Brazil Auto Parts

Choose a Seat and Drive Along; Randon Is Our Top-Pick

Initiating Coverage: Randon | Tupy | Iochpe-Maxion | Fras-le | Marcopolo

We are initiating coverage of Brazilian Auto Parts with a heterogeneous view across the sector. Despite a challenging near-term momentum in the auto sector (mainly due to semiconductors shortage and raw material prices surge), **we see investment opportunities**: (i) Randon is our top-pick (Buy | TP R$18/sh.), based on its strong operating performance and appealing valuation levels; followed by (ii) Tupy (Buy | TP R$32/sh.) and (iii) Iochpe-Maxion (Buy | TP R$27/sh.), as well-diversified alternatives to external markets' exposure at an attractive valuation; with cautious views on (iv) Fras-le (Neutral | TP R$16/sh.) due to stretched valuation; and (v) Marcopolo (Neutral | TP R$2.80/sh.) on market concerns and profitability sustainability in the long-term.

Why to read this report? (i) actionable approach on valuation, using our stock picking framework to support a relative call; (ii) detailed understanding of each company's market exposure; (iii) in-depth analysis of the automotive sector in Brazil and worldwide; (iv) ESG analysis on each name.

The automotive sector in the context of COVID-19. Following (i) raw materials price surge and (ii) semiconductors shortage, we see heterogeneous implications for the auto sector: (a) light vehicles continue to be the most impacted categories on volumes worldwide, especially in August due to supply chain worsening (~30% fall vs. 2019), while (b) heavy vehicles showed a better relative performance, especially in Brazil (+32% vs. 2019 levels in August).

Our preferences in the sector. Despite its higher relative exposure to Brazil's macro environment (~86% of revenues), our preference relies on Randon (Buy, top-pick) due to its strong operating momentum bolstered by agribusiness, in our view, (EBITDA in 2021E +64% vs 2019 [pre-pandemic], with XPe +11% vs. consensus) while trading at an appealing level of 4.9x 2022 EV/EBITDA (-19% vs. its historical average). On a safer side, we believe market diversification should play an important role on top-line resilience, with positive views on Tupy (Buy) and Iochpe-Maxion (Buy) in that regard (~18-25% of revenues originated domestically, respectively), trading at a cheap valuation (~25-20% discount vs. historical average, respectively).

A more cautious view. While we do like Fras-le's (Neutral) market positioning and welcome its strong momentum, we see valuation already pricing its recent operating improvement and better relative top-line resilience (valuation of ~7.2x well-above its historical average of ~5.7x), with stock liquidity as a main issue. Finally, we have a more cautious approach on Marcopolo (Neutral) due to (i) market concerns on (a) urban buses (ride-sharing competition) and (b) road buses (uncertainties surrounding the recovery of tourism-exposed products, Marcopolo's most value-added product) and (ii) fair valuation.

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Company	Ticker	Current Price	Target Price	Upside	Rec.	EBITDA (R$ mn)		P/E		EV/EBITDA		Mkt. Cap (R$ mn)
						2021E	2022E	2021E	2022E	2021E	2022E	
Randon	RAPT4	R$ 11.20	R$ 18.00	61%	Buy	R$ 1,196	R$ 1,329	9.2x	9.1x	5.3x	4.9x	R$ 4,086
Tupy	TUPY3	R$ 20.20	R$ 32.00	58%	Buy	R$ 831	R$ 994	12.5x	8.5x	4.6x	3.9x	R$ 2,911
Iochpe-Maxion	MYPK3	R$ 18.40	R$ 27.00	47%	Buy	R$ 1,548	R$ 1,615	5.8x	5.9x	4.3x	4.0x	R$ 2,828
Fras-Le	FRAS3	R$ 14.15	R$ 16.00	13%	Neutral	R$ 422	R$ 480	15.4x	12.5x	8.4x	7.2x	R$ 3,079
Marcopolo	POMO4	R$ 2.83	R$ 2.80	-1%	Neutral	R$ 48	R$ 354	42.0x	29.0x	233.7x	10.4x	R$ 2,564

Source: XP Research.

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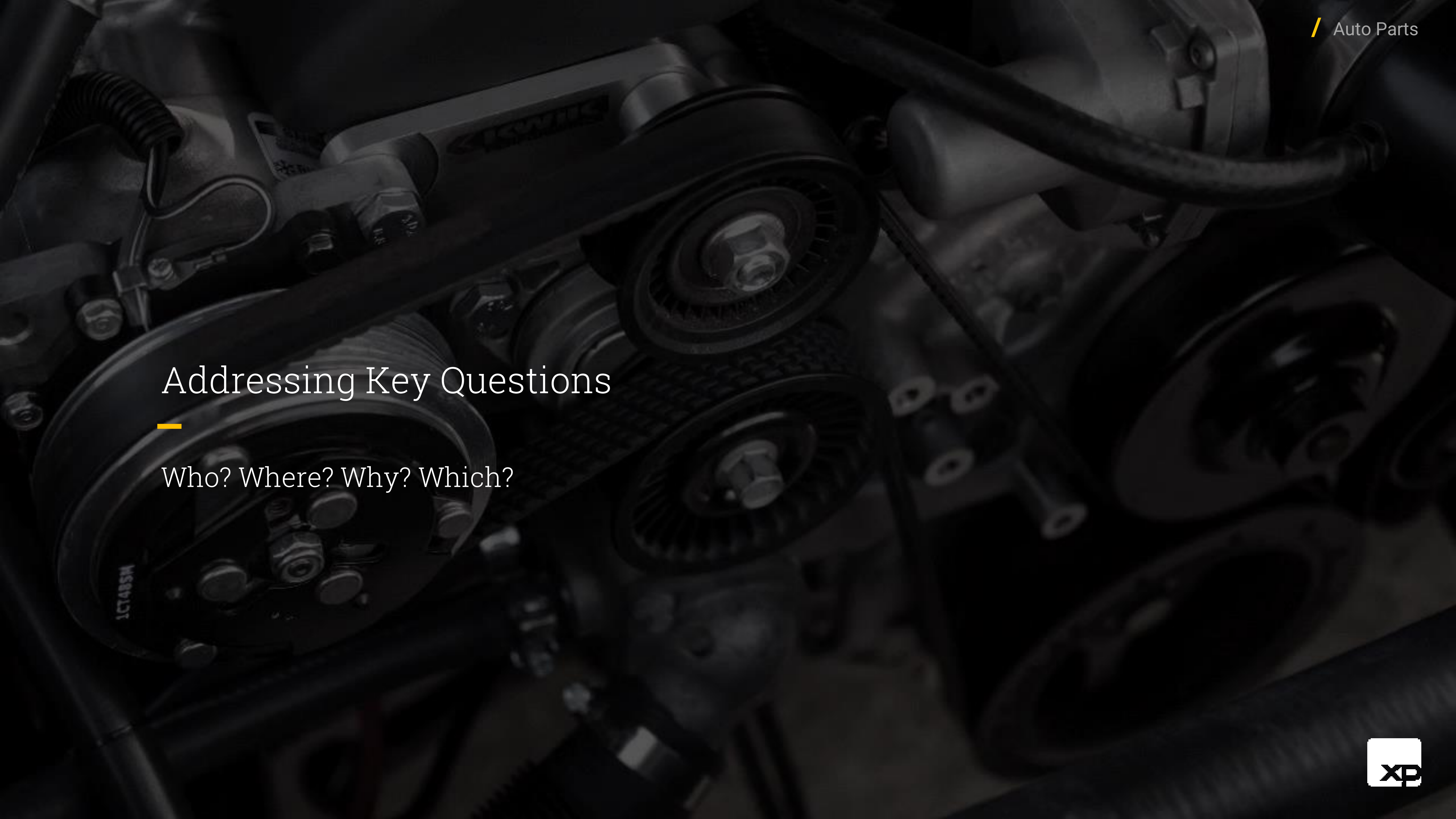


Addressing Key Questions

Who? Where? Why? Which?

Addressing Key Questions

Our Calls

Figure 1: Target Price Comparison and Upside (Downside)

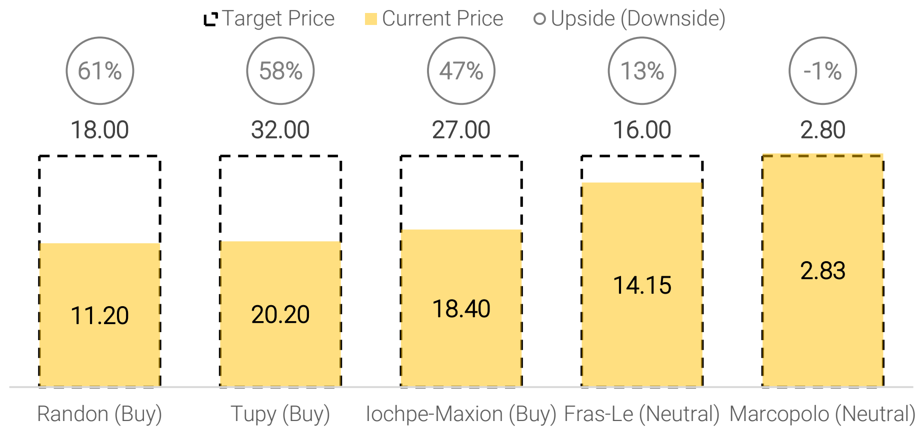
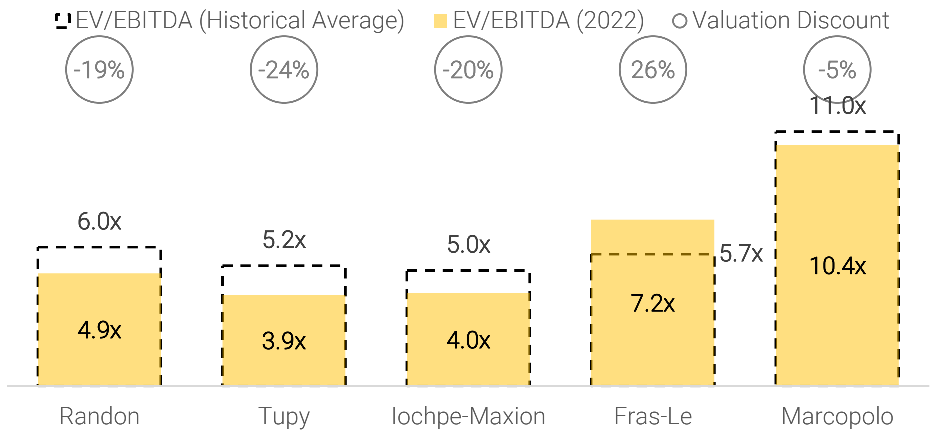


Figure 2: Current EV/EBITDA Multiples vs. Historical Average



4Ws: Who? Where? Why? Which?

In order to better explore our relative calls on Brazilian auto parts companies, in the following section we try to address four main selected questions regarding each company's (i) operations' summary, (ii) market exposure, (iii) market positioning and competitive dynamics and (iv) valuation grounds:

Who?	Where?	Why?	Which?
Describing each company's operations, with big numbers on revenue and profitability figures	Detailing Brazilian Auto Parts companies' exposure to end-markets, vehicle categories and regions	Analyzing each company's market positioning, competitive dynamics and main sales drivers	By using our stock picking framework (XP Thermometer), we detail our relative preferences in the sector

Source: Eikon and XP Research.

Who?

Describing Each Brazilian Auto Part Company

By analyzing Brazilian Auto Parts companies, we assess companies with different market dynamics and segments' exposure. Below we provide a brief summary of all five companies we are initating coverage in this report: Randon, Tupy, Iochpe-Maxion, Fras-le and Marcopolo.

Sector	Companies	Company Description	2Q21 LTM Sales (R$ mi)	2Q21 LTM EBITDA Margin	2Q21 LTM ROIC	2021-2025 Sales CAGR	2022 EV/EBITDA
Brazil Auto Parts	Randon	Randon is a Brazil-based leading company primarily engaged in the manufacture of heavy vehicles' trailers and parts, with its activities divided into three business segments: (i) OEMs (trailers and rail wagons manufacturing), (ii) Auto parts (friction and non-friction parts); and (iii) Financial Services.	7,351	16.3%	16.1%	5.8%	4.9x
	Tupy	Tupy is one of the leading iron head blocks manufacturers in the world for motor vehicles. Its transportation/infra division focuses on manufacturing iron head blocks for light, commercial and off-road vehicles, while its hydraulics division is responsible for producing flexible iron connections, iron and steel grits and cast-iron shapes. The company's industrial facilities are located in Brazil and Mexico (and Portugal after the acquisition of Teksid).	5,710	14.5%	8.9%	10.2%	3.9x
	Iochpe-Maxion	Iochpe-Maxion is engaged in the production of aluminum and steel automotive wheels for light and heavy vehicles, while also producing structural components and railway equipment in Brazil through its affiliate Amsted-Maxion. Its operations are focused on the automotive segment, and divided into the wheels and structural component segments, with industrial facilities spread worldwide.	11,681	10.8%	5.5%	7.4%	4.0x
	Fras-le	Fras-Le is a focused company on the design, production, commercialization and export of friction and non-friction materials for motor vehicle brake systems. Its activities are divided into two business segments: (i) OEMs, serving the main vehicle manufacturers in Brazil and abroad, and (ii) aftermarket, mainly serving parts' distributors.	2,289	18.7%	14.9%	8.4%	7.2x
	Marcopolo	Marcopolo is a Brazil-based company primarily engaged in the manufacture of bus-bodies. The company's activities are divided into two business segments: Industrial and Finance. The Industrial division focuses on designing, producing and distribution of bus bodies and spare parts for urban, road and micro buses, while the Finance division is responsible for financing transactions through Banco Moneo.	3,529	1.8%	-0.7%	10.3%	10.4x

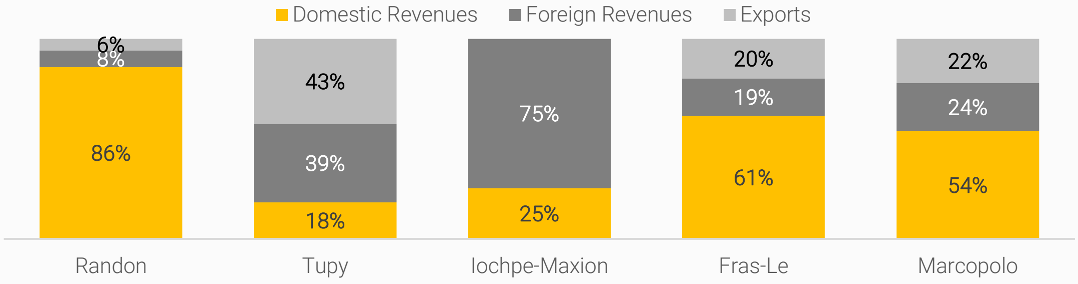
Source: Eikon and XP Research.

Where?

Detailing Each Company’s Exposure

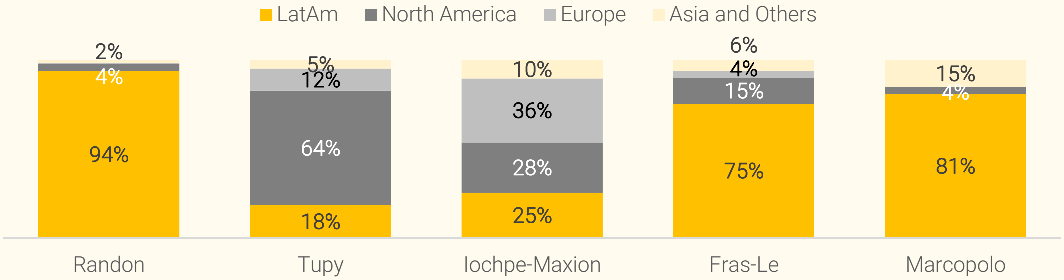
Sales by Destination (Domestic | Exports | Foreign Revenues)

Randon positions as the most Brazil-exposed player among Brazilian auto parts, while **Iochpe-Maxion sustains the largest exposure to foreign markets** due to its wide industrial footprint. Finally, we see **Tupy's high exposure to exports** as an important natural hedge vs. local currency depreciation.



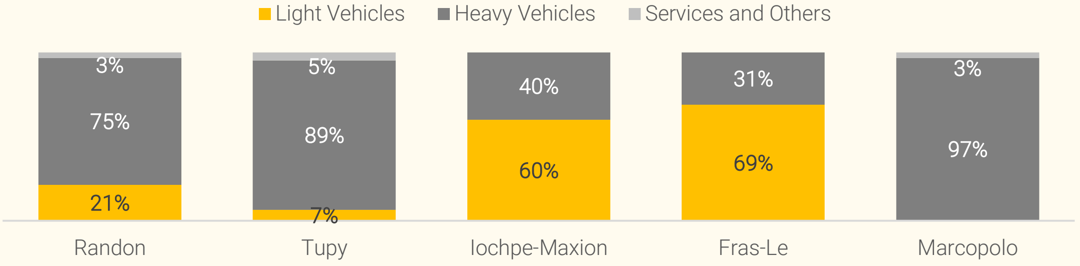
Sales by Geographies (LatAm | North America | Europe | Asia and Others)

Whereas **Randon, Fras-le and Marcopolo are the players mostly relying on LatAm**'s macro trends (75-95% of revenues), we note **Iochpe-Maxion to be the most diversified company in terms of geographies**, with **Tupy as the least dependent company on Brazil's economic outlook** (while highly exposed to North America).



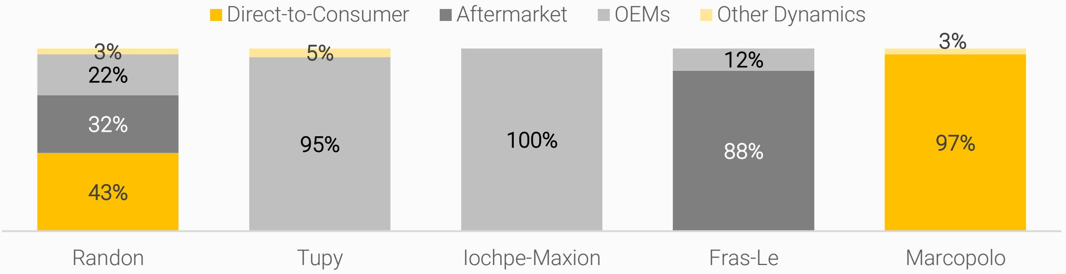
Sales by Vehicle Category (Light Vehicles | Heavy Vehicles | Others)

Most of Brazilian auto parts companies have most of its revenues stemmed from heavy vehicles, representing ~75-100% of Randon, Tupy and Marcopolo’s revenues. **While we do like Randon’s exposure to the trailers’** market (bolstered by agribusiness) and **Tupy’s exposure to light commercials and infra-exposed products** (e.g., off-road vehicles), **we fear Marcopolo’s solely exposure to buses** in a context of prolonged economic recovery.



Sales by Client Profile (D2C | Aftermarket | OEMs | Others)

We see two main implications regarding distinct end-market exposure: (i) top-line oscillations – more cyclical for the D2C (**Marcopolo/Randon**) and OEMs (**Tupy/Iochpe**) exposure, vs. a countercyclical performance in the aftermarket (**Fras-le**); and (ii) margins – (a) larger stability with (a.i) OEMs due to pre-defined and ongoing negotiations regarding pass-through clauses and (a.ii) aftermarket on top-line resilience vs. (b) a volatile behavior on D2C end-market (supply/demand profile also impacting pricing).



Source: Company Data and XP Research.

Why?

Analyzing Market Positioning and Sales Drivers

Due to the different nature of Brazilian Auto Parts companies' business model, we believe we are required to better explore the specifics of each market dynamics, including:

- **(i) Market positioning and competitive landscape**, with the companies' relative size vs. key competitors (listed companies at incumbent position in their respective markets);
- **(ii) Client concentration** (Tupy and Iochpe-Maxion with high concentration revenue profile, due to their higher relative exposure to OEMs);
- **(iii) Sales drivers** (Fras-le highly exposed to consumer trends, while Tupy shows the highest capital goods' demand profile).

Companies	Market Positioning	Main Competitors	Clients Concentration	Main Products	Sales Drivers
RANDON	**Leader** in trailers' production in Brazil (~32% market share)	Facchini (24%), Librelato (12%), Noma (6%) and Guerra (recently back)	**Pulverized portfolio** in the OEM division (D2C profile) and Auto Parts (**top 10 clients with ~50% of sales**)	Railway wagons, off-road trucks, truck bodies, trailers, semi-trailers, automobile components for suspension, brake and transmission systems	Agribusiness and e-commerce expansion in Brazil bolstering heavy vehicles' fleet expansion need; domestic industrial growth;
TUPY	**Leader** in iron head blocks casting worldwide (especially in Brazil after Teksid's acquisition)	Teksid (non-acquired operations in Mexico, Poland and China), Fritz Winter and Eisenwerk Brühl	Concentrated revenue profile (**top 4 with ~61% of sales**)	Iron head blocks (consisted of gray/nodular or compacted graphite iron) for motor vehicles (light, commercial and off-road), as malleable cast iron pipe fittings	Gross fixed capital formation (capital goods company profile); global infrastructure development (especially in the U.S.); global industrial expansion; agribusiness activity increase
IOCHPE-MAXION	**Largest steel wheels** manufacturer in the world and top10 aluminum wheels producer	Superior (U.S.), Ronal (Europe), Mangels (Brazil), CITIC Dicastal (China), Topy (Japan), Steel Strips (India) and Metalsa (Mexico)	Concentrated revenue profile (**top 5 with ~48% of sales**)	Steel and aluminum wheels, side rails, cross members and full frames, structural components for light vehicles, freight cars, railway wheels and castings	Global economic growth, supporting demand increase for light and commercial vehicles; Brazilian railway segment development supporting demand for Amsted-Maxion affiliate
FRAS-LE	**Leader in friction products** in Brazil (43% and 87% share in AM and OEMs)	Knorr, Wabco, Cobreq, Duroline, SYL, TRW and Breakeparts	**Meritor with ~9%** of sales	Friction and non-friction materials for motor vehicle brake systems, clutch facings, brake linings, brake shoes and brake pads light and commercial vehicles	Necessity for fleet expansion; fleet aging (increasing the need for auto maintenance, benefiting the aftermarket segment); consumer purchasing power increase
Marcopolo	**Leader** in Brazil (**~49% market share**, with larger relevance on intercity buses)	Comil, Busscar and Irizar (intercity buses), Caio Induscar (~45% share in urban buses) and Mascarello (~44% share in micro buses)	Usually, pulverized revenue profile (*Caminho da Escola* **~39% of Brazil volumes in 2020**)	Bus bodies for road, intercity, urban and micro buses, as well as spare parts manufacturing	Consumer purchasing power increase (benefiting the leisure/tourism road buses); urban mobility fleet expansion (demand for urban buses); fleet renewal; currency depreciation supporting exports

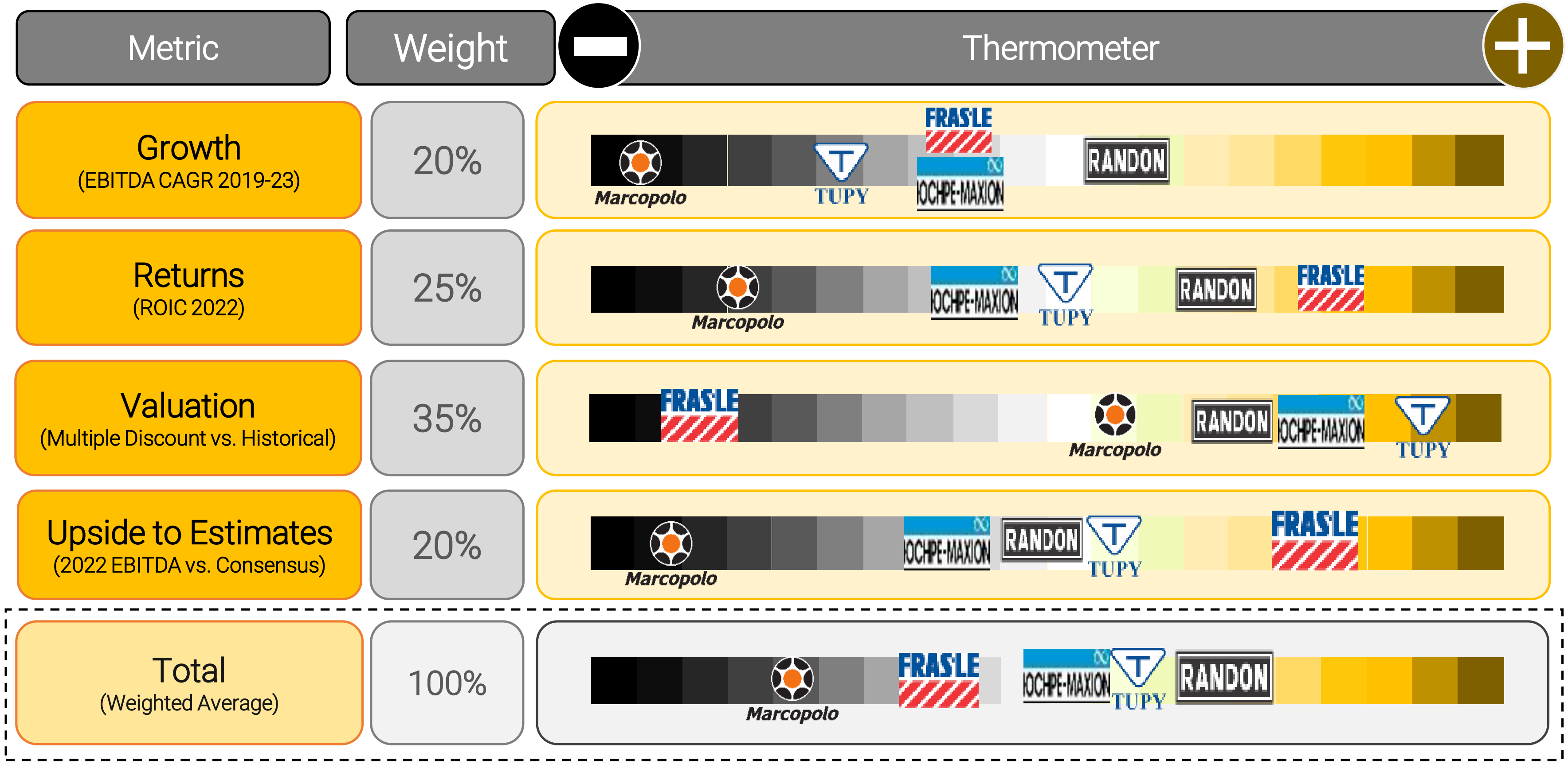
Source: Company Data and XP Research.

Which?

Stock Picking Framework; Randon Is Our Top-Pick

In order to better illustrate our relative calls for Brazilian Auto Parts, we provide below a stock picking framework comparing companies' most relevant valuation influence factors (our methodology considers the most and least attractive sector's figures in the most positive and negative extreme of the thermometer, respectively, with each company's position along that range).

- For this analysis we used: (i) Growth, using EBITDA 2019-23 CAGR; (ii) Returns, using 2022E ROIC; (iii) Valuation, including the discount of 2022E EV/EBITDA multiple vs. historical average; and (iv) Upside to Estimates, comparing our 2022 EBITDA vs. consensus expectations.



Source: Eikon and XP Research.

Valuation

Stock Performance

Randon, Tupy and Iochpe-Maxion's Operating Performance Not Reflected in Stock Prices

After the outbreak of COVID-19 in March 2020, with a sharp hit on Brazilian Auto Parts companies' stock prices (sector's share falling up to 40-65% at the peak of the crisis), we notice a distinct share performance reaction following the most critical period for each company. **While Fras-le's strong stock performance** (+160% since January 2020) **is in-line with its also solid operating execution post Nakata acquisition** (revenues +60% vs. pre-pandemic), **we do not see Randon, Tupy and Iochpe-Maxion's rapid operating improvement** (top-line +60%, +45% and +35% vs. pre-pandemic, respectively) **reflected in their share prices** (still down 10-20% vs. January 2020). Finally, as the most impacted company by the COVID-19, **we see Marcopolo's stock reaction** (-35% since January 2020) **fairly reflecting its operating performance and its recovery risks going forward** (EBITDA still at negative levels in 2Q21).

Figure 3: Brazilian Auto Parts Companies Stock Performance Since Pre-Pandemic Period

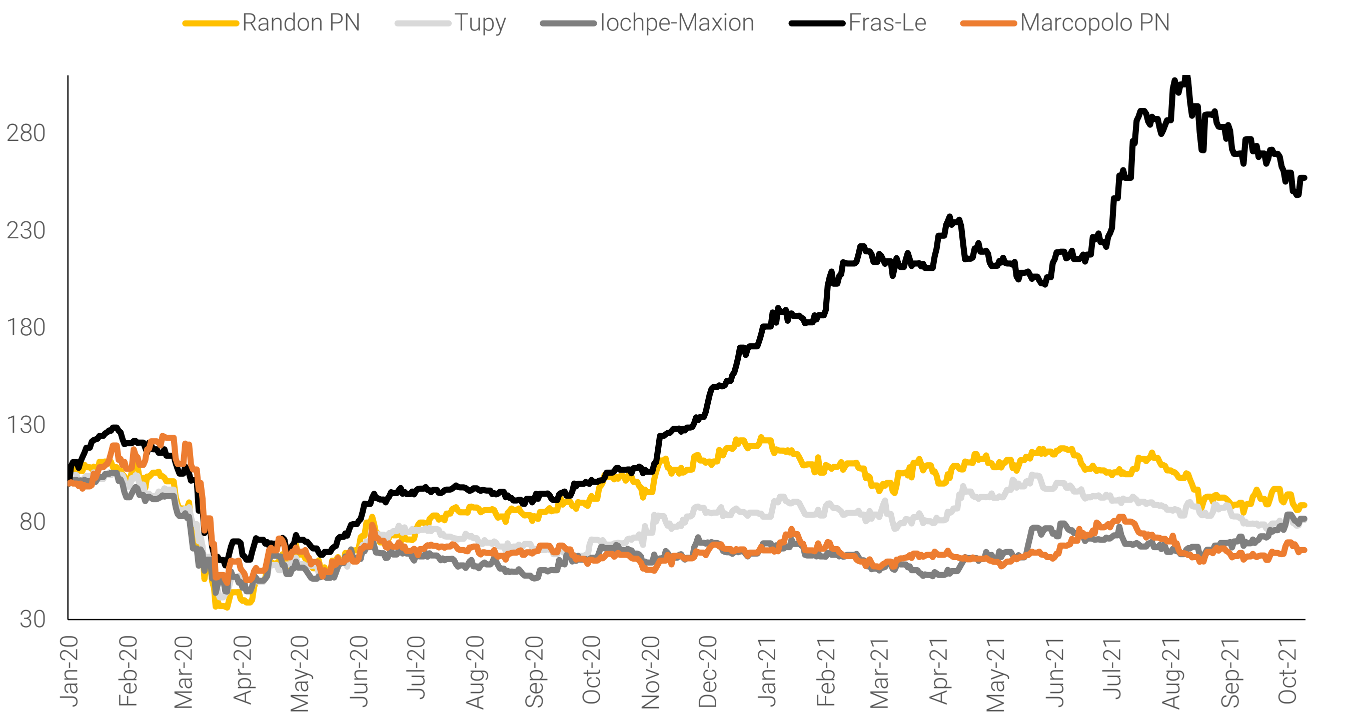


Figure 4: Top-Line Evolution (100-Index)

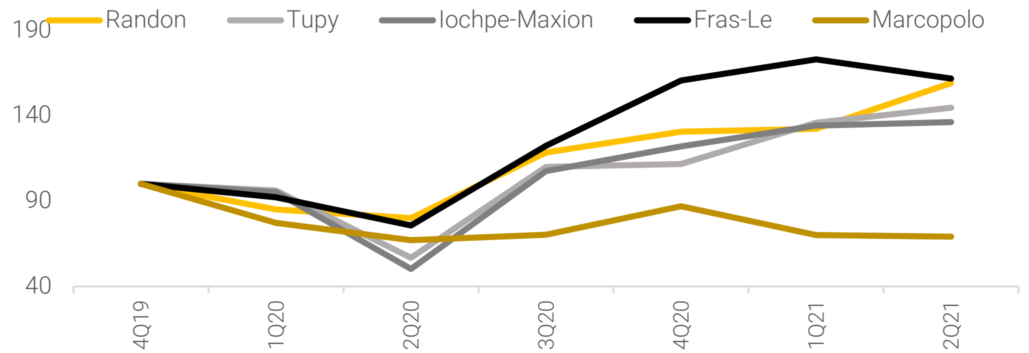
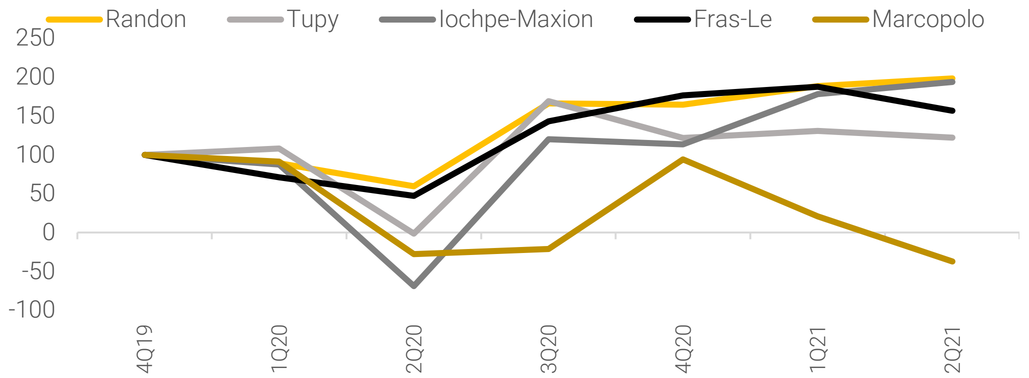


Figure 5: EBITDA Evolution (100-Index)



Source: Eikon, Company Data and XP Research.

