports have declined in the US, but not in Europe

Asian tire imports have historically and continue to pose risks for Western tire-makers, offering significantly lower priced alternatives to consumers. While they do not compete directly in premium segments, trading down is typical during economic downturns, particularly in North America. Global maritime constraints that spanned 2020-1H'22 limited imports, but a strong resurgence in 1H'22 overwhelmed dealer channels and ushered in a destocking phase from 4Q'22. In 2023 YTD (Jan-July), US imports have declined by -23% and the pace slowed even further in Jul'23 to -30%y/y (-10%m/m) and are now c9% below pre-Covid levels. However, in Europe imports are -1% YTD and rose by 5% y/y at our most recent data point (May'23). We provide more interesting details in our Asian Tracking Asian tire imports section, showing imports by regions and by producer.

Minor changes to our estimates incorporating H1 actual

Overall, H1'23 earnings did not deviate much from our earlier expectations and the outlook for 2H'23 is also tracking broadly in-line. Accordingly, we only make minor adjustments to our forecasts and Price Objectives and our ratings remain unchanged. For Michelin, we raise our FY23-24E adj. EBIT forecasts by 1.2% and 8.9% (partly driven by M&A) and our Price Objective (PO) by 5% to €27.4/sh (previous: €26). Our Pirelli estimates are broadly unchanged, 0%/+1.5% but our PO rises to €6/sh as we roll it forward (previous: €5.8). For Nokian, we raise estimates by 4.1%/38%, albeit distorted by the low base post Russia exit. Our PO however is lowered to €7.2/sh (previous: €7.4), reflecting higher net debt, driven by lower than expected proceeds from the sale of its Russian operations (€285m vs. €400m). Continental remains a tale of two businesses. Near-term, we are more optimistic on Tires than Automotive Technologies which continues to disappoint. Estimates change by -3.0/+0.5% and our PO moves to €75/sh (previous: €76/sh).

Exhibit 2: BofA current vs. previous estimates FY23e and FY24e

PO changes for Continental to €75.0 (prior: €76.0), Michelin to €27.4 (prior: 26.0), Nokian declines to €7.2 (prior: €7.4), Pirelli increases to €6.0 (prior: €5.80)

	Previous estimates					Current estimates					Change in estimates				
FY23E	Sales	Adj. EBIT	Adj. EBIT %	FCF	PO	Sales	Adj. EBIT	Adj. EBIT %	FCF	PO	Sales	Adj. EBIT	Adj. EBIT %	FCF	PO
Continental	42,353	2,595	6.1%	870	76.00	41,919	2,518	6.0%	385	75.0	-1.0%	-3.0%	-0.1%	-55.7%	-1%
Conti - Rubber	21,321	2,345	11.0%			21,235	2,367	11.1%			-0.4%	0.9%	0.1%		
Michelin	28,921	3,420	11.8%	2,038	26.0	28,847	3,460	12.0%	2,099	27.4	-0.3%	1.2%	0.2%	3.0%	5.4%
Nokian	1,401	77	5.5%	90	7.4	1,365	81	5.9%	-209	7.2	-2.6%	4.1%	0.4%	-332.2%	-2.7%
Pirelli	6,773	1,046	15.4%	536	5.8	6,657	1,046	15.7%	545	6.0	-1.7%	0.0%	0.3%	1.8%	3.4%
FY24E															
Continental	44,089	3,042	6.9%	1,524	76.00	43,275	3,058	7.1%	955	75.0	-1.8%	0.5%	0.2%	-37.3%	-1%
Conti - Rubber	21,594	2,516	11.7%			21,321	2,493	11.7%			-1.3%	-0.9%	0.0%		
Michelin	29,142	3,324	11.4%	2,089	26.0	29,194	3,619	12.4%	2,232	27.4	0.2%	8.9%	1.0%	6.8%	5.4%
Nokian	1,603	85	5.3%	-204	7.4	1,515	118	7.8%	-181	7.2	-5.5%	38.2%	2.5%	-11.1%	-2.7%
Pirelli	7,114	1,142	16.1%	571	5.8	6,800	1,160	17.1%	574	6.0	-4.4%	1.5%	1.0%	0.5%	3.4%

Source: BofA Global Research estimates

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Exhibit 3: Reasons for changes made to our Price Objectives

PO changes driven by higher than expected debt for Nokian and higher earnings for Michelin and Pirelli while Conti sees multiples and estimate revisions

Company	PO (new)	PO (Old)	% chng	Reason	Multiples	WACC
Continental	75	76	-1%	Estimate revisions and change in applied multiples	Rubber P/E: new: 8.1x old: 8.7x, Auto tech P/E: new: 5.2x old: 5.4x, Rubber EV/EBIT: new: 8.0x old: 7.7x, Auto Tech EV/EBIT: new: 5.2x old: 5.4x, Rubber EV/Sales: new: 0.8x old: 0.8x, Auto Tech: EV/Sales: new: 0.4x old: 0.3x	
Michelin	27.4	26	5%	Estimate revisions	P/E: new: 9.0x old: 9.0x EV/EBIT: new: 7.5x old: 7.5x EV/Sales: new: 0.9x old: 0.9x	New: 9.6% Old: 9.6%
Nokian	7.2	7.4	-3%	Estimate revisions	P/E: new:10.0x old: 10.0x EV/EBIT: new: 6.0x old: 6.0x EV/Sales: new: 0.7x old: 0.7x	New: 10% Old: 10%
Pirelli	6.0	5.8	4%	Estimate revisions	P/E: new: 10.3x old: 10.3x EV/EBIT: new: 7.5x old: 7.5x EV/Sales: new: 1.3x old: 1.3x	New: 9.9% Old: 9.9%

Source: BofA Global Research estimates

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Company summaries: more detail in COMPANY SECTION

Pirelli, Buy (PO €6.0/sh): Fresh off a strong beat in 1H'23, Pirelli again showed more volume and pricing resilience than peers, driven by a more premium product positioning. While margin guidance was slightly raised to 14.5-15% we expect a further raise to 15-15.5% at Q3 earnings. While consensus has risen significantly, we still remain 4.8% ahead for FY23E and +7.7% for FY24E (On adj. EBIT). We continue to see Pirelli as a key beneficiary of the shift to EVs and expect its volume and price advantage over peers to remain intact. Valuation is undemanding, in our view. At a 1-year forward P/E of 8.4x and EV/EBIT of 7.3x, it trades at a c20% discount to historical average and 8% below peer, Michelin.

Michelin, Underperform (PO €27.4/sh): 1H'23 was broadly in-line. Segment operating income (SOI) guidance was raised in H1 to >€3.4bn (on a constant fx basis) and with consensus standing at €3.45bn (€3.75bn excluding fx headwinds) a further raise at Q3 is already expected. However, with Asian tire imports in Europe tracking higher again and truck tires potentially staying weaker for longer, this is not a foregone conclusion. Pricing disruption is also a risk for FY24E if other tier 1's opt to cut prices. We also note that Michelin is becoming more active in M&A and has flagged €5-10bn in additional acquisitions to reach its 2030 targets, large and/or small. We see valuation as full. Michelin trades at 1YR fwd P/E & EV/EBIT of 10.4x & 8.3x, 20% above its historical average.

Nokian Tyres, Underperform (PO €7.2/sh): 1H'23 missed expectations by a long way and net debt rose sequentially to €220m (1Q'23: €47m). Nokian left its guidance unchanged for sales of €1.3-1.5bn and an adj. EBIT margin of 6-8%. We think this guidance will be difficult to meet and relies heavily on external factors, including contract manufacturers. Accordingly, we are 6% & 16% below consensus for FY23-24E. Longer-term, we think Nokian's turnaround is no walk in the park and as seen with the Dayton plant, the new Romania plant is not without execution risk. Further, at 15x 2YR fwd EPS, Nokian's valuation is expensive relative to premium peers which trade at 8-9x, with higher margins and considerably lower risk profiles.

Continental, Neutral (PO €75/sh): 1H'23 missed expectations in Automotive driven by slower than expected price negotiations, special freight and forex. Guidance was largely unchanged, but we view the margin corridor of 2-3% for Automotive Technologies as ambitious. We forecast 1.6% and see downside risks from UAW strikes, should they span more than two weeks (20bps downside per week). A conservative Tires guide does however compensate at group level which should see the group margin target of 5.5-6.5% met (BofAe: 6.0%). However, we see scope for a miss on the FCF guide of €0.8bn-1.2bn, forecasting just €500m. Accordingly, despite Conti's attractive valuation we think a FCF miss could weigh on sentiment and we see limited upside catalysts in 2023. Conti trades at a 12m fwd EV/Sales of 0.5x, EV/adj. EBIT of 7.5x and PE of 8.0x. See our latest Conti Report here – Deep dive: Great recovery potential, but fearing a last warning ....

Exhibit 4: BofAe estimates vs. Visible Alpha consensus for FY23e and FY24e

In FY23e on adj EBIT for Continental we are -3.8% below consensus, 4.8% above for Pirelli. Broadly in-line for Michelin and -6% below for Nokian

	BofAe				Visible Alpha consensus				BofAe vs. consensus			
FY23E	Sales	Adj. EBIT	Adj. EBIT %	FCF	Sales	Adj. EBIT	Adj. EBIT %	FCF	Sales	Adj. EBIT	Adj. EBIT %	FCF
Continental	41,919	2,518	6.0%	385	42,619	2,616	6.1%	826	-1.6%	-3.8%	-0.1%	-53.4%
Conti - Rubber	21,235	2,367	11.1%		21,483	2,316	10.8%		-1.2%	2.2%	0.4%	
Michelin	28,847	3,460	12.0%	2,099	28,745	3,450	12.0%	2,076	0.4%	0.3%	0.0%	1.1%
Nokian	1,365	81	5.9%	-209	1,337	85.8	6.4%	(107.8)	2.1%	-6.1%	-0.5%	93.6%
Pirelli	6,657	1,046	15.7%	545	6,677	998	14.9%	724.5	-0.3%	4.8%	0.8%	-24.7%
FY24E	Sales	Adj. EBIT	Adj. EBIT %	FCF	Sales	Adj. EBIT	Adj. EBIT %	FCF	Sales	Adj. EBIT	Adj. EBIT %	FCF
Continental	43,275	3,058	7.1%	955	44,160	3,013	6.8%	1,226	-2.0%	1.5%	0.2%	-22.1%
Conti - Rubber	21,321	2,493	11.7%		21,848	2,470	11.3%		-2.4%	1.0%	0.4%	
Michelin	29,194	3,619	12.4%	2,232	29,253	3,570	12.2%	2,136	-0.2%	1.4%	0.2%	4.5%
Nokian	1,515	118	7.8%	-181	1,487	128.2	8.6%	(140.5)	1.9%	-8.2%	-0.9%	29.1%
Pirelli	6,800	1,160	17.1%	574	6,940	1,077	15.5%	711.2	-2.0%	7.7%	1.5%	-19.3%

Source: BofA Global Research estimates, Visible Alpha

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Tire volumes: improvement implied for H2

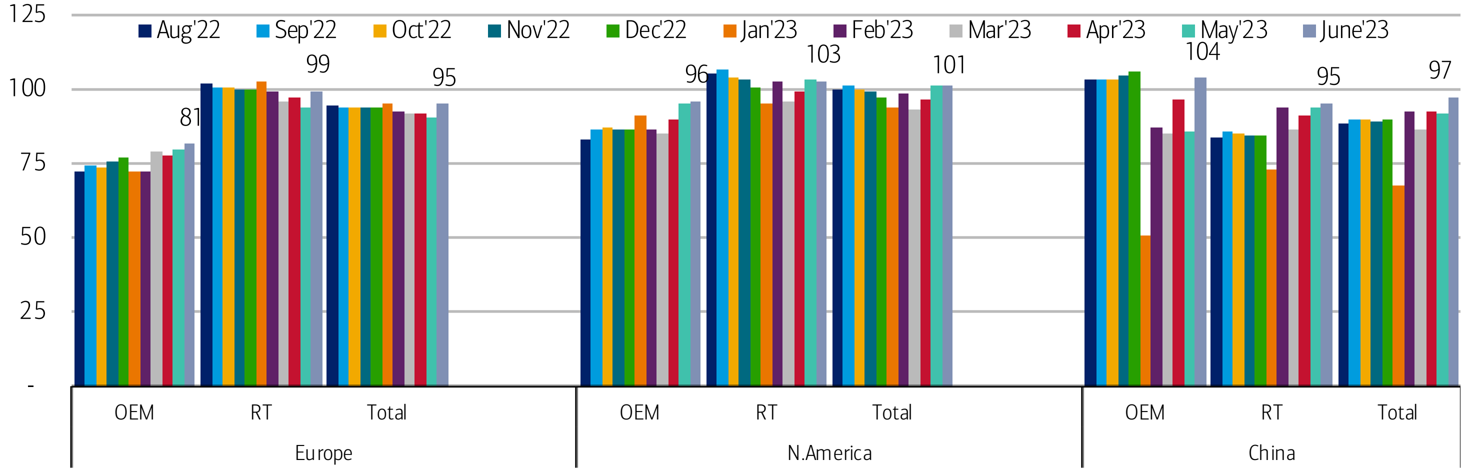
We reflect on the latest replacement tire (RT) market data for Jun'23. If this run-rate is sustained through 2H'23, H2 volumes should improve sequentially in both light vehicle (LV) and truck segments. However, while LV tire units appear to have inflected and may turn positive in H2, truck tire volumes are likely to remain firmly negative on a y/y basis.

LV tire volumes show signs of inflection in June'23

LV replacement tire (RT) volumes in Europe, N. America and China showed signs of recovery in May/June vs. prior months. Index levels (CY19=100) improved sequentially in Europe from 94 to 99, N. America from 99 to 103 and in China from 91 to 95. (Exhibit 5). Comparted to the 1H'23 average, Europe was up +1ppt to 99, N. America +3ppts to 103 and China, +6ppts to 95 (Exhibit 5 - Exhibit 6). If this level is sustained through 2H'23, Europe and N. America would see y/y volume declines of 1.2% and 1.7% in H2, much better than the -6% suffered in 1H'23. It would also imply a sequential h/h improvement of 1/3ppts. The improvement in China would see +11.9%y/y and +6% h/h. Global RT volumes would grow by c+1%y/y and +3ppts h/h (Exhibit 7). For CY23E this would imply a volume decline of -3.6% in Europe, -3.8% in N. America and -0.5% globally. China on the other hand would show growth of 13.9%y/y.

Exhibit 5: Run-rate of LV tire markets on a year-to-date basis in key regions (CY19=100)

European LV tire markets tracking c5% below pre-Covid levels in June 2023 (RT: -1%); N. America now slightly above (+1%), China -3% (RT: -5%)



Source: BofA Global Research, Michelin Tire Market data

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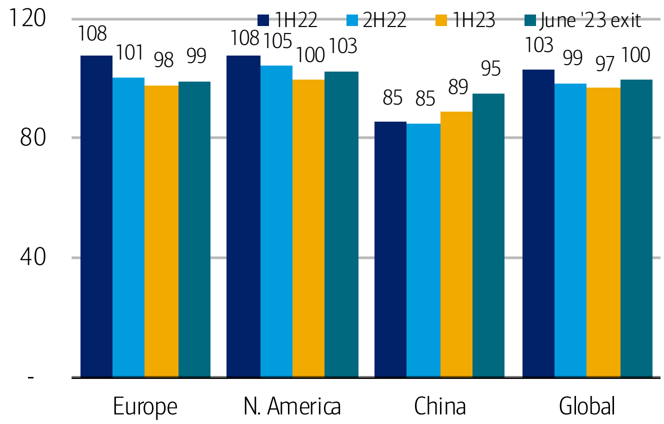
Exhibit 6: LV replacement tire sales volume level (CY19=100)

The Jun'23 run-rate implies sequential improvements of 1ppt in Europe, 3ppts in N. America, 6ppts in China and 3ppts at a global level.



Source: BofA Global Research estimates, Michelin Tire market data

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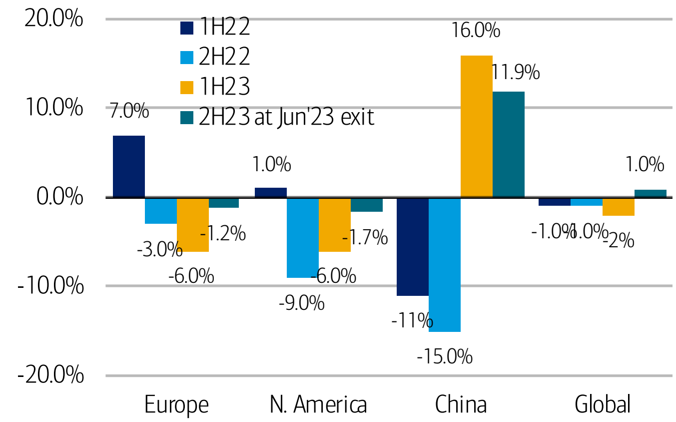
Exhibit 7: LV replacement tire sales growth (% y/y)

On a y/y basis, this would imply -1.2% in Europe, -1.7% in N. America, +11.9% in China and +1% for global volumes



Source: BofA Global Research estimates, Michelin Tire market data

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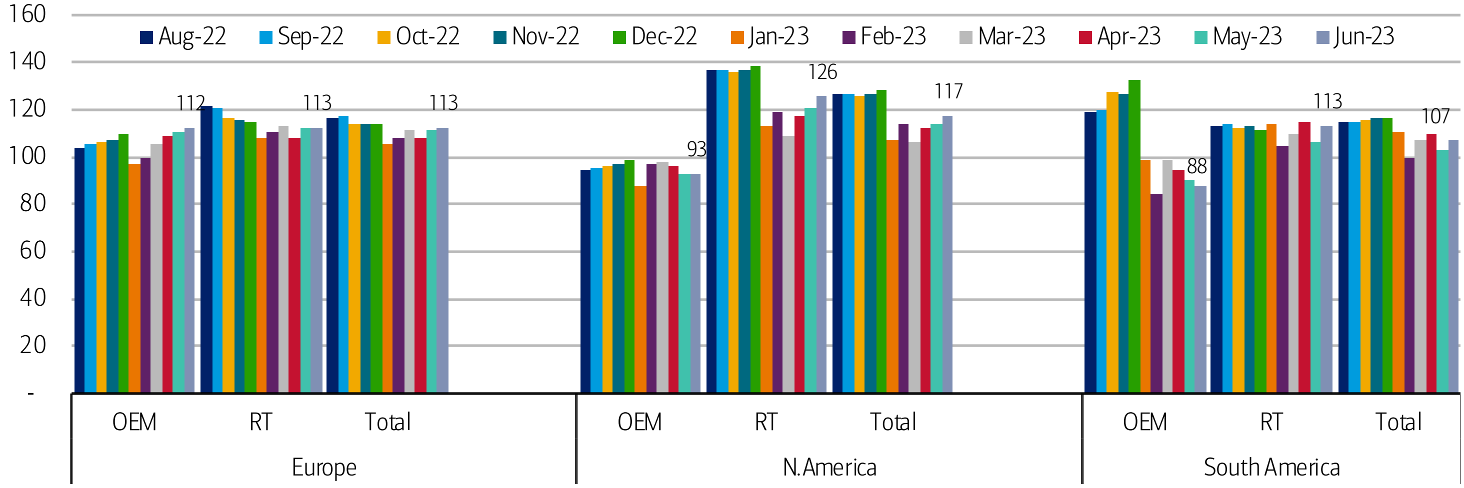
No inflection in trucks but a smaller decline implied for H2

Truck replacement tire (RT) volumes in Europe, N. America and S. America also showed signs of improvement in May/June vs. the prior months. Index levels (CY19=100) improved sequentially in Europe from 112 to 113, in N. America from 121 to 126 and in S. America from 107 to 113. (Exhibit 5). Compared with the 1H'23 average, volumes were marginally up in Jun'23: In Europe +2ppts to 113, in N. America +8ppts to 126, in S. America 2ppts to 113. If this level is sustained through 2H'23, Europe and N. America would see y/y declines of -5.6% and -8.2y/y, respectively – much better than the -13%/-11% suffered in 1H'23 and would imply a sequential improvement of 2/8ppts h/h. The improvement in S. America would see a 0.7%y/y improvement and +2% h/h. Global RT volumes would decline by c5.8%y/y and improve sequentially by 4ppts h/h (Exhibit 9 & Exhibit 10). For the full year, this would imply -9.3%, -9.6% and -5.4% for Europe, N. America and global volumes, while S. America would show growth of 1.9%.