Companies at Different Profitability Cycles

Randon and Fras-le At All-Time-High Profitability Levels

Margin profile with specific dynamics for each company. Comparing each company's historical EBITDA margins (Figure 6), we note that: (i) Tupy and Iochpe-Maxion show the least volatile margin profile, explained by its long-term contracts with OEMs, relying on pass-though clauses/negotiations that offset raw material price increases; (ii) Fras-le's resilient margin profile, as a result of its steady top-line performance (aftermarket's countercyclicality); and (iii) Randon and Marcopolo have the most volatile margin profile, due to its higher relative exposure to D2C end-market, in our view.

Companies at different profitability cycles. Companies' return on invested capital is a function of (a) invested capital turnover and (b) NOPLAT margin. Whereas Marcopolo is currently struggling to recover its turnover levels of ~1.3-1.5x (bus sector still impacted by pandemic-related effects), we note a rapid recovery of top-line and profitability for all other companies following a more critical 2Q20, with Randon and Fras-le showing all-time-high return levels of 15-16%.

Figure 6: EBITDA Margin Comparison

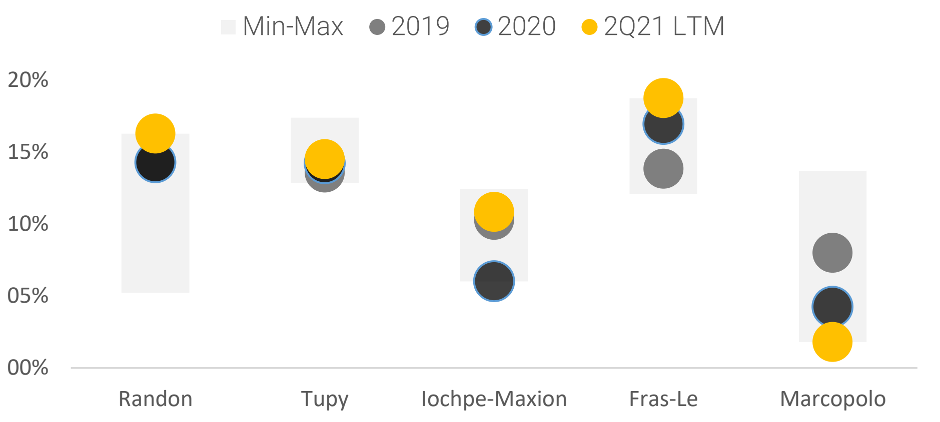
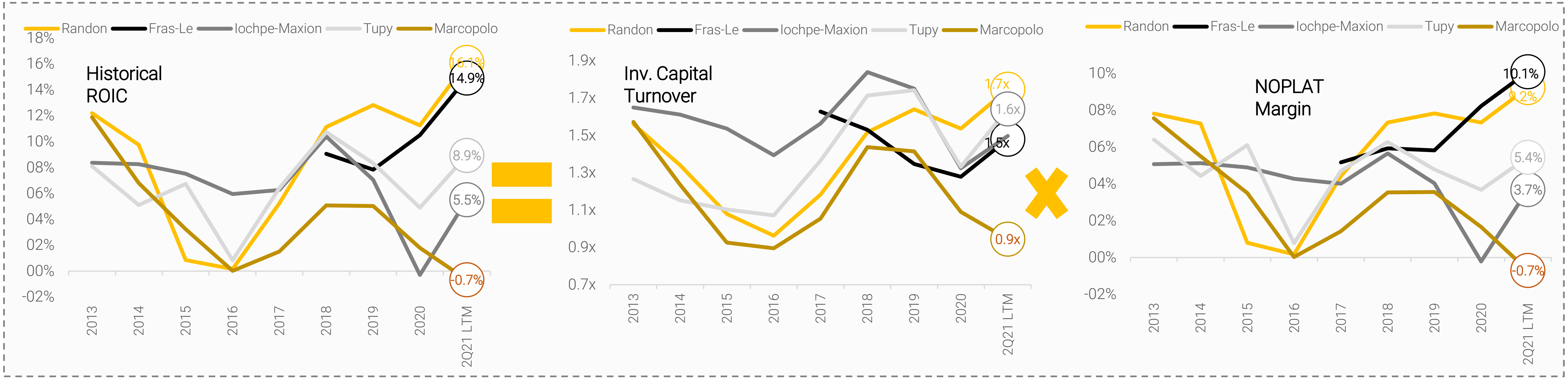


Figure 7: (a) ROIC Composition = (b) Invested Capital Turnover x (c) NOPLAT Margin



Source: Eikon, Company Data and XP Research.

Multiple Analysis: A Reasonable Channel Check

Randon, Tupy and Iochpe Discounted vs. Historical Avg.

Brazilian Auto Parts have shown a steady multiple performance historically, with EV/EBITDA multiples ranging between 5-6x over the past decade (excluding Marcopolo, trading with an average of ~11x).

Comparing the sector's current multiples, we highlight Randon, Tupy and Iochpe-Maxion's highly discounted valuation levels, trading at a ~20-25% discount vs. historical averages, with Marcopolo's at closer levels vs. its historical average of ~11x.

Although Fras-le's multiples sound too stretched at first glance (+26% vs. historical average), we believe that due to its higher relative ROIC and growth expectations (see Figures 9 and 10), its current multiples seem reasonable when comparing to other global Auto Parts companies.

Figure 9: Return-Adjusted Valuation Analysis

ROIC (y-axis) and EV/EBITDA Multiple (x-axis)

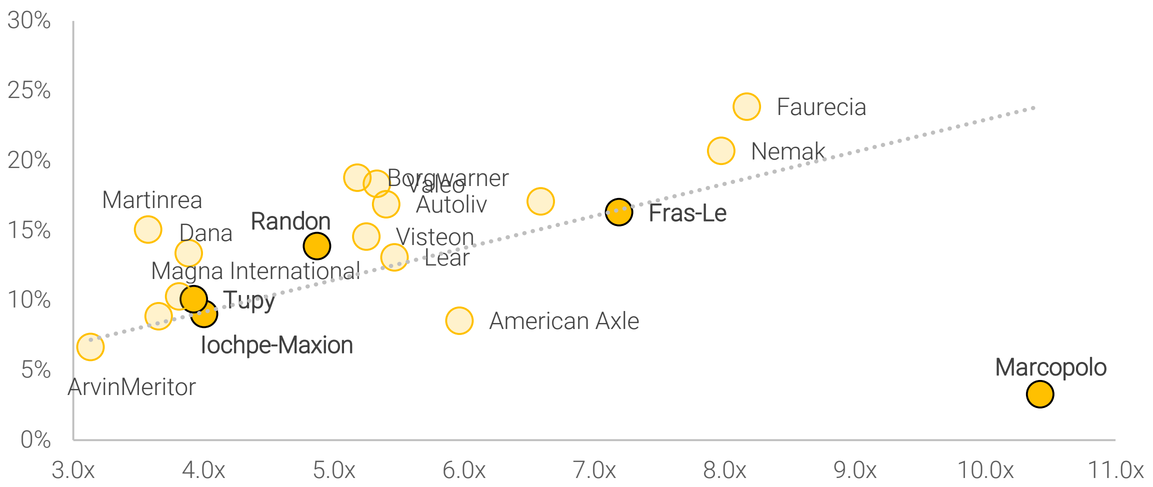


Figure 8: Auto Parts Companies' Current Multiples vs. Historical Average

EV/EBITDA

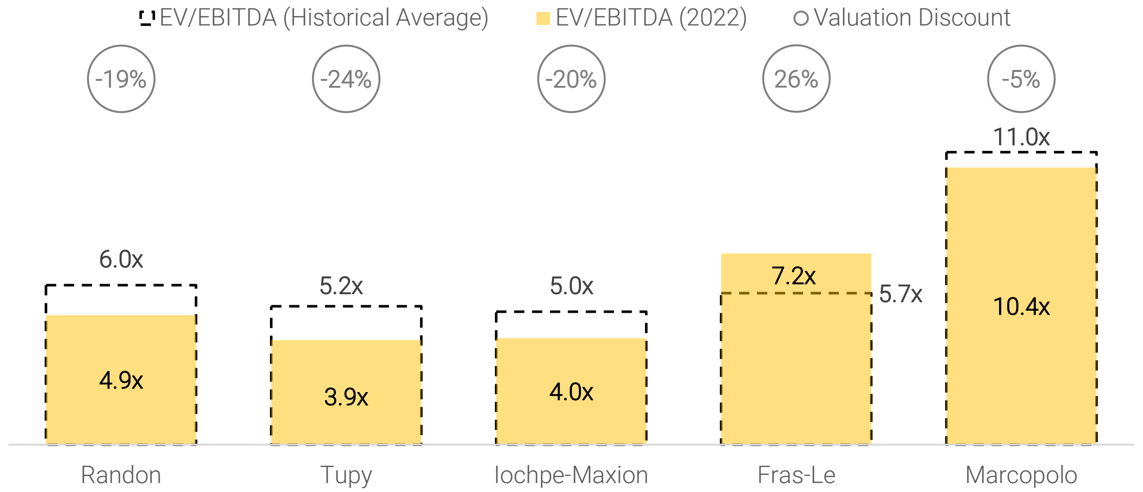
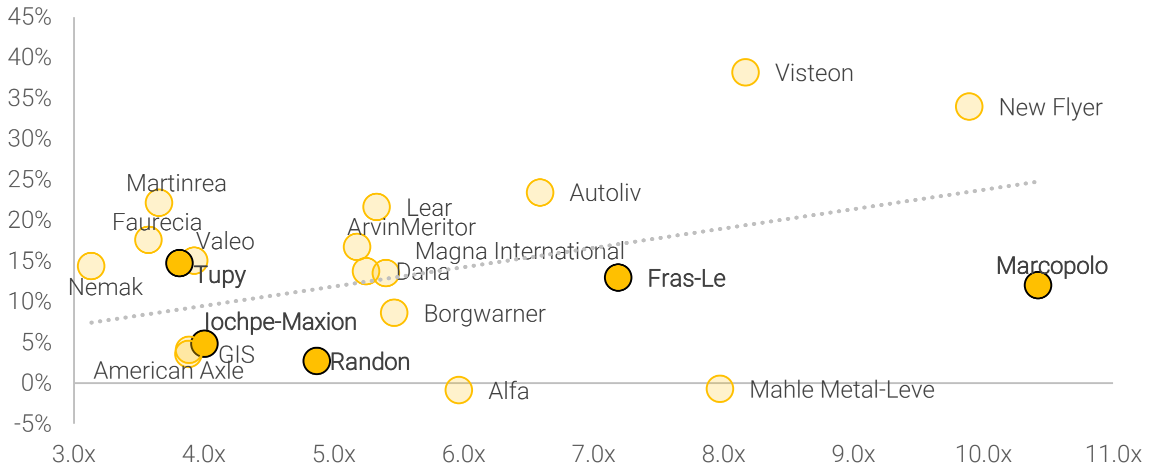


Figure 10: Growth-Adjusted Valuation Analysis

EBITDA 2021-23 Growth (y-axis) and EV/EBITDA Multiple (x-axis)



Source: Eikon and XP Research.

XP vs. Consensus

Overall Above Consensus (XPe +12-15% for Randon, Tupy and Iochpe's 2022 EBITDA)

While our ratings distribution for Brazilian Auto Parts are closely in-line with consensus views on the names (Figure 12), we expect better short-term momentum for Randon, Tupy, Iochpe-Maxion and Fras-le (EBITDA in 2021 and 2022 +10-15% vs. consensus), and in-line with near-term expectations for Marcopolo (2022 EBITDA +1% vs. consensus).

Figure 11: XP vs. Consensus for Main Estimates

R$ million

XP vs. Consensus	2021			2022			2023		
	XPe	Consensus	Diff. (%)	XPe	Consensus	Diff. (%)	XPe	Consensus	Diff. (%)
Randon									
Net Revenues	8,502	7,240	17%	9,199	7,922	16%	8,972	8,553	5%
EBITDA	1,196	1,082	11%	1,329	1,172	13%	1,262	1,283	-2%
Net Income	400	401	0%	406	438	-7%	354	455	-22%
Tupy									
Net Revenues	6,554	5,822	13%	8,187	6,359	29%	8,575	6,756	27%
EBITDA	831	710	17%	994	867	15%	1,100	928	18%
Net Income	232	176	32%	343	257	33%	399	294	36%
Iochpe-Maxion									
Net Revenues	13,254	11,864	12%	13,995	13,196	6%	14,987	15,261	-2%
EBITDA	1,548	1,401	10%	1,615	1,441	12%	1,701	1,687	1%
Net Income	479	318	51%	473	347	36%	503	390	29%
Fras-Le									
Net Revenues	2,487	2,116	18%	2,792	2,286	22%	3,057	N.A.	n.a.
EBITDA	422	339	25%	480	375	28%	538	N.A.	n.a.
Net Income	198	155	28%	244	194	25%	283	N.A.	n.a.
Marcopolo									
Net Revenues	3,630	3,811	-5%	4,301	4,307	0%	4,730	4,810	-2%
EBITDA	48	273	-82%	354	352	1%	555	464	20%
Net Income	201	176	14%	113	199	-44%	260	238	9%

Figure 12: Ratings Distribution

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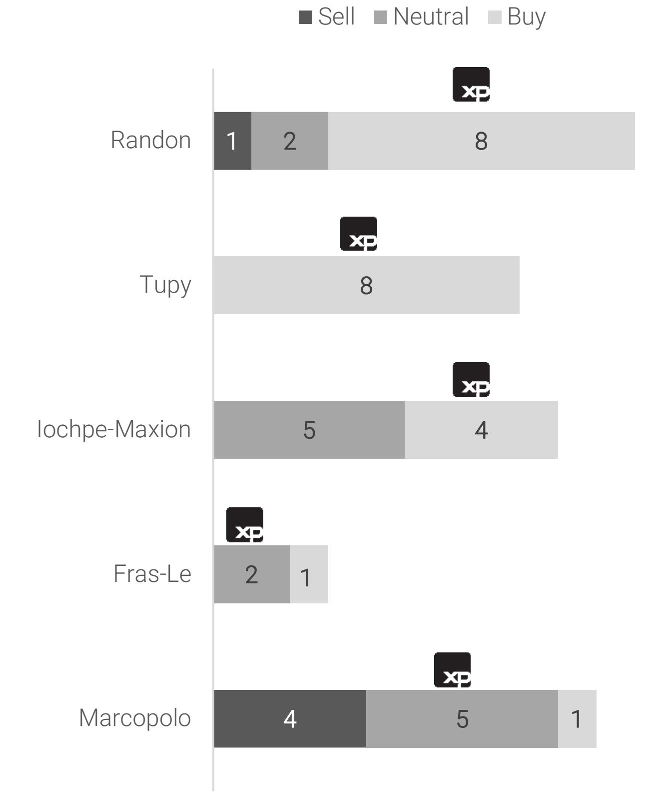


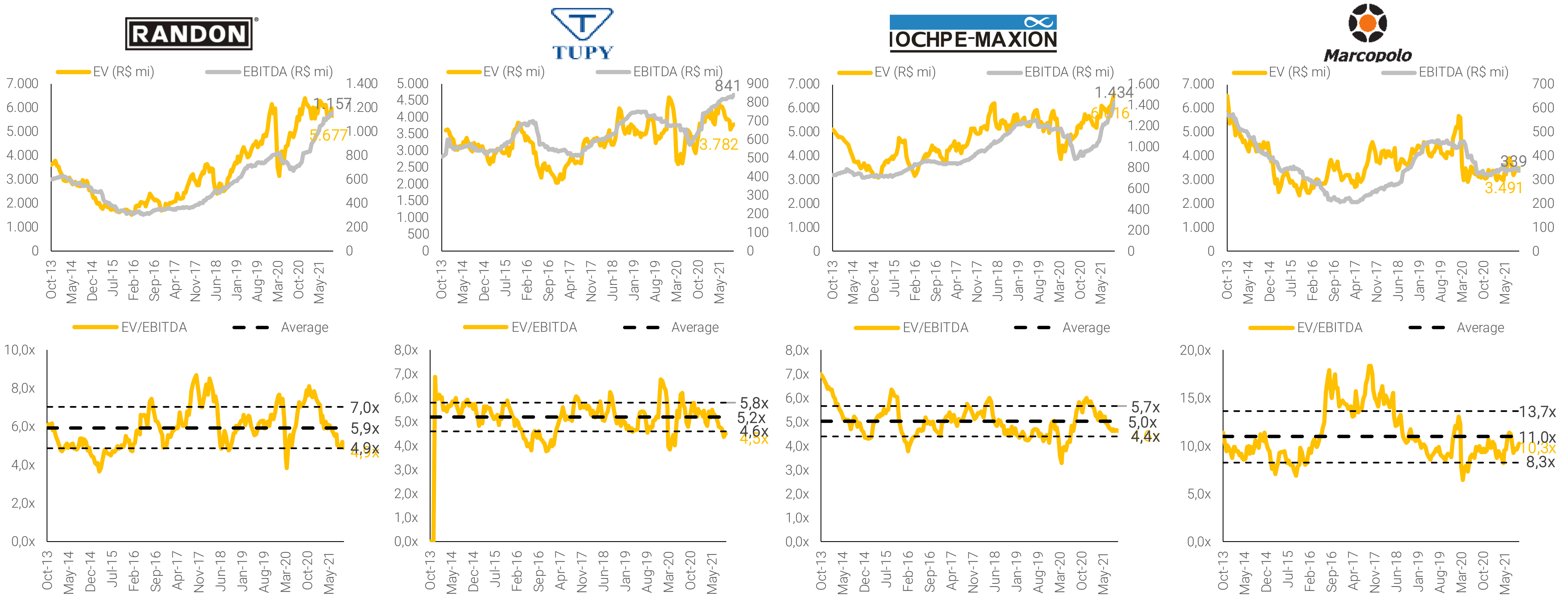
Source: Eikon and XP Research.

Historical Multiples

Randon, Iochpe-Maxion and Tupy Discounted vs. Historical Average

Figures 13-20: (1) Enterprise Value vs. Consensus' 1-Yr Forward EBITDA Estimates; (2) Forward EV/EBITDA Multiple

Consensus Figures (due to non-availability of Fras-le's consensus figures, we are not including the company's historical multiples' numbers)



Source: Eikon and XP Research.

Global Peers Comparison

Figure 21: Comps Table

Companies	Current Price	Rating	Market Cap ($ mi)	ADTV ($ mi)	P/E 2022	P/E 2023	EV/EBITDA 2022	EV/EBITDA 2023	ROIC 2022	ROIC 2023	EBITDA CAGR 2021-2023
Brazil Auto Parts					**10.8x**	**10.2x**	**6.0x**	**5.7x**	**12.0%**	**11.8%**	**8.9%**
Randon	11.20	Buy	742	6.4	9.1x	10.4x	4.9x	5.2x	13.9%	12.8%	2.7%
Tupy	20.20	Buy	528	3.0	8.5x	7.3x	3.9x	3.7x	10.1%	10.9%	15.1%
Iochpe-Maxion	18.40	Buy	513	5.9	5.9x	5.6x	4.0x	3.7x	9.0%	9.6%	4.8%
Fras-Le	14.15	Neutral	559	0.4	12.5x	10.7x	7.2x	6.2x	16.3%	18.9%	13.0%
Marcopolo	2.83	Neutral	466	2.2	29.0x	10.1x	10.4x	6.5x	3.3%	6.2%	238.6%
Mahle Metal-Leve	38.41	N.C.	895	4.2	14.9x	14.1x	8.0x	7.2x	20.7%	23.0%	-0.7%
Global Auto Parts					**9.3x**	**8.4x**	**5.2x**	**4.8x**	**14.6%**	**16.6%**	**14.6%**
New Flyer	23.44	N.C.	1,334	7.1	16.9x	10.0x	9.9x	7.6x	n.a.	n.a.	34.0%
GIS	29.99	N.C.	466	0.1	8.9x	9.3x	3.9x	4.0x	n.a.	n.a.	3.6%
Nemak	5.28	N.C.	785	2.3	5.1x	4.6x	3.1x	2.8x	6.7%	7.2%	14.4%
Alfa	14.98	N.C.	3,555	5.9	10.7x	9.9x	6.0x	5.5x	8.6%	9.4%	-0.9%
ArvinMeritor	25.56	N.C.	1,793	17.3	6.5x	6.0x	5.2x	4.9x	18.8%	21.2%	16.7%
American Axle	10.11	N.C.	1,153	12.2	4.6x	4.2x	3.9x	3.9x	13.4%	16.0%	4.1%
Borgwarner	46.92	N.C.	11,251	88.1	9.7x	8.8x	5.5x	5.2x	13.1%	14.3%	8.6%
Dana	24.34	N.C.	3,535	25.3	7.6x	6.7x	5.2x	4.9x	14.6%	15.7%	13.8%
Lear	167.76	N.C.	10,022	82.5	10.1x	8.4x	5.3x	4.7x	18.3%	25.9%	21.6%
Visteon	100.32	N.C.	2,807	24.7	19.5x	14.2x	8.2x	6.6x	23.9%	28.1%	38.2%
Linamar	67.75	N.C.	3,556	8.8	8.0x	n.a.	3.9x	3.9x	n.a.	n.a.	2.8%
Valeo	26.38	N.C.	7,376	31.2	10.8x	7.9x	3.8x	3.5x	10.3%	13.3%	14.7%
Faurecia	43.65	N.C.	6,969	33.3	8.2x	6.6x	3.6x	3.2x	15.1%	17.2%	17.6%
Magna International	82.91	N.C.	24,947	81.4	10.3x	8.8x	5.4x	4.9x	16.9%	18.6%	13.5%
Martinrea	11.82	N.C.	762	3.6	5.3x	3.9x	3.7x	3.1x	8.9%	n.a.	22.1%
Autoliv	819.20	N.C.	8,096	23.1	12.0x	9.7x	6.6x	5.5x	17.1%	20.5%	23.4%

Source: Eikon and XP Research.

The Automotive Industry

A Global and Domestic Overview in the Industry's Post-Pandemic Outlook

Global Macro Outlook

We See Macro Tailwinds in a Post-Pandemic Horizon, With Domestic Caution as Interest Rates Rise

Unlike other recessions, the world has been rapidly recovering from the COVID-19 economic downturn: (i) according to Figure 22, Manufacturers' PMI (an index of the prevailing direction of economic trends in the manufacturing sectors) indicates that the worst is behind us for different regions across the globe, with (ii) GDP expectations above 2019 figures for 2022 (Figure 23).

In Brazil, even though we are optimistic on industrial capacity utilization reaching higher levels compared to pre-crisis period, according to Brazilian National Industry Confederation (CNI) and Fundação Getúlio Vargas (FGV), we are concerned on the subsequently impacts of rising interest rates (Figure 25) on GDP growth (Figure 26).

Figure 22: Manufacturers' PMI Indicates Confidence's Rapid Improvement

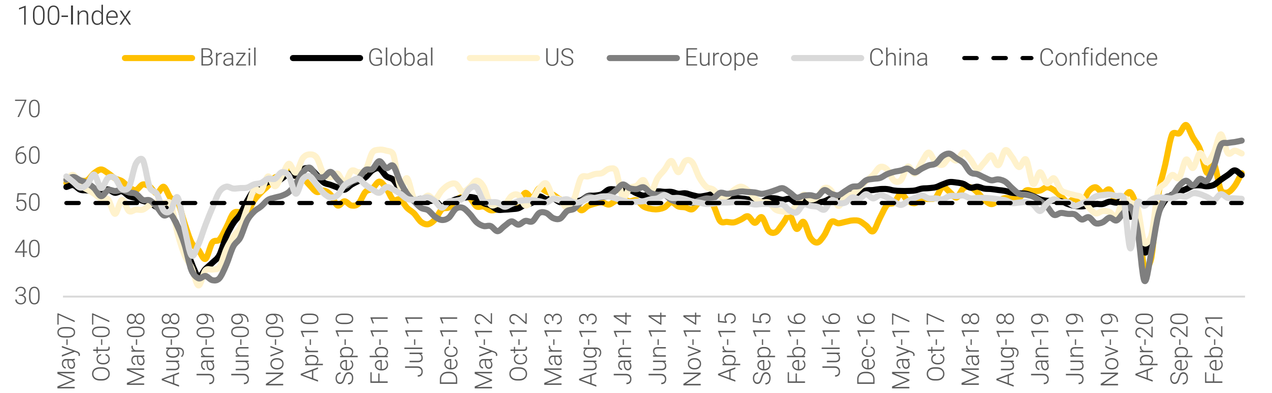


Figure 23: GDP Expectations for Selected Regions

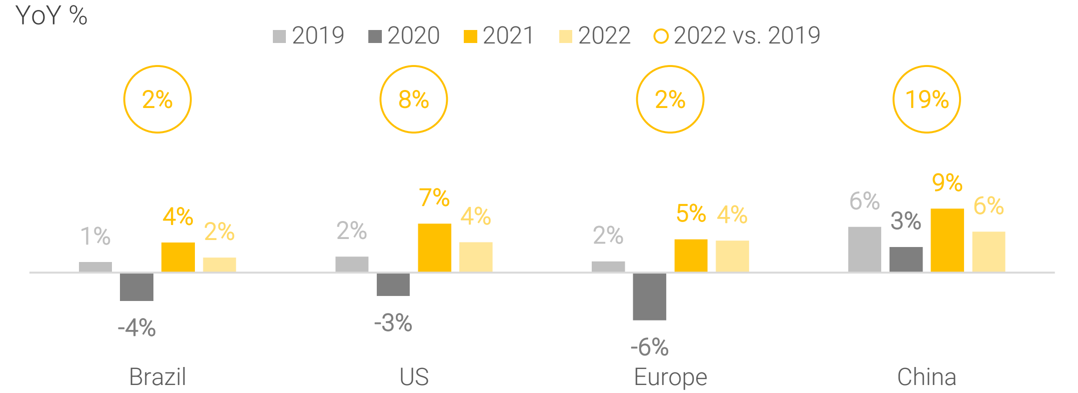


Figure 24: Capacity Utilization in Brazil at Higher Levels vs. Pre-Pandemic

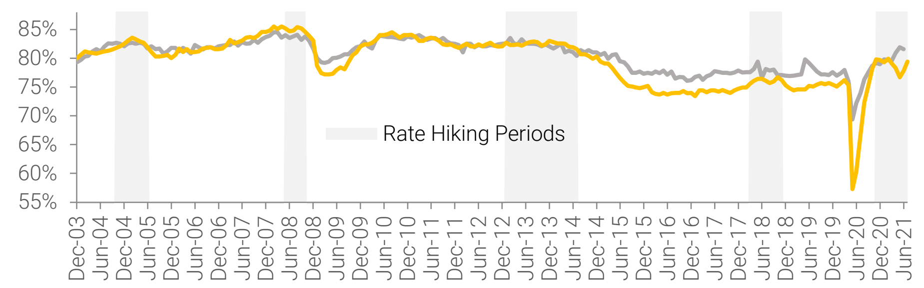


Figure 25: SELIC At An Upward Path is a Risk

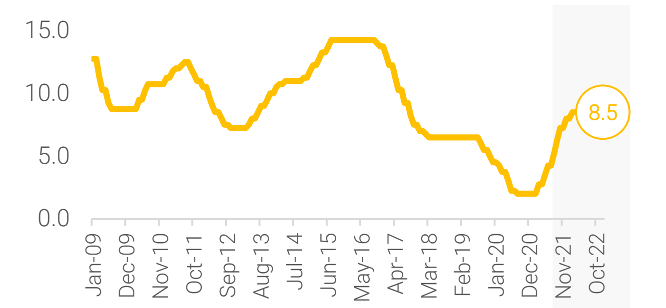
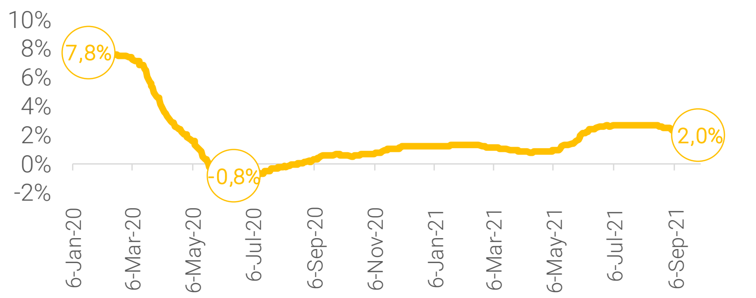


Figure 26: 2019-22 GDP Expectations Evolution



Source: PMI, Eikon, CNI, FGV, BACEN and XP Research.

Automotive Industry Global Overview

China and U.S.A. as the Main Auto Suppliers

The automotive industry consists of a wide range of enterprises involved in the manufacturing of motor vehicles, and one of the largest industries by revenue in the world. It has historically shown a cyclical behavior, usually presenting sharp decline rates in times of economic recessions.

In terms of auto production, we note China and the U.S. as the world's largest manufacturing markets (~28% and ~12% of world's auto production in 2019, respectively), with top 15 countries representing ~87% of total auto production.

Finally, Figure 29 shows a strong correlation between vehicle penetration (vehicles/inhabitant) and the economic output of a nation per person (GDP per capita), implying that the richer a population is, the higher its fleet penetration could be.

Figure 27: World Auto Production Breakdown (million units)

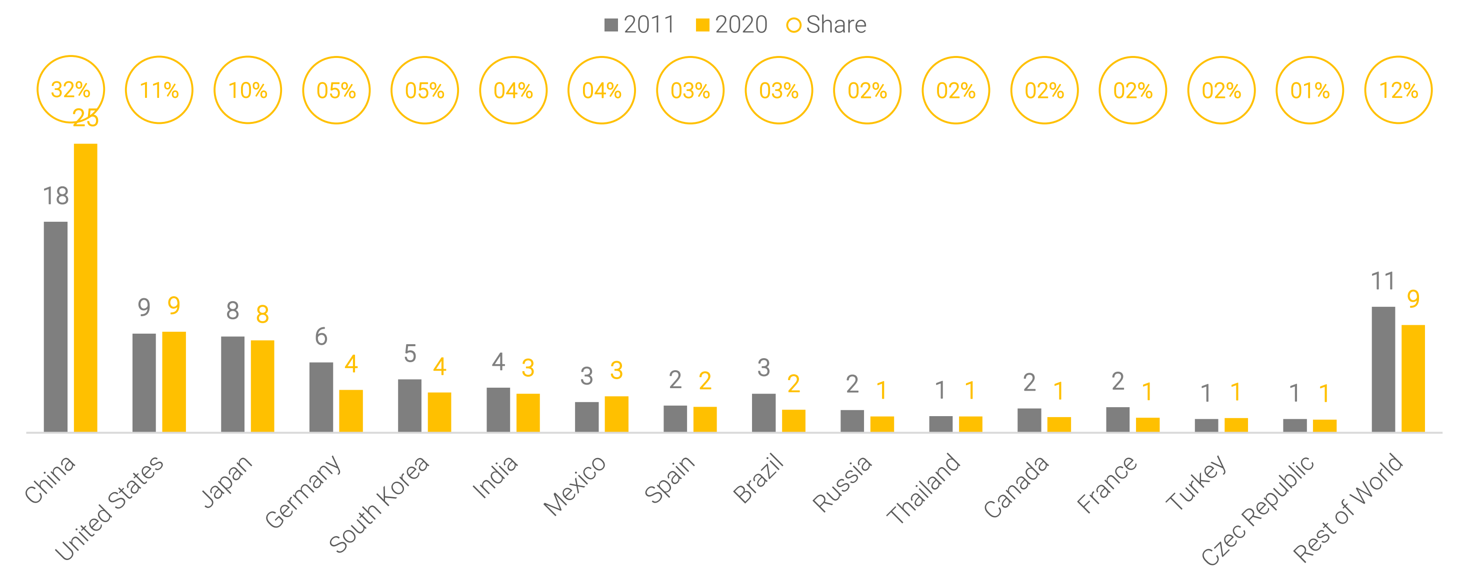


Figure 28: World Auto Production

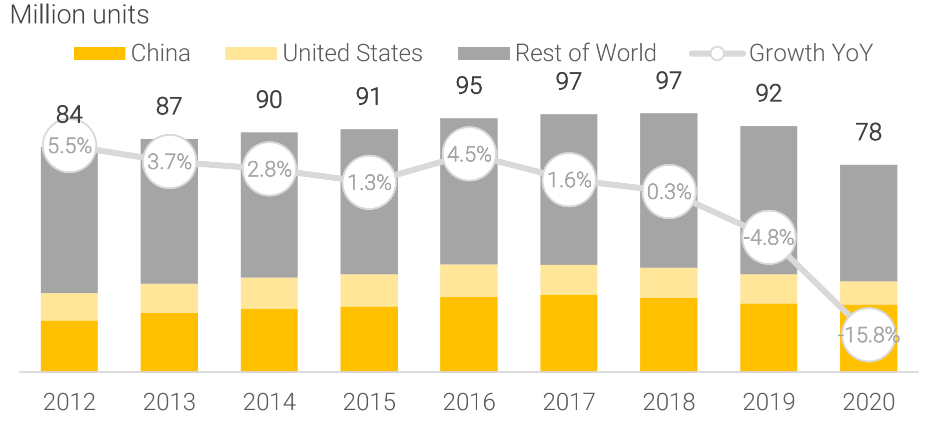
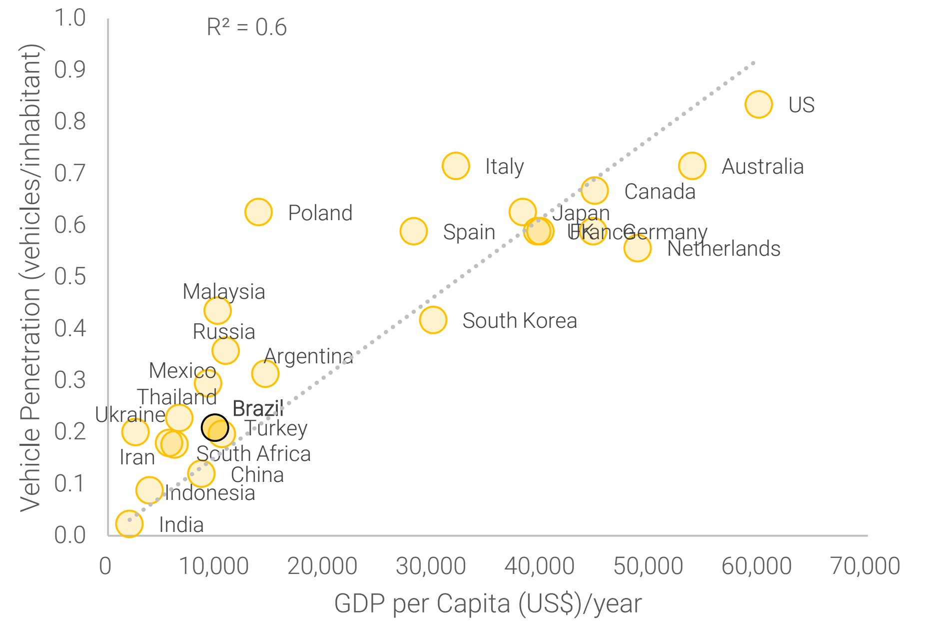


Figure 29: Vehicles Penetration vs. GDP per Capita



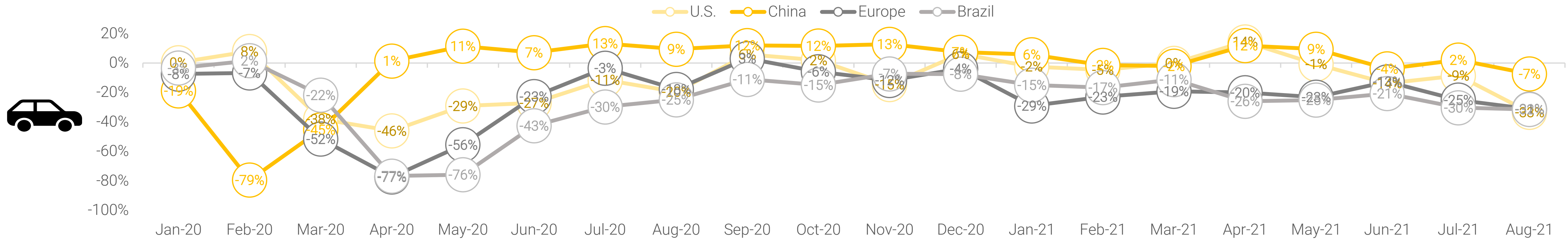
Source: ANFAVEA and XP Research.

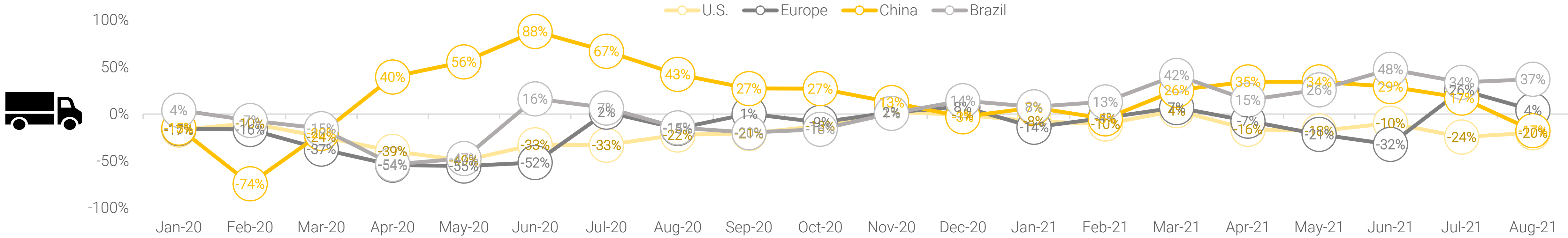
The World In Light of the COVID-19 Pandemic

Heterogeneous Performances Across Different Regions and Segments

Light vehicles have been the most impacted automotive category over 2020-2021 (sales falling up to 45% in the U.S. and ~75-80% in Europe, China and Brazil at the peak of the crisis), mainly reflecting the (i) ongoing social restrictions imposed by government authorities to prevent the COVID-19 spread, (ii) new vehicles' price surge, due to miscellaneous cost increases, and (iii) more recently aggravated by supply chain restraints such as semiconductors' shortage. On the other hand, **we note a more resilient performance of heavy commercial vehicles** (less impacted by chip shortage) in all regions, with Brazil as the main highlight (sales in August/21 +37% vs. August/19), positively driven by agribusiness-exposed vehicles.

Figures 30-31: 2021 vs. 2019 and 2020 vs. 2019 Sales Performance for Selected Regions for (1) Light and (2) Commercial Vehicles



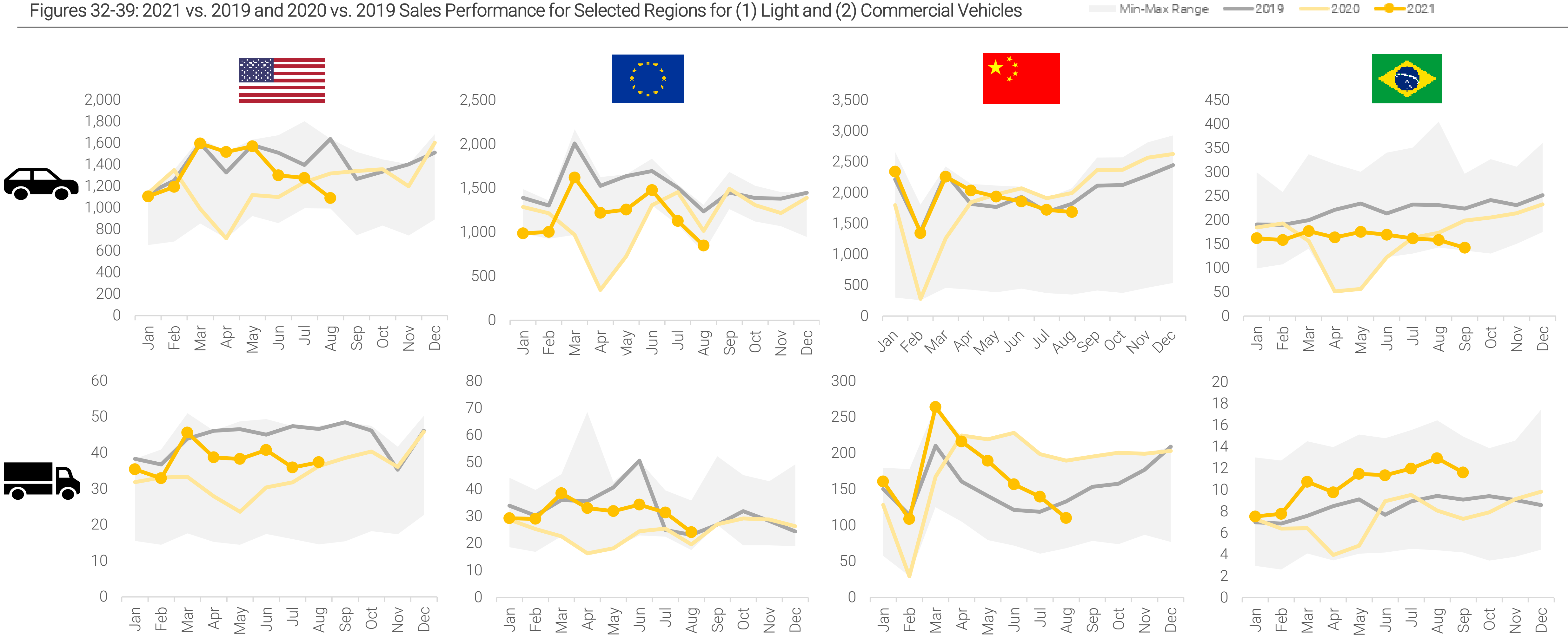


Source: FRED, ACEA, CAAM, ANFAVEA and XP Research.

Seasonal Analysis Shows a Volumes' Hit in August Due to Semiconductor Shortage

Light Vehicles Have Been More Impacted vs. Commercial Vehicles; Brazil Is the Highlight in Commercial Vehicles

Figures 32-39: 2021 vs. 2019 and 2020 vs. 2019 Sales Performance for Selected Regions for (1) Light and (2) Commercial Vehicles



Source: FRED, ACEA, CAAM, ANFAVEA and XP Research.

Brazil Automotive Industry

Running at Low-Capacity Utilization Levels

Brazil's automotive industry is a ~R$200 billion business consisting of more than 30 OEMs of passenger cars, light vehicles, trucks, truck trailers, buses chassis, buses bodies and agricultural machines (see next slide for more details regarding each OEM exposure in Brazil's auto sales).

With an installed capacity of ~5.1 million vehicles produced per year, **we see current capacity utilization at unsustainable levels of ~40% in 2020**, reflecting the pandemic-related impacts in the industry. Going forward, **we expect utilization to progressively pick up to healthier levels** (~70% by 2025E) as: (i) the demand side continues to recover as COVID-19 social restrictions are over; and as (ii) the supply side normalizes, with (a) accommodation of capacity reduction (Ford and Mercedes-Benz ceasing local production) and (b) normalization of supply chain bottlenecks (such as semiconductors shortage).

Figure 40: Brazil's Automotive Industry Overview ■ 2019 ■ 2020

OEMs	16	14	12	6
Operating Fleet ('000)	37,720 / 37,862	5,458 / 5,534	1,965 / 1,994	336 / 331
Production ('000)	2,449 / 1,614	355 / 291	113 / 91	28 / 18
Sales ('000)	2,262 / 1,616	404 / 339	101 / 90	21 / 14
Exports ('000)	347 / 257	60 / 49	14 / 13	7 / 4
Fleet Retirement (%)	3.8% / 0.0	4.5% / 0.0	2.9% / 0.0	5.4% / 0.1

Figure 41: Brazil's Automotive Industry Performance

Revenues in R$ billion and YoY growth for revenues and GDP

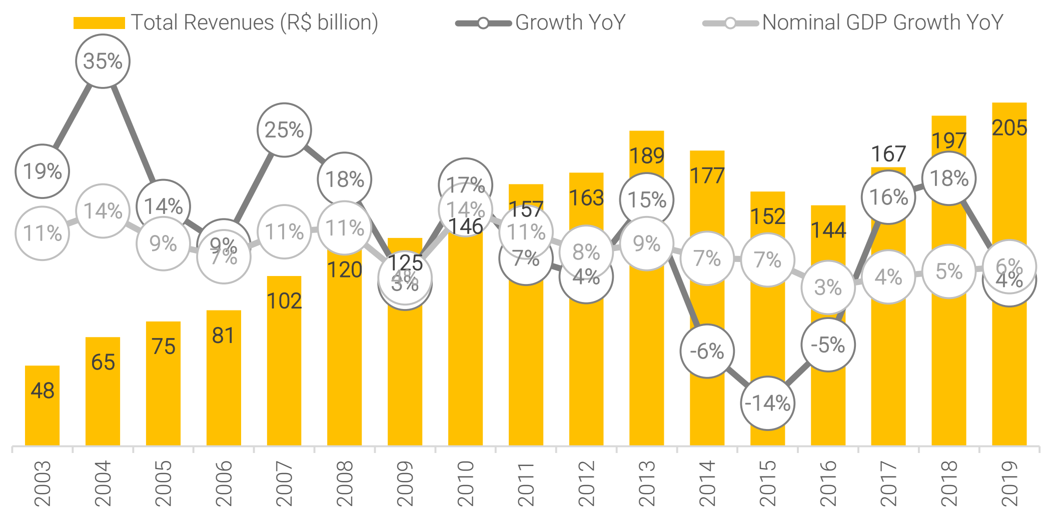
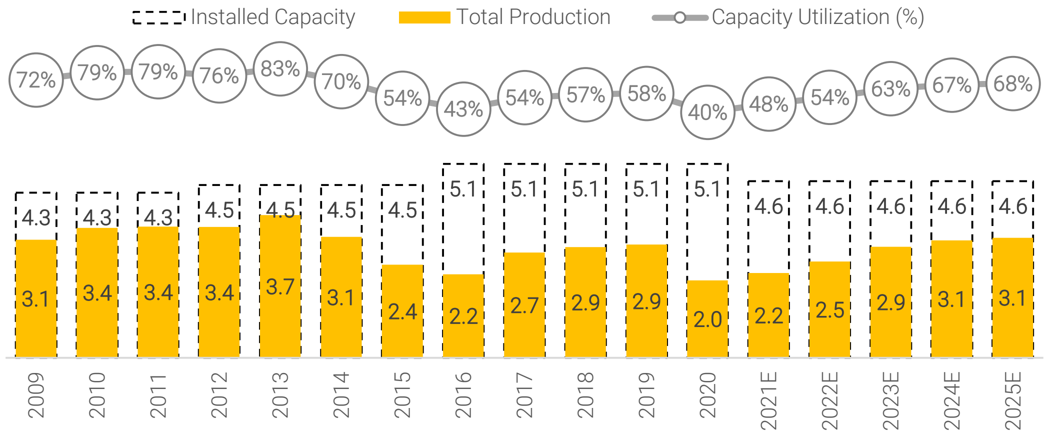


Figure 42: Brazil's Idleness at High Levels Post-Pandemic

Capacity and Production in million vehicles



Source: ANFAVEA and XP Research.

Who is Who?

Better Understanding Each OEM's Exposure

OEMs (Market Share)	Passengers Cars	Light Commercials	Trucks	Trailers	Buses Chassis	Buses Body	Wheel Tractors	Crawler Tractors	Grains Combines	Sugarcane Combines	Loaders & Backhoes
AGCO	-	-	-	-	-	-	X	-	X	X	-
Agrale	-	-	0%	-	16%	-	X	-	-	-	-
Audi	0%	-	-	-	-	-	-	-	-	-	-
BMW	1%	-	-	-	-	-	-	-	-	-	-
Caio/Induscar	-	-	-	-	-	25%	-	-	-	-	-
CAOA	2%	1%	0%	-	-	-	-	-	-	-	-
Caterpillar	-	-	-	-	-	-	-	X	-	-	X
CNH (Iveco, Case, New Holland)	-	1%	6%	-	9%	-	X	X	X	X	X
Comil	-	-	-	-	-	8%	-	-	-	-	-
DAF	-	-	4%	-	-	-	-	-	-	-	-
Facchini	-	-	-	24%	-	-	-	-	-	-	-
FCA (Fiat, Dodge, Chrysler, Jeep)	23%	51%	2%	-	-	-	-	-	-	-	-
Ford	4%	5%	0%	-	-	-	-	-	-	-	-
General Motors	14%	9%	-	-	-	-	-	-	-	-	-
Honda	5%	-	-	-	-	-	-	-	-	-	-
HPE (Mitsubishi, Suzuki)	1%	3%	-	-	-	-	-	-	-	-	-
Hyundai	11%	-	-	-	-	-	-	-	-	-	-
Irizar	-	-	-	-	-	3%	-	-	-	-	-
Jaguar Land Rover	0%	0%	-	-	-	-	-	-	-	-	-
John Deere	-	-	-	-	-	-	X	-	X	X	-
Komatsu	-	-	-	-	-	-	-	X	-	-	-
Librelato	-	-	-	12%	-	-	-	-	-	-	-
MAN (VW Trucks and Buses)	-	1%	28%	-	31%	-	-	-	-	-	-
Marcopolo	-	-	-	-	-	49%	-	-	-	-	-
Mascarello	-	-	-	-	-	14%	-	-	-	-	-
Mercedes-Benz (Cars and Vans)	0%	2%	3%	-	-	-	-	-	-	-	-
Mercedes-Benz	-	-	28%	-	39%	-	-	-	-	-	-
Nissan	3%	2%	-	-	-	-	-	-	-	-	-
Noma	-	-	-	6%	-	-	-	-	-	-	-
PSA (Peugeot, Citroën)	2%	2%	0%	-	-	-	-	-	-	-	-
Randon	-	-	-	32%	-	-	-	-	-	-	-
Renault	7%	5%	-	-	-	-	-	-	-	-	-
Scania	-	-	12%	-	2%	-	-	-	-	-	-
Toyota	8%	10%	-	-	-	-	-	-	-	-	-
Volkswagen	18%	9%	-	-	-	-	-	-	-	-	-
Volvo	-	-	16%	-	3%	-	-	-	-	-	-
Total Licensed Vehicles	1,749,669	431,328	117,865	88,377	15,279	14,287	35,366	944	5,615	770	4,382

Source: ANFAVEA and XP Research.

Auto Parts Industry in Brazil

Largely Exposed to OEMs, With Aftermarket Bringing Top-Line Resilience

The auto parts industry in Brazil is a ~R$100 billion business, consisting of three main sources of revenue inflow: (i) OEMs, as key players regarding the automakers supply chain; (ii) aftermarket, providing distribution and retailing of spare parts to the final customer; and (iii) exports.

While OEMs show a highly cyclical economical behavior, we believe the aftermarket and exports drive a more resilient profile for the auto parts industry.

- **While the aftermarket benefits from an older fleet** (often accompanied by outperformance of used car sales vs. new car sales throughout an economy downturn, which requires larger maintenance expenses), **exports usually perform well when currency depreciates**.

Figure 43: Auto Parts Industry's Revenues

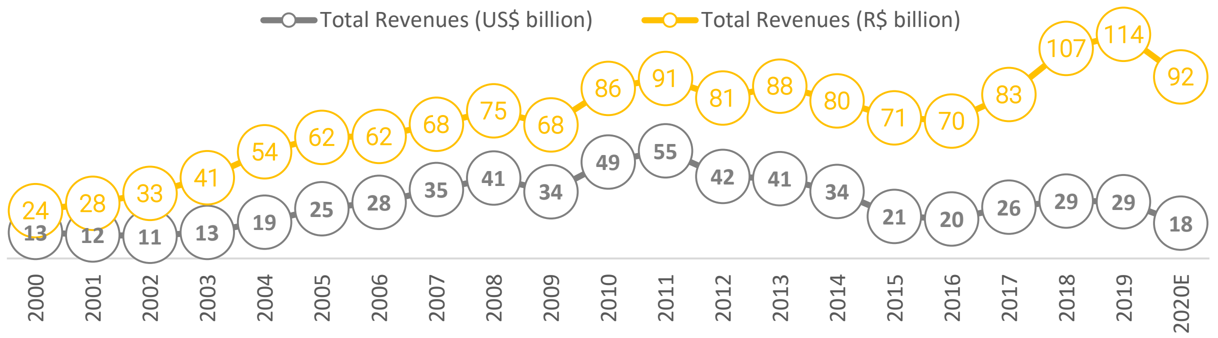


Figure 44: An Older Light Vehicles' Age Benefits the Auto Parts Aftermarket Industry

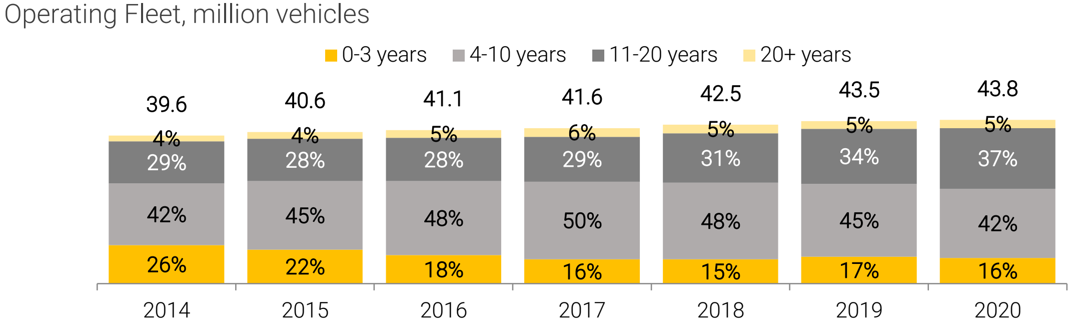


Figure 45: OEMs Play Usually the Highest Role Within Auto Parts' Industry…

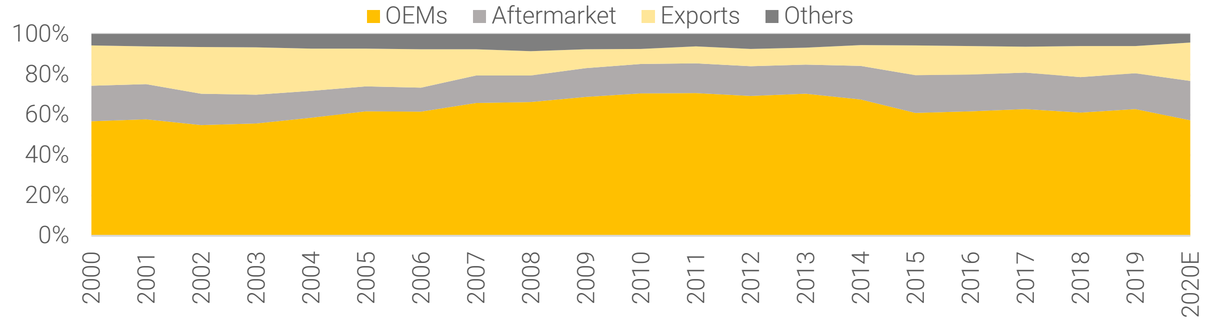
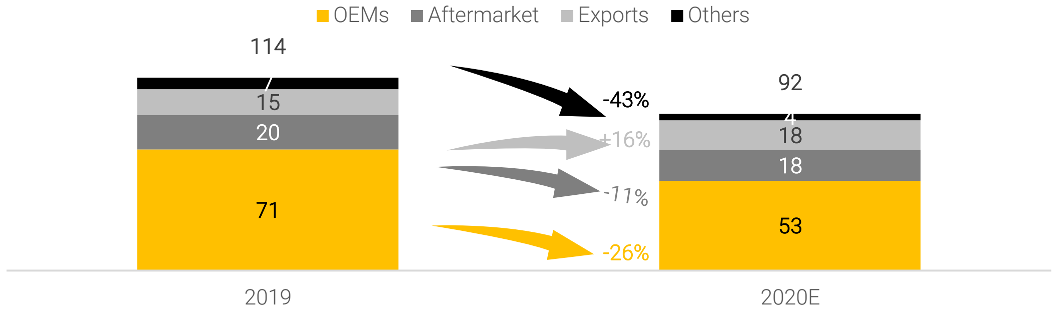


Figure 46: …Though Aftermarket and Exports Imply Further Top-Line Resilience (R$ billion)



Brazil Light Vehicles Market

Largely Impacted by the Pandemic and Semiconductors Shortage

Brazil's light vehicles have been more impacted vs. commercial vehicles in the COVID-19 outbreak context, with production and sales falling 32% and 27% in 2020 YoY, respectively (still down 42% and 31%, respectively, in August 2021 vs. the same month in 2019, mainly due to supply chain bottlenecks impacting the sector).

We expect a progressive recovery throughout the upcoming years, with production and sales reaching 2019 levels in 2023 and 2024, respectively, with: (i) low inventory of light vehicles (Figure 51) favoring production rather than sales in the short-term (inventory build-up); while (ii) rising interest rates and (iii) hiking new and used car prices remain the key risks to the sector's demand recovery.

Figure 47: Light Vehicle Fleet More Stable vs. GDP Growth

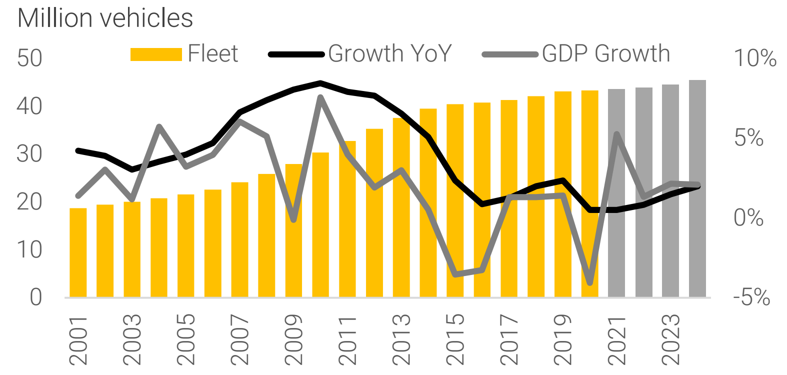


Figure 48: Light Vehicles Production

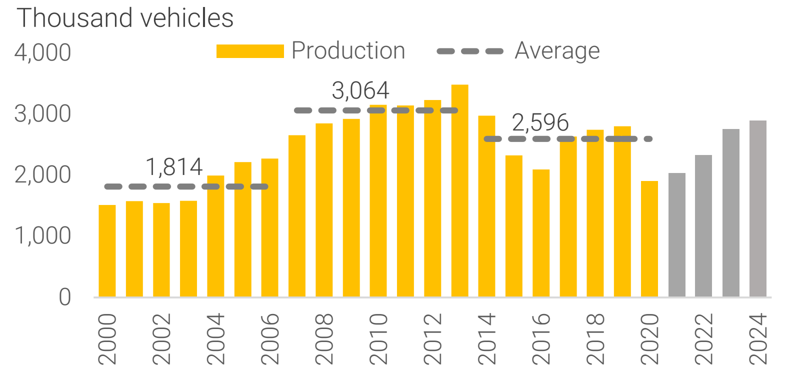


Figure 49: Light Vehicles Sales

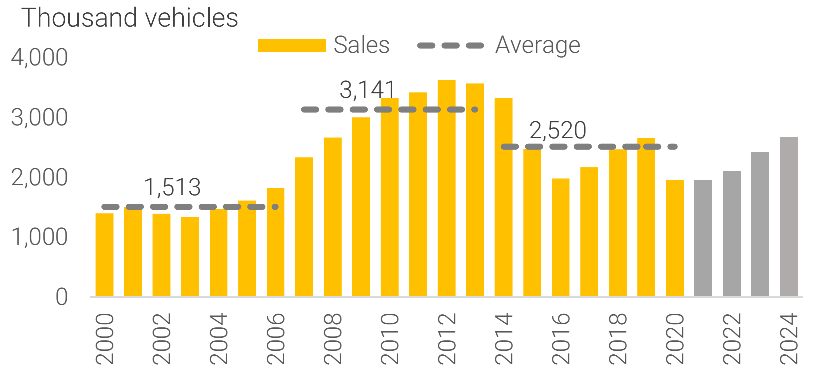


Figure 50: New and Used Car Prices Surged in Light of Supply Chain Issues

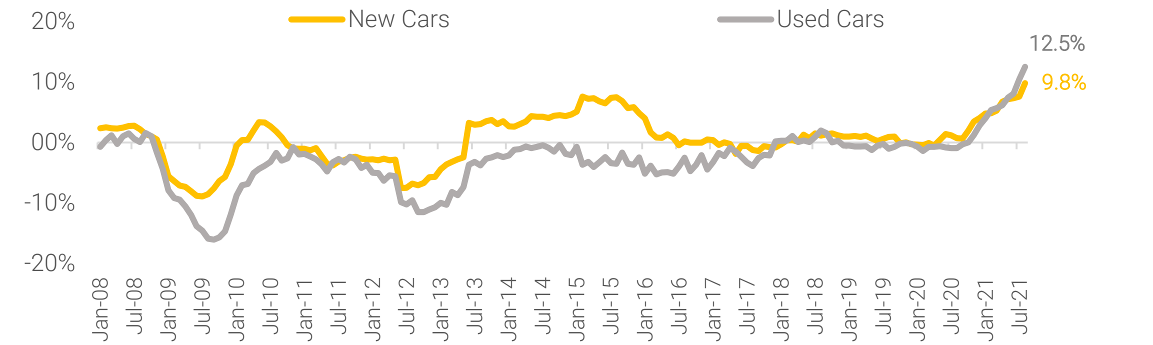
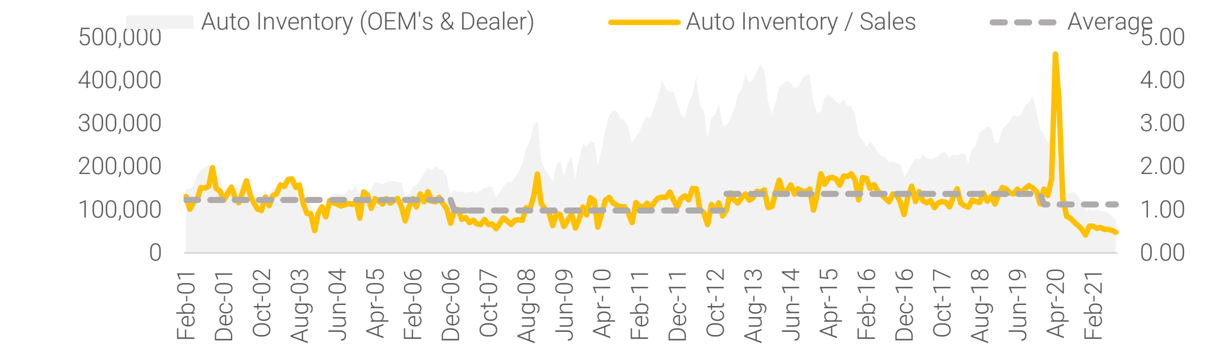


Figure 51: Inventory at All-Time Low Levels



Source: ANFAVEA, IBGE and XP Research.

Brazil Trucks Market

Booming Production and Sales, With Positive Long-Term Demand Indications

We see Brazilian truck market as one of the most cyclical auto sub-categories within Brazilian auto industry, with fleet expansion highly correlated to economic activity (Figure 52). In addition, following the significant reduction of government-incentivized financing sources in 2015 such as FINAME-PSI (Figure 56), trucks production and sales have drastically fallen (~47% fall in 2015 vs. 2014).

Regarding pandemic-related impacts, despite a sharp performance dip at the peak of the crisis (when production and sales fell by 96% and 54%, respectively), we note a rapid improvement for trucks demand (production and sales +39% and +32% in August/21 vs. the same month in 2019, respectively), reflecting, in our view, a prompt demand need for e-commerce and agribusiness-related vehicles, as Brazilian transportation matrix currently relies on highway alternatives (potentially losing part of its relevance in the long-term due to government's investment initiatives on rail roads and waterways).