Exhibit 8: Truck tire market level year to date vs. in key regions (CY19=100)

On a year to date basis European, N. America and S. American truck tire volumes are run-rating ahead of 2019 levels



Source: BofA Global Research, Michelin Tire Market data

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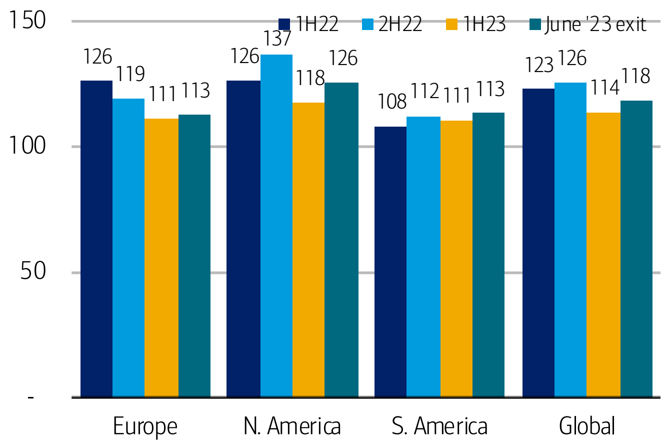
Exhibit 9: Truck replacement tire sales volume level (CY19=100)

The Jun'23 run-rate implies sequential improvements of 2ppts in Europe, 8ppts in N. America, 2ppts in S. America and 4ppts at a global level



Source: BofA Global Research estimates, Michelin Tire market data

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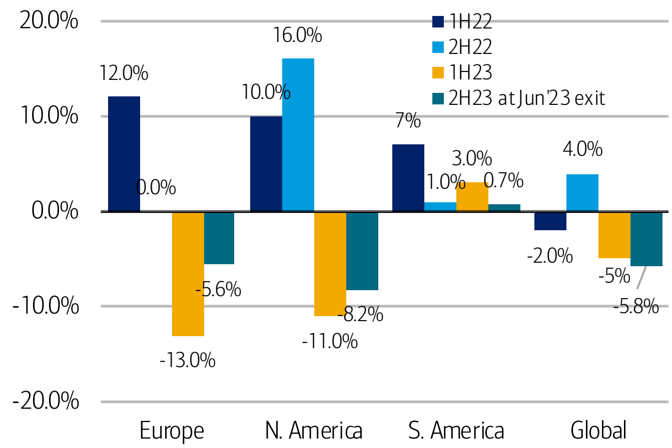
Exhibit 10: Truck replacement tire sales growth (% y/y)

On a y/y basis, this would imply -5.6% in Europe, -8.2% in N. America, +0.7% in S. America and -5.8% for global volumes



Source: BofA Global Research estimates, Michelin Tire market data

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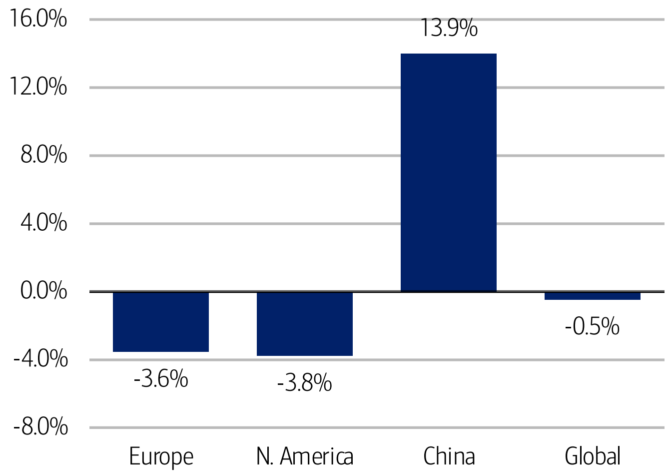
Exhibit 11: CY23 LV RT growth rates implied by the Jun'23 run-rate
The Jun'23 run-rate implies CY23 growth of -3.6% in Europe, -3.8% in N. America, +13.9% in China and -0.5% for global volumes



Source: BofA Global Research estimates

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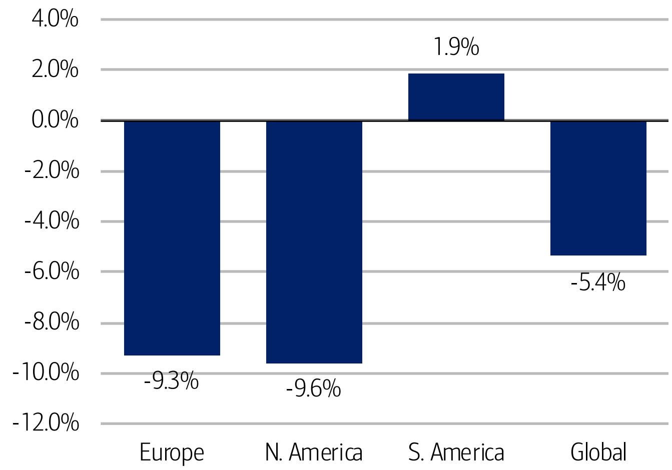
Exhibit 12: CY23 Truck RT growth rates implied by the Jun'23 run-rate
The Jun'23 run-rate implies CY23 growth of -9.3% in Europe, -9.6% in N. America, +1.9% in S. America and -5.4% for global volumes



Source: BofA Global Research estimates

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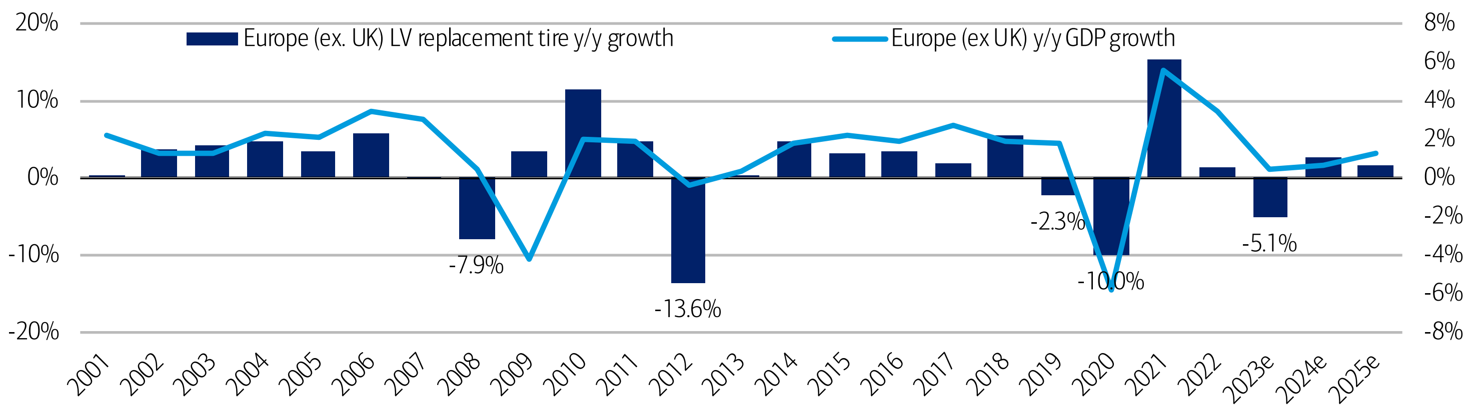
Our tire market forecasts for 2023 reflect similar growth rates in LVs but deeper declines in trucks

Our replacement tire volume forecasts for CY23 are not too dissimilar to those implied by Jun'23 run-rates. For Europe (Exhibit 13), we forecast -3.4% (Jun'23 implied: -3.6%), N. America (Exhibit 14) -4.3% (Jun'23 implied: -3.8%). However, in trucks, we remain concerned that the overall market level is still well in excess of pre-Covid levels. Accordingly, the decline ere could be deeper. For Europe (Exhibit 15) we expect -10.7% (Jun'23 implied: -9.3%) and for N. America (Exhibit 16) we expect -11.6% (Jun'23 run-rate implied: -9.6%). In both LVs and trucks, there is however some positive offset from growing OEM volumes, driven by recoveries in global LV production and truck builds. We highlight these in Exhibit 17 and Exhibit 18.

Exhibit 13: European LV replacement tire growth y/y vs. GDP growth
During previous downturns, LV RT volumes in Europe have declined by between 2% and 14% in more extreme cases. For 2023E, we expect a decline of around 5.1% based on a mild recessionary environment.



Source: BofA Global Research estimates, Eurostat. LMC

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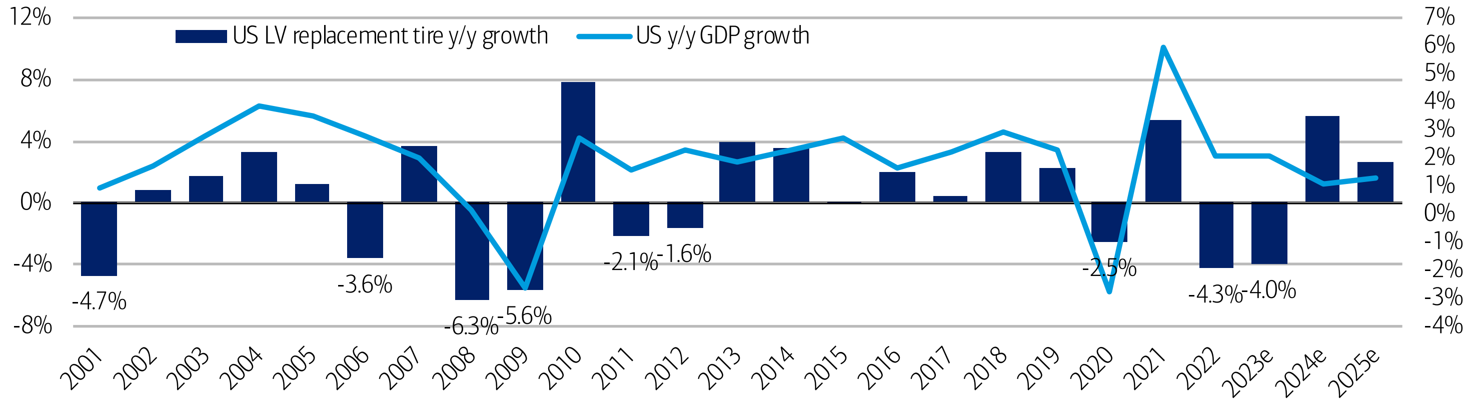
Exhibit 14: US LV replacement tire growth y/y vs. GDP growth

During previous downturns, LV RT volumes in N. America have declined by between 2% and 6% in more extreme cases. For 2023E, we expect a decline of around 4% based on a mild recessionary environment



Source: BofA Global Research estimates, US Bureau of Statistics, LMC

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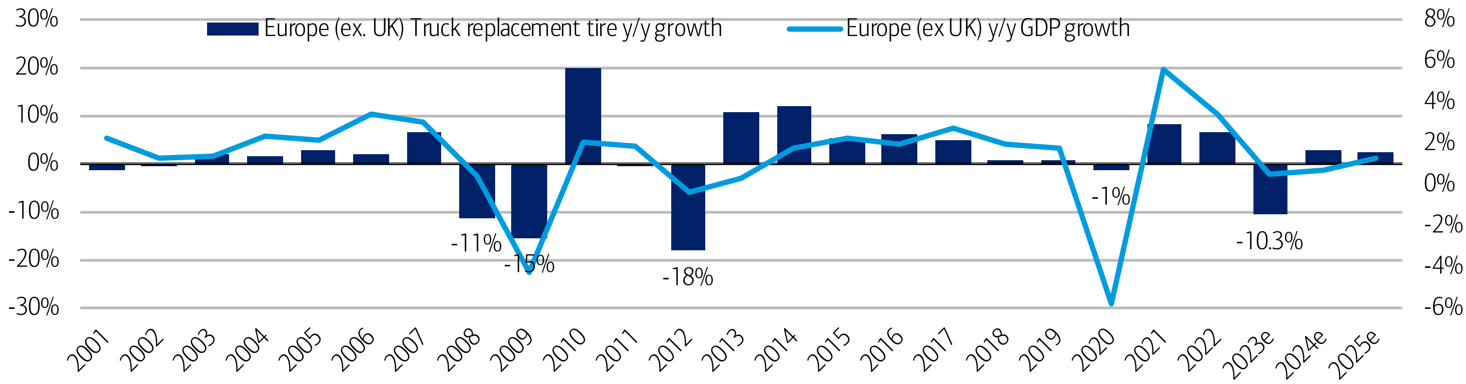
Exhibit 15: European truck replacement tire growth vs. GDP growth

During previous downturns, truck RT volumes in Europe have declined by between 1% and 18% in more extreme cases. For 2023E, we expect a decline of around 11% based on a mild recessionary environment



Source: BofA Global Research estimates, Eurostat, LMC

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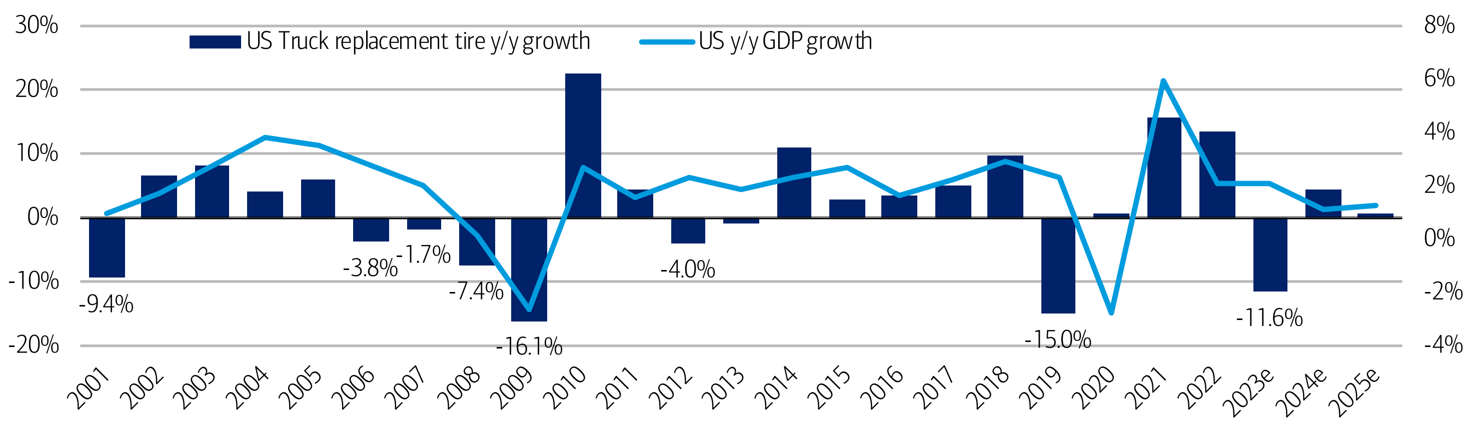
Exhibit 16: US truck replacement tire growth y/y vs. US GDP growth

During previous downturns, truck RT volumes in Europe have declined by between c2% and 16% in more extreme cases. For 2023E, we expect a decline of around 11.6% based on a mild recessionary environment



Source: BofA Global Research estimates, US Bureau of Statistics, LMC

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Detailed tire market forecasts by region

Exhibit 17: Global LV Tire forecasts (OEM + Replacement) in mn units

For FY23E we forecast global LV tire growth of 0.6%, with +4.8% OEM channels and -0.5% in replacement. This includes -2.4% in EU and -2.0% in N. America

Region	2019	2020	2021	OEM	RT	2022	OEM	RT	2023e	OEM	RT	2024e	OEM	RT	2025e
Western Europe	**303.4**	**265.2**	**293.6**	**39.5**	**259.8**	**299.3**	**44.8**	**247.5**	**292.3**	**43.0**	**252.3**	**295.3**	**42.7**	**255.5**	**298.2**
y-o-y %	-3.1%	-12.6%	10.7%	5.0%	1.5%	2.0%	13.3%	-4.7%	-2.4%	-4.0%	1.9%	1.0%	-0.8%	1.3%	1.0%
Central Europe	**52.3**	**45.9**	**52.1**	**14.6**	**37.8**	**52.4**	**16.0**	**34.9**	**50.9**	**15.4**	**37.7**	**53.1**	**15.0**	**39.4**	**54.4**
y-o-y %	0.6%	-12.3%	13.6%	6.8%	-1.7%	0.5%	9.8%	-7.7%	-2.8%	-3.9%	8.0%	4.2%	-2.4%	4.4%	2.5%
EU 28	**355.8**	**311.1**	**345.7**	**54.1**	**297.6**	**351.7**	**60.8**	**282.4**	**343.2**	**58.4**	**290.0**	**348.4**	**57.7**	**294.9**	**352.6**
y-o-y %	-2.5%	-12.6%	11.1%	5.4%	1.1%	1.7%	12.3%	-5.1%	-2.4%	-4.0%	2.7%	1.5%	-1.2%	1.7%	1.2%
Eastern Europe	**92.0**	**84.3**	**96.2**	**9.2**	**80.2**	**89.4**	**9.3**	**82.7**	**92.0**	**9.4**	**85.2**	**94.5**	**9.6**	**86.4**	**96.0**
y-o-y %	-1.5%	-8.3%	14.0%	-24.8%	-4.5%	-7.1%	0.6%	3.2%	2.9%	1.0%	3.0%	2.8%	2.4%	1.5%	1.6%
Total Europe	**447.8**	**395.5**	**441.9**	**63.3**	**377.8**	**441.1**	**70.0**	**365.1**	**435.2**	**67.7**	**375.2**	**442.9**	**67.3**	**381.3**	**448.6**
y-o-y %	-2.3%	-11.7%	11.7%	-0.4%	-0.1%	-0.2%	10.6%	-3.4%	-1.4%	-3.3%	2.8%	1.8%	-0.7%	1.6%	1.3%
North America	**368.3**	**343.9**	**361.2**	**57.2**	**299.3**	**356.5**	**61.9**	**287.5**	**349.3**	**66.2**	**303.5**	**369.7**	**68.8**	**311.4**	**380.2**
y-o-y %	0.8%	-6.6%	5.0%	9.6%	-3.1%	-1.3%	8.2%	-4.0%	-2.0%	7.0%	5.6%	5.8%	4.0%	2.6%	2.8%
Asia ex-China	**293.0**	**249.9**	**278.7**	**84.0**	**208.8**	**292.8**	**89.3**	**206.5**	**295.8**	**85.6**	**214.1**	**299.6**	**85.2**	**224.8**	**310.0**
y-o-y %	-0.9%	-14.7%	11.5%	10.5%	3.0%	5.1%	6.3%	-1.1%	1.0%	-4.2%	3.7%	1.3%	-0.4%	5.0%	3.5%
China	**284.6**	**271.6**	**292.2**	**104.6**	**176.7**	**281.3**	**103.6**	**190.7**	**294.3**	**107.6**	**198.9**	**306.5**	**111.1**	**212.8**	**323.9**
y-o-y %	-0.8%	-4.6%	7.6%	6.4%	-8.9%	-3.7%	-0.9%	7.9%	4.6%	3.9%	4.3%	4.1%	3.2%	7.0%	5.7%
Asia incl China	**577.6**	**521.5**	**570.9**	**188.6**	**385.5**	**574.1**	**193.0**	**397.2**	**590.1**	**193.2**	**412.9**	**606.1**	**196.3**	**437.7**	**633.9**
y-o-y %	-0.9%	-9.7%	9.5%	8.2%	-2.8%	0.6%	2.3%	3.0%	2.8%	0.1%	4.0%	2.7%	1.6%	6.0%	4.6%
South America	**87.9**	**67.2**	**83.6**	**11.3**	**77.1**	**88.4**	**11.3**	**80.8**	**92.2**	**11.8**	**81.1**	**92.9**	**12.8**	**85.2**	**98.1**
y-o-y %	0.9%	-23.5%	24.4%	8.4%	5.2%	5.6%	0.3%	4.9%	4.3%	4.3%	0.3%	0.8%	8.5%	5.1%	5.5%
Middle East	**72.4**	**74.9**	**79.5**	**4.7**	**77.5**	**82.1**	**4.4**	**78.3**	**82.7**	**4.5**	**79.5**	**84.0**	**4.8**	**81.4**	**86.2**
y-o-y %	-0.2%	3.4%	6.2%	10.4%	2.9%	3.3%	-6.3%	1.1%	0.7%	2.8%	1.5%	1.6%	5.0%	2.4%	2.5%
Africa	**54.8**	**47.8**	**54.5**	**4.3**	**52.6**	**56.8**	**4.6**	**54.2**	**58.8**	**4.6**	**54.8**	**59.4**	**4.9**	**56.7**	**61.6**
y-o-y %	3.5%	-12.8%	14.0%	8.0%	4.0%	4.3%	6.6%	3.2%	3.5%	0.2%	1.0%	1.0%	7.2%	3.5%	3.8%
Global Total	**1,608.7**	**1,450.8**	**1,591.7**	**329.4**	**1,269.6**	**1,599.0**	**345.2**	**1,263.1**	**1,608.3**	**348.0**	**1,307.0**	**1,655.1**	**354.8**	**1,353.8**	**1,708.6**
y-o-y %	-0.6%	-9.8%	9.7%	6.7%	-1.0%	0.5%	4.8%	-0.5%	0.6%	0.8%	3.5%	2.9%	1.9%	3.6%	3.2%

Source: BofA Global Research estimates, LMC

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Exhibit 18: Global Truck Tire forecasts (OEM + Replacement) in mn units

For FY23E we see global truck tire growth of -1.4%, driven by +5.5% in OEM channels & -2.8% in RT. This includes declines of 5.8% & 8% in EU & N. America

Region	2019	2020	2021	OEM	RT	2022	OEM	RT	2023e	OEM	RT	2024e	OEM	RT	2025e
Western Europe	**16.2**	**14.5**	**16.1**	**4.0**	**13.2**	**17.3**	**4.5**	**12.0**	**16.5**	**4.3**	**12.2**	**16.5**	**4.7**	**12.4**	**17.1**
y-o-y %	-1.6%	-10.5%	11.0%	8.6%	7.1%	7.4%	11.0%	-9.5%	-4.7%	-3.5%	1.7%	0.3%	7.7%	1.9%	3.4%
Central Europe	**3.1**	**3.2**	**3.4**	**0.3**	**3.2**	**3.5**	**0.4**	**2.8**	**3.1**	**0.4**	**3.0**	**3.3**	**0.3**	**3.2**	**3.5**
y-o-y %	1.1%	3.4%	5.9%	8.8%	4.6%	5.0%	11.0%	-13.4%	-11.1%	-3.5%	6.8%	5.6%	-4.7%	6.2%	5.0%
EU 28	**19.3**	**17.7**	**19.4**	**4.4**	**16.4**	**20.8**	**4.8**	**14.8**	**19.6**	**4.7**	**15.2**	**19.8**	**5.0**	**15.6**	**20.6**
y-o-y %	-1.2%	-8.3%	10.1%	8.6%	6.6%	7.0%	11.0%	-10.3%	-5.8%	-3.5%	2.7%	1.2%	6.8%	2.7%	3.7%
Eastern Europe	**11.8**	**12.7**	**12.4**	**1.1**	**11.4**	**12.5**	**1.2**	**10.8**	**12.0**	**1.1**	**11.3**	**12.4**	**1.2**	**11.7**	**12.8**
y-o-y %	-2.8%	7.7%	-2.8%	-7.0%	1.9%	1.1%	6.0%	-5.0%	-4.1%	-0.9%	4.1%	3.6%	4.6%	3.2%	3.3%
Total Europe	**31.1**	**30.4**	**31.8**	**5.4**	**27.9**	**33.3**	**6.0**	**25.6**	**31.6**	**5.8**	**26.5**	**32.3**	**6.2**	**27.2**	**33.4**
y-o-y %	-1.8%	-2.2%	4.7%	5.1%	4.6%	4.7%	10.0%	-8.1%	-5.2%	-3.0%	3.3%	2.1%	6.4%	2.9%	3.6%
North America	**32.5**	**30.5**	**34.8**	**7.6**	**32.0**	**39.6**	**8.1**	**28.3**	**36.4**	**7.5**	**29.6**	**37.1**	**8.4**	**29.8**	**38.2**
y-o-y %	-7.1%	-6.3%	14.4%	9.5%	14.8%	13.7%	7.0%	-11.6%	-8.0%	-7.0%	4.4%	1.9%	11.0%	0.8%	2.9%
Asia ex-China	**39.8**	**33.9**	**39.6**	**6.0**	**35.1**	**41.0**	**5.6**	**34.8**	**40.4**	**5.8**	**35.5**	**41.3**	**6.0**	**37.1**	**43.1**
y-o-y %	-4.3%	-14.8%	16.8%	19.1%	1.3%	3.6%	-6.6%	-0.6%	-1.5%	3.9%	1.8%	2.1%	3.6%	4.5%	4.4%
China	**60.2**	**59.2**	**60.3**	**9.5**	**37.9**	**47.4**	**10.9**	**39.1**	**49.9**	**12.4**	**42.4**	**54.8**	**12.9**	**46.0**	**58.9**
y-o-y %	0.1%	-1.6%	1.8%	-46.1%	-11.2%	-21.4%	15.0%	3.0%	5.4%	14.5%	8.4%	9.7%	3.6%	8.5%	7.4%
Asia incl China	**100.0**	**93.1**	**99.9**	**15.4**	**73.0**	**88.4**	**16.5**	**73.9**	**90.4**	**18.3**	**77.8**	**96.1**	**18.9**	**83.0**	**101.9**
y-o-y %	-1.7%	-6.8%	7.2%	-31.6%	-5.6%	-11.5%	6.6%	1.3%	2.2%	10.9%	5.3%	6.3%	3.6%	6.7%	6.1%
South America	**14.9**	**13.7**	**15.5**	**1.9**	**13.6**	**15.5**	**1.5**	**14.0**	**15.5**	**1.9**	**14.0**	**15.9**	**2.0**	**14.4**	**16.4**
y-o-y %	-1.0%	-7.9%	12.6%	6.3%	-0.4%	0.4%	-20.2%	3.0%	0.1%	22.3%	-0.3%	2.0%	3.7%	3.4%	3.5%
Africa	**9.0**	**8.5**	**9.5**	**0.6**	**8.8**	**9.3**	**0.6**	**9.1**	**9.7**	**0.8**	**9.4**	**10.3**	**0.7**	**9.7**	**10.4**
y-o-y %	3.6%	-5.8%	12.2%	3.5%	-1.9%	-1.6%	0.0%	4.0%	3.7%	43.8%	3.8%	6.2%	-10.8%	2.3%	1.3%
Global Total	**187.5**	**176.2**	**191.5**	**31.0**	**155.2**	**186.2**	**32.7**	**151.0**	**183.6**	**34.3**	**157.3**	**191.6**	**36.2**	**164.2**	**200.4**
y-o-y %	-2.4%	-6.0%	8.7%	-16.4%	0.5%	-2.8%	5.5%	-2.8%	-1.4%	5.0%	4.2%	4.3%	5.3%	4.4%	4.6%

Source: BofA Global Research estimates, LMC

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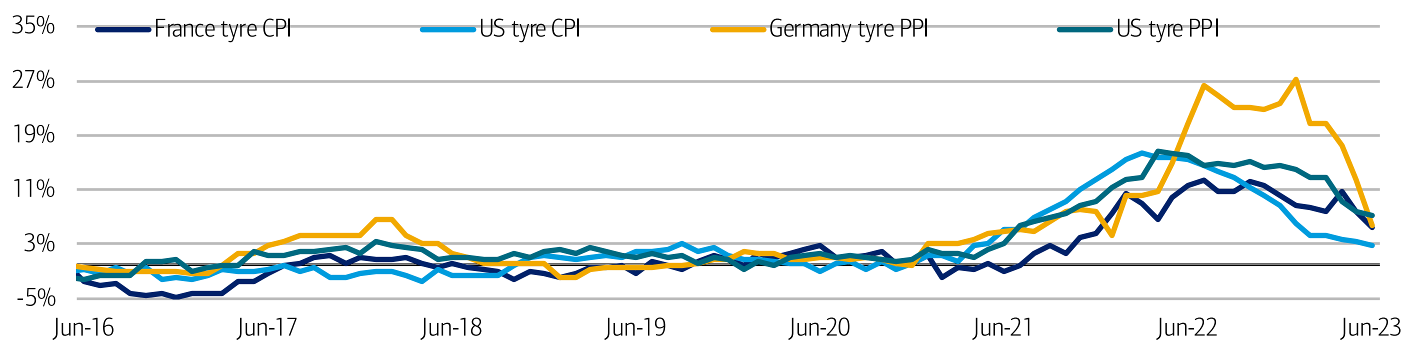
Price inflation rapidly waning

Tire producers typically don't announce price increases in regions outside of N. America, however we believe increases here are likely to be mirrored in other geographies to avoid tire price arbitrage between regions. Cumulatively, Tire producers announced 3-4 price increases in each of 2021 and 2022. The last announced price increases were in January 2023 (Exhibit 21) and given declining raw material prices is likely to be the last for some time to come. CPI data reflects the pause in price increases as y/y inflation rates are quickly fading (Exhibit 19). Based on the last reported tire inflation data (Jun'23), full year 2023 inflation is likely to end only marginally higher: +2.6%y/y in France, +0.8% in the US and +0.1% in Germany (Exhibit 20). However, within the different tire segments, we believe that tier 1 tire pricing has been more positive, while increased price competition in value segments has been more negative, weighing down overall pricing levels. However, it is important to recognise that inflation has not turned negative, which means that high pricing levels have been sustained.

Exhibit 19: Tire price inflation in major regions (% increase y/y) up to June 2023

Tire inflation is fading rapidly but is yet to turn negative. Accordingly, high pricing levels are sill holding.



Source: Bloomberg, Destatis, US Bureau of Labor Statistics, INSEE National Statistics office of France

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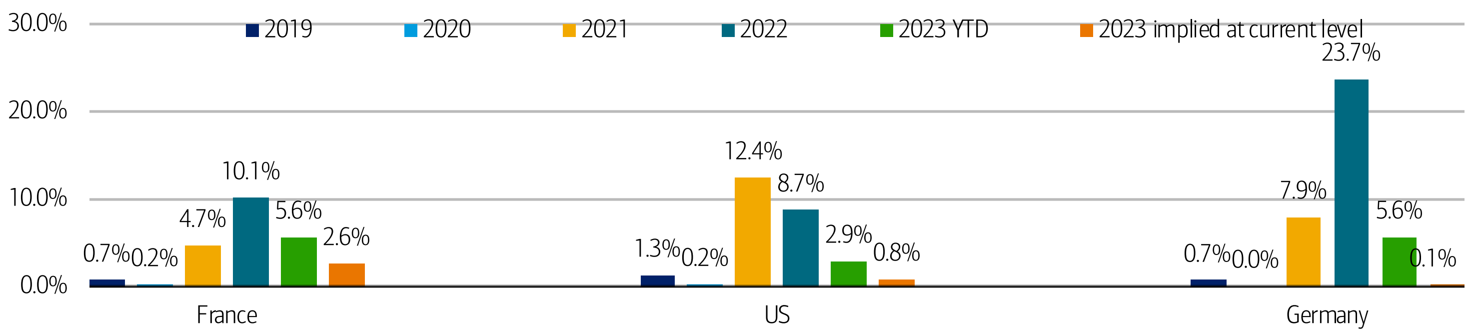
Exhibit 20: Annual tire price inflation by region (%)

Tire inflation peaked in 22, +10% in France, +9% in the US and +24% in Germany. However, inflation in 2023 is set to moderate to 2.6%, 0.8% and 0.1%, respectively.



Source: BofA Global Research, Bloomberg, Destatis, US Bureau of Labor Statistics, INSEE National Statistics office of France

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Exhibit 21: Tire price increases announcements for N. America

Premium tire makers have announced one price increases in 2023 in N. America

Company	Region	Date effective	LVs	Trucks
Pirelli	N.America	01/01/2021	ND	N/A
Bridgestone	N.America	01/01/2021	ND	ND
Michelin	N.America	01/02/2021	<=5%	<=5%
Bridgestone	EUR,Africa/ME, Russia	01/03/2021	<=5%	<=4%
Continental	N.America	01/03/2021	ND	N/A
Michelin	Africa/ME	01/03/2021	<=8%	<=8%
Goodyear	N.America	01/04/2021	<=8%	N/A
Michelin	N.America	01/04/2021	<=8%	<=8%

Exhibit 21: Tire price increases announcements for N. America

Premium tire makers have announced one price increases in 2023 in N. America

Company	Region	Date effective	LVs	Trucks
Pirelli	N.America	15/04/2021	<=7%	N/A
Bridgestone	N.America	01/05/2021	<=8%	<=8%
Yokohama	N.America	01/05/2021	ND	ND
Goodyear	N.America	01/06/2021	<=8%	N/A
Bridgestone	N.America	01/07/2021	<=8%	ND
Continental	N.America	01/07/2021	ND	N/A
Michelin	N.America	01/07/2021	<=6%	<=6%
Pirelli	N.America	01/07/2021	<=6%	N/A
Yokohama	N.America	01/08/2021	ND	ND
Bridgestone	N.America	01/09/2021	<=8%	<=8%
Michelin	N.America	01/09/2021	<=8%	<=14%
Goodyear	N.America	01/09/2021	<=5%	N/A
Continental	N.America	01/10/2021	ND	N/A
Pirelli	N.America	01/10/2021	<=8%	N/A
Yokohama	N.America	01/11/2021	ND	ND
Continental	N.America	01/01/2022	ND	N/A
Michelin	N.America	01/01/2022	<=12%	<=12%
Pirelli	N.America	17/01/2022	<=10%	N/A
Yokohama	N.America	01/02/2022	ND	ND
Bridgestone	N.America	02/02/2022	ND	<=14%
Michelin	N.America	01/04/2022	<=5%	<=5%
Continental	N.America	01/04/2022	ND	N/A
Bridgestone	N.America	01/04/2022	<=10%	<=10%
Pirelli	N.America	11/04/2022	<=10%	N/A
Michelin	N.America	01/06/2022	<=12%	<=12%
Pirelli	N.America	15/06/2022	<=10%	N/A
Yokohama	N.America	01/07/2022	ND	ND
Bridgestone	N.America	01/07/2022	<=10%	<=10%
Bridgestone	N.America	01/10/2022	<=9%	<=9%
Yokohama	N.America	01/11/2022	ND	ND
Michelin	N.America	01/01/2023	<=9%	ND
Bridgestone	N.America	01/01/2023	ND	ND
Pirelli	N.America	15/01/2023	<=10%	N/A

Source: BofA Global Research, Company announcements

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Raw material prices continue to decline

In our coverage, only Michelin and Pirelli disclose commodity basket exposures in raw materials. Michelin is more exposed to natural rubber than Pirelli, but exposures to oil-based inputs as a whole (Carbon black and chemicals) are similar. Exposures are not directly comparable however, as Pirelli produces and sells consumer tyres only, while Michelin also supplies (amongst others) the truck and capital equipment sectors, where tire compounds can vary.

Raw mat tailwinds begin in 2H'23 & will continue into '24

For tire makers, changes in raw material prices typically take 4-6 months to reflect in cost of goods sold. In 2022/3, the lag has been 6-8months due to excess inventory levels amassed due to supply chain and energy shortage fears in 2022. Accordingly, while spot commodity prices have declined strongly since late 3Q'22, cost tailwinds are only now beginning to reflect in earnings (2H'23). Given that spot raw material prices have continued to decline, these tailwinds will benefit 1H'24 and possibly even extend into 2H'24.

Input costs -18%y/y and spot prices reflect a further -10%

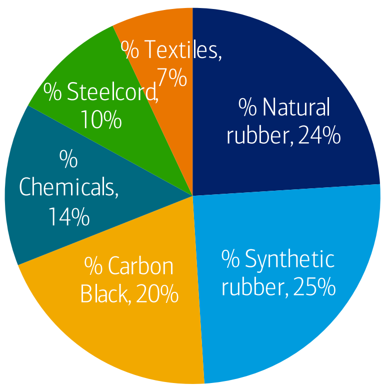
In EUR terms, raw material input costs are down by c18% ytd vs. 2022 and at spot commodity prices are 28% lower, now 9% below 2021 levels. However, relative to pre-Covid levels (2016-19), raw material input costs remain around 14% higher (Exhibit 24), driven predominantly by steel and carbon black. Current prices of most of the key inputs, including natural rubber, carbon black and butadiene do however continue to trend lower

(Exhibit 25 and Exhibit 26), which could suggest even larger declines. Accordingly, raw materials are likely to provide cost tailwinds for tire makers well into 2024.

Sea freight rates also remain a tailwind

More than 80% of the world's natural rubber is sourced from South-East Asia and hence account for significant shipping volumes - Michelin is one of the worlds largest shipping customers. Accordingly, freight rates matter a lot for the overall cost base (7% of sales in FY22). Sea freight rates had already correctly sharply 2H'22 and now seem to be bottoming (Exhibit 31). Our Transport team's recent freight tracker shows that spot rates rose by +5% m/m in July, putting them 22% above Jan 2019 levels, **but** -76% y/y. Important also note that tire makers typically commit to annual contracts, with annual negotiations concluded only in May of each year. Accordingly, rate declines that began in 3Q'22 will only start to reflect meaningfully in earnings in 2H'23.

Exhibit 22: Michelin raw material exposure by commodity
Michelin has c49% exposure to natural and synthetic rubber



Source: Company data

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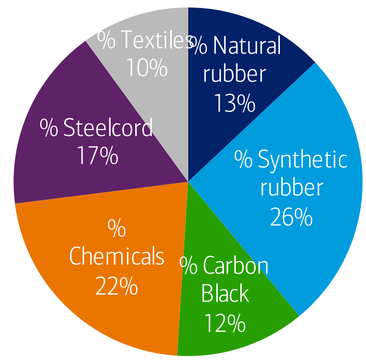
Exhibit 23: Pirelli raw material exposure by commodity
Pirelli has c39% exposure to natural and synthetic rubber



Source: Company data

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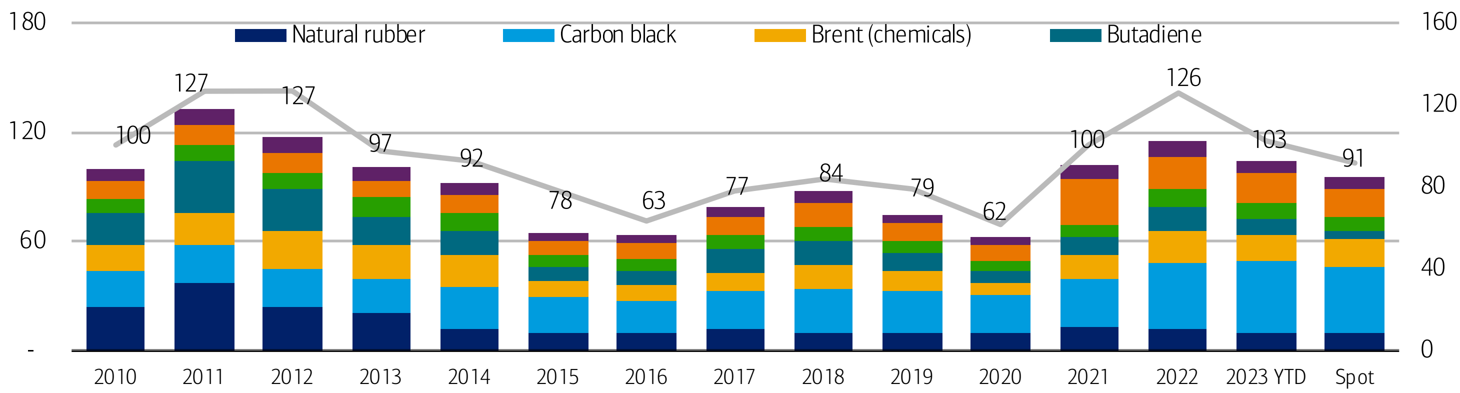
Exhibit 24: Tires raw material basket (CY2010=100)
Raw material input costs are down by c18% ytd vs. 2022 and at spot commodity prices are 28% lower.



Source: BofA Global Research estimates, Bloomberg

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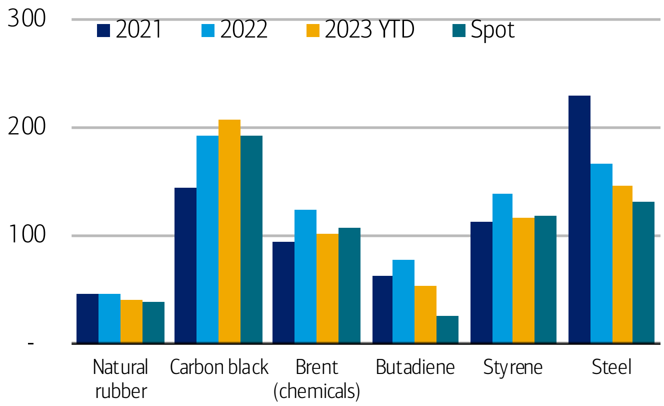
Exhibit 25: Tire raw material prices in USD (2010=100)

Average prices of key raw material inputs are down in 2023 YTD vs. 2022 and spot prices are below the 2023 YTD average



Source: BofA Global Research, Bloomberg

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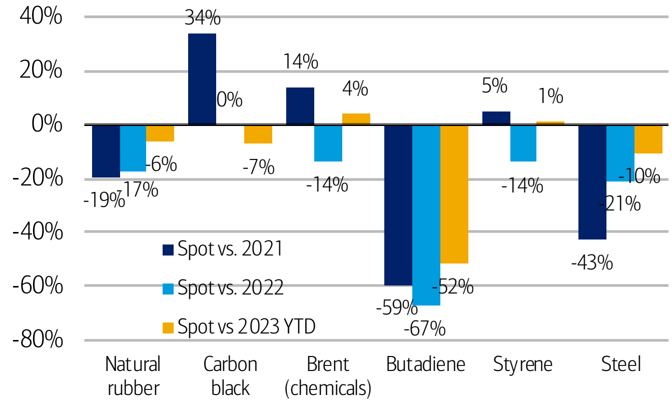
Exhibit 26: Spot raw material prices vs. avg. 2021, 22 & 23 levels

Prices of all of the most important raw material inputs continue to decline



Source: BofA Global Research, Bloomberg

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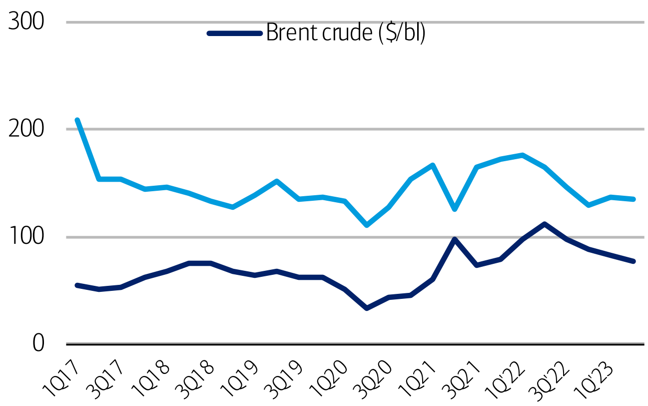
Exhibit 27: Brent crude ($/bl) and Natural rubber prices (USd/kg, rhs)

Natural rubber is still below 2017 peaks, Brent crude remains elevated



Source: BofA Global Research, Bloomberg

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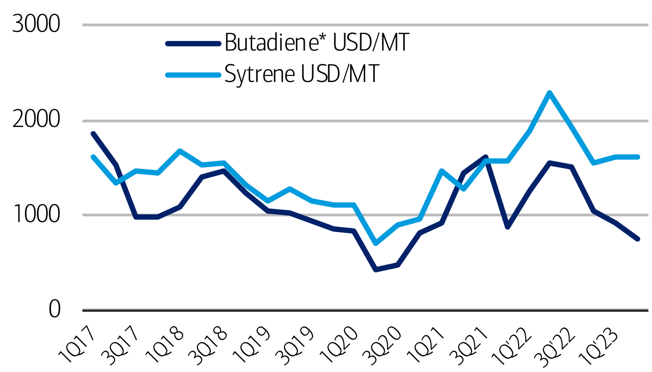
Exhibit 28: Butadiene and Styrene prices ($/ton)

Butadiene and Styrene have both come off 2Q 22 peaks and in Butadiene's case have continued to decline towards 2020 lows.



Source: BofA Global Research, Bloomberg. Butadiene based on an average of pricing points from different regions

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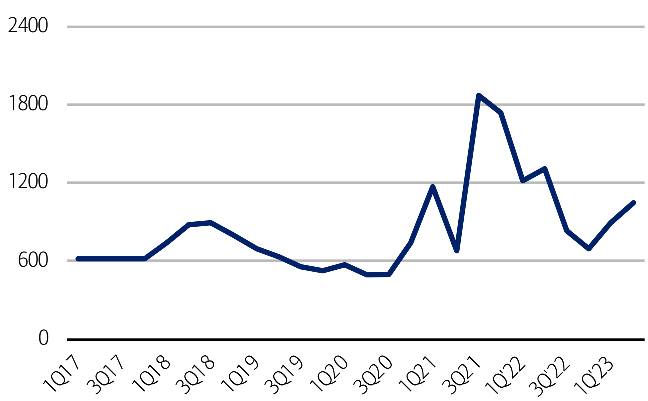
Exhibit 29: Steel (HRC) price ($/mt

Hot rolled coil prices are below 2021-22 levels but have recently risen.



Source: Bloomberg

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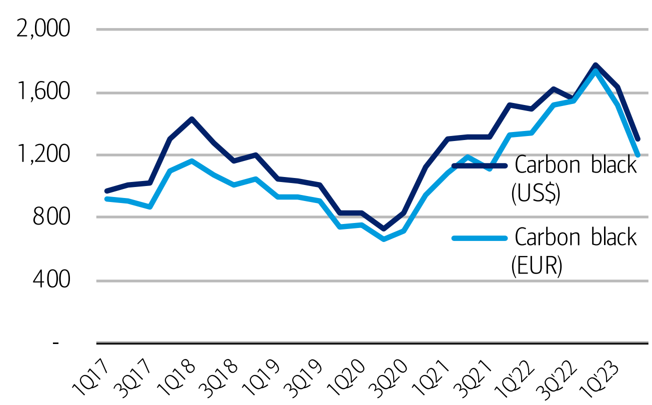
Exhibit 30: Carbon black price (index, CY2010=100)

Carbon black prices while elevated vs. normalised levels are clearly easing



Source: BofA Global Research, Bloomberg.

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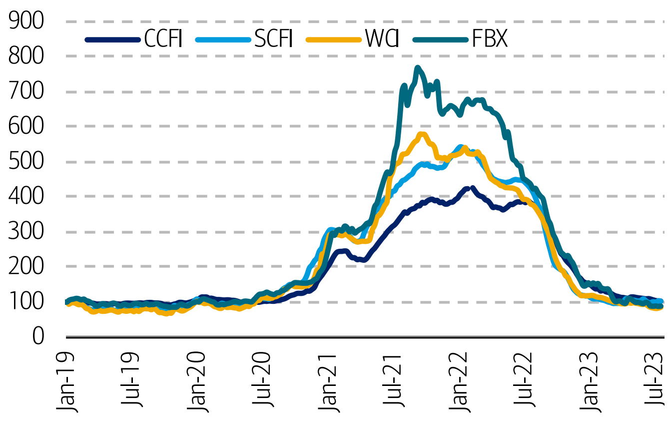
Exhibit 31: Container shipping freight rates, indexed to January 2019

SCFI improved 5% month-on-month



Source: Refinitiv Eikon, Drewy, Bloomberg

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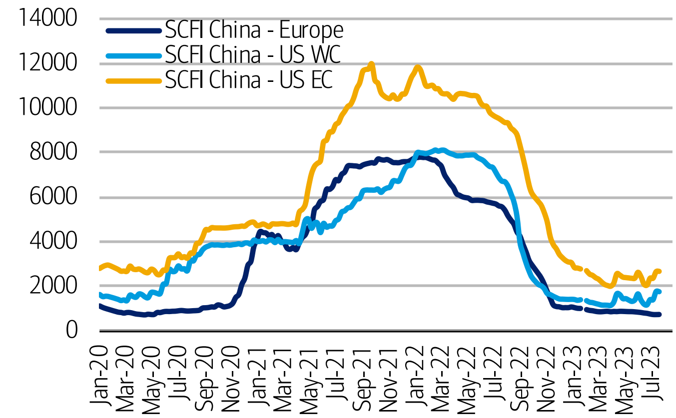
Exhibit 32: SCFI indexes by trade lane

Asia-USWC rates are higher by 50% month-on-month



Source: Clarksons

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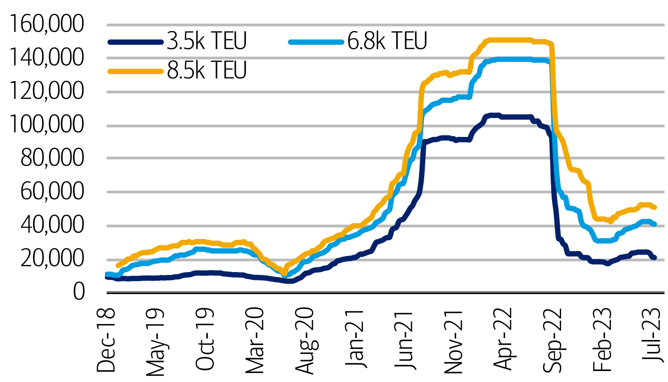
Exhibit 33: 6-12 month Timecharter rates

Short-term charter rates declined in July…



Source: Clarksons

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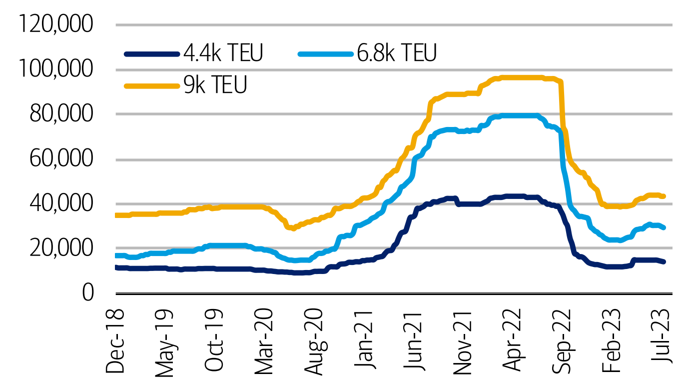
Exhibit 34: 3-5 years Timecharter rates

…with medium-term rates decreasing in July



Source: Clarksons

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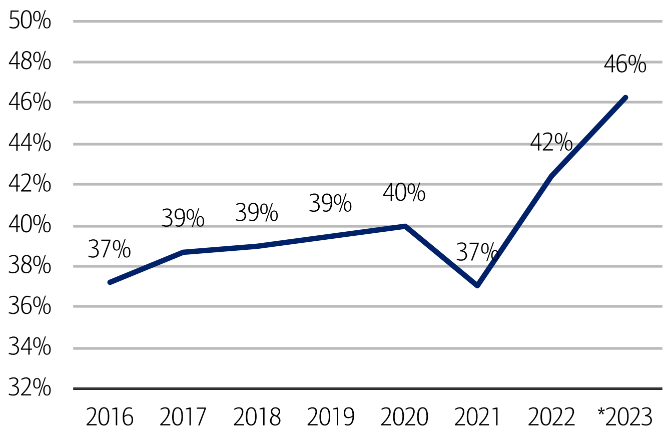
Tracking Asian tire imports

Latest data points reflect that: 1) imports into the US have declined in 2023. Having peaked at 49% in 2022, imports account for c47% of replacement market demand in '23 YTD; but, 2) Europe has seen an increase from 42% in 2022 to 46% suggesting that destocking efforts have been frustrated by sticky import volumes. This is likely one of the key reasons why tire makers have flagged slower destocking in Europe.