Figure 52: Truck Fleet Highly Correlated to GDP

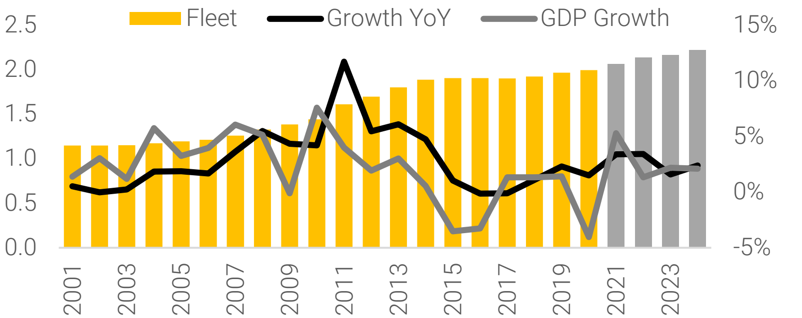


Figure 53: Truck Production

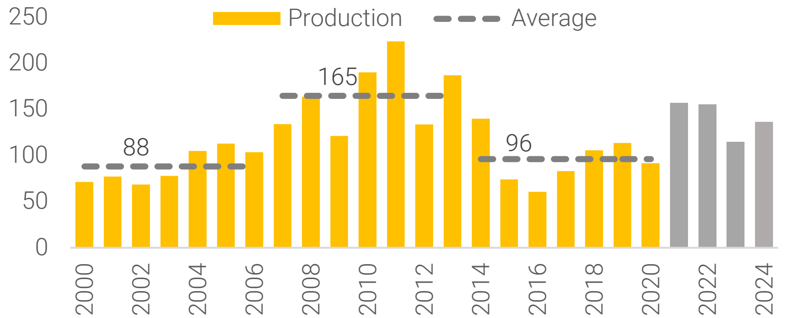


Figure 54: Truck Sales

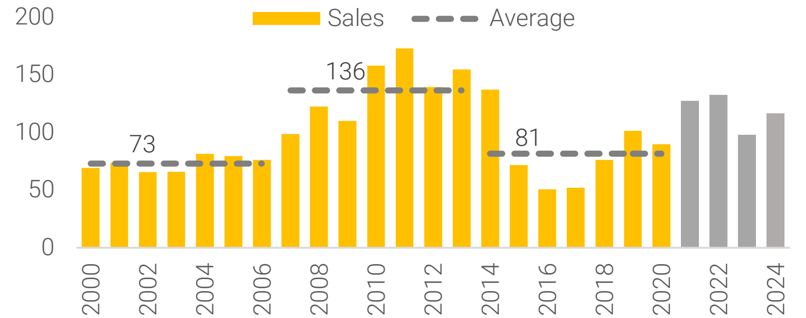


Figure 55: Brazil Transportation Matrix Dependent on Trucks

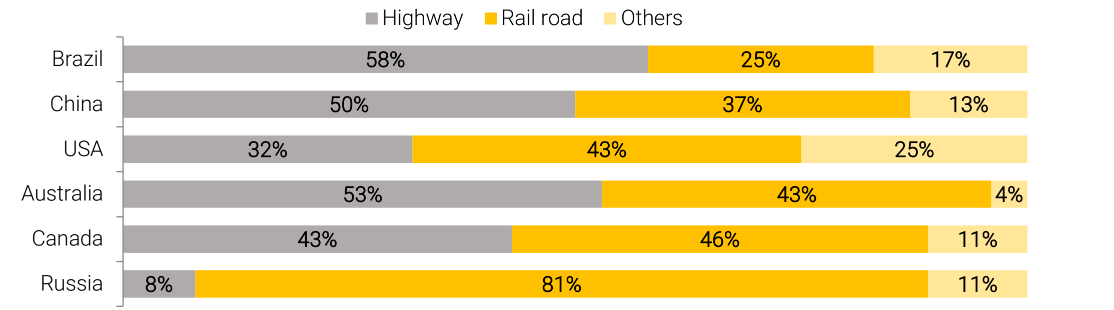
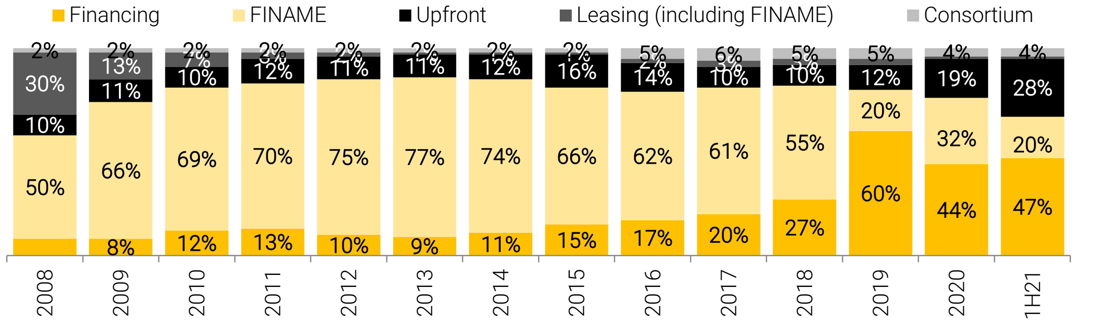


Figure 56: Financing Sources for Heavy Vehicles Shifting Toward Market Alternatives



Source: ANFAVEA, ANEF, CNT and XP Research.

Brazil Trailers Market

Important Long-Term Sales Drivers

With a similar dynamic as the truck market, trailers' sales have been performing strongly throughout 2021, with August/21 figures +42% vs. the same month in 2019 (and exports +127%).

We believe this solid performance reflects the positive long-term drivers we see for the sector's structural demand, such as: (i) Brazilian agricultural expansion (grains' production to grow by ~16% in 2022E, according to CONAB); (ii) e-commerce penetration increase; and (iii) economic rebound. That said, **we see Randon's recent deployed investments on capacity supporting its long-standing incumbent position**, and well-positioned to capture abovementioned demand growth in the future.

Figure 57: Trailers' Sales

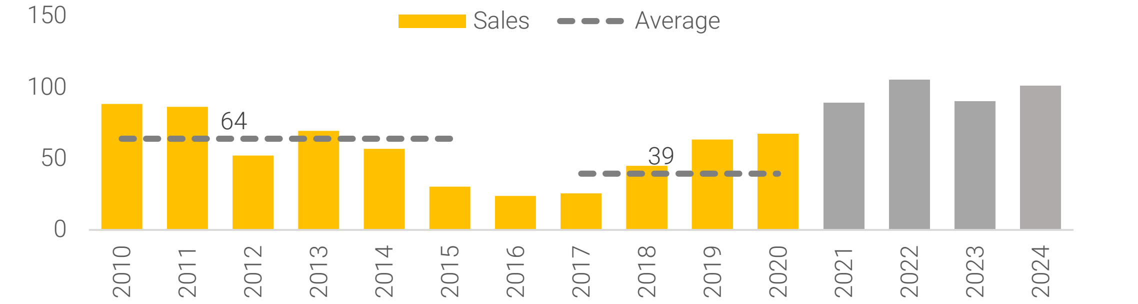


Figure 58: Seasonal Analysis of Trailers Sales

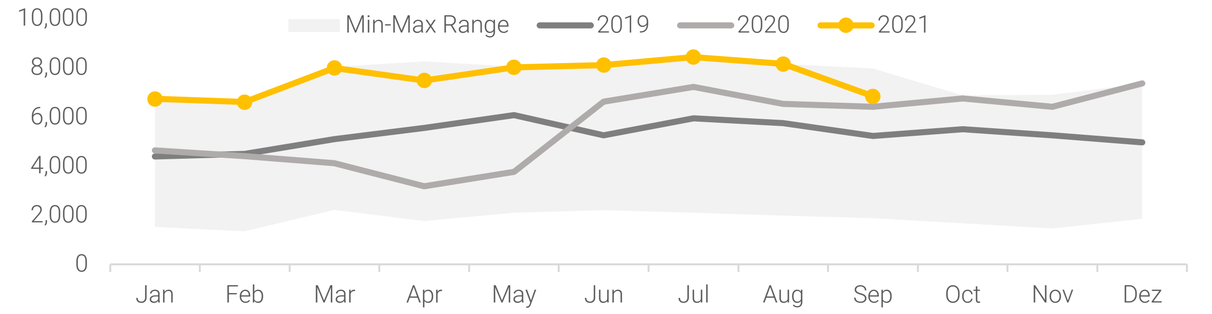


Figure 59: CONAB Indicates All-Time-High Crop in 2022 After Corn Breakage in 2021

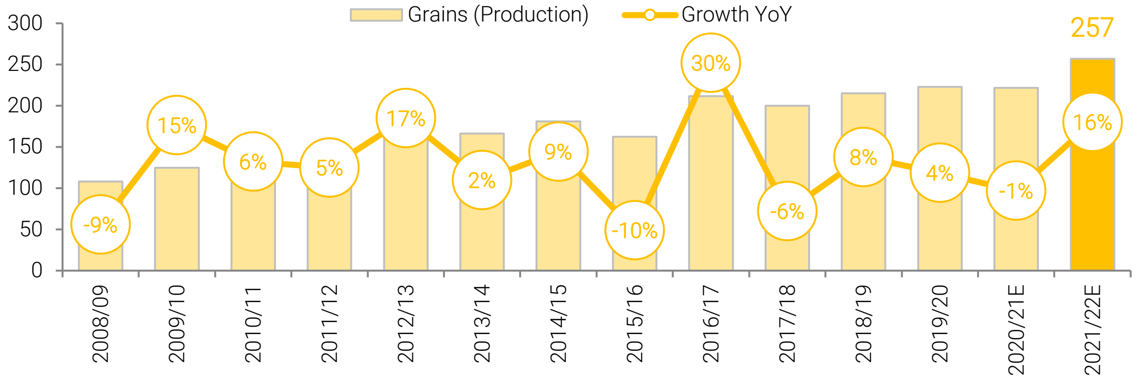
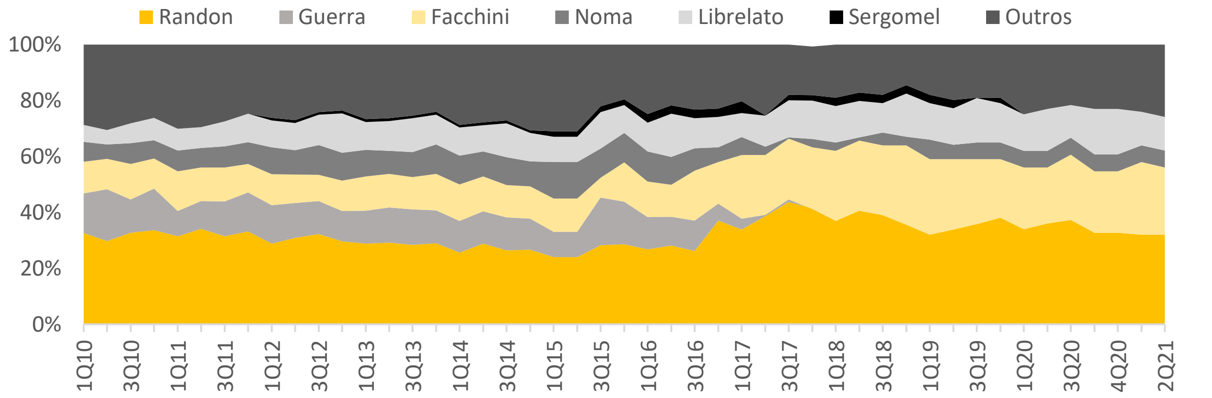


Figure 60: Trailers' Market Share (Randon Is the Incumbent)



Source: FENABRAVE, CONAB, ANFIR, Company Data and XP Research.

Brazil Buses Market

Pandemic-Related Effects Impacting the Sector's Recovery, Especially on Road Demand

As the most impacted automotive category within Brazilian auto industry, bus demand has significantly fallen post-COVID-19, with **2021 production indications implying that the worst might have still not passed** (YTD total production 19% and 44% below 2020 and 2019 levels, respectively).

We are concerned regarding the pace of bus demand recovery in the upcoming years, mainly on: (i) urban buses operating at 5-yr lows (-57% in August/21 vs. 2019 figures), suffering from competition with other mobility alternatives; (ii) road buses (Marcopolo's most value-added product) still 43% below 2019 levels in August/21, with social restriction still preventing the category's recovery. In addition, we worry that Brazil's tight fiscal standpoint might hinder future demand orders in the "*Caminho da Escola*", a government's program to renew the school buses fleet (potentially further compromising urban and micro buses demand).

Figure 61: Bus Production Historical Performance

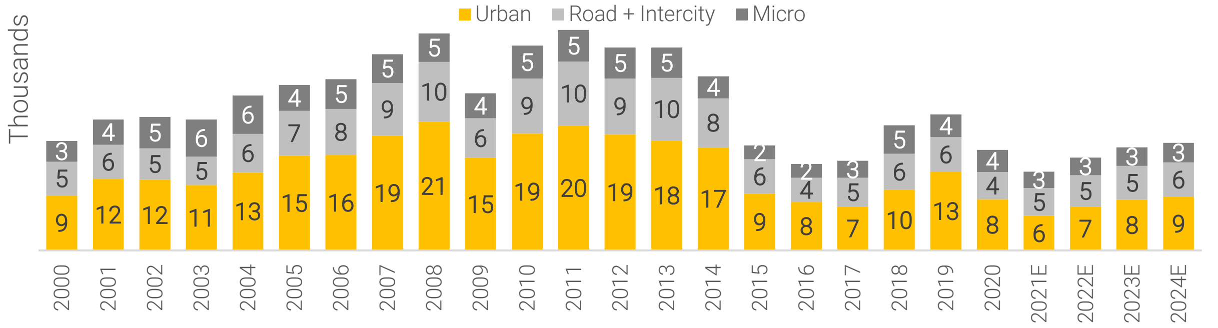
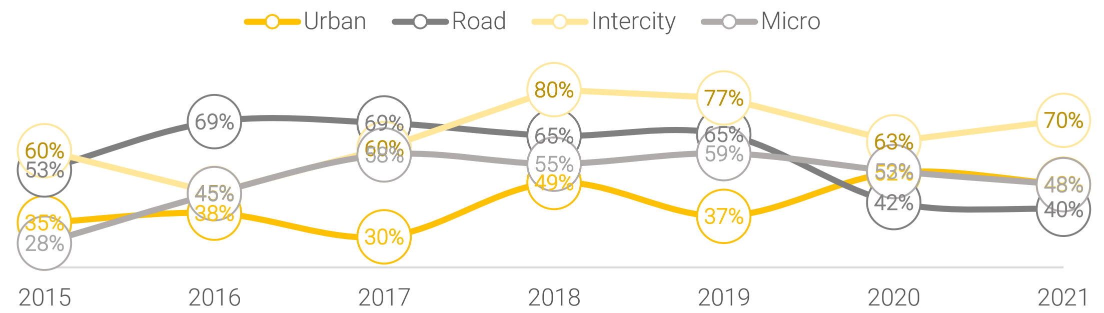
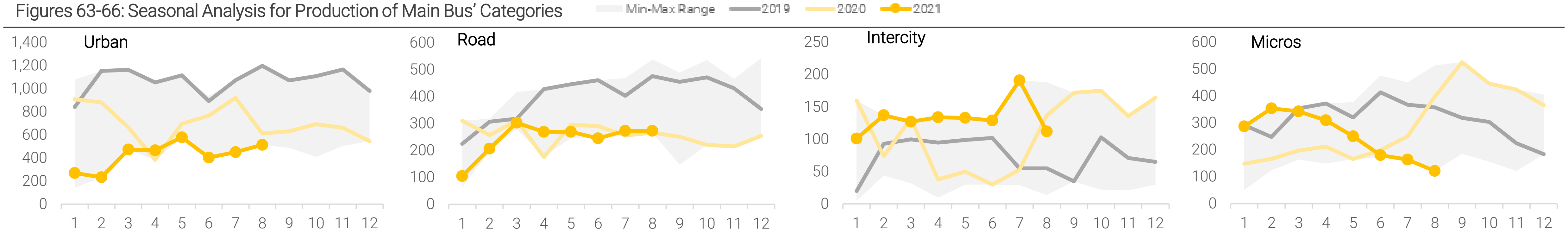


Figure 62: Marcopolo's Market Share Within Different Buses' Categories



Figures 63-66: Seasonal Analysis for Production of Main Bus' Categories



Source: FABUS and XP Research.

Automotive Industry - Heat Map

Operating Performance Across Several Regions and Vehicle Categories

Date	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21
Brazil Market																				
Autos (Passenger Cars + Light Vehicles)																				
Production	-4%	-22%	-22%	-100%	-86%	-58%	-36%	-21%	-11%	-19%	4%	21%	0%	-25%	-20%	-31%	-32%	-32%	-42%	-42%
New Car Sales	-3%	1%	-22%	-77%	-76%	-42%	-30%	-25%	-11%	-15%	-7%	-8%	-15%	-17%	-11%	-26%	-25%	-21%	-30%	-31%
Direct Sales	3%	9%	-20%	-75%	-82%	-52%	-35%	-26%	-12%	-18%	-15%	-9%	-8%	-21%	-15%	-30%	-28%	-26%	-39%	-38%
Retail Sales	-7%	-4%	-24%	-78%	-70%	-34%	-25%	-23%	-10%	-12%	0%	-7%	-19%	-13%	-8%	-22%	-23%	-15%	-23%	-26%
Used Car Sales	5%	-9%	-14%	-83%	-67%	-32%	-17%	-7%	8%	7%	14%	22%	-1%	5%	19%	-7%	2%	23%	5%	9%
Imports	-8%	-4%	-25%	-68%	-62%	-26%	-26%	-32%	-23%	-25%	-17%	-29%	-34%	-38%	-25%	-35%	-25%	6%	-5%	-12%
Exports	-22%	-7%	-20%	-79%	-93%	-54%	-32%	-24%	-19%	18%	42%	33%	-3%	-21%	-6%	-5%	-14%	-19%	-46%	-23%
Inventory (OEMs + Dealerships)	7%	-11%	-10%	-23%	-38%	-50%	-57%	-59%	-59%	-64%	-64%	-66%	-61%	-66%	-66%	-68%	-70%	-71%	-73%	-78%
Electric Vehicles Sales	324%	615%	367%	52%	68%	86%	74%	124%	67%	14%	11%	-19%	257%	384%	457%	834%	769%	390%	278%	347%
Trucks																				
Production	5%	-5%	1%	-96%	-64%	-44%	-38%	-32%	-9%	-3%	31%	76%	26%	23%	50%	39%	24%	46%	36%	39%
New Truck Sales	4%	-5%	-15%	-54%	-49%	12%	6%	-16%	-20%	-16%	-2%	16%	5%	13%	42%	16%	23%	42%	28%	32%
Semi-Light Trucks	38%	-42%	-59%	-58%	-38%	52%	27%	30%	0%	-6%	48%	4%	60%	-19%	12%	-3%	41%	102%	137%	132%
Light Trucks	-6%	-15%	-22%	-63%	-55%	7%	-25%	-12%	-13%	-10%	-10%	1%	-9%	-12%	14%	-1%	-4%	30%	11%	38%
Medium Trucks	-28%	-6%	-18%	-53%	-47%	12%	-4%	-7%	-23%	-17%	-4%	-6%	-15%	-6%	31%	-2%	1%	13%	24%	24%
Semi-Heavy Trucks	4%	4%	11%	-37%	-34%	24%	4%	-9%	-5%	-6%	6%	38%	29%	31%	68%	36%	37%	62%	45%	31%
Heavy Trucks	11%	-4%	-18%	-58%	-52%	13%	16%	-22%	-29%	-23%	-2%	12%	2%	21%	43%	16%	31%	48%	27%	36%
Exports	72%	11%	-19%	-80%	-52%	18%	-19%	-7%	59%	-2%	15%	69%	163%	143%	64%	71%	36%	69%	25%	53%
Buses																				
Production (ANFAVEA)	-26%	1%	19%	-86%	-56%	-43%	-53%	-36%	-19%	-32%	-17%	-15%	-26%	-37%	29%	-33%	-40%	-32%	-42%	-43%
New Bus Sales	-2%	-7%	-35%	-79%	-61%	-34%	-21%	-34%	-34%	-32%	-22%	-36%	-40%	-28%	-25%	-35%	-9%	-10%	-35%	-40%
Exports	-24%	-39%	-70%	-88%	-52%	-37%	10%	-47%	-37%	-3%	-49%	-37%	-28%	-69%	-64%	-44%	-30%	-43%	-35%	-14%
Production (FABUS)	14%	-25%	-30%	-61%	-42%	-26%	-20%	-30%	-12%	-24%	-23%	-19%	-44%	-51%	-34%	-41%	-46%	-47%	-43%	-50%
Urban	8%	-24%	-43%	-64%	-38%	-14%	-14%	-49%	-41%	-38%	-43%	-44%	-68%	-80%	-59%	-56%	-48%	-55%	-58%	-57%
Road	38%	-16%	-2%	-59%	-34%	-37%	-36%	-44%	-45%	-53%	-50%	-28%	-53%	-33%	-5%	-37%	-40%	-47%	-32%	-43%
Intercity	700%	-20%	32%	-60%	-49%	-71%	-4%	149%	391%	70%	92%	152%	405%	47%	27%	41%	34%	26%	247%	104%
Micro	-35%	-39%	-29%	-58%	-58%	-32%	-22%	31%	115%	44%	104%	76%	6%	1%	5%	-21%	-64%	-51%	-56%	-61%
Trailers																				
Trailer Sales (ANFIR)	6%	-2%	-19%	-43%	-38%	26%	21%	14%	23%	23%	22%	47%	53%	47%	57%	35%	32%	54%	42%	42%
Exports	-49%	-25%	-39%	-80%	-62%	41%	-3%	25%	85%	11%	74%	37%	12%	76%	39%	30%	31%	175%	130%	127%
Foreign Markets																				
U.S.A.																				
Passenger Cars	0%	8%	-38%	-46%	-29%	-27%	-11%	-20%	6%	2%	-15%	6%	-2%	-5%	0%	14%	-1%	-14%	-9%	-33%
Commercial Vehicles	-17%	-10%	-24%	-39%	-49%	-33%	-33%	-22%	-21%	-13%	2%	-1%	-8%	-10%	4%	-16%	-18%	-10%	-24%	-20%
Europe																				
Passenger Cars	-7%	-7%	-52%	-78%	-57%	-24%	-4%	-18%	1%	-7%	-14%	-4%	-31%	-26%	-22%	-23%	-25%	-14%	-26%	-32%
Light Commercial Vehicles	-8%	-4%	-50%	-71%	-46%	-14%	-1%	-19%	18%	2%	1%	-5%	-14%	-2%	-2%	-3%	-11%	-5%	-17%	-24%
Medium Commercial Vehicles	-2%	-11%	-29%	-38%	-43%	-45%	6%	-11%	22%	-5%	-5%	-10%	-6%	-1%	12%	-4%	-14%	-28%	9%	-5%
Heavy Commercial Vehicles	-20%	-19%	-39%	-56%	-58%	-54%	3%	-14%	-3%	-10%	5%	12%	-15%	-5%	10%	-6%	-21%	-33%	30%	9%
Buses	4%	-1%	-39%	-66%	-58%	-43%	-10%	-25%	-4%	-4%	-5%	15%	-15%	-4%	-24%	-25%	-38%	-29%	30%	-3%
China																				
Passenger Cars	-20%	-82%	-48%	-2%	7%	2%	9%	6%	8%	9%	12%	7%	1%	-5%	-7%	8%	5%	-9%	2%	-6%
Light Commercial Vehicles	-2%	-62%	-24%	26%	43%	48%	54%	41%	51%	32%	22%	7%	52%	29%	33%	35%	39%	40%	7%	-20%
Trucks	-15%	-74%	-20%	40%	56%	88%	67%	43%	27%	27%	13%	-3%	7%	-5%	26%	35%	34%	29%	17%	-17%

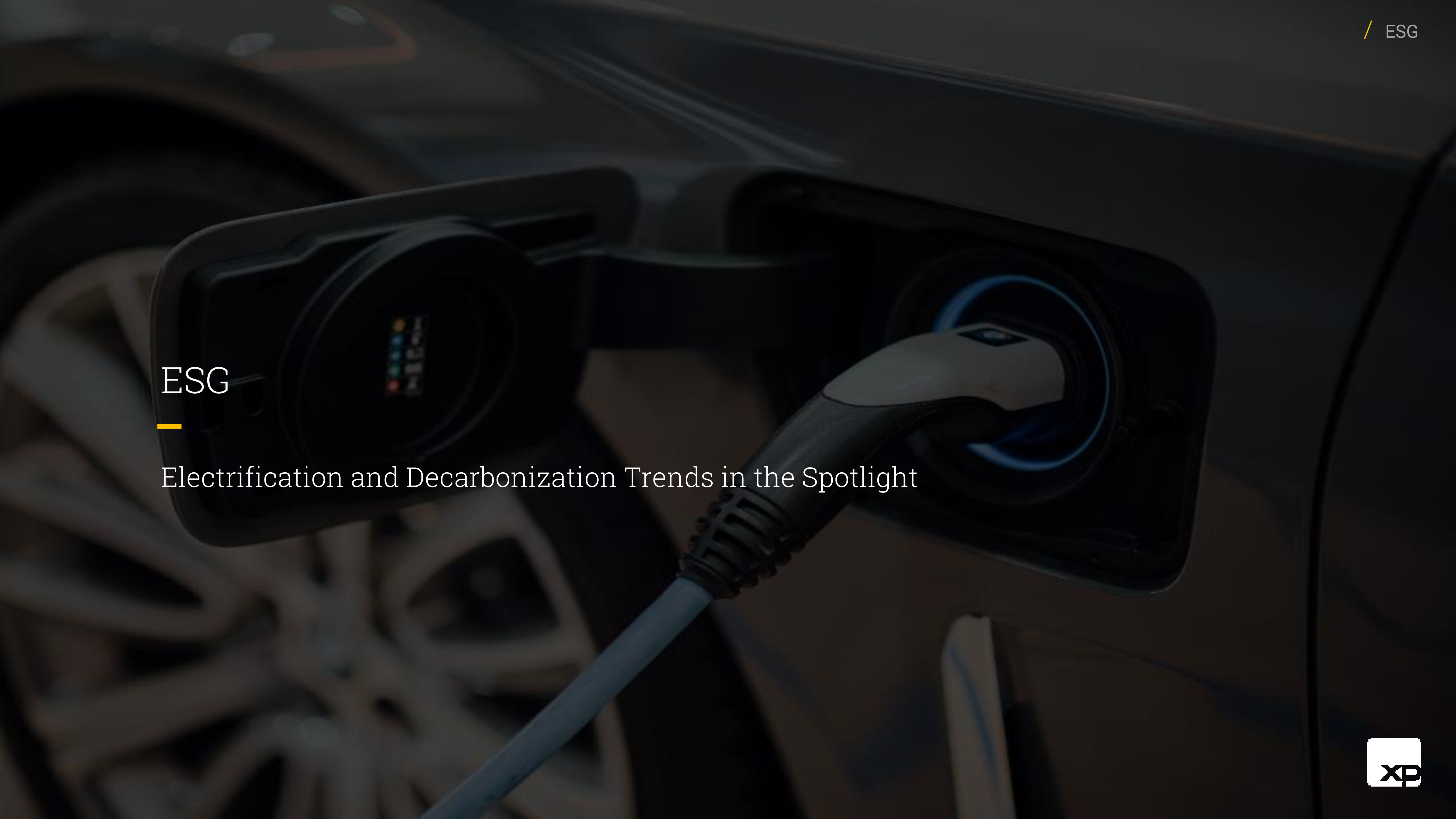
Source: ANFAVEA, FRED, ACEA, CAAM, ANFIR, FABUS and XP Research. *Monthly performance vs. 2019 levels.

Automotive Industry - Model Forecast

Below We Provide the Main Results of our Brazil Auto Model Forecast

Auto Forecast	# of Vehicles ('000)								Elasticity to GDP			
	2000-15	2019	2020	2021	2022	2023	2024	2025	2000-10	2010-19	2000-25	2019-25
Operating Fleet	28,894	45,479	45,722	46,008	46,438	47,134	48,077	49,042	1.2x	1.3x	1.5x	1.0x
Passenger Cars	23,892	37,720	37,862	37,913	38,104	38,578	39,270	39,981	1.2x	1.3x	1.5x	1.0x
Light Commercials	3,334	5,458	5,534	5,706	5,876	6,064	6,263	6,463	1.0x	1.5x	1.6x	1.1x
Trucks	1,404	1,965	1,994	2,062	2,132	2,166	2,217	2,270	0.9x	1.3x	1.2x	1.1x
Buses	264	336	331	328	326	326	327	329	1.0x	1.1x	1.0x	0.9x
Production	2,620	2,945	2,014	2,206	2,505	2,892	3,059	3,123	1.5x	0.8x	1.2x	1.0x
Passenger Cars	2,140	2,449	1,614	1,672	1,939	2,339	2,462	2,513	1.4x	0.9x	1.2x	0.9x
Light Commercials	325	355	291	358	389	415	436	445	1.5x	0.7x	1.2x	1.2x
Trucks	124	113	91	157	155	115	136	139	1.9x	0.6x	1.2x	1.1x
Buses	31	28	18	18	21	24	25	25	1.3x	0.6x	0.7x	0.8x
Sales	2,527	2,788	2,058	2,101	2,256	2,540	2,816	2,875	1.6x	0.7x	1.2x	0.9x
Passenger Cars	2,080	2,262	1,616	1,528	1,670	1,960	2,196	2,242	1.6x	0.7x	1.1x	0.9x
Light Commercials	320	404	339	432	438	464	484	494	1.7x	0.8x	1.5x	1.1x
Trucks	105	101	90	127	132	98	116	119	1.6x	0.6x	1.0x	1.1x
Buses	22	21	14	14	16	18	19	20	1.2x	0.7x	0.7x	0.9x
Exports	469	428	324	371	416	461	488	498	1.2x	0.8x	1.0x	1.1x
Passenger Cars	378	347	257	293	330	374	394	402	1.4x	0.8x	1.2x	1.1x
Light Commercials	61	60	49	53	58	62	65	67	0.7x	0.9x	0.6x	1.0x
Trucks	21	14	13	22	23	19	23	24	1.7x	0.6x	1.6x	1.6x
Buses	8	7	4	4	5	5	5	6	1.4x	0.7x	0.7x	0.7x
Fleet Retirement Turnover (%)	3.3%	3.8%	4.0%	3.9%	3.9%	3.9%	3.9%	3.9%	n.m.	n.m.	n.m.	n.m.
Passenger Cars	3.3%	3.8%	3.9%	3.9%	3.9%	3.9%	3.8%	3.8%	n.m.	n.m.	n.m.	n.m.
Light Commercials	4.7%	4.5%	4.7%	4.6%	4.6%	4.6%	4.6%	4.6%	n.m.	n.m.	n.m.	n.m.
Trucks	4.2%	2.9%	3.0%	2.9%	2.9%	3.0%	2.9%	2.9%	n.m.	n.m.	n.m.	n.m.
Buses	4.7%	5.4%	5.5%	5.6%	5.5%	5.5%	5.5%	5.5%	n.m.	n.m.	n.m.	n.m.
GDP Growth	52.2%	1.4%	-4.1%	5.3%	1.3%	2.2%	2.1%	2.1%	43.7%	6.6%	67.1%	9.0%

Source: XP Research.



ESG

Electrification and Decarbonization Trends in the Spotlight

ESG

Governance and Safety at First Place

An Overview of Randon, Tupy, Iochpe-Maxion, Fras-le and Marcopolo ESG Activities

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For the Brazilian Auto Parts' segment, we see the G pillar as the most important, followed by the S and E, respectively. In our view, on a company perspective, TUPY3 is the best positioned among companies within the industry under XP's coverage, mainly on the back of its good governance practice and compromise with the environmental pillar for a long date, followed by RAPT4. On the other hand, we see POMO4 still paving the way to get back on the ESG road, given its lack of ESG data disclosure for some years, while the other companies (FRAS3 and MYPK3) are running faster.

(E) Environmental. Those risks focus on the companies' capacity to develop clean tech innovation, as well as its ability to embrace the opportunities in the world's decarbonization trend. Therefore, we seek for (i) an increase in their R&D initiatives - mainly in relation to green tech; (ii) efforts to produce electric/hybrid vehicles; (iii) energy consumption reduction programs; and (iv) toxic emission and waste management.

(S) Social. On this pillar we consider the critical role that auto parts companies play at vehicle safety, and the possibilities of tracking faults to each component products. We highlight key-topics as follow: (i) labor management, once auto parts manufacturing use to be labor-intensive; and (ii) health & safety, especially related to products safety, considering company's concerns about it, recalls episodes, and strength of supply chain.

(G) Governance. The most important pillar for this sector is related to a high proportion of cross shareholding presented by the companies in this segment, as well as the evaluation related to ethics issues and board composition, which are relevant to any industry.

In this section, we highlight ESG's key topics for Auto Parts companies Randon (RAPT4), Tupy (TUPY3), Iochpe-Maxion (MYPK3), Fras-le (FRAS3) and Marcopolo (POMO4) and analyze how those companies screen from an ESG perspective.

Company	Ticker	Is the company listed?	Is the company in Novo Mercado?	Does it have a Sustainability Report?	Does it have a Materiality Matrix?	% of women (Board of Directors)	% of women (Board of Executive Officers)	% independent members (Board of Directors)	ESG MSCI Rating
Randon	[RAPT4]	✓	X	✓	✓	20%	0%	0%	CCC **B** BB BBB A AA AAA
Tupy	[TUPY3]	✓	✓	✓	✓	33%	0%	33%	CCC **B** BB BBB A AA AAA
Iochpe-Maxion	[MYPK3]	✓	✓	✓	✓	0%	0%	55%	**CCC** B BB BBB A AA AAA
Fras-le	[FRAS3]	✓	X	✓	✓	0%	0%	0%	Not Available
Marcopolo	[POMO4]	✓	X	✓	X	25%	0%	75%	CCC B **BB** BBB A AA AAA

Source: Company Data, MSCI and XP Research.

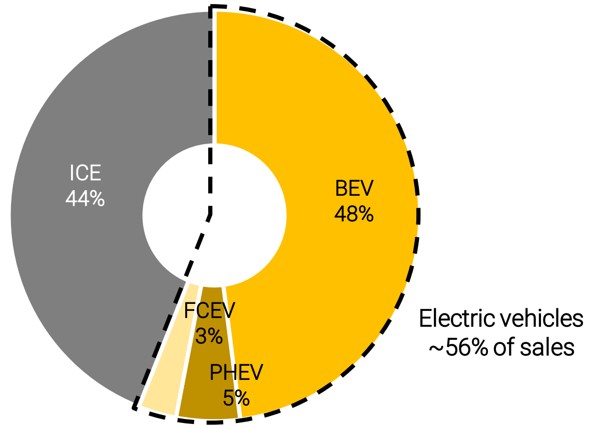
Industry Trends

Electrification and Decarbonization Trends as Main Highlights

In face of the fact that 50% of total CO2 emissions are caused by fossil fuels by vehicles (Bloomberg), the automotive sector currently presents two major trends in terms of clean technologies: electric vehicles and decarbonization, which we detail below.