Exhibit 35: Asian imports as a % of Europe LV replacement demand
Asian imports have risen to 46% of RT demand in 2023* from 42% in 2022



Source: BofA Global Research estimates, LMC, *2023 is extrapolated using the YTD (May) run rate
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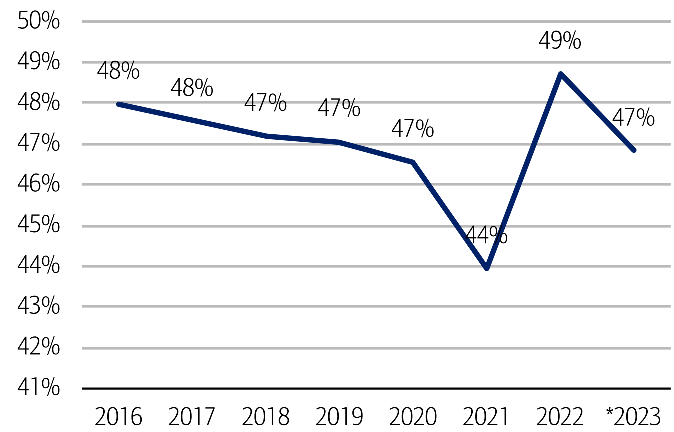
Exhibit 36: Asian imports as a % of US LV replacement demand
But have declined in the US in 2023* to 47% (2022: 49%)



Source: BofA Global Research estimates, LMC, *2023 is extrapolated using the YTD (May) run rate
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Imports into the US are down -22% YTD in '23

Asian tire imports have been a major destabilising force for the US tire market in 2H'22 to 1H'23, driven by a major influx in 2021/22 (2021: 19%y/y; 2022: +9% - Exhibit 43). As a consequence, dealer channels became severely over-stocked, spurring a major destocking which started in 4Q'22. Encouragingly, with imports down 22% YTD, Asian tires appear to have been the main focus for destocking efforts. The most recent data point for Jul'23, shows a decline of -30% y/y (Exhibit 40), suggesting that the decline in imports has in fact accelerated relative to the 2023 YTD decline of -22.5% (Exhibit 42).

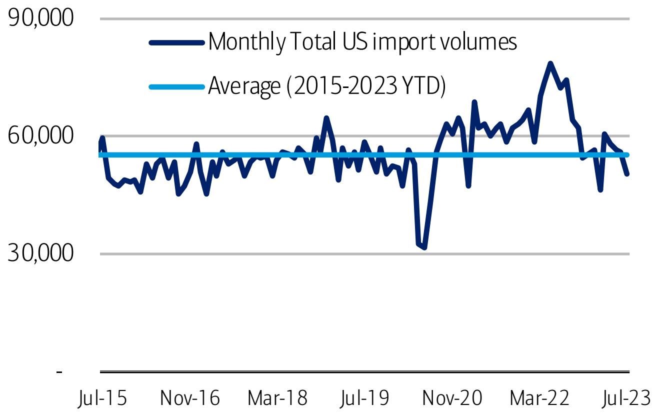
Thailand remains the largest source of imports into the US

On a 2023 YTD basis Thailand retains the highest share of imports (21%), followed by South Korea (14%) and China (14%). Hong Kong has been the biggest gainer raising its share of imports by +2.2ppts while China and Vietnam have experienced the largest declines of -1.2%/-2.2%, respectively (Exhibit 45 and Exhibit 46). The most recent data point (July '23), however shows that all major export countries experienced a sequential decline m/m, with the exception of China which was up by +9.1%m/m. Other regions: Thailand (-16%), South Korea (-17%) and Japan (-27%). On a year-to-date basis, all regions are firmly in negative territory, led by China which is down -37%y/y, followed by South Korea (-35%), Japan (-30%) and Thailand (-23%) - Exhibit 47.

Hankook the largest exporter, Sumitomo catching up

On a YTD basis Hankook still has the highest share of imports (14%), followed by Sumitomo (12%), Goodyear (10%) and Toyo (10%). Toyo has gained the most share y/y (+1.6%) whereas Yokohama (-1.7%) has lost the most vs 2022 levels (Exhibit 48 and Exhibit 49). Suppliers which saw a large decline m/m in July-23 include Kumho (-34%), Yokohama (-33%), Toyo (-31%) and Sumitomo (-21%). All suppliers have seen their exports decline on a y/y basis in July-23 except Michelin (+59%) - Yokohama (-48%), Hankook (-45%), Kumho (-42%) and Sumitomo (-28%) - see Exhibit 50. Toyo gained the most market share on a YTD basis to July-23 (+1.6%), whilst Yokohama lost -1.7% - Exhibit 49.

Exhibit 37: Monthly total US tyre imports
Monthly US imports -10% m/m in July 23 and down -30% y/y



Source: BofA Global Research, Panjiva
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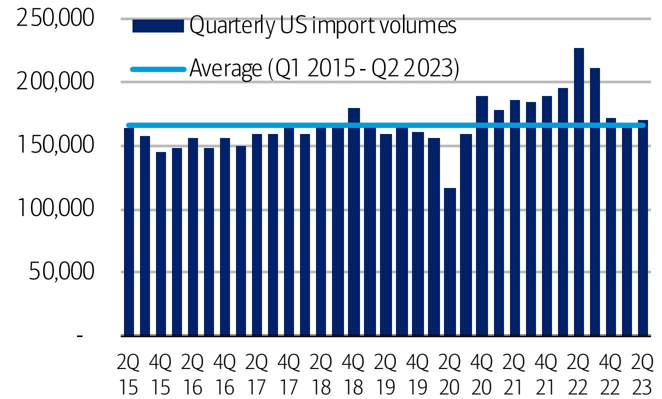
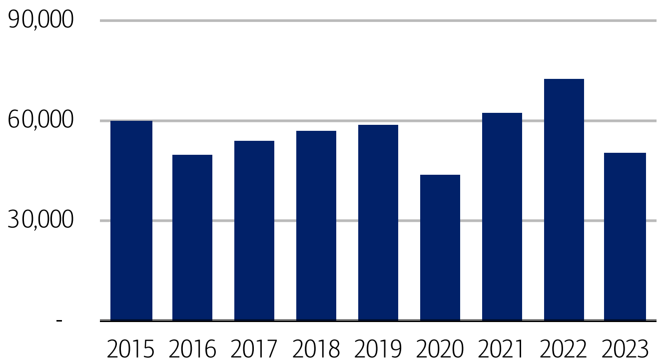
Exhibit 38: Quarterly total US tyre imports
Although declining from 2Q 22 peak (227k), 2Q 23 imports above avg. 166k



Source: BofA Global Research, Panjiva
BofA GLOBAL RESEARCH

Month of July US tyre imports

Exhibit 39: July month total US tyre imports (teu)
July-23 total US imports are down -30% y/y at 51k units



Source: BofA Global Research, Panjiva, 2015 – 2023 refer to the month of July in those years
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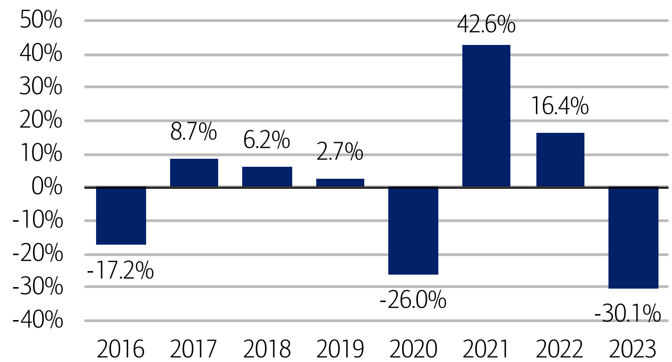
Exhibit 40: July month US tyre imports % change y/y
July has historically seen positive growth but 2023 was down -30% y/y



Source: BofA Global Research, Panjiva, 2015 – 2023 refer to the month of July in those years
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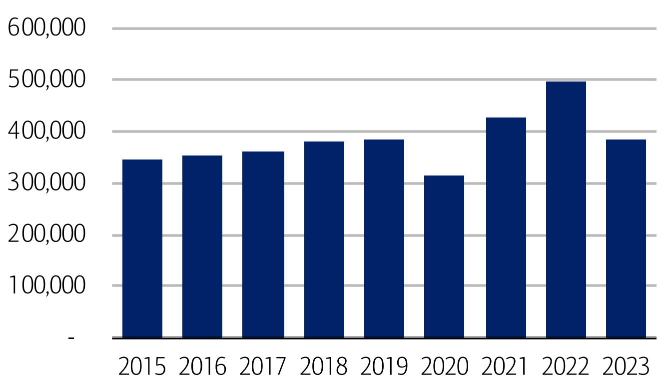
YTD (Jan – July) US tyre imports

Exhibit 41: YTD (Jan – July) total US tyre imports (teu)
YTD (Jan – July) imports were down -23% in 2023 vs Jan-July in 2022 to 385k



Source: BofA Global Research, Panjiva, 2015 – 2023 refer to the YTD (Jan – July) in those years
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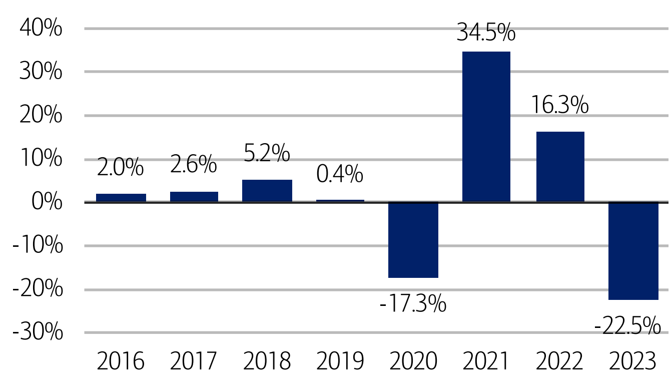
Exhibit 42: YTD (Jan – July) total US tyre imports % change y/y
YTD (Jan – July) imports were down -23% in 2023 vs Jan-July in 2022



Source: BofA Global Research, Panjiva, 2015 – 2023 refer to the YTD (Jan – July) in those years
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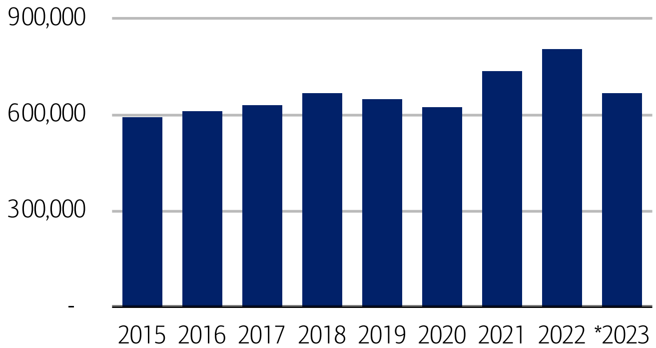
Annual US tyre imports

Exhibit 43: Annual US tyre imports. *= annualised YTD run rate (teu)
Annual imports were up +9% to 806k units in 2022, and are run-rating at 666k units (-17%) for 2023E



Source: BofA Global Research, Panjiva, *2023 extrapolated from the YTD run rate
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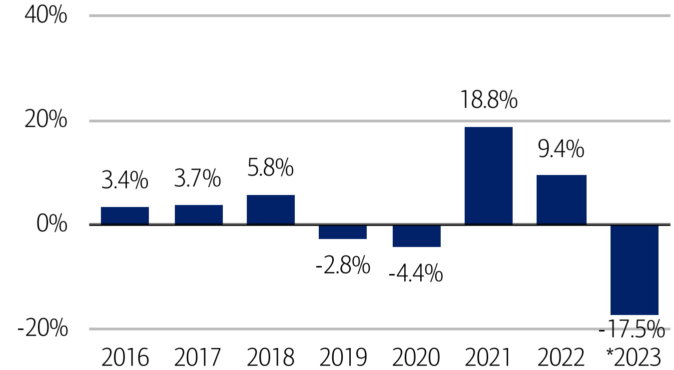
Exhibit 44: Annual total US tyre imports % change y/y
Annual imports were up +9% in 2022 and is run-rating (-17%) for 2023



Source: BofA Global Research, Panjiva, *2023 extrapolated from the YTD run rate
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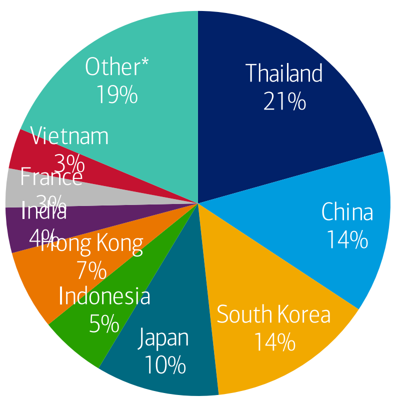
US tyre imports by country

Exhibit 45: YTD (Jan – July) US tyre imports share by country
YTD Thailand has the highest share of imports (21%), followed by South Korea (14%) and China (14%)



Source: BofA Global Research, Panjiva, *Other includes: Chile, Singapore, Taiwan, Brazil, Switzerland, Malaysia, Portugal, Germany, Belgium, Costa Rica, Panama
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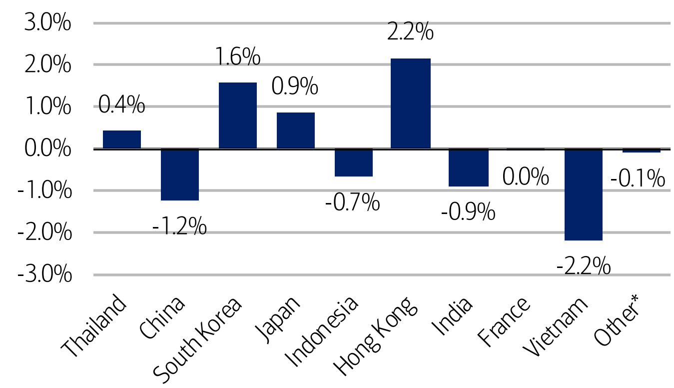
Exhibit 46: Import share gains/(losses) YTD (Jan 23 – July 23) vs 2022
YTD relative to 2022 Hong Kong has gained the most share of US imports (+2.2%) where as China (-1.2%) and Vietnam have lost the most (-2.2%)



Source: BofA Global Research, Panjiva, *Other includes: Chile, Singapore, Taiwan, Brazil, Switzerland, Malaysia, Portugal, Germany, Belgium, Costa Rica, Panama
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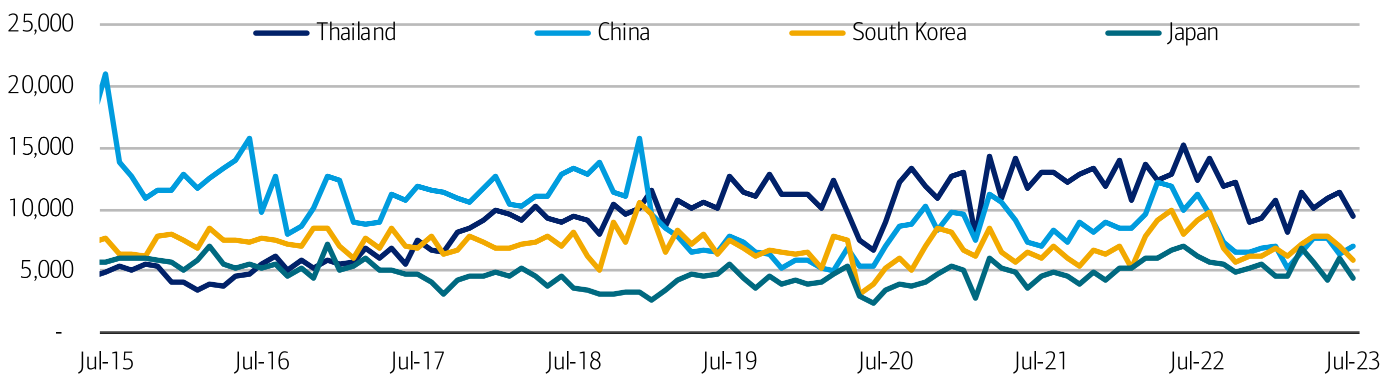
Exhibit 47: Monthly US tyre imports volumes by major export country
Three major regions saw a decline m/m in July-23 – Thailand (-16%), South Korea (-17%) and Japan (-27%). China was a standout at +9.1% growth m/m. All regions are down in July-23 y/y - Thailand (-23%), China (-37%), South Korea (-35%) and Japan (-30%).



Source: BofA Global Research, Panjiva
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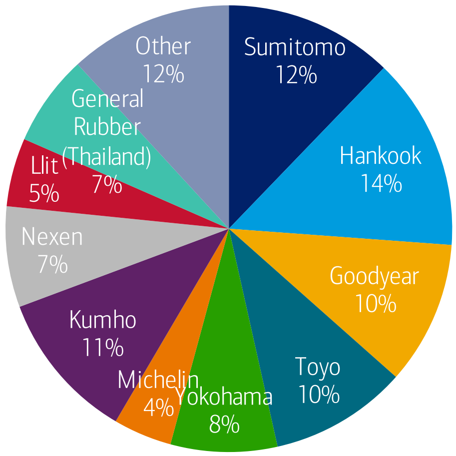
US tyre imports by producer

Exhibit 48: YTD (Jan – July) US tyre imports share by producer
YTD Hankook has the highest share of imports (14%), followed by Sumitomo (12%) and Goodyear (10%) and Toyo (10%)



Source: BofA Global Research, Panjiva

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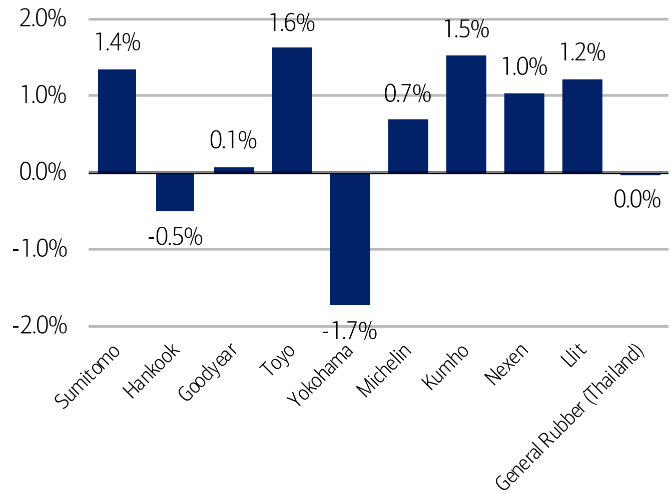
Exhibit 49: Import share gains/(losses) YTD (Jan 23 – July 23) vs 2022
YTD relative to 2022 Toyo has gained the most share of US imports (+1.6%) where as Yokohama (-1.7%) has lost the most



Source: BofA Global Research, Panjiva

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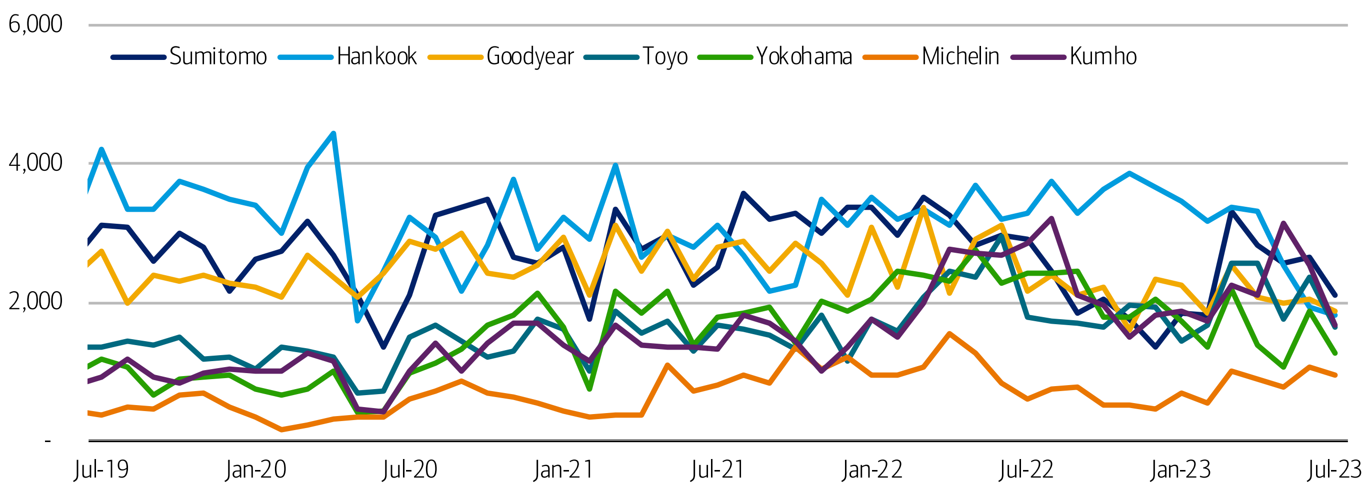
Exhibit 50: Monthly US tyre imports volumes by major export supplier
The four suppliers which saw a large decline m/m in July-23 – Kumho (-34%), Yokohama (-33%), Toyo (-31%), Sumitomo (-21%). All these suppliers are also down in July-23 y/y - Yokohama (-48%), Hankook (-45%), Kumho (-42%), Sumitomo (-28%) and Goodyear (-13%) except Michelin (+59%).



Source: BofA Global Research, Panjiva

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Asian tyre imports into Europe

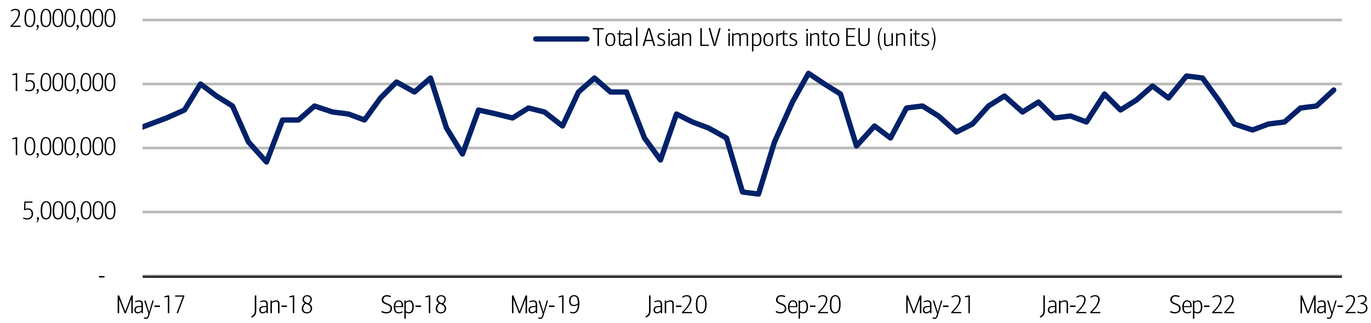
Asian imports into Europe (EU) now -1% YTD in '23

We also track imports into Europe with data provided by LMC, which comes with a c2month time lag vs. US data provided by Panjiva. As in the US, Asian tire imports have also weighed on the EU tire market in 2H'22 through 1H'23, driven by an influx beginning in 2021 (+8%y/y) and spanning 2022 (+8% y/y, Exhibit 59). As a consequence, dealer channels became severely over-stocked, eventually spurring a major destocking starting in 4Q'22. Recent data reflects little reprieve. Unlike in the US, Asian imports have again started to rise in Europe signalling a new restocking phase. May'23 data reflects an increase of +10% m/m (Exhibit 51) and +5% y/y (Exhibit 55). Worryingly, the latest data reflects a continued acceleration in imports since the trough in Dec'22.

May'23 the largest May month of imports on record

The month of May saw the import of 14.6m tires, higher than any other May month on record (Exhibit 54), up 5%y/y on an already elevated year-ago base (Exhibit 55). On a YTD basis, imports are only down by 1% (Exhibit 56 - Exhibit 57), much less than the market decline of 6% reported by tire makers, suggesting a c5% market share gain for importers. Assuming the May'23 import run-rate is sustained for the remainder of 2023, imports would be -2%y/y for the calendar year (Exhibit 58 - Exhibit 59).

Exhibit 51: Monthly imports of Asian LV tires into Europe (units)
Europe sees a 10% m/m increase in May-23



Source: LMC

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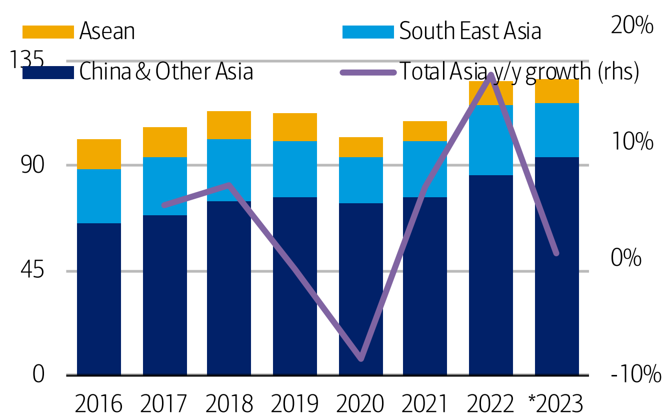
Exhibit 52: Europe LV import volumes from Asia (m units)
Total Asian imports grew at +16% y/y for 2022



Source: BofA Global Research, LMC, Asean includes Indonesia, Malaysia, Philippines, Singapore, Thailand, Vietnam, *2023 is extrapolated using the YTD (May) run rate

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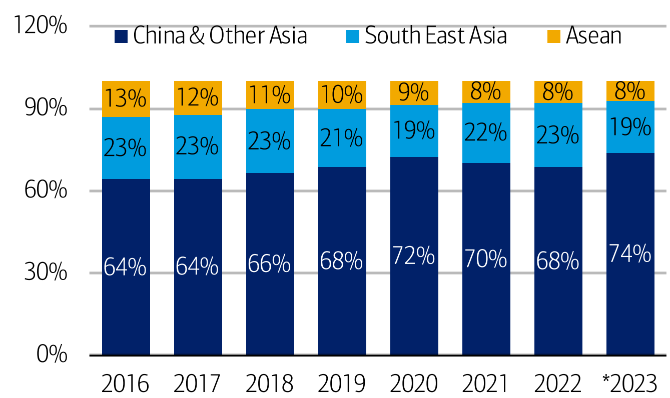
Exhibit 53: Europe LV import volumes from Asia composition
China & Other Asia makes up the majority of Asian imports to the EU



Source: BofA Global Research, LMC, Asean includes Indonesia, Malaysia, Philippines, Singapore, Thailand, Vietnam, *2023 is extrapolated using the YTD (May) run rate

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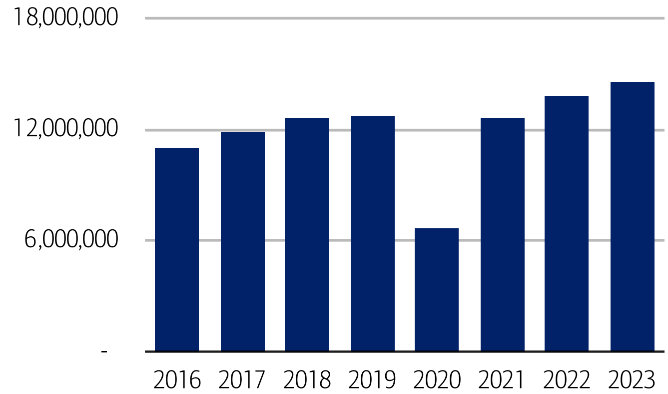
Month of May EU tyre imports

Exhibit 54: May month total EU tyre imports (units)

May-23 total EU imports are up 5% y/y at 14.6m units

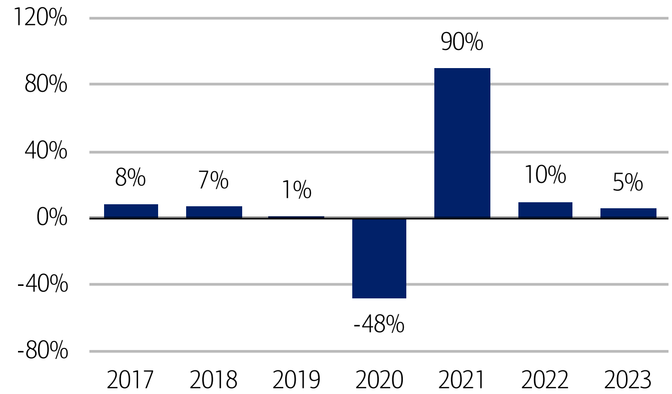


Source: BofA Global Research, LMC, 2015 – 2023 refer to the month of May in those years

BofA GLOBAL RESEARCH

Exhibit 55: May month EU tyre imports % change y/y

May has historically seen positive growth but 2023 is in-line at +5% y/y



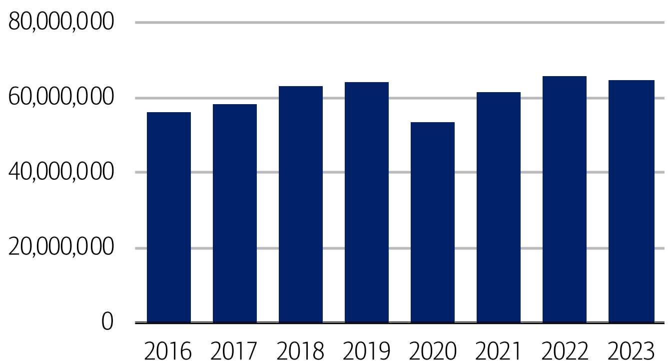
Source: BofA Global Research, LMC, 2015 – 2023 refer to the month of May in those years

BofA GLOBAL RESEARCH

YTD (Jan – May) EU tyre imports

Exhibit 56: YTD (Jan – May) total EU tyre imports (units)

YTD (Jan – May) imports were down -1% in 2023 vs Jan-May in 2022 to 65m



Source: BofA Global Research, LMC, 2015 – 2023 refer to the YTD (Jan – May) in those years

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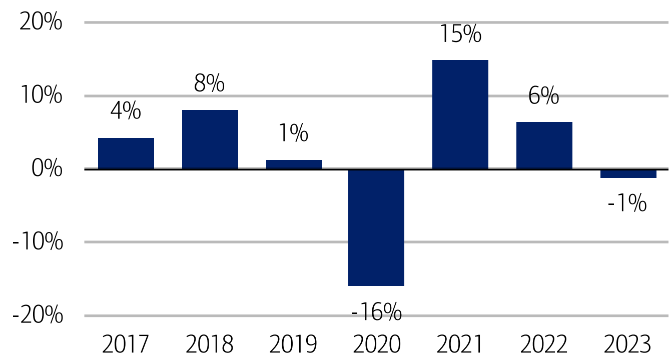
Exhibit 57: YTD (Jan – May) total EU tyre imports % change y/y

YTD (Jan – May) imports were down -1% in 2023 vs Jan-May in 2022



Source: BofA Global Research, LMC, 2015 – 2023 refer to the YTD (Jan – May) in those years

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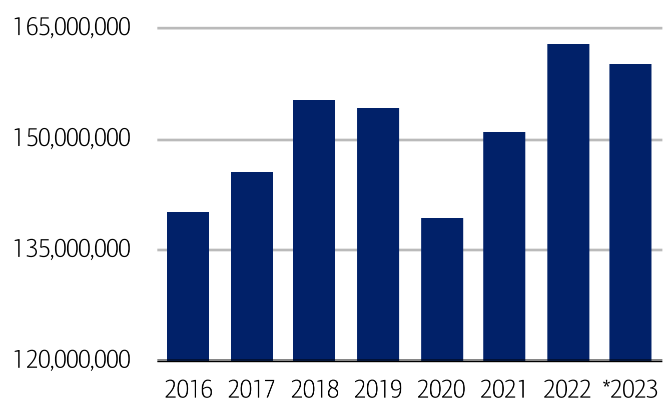
Annual EU tyre imports

Exhibit 58: Annual EU tyre imports. * = annualised YTD run rate (units)

Annual imports were up +8% to 163m units in 2022, and are run-rating at 160m units (-2%) for 2023

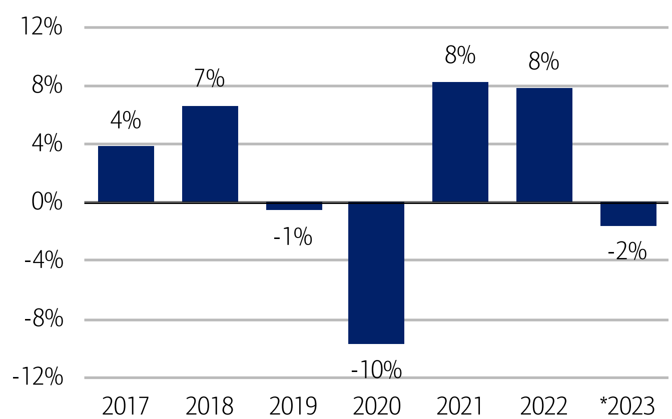


Source: BofA Global Research, LMC, *'23 extrapolated from the YTD seasonally adjusted run rate

BofA GLOBAL RESEARCH

Exhibit 59: Annual total EU tyre imports % change y/y

Annual imports were up +8% in 2022 and is run-rating (-2%) for 2023



Source: BofA Global Research, LMC, *'23 extrapolated from the YTD seasonally adjusted run rate

BofA GLOBAL RESEARCH

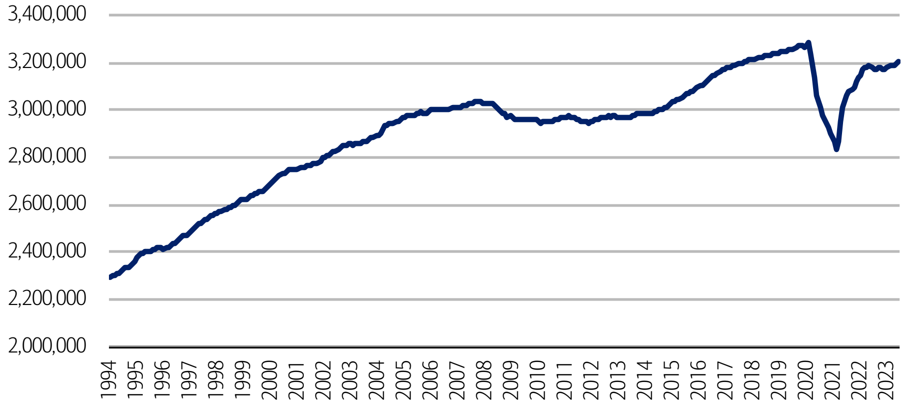
Miles driven: first month above pre-Covid

June is first record travel month since pre-Covid

As noted by our US team their recent note. On 8/10/23, the US Department of Transportation reported that US travel on roads and streets increased 3.1% YoY in June to 283.0bn vehicle miles. This was a record for June and marks the first time since early 2020 that total miles driven for a month has exceeded pre-Covid levels. Ultimately, miles driven is a key metric we follow to gauge demand for vehicles and this was an encouraging data point for the broader auto sector and economy. Recall, our thesis has been that auto demand centers around a simple premise of, "a capital goods replacement cycle with a consumer overlay." Our forecast for US auto sales is well above consensus at 16.1mm in 2024, climbing to a peak of 18.1mm in 2028. Our forecast may end up proving conservative if the economy recovers, miles driven keep increasing, and consumer confidence rebounds.

Exhibit 60: LTM Vehicle Distance Traveled (Million Miles)

US travel on roads and streets increased 3.1% YoY in June to 283.0bn vehicle miles. This was a record for June and marks the first time since early 2020 that total miles driven for a month has exceeded pre-Covid levels.



Source: US Department of Transportation

BofA GLOBAL RESEARCH

Valuation/share price performances vs. global peers

Exhibit 61: Global tire manufacturer comps table

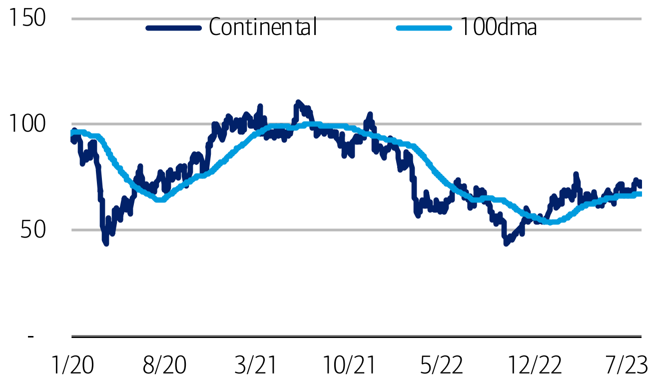
We see Pirelli's valuation as undemanding compared to global peers.

	Mkt Cap	EV/Sales			EV/EBITDA			EV/EBIT			P/E			Dividend yield		
Company	EURm	2023e	2024e	2025e	2023e	2024e	2025e	2023e	2024e	2025e	2023e	2024e	2025e	2023e	2024e	2025e
Michelin	20,217	0.9x	0.9x	0.9x	4.8x	4.7x	4.5x	7.6x	7.3x	6.9x	9.0x	8.7x	8.1x	5%	5%	6%
Nokian	1,108	1.0x	0.9x	0.8x	6.3x	5.3x	4.6x	16.0x	11.2x	9.1x	22.6x	15.6x	12.4x	9%	7%	23%
Pirelli	4,514	1.2x	1.2x	1.1x	5.6x	5.3x	5.0x	8.4x	7.8x	7.3x	8.9x	7.9x	7.1x	7%	7%	9%
Continental	13,380	0.5x	0.5x	0.4x	4.2x	3.7x	3.3x	8.0x	6.8x	5.7x	8.8x	7.1x	5.9x	6%	5%	9%
EU average		**0.9x**	**0.8x**	**0.8x**	**5.2x**	**4.7x**	**4.3x**	**10.0x**	**8.3x**	**7.2x**	**12.3x**	**9.8x**	**8.4x**	**7%**	**6%**	**12%**
Bridgestone	25,385	1.0x	0.9x	0.9x	4.9x	4.7x	4.3x	7.7x	7.3x	6.8x	10.3x	9.8x	9.2x	4%	4%	4%
Goodyear	3,351	0.6x	0.6x	0.6x	6.9x	5.8x	5.4x	14.8x	10.2x	9.6x	498.4x	9.5x	7.5x	0%	0%	0%
Hankook	3,295	0.5x	0.5x	0.5x	2.9x	2.8x	2.7x	4.5x	4.4x	4.2x	7.3x	6.3x	6.2x	2%	2%	2%
Sumitomo	2,333	0.6x	0.5x	0.5x	5.6x	5.1x	4.8x	14.4x	11.7x	9.9x	14.8x	10.6x	8.9x	3%	3%	4%
Yokohama	3,157	0.9x	0.9x	0.8x	6.8x	5.9x	5.8x	10.6x	9.0x	8.5x	8.2x	7.0x	6.6x	2%	3%	3%
Cheng Shin	3,486	1.4x	1.2x	1.1x	7.5x	7.3x	7.4x	15.5x	12.5x	12.9x	17.6x	14.9x	15.1x	5%	5%	5%
Global avg excl. EU		0.8x	0.7x	0.7x	6.2x	5.4x	5.1x	12.5x	9.6x	9.1x	12.6x	9.7x	8.2x	2.5%	3.0%	3.2%
Global average		**0.9x**	**0.9x**	**0.8x**	**5.6x**	**5.3x**	**4.8x**	**10.6x**	**9.0x**	**8.5x**	**10.3x**	**9.5x**	**8.1x**	**3.6%**	**4.0%**	**4.3%**

Source: BofA Global Research estimates, Bloomberg

BofA GLOBAL RESEARCH

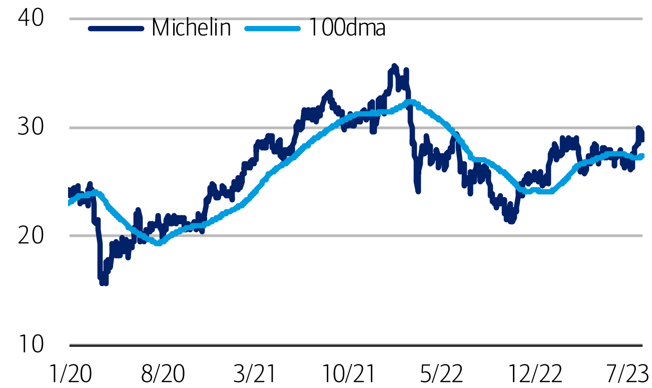
Exhibit 62: Continental share price performance
Conti remains well below the "good old Conti" levels



Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 63: Michelin share price performance
Michelin trades slightly above pre-Covid levels



Source: BofA Global Research, Bloomberg

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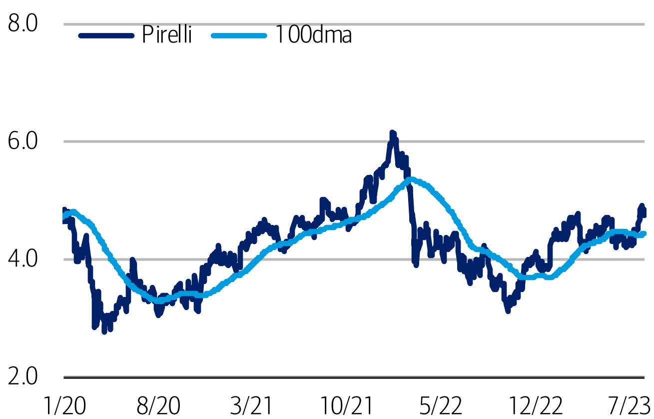
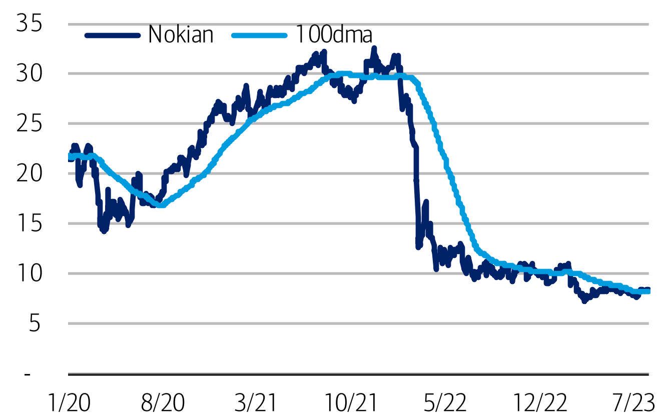
Exhibit 64: Pirelli share price performance
Pirelli trades inline with its pre-Covid levels



Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

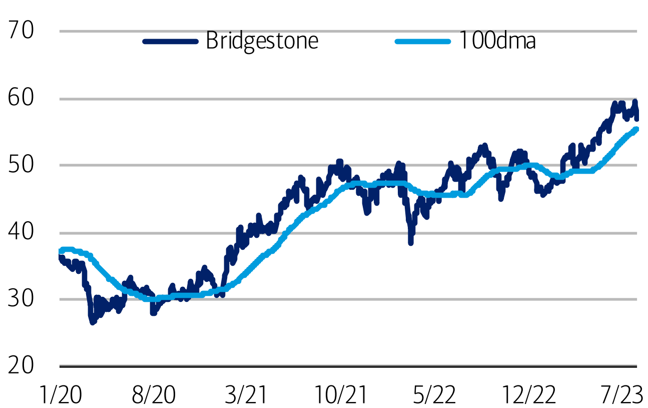
Exhibit 65: Nokian share price performance
Nokian trades well below pre-Covid levels



Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

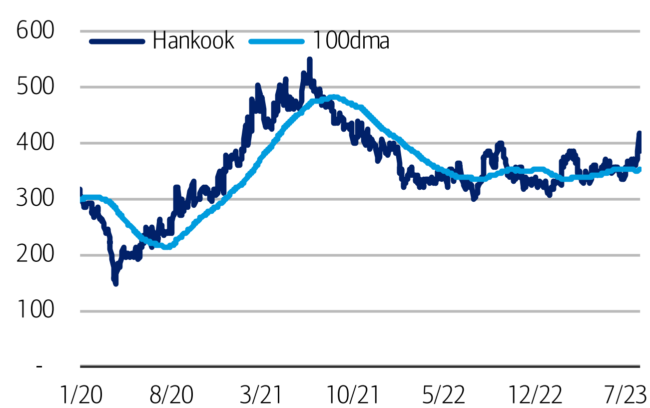
Exhibit 66: Bridgestone share price performance
Bridgestone trades well above pre-Covid levels



Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 67: Hankook share price performance
Hankook share price is trading slightly above its pre-covid levels



Source: BofA Global Research, Bloomberg

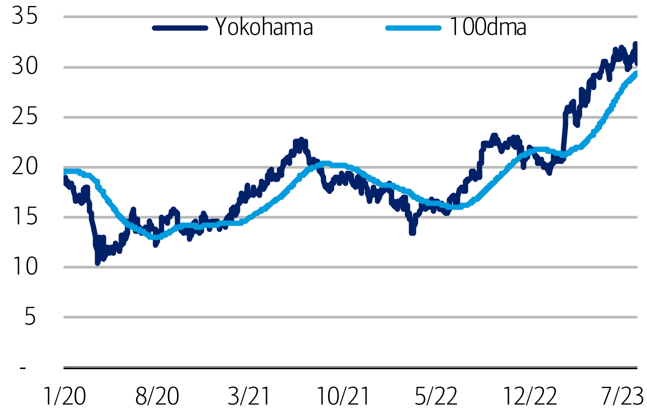
BofA GLOBAL RESEARCH

Exhibit 68: Cheng Shin share price performance
Cheng Shin trades in line with its pre-Covid levels

Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

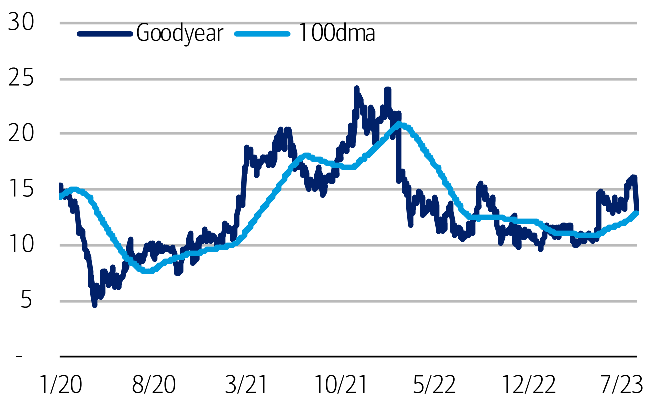
Exhibit 69: Yokohama share price performance
Yokohama now trades well above its pre-Covid levels



Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 70: Goodyear share price performance
Goodyear is trading slightly below its pre-covid levels



Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

COMPANY SECTION

Michelin, Underperform (PO €27.4/sh)

1H'23 in-line with BofAe and consensus expectations

Revenue of €14.1bn was broadly in-line (BofAe: €13.8bn, comp. cons: €13.9bn), as was SOI (EBIT) of €1.7bn ~margin 12.1% (BofAe; €1.71bn ~12.3%; cons: €1.66bn ~11.9%). H1 revenue reflected a -3.7% volume decline (BofAe: -4.3%; cons. -4.0%), a -1% currency headwind (BofAe: -1.3%; cons: -0.8%) and price/mix tailwinds of +9.4%y/y (price: 8.5%; mix 0.9%). However, this faded in Q2 to 6.7% from 12.3% in Q1. At an EBIT level, lower production hurt efficiency, accounting for a €328m headwind. Cost inflation detracted c€560m as expected. At a segment EBIT level, RS1 (PC & LT) improved by €84m y/y, while RS3 (Speciality) showed a more significant uptick of €236m. However, this was weighed down by RS2 (Truck tires) which had a sharp contraction in volumes (-8%y/y) and an EBIT decline of €146m. Headline FCF of €922m beat (BofAe: €405m; cons €411m) but was helped by the reversal of a c€300m exceptional working capital build-up in 4Q'22 and by disposal related proceeds of c€200m in 2022.