(i) Electric Vehicles: According to MSCI, in addition to tightening emission-related regulatory pressures, 2020 increasingly saw more OEMs announcing accelerated investments to the shift of their product portfolios to electric and electrified vehicles (Figure 69). In this way, auto components producers that can invest and develop new alternative drivetrain products could stand to benefit. However, even though these vehicles production and utilization are current financially incentivized by some governments and companies, this segment still faces scale production and adhesion limitations, as: (i) expansive barriers to the industry production remodeling; (ii) installation of infrastructure for electrical charging points; and (iii) time to recharging and other battery-related limitations. Finally, **long-term estimates show that electric vehicles could represent up to 56% of total vehicle sales by 2050** (Figure 67).

Figure 67: 2050 Share of Total Vehicle Sales[1]



(i) (ii) Decarbonization: Like electric vehicles, the utilization of biofuel, hybrid powertrain and other sustainable-related alternatives are facilitated in big cities due to the existence of a better infrastructure and higher deployed investments on sustainability efforts. Medium and heavy trucks still face difficulties related to (i) high prices; (ii) time stopped for recharging; and (iii) lack of infrastructure in regions far from cities centers (which are some of the challenges in the transition to a low carbon economy) – in that regard, Figures 68 and 70 show that utilization of diesel or other liquid fuels induced engines will keep in high rates for heavy trucks in the long-term. As an example of decarbonization initiatives, we highlight the Euro VI, a system defined as a set of standards that regulate the emission of pollutants for diesel engines. In Europe, it was launched in 2013 and implemented to all heavy road vehicles equipped with diesel engines sold as of 2015; in USA, it is in place since 2010; and, in Brazil, it is scheduled to be implemented by 2023 (which could be postponed for three years due to the pandemic), with implications for the local heavy vehicles' industry and the auto parts business.

Figure 68: Electric Vehicles Sales in the World

Electric Vehicles *(Sales, units)*				
2020 *(Penetration)*	2,986,659 *(4.6%)*	95,315 *(n.a.)*	7,470 *(n.a.)*	83,499 *(n.a.)*
2025 *(Penetration)*	11,429,427 *(10.4%)*	1,207,769 *(9.0%)*	206,517 *(1.9%)*	333,341 *(17.7%)*
2030 *(Penetration)*	22,425,087 *(17.3%)*	2,856,141 *(16.3%)*	304,904 *(2.7%)*	594,016 *(19.8%)*

Figure 69: Electrification Investments Announced

Main OEMs, US$ billion

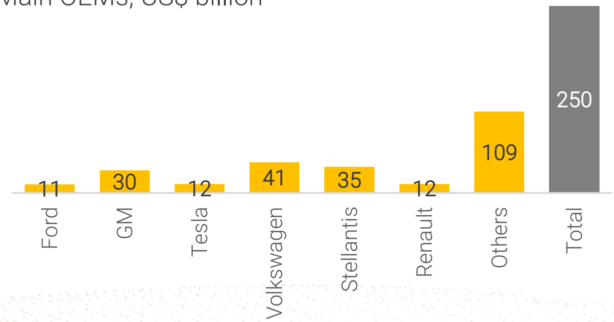
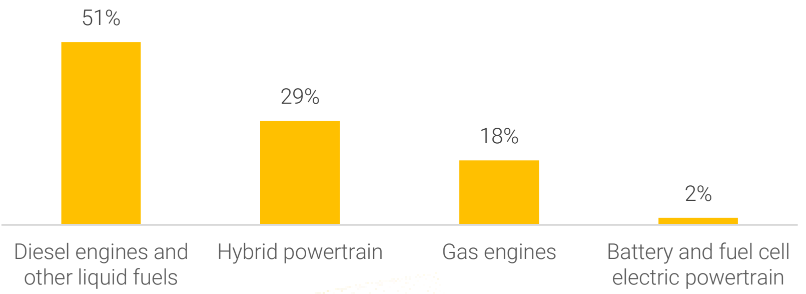


Figure 70: Heavy Vehicles' Powertrain Alternative Adoption

Europe in 2050



Source: IEA, Wood Mackenzie and XP Research. [1]BEV: battery electric vehicles; PHEV: plug-in hybrid electric vehicles; FCEV: fuel cell electric vehicles; ICE: internal combustion engine vehicles.

Companies' Initiatives

Auto Parts Companies Engaged in Greener Initiatives

Below we list the main initiatives we see Auto Parts' companies engaging regarding (i) electrification; and (ii) decarbonization trends.

Electrification Trends		Decarbonization Trends		
RANDON	Marcopolo	TUPY	IOCHPE-MAXION	FRASLE
Company owns a technology center (CTR), with a segment focused on security and performance tests for electric vehicles. In 2019 it was released e-Sys system, the first auxiliary traction module with electric motor for trailers in Latin America, capable of providing fuel savings of up to 25%, as well as helping to reduce component wear.	In 2018, Marcopolo has signed a partnership with BYD, a global company specializing in clean energy and the world's largest manufacturer of rechargeable batteries, to develop and produce 100% electric buses. In 2021 the first 100% electric VLP in Brazil, has already supplied around 370 electric and hybrid units to several countries.	In 2021 the company has signed an agreement with Westport Fuel and AVL List GmbH for the development of an internal combustion engine (ICE) of high efficiency, powered by hydrogen and intended for cargo transport.	Maxion Structural Components, a group's subsidiary, has been developing battery racks in commercial vehicles, capable to achieve a weight reductions of up to 60%. Maxion Wheels presents its technology focus on wheels weight reduction.	The company has invested in new composite materials for auto parts production. Launched in 2021, the usage of them is capable do decrease up to 65% component's weight, causing a decrease in fuel consumption and CO2 emission.

Source: XP Research.

Randon (RAPT4)

In the Right Way

We see Randon in the right way towards ESG agenda, being well positioned in the S front, mainly on the back of company's great standards for suppliers, coupled with a solid safety performance, though we see room for improvement in labor management, while on the G pillar, we welcome its anti-corruption initiatives, but the lack of independent members at the Board calls our attention. Finally, on E, we missed detailed information about clean tech investments and GHG emissions, but we positively acknowledge Randon's efforts to advance on this front, with high expectations with what is coming.

(E) High expectations with what is coming. On this front, we highlight three key topics:

- (i) Energy Consumption: We see Randon advancing to contribute with the energy transition agenda, especially due to the increase in the consumption of renewable fuels over the years (Figure 71). However, we still see space for improvement, once the energy consumption from non-renewable sources also increased in 2020 compared to the previous year – the company stated that Randon Araraquara plant went through an expansion process and Controil unit had started reporting its consumption, justifying the increase.
- (ii) Opportunity in Clean Tech: We positively highlight company's projects at R&D, though we see opportunity for investments considering clean mobility trends – about 1.66% of net revenues was invested at technology and innovation in 2020. In addition, we also welcome the initiatives of CTR Innovation Lab and Conexo Platform, a physical space for finding digital solutions through collaboration thinking, and Randon Ventures for startups investments.
- (iii) Toxic Emissions & Waste: The company has just disclosed a new technology called e-Sys system that can decrease the greenhouse gases (GHG) emission by vehicles, whereas missing a long-dated track records of its emissions in industrial plants. Regarding waste management, we positively highlight (i) the increase in the treated effluent reuse during the last years (Figure 72); (ii) the 65.4% of materials waste generated recycled; and (iii) the 37% of materials used coming from renewable sources (Figure 73). Finally, it's worth mentioning that we see with good eyes the Program "Rota Verde" launched in 2021, which has the goal to zero the amount of waste sent to landfills, while waiting for its implementation in the next period.

Figure 71: Energy Consumption (GJ)

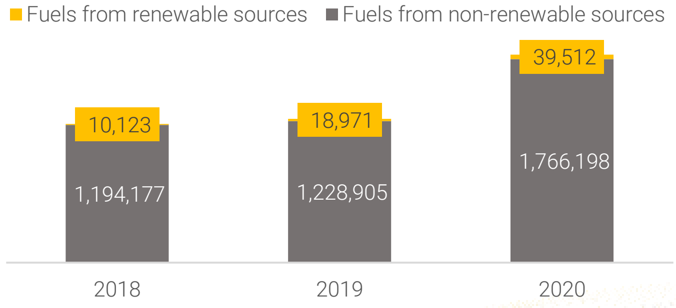


Figure 72: Reuse of Treated Effluents

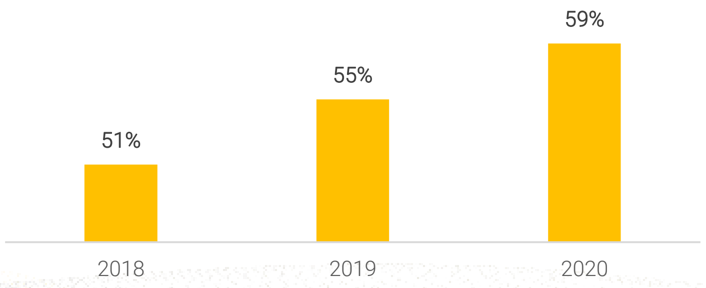
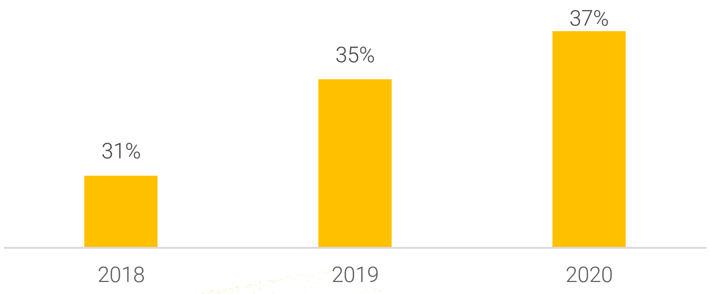


Figure 73: % of materials used from renewable sources



Source: Company Data, MSCI and XP Research.

Randon (RAPT4)

(S) A strict control of supplier selection coupled with a solid safety performance. On the Social pillar, we detailed below two key topics:

- **(i) Labor Management**: According to MSCI, the labor-intensive truck and auto parts manufacturing operations may expose companies to risks related to labor unrest. With a total work-force of 12,239 employees by the end of 2020, we positively highlight Randon's Health, Safety and Environment (HSE) Policy, established to address the necessary processes to reduce the employees' exposure to risks inherent to the work environment, while we expect to see more initiatives and polices focused on the wellness of industrial employees in the future.
- **(ii) Health & Safety**: Randon's processes are certified by environmental quality, health and safety management systems and present technical certifications for the automotive industry in all countries with operations. We positively highlight several requirements that its suppliers must be in compliance with, including safety equipment utilization and quality management certifications, such as ISO 9001 and IATF 16949.

(G) Positive anti-corruption initiatives, but the lack of independent members at the Board calls our attention. Randon shares (RAPT4) are listed on Level 1 segment of B3, with the controller group (mainly composed by members of Randon Family) owning 37.7% of shares. On the bright side, we welcome the fact that Randon has signed a Business Pact for Integrity and Against Corruption of the Ethos Institute and presents activities against corruption and efforts within ethics and compliance. On the other hand, when it comes to company's Board of Directors, we highlight the lack of policy of minimum independent members (current none of 5 are independents one, which calls our attention), while on diversity, despite we positively acknowledge the presence of one female member, we see room for improvement, as well as for the Board of Executive Officers, which lacks women's presence – *please refer to the Appendix for company's Management and Shareholder Structure (pg 67)*.

MSCI ESG Rating. Randon has a B rating by MSCI ESG Ratings. On a global perspective, the B rating places RAPT4 among the 17% companies with this rating under MSCI ACWI Index constituents within construction & farm and machinery & heavy trucks (29 companies).

Figure 74: MSCI Distribution

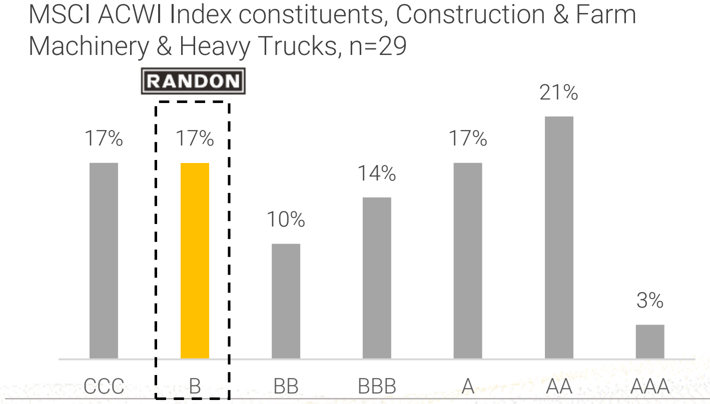


Figure 75: ESG MSCI Rating – Weights

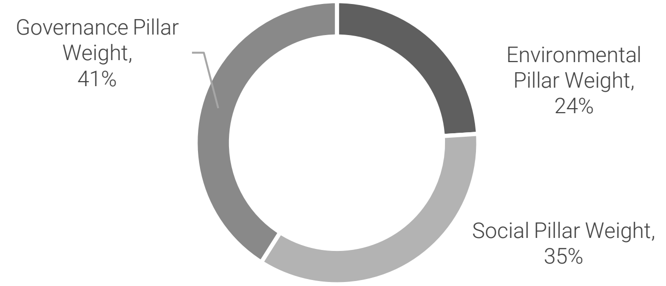
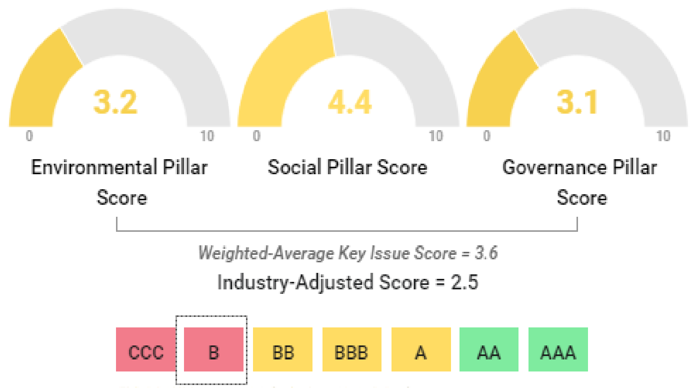


Figure 76: ESG MSCI Rating – Scores



Source: Company Data, MSCI and XP Research.

Tupy (TUPY3)

Half of ESG Homework Done

We see Tupy as the best ESG-positioned company within the sector under XP's coverage. On the E pillar, we highlight Tupy's historical commitments with the environment, mainly when it comes to the control of toxic emission gases, though we missed a detailed plan focused on clean tech. On the S front, the Health & Safety policies are the main highlight, while on G, we positively acknowledge (i) that its shares (TUPY3) are listed on Novo mercado; and (ii) Tupy's goal to have women's presence in the Board of Directors up to 2023, evidencing company's compromise to cover the diversity agenda.

(E) Company's commitment for a long date is a huge highlight. On this front, we highlight three key topics:

- (i) Energy Consumption: Tupy presents an Energy Efficiency Group with the role of mapping energetic reduction opportunities and execution of projects, which we welcome. According to last data about energy efficiency, the consumed energy per ton produced increased in 2020 (including fuels from non-renewable sources), however, it's necessary to consider the COVID-19 restrictions and impacts on productivity. On the other hand, we see a slightly (but positive) increase in the renewable source's consumption (Figure 77).
- (ii) Opportunity in Clean Tech: The company has a R&D participation focused on decarbonatization process, promoting new materials and process focused on alternative fuels, representing ~3% of 2019's net revenues. In its last Sustainability Report (2020), Tupy mentioned, generally, that owns some projects under development and initiatives in clean tech, and we look forward to seeing further advances.
- (iii) Toxic Emissions & Waste: Since 2010 the most relevant GHG are identified and quantified in the Brazilian plants and, since 2019, in the Mexican ones. We deeply welcome company's compromise with that front, especially due to long GHG emissions' track records (while some peers still do not have it fully mapped). As we can see below, tCO2 equivalent per year decreased in 2020, while increasing when compared to tCO2 equivalent per produced tons, mainly explained by pandemic-related impacts on productivity (Figure 78). Regarding waste management, Tupy recycled about half of the total generated waste volume in 2020 (Figure 79) and highlights that all the sand used at Joinville-Brazil plant is regenerated. Finally, it's worth mentioning that 99% of all metallic material used is from recycling.

Figure 77: Consumed Energy per Produced Ton

GJ/ton

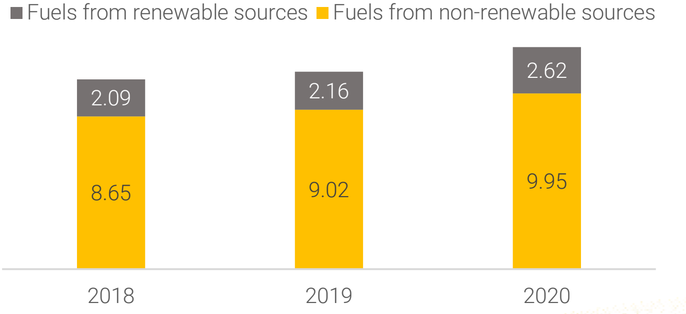


Figure 78: Direct tCO2eq Emissions

Absolute Terms (tons) | Per Produced Ton

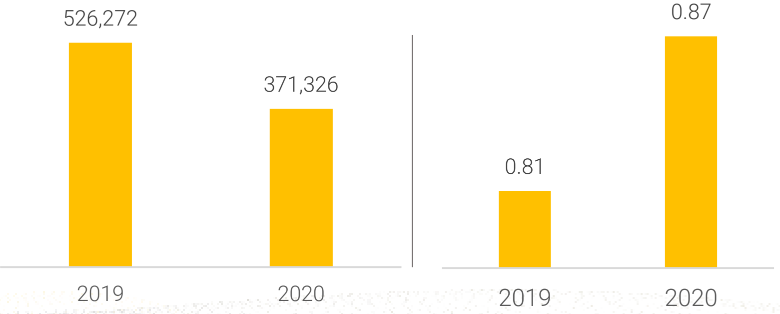
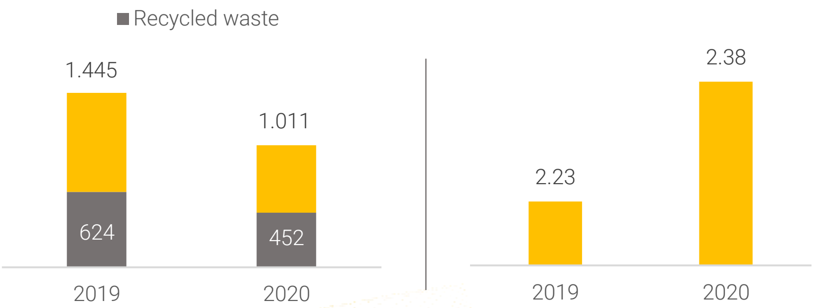


Figure 79: Total Generated Waste

Absolute Terms (tons) | Per Produced Ton



Source: Company Data and XP Research.

Tupy (TUPY3)

(S) Well positioned. On the Social pillar, we detailed below two key topics:

- **(i) Labor Management**: Tupy has a total workforce of 13.474 employees (2020) and, despite we expect a more detailed program about employee's satisfaction, we positively highlight company's lower employee turnover rate –20% in FY 2020 vs. FY 2018–2019's average of 32.5%.
- **(ii) Health & Safety:** We see the company well positioned on this topic, with highlight to (i) the presence of a quality management system certified by ITAF 16949; (ii) company's actions guided by the Integrated Management Policy that covers Health, Safety, Environment, Quality and Social Responsibility through all its operations and, in Brazil, by the Regulatory Standards (NRs); and (iii) Tupy zero fatalities accidents reported in 2020 and a decrease on total accidents compared to 2019. On the other hand, we missed its suppliers monitoring by an external indicator (currently, it is only internal).

(G) Novo Mercado and diversity goal ahead are the main highlight. Tupy's shares (TUPY3) are listed on Novo mercado segment of B3, and the company's major shareholders are BNDESPar (28.2% stake), Previ Group (24.8%) and Trigono Capital (5%). Tupy has the policy of "one share, one vote", which we welcome, as it can equalize the economic and voting power of each shareholder. Face the fact that BNDESPar (a stated-owned entity) is Tupy's major shareholder, we missed more details and initiatives regarding: (i) executive oversight; (ii) higher provision for regular audits; and (iii) more ethic-based training offered to the employees. When it comes to Board of Directors, 3 of the 9 members are independents (33%) and, regarding diversity, the company has three woman at the Board of Directors (33%), while the Board of Executive Officers lacks female presence, evidencing room for improvement. On the positive side, we welcome the goal proposed by the company to have 33.3% of the Board of Directors composed by women up to 2023 – *please refer to the Appendix for company's Management and Shareholder Structure (pg 69)*.

MSCI ESG Rating. Tupy has a B rating by MSCI ESG Ratings. On a global perspective, the B rating places TUPY3 among the 19% companies with this rating under MSCI ACWI Index constituents within auto components (36 companies).

Figure 80: MSCI Distribution

MSCI ACWI Index constituents, Auto Components, n=36

Figure 81: ESG MSCI Rating – Weights

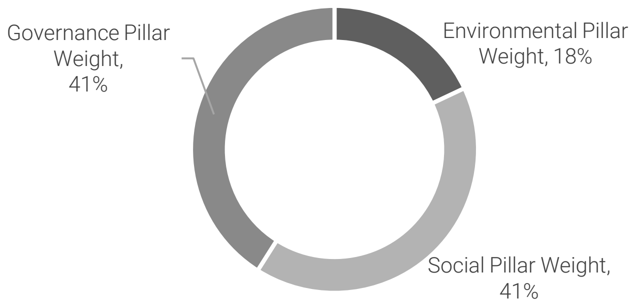
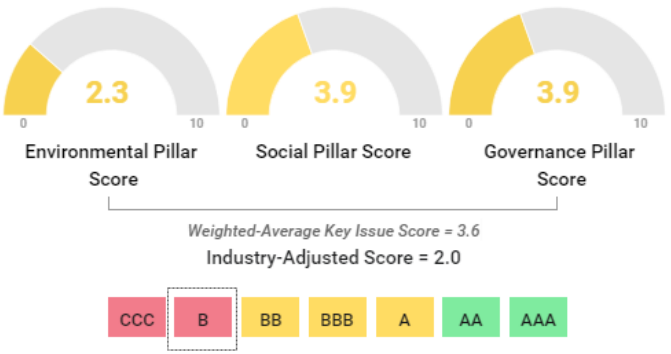


Figure 82: ESG MSCI Rating – Scores



Source: Company Data, MSCI and XP Research.

Iochpe-Maxion (MYPK3)

On the ESG Road; Space for Improvements in the Three Pillars

We welcome Iochpe's efforts to advance on the ESG agenda and we look forward to seeing further advances. On the E pillar, we highlight its initiatives related to the waste management, but we missed a detailed research for clean tech, as well as a plan about CO2 emission. On the S front, we appreciate the presence of a Committee of Security and Sustainability composed by global leaders, while we see room for improvement when it comes to labor management. Finally, on G, Iochpe has its shares listed on Novo Mercado, but diversity in the leadership fails, and we expect for changes in the short-term.

(E) Space for increasing the clean tech investments. On this pillar, we highlight three key topics:

- (i) Energy Consumption: On the positive side, we highlight Iochpe's project based on the integration of all power meters in order to enable the apportionment of electricity consumption through its proper identification at each stage of the production process; however, on the other side, we note the lack of a long-dated energy consumption track record data (Figure 83).
- (ii) Opportunity in Clean Tech: We see space for increasing the clean tech investments in the company and the details regarding the programs or projects developed (or under development). In general words, Iochpe-Maxion states to be reducing its products' weight (Figure 84), in order to decrease its CO2 emission. However, according to MSCI, the company continues to lag global peers in expanding clean technology investments, and we see opportunities ahead in this topic.
- (iii) Toxic Emissions & Waste: Iochpe describes its waste management focused on: (i) reuse of packaging or its return to origin of destination; (ii) reduced consumption of non-recycled or non-recyclable; (iii) reduction of solid waste destined to landfill; (iv) correct destination of materials not used for sale; and (v) reuse of materials in others industrial processes. According to the company, 8.91% of used raw materials was recycled in 2019. Even though Iochpe has still not set a goal for CO2 emission reduction, it was planned to be measured in 2020, with a goal to be set going forward. Iochpe-Maxion owns an effluent treatment plant, with capacity to treat 100% of the operation's effluents – the target for reduction of effluents generation and waste was settled as 2% for 2020.

Figure 83: 2019 Energy Consumption (GJ)

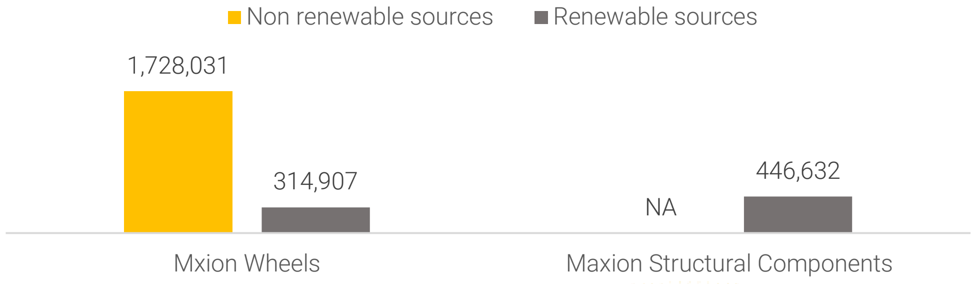
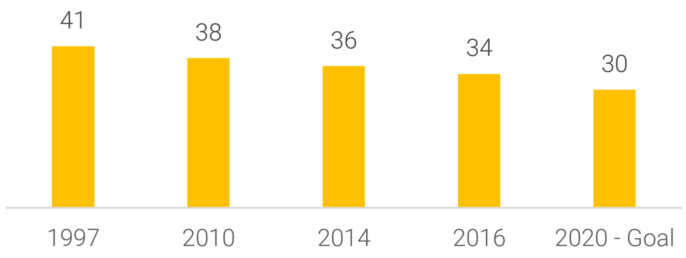


Figure 84: Weight Reduction Evolution (kg)



Source: Company Data, MSCI and XP Research.

Iochpe-Maxion (MYPK3)

(S) Iochpe's Committee of Security and Sustainability as the main highlight. On this pillar, we detailed below two key topics:

- **(i) Labor Management**: On this matter, we highlight: (i) the company's "Stop Work" process, as a formal method for suspending individual tasks or group operations when the risk control is not clearly established or understood; (ii) Iochpe's Committee of Security and Sustainability composed by global leaders for best practices stimulation, which is a highlight within company's peers; and (iii) company's goal of zero accidents and zero fire incidents in the next five years and, in 2019, a standard incident and accident investigation process was implemented. Besides that, considering that in the industrial sector the probability of strikes are elevated, we missed Iochpe's detail discernible employee engagement programs and development initiatives.
- **(ii) Health & Safety**: Around 50% of the Maxion Wheels' plants are OHSAS 18001 or ISO 45001 certified, with the company setting a goal to all plants be ISO 45001 certified up to July 2021, which we appreciate. Due to the influence that its products present at user's safety, the company states that 100% of the categories of products and services that may have an act on health and safety to the consumer are evaluated in relation to improvement aspects. However, the impact of these information were not available until the publication of 2019 Sustainability Report.

(G) Standing out with an independent majority at the Board. Iochpe-Maxion's has its shares (MYPK3) listed on Novo Mercado segment of B3 and has as major shareholders the Ioschpe Family (14.7% of shares), Alaska Investimentos (12.1%), WPA (8.4%), Vokin (5.0%) and treasury (0.9%) with the remaining shares in the free float (58.9%). Regarding its **Board of Directors**, we see the independent members majority as a key highlight (5 out of 9 – 55%), while when it comes to diversity in leadership, the company has plenty room for improvement, given the absence of female members, both on Board of Directors and Board of Executive Officers – *please refer to the Appendix for company's Management and Shareholder Structure (pg 70)*.

MSCI ESG Rating. Iochpe-Maxion has a CCC rating by MSCI ESG Ratings. On a global perspective, the CCC rating places MYPK3 among the 11% companies with this rating under MSCI ACWI Index constituents within Auto components (36 companies).

Figure 85: MSCI Distribution

MSCI ACWI Index constituents, Auto Components, n=36

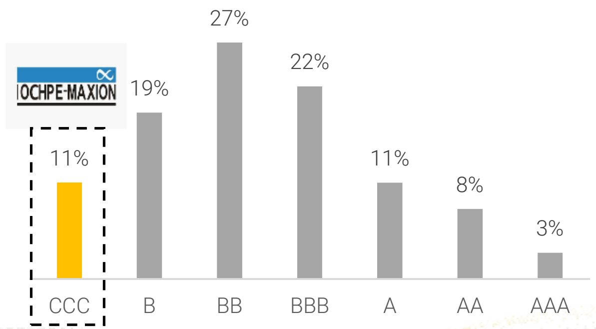


Figure 86: ESG MSCI Rating – Weights

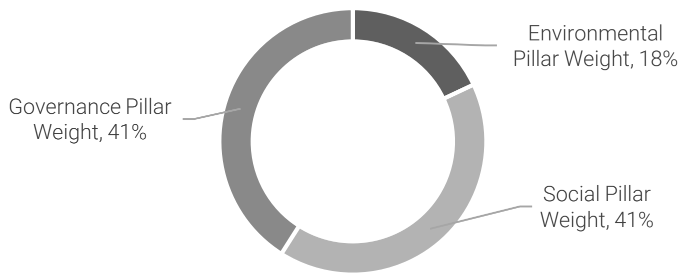
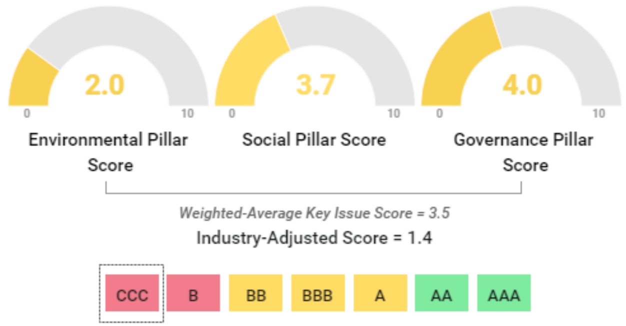


Figure 87: ESG MSCI Rating – Scores



Source: Company Data, MSCI and XP Research.

Fras-le (FRAS3)

It Could Drive Faster on the ESG Road

Although we see a long ESG road ahead, we positively acknowledge Fras-le initiatives within this agenda and expect more to come. On the E pillar, we highlight company's advances towards energy efficiency, while on the S front, we still see room for improvement, though we recognize the current efforts in place. Finally, on G, it's worth to keep an eye on it, mainly on the back of (i) company's high family control; (ii) the absence of independent members at the Board; and (iii) the lack of female members in leadership positions.

(E) Energy consumption reduction at the spotlight. On this pillar, we highlight three key topics:

- (i) Energy Consumption: Fras-le continuously invests in new technologies to improve energy efficiency and a lower consumption at its production cycle (Figures 88 and 89). The operation's usage to assess losses due to compressed air leakage allows a periodic data collection used to minimize systematic and standardized energy losses. Regarding efficiency, Fras-le reduces energy losses with an active filter in its substations by the operating voltage levels adjustment between the load and the equipment feed bars. Given the reduction in production in 2020, caused by restrictive measures due to COVID-19, the energetic efficiency goal settled in 2019 was not reached. However, energy consumption was able to be accomplished (-10.6% GJ YoY, with -13.3% GJ YoY for non-renewable-sources and -9.9% for renewable ones).
- (ii) Opportunity in Clean Tech: In 2020 the company has launched a line of materials "GRN Tech", that is according to "Level N" of environmental legislation of USA about heavy-metals coefficient, which we appreciate. These products were launched as coper-free and five years before the law goes into effect.
- (iii) Toxic Emissions & Waste: The company does not disclosure any toxic emission program, while focusing on raw materials and residual plans. Regarding waste management, for the first time in 2020, 25% of raw materials were from recycled origin, and for the second time, 88% of residual generated at its operations was recovered or recycled. Fras-le also owns its effluent treatment plant for sanitary and industrial flows treatment and reutilization, which we welcome, as well as its decreasing in water consumption over the last few years (Figure 90).

Figure 88: Energy Intensity (GJ/piece)

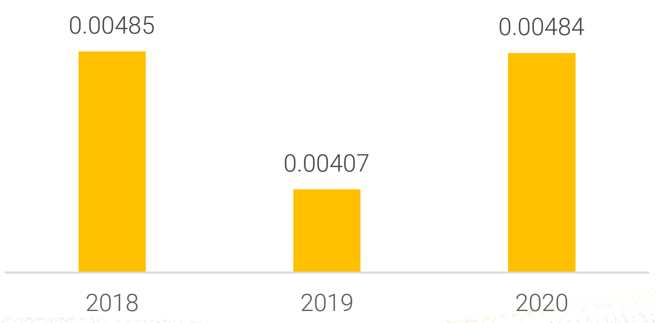


Figure 89: Total Energy Consumption (GJ)

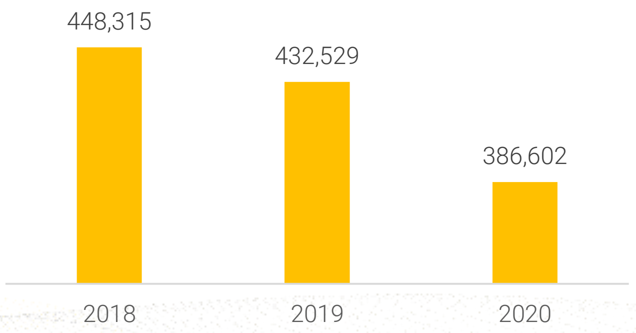
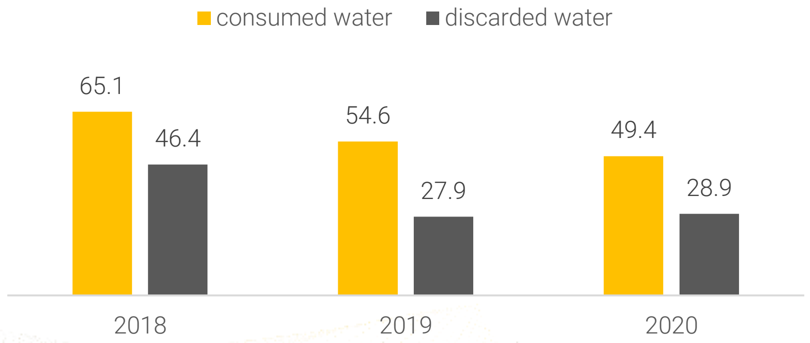


Figure 90: Water Consumption and Disposal (ML)



Source: Company Data and XP Research.

Fras-le (FRAS3)

(S) Solid initiatives, but still room for improvement. On this pillar, we highlight three key topics:

- **(i) Labor Management**: The company is exposed to risks associated with employee injuries, mainly due to the industrial production line. However, according to Fras-le: (i) all the products are free of harmful substances to health; (ii) all employee has the right to decline some activity with high risk to healthy and security; and (iii) can access an anonymous reporting channel. Despite all security trainings provided by the company, and its preventive action, it's worth mentioning that the company reported one fatal accident in 2020.
- **(ii) Health & Safety**: The company is guided by the Health, Safety and Environment Policy (HSE) of Randon's Group and the management system is certificated by several standards[1], as well as its products[2], encompassing the health & safety front, which we appreciate and note positive results (Figure 91). In addition, we highlight that, regarding the braking product line, as considered safety items, all potential failure modes that can interfere at user's safety are mapped from design phase up to the end.
- **(iii) Product Safety & Quality:** The company monitors its products and processes, through quality control/product performance analysis results, product monitoring records, production quality control plans and technical guarantee analysis reports (Figure 92), which we appreciate. In 2020, Fras-le did not register non-compliance cases related to the impact of products and services on the customers' health and safety.

Figure 91: Work-Related Injury Rate (Includes Deaths)

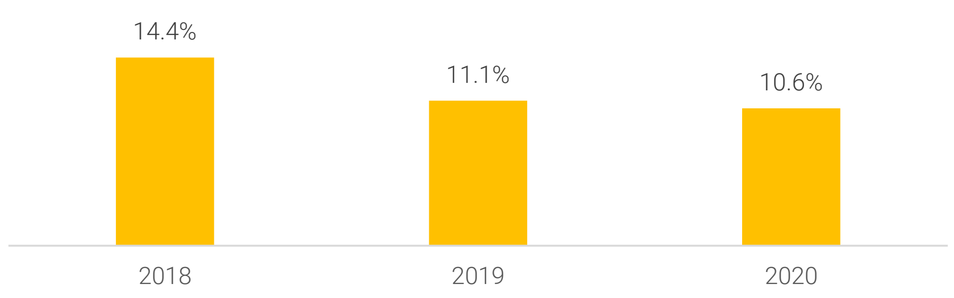
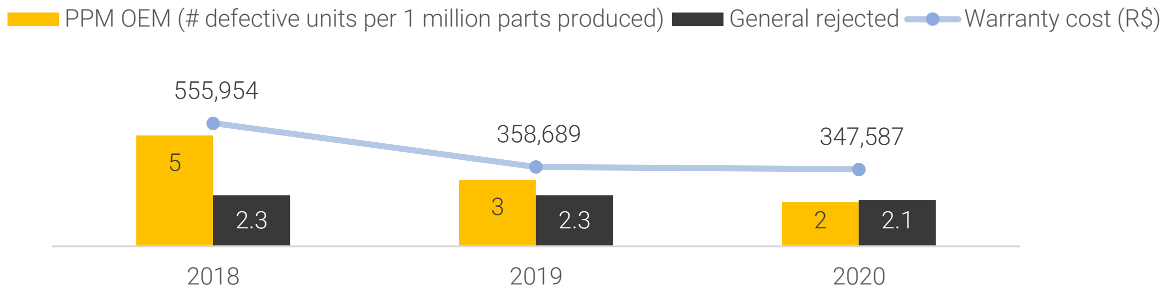


Figure 92: Strategic Quality Indicator



(G) A family-controlled company, with an absence of independent members at the Board. Fras-le's shares (FRAS3) are listed on Level 1 segment of B3, with the controller group owning 64% of shares and 17% in the free float. The company has started as a family business, and it keeps with a high actuation of family members at Board of Directors, as chairman and member positions. Also, we flag an absence of independent members on the Board (composed by 9 members), which, coupled with family control and over boarding, calls our attention. Finally, on diversity, the company has plenty room for improvement, given the absence of female members, both on Board of Directors and Board of Executive Officers – *please refer to the Appendix for company's Management and Shareholder Structure (pg 71).*

[1] *IATF 16949: 2016, ISO 9001:2015, ISO 14001:2015 e OHSAS 18001:2007/ ISO 45001 e ISO IEC 17025:2017*

[2] *Products are certificated and regulated by IRAM-AITA (Argentina), Inmetro (Brazil), CCC (China), ONAC (Colombia), AMECA e NSF (USA), ECE-R90 (Europe) e EAC (Russia).*

Source: Company Data and XP Research.

Marcopolo (POMO4)

Paving the Way to Get Back on Track on the ESG Road

Although we see Marcopolo on the way to refocus on the ESG agenda, the company lags its peers in the ESG road. On the E pillar, although it counts on well-recognized certifications, we note the lack of a robust strategy in clean tech, while on the S front we welcome Marcopolo's solid initiatives and programs in place. On the G, its worth to keep an eye on it, given that shareholders' structure could potentially cause minority shareholders' interests subordination. Finally, we missed a Sustainability Report, as well as a detailed ESG data disclosure, which limited our and investors analysis.

(E) Lack of a robust strategy in clean tech and limited data disclosure. Marcopolo has invested about 3% of its net revenues for clean tech initiatives, as hybrid and electric buses - according to MSCI, it is lower than global peers - and it appears to lack a robust strategy to increase investment in clean tech product development. Although the company counts on well-recognized certifications as ISO 14001, ISO 9001 and OHSAS 18001, we did not find any toxic emission reduction programs in a detailed way, neither energy consumption nor waste management, which are considered critical given its segment of operation.

(S) Solid initiatives and programs in place. The company is OHSAS 18001 healthy and security certified, which we appreciate. In addition, an Organizational Satisfaction Survey is elaborated every two years, and then Action Plans for each city are reviewed. Finally, we welcome Marcopolo's (i) activities for the employee's well living; (ii) internal trainings; and (iii) social responsibilities through Foundation Marcopolo.

(G) It's worth to keep an eye. Marcopolo's shares (POMO4) are listed on Level 2 segment of B3. Regarding the shareholders' structure, the controller group, formed by Bellini Family, holds 50.7% of voting shares and, with the company presenting unique voting rights, it could potentially cause minority shareholders' interests subordination. When it comes to Board of Directors, we welcome the presence of (i) an independent majority (6 of the 8 members – 75%); and (ii) 2 women (25%), while we note the absence of female members at the Board of Executive Officers – *please refer to the Appendix for company's Management and Shareholder Structure (pg 72)*.

MSCI ESG Rating. Marcopolo has a BB rating by MSCI ESG Ratings. On a global perspective, the BB rating places POMO4 among the 10% companies with this rating under MSCI ACWI Index constituents within construction & farm and machinery & heavy trucks (29 companies).

Figure 93: MSCI Distribution

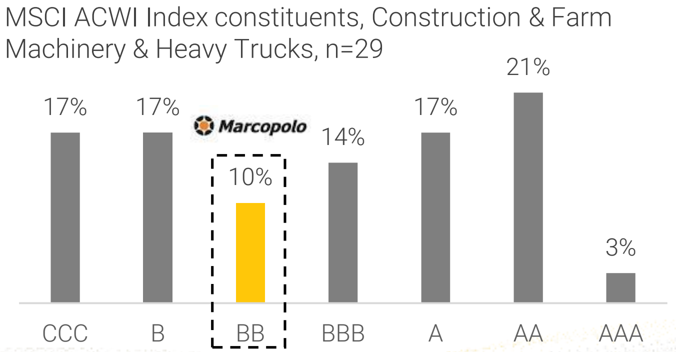


Figure 94: ESG MSCI Rating – Weights

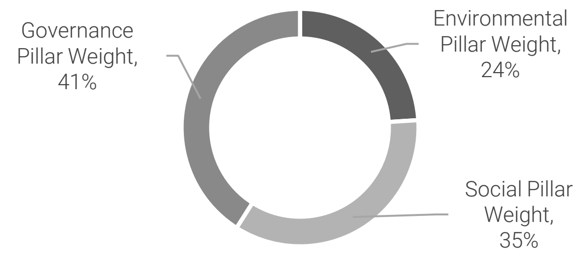
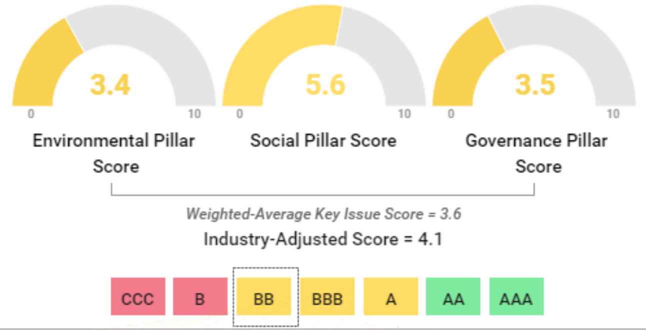


Figure 95: ESG MSCI Rating – Scores



Source: Company Data, MSCI and XP Research.

Investment Cases

Randon | Tupy | Iochpe-Maxion | Fras-le | Marcopolo

Randon | Buy; TP R$18.00/share

Positive Sales Drivers to Support Demand in the Upcoming Years

Initiating Coverage with Buy Rating and Target Price of R$18.00/share

We are initiating coverage of Randon with a Buy rating and target price of R$18.00/share, 61% upside vs current prices. We do not see Randon's current strong operating momentum priced-in, while our positive stance is based on: (i) exposure to booming sectors in Brazil, such as agribusiness and (to a lower extent) e-commerce; and (ii) solid market positioning, as the trailers' manufacturer incumbent in Brazil, with differentiated products vs. competition and verticalized operations. Finally, we see valuation as appealing, with 2022 EV/EBITDA of 4.9x ~19% below historical average of ~6.0x.

Strong operating momentum. Following a prompt top-line dip in 2Q20 as a pandemic-related effect (-28% YoY), Randon saw its sales rapidly recovering throughout 2021, with 1H21 reported revenues +65% vs. 1H19 (pre-pandemic), reflecting a solid operating performance through all its divisions (OEMs, Fras-le and Auto Parts [excl. Fras-le] growing revenues by 59%, 87% [positively boosted by Nakata acquisition] and 56%, respectively, in 1H21 vs. 1H19).

Exposure to booming sectors in Brazil supports medium-term growth. Representing ~30% of revenues, we see the agribusiness as the foremost sales driver for Randon, which we expect to be favored in a scenario combining a (i) depreciated BRL and (ii) high commodity prices (CONAB forecasts a 16% grains' production growth in 2022E YoY in that regard). Although we acknowledge that a higher share of rail roads and waterways could pose a risk for a trailer-exposed company, we see Randon's presence on rail cars partially offsetting an eventual demand shift toward other transportation alternatives.

Innovation as a highlight. We see Randon's technology-oriented production standards as a differential, with its Technological Center (CTR) dedicated to researching innovative solutions for its products. As examples, we highlight (i) the e-Sys system, the first auxiliary traction module with electric motor for trailers in Latin America, and (ii) a recent announced project co-shared with Fras-le aiming to enhance materials' properties using niobium nanoparticles.

Valuation is appealing. Trading at 4.9x 2022 EV/EBITDA, we see the stock undeservedly below its historical average of ~6.0x, while also not reflecting the recent strong performance of its controlled company Fras-le (+42% YTD vs. -27% for RAPT4, with 2022 EV/EBITDA excl. FRAS3 at a cheaper 4.2x).

Estimates	2020A	2021E	2022E	2023E	2024E	2025E
Net Revenues (R$ million)	5,425	8,502	9,199	8,972	10,028	10,642
EBITDA (R$ million)	774	1,196	1,329	1,262	1,535	1,660
EBITDA Margin (%)	*14.3%*	*14.1%*	*14.4%*	*14.1%*	*15.3%*	*15.6%*
Net Profit (R$ million)	665	400	406	354	514	563
P/E (x)	5.6x	9.2x	9.1x	10.4x	7.2x	6.5x
EV/EBITDA (x)	7.5x	5.3x	4.9x	5.2x	4.3x	4.0x
Dividend Yield (%)	3.0%	7.8%	6.7%	8.4%	10.8%	11.5%

Source: Company Data and XP Research.

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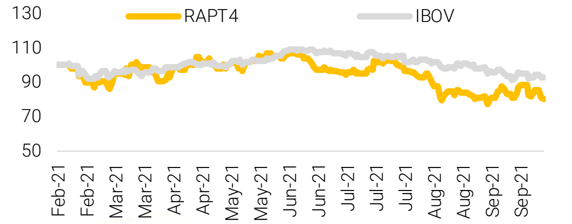
Randon (RAPT4)	Buy
Target Price (R$/sh.)	18.00
Current Price (R$/sh.)	11.20
Upside (%)	*60.7%*
Market Cap (R$ million)	4,086
# of shares (million)	342
Free Float (%)	58%
ADTV (R$ million)	35

Performance vs. IBOV



Randon – Company Overview

Randon was founded in 1940 as an industrial engine overhaul workshop, currently owning several subsidiaries in diverse segments, such as trailers, semi-trailers and rail cars manufacturing, and auto parts production of axle, suspensions, friction materials, brakes, coupling components and systems, hubs, drums and cast steels brackets for axle suspensions.

Figure 96: 2Q21 LTM Revenue Breakdown

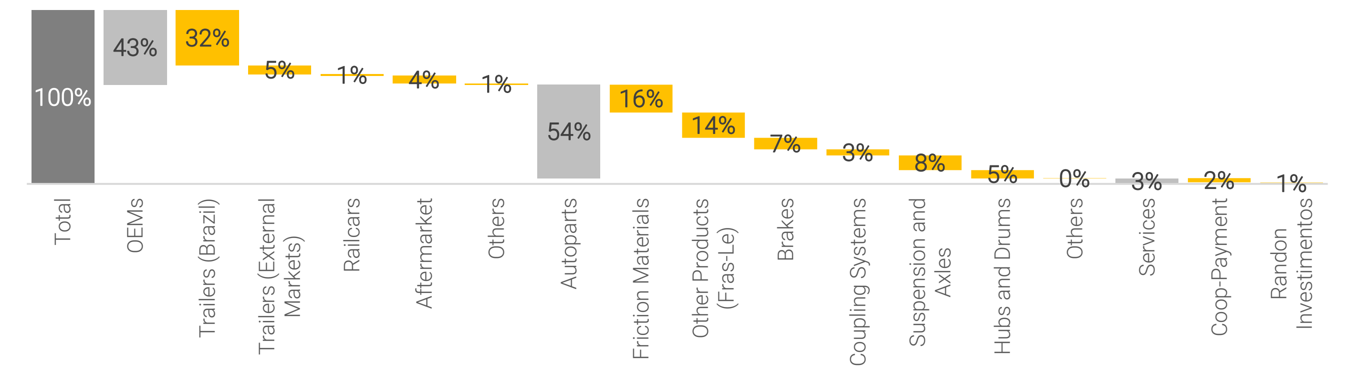


Figure 97: Historical Revenue and Profitability

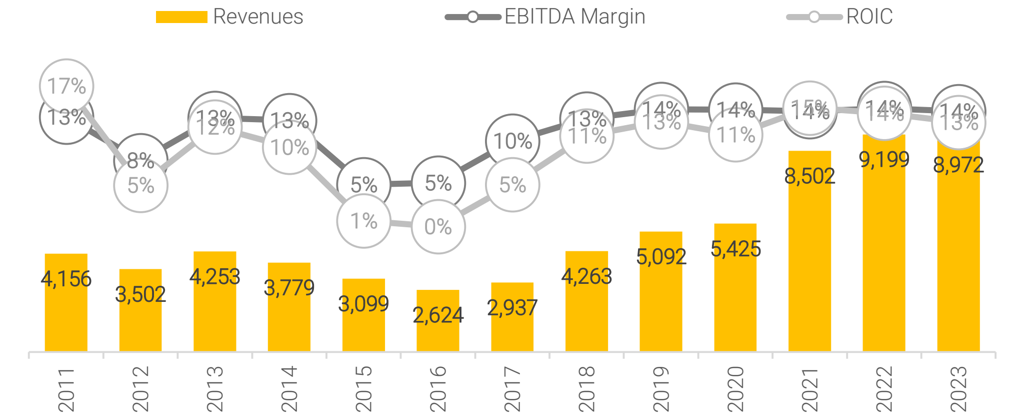


Figure 98: Randon Has Been Increasing Auto Parts Share

R$ millions

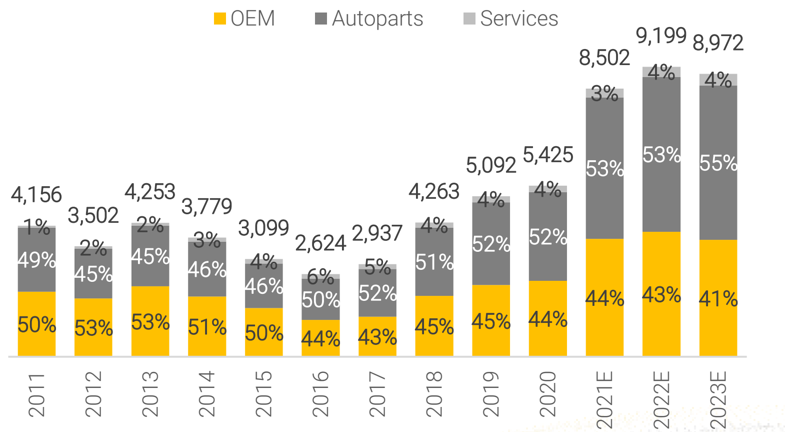


Figure 99: 2Q21OEM's Revenue Breakdown

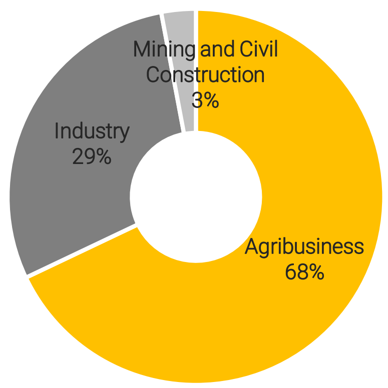
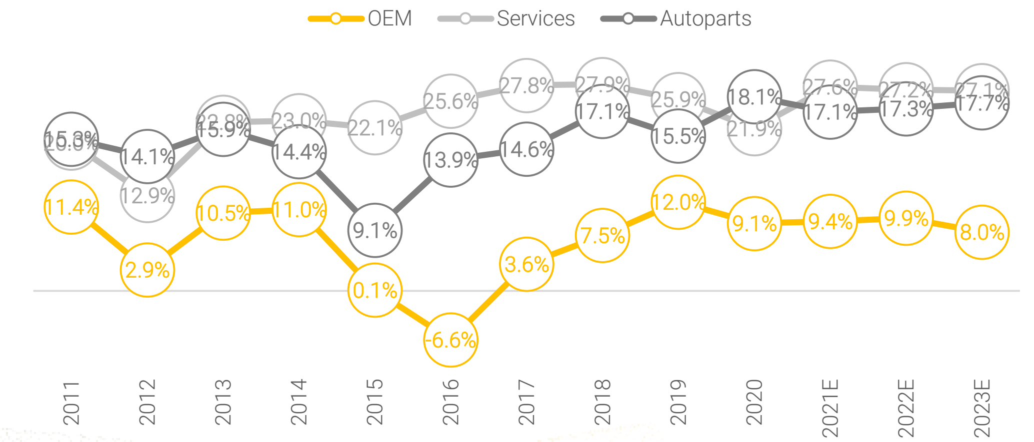


Figure 100: Historical EBITDA Margins Breakdown



Source: Company Data and XP Research.

Randon – Valuation

Our Target Price Implies 61% Upside

Our 2022YE DCF-based target price of BRL18.00 per share presents a 61% upside vs. current prices, with roughly 56% of it valued at its perpetuity.

We use a FCFF (free cash flow to firm) valuation approach, where our main assumptions include: (i) 3.7% long-term growth rate; (ii) 8.4% risk-free rate; (iii) 23% debt to (debt + equity) ratio and (iv) beta at 1.15, implying 12.5%, 14.8% and 7.5% nominal WACC, cost of equity and cost of debt, respectively.

Figure 101: DCF Main Assumptions

FCFF	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Perp.
NOPLAT	275	5	13	130	311	371	686	657	698	654	834	915	999	1,090	1,187	1,290	1,401	
(+) D&A	121	125	136	117	122	160	188	230	270	271	271	274	279	285	293	302	313	
(-) Capex	-125	-162	-43	-131	-137	-236	-198	-327	-276	-269	-301	-319	-339	-359	-381	-405	-429	
(+/-) Δ NWC	109	-37	297	-80	-205	-29	-560	-365	-241	66	-275	-163	-172	-183	-194	-206	-219	
FCFF	380	-69	403	37	91	266	115	195	452	721	529	706	767	833	904	982	1,066	12,534
PV FCFF										641	417	495	478	461	445	429	414	4,868
% of Total EV										*7%*	*5%*	*6%*	*6%*	*5%*	*5%*	*5%*	*5%*	*56%*

Figure 102: CAPM Model

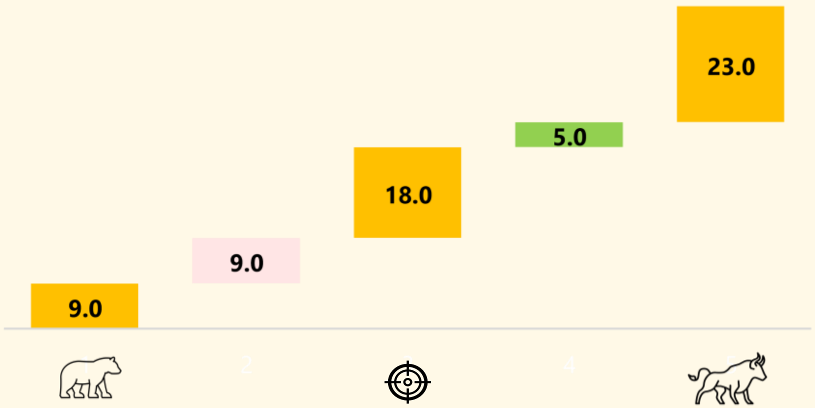
WACC	
Ke	14.8%
Kd (BT)	7.5%
T	34%
D/(D+E)	23%
WACC	12.5%
g	3.7%
Base Year	2022
Valuation	
Net Debt 2022	1,848
EV 2022	9,734
Fras-le's Minorities Equity 2022	1,675
Other Minority Shareholders' Equity 2022	350
Market Cap	5,861
# de Shares (million)	329
Target Price	18.00

Figure 103: Bull and Bear Scenarios

Base-case: Our main assumptions for our base-case include: (i) 1.0x elasticity to GDP for trailers' demand; (ii) 1.0x elasticity to inflation for trailers' demand; (iii) 1.0x elasticity to nominal GDP for auto parts' demand, (iv) capex as % of revenue of 3%.

Bull-case: In our bull-case we consider (i) 1.3x elasticity to GDP for trailers' demand; (ii) 1.1x elasticity to inflation for trailers' demand; (iii) 1.3x elasticity to nominal GDP for auto parts' demand, (iv) capex as % of revenue of 2.5%.

Bear-case: Finally, our bear-case assumptions include: (i) 0.8x elasticity to GDP for trailers' demand; (ii) 0.8x elasticity to inflation for trailers' demand; (iii) 0.8x elasticity to nominal GDP for auto parts' demand, (iv) capex as % of revenue of 3.5%.



Source: Company Data and XP Research.

Randon – XP Estimates Summary

Figure 104 : Randon Financials

	2020a	2021e	2022e	2023e	2024e	2025e
Valuation						
EV (R$ Mn)	5,044	5,536	5,536	5,365	5,538	5,606
Market Cap (R$ Mn)	3,713	3,688	3,688	3,688	3,688	3,688
EV/Sales	0.9	0.7	0.6	0.6	0.6	0.5
EV/EBITDA (2)	6.5x	4.6x	4.2x	4.3x	3.6x	3.4x
EV/EBITDA (@ 100% Fras-Le)	7.3x	5.9x	5.3x	5.4x	4.6x	4.3x
EV/EBITDA	7.5x	5.3x	4.9x	5.2x	4.3x	4.0x
EV/EBITDA (excl. Fras-Le)	7.7x	4.5x	4.2x	4.9x	3.8x	3.6x
P/E	5.6x	9.2x	9.1x	10.4x	7.2x	6.5x
P/E (@ 100% Fras-Le)	5.7x	10.4x	9.9x	10.5x	7.7x	7.0x
P/E (excl. Fras-Le)	10.7x	7.4x	7.6x	10.2x	6.1x	5.6x
P/B	1.8x	1.6x	1.5x	1.5x	1.4x	1.3x
P/B (@ 100% Fras-Le)	1.7x	1.8x	1.7x	1.6x	1.6x	1.5x
P/B (excl. Fras-Le)	1.9x	1.2x	1.1x	1.1x	1.1x	1.0x
ROE	15.5%	13.6%	12.7%	10.5%	14.8%	15.6%
ROIC	11.3%	14.5%	13.9%	12.8%	15.9%	16.6%
Dividend Yield	3%	8%	7%	8%	11%	11%
FCF Yield	5%	10%	11%	18%	11%	15%
Capex as % of Sales	4%	4%	3%	3%	3%	3%
Revenue Breakdown						
OEM	2,409	3,736	3,968	3,705	4,166	4,428
Trailer Sales	2,072	3,103	3,301	3,051	3,440	3,653
Rail Car Sales	10	197	210	228	246	266
Others	327	435	457	426	479	509
Autoparts	2,810	4,486	4,904	4,901	5,464	5,786
OEM	1,304	2,011	2,215	2,215	2,473	2,618
Aftermarket	763	1,431	1,576	1,576	1,760	1,862
Exports	743	1,043	1,113	1,111	1,231	1,307
Services	206	281	327	366	399	428
Coop-Payments of Sold Quotas	160	205	223	242	256	271
Randon Investimentos	46	77	103	124	143	157

	2020a	2021e	2022e	2023e	2024e	2025e
Consolidated income statement (R$mn)						
Net Revenues	5,425	8,502	9,199	8,972	10,028	10,642
EBIT	1,011	982	1,058	991	1,264	1,386
EBIT Margin	*18.6%*	*11.5%*	*11.5%*	*11.0%*	*12.6%*	*13.0%*
EBITDA	774	1,196	1,329	1,262	1,535	1,660
EBITDA Margin	*14.3%*	*14.1%*	*14.4%*	*14.1%*	*15.3%*	*15.6%*
Net Financial Results	217	-159	-179	-171	-149	-169
Pre-tax income	1,228	822	879	820	1,114	1,217
Pre-tax margin	*22.6%*	*9.7%*	*9.6%*	*9.1%*	*11.1%*	*11.4%*
Net Income	665	400	406	354	514	563
Net margin	*12.3%*	*4.7%*	*4.4%*	*3.9%*	*5.1%*	*5.3%*
Adjusted Net income	384	390	406	354	514	563
Adjusted Net margin	*7.1%*	*4.6%*	*4.4%*	*3.9%*	*5.1%*	*5.3%*
Shares out	339	329	329	329	329	329
Consolidated balance sheet (R$mn)						
Total Debt	3,780	4,007	4,170	4,347	4,545	4,756
Net Debt	1,331	1,847	1,848	1,677	1,850	1,917
Equity	2,059	2,339	2,499	2,543	2,659	2,800
Assets	8,981	9,537	9,993	10,233	10,707	11,145
Net working capital	-560	-365	-241	66	-275	-163
Fixed assets	2,454	2,576	2,581	2,580	2,610	2,655
Consolidated cash flow (R$mn)						
D&A	188	230	270	271	271	274
Capex	198	327	276	269	301	319
Free Cash Flow	173	366	408	657	423	566
Dividends	112	288	246	310	398	423

Source: Company Data and XP Research.

Tupy | Buy; TP R$32.00/share

Defensive Market Exposure Trading at a Discounted Valuation

Initiating Coverage with Buy Rating and Target Price of R$32.00/share

We are initiating coverage of Tupy with a Buy rating and target price of R$32.00/share, 58% upside vs current prices. We see Tupy as a resilient investment alternative within the Auto Parts space, mainly due to its (i) geographic diversification, (ii) high relevance of exports offsetting domestic concerns, (iii) diversified vehicles categories addressed by its products, and (iv) positive near-term and long-term outlook regarding growth avenues. In terms of valuation, we see the stock trading at an attractive 2022 EV/EBITDA of 3.9x, which is ~24% below historical average of ~5.2x.

Diversified exposure implies larger top-line resilience. We believe Tupy positively combines a (i) high degree of geographic diversification (18%, 64% and 12% of revenues in Brazil, North America and Europe, respectively) with (ii) high products assortment (light, commercial and off-road vehicles as 7%, 65% and 24% of revenues, respectively). Moreover, its high relevance to exports (~43% of sales) prompts Tupy a more defensive profile against domestic risks.

Teksid acquisition is an important achievement. Officially concluded in October 2021, we see the acquisition of Teksid's operations in Brazil and Portugal (~70% of its total head blocks production capacity) as an important milestone for Tupy. Not only will the company (i) reinforce its dominant position in Brazil (~18% of revenues), but also (ii) increase its presence within the European market (only ~12% of sales nowadays). We estimate a NPV impact of ~R$420 million from the acquisition (~9% of our TP), with main synergies stemming from Teksid's margins improvement to Tupy's levels by 2025.

Growth avenues remain credible in the upcoming years. Despite our conservative 2021-25 top-line organic CAGR of ~6% (excluding Teksid from the account), we see encouraging opportunities to favor Tupy's revenue growth outlook in the future, such as: (i) continuously increase of higher value-added products and services (CGI and machined products currently representing 24% and 27% of volumes, respectively, vs. 14% and 18% five years ago); (ii) motor engines assembling (incipient at this point); and (iii) decarbonization and digital initiatives expected to be explored in the long-term.

Attractive valuation. Trading at 3.9x 2022 EV/EBITDA, we see Tupy largely discounted vs. its historical average of 5.2x, which we see as unfair – our 2022YE target price of R$32.00/share implies a forward EV/EBITDA multiple of 5.3x (in-line with its historical average) and equity upside of 58%.

Estimates	2020A	2021E	2022E	2023E	2024E	2025E
Net Revenues (R$ million)	4,258	6,554	8,187	8,575	9,103	9,663
EBITDA (R$ million)	605	831	994	1,100	1,222	1,354
EBITDA Margin (%)	*14.2%*	*12.7%*	*12.1%*	*12.8%*	*13.4%*	*14.0%*
Net Profit (R$ million)	(76)	232	343	399	466	548
P/E (x)	-35.4x	12.5x	8.5x	7.3x	6.2x	5.3x
EV/EBITDA (x)	5.8x	4.6x	3.9x	3.7x	3.4x	3.2x
Dividend Yield (%)	0.0%	0.0%	2.9%	6.8%	12.0%	18.8%

Source: Company Data and XP Research.

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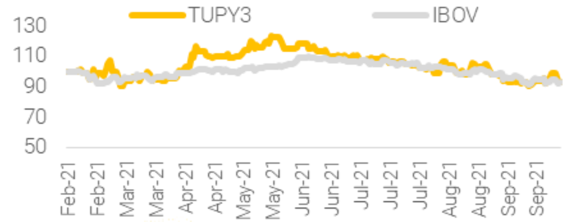
Tupy (TUPY3)	Buy
Target Price (R$/sh.)	32.00
Current Price (R$/sh.)	20.20
Upside (%)	*58.4%*
Market Cap (R$ million)	2,911
# of shares (million)	144
Free Float (%)	42%
ADTV (R$ million)	17

Performance vs. IBOV



Tupy – Company Overview

Tupy was founded in 1983 in Santa Catarina, Brazil, and it has started focused on malleable cast iron products. Currently it produces cast iron head blocks, mostly produced under request for the automotive sector, and malleable cast iron pipe fittings, steel shots and grits and continuous casting, which are supplied to several industrial sectors.