FY23 guide raised in H1. Further raise at Q3 priced in

Michelin upgraded it's '23 guidance for constant currency SOI to >€3.4bn from >€3.2bn, well below (Visible Alpha) consensus, which currently implies c€3.75bn (reported basis €3.45bn + c€300m forex headwind). We believe consensus assumptions for H2 on volumes (-2.4%), price/mix (+0.8%) and forex (-3.8%) are reasonable and arrive at a similar adjusted EBIT forecast. Accordingly, we think a further guidance raise at Q3 is now the consensus view. Upgraded FCF guidance of >€2.0bn (prior: >€1.6bn) seems achievable to us, supported by lower raw material prices and safety stock levels. However, as with the SOI outlook, this is already the consensus view (BofAe & cons: €2.1bn).

Asian imports and pricing pose downside risks

As highlighted in our Tracking Asian tire imports, imports in Europe have risen further in 2023, and excluding the 2020-21 maritime disruptions has now continued a multiple-year trend of increases. Accordingly risks of down-trading and price disruption are rising. Additionally, certain premium tire makers have lost share in 2023 and may be tempted to break rank and invest raw material tailwinds in price, to win back share.

Strategy pivot and M&A ambitions a key focus area

During its 2021 CMD, Michelin revealed its 2030 strategy, which included the ambition to grow its non-tire ('Around & Beyond tire') revenues to 20 to 30% of group. In order to reach this, management has more recently alluded to €5-10bn in acquisitions. Both small and large deals are being contemplated and the intention is to fund these using cash resources. The key debates however are around: 1) The raison dêtre behind these: Michelin alludes mainly to R&D synergies and customer/footprint overlaps; and 2) the price paid. The recent acquisition of Flexible Composites Group (FCG) was concluded at a materially higher multiple than what Michelin trades at – EV/Sales c3.2x vs. 0.85x, and EV/EBITDA 9.0x (post-synergies) vs. 4.5x.

PO raised to €27.4/sh but rating unchanged. Underperform

We raise our forecasts by 1.2-8.9% for FY23-24E, driven by growing raw material tailwinds. Accordingly, our Price Objective increase by 5% to €27.4/sh (prev: €26). While we view Michelin as a high-quality company and acknowledge its market leadership, its current valuation implies a 20% premium to its 10YR history, which we think is difficult to justify. We see limited upside to current consensus estimates, and see growing Asian imports, pricing and M&A as overhangs. Michelin trades at 1YR fwd P/E & EV/EBIT of 10.4x & 8.3x. We reiterate our Underperform rating.

Exhibit 71: Michelin forecasts vs. Visible Alpha consensus (EURm)

For segment operating income we are broadly in-line with consensus in FY23e and 1.4% above in FY24E

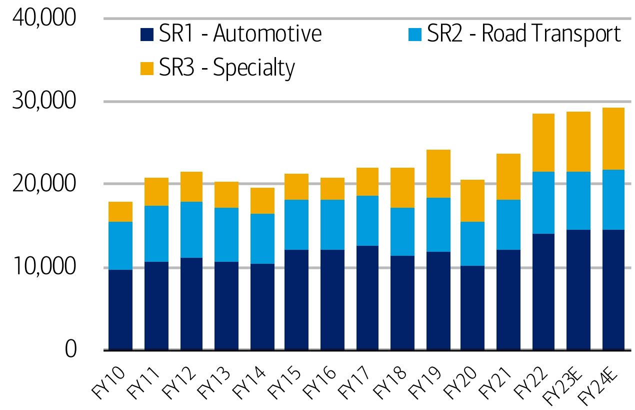
Reporting metric	FY22	1H'23	2H'23E	2H'23E VA Cons	FY23E	FY 23 VA Cons	BofAe VA Cons	FY24E	FY 24 VA Cons	BofAe VA Cons	FY25E	FY 25 VA Cons	BofAe VA Cons
Group Sales	**28,590**	**14,079**	**14,768**	**14,761**	**28,847**	**28,745**	**0.4%**	**29,194**	**29,253**	**-0.2%**	**30,151**	**30,006**	**0.5%**
% growth y/y	*20.2%*	*5.9%*	*-3.5%*	*-3.5%*	*0.9%*	*0.5%*		*1.2%*	*1.8%*		*3.3%*	*2.6%*	
EBITDA	4,887	2,547	2,602	2,653	5,149	5,211	-1.2%	5,374	5,405	-0.6%	5,553	5,640	-1.6%
EBITDA margin	17.1%	18.1%	17.6%	18.0%	17.8%	18.1%		18.4%	18.5%		18.4%	18.8%	
Reported EBIT	**3,021**	**1,614**	**1,646**	**1,664**	**3,260**	**3,275**	**-0.5%**	**3,419**	**3,420**	**0.0%**	**3,529**	**3,614**	**-2.4%**
Reported EBIT margin	10.6%	11.5%	11.1%	11.3%	11.3%	11.4%		11.7%	11.7%		11.7%	12.0%	
Segment operating income	**3,396**	**1,704**	**1,756**	**1,743**	**3,460**	**3,450**	**0.3%**	**3,619**	**3,570**	**1.4%**	**3,729**	**3,767**	**-1.0%**
Operating margin	11.9%	12.1%	11.9%	11.8%	12.0%	12.0%		12.4%	12.2%		12.4%	12.6%	
Reported net income	1,996	1,216	962	1,057	2,178	2,256	-3.5%	2,233	2,317	-3.6%	2,312	2,464	-6.2%
Basic EPS, in EUR	**2.79**	**1.69**	**1.34**	**1.49**	**3.03**	**3.17**	**-4.3%**	**3.11**	**3.23**	**-3.8%**	**3.22**	**3.43**	**-6.1%**
DPS, in EUR	1.25	0.00	0.00	-	1.38	1.4	-4.8%	1.47	1.5	-3.5%	1.56	1.7	-5.9%
Capex	-2,041	-1,125	-1,154	-1,101	-2,309	-2,226	-3.7%	-2,002	-2,181	8.2%	-2,041	-2,189	6.8%
Free cash flow	-104	771	1,068	1,235	2,099	2,076	1.1%	2,232	2,136	4.5%	2,163	2,117	2.2%
Net debt/(cash)	4,320	4,626	4,862		4,862			3,612			2,501		
Segments													
Automotive (SR1)													
Revenue	14,138	7,024	7,408	7,225	14,432	14,178	1.8%	14,556	14,242	2.2%	14,952	14,478	3.3%
Adj EBIT	1,711	866	943	873	1,809	1,730	4.5%	1,943	1,731	12.3%	1,989	1,782	11.6%
Adj EBIT Margin	12.1%	12.3%	12.7%	12.1%	12.5%	12.2%		13.4%	12.2%		13.3%	12.3%	
Road Transportation (SR2)													
Revenue	7,462	3,397	3,632	3,732	7,029	7,173	-2.0%	7,267	7,212	0.8%	7,505	7,343	2.2%
Adj EBIT	641	168	244	229	412	443	-7.0%	515	521	-1.0%	536	575	-6.9%
Adj EBIT Margin	8.6%	4.9%	6.7%	6.1%	5.9%	6.2%		7.1%	7.2%		7.1%	7.8%	
Specialities (SR3)													
Revenue	6,990	3,658	3,728	3,762	7,386	7,394	-0.1%	7,370	7,747	-4.9%	7,694	8,150	-5.6%
Adj EBIT	1,044	670	586	624	1,256	1,280	-1.9%	1,177	1,304	-9.7%	1,221	1,388	-12.1%
Adj EBIT Margin	14.9%	18.3%	15.7%	16.6%	17.0%	17.3%		16.0%	16.8%		15.9%	17.0%	
Group Revenue Bridge													
Volumes	-2.0%	-3.7%	-1.6%	-2.4%	-2.6%	-2.9%		2.5%	1.2%		3.1%	1.5%	
Price/mix	13.7%	9.4%	1.5%	0.8%	5.2%	4.8%		-2.1%	-0.3%		-0.2%	0.3%	
Currency	6.2%	-1.0%	-3.8%	-3.8%	-2.5%	-2.6%		-0.2%	-0.3%		0.0%	0.0%	
Scope	2.2%	1.2%	0.5%	0.4%	0.8%	0.4%		1.0%	0.5%		0.5%	0.2%	
Sales non-tire	0.0%	0.0%	14.6%		0.0%			0.0%			0.0%		
Group sales	**20.2%**	**5.9%**	**-3.5%**	**-5.0%**	**0.9%**	**-0.2%**		**1.2%**	**1.1%**		**3.3%**	**2.1%**	

Source: BofA Global Research estimates, company report, Visible Alpha

BofA GLOBAL RESEARCH

Exhibit 72: Michelin revenue by segment (EURm)

We expect revenue growth in FY23E of 0.9%, held back by forex.

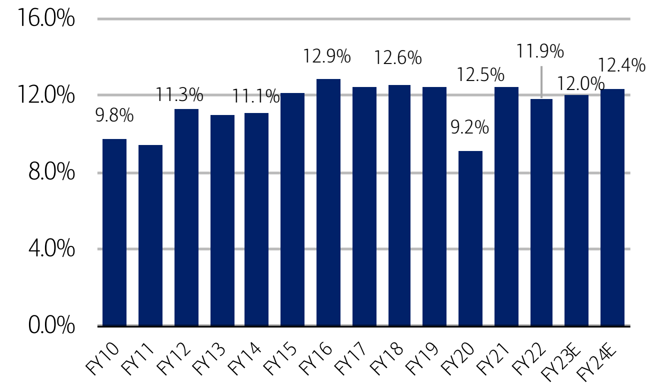


Source: BofA Global Research estimates, company report

BofA GLOBAL RESEARCH

Exhibit 73: Michelin group EBIT margin (%)

We expect EBIT margin to rise marginally in FY23-24E to 12/12.4%

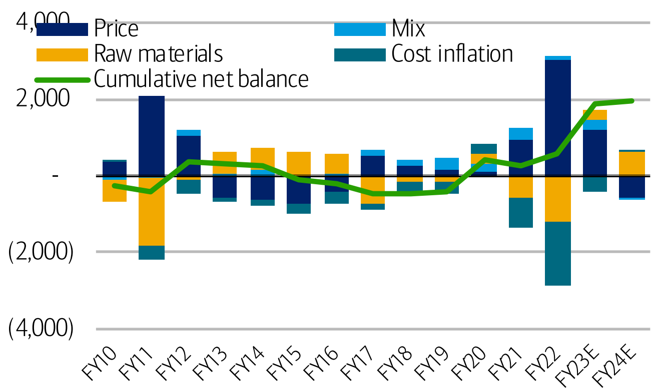


Source: BofA Global Research estimates, company report

BofA GLOBAL RESEARCH

Exhibit 74: Michelin net price/mix vs. inflation (EURm)

Michelin's current cumulative net price/mix vs. inflation is strongly positive – we see some scope for contraction from FY24E

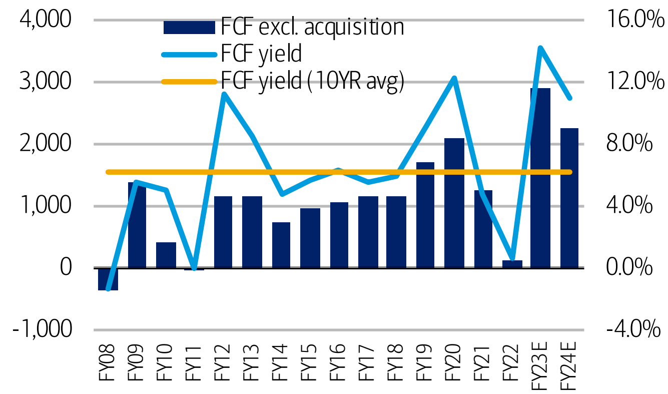


Source: BofA Global Research estimates, company report

BofA GLOBAL RESEARCH

Exhibit 75: Michelin FCF generation (EURm) and FCF yield (rhs)

Michelin is currently trading at a FCF yield of 14% and 1YR fwd 11.0%

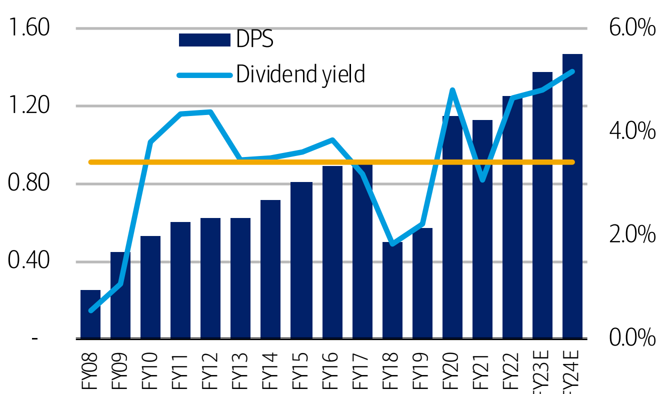


Source: BofA Global Research estimates, company report

BofA GLOBAL RESEARCH

Exhibit 76: Michelin dividend per share (€) and dividend yield (rhs)

Michelin is currently trading on a dividend yield of 4.8%, 1.4ppts above the historical average of 3.4%

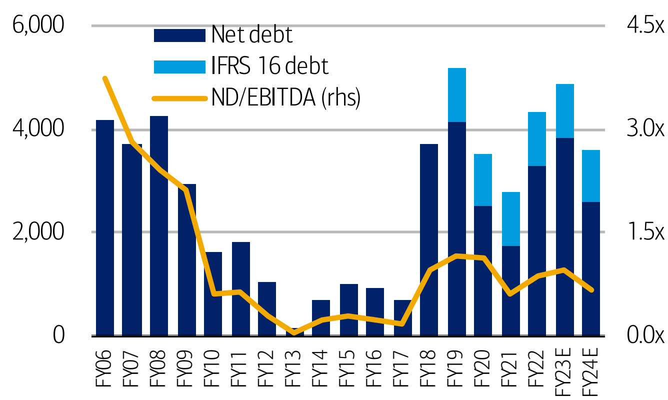


Source: BofA Global Research estimates, company report

BofA GLOBAL RESEARCH

Exhibit 77: Michelin net debt (EURm) and ND/EBITDA (rhs)

With ND/EBITDA at 0.9x, the balance remains relatively unconstrained.



Source: BofA Global Research estimates, company report

BofA GLOBAL RESEARCH

Nokian Tyres, Underperform (PO €7.2/sh)

Russia exit & replacement tire headwinds drive Q2 miss

Nokian reported its second quarter without its historically (very) profitable Russian operations. Top-line of €293m was particularly weak, missing consensus of €345m by c15% (BofAe: €361m) and was down -7.3%y/y on a like-for-like basis. Segment EBIT of €15.2m was also c11% below consensus. EBIT margin of 5.2% was slightly better (cons: 4.9%). Weakness was concentrated mainly in Passenger Car tyres (70% of sales), led by a volume decline of c-29%y/y, impacted by the Russia exit, and exacerbated by weaker replacement tire markets to which Nokian is more exposed vs. peers. Price/mix was particularly strong at +15.6%y/y (with price > mix), partially offset by forex a headwind of -4%. FCF burn was slightly better than expected at -€111m vs. cons: -€170m. Nokian has a net debt position of c€220m (Q1 23: €47m). Nokians balance sheet was helped in Q2 by the receipt of proceeds from the Russia disposal

Guidance unchanged but requires near perfect execution

Nokian kept its '23 guide unchanged, for sales of €1.3-1.5bn and an adj. EBIT margin of 6-8%. With only €530m of revenue booked in H1, much ground needs to be covered in H2 to meet guidance (to low-end €770m; to mid-point €870m) & cons (BofAe: €1.36bn; cons: €1.34bn). Based on historical seasonality (H1=43%), 1H'23 results imply full-year revenue of €1.2bn (i.e. H2=€700m). Nokian plans to fill the gap with contract volumes and higher output from its Nokia and Dayton plants. We estimate that revenue from toll-produced tires needs to reach c€70m in H2 (c1.1-1.2m units) to reach the lower-end, suggesting that near perfect execution is required on the 1.5m of secured capacity. Additional volumes from the Nokia and Dayton plants are needed to reach the mid-point. Accordingly, a guide cut is not impossible in our view, if toll volumes or market demand disappoints. At an EBIT level, we expect €81m for FY23E, well below the guidance mid-point of €98m and 6% below consensus (€86m).

Long path to recovery: capex, debt rising, FCF negative

Nokian's path to recovery starts begins in earnest once production from its new plant in Romania ramps up, with first commercial production expected only in 2025. In the interim, the company aims to maintain its market share through contract manufacturing arrangements, starting in FY23E with c1.5m units. However, these volumes are likely to contribute close to zero to margins and hence Nokian's profit recovery will be delayed until Romania is up and running and operating at a reasonable throughput level – most likely only in FY26/27E. This also not without execution risk. In the meantime, capex will rise to above €300m pa for FY23-25E (Exhibit 84), and net debt will rise. Free cash flow is likely to be firmly negative until FY26E (Exhibit 82). On our estimates, net debt should rise and peak at around €600-700m in FY26/27E with ND/EBITDA reaching 2.0x (Exhibit 83). The company aims to continue paying dividends, which we think will sum c€120m between FY24-27E.

Reiterate Underperform. PO moves to €7.2/sh (prior: €7.4)

Nokian's turnaround plan and margin ambition is no walk in the park. At 11%, consensus also fades the company's mid-term segment operating income margin target of 15%, suggesting that this has now become the consensus view. Nevertheless, we remain substantially below consensus on segment operating income (FY23-25E: -6.1%, -8.2%, -5.9%), preferring to adopt a 'wait and see' approach. As witnessed with Dayton, the Romania plant could take longer than expected to contribute positively towards profits and is not without execution risk. Further, at 15x 2YR forward earnings, Nokian's valuation is not cheap relative to premium peers Pirelli and Michelin which trade at closer to 8-9x and have considerably lower risk profiles and positive FCF. We trim our Price Objective to €7.2/sh, reflecting our updated earnings estimates. We retain our Underperform rating.