Figure 105: 2Q21 LTM Revenue Breakdown

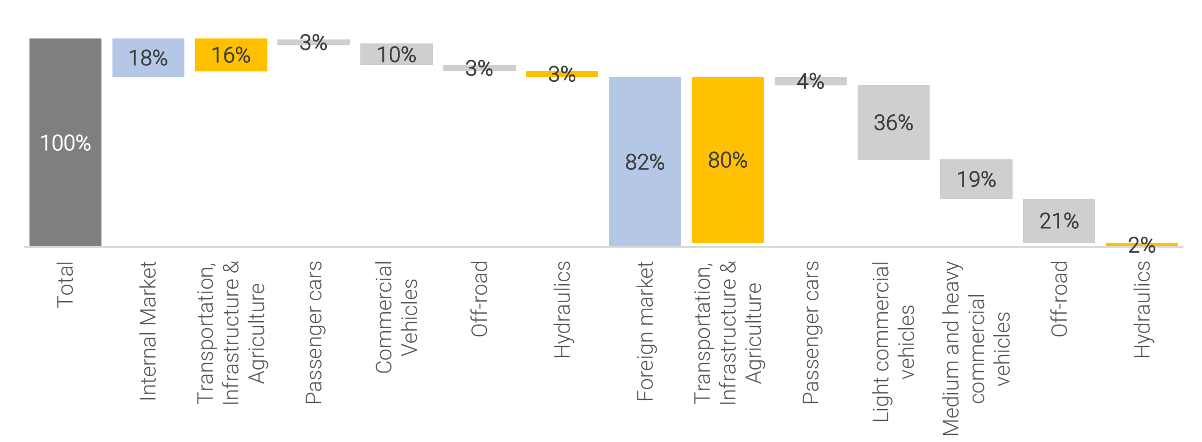


Figure 106: Historical Revenue and Profitability

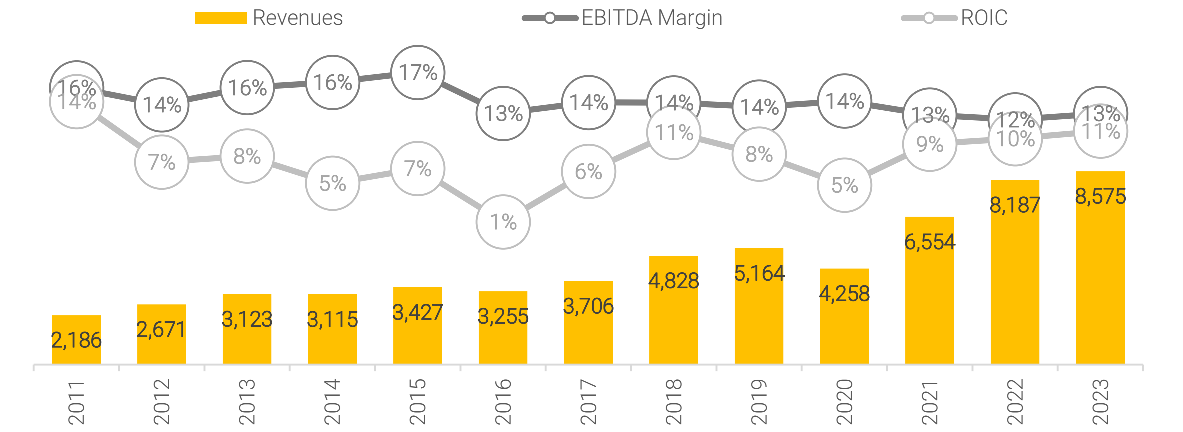


Figure 107: Tupy Has Been Increasing its International Market Revenue

R$ millions

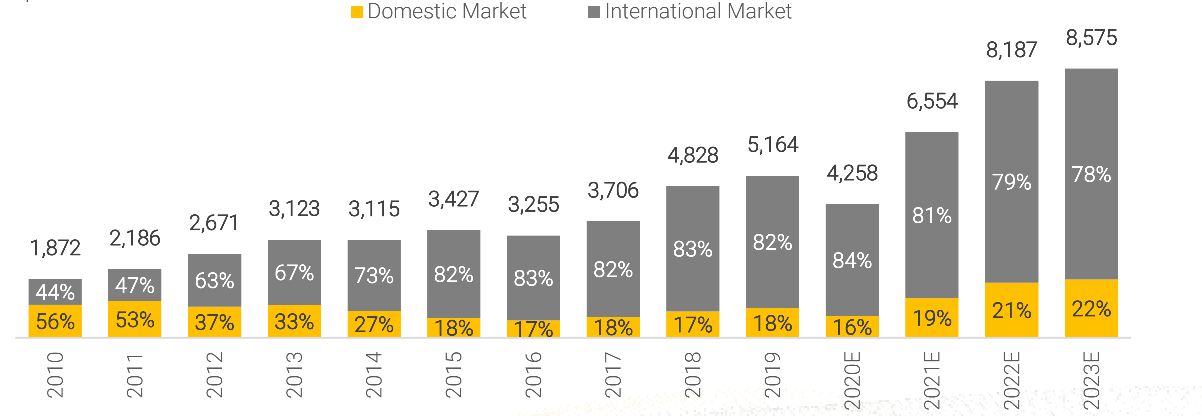
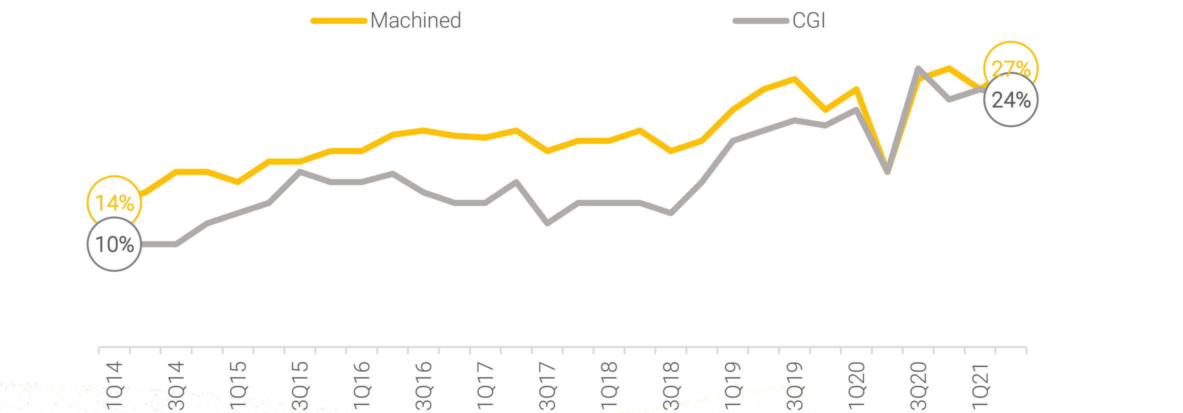


Figure 108: Tupy Has Been Increasing its CGI and Machined Volumes' Share



Source: Company Data and XP Research.

Tupy – Valuation

Our Target Price Implies 58% Upside

Our 2022YE DCF-based target price of BRL 32.00 per share presents a 58% upside vs. current prices, with roughly 59% of it valued at its perpetuity.

We use a FCFF (free cash flow to firm) valuation approach, where our main assumptions include: (i) 3.7% long-term growth rate; (ii) 8.4% risk-free rate; (iii) 19% debt to (debt + equity) ratio and (iv) beta at 1.2, implying 13.4%, 15.0% and 7.0% nominal WACC, cost of equity and cost of debt, respectively.

Figure 109: DCF Main Assumptions

FCFF	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Perp
NOPLAT	109	211	-141	218	281	294	133	284	384	454	532	615	686	762	842	927	960	
(+) D&A	298	276	380	257	279	326	350	338	413	412	415	423	434	449	467	488	512	
(-) Capex	-218	-156	-132	-124	-185	-271	-137	-230	-409	-429	-455	-483	-513	-544	-578	-613	-636	
(+/-) Δ NWC	-184	-75	139	-5	-186	-111	-165	-74	-314	-382	-112	-119	-128	-136	-145	-154	-101	
FCFF	5	256	246	346	190	238	181	318	73	55	380	435	479	530	586	648	735	7,924
PV FCFF										49	296	299	290	283	276	269	270	2,908
% of Total EV										*1%*	*6%*	*6%*	*6%*	*6%*	*6%*	*5%*	*5%*	*59%*

Figure 110: CAPM Model

WACC	
Ke	15.0%
Kd (BT)	7.0%
T	15%
D/(D+E)	19%
WACC	13.4%
g	3.7%
Base Year	2022
Valuation	
Net Debt 2022	992
EV 2022	5,600
Market Cap	4,607
# de Shares (million)	144
Target Price	32.00

Figure 111: Bull and Bear Scenarios

Base-case: Our main assumptions for our base-case include: (i) domestic and external volumes growth from 2023 onwards of 1.0x GDP; (ii) domestic and external unit prices increase from 2023 onwards of 1.0x inflation; (iii) capex as % of revenue of 5.0%.

Bull-case: In our bull-case we consider: (i) domestic and external volumes growth from 2023 onwards of 1.2x GDP; (ii) domestic and external unit prices increase from 2023 onwards of 1.0x inflation; and (iii) capex as % of revenue of 4.5%.

Bear-case: Finally, our bear-case assumptions include: (i) domestic and external volumes growth from 2023 onwards of 0.8x GDP; (ii) domestic and external unit prices increase from 2023 onwards of 0.9x inflation; and (iii) capex as % of revenue of 5.4%.

Source: Company Data and XP Research.

Tupy – XP Estimates Summary

Figure 112: Tupy Financials

	2020a	2021e	2022e	2023e	2024e	2025e
Valuation						
EV (R$ Mn)	3,502	3,851	3,905	4,104	4,140	4,320
Market Cap (R$ Mn)	2,702	2,912	2,912	2,912	2,912	2,912
EV/Sales	0.8	0.6	0.5	0.5	0.5	0.4
EV/EBITDA	5.8x	4.6x	3.9x	3.7x	3.4x	3.2x
P/E	-35.4x	12.5x	8.5x	7.3x	6.2x	5.3x
ROE	-2.1%	10.6%	12.0%	13.0%	14.4%	16.6%
ROIC	4.9%	9.4%	10.1%	10.9%	12.0%	13.3%
Dividend Yield	0%	0%	3%	7%	12%	19%
FCF Yield	0%	-4%	7%	8%	20%	22%
Capex as % of Sales	3%	4%	5%	5%	5%	5%
Revenue Breakdown						
Consolidated Revenues	4,258	6,554	8,187	8,575	9,103	9,663
Domestic Market	678	1,254	1,751	1,856	1,965	2,081
Internation Market	3,579	5,300	6,436	6,720	7,138	7,581
Volume Breakdown [kton]						
Consolidated Volume	392,209	525,695	654,203	669,548	685,141	701,099
Domestic Market	73,587	115,238	155,087	158,453	161,780	165,178
Internation Market	318,622	410,457	499,116	511,095	523,361	535,922

	2020a	2021e	2022e	2023e	2024e	2025e
Consolidated income statement (R$mn)						
Net Revenues	4,258	6,554	8,187	8,575	9,103	9,663
EBIT	217	422	581	688	807	931
EBIT Margin	*5.1%*	*6.4%*	*7.1%*	*8.0%*	*8.9%*	*9.6%*
EBITDA	605	831	994	1,100	1,222	1,354
EBITDA Margin	*14.2%*	*12.7%*	*12.1%*	*12.8%*	*13.4%*	*14.0%*
Net Financial Results	-341	-76	-62	-83	-100	-101
Pre-tax income	-124	346	520	605	707	830
Pre-tax margin	*-2.9%*	*5.3%*	*6.3%*	*7.0%*	*7.8%*	*8.6%*
Net Income	-76	232	343	399	466	548
Net margin	*-1.8%*	*3.5%*	*4.2%*	*4.7%*	*5.1%*	*5.7%*
Adjusted Net income	-76	232	343	399	466	548
Adjusted Net margin	*-1.8%*	*3.5%*	*4.2%*	*4.7%*	*5.1%*	*5.7%*
Shares out	145	144	144	144	144	144
Consolidated balance sheet (R$mn)						
Total Debt	2,226	2,416	2,580	2,827	3,090	3,369
Net Debt	800	939	992	1,192	1,227	1,407
Equity	2,553	2,722	2,980	3,179	3,296	3,296
Assets	6,113	6,798	7,471	7,868	8,314	8,663
Net working capital	-165	-74	-314	-382	-112	-119
Fixed assets	1,899	2,172	2,169	2,185	2,225	2,286

Source: Company Data and XP Research.

Iochpe-Maxion | Buy; TP R$27.00/share

The Most Diversified Company Under Our Coverage

Initiating Coverage with Buy Rating and Target Price of R$27.00/share

We are initiating coverage of Iochpe-Maxion with a Buy rating and target price of R$27.00/share, 47% upside vs current prices. Iochpe-Maxion is the most diversified company under our coverage, with a well-distributed top-line both in terms of geographies and vehicle categories, while its solely exposure to OEMs helps reducing margin volatility given its contract dynamics and cost increases pass-through negotiations (despite its top-line more cyclical behavior). In terms of valuation, we see the stock trading at an attractive 2022 EV/EBITDA of 4.0x, which is ~20% below historical average of ~5.0x.

An automotive multinational. Iochpe is the most diversified company under our coverage in terms of geographies, with industrial footprint spread between 31 facilities in 15 countries, and revenues well-distributed throughout the globe (LatAm, North America, Europe and Asia representing 25%, 28%, 36% and 10%, respectively), implying a larger top-line resilience as regions in a better economic cycle could offset markets going through economic downturns.

Portfolio diversification supports short-term hiccups within light vehicles. While most of Brazilian Auto Parts companies relies on heavy vehicles exposure, we note Iochpe's well-balanced portfolio in terms of vehicle categories, with light and commercial vehicles representing 60% and 40%, respectively. Due to the distinct demand drivers for each category, we welcome a more counterbalanced product assortment.

Well-executed liability management. Seen as a major concern for Iochpe's liquidity outlook throughout the pandemic, we believe the company has done a solid liability management over the past year. We note that (i) leverage has been rapidly reducing, backed by operating improvements (~3.0x Net Debt/LTM EBITDA in 2Q21 vs. ~9.4x in 4Q20); while (ii) debt profile has improved, with recent issuance of sustainability-linked notes as a positive milestone (US$400 million due 2028 at a 5.0% cost of debt), supporting a better liquidity perspective for Iochpe-Maxion (recently revised to a positive outlook by S&P).

Attractive valuation. Trading at 4.0x 2022 EV/EBITDA, we see Iochpe's valuation discount of ~20% vs. its historical average of 5.0x as excessive – our 2022YE target price of R$27.00/share implies a forward EV/EBITDA multiple of 4.5x (closer to its historical average) and equity upside of 47%.

Estimates	2020A	2021E	2022E	2023E	2024E	2025E
Net Revenues (R$ million)	8,761	13,254	13,995	14,987	16,555	17,617
EBITDA (R$ million)	527	1,548	1,615	1,701	1,876	2,022
EBITDA Margin (%)	*6.0%*	*11.7%*	*11.5%*	*11.4%*	*11.3%*	*11.5%*
Net Profit (R$ million)	(492)	479	473	503	607	670
P/E (x)	-4.7x	5.8x	5.9x	5.6x	4.6x	4.2x
EV/EBITDA (x)	11.0x	4.3x	4.0x	3.7x	3.6x	3.4x
Dividend Yield (%)	6.3%	8.1%	7.5%	10.0%	18.0%	19.9%

Source: Company Data and XP Research.

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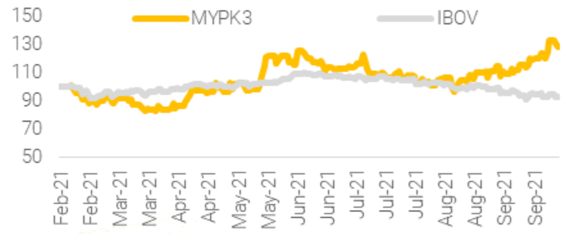
Iochpe-Maxion (MYPK3)	Buy
Target Price (R$/sh.)	27.00
Current Price (R$/sh.)	18.40
Upside (%)	*46.7%*
Market Cap (R$ million)	2,828
# of shares (million)	154
Free Float (%)	59%
ADTV (R$ million)	32

Performance vs. IBOV



Iochpe-Maxion – Company Overview

Iochpe Maxion was founded in 1918, focused on lumbering activities, but over time it has changed to financial sector and then to the industrial sector, going through a business portfolio restructuring in 1998. Its operation is divided in two divisions: (i) Maxion Wheels, focused on production of steel and aluminum wheels for commercial, light vehicles and agricultural machinery, and (ii) side rails, cross members and full frames for commercial vehicles and structural components for light vehicles.

Figure 113: 2Q21 LTM Revenue Breakdown

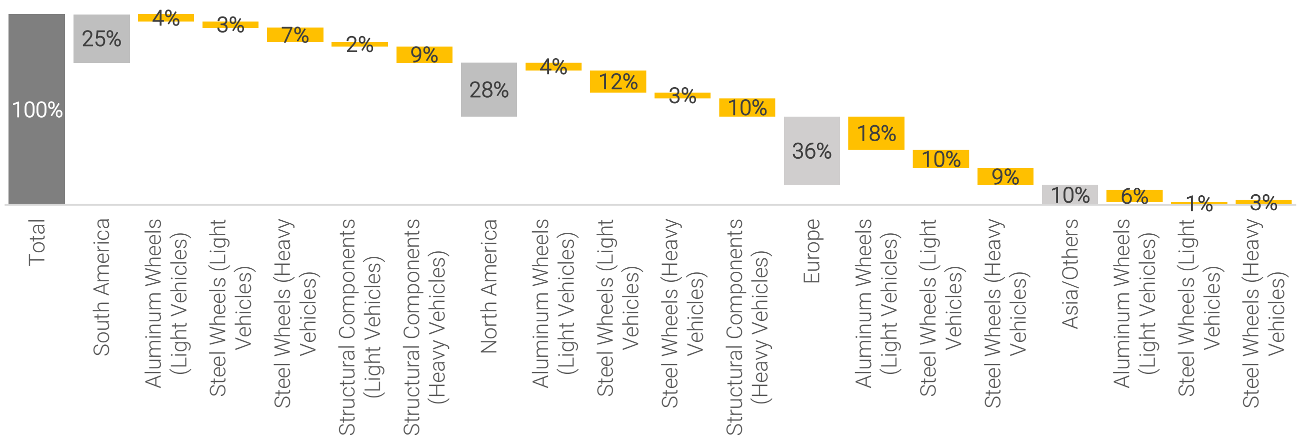


Figure 114: Historical Revenue by Segment

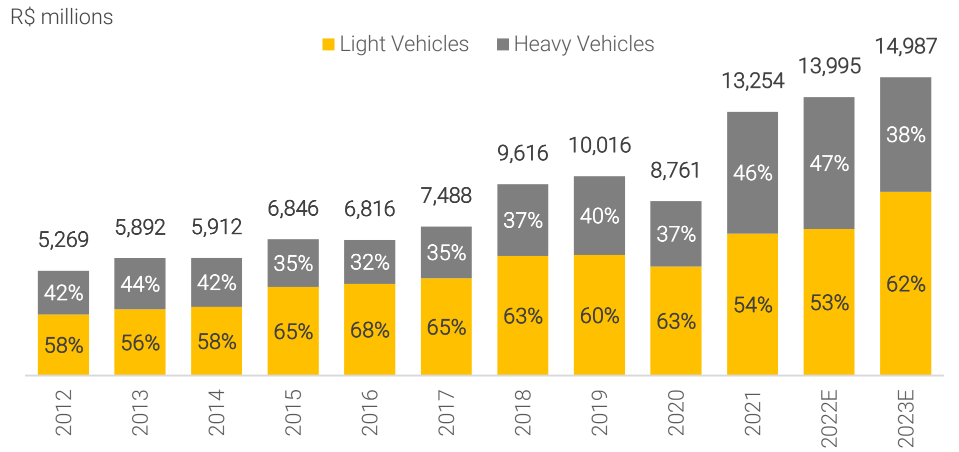


Figure 115: Historical Revenue Breakdown by Market

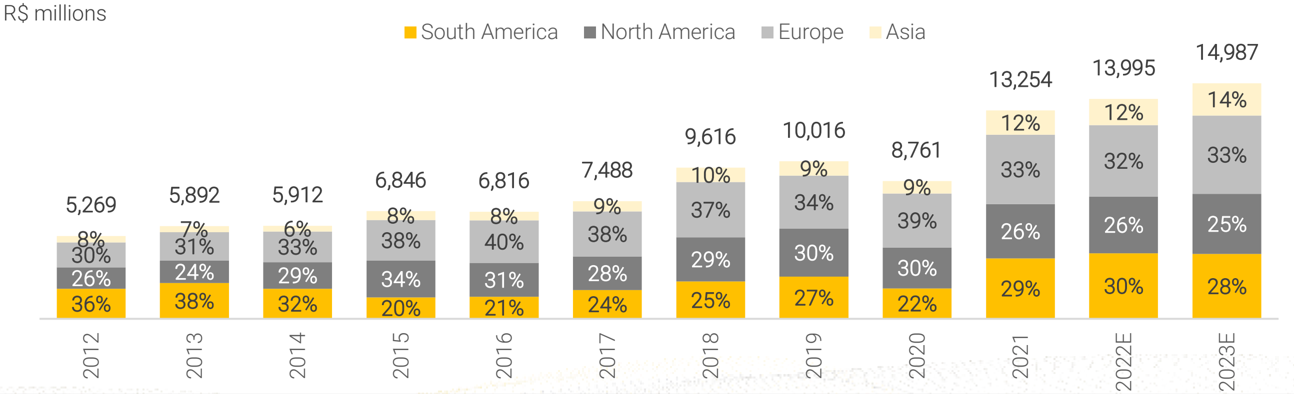
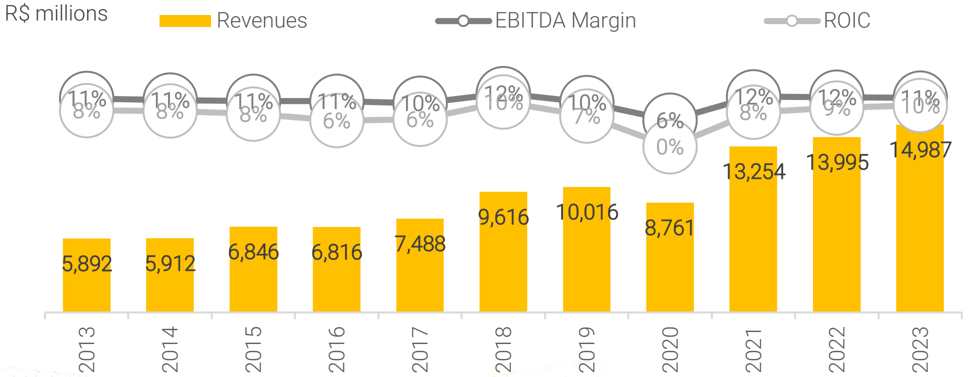


Figure 116: Historical Revenue and Profitability



Source: Company Data and XP Research.

Iochpe-Maxion – Valuation

Our Target Price Implies 47% Upside

Our 2022YE DCF-based target price of BRL 27.00 per share presents a 47% upside vs. current prices, with roughly 55% of it valued at its perpetuity.

We use a FCFF (free cash flow to firm) valuation approach, where our main assumptions include: (i) 1.8% long-term growth rate; (ii) 6.5% risk-free rate; (iii) 29% debt to (debt + equity) ratio and (iv) beta at 1.2, implying 10.5%, 13.1% and 6.5% nominal WACC, cost of equity and cost of debt, respectively.

Figure 117: DCF Main Assumptions

FCFF	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Perp.
NOPLAT (Excl. Equity Income)	366	306	464	588	-188	696	693	751	858	942	1,016	1,016	1,016	1,015	1,012	
(+) D&A	317	302	356	420	557	538	532	529	538	553	571	591	610	629	646	
(-) Capex	-299	-246	-507	-519	-369	-400	-490	-641	-709	-754	-803	-811	-820	-829	-838	
(+/-) Δ NWC	18	-324	-195	129	-512	-877	-133	-17	-293	-197	-212	-38	-38	-39	-40	
FCFF	402	37	118	618	-512	-43	602	621	394	544	572	759	768	775	780	9,095
PV FCFF								562	323	403	384	460	422	385	351	4,088
% of Total EV								*8%*	*4%*	*5%*	*5%*	*6%*	*6%*	*5%*	*5%*	*55%*

Figure 118: CAPM Model

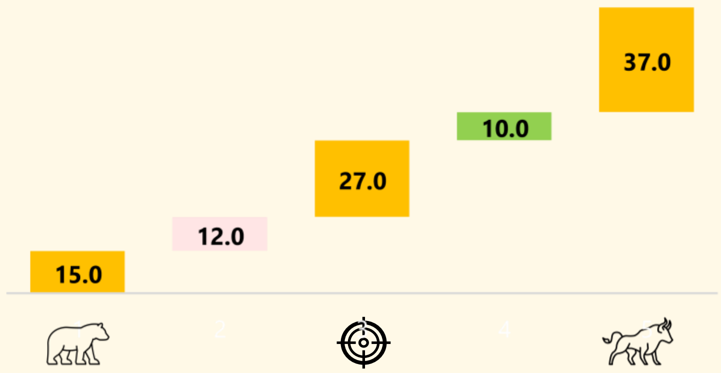
WACC	
Ke	13.1%
Kd (BT)	6.5%
T	34%
D/(D+E)	29%
WACC	10.5%
g	1.8%
Base Year	2022
Valuation	
Net Debt 2022	3,667
EV 2022	8,152
Minorities Shareholders Equity 2022	576
Affiliates' Equity 2022	266
Market Cap	4,175
# de Shares (million)	152
Target Price	27.00

Figure 119: Bull and Bear Scenarios

Base-case: Our main assumptions for our base-case include: (i) elasticity to GDP for light and heavy vehicles of 1.0x; (ii) capex as % of revenue of 4.3%; and (iii) accounts receivable, inventories and suppliers' days of 55, 70 and 55, respectively.

Bull-case: In our bull-case we consider: (i) elasticity to GDP for light and heavy vehicles of 1.3x; (ii) capex as % of revenue of 4.2%; and (iii) accounts receivable, inventories and suppliers' days of 50, 65 and 59, respectively.

Bear-case: Finally, our bear-case assumptions include: (i) elasticity to GDP for light and heavy vehicles of 0.8x; (ii) capex as % of revenue of 4.5%; and (iii) accounts receivable, inventories and suppliers' days of 60, 74 and 45, respectively.



Source: Company Data and XP Research.

Iochpe-Maxion – XP Estimates Summary

Figure 120 : Iochpe-Maxion Financials

	2020a	2021e	2022e	2023e	2024e	2025e
Valuation						
EV (R$ Mn)	5,826	6,662	6,471	6,356	6,689	6,943
Market Cap (R$ Mn)	2,311	2,804	2,804	2,804	2,804	2,804
EV/Sales	0.7	0.5	0.5	0.4	0.4	0.4
EV/EBITDA	11.0x	4.3x	4.0x	3.7x	3.6x	3.4x
P/E	-4.7x	5.8x	5.9x	5.6x	4.6x	4.2x
P/B	-11.8x	13.9x	13.7x	12.6x	11.0x	10.4x
ROE	-10.7%	9.4%	11.3%	11.2%	12.9%	13.7%
ROIC	-0.3%	8.0%	9.0%	9.6%	10.5%	10.9%
Dividend Yield	6%	8%	7%	10%	18%	20%
FCF Yield	-2%	-3%	12%	16%	8%	12%
Capex as % of Sales	4%	3%	4%	4%	4%	4%

	2020a	2021e	2022e	2023e	2024e	2025e
Revenue Breakdown						
Total Revenues	8,761	13,254	13,995	14,987	16,555	17,617
South America	1,935	3,843	4,170	4,126	4,653	4,924
North America	2,602	3,453	3,606	3,815	4,196	4,455
Europe	3,441	4,416	4,544	5,002	5,386	5,686
Asia	782	1,542	1,675	2,045	2,320	2,552

	2020a	2021e	2022e	2023e	2024e	2025e
Revenue Breakdown						
Total Revenues	8,761	13,254	13,995	14,987	16,555	17,617
Light Vehicles	5,488	7,139	7,355	9,239	9,844	10,490
Heavy Vehicles	3,272	6,115	6,640	5,748	6,711	7,127

	2020a	2021e	2022e	2023e	2024e	2025e
Consolidated income statement (R$mn)						
Net Revenues	8,761	13,254	13,995	14,987	16,555	17,617
EBIT	-185	1,193	1,083	1,173	1,338	1,469
EBIT Margin	*-2.1%*	*9.0%*	*7.7%*	*7.8%*	*8.1%*	*8.3%*
EBITDA	527	1,548	1,615	1,701	1,876	2,022
EBITDA Margin	*6.0%*	*11.7%*	*11.5%*	*11.4%*	*11.3%*	*11.5%*
Net Financial Results	-233	-274	-304	-344	-336	-362
Pre-tax income	-418	919	779	829	1,002	1,106
Pre-tax margin	*-4.8%*	*6.9%*	*5.6%*	*5.5%*	*6.1%*	*6.3%*
Net Income	-492	479	473	503	607	670
Net margin	*-5.6%*	*3.6%*	*3.4%*	*3.4%*	*3.7%*	*3.8%*
Adjusted Net income	-492	479	473	503	607	670
Adjusted Net margin	*-5.6%*	*3.6%*	*3.4%*	*3.4%*	*3.7%*	*3.8%*
Shares out	156	152	152	152	152	152

	2020a	2021e	2022e	2023e	2024e	2025e
Consolidated balance sheet (R$mn)						
Total Debt	5,120	5,505	5,448	5,492	5,536	5,582
Net Debt	3,515	3,859	3,667	3,553	3,886	4,139
Equity	3,803	4,019	4,334	4,613	4,782	4,968
Assets	12,412	13,743	13,941	14,433	14,911	15,317
Net working capital	-512	-877	-133	-17	-293	-197
Fixed assets	6,458	6,082	6,040	6,153	6,323	6,524

	2020a	2021e	2022e	2023e	2024e	2025e
Consolidated cash flow (R$mn)						
D&A	557	538	532	529	538	553
Capex	369	400	490	641	709	754
Free Cash Flow	(36)	(87)	344	438	217	350
Dividends	146	228	210	279	506	558

Source: Company Data and XP Research.

Fras-le | Neutral; TP R$16.00/share

Strong Operating Momentum, Though Fairly Priced, In Our View

Initiating Coverage with Neutral Rating and Target Price of R$16.00/share

We are initiating coverage of Fras-le with a Neutral rating and target price of R$16.00/share, 13% upside vs current prices. While we do like Fras-le's exposure to the aftermarket (with a countercyclical behavior) and acknowledge its recent operating improvements on profitability and top-line growth (notably integrating a sizeable acquisition such as Nakata), we see valuation as fair. Trading at 7.2x 2022 EV/EBITDA, the stock is well-above its historical average of 5.7x, while stock liquidity remains a main issue for further multiples re-rating (ADTV of ~R$2 million significantly below its peers).

Broadening its product assortment. Over the past years, Fras-le has been continuously expanding its portfolio (organically and inorganically) aiming to increase its exposure to non-friction materials (currently representing ~49% of revenues, vs. only ~8% in 2015) in order not to solely depend on friction materials (potentially threatened by electrification trends). Moreover, we welcome the company's innovative initiatives toward the development of enhanced material properties, such as (i) the creation of "Fras-le Smart Composites", and (ii) co-shared project with Randon using niobium nanoparticles.

M&As remain an optionality. Fras-le has consolidated itself as a well-stablished M&A platform, concluding seven acquisitions over the past five years. While we do not include new acquisitions in our numbers, we see potential new M&As as an encouraging optionality to our base-case, due to its: (i) solid track-record regarding incorporating new companies (notably integrating Nakata's acquisition, a company ~30% the size of Fras-le's, while improving margins and ROIC); and (ii) comfortable balance sheet (Net Debt/EBITDA of 1.2x and 0.9x in 2021E and 2022E, respectively).

Valuation is our main concern. FRAS3 shares have recently soared, reflecting, in our view, its strong results improvement over the past years and well-executed integration of Nakata, acquired in September 2020 (2Q21 LTM EBITDA +113% vs. 1Q20 LTM, compared to stock performance of +157% since January 2020). While we do believe a premium vs. its historical average is deserved, we see current multiple of 7.2x 2022 EV/EBITDA already pricing in a higher-than-average sustainable return level (premium of ~26% vs. historical average of 5.7x). Moreover, we continue to see stock liquidity as a main issue for further multiples re-rating (ADTV of ~R$2 million significantly below its peers).

Estimates	2020A	2021E	2022E	2023E	2024E	2025E
Net Revenues (R$ million)	1,671	2,487	2,792	3,057	3,239	3,432
EBITDA (R$ million)	283	422	480	538	582	629
EBITDA Margin (%)	*16.9%*	*17.0%*	*17.2%*	*17.6%*	*18.0%*	*18.3%*
Net Profit (R$ million)	189	198	244	283	321	352
P/E (x)	6.7x	15.4x	12.5x	10.7x	9.4x	8.6x
EV/EBITDA (x)	6.6x	8.4x	7.2x	6.2x	5.8x	5.4x
Dividend Yield (%)	1.2%	3.5%	4.0%	7.0%	10.6%	11.6%

Source: Company Data and XP Research.