Exhibit 78: Nokian Tyres forecasts vs. Visible Alpha consensus (EURm)

For segment EBIT we are 6.1% below Visible Alpha consensus in FY23e, 8.2% below for FY24e and 5.9% lower in FY25E

Reporting metric	FY22	Q1 23	Q2 23	Q3 23E	Q3 23e VA Cons	FY23e	FY23e VA Cons	BofA vs VA Cons	FY24e	FY24e VA Cons	BofA vs VA Cons	FY25e
Net sales	1,776.0	236.7	293.2	402.0	386.3	1,364.9	1,336.7	2.1%	1,515.1	1,486.7	1.9%	1,720.0
EBITDA	366.9	18.5	41.3	56.6	57.1	178.4	201.2	-11.3%	244.2	247.1	-1.2%	293.9
EBITDA margin	*20.7%*	*7.8%*	*14.1%*	*14.1%*	*14.8%*	*13.1%*	*15.1%*		*16.1%*	*16.6%*		*17.1%*
Operating Result	**-116.3**	**-18.8**	**9.4**	**25.9**	**28.4**	**55.6**	**76.3**	**-27.1%**	**92.7**	**116.3**	**-20.3%**	**123.7**
EBIT margin	***-6.5%***	***-7.9%***	***3.2%***	***6.4%***	***7.3%***	***4.1%***	***5.7%***		***6.1%***	***7.8%***		***7.2%***
Segment EBIT	**221.1**	**-14.1**	**15.1**	**33.2**	**31.3**	**80.6**	**85.8**	**-6.1%**	**117.7**	**128.2**	**-8.2%**	**148.7**
Margin	*12.4%*	*-6.0%*	*5.2%*	*8.3%*	8.1%	5.9%	6.4%		*7.8%*	8.6%		*8.6%*
Net income	-175.5	-357.6	1.8	19.6	87.9	-306.9	-99.5	-208.5%	42.2	68.6	-38.4%	61.4
EPS (adjusted dil)	**1.30**	**-0.12**	**-0.01**	**0.14**	**0.16**	**0.22**	**0.37**	**-40.9%**	**0.41**	**0.57**	**-27.0%**	**0.63**
DPS, in EUR	0.55	0.00	0.00	0.00	0.00	0.11	0.39	-70.8%	0.17	0.46	-63.4%	0.22
Free cash flow	-116.0	-93.9	-108.9	-77.6	-126.6	-208.6	-107.8	-93.6%	-181.4	-140.5	-29.1%	-39.5
Net debt/(cash)	140.9	46.8	219.6	301.1		260.2			494.8			601.2
Segments												
PC Tyres												
Net sales	1,233.8	133.3	152.6	288.6	271.5	851.9	801.6	6.3%	984.9	936.5	5.2%	1,171.0
yoy growth	2.9%	-57.7%	-54.4%	-17.1%	-22.0%	-30.9%	-35.0%		15.6%	16.8%		18.9%
Sales Bridge												
Volume	*-25.2%*	*-44.8%*	*-16.1%*	*-27.5%*	*2.7%*	*-25.9%*	*-14.0%*		*17.4%*	*25.5%*		*21.6%*
Price/Mix	*19.8%*	*17.1%*	*8.7%*	*4.5%*	*7.0%*	*8.7%*	*11.8%*		*-2.0%*	*-4.6%*		*-2.7%*
Others	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*		*0.0%*	*0.0%*		*0.0%*
FX	*6.0%*	*-1.5%*	*-4.0%*	*-3.5%*	*-5.2%*	*-2.1%*	*-3.5%*		*-0.3%*	*-0.3%*		*0.0%*
Segment EBIT	**178.7**	**-4.6**	**0.5**	**20.9**	**31.7**	**46.0**	**54.1**	**-14.9%**	**71.7**	**91.7**	**-21.8%**	**98.5**
Margin	14.5%	-3.5%	0.3%	7.2%	11.7%	5.4%	6.7%		7.3%	9.8%		8.4%
EBIT Bridge												
Prior year	**298.7**	**74.0**	**64.1**	**-109.5**		**178.7**			**46.0**			**71.7**
Volume	-123.0	-55.0	-20.0	-37.3	14.4	-122.4	-27.6		46.3	70.6		74.5
Price / Mix	237.0	54.0	29.0	15.7	16.5	106.9	100.1		-17.0	-55.3		-26.9
Materials	-265.0	-45.0	6.0	12.8	5.2	12.0	2.6		22.0	16.2		0.0
Admin costs	-15.5	0.0	0.0	0.0	11.0	0.0	-5.9		-1.8	1.7		-1.8
Selling & Marketing	-3.2	1.0	7.0	3.1	6.3	16.2	14.3		-1.8	1.3		-5.9
Currency	32.0	-3.0	-1.0	-3.1		-9.3			-0.7			0.0
Others	-2.0	-30.6	-84.6	139.4		-136.0			-21.4			-13.1
Current year	**178.9**	**-4.6**	**0.5**	**20.9**	**31.7**	**46.0**	**54.1**	**-14.9%**	**71.7**	**91.7**	**-21.8%**	**98.5**
Heavy Tyres												
Net sales	273.4	68.2	67.5	66.9	65.5	267.9	268.9	-0.4%	285.3	278.5	2.5%	301.0
Segment EBIT	43.8	9.6	8.7	9.2	8.8	37.5	37.5	-0.1%	47.1	42.7	10.2%	51.2
Margin	16.0%	14.1%	12.9%	13.8%	13.4%	14.0%	14.0%		16.5%	15.3%		17.0%
Vianor												
Net sales	362.1	55.5	94.4	73.4	72.4	347.6	345.3	0.7%	356.3	352.3	1.1%	363.4
Segment EBIT	3.1	-13.5	9.5	1.5	-5.0	3.1	2.7	11.5%	2.7	3.4	-20.5%	2.8
Margin	0.9%	-24.3%	10.1%	2.0%	-6.9%	0.9%	0.8%		0.8%	1.0%		0.8%
Elimin./other												
Net sales	-93.3	-20.7	-21.3	-26.9	-23.1	-102.6	-78.2	-31.2%	-111.5	-81.1	-37.5%	-115.4
Segment EBIT	-341.9	-5.6	-3.6	1.6	-4.0	-6.0	-8.7	31.4%	-3.8	-9.1	58.3%	-3.8
Margin	366.5%	27.1%	16.9%	-5.9%	17.4%	5.8%	11.2%		3.4%	11.2%		3.3%

Source: BofA Global Research estimates, company report, Visible Alpha

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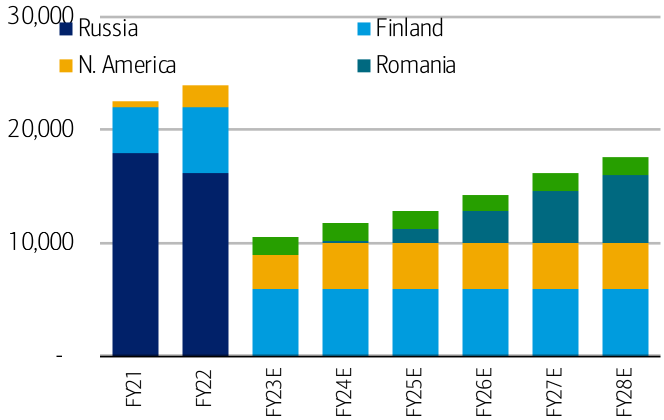
Exhibit 79: Nokian PC tire production by region ('000 units)

We see PC tire capacity recovering to c30% below prior capacity by FY28E, one year later than planned by management (FY27E)



Source: BofA Global Research estimates, company report

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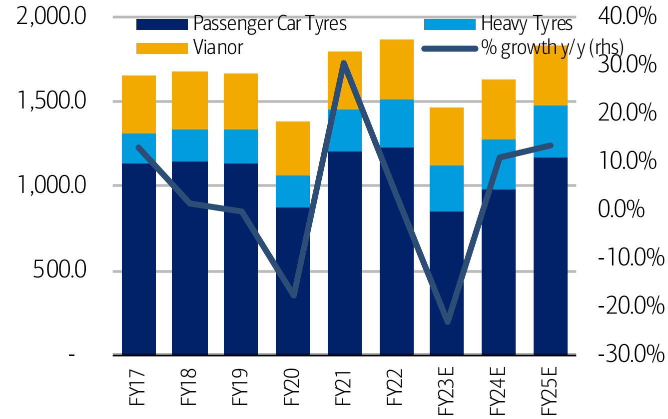
Exhibit 80: Nokian Revenue (EURm) and growth y/y (rhs)

We expect group revenues to decline by 23% y/y in FY23E, but will start to recover from FY24E as contract manufacturing increases



Source: BofA Global Research estimates, company report

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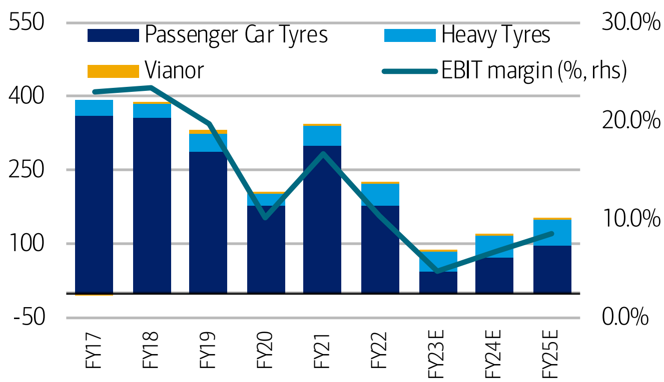
Exhibit 81: Nokian EBIT by segment (EURm) and EBIT margin (rhs)

We see group EBIT margin falling to 4.1% in FY23E before beginning a recovery in FY24E.



Source: BofA Global Research estimates, company report

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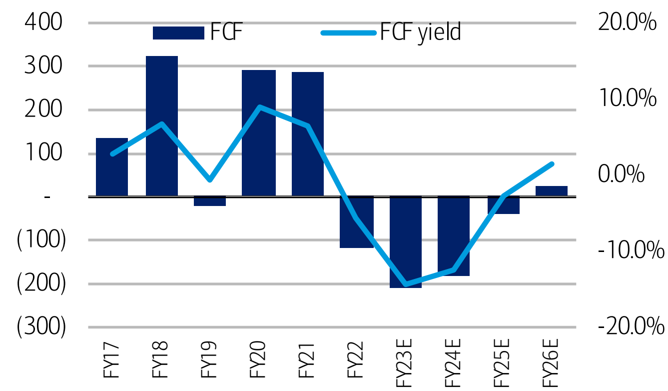
Exhibit 82: Nokian FCF (EURm) and FCF yield (rhs)

We expect Nokian's FCF yield to turn negative by FY24E. FY22-23E may prove positive on inventory realization.



Source: BofA Global Research estimates, company report

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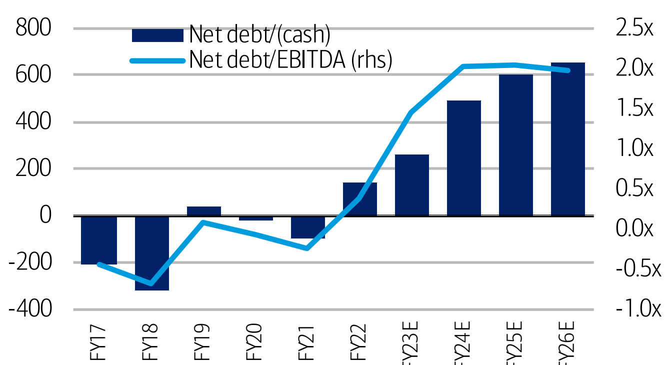
Exhibit 83: Nokian net debt (EURm) and ND/EBITDA (rhs)

Nokian has spent years debt-free, but ned debt will grow from FY23E onwards, with ND/EBITDA rising to c2.0x by 2025E

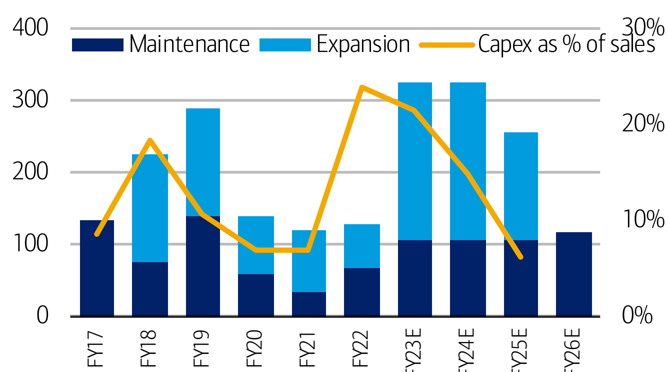


Source: BofA Global Research estimates, company report

BofA GLOBAL RESEARCH

Exhibit 84: Nokian capex (EURm) and capex as a % of sales (rhs)

We expect capex to begin rising in FY23E to fund the Romania plant. Capex in Russia amounted to only c€10-11m per year.



Source: BofA Global Research estimates, company report

BofA GLOBAL RESEARCH

Pirelli, Buy (PO €6.0/sh)

Q2: beats by 4% vs. recently raised company consensus

Pirelli's Q2 was strong on all metrics. While revenue of €1.74bn was just 2% above BofAe and consensus, adj. EBIT of €269m was 3/4% ahead (BofAe: €262m, company consensus: €259m). Adj. EBIT margin rose sequentially to 15.5% (BofAe: 15.1%; consensus: 15%) from 14.6% in Q1. FCF of €157m was also strong (BofAe: €177m; consensus: €133m). Revenue growth of 3.7%y/y was underpinned by price/mix tailwinds of +10.2% (c70/30 price/mix), partially offset by a volume decline of -1.1% and a forex headwind of -5.4%. At an EBIT level, price/mix effects of €147m more than offset net cost inflation of €63m and forex of €36m. Net debt further reduced to €3.1bn (from 1Q'23A: €3.24bn) and net debt/adj. EBITDA fell to c2.1x

Guidance: small raise but on conservative assumptions

FY23E revenue outlook reduced to '€6.5-6.7bn' from '€6.6-6.8bn', but the adj. EBIT margin corridor was lifted to '14.5-15%' from '14-14.5%'. At the midpoint, this implies a c2% raise on adj. EBIT. Net cash flow was unchanged at €440-470m. However, with 15.1% reached in 1H'23, the margin guide implies deterioration in H2, which we think is unlikely, given that we expect 1) carry-over pricing and mix to remain positive (BofAe: +1.8%y/y) ; 2) raw material tailwinds to start reflect (BofAe: +€100m); and 3) cost efficiencies to rise to €69m. Accordingly, notwithstanding forex headwinds (BofAe: -€65m) and weaker volumes (BofAe: -1.2%), we see 2H'23E adj. EBIT of €512m (1H'23: €517m), implying a margin of 15.8%, taking FY23E to 15.7%. Accordingly, we think that Pirelli should again raise its margin guide to '15-15.5%' at Q3. Consensus has risen significantly in recent months, but we remain 4/8% ahead for FY23-24E on adj. EBIT.

Key beneficiary of structural shift to EVs

Pirelli continues to see its sales mix shift more towards high value segments (prestige, premium, >18" and EV tires). By 2025E, we expect high value to contribute c75% to group revenue - Exhibit 86 (vs. FY22: 71%). The company continues to benefit from the shift to EV tires, which are priced 10-15% above than ICE tires. These dynamics are visible in Pirelli's volumes and price/mix, which continue to outperform the broader tire markets and key peers. Since 2017, the premium tire market has outperformed the global car tire market on average by 7ppts per annum, and Pirelli's high value volumes have outperformed this segment by c2ppts pa. Similarly, Pirelli's price/mix has outpaced peers by c2ppts pa. We attribute this to Pirelli's success here to a more customer centric R&D approach, which has helped the company: 1) win first with OEMs (high OE marked tire rate), driving market share gains (EV market share =1.5x ICE share in premium & prestige segments); and 2) secure an industry leading number of EV tire homologations (c400 worldwide), supporting strong sales growth in OE channels. Importantly, based on historically strong follow-through/loyalty rates (94%), these also provide excellent visibility for higher margin replacement tire sales which should start to accelerate late in FY24E when NEW EVs sold in FY22-23E enter their first tire replacement cycles.

Margin expansion & de-leveraging continue, reiterate Buy

Pirelli's ability to expand profits in 2023 under difficult macro conditions makes it appealing the tire sector, in our view. At a 1-year forward P/E of 8.4x and EV/EBIT of 7.3x, it trades at a c20% discount to its historical average and 8% below peer, Michelin, which we think has weaker fundamentals for 2H'23. We believe that Pirelli's higher relative exposure to EV and high-value tires and more resilient customer base (in prestige and premium cars) are key underpins, which should justify a premium. High net debt, which previously detracted from the investment case, is less of a factor and should fall to €2.3bn by year-end, with net debt/adj. EBITDA at 1.5x (FY24e: 1.2x). In-line with our update estimates, we raise our PO to €6.0/sh (prior: €5.8/share) and reiterate our Buy rating. Pirelli is also on our Q3 EMEA Best Ideas list (see the 3 July 2023 EMEA Best Ideas report).

Exhibit 85: Pirelli forecasts vs. Visible Alpha consensus (EURm)
We are 4.8% above consensus on adj. EBIT for FY23E and 7.7% ahead in 2024E.

Reporting metric	FY22	Q1 23	Q2 23	Q3 23E	Q2 23 VA Cons	BofA vs Cons	FY23E	FY23e VA cons	BofA vs Cons	FY24E	FY24e VA cons	BofA vs Cons	FY25E
Sales revenue	6,616	1,700	1,738	1,736	1,849	-6.1%	6,657	6,677	-0.3%	6,800	6,940	-2.0%	7,128
y-o-y change %	24.1%	11.7%	3.7%	-5.4%	0.8%		0.6%	0.9%		2.1%	3.9%		4.8%
EBIT adjusted	**979**	**248**	**269**	**281**	264	**6.5%**	**1,046**	998	**4.8%**	**1,160**	1,077	**7.7%**	**1,252**
EBIT margin adjusted	14.8%	14.6%	15.5%	16.2%	14.3%		15.7%	14.9%		17.1%	15.5%		17.6%
Net income adj. (after minorities)	570	142	156	163	170	-4.1%	603	573	5.3%	664	639	3.8%	742
Basic EPS (reported)	0.41	0.11	0.12	0.14	0.12	14.0%	0.49	0.45	9.0%	0.58	0.53	9.4%	0.66
Adj EPS, in EUR	**0.57**	**0.14**	**0.16**	**0.16**	0.16	3.8%	**0.60**	0.59	1.7%	**0.66**	0.67	-0.4%	**0.74**
Capex	303	121	70	87	117	-26.0%	354	415	-14.5%	354	438	-19.3%	356
DPS, in EUR	0.16	0.00	0.00	0.00	-	-	0.20	0.19	1.9%	0.23	0.24	-1.5%	0.26
Rep. free cash flow	332	-691	157	149	582	-74.5%	545	725	-24.7%	574	711	-19.3%	582
Net debt/(cash)	2,553	3,244	3,227	3,006			2,341			1,767			1,185
Segment data													
High Value Revenue	4,697	1,277	1,268	1,225	1,288	-4.9%	4,846	5,024	-3.5%	5,041	5,244	-3.9%	5,342
volume growth %	24.3%	4.9%	6.5%	-1.0%			3.7%			4.9%			5.0%
Standard Revenue	1,919	423	471	510	519	-1.8%	1,812	1,684	7.5%	1,759	1,702	3.4%	1,785
volume growth %	-6.3%	5.8%	-5.0%	-9.6%			-5.6%			-2.9%			1.5%
Group Revenue growth bridge													
Volume	-1.0%	-3.1%	-1.1%	-2.8%	0.3%		-1.1%	-1.3%		3.7%	1.9%		3.8%
Price/mix	19.7%	15.1%	10.2%	5.2%	6.9%		8.1%	7.5%		0.5%	2.3%		1.0%
Others/Perimeter	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%		0.0%	0.0%		0.0%
Exchange rate	5.4%	-0.3%	-5.4%	-7.8%	-2.2%		-6.4%	-5.3%		-2.1%	-0.3%		0.0%
Group EBIT Bridge													
Opening Adj EBIT	816	229	253	272	271		979	978		1,046	998		1,160
Volumes	-22	-20	-8	-22	2		-30	(37)		107	54		111
Price/mix	891	198	147	76	14		451	356		25	85		51
FX	31	-15	-36	-54	(9)		-174	(120)		-56	(7)		0
Efficiencies	136	10	21	40	29		110	93		0	66		50
Raw materials costs	-492	-78	-22	45	(7)		13	(32)		143	48		0
Other input costs	-328	-69	-62	-62	(62)		-243	(220)		-56	(113)		-75
D&A/Other costs	-55	-6	-24	-15	(1)		-60	(25)		-49	(51)		-45
Reconciliation	0	0	0	0	26		0	5		0	(2)		0
Closing Adj EBIT	**979**	**248**	**269**	**281**	**264**	**1.9%**	**1,046**	**998**	**4.8%**	**1,160**	**1077**	**7.7%**	**1,252**

Source: BofA Global Research estimates, company report, Visible Alpha

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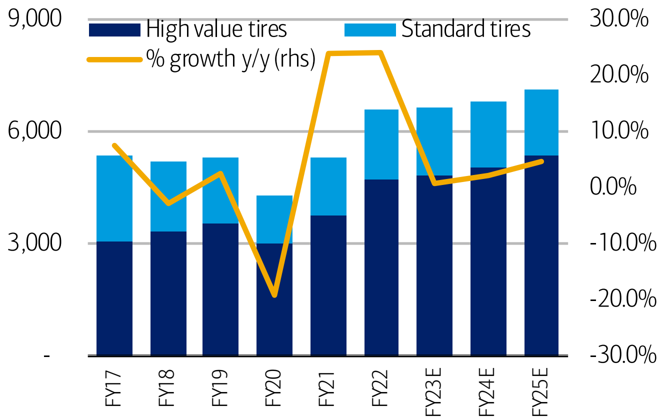
Exhibit 86: Pirelli revenue by segment and % growth (rhs)

We expect revenue to grow by 0.6% in FY23E, as strong price/mix is offset by forex headwinds

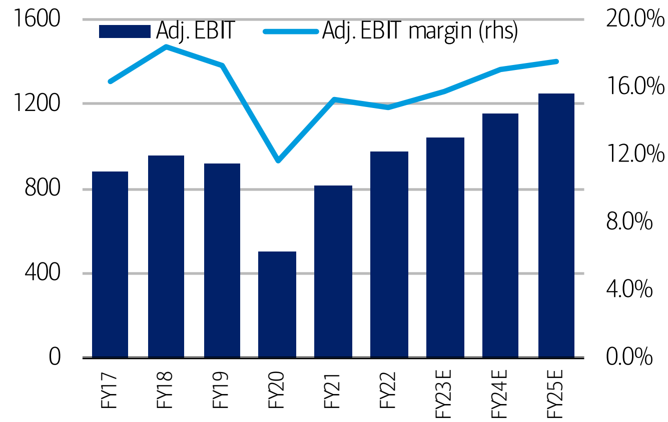


Source: BofA Global Research estimates, company report

BofA GLOBAL RESEARCH

Exhibit 87: Pirelli Adj. EBIT (EURm) and adj. EBIT margin (rhs)

We expect slight EBIT margin contraction to reach 15.7% in FY23E, rising to 17% in FY24E

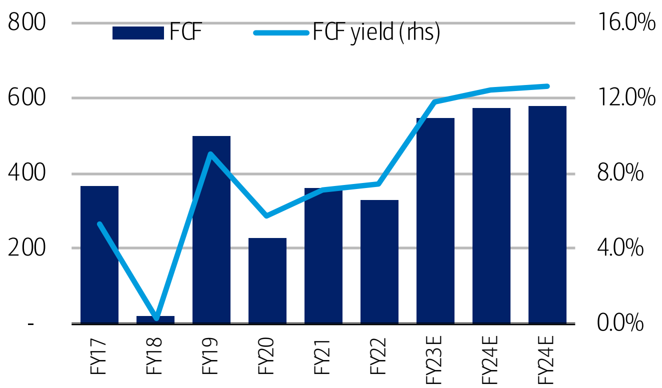


Source: BofA Global Research estimates, company report

BofA GLOBAL RESEARCH

Exhibit 88: Pirelli FCF (EURm) and FCF yield (rhs)

Pirelli is trading on a FCF yield of c12% on our estimates



Source: BofA Global Research estimates, company report

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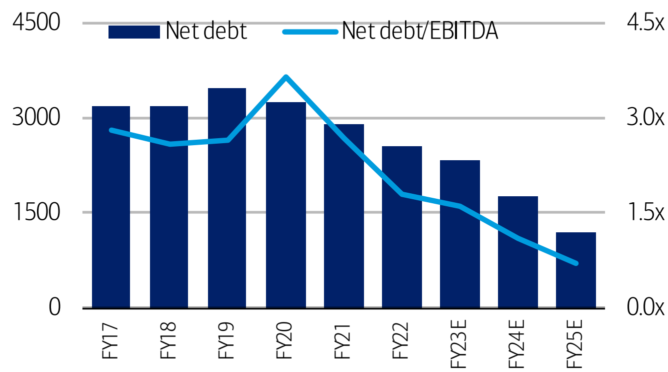
Exhibit 89: Pirelli net debt (EURm) and ND/EBITDA (rhs)

We see ND/EBITDA declining to 1.6x in FY23E, and 1.1x in FY24E

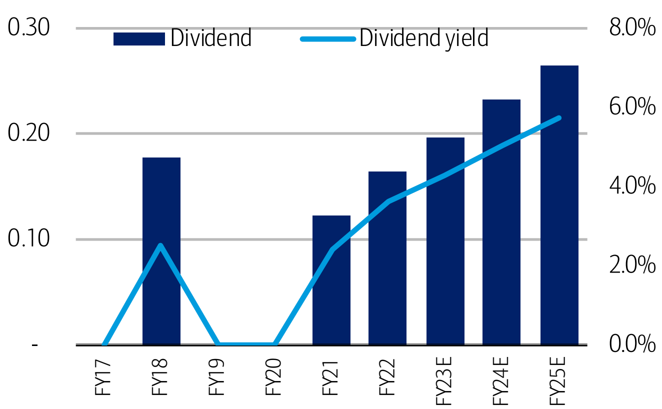


Source: BofA Global Research estimates, company report

BofA GLOBAL RESEARCH

Exhibit 90: Pirelli dividend (EUR/sh) and dividend yield (rhs)

We see Pirelli's dividend yield reaching 4% near-term and breaching 5% by 2025



Source: BofA Global Research estimates, company report

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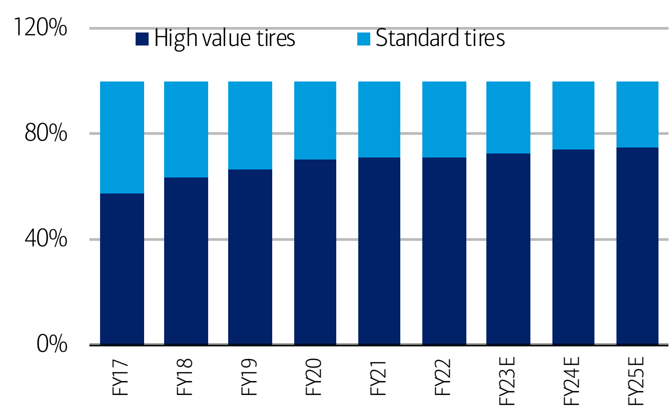
Exhibit 91: Pirelli revenue contribution by segment

Pirelli's shift to high value tires continues, augmented by the transition to BEVs and market share gains



Source: BofA Global Research estimates, company report

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Continental, Neutral (PO €75/sh)

Mixed Q2 for Conti: Tires strong, Auto's weak, again.

Continental (Conti) pre-released its Q2 results already on 12 July. However, the Automotive Group (Autos) remained a key focus area, as it reported an adj. EBIT margin of just -0.6% in Q2 (Q1 23: +0.8%) due to higher-than-expected negative effects from FX translation and special freight costs. We were hoping that more price negotiations with OEMs would have been concluded already in Q2, but this has been delayed to Q3. Apart from that, it was a solid quarter for Autos: Conti outperformed global LVP by c5% (like in Q1 23) and reported €8.6bn order intake for Q2, driven by €5.2bn in Autonomous Mobility. Tires and Contitech (again) compensated a bit the earnings shortfall in Autos. The Tires segment reported 13.7% adj. EBIT margin for Q2 (ahead of FY23 guidance of 12-13%) as price/mix effects (7.7% of sales) offset diminishing cost inflation (c€-50m). Apart from these earnings figures, FCF generation remained subdued (€-14m in Q2) due to higher capex & working capital requirements.

FY23 automotive guidance still ambitious

Conti's automotive segment just reached break-even in terms of adj. EBIT in H1 23, vs a FY23 guide for a 2-3% margin. This implies that the company needs to achieve at least a 4% margin in Automotive in H2 23. Around 50% of this (=2% of sales in H2) should be achieved through price increases, while a further €150m-200m (=c1.5%-2.0% of sales) should come from R&D reimbursements, which are usually booked in Q4. However, we expect additional headwinds from forex (=c€-50m = 0.5% of H2 sales), mainly related to the Mexican Peso and Chinese Renminbi. Accordingly, we expect weaker automotive revenues, and as a result forecast an Automotive adj. EBIT margin of only 1.6%, implying a miss to company guidance for 2-3%. UAW strikes could pose more downside.

Potential UAW strike not yet considered in Conti's guide

Potential strikes by the UAW (United Auto Workers) union in the US could lead to production shut-downs as of 15th Sep'23 (see: Automotive Industry: Potential UAW strike = ~2% risk to GDP as the clock counts down to 9/14 10 August 2023), that may last between 2-8 weeks. We think two weeks would hurt Q3 results a bit, but that shortfalls could be caught up in Q4. However, more than 4 weeks would be more difficult to overcome. We estimate that Conti generates c€3.0bn in Automotive revenues with the Detroit 3 in North America. Accordingly, each month of strike could cost c€150m in revenues and c€50m in EBIT (= c0.2% of sales).

... while the Tires guidance is rather cautious

Conti still guides for a 12-13% adj. EBIT margin in Tires for FY23, despite reducing its segment revenue guide by €500m to €14bn-15bn at H1 results and achieving 13.6% in H1. The company argues that the margin will come down due to a higher OEM sales share and less favourable raw material price effects vs. peers. The main reason for this is that the company has stopped sourcing Butadiene and Carbon Black from Russia in FY22. Nevertheless, has highlighted in this report, other input costs such as natural rubber have declined considerably in 2023 YTD. We expect a 13.4% adj. EBIT margin for 2H'23, implying a c13.3% margin for FY23, above the margin guide corridor.

Rating unchanged at Neutral, PO €75 (down from €76)

Despite raising estimates, our PO moves to €75 (prior: €76), as we apply lower multiples, to reflect: 1) a split in our Rubber valuation between Tires & Contitech (Contitech is valued lower than Tires) and 2) lower valuation premiums & discounts to the peers. While it's not difficult to find upside in our valuation, we expect a slight guidance miss for FY23 (In Automotive & on FCF) to weigh on sentiment. Accordingly, we reiterate our Neutral rating. At our PO of €75, Conti would trade at a 12m fwd EV/Sales of 0.54x (vs spot 0.50x), 12m fwd EV/adj. EBIT of 8.1x (vs spot: 7.5x) and a 12m fwd PE of 9.0x (vs spot: 8.0x.

Exhibit 92: Overview on our financial forecasts for Continental AG (EURm)

We are 3.8% below consensus for FY23E on adj. EBIT and 1.5% ahead for FY24e.

Group (EURm)	FY22	1Q'23	2Q'23	3Q'23E	3Q'23E VA cons	4Q'23E	FY23E	FY23E VA cons	FY24E	FY24E VA cons	FY25E	FY25E VA cons	FY26E
Group Sales	**39,409**	**10,306**	**10,426**	**10,509**	**10,681**	**10,678**	**41,919**	**42,619**	**43,275**	**44,160**	**45,056**	**46,076**	**46,986**
% chg y/y	16.7%	11.1%	10.4%	1.1%	-72.9%	3.8%	6.4%	8.1%	3.2%	3.6%	4.1%	4.3%	309.6%
Adj. EBIT (Group)	**1,951**	**578**	**497**	**691**	**677**	**752**	**2,518**	**2,616**	**3,058**	**3,013**	**3,686**	**3,491**	**4,212**
as % of sales	**4.9%**	**5.6%**	**4.8%**	**6.6%**	**6.3%**	**7.0%**	**6.0%**	**6.1%**	**7.1%**	**6.8%**	**8.2%**	**7.6%**	**9.0%**
R&D Expense	-4,165	-1,030	-1,003	-1,106	-919	-1,094	-4,232	-3,679	-4,409	-3,700	-4,402	-3,754	-4,484
as % of sales	-10.6%	-10.0%	-9.6%	-10.5%	-8.6%	-10.2%	-10.1%	-8.6%	-10.2%	-8.4%	-9.8%	-8.1%	-9.5%
Special items *	-1,196	-47	-121	-186	-82	-36	-390	-332	-225	-211	-208	-213	-186
Reported EBIT	755	531	377	504	595	716	2,129	2,284	2,834	2,802	3,479	3,278	4,027
as % of sales	1.9%	5.2%	3.6%	4.8%	5.6%	6.7%	5.1%	5.4%	6.5%	6.3%	7.7%	7.1%	8.6%
Profit before tax	557	497	355	434	516	636	1,921	2,033	2,529	2,548	3,259	3,047	3,884
Net income	67	382	209	294	358	447	1,331	1,428	1,759	1,784	2,267	2,140	2,709
EPS, basic (EUR)	**0.33**	**1.91**	**1.04**	**1.47**	**1.79**	**2.23**	**6.65**	**7.26**	**8.80**	**8.80**	**11.34**	**10.45**	**13.55**
EPS, adjusted diluted	4.45	1.91	1.04	2.15	-	2.37	8.11	7.68	9.63	9.38	12.11	11.18	14.24
DPS (EUR)	1.50						2.00	2.51	2.64	3.16	3.40	3.71	4.06
Adj. FCF *	**200**	**-949**	**-14**	**331**	**491**	**1,113**	**515**	**826**	**955**	**1,226**	**1,310**	**1,753**	**1,813**
Capex	-2,133	-443	-529	-702	-593	-756	-2,431	-2,499	-2,467	-2,529	-2,568	-2,560	-2,725
Net debt/(cash)	4,499	5,539	6,076	5,743		4,635	4,600	4,240	4,072	3,461	3,327	2,364	2,237
Segments (EURm)													
Automotive													
Revenue	**18,322**	**5,015**	**5,133**	**5,151**	**5,210**	**5,118**	**20,417**	**20,836**	**21,842**	**22,368**	**23,268**	**23,996**	**24,797**
% chg y/y	19.3%	18.1%	19.0%	4.2%	-71.6%	6.2%	11.4%	13.7%	7.0%	7.3%	6.5%	7.3%	6.6%
Adj EBIT	**-30**	**39**	**-32**	**155**	**163**	**174**	**336**	**456**	**765**	**756**	**1,264**	**1,080**	**1,702**
as % of sales	**-0.2%**	**0.8%**	**-0.6%**	**3.0%**	**3.1%**	**3.4%**	**1.6%**	**2.2%**	**3.5%**	**3.4%**	**5.4%**	**4.5%**	**6.9%**
Tires													
Revenue	**14,005**	**3,463**	**3,459**	**3,537**	**3,633**	**3,786**	**14,245**	**14,553**	**14,088**	**14,705**	**14,370**	**15,005**	**14,569**
% chg y/y	18.6%	5.1%	2.3%	-2.5%	-74.1%	2.2%	1.7%	3.9%	-1.1%	1.0%	2.0%	2.0%	1.4%
Adj EBIT	**1,842**	**469**	**474**	**466**	**437**	**502**	**1,911**	**1,865**	**1,932**	**1,940**	**1,985**	**2,067**	**1,998**
as % of sales	**13.1%**	**13.5%**	**13.7%**	**13.2%**	**12.0%**	**13.3%**	**13.4%**	**12.8%**	**13.7%**	**13.2%**	**13.8%**	**13.8%**	**13.7%**
ContiTech													
Revenue	**6,594**	**1,731**	**1,742**	**1,764**	**1,787**	**1,753**	**6,990**	**6,930**	**7,234**	**7,143**	**7,487**	**7,423**	**7,786**
% chg y/y	11.5%	10.2%	8.0%	2.1%	-72.9%	4.2%	6.0%	5.1%	3.5%	3.1%	3.5%	3.9%	4.0%
Adj EBIT	**308**	**109**	**109**	**120**	**118**	**118**	**456**	**451**	**561**	**530**	**637**	**602**	**712**
as % of sales	**4.7%**	**6.3%**	**6.3%**	**6.8%**	**6.6%**	**6.7%**	**6.5%**	**6.5%**	**7.8%**	**7.4%**	**8.5%**	**8.1%**	**9.1%**
Contract Manufacturing													
Revenue	**666**	**154**	**136**	**113**	**106**	**89**	**492**	**508**	**345**	**327**	**172**	**256**	**86**
% chg y/y	-25.2%	-26.5%	-23.9%	-23.2%	-84.1%	-31.5%	-26.0%	-23.7%	-30.0%	-35.6%	-50.0%	-21.6%	117.4%
Adj EBIT	**20**	**10**	**6**	**0**		**0**	**15**		**0**		**0**		**0**
as % of sales	**3.0%**	**6.2%**	**4.3%**	**0.0%**		**0.0%**	**3.1%**		**0.0%**		**0.0%**		**0.0%**
Consolidation													
Revenue	-178	-57	-44	-56	-54	-68	-225	-208	-232	-383	-242	-604	-252
Adj. EBIT (Group)	-189	-48	-60	-50	-41	-42	-200	-156	-200	-213	-200	-259	-200

Source: BofA Global Research estimates, company report, VA (Visible Alpha) consensus; * Special items include PPA, restructuring expenses & consolidation effects

BofA GLOBAL RESEARCH

Key abbreviations and acronyms used in this report:

BEV: battery electric vehicle
CV: commercial vehicle
EV: electric vehicle
LV: light vehicle
LVP: LV production
MV: motor vehicle
OE(M): original equipment (manufacturer)
PC: passenger car
RT: replacement tires
SUV: sport utility vehicle

Exhibit 93: Stocks mentioned
Prices and ratings for stocks mentioned in this report

BofA Ticker	Bloomberg ticker	Company name	Price	Rating
CTTAF	CON GY	Continental AG	EUR 66.9	B-2-7
CTTAY	CTTAY US	Continental AG	US$ 7.28	C-2-7
MGDDF	ML FP	Michelin	EUR 28.31	C-3-8
MGDDY	MGDDY US	Michelin	US$ 15.37	B-3-8
NKRKF	TYRES FH	Nokian Tyres	EUR 7.94	B-3-8
PLLIF	PIRC IM	Pirelli	EUR 4.544	B-1-7

Source: BofA Global Research

BofA GLOBAL RESEARCH

Investment Rationale

Continental AG

Conti has initiated significant restructuring efforts since 2019, by which the company aims to return to an adj. EBIT margin level of 8-11% mid-term. We still believe in these targets, but expect the company to achieve these targets only in 2026e. We expect weak results in H2 23, followed by a good recovery in 2024/25, but it still takes some time.

Michelin

We see Michelin as one of the few companies in our universe that can pass on price increases from rising raw material prices (although often lagged) and hold firm when prices fall. It's strong brand and premium product offering support. Key industry trends include: Increased regulations and the shift towards EVs & SUVs should continue to sustain positive mix variances. Ongoing productivity and competitiveness gains further augments margins. However, the company is not immune to cyclical risk.

Price objective basis & risk

Continental AG (CTTAF / CTTAY)

Our 12-month price objective of €75/sh (ADR: US$8.20) is based on a SOTP analysis. We value Conti on 2Y rolled estimates, taking the average of EV/Sales, EV/EBIT and P/E multiples as follows: (1) Tires: at 0.8x EV/Sales, 8.0x EV/EBIT and 8.1x earnings, in line with peers (average of Pirelli, Michelin, Bridgestone, Nokian Tires, Hankook, Nexen, Goodyear, Yokohama) (2) For Automotive Technologies, we apply multiples of 0.4x EV/Sales, 5.2x EV/EBIT and 5.2x earnings, implying a c30% discount to key peers (average of Valeo, Forvia, Denso, Magna International, Hyundai Mobis), on account of its lower margin profile. (3) ContiTech at 0.4x EV/Sales, 6.6x EV/EBIT and 6.2x earnings, in line with its peer TI Fluid. We place zero value on Contract Manufacturing since it is ramping down over the next 2-3 years.

Downside risks to our price objective are: 1) lower than expected tyre or light vehicle production volumes, 2) negative pricing arising from increased competitive/customer pressure and/or indexation clauses to raw material prices, 3) raw material costs developing differently than expected, and in the particular case of headwinds in the Rubber Group, not being offset by responsive pricing policies, 4) unfavourable currency developments, 5) lower than expected free cash flow generation due to negative working capital developments, 6) automotive component recalls/warranty claims.

Michelin (MGDDF / MGDDY)

Our 12-month price objective of €27.4/sh (ADR: $15.1/sh) derived based on a combination of 1. DCF (25% weighting) & 2. Applied historical multiples (75%). Our historical multiples include P/E, EV/EBIT & EV/sales. We allocate a higher weight to earnings based metrics to reflect the market's focus on near term earnings prospects in automotive suppliers. However, we also include a DCF valuation to account for longer term trends and through-the-cycle earnings prospects. In our DCF, we apply a WACC of 9.6% and a terminal growth rate of 1.9%. Our applied valuation multiples are in-line with Michelin's long term historical multiples and are as follows: P/E: 9.0x, EV/EBIT: 7.5x & EV/Sales: 0.9x

Risks to our PO are: Upside 1) higher-than-expected volumes, 2) stronger pricing arising from decreased competitive pressure and/or indexation clauses to raw material prices, 3) lower raw material costs, 4) Favourable currency developments (weaker Euro vs. earning currencies), 5) higher-than-expected cost savings, 6) higher free cash flow generation due to positive working capital developments or lower-than-expected capex.

Downside risks are: 1) Lower-than-expected volumes, 2) weaker pricing due to increased competitive pressures/imports from Asian competitors, 3) inability to pass-through higher raw material costs, 4) Unfavourable currency developments (stronger Euro vs. earning currencies), 5) Lower-than-expected cost savings, 6) Lower free cash flow due to higher capex & working capital

Nokian Tyres (NKRKF)

Our 12-month price objective of €7.2/sh is is based on a combination of 1. DCF (25% weighting) and 2. Applied historical multiples (75%). Our multiples include P/E, EV/EBIT and EV/sales. We allocate a higher weighting to the latter to reflect the market's focus on near term earnings prospects in automotive suppliers. the inclusion of a DCF factors in longer term trends and through-the-cycle earnings prospects. In our DCF, we apply a WACC of 10.0% and a terminal growth rate of 1.3%. Our applied valuation multiples are in-line with tire peers with similar margin and return profiles are as follows: P/E: 10.0x, EV/EBIT: 6.0x and EV/Sales: 0.7x.

Upside risks: 1) higher than expected sales: in Russia where economic growth is highly correlated to oil & commodity prices and in the US through higher market penetration. 2) stronger than expected price realisation, 3) higher free cash flows due to positive working capital developments or lower than expected capex (despite the new plants). 4) a swift end to the Russia/Ukraine conflict and sanctions.

Downside risks: 1) lower sales caused by a deteriorating environment in Russia, 2) warm weather conditions in Central & Eastern Europe negatively impacting winter tyre sales, 3) negative pricing impacts of increased competitive pressure, 4) Higher Raw material price inflation not covered by price increases 5) lower FCF on negative working capital or higher capex, and 7) a decision/mandate to fully exit its operations in Russia

Pirelli (PLLIF)

Our 12-month price objective of €6.0/sh is based on a combination of 1. DCF (25% weighting) and 2. Peer multiples (75%), including P/E, EV/EBIT and EV/sales. We allocate a higher weighting to earnings based metrics to reflect the market's focus on near term earnings prospects in automotive suppliers and use peer multiples due to Pirelli's shorter listing history as a consumer tire focused player (IPO 2017). However, we also introduce a DCF valuation to account for longer term trends and through-the-cycle earnings prospects. In our DCF, we apply a WACC of 9.9% and a terminal growth rate of 2%. Our applied valuation multiples are as follows: P/E: 10.3x, EV/EBIT: 7.5x and EV/Sales: 1.3x.

Risks to our PO:
Upside: 1) higher than expected volumes, 2) stronger pricing driven by more buoyant Prestige & Premium tire markets, 3) favourable currency developments by region, 4) higher cost savings as part of its efficiency programme, 5) higher free cash flow generation on positive working capital developments or lower capex.

Downside: 1) execution risks linked to expansion plans in the high value segment 2) Weaker volumes and pricing due to increased competition in the high value segment, 3) overhang risk if core shareholders decide to exit, 4) lower than expected efficiency gains leading to margin dilution, negative currency impacts (depreciation of regions outside of Europe).

Analyst Certification

We, Michael Jacks, CFA and Horst Schneider, hereby certify that the views each of us has expressed in this research report accurately reflect each of our respective personal views about the subject securities and issuers. We also certify that no part of our respective compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

EMEA - Autos & Auto Components Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	ALD	ALLDF	ALD FP	Horst Schneider
	Autoliv	ALIV	ALIV SS	Michael Jacks, CFA
	Autoliv	ALV	ALV US	Michael Jacks, CFA
	Forvia	FURCF	FRVIA FP	Michael Jacks, CFA
	Mercedes-Benz Group AG	MBGAF	MBGAF US	Horst Schneider
	Mercedes-Benz Group AG	XQEJF	MBG GY	Horst Schneider
	Pirelli	PLLIF	PIRC IM	Michael Jacks, CFA
	Stellantis NV	STLA	STLA US	Michael Jacks, CFA
	Stellantis NV	XVWGF	STLAM IM	Michael Jacks, CFA
	Traton SE	TRATF	8TRA GY	Michael Jacks, CFA
	Traton SE	XTREF	8TRA SS	Michael Jacks, CFA
	Valeo	VLEEF	FR FP	Michael Jacks, CFA
	Valeo	VLEEY	VLEEY US	Michael Jacks, CFA
	Vitesco Technologies	VTSCF	VTSC GY	Michael Jacks, CFA
	Volkswagen AG	VLKAF	VOW GY	Horst Schneider
	Volkswagen AG	VLKPF	VOW3 GY	Horst Schneider
	Volkswagen AG	VWAGY	VWAGY US	Horst Schneider
	Volkswagen AG	VWAPY	VWAPY US	Horst Schneider
NEUTRAL				
	Aston Martin Lagonda	AMGDF	AML LN	Horst Schneider
	Continental AG	CTTAY	CTTAY US	Horst Schneider
	Continental AG	CTTAF	CON GY	Horst Schneider
	Porsche	POAHY	POAHY US	Horst Schneider
	Porsche AG	DRPRF	P911 GY	Horst Schneider
	Porsche AG	DRPRY	DRPRY US	Horst Schneider
	Porsche Automobil Holding SE	POAHF	PAH3 GY	Horst Schneider
	Renault	RNSDF	RNO FP	Horst Schneider
UNDERPERFORM				
	BMW	BAMXF	BMW GY	Horst Schneider
	BMW	BMWYY	BMWYY US	Horst Schneider
	Michelin	MGDDF	ML FP	Michael Jacks, CFA
	Michelin	MGDDY	MGDDY US	Michael Jacks, CFA
	Nokian Tyres	NKRKF	TYRES FH	Michael Jacks, CFA
	Schaeffler AG Pfd	SCFLF	SHA GY	Horst Schneider
RVW				
	Norma Group	NOEJF	NOEJ GY	Michael Jacks, CFA

Disclosures

Important Disclosures

Equity Investment Rating Distribution: Autos Group (as of 30 Jun 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships [R1]	Count	Percent
Buy	54	48.21%	Buy	28	51.85%
Hold	31	27.68%	Hold	20	64.52%
Sell	27	24.11%	Sell	11	40.74%

Equity Investment Rating Distribution: Industrials/Multi-Industry Group (as of 30 Jun 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships [R1]	Count	Percent
Buy	45	50.00%	Buy	26	57.78%
Hold	26	28.89%	Hold	17	65.38%
Sell	19	21.11%	Sell	10	52.63%

Equity Investment Rating Distribution: Machinery/Diversified Manufacturing Group (as of 30 Jun 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships [R1]	Count	Percent
Buy	31	46.97%	Buy	11	35.48%
Hold	18	27.27%	Hold	6	33.33%
Sell	17	25.76%	Sell	8	47.06%

Equity Investment Rating Distribution: Technology Group (as of 30 Jun 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	212	53.13%	Buy	103	48.58%
Hold	89	22.31%	Hold	45	50.56%
Sell	98	24.56%	Sell	30	30.61%

Equity Investment Rating Distribution: Telecommunications Group (as of 30 Jun 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	57	55.88%	Buy	39	68.42%
Hold	21	20.59%	Hold	13	61.90%
Sell	24	23.53%	Sell	15	62.50%

Equity Investment Rating Distribution: Transport/Infrastructure Group (as of 30 Jun 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	72	52.94%	Buy	42	58.33%
Hold	29	21.32%	Hold	13	44.83%
Sell	35	25.74%	Sell	17	48.57%

Equity Investment Rating Distribution: Utilities Group (as of 30 Jun 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	80	51.61%	Buy	52	65.00%
Hold	40	25.81%	Hold	29	72.50%
Sell	35	22.58%	Sell	23	65.71%

Equity Investment Rating Distribution: Global Group (as of 30 Jun 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	1877	53.28%	Buy	1040	55.41%
Hold	815	23.13%	Hold	464	56.93%
Sell	831	23.59%	Sell	385	46.33%

R1 Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

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Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster R2
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

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