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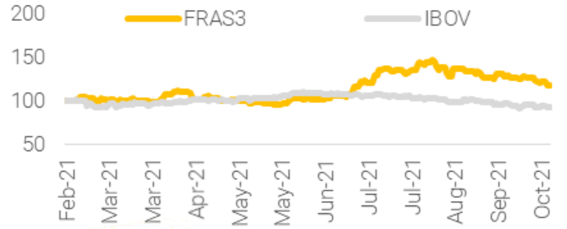
Fras-Le (FRAS3)	Neutral
Target Price (R$/sh.)	16.00
Current Price (R$/sh.)	14.15
Upside (%)	*13.1%*
Market Cap (R$ million)	3,079
# of shares (million)	218
Free Float (%)	17%
ADTV (R$ million)	2

Performance vs. IBOV



Fras-le – Company Overview

Fras-le was founded in 1954 in Rio Grande do Sul State, Brazil, and, since 1996, it is part of Randon Group. Company's portfolio is currently composed of (i) friction products, such as tarpaulins and brake pads, and (ii) non-friction products, such as wheel hubs, discs and drums commercialized over 120 countries.

Figure 121: 2Q21 LTM Revenue Breakdown

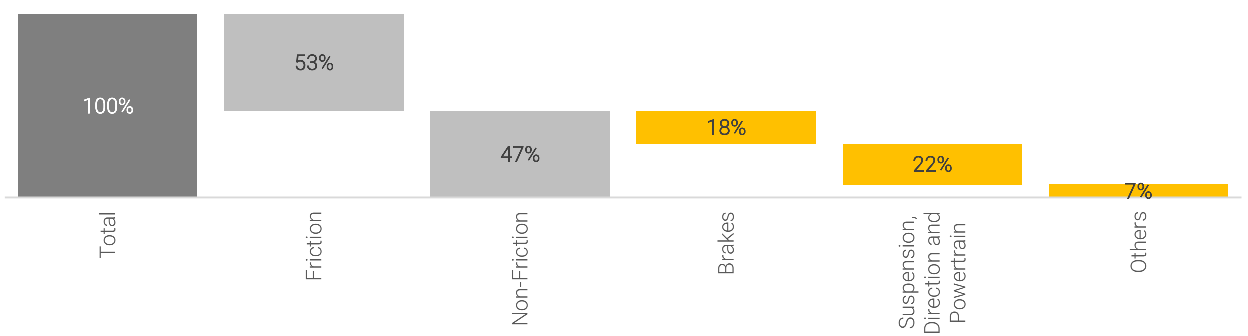


Figure 122: 2Q21 Revenue Breakdown by Segment

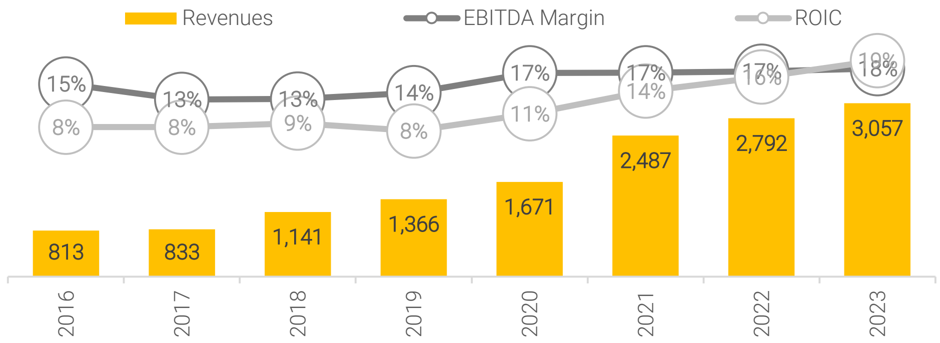
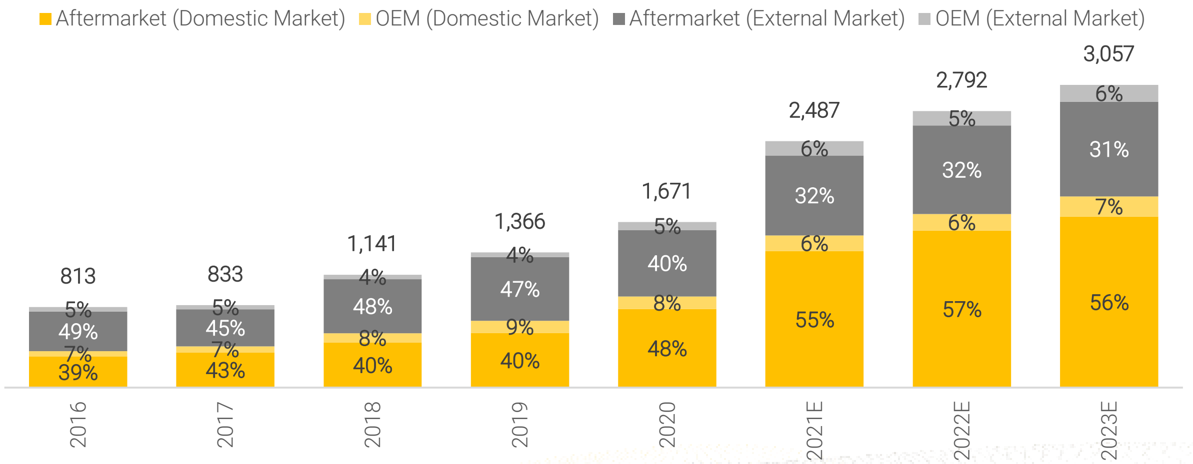
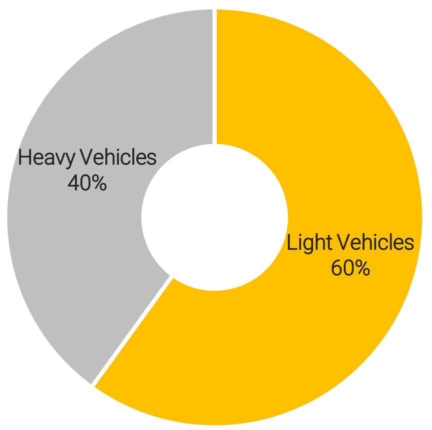


Figure 123: Fras-le Has Been Increasing its Aftermarket Revenue

Figure 124: Historical Revenue and Profitability

R$ millions





Source: Company Data and XP Research.

Fras-le – Valuation

Our Target Price Implies 13% Upside

Our 2022YE DCF-based target price of BRL 16.00 per share presents a 13% upside vs. current prices, with roughly 51% of it valued at its perpetuity.

We use a FCFF (free cash flow to firm) valuation approach, where our main assumptions include: (i) 3.7% long-term growth rate; (ii) 8.4% risk-free rate; (iii) 12% debt to (debt + equity) ratio and (iv) beta at 1.2, implying 13.8%, 15.0% and 7.0% nominal WACC, cost of equity and cost of debt, respectively.

Figure 125: DCF Main Assumptions

FCFF	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Perp.
NOPLAT	62	50	121	50	172	223	259	300	331	363	398	434	473	515	558	
(+) D&A	40	41	44	69	91	109	110	110	110	110	111	113	115	117	120	
(-) Capex	-10	-45	-80	-83	-56	-107	-112	-107	-113	-120	-127	-135	-143	-151	-160	
(+/-) Δ NWC	0	-94	-137	33	-282	76	-41	41	-35	-37	-39	-41	-44	-46	-49	
FCFF	92	-47	-52	68	-76	301	216	344	293	317	343	371	401	434	469	4,844
PV FCFF								303	226	215	205	195	185	176	167	1,725
% of Total EV								*9%*	*7%*	*6%*	*6%*	*6%*	*5%*	*5%*	*5%*	*51%*

Figure 126: CAPM Model

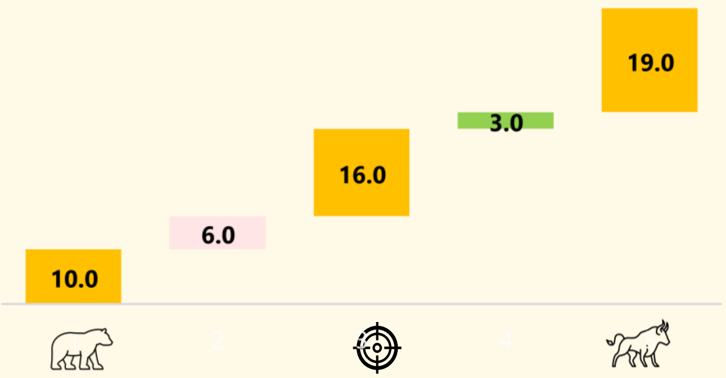
WACC	
Ke	15.0%
Kd (BT)	7.0%
T	34%
D/(D+E)	12%
WACC	13.8%
g	3.7%
Base Year	2022
Valuation	
Net Debt 2022	415
EV 2022	3,863
Minorities Shareholders Equity 2022	14
Market Cap	3,435
# de Shares (million)	215
Target Price	16.00

Figure 127: Bull and Bear Scenarios

Base-case: Our main assumptions for our base-case include: (i) elasticity to nominal GDP for domestic and external market of 1.0x; (ii) capex as % of revenue of 3.5%; and (iii) accounts receivable, inventories and suppliers' days of 35, 100 and 60, respectively.

Bull-case: In our bull-case we consider: (i) elasticity to nominal GDP for domestic and external market of 1.3x; (ii) capex as % of revenue of 2.0%; and (iii) accounts receivable, inventories and suppliers' days of 35, 90 and 55, respectively.

Bear-case: Finally, our bear-case assumptions includes: (i) elasticity to nominal GDP for domestic and external market of 0.8x; (ii) capex as % of revenue of 5.0%; and (iii) accounts receivable, inventories and suppliers' days of 50, 120 and 35, respectively.



Source: Company Data and XP Research.

Fras-le – XP Estimates Summary

Figure 128 : Fras-le Financials

	2020a	2021e	2022e	2023e	2024e	2025e
Valuation						
EV (R$ Mn)	1,864	3,530	3,451	3,336	3,374	3,420
Market Cap (R$ Mn)	1,264	3,036	3,036	3,036	3,036	3,036
EV/Sales	1.1	1.4	1.2	1.1	1.0	1.0
EV/EBITDA	6.6x	8.4x	7.2x	6.2x	5.8x	5.4x
P/E	6.7x	15.4x	12.5x	10.7x	9.4x	8.6x
P/B	9.9x	17.9x	14.2x	11.8x	10.5x	9.7x
ROE	17.8%	19.2%	21.5%	23.0%	25.4%	28.0%
ROIC	10.5%	14.1%	16.3%	18.9%	20.8%	22.3%
Dividend Yield	1%	3%	4%	7%	11%	12%
FCF Yield	4%	4%	10%	15%	13%	14%
Capex as % of Sales	3%	4%	4%	4%	4%	4%
Revenue Breakdown						
Domestic Market	920	1,538	1,751	1,930	2,043	2,162
Aftermarket	794	1,377	1,586	1,726	1,827	1,933
OEM	126	161	165	204	216	229
External Market	751	949	1,040	1,126	1,196	1,269
Aftermarket	672	804	896	955	1,014	1,077
OEM	78	145	145	171	181	193
Revenue Breakdown						
Domestic Market	55%	62%	63%	63%	63%	63%
Aftermarket	48%	55%	57%	56%	56%	56%
OEM	8%	6%	6%	7%	7%	7%
External Market	45%	38%	37%	37%	37%	37%
Aftermarket	40%	32%	32%	31%	31%	31%
OEM	5%	6%	5%	6%	6%	6%

	2020a	2021e	2022e	2023e	2024e	2025e
Consolidated income statement (R$mn)						
Net Revenues	1,671	2,487	2,792	3,057	3,239	3,432
EBIT	240	317	370	428	472	519
EBIT Margin	*14.4%*	*12.8%*	*13.2%*	*14.0%*	*14.6%*	*15.1%*
EBITDA	283	422	480	538	582	629
EBITDA Margin	*16.9%*	*17.0%*	*17.2%*	*17.6%*	*18.0%*	*18.3%*
Net Financial Results	15	-38	-22	-24	-13	-16
Pre-tax income	255	279	348	404	459	503
Pre-tax margin	*15.2%*	*11.2%*	*12.5%*	*13.2%*	*14.2%*	*14.7%*
Net Income	189	198	244	283	321	352
Net margin	*11.3%*	*7.9%*	*8.7%*	*9.3%*	*9.9%*	*10.3%*
Adjusted Net income	189	198	244	283	321	352
Adjusted Net margin	*11.3%*	*7.9%*	*8.7%*	*9.3%*	*9.9%*	*10.3%*
Shares out	225	215	215	215	215	215
Consolidated balance sheet (R$mn)						
Total Debt	1,071	1,033	1,138	1,251	1,371	1,498
Net Debt	599	494	415	299	337	384
Equity	955	1,075	1,197	1,267	1,267	1,267
Assets	2,889	2,910	3,177	3,397	3,541	3,694
Net working capital	-282	76	-41	41	-35	-37
Fixed assets	1,242	1,222	1,224	1,220	1,224	1,234
Consolidated cash flow (R$mn)						
D&A	91	109	110	110	110	110
Capex	56	107	112	107	113	120
Free Cash Flow	47	114	306	440	403	433
Dividends	16	105	122	212	321	352

Source: Company Data and XP Research.

Marcopolo | Neutral; TP R$2.80/share

Cautious on Market Recovery Concerns

Initiating Coverage with Neutral Rating and Target Price of R$2.80/share

We are initiating coverage of Marcopolo with a Neutral rating and target price of R$2.80/share, -1% downside vs current prices. As the most impacted company throughout the pandemic (EBITDA still at negative levels), our main concern for Marcopolo is based on the risks regarding the pace of the sector's recovery, with (a) urban and (b) road buses' demand largely hit by competition with other mobility alternatives and postponed tourism/leisure pick-up, respectively. Finally, we see current valuation of 10.4x 2022 EV/EBITDA as fair, trading close to its historical average of ~11.0x.

Urban buses as the most impacted sub-category under buses demand. As the most impacted automotive category in Brazil, our main concern relies on the pace of the recovery of buses demand in Brazil. For urban buses (Marcopolo with ~48% market share), we fear a (a) fiercer competition from other mobility alternatives and (b) longer-than-expected restrictions impositions to continue hitting on volumes in the upcoming months (-60% YTD vs. 2019).

Deterioration in road + intercity buses' mix impacts Marcopolo's profitability outlook. Regarding road and intercity buses (Marcopolo with ~51% market share), despite this sub-segment's softer volumes fall vs. other categories (-18% YTD vs. 2019), we note a negative shift in mix, with (a) road buses' demand (Marcopolo's most value-added product) sharply declining due to social restrictions' impact on leisure and tourism demand (-37% YTD vs. 2019), while (b) intercity buses (with lower relative profitability levels) go through a more positive cycle (+72% YTD vs. 2019).

***Caminho da Escola*'s new orders to be delivered by 2022.** In 2Q21, Marcopolo delivered its final units to the 2019 *Caminho da Escola* program (total of 4,612 units), with no remaining orders to be delivered throughout 2021. After winning the right to deliver 3,900 units to the 2021 program, we expect government's volumes to resume by 2022, partially offsetting the weak demand in urban and micro segments (although 15% lower vs. the last program).

Valuation is fairly priced, in our view. We see Marcopolo trading at a ~10.4x and ~1.0x 2022 EV/EBITDA and P/B, respectively, which is close to its historical average of ~11x. As a cross-check exercise, as we do not assume Marcopolo's ROE to be significantly superior vs. its cost of equity in the long-run, we see the stock trading at a book level as reasonable (our long-term forecast implies a ROE of ~13-14%, slightly below its cost of equity of 14.8%).

Estimates	2020A	2021E	2022E	2023E	2024E	2025E
Net Revenues (R$ million)	3,590	3,630	4,301	4,730	5,043	5,377
EBITDA (R$ million)	152	48	354	555	609	669
EBITDA Margin (%)	*4.2%*	*1.3%*	*8.2%*	*11.7%*	*12.1%*	*12.4%*
Net Profit (R$ million)	91	201	113	260	300	337
P/E (x)	48.8x	42.0x	29.0x	10.1x	8.7x	7.8x
EV/EBITDA (x)	17.7x	233.7x	10.4x	6.5x	6.1x	5.9x
Dividend Yield (%)	2.3%	0.6%	0.7%	3.8%	6.5%	8.7%

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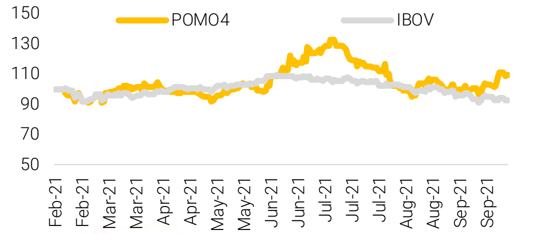
Marcopolo (POMO4)	Neutral
Target Price (R$/sh.)	2.80
Current Price (R$/sh.)	2.83
Upside (%)	*-1.1%*
Market Cap (R$ million)	2,564
# of shares (million)	943
Free Float (%)	80%
ADTV (R$ million)	12

Performance vs. IBOV



Source: Company Data and XP Research.

Marcopolo – Company Overview

Marcopolo was founded in 1949 in Rio Grande do Sul State, Brazil. The company is focused on passenger solutions for mass transportation, holding the position as leading bus bodies manufacturer, produced in five different countries and commercialized in more than one hundred.

Figure 129: 2Q21 LTM Revenue Breakdown

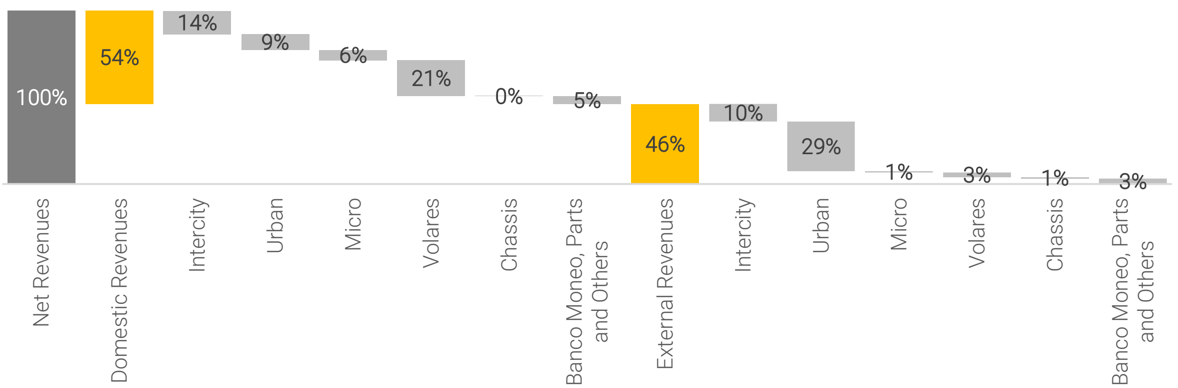


Figure 130: Historical Revenue Breakdown by Segment

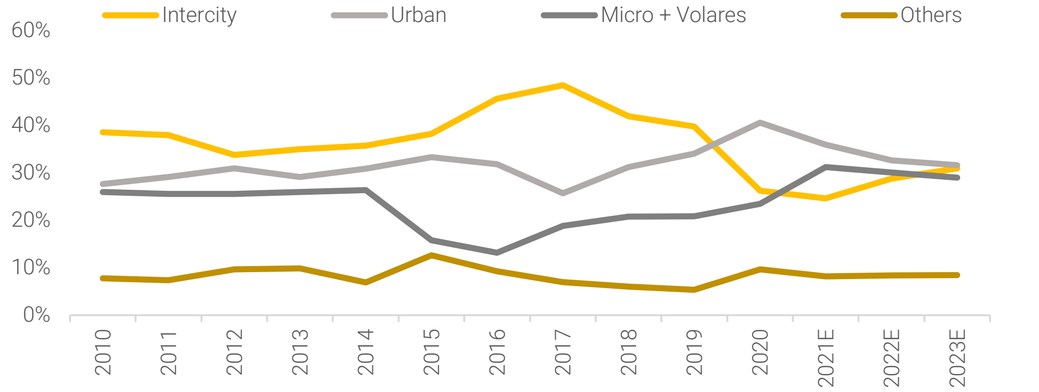


Figure 131: Revenue Breakdown by Market

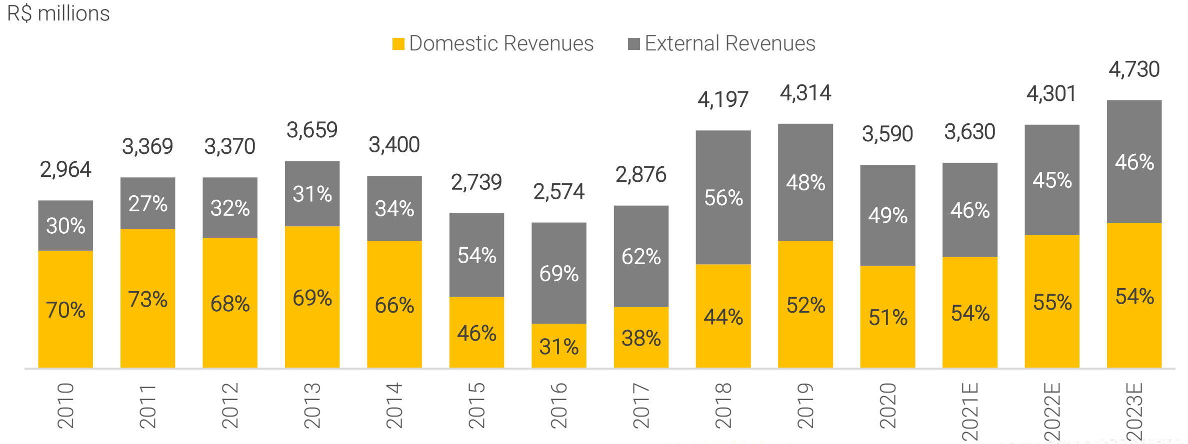
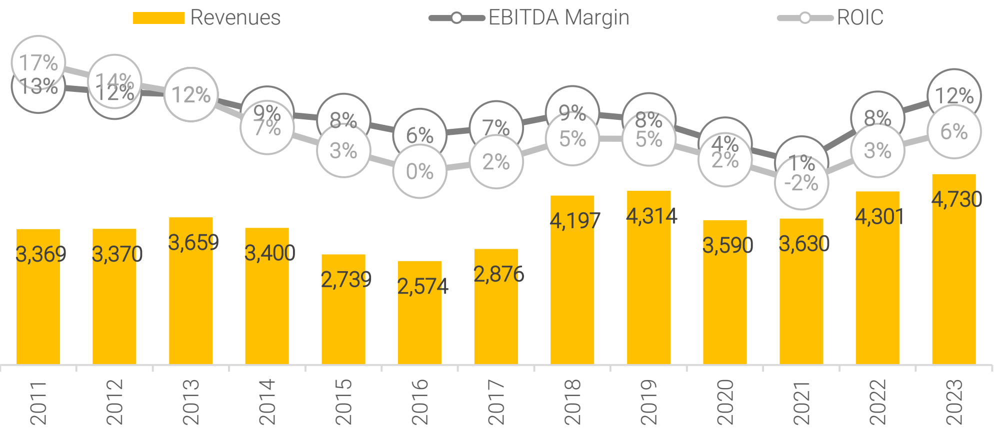


Figure 132: Historical Revenue and Profitability



Source: Company Data and XP Research.

Marcopolo – Valuation

Our Target Price Implies -1% Downside

Our 2022YE DCF-based target price of BRL 2.80 per share presents a -1% downside vs. current prices, with roughly 67% of it valued at its perpetuity.

We use a FCFF (free cash flow to firm) valuation approach, where our main assumptions include: (i) 3.7% long-term growth rate; (ii) 8.4% risk-free rate; (iii) 42% debt to (debt + equity) ratio and (iv) beta at 1.15, implying 10.5%, 14.8% and 7.0% nominal WACC, cost of equity and cost of debt, respectively.

Figure 133: DCF Main Assumptions

FCFF	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2030
NOPLAT (Excl. Equity Income)	186	93	126	-11	188	195	384	65	135	256	283	313	344	379	415	455	454	
(+) D&A	41	46	49	45	61	87	96	108	108	110	112	115	119	123	128	133	139	
(-) Capex	-112	-156	-72	-54	-142	-165	-134	-122	-129	-142	-151	-161	-172	-183	-196	-209	-216	
(+/-) Δ NWC	-67	54	106	31	-325	390	-524	-259	214	-44	-116	-123	-132	-140	-150	-160	-98	
FCFF	49	37	209	12	-218	506	-179	-208	327	179	128	143	160	178	198	219	279	4,280
PV FCFF										162	105	106	107	108	109	109	126	1,926
% of Total EV										*6%*	*4%*	*4%*	*4%*	*4%*	*4%*	*4%*	*4%*	*67%*

Figure 134: CAPM Model

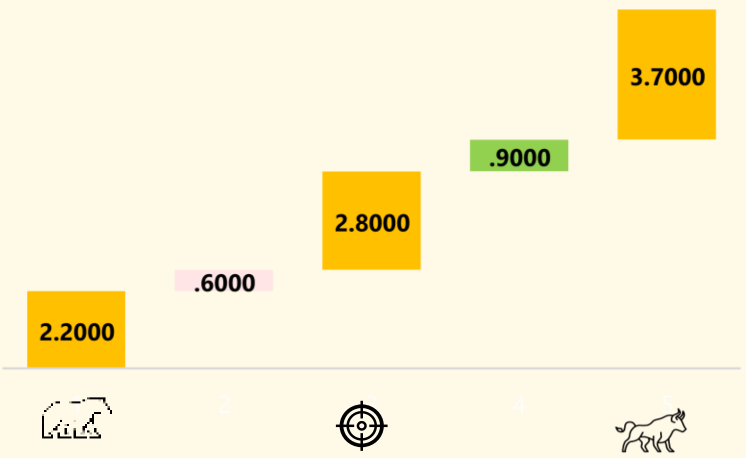
WACC	
Ke	14.8%
Kd (BT)	7.0%
T	34%
D/(D+E)	42%
WACC	10.5%
g	3.7%
Base Year	2022
Valuation	
Net Debt 2022	1,220
EV 2022	3,157
(+) Marcopolo's Equity Stake in NFI	631
(+) Other Affiliates' Equity 2022	86
(-) Minorities' Stake 2022	51
Market Cap	2,604
# de Shares (million)	943
Target Price	2.80

Figure 135: Bull and Bear Scenarios

Base-case: Our main assumptions for our base-case include: (i) domestic production elasticity to GDP of 1.0x in 2024 onwards; (ii) external production elasticity to GDP of 1.5x in 2024 onwards; (iii) capex as % of revenues of 3.0%; (iv) inventory of 80 days.

Bull-case: In our bull-case we consider: (i) domestic production elasticity to GDP of 2.0x in 2024 onwards; (ii) external production elasticity to GDP of 2.0x in 2024 onwards; (iii) capex as % of revenues of 2.5%; (iv) inventory of 75 days.

Bear-case: Finally, our bear-case assumptions includes: (i) domestic production elasticity to GDP of 0.0x in 2024 onwards; (ii) external production elasticity to GDP of 1.0x in 2024 onwards; (iii) capex as % of revenues of 3.3%; (iv) inventory of 85 days.



Source: Company Data and XP Research.

Marcopolo – XP Estimates Summary

Figure 136 : Marcopolo Financials

	2020a	2021e	2022e	2023e	2024e	2025e
Valuation						
EV (R$ Mn)	3,965	4,134	3,888	3,864	3,960	4,104
Market Cap (R$ Mn)	2,978	2,668	2,668	2,668	2,668	2,668
EV/Sales	1.1	1.1	0.9	0.8	0.8	0.8
EV/EBITDA (2)	26.0x	85.4x	11.0x	7.0x	6.5x	6.1x
EV/EBITDA	17.7x	233.7x	10.4x	6.5x	6.1x	5.9x
P/E (2)	32.9x	13.3x	23.7x	10.3x	8.9x	7.9x
P/E	48.8x	42.0x	29.0x	10.1x	8.7x	7.8x
P/B	1.2x	1.0x	1.0x	0.9x	0.9x	0.8x
ROE	0.6%	2.6%	4.0%	8.9%	9.8%	10.6%
ROIC	1.8%	-1.7%	3.3%	6.2%	6.6%	6.9%
Dividend Yield	2%	1%	1%	4%	7%	9%
FCF Yield	3%	-22%	13%	9%	8%	9%
Capex as % of Sales	4%	3%	3%	3%	3%	3%

	2020a	2021e	2022e	2023e	2024e	2025e
Revenues Breakdown						
Consolidated Revenues	3,590	3,630	4,301	4,730	5,043	5,377
Intercity	943	894	1,240	1,464	1,560	1,663
Urban	1,458	1,306	1,405	1,496	1,603	1,717
Micro	223	213	329	348	371	395
Volares	619	920	965	1,022	1,084	1,149
Chassis	115	42	46	51	55	59
Banco Moneo, Parts and Others	232	255	315	347	369	394
Domestic Revenues	1,818	1,970	2,355	2,563	2,714	2,875
Intercity	495	537	757	853	903	957
Urban	423	258	321	351	372	394
Micro	199	177	202	214	226	240
Volares	557	848	891	945	1,000	1,060
Chassis	7	5	11	12	13	13
Banco Moneo, Parts and Others	137	144	174	189	200	212
External Revenues	1,772	1,660	1,946	2,167	2,328	2,502
Intercity	447	356	484	612	657	706
Urban	1,035	1,048	1,084	1,146	1,231	1,323
Micro	24	36	127	135	145	156
Volares	62	72	74	78	84	90
Chassis	108	36	35	39	42	45
Banco Moneo, Parts and Others	96	111	142	158	169	182

	2020a	2021e	2022e	2023e	2024e	2025e
Consolidated income statement (R$mn)						
Net Revenues	3,590	3,630	4,301	4,730	5,043	5,377
EBIT	172	123	247	445	497	553
EBIT Margin	*4.8%*	*3.4%*	*5.7%*	*9.4%*	*9.9%*	*10.3%*
EBITDA	152	48	354	555	609	669
EBITDA Margin	*4.2%*	*1.3%*	*8.2%*	*11.7%*	*12.1%*	*12.4%*
Net Financial Results	-124	154	-98	-81	-76	-84
Pre-tax income	49	276	149	364	420	469
Pre-tax margin	*1.4%*	*7.6%*	*3.5%*	*7.7%*	*8.3%*	*8.7%*
Net Income	91	201	113	260	300	337
Net margin	*2.5%*	*5.5%*	*2.6%*	*5.5%*	*6.0%*	*6.3%*
Adjusted Net income	47	47	70	202	233	257
Adjusted Net margin	*1.3%*	*1.3%*	*1.6%*	*4.3%*	*4.6%*	*4.8%*
Shares out	954	943	943	943	943	943
Consolidated balance sheet (R$mn)						
Total Debt	2,031	2,248	2,323	2,446	2,578	2,718
Net Debt	987	1,465	1,220	1,195	1,292	1,435
Equity	2,552	2,697	2,792	2,951	3,077	3,183
Assets	5,861	6,474	6,583	6,903	7,203	7,493
Net working capital	-524	-259	214	-44	-116	-123
Fixed assets	1,352	1,348	1,370	1,402	1,441	1,487
Consolidated cash flow (R$mn)						
D&A	14	(108)	65	52	44	36
Capex	134	122	129	142	151	161
Free Cash Flow	82	(583)	338	249	209	228
Dividends	70	17	18	101	174	231

Source: Company Data and XP Research.

Appendix

Key Risks, Industrial Footprint, Management and Shareholders Structure

Addressing Key Risks

RANDON

(i) Macro risks, given the high correlation between operating fleet expansion and GDP growth;

(ii) Fiercer than expected competition, especially in a scenario of high idle capacity (not seen at this moment);

(iii) Higher share of rail roads and waterways among Brazilian transportation matrix (partially offset by Randon's exposure to rail car sales);

(iv) Hiking short-term and/or long-term interest rates, due to its high debt-exposure to CDI rates;

(v) Higher-than-expected raw material prices increase;

(vi) Grains' production deceleration in Brazil.

TUPY

(i) Global industrial activity deceleration impacting gross capital formation (exposure to capital goods sectors in the off-road segment);

(ii) Higher-than-expected adoption of electric heavy vehicles impacting iron head blocks applications;

(iii) High top-line concentration in a few OEMs (top 4 ~61% of sales);

(iv) Challenges in Teksid's proper integration of operations;

(v) BRL appreciation negatively impacting Tupy's exports outlook from Brazil

IOCHPE-MAXION

(i) Light vehicles performance postponed recovery due to supply chain issues;

(ii) Lower-than-expected GDP growth in Europe, U.S.A. and Brazil, impacting demand outlook for auto production;

(iii) High top-line concentration on a few OEMs (top 5 ~48% of sales);

(iv) hiking short-term and/or long-term interest rates, due to its higher relative leverage levels;

(v) higher-than-expected raw material prices increase (potentially offset by contract pass-through negotiations with OEMs);

(vi) FX volatility, due to its high exposure to foreign economies

FRAS-LE

(i) Macro risks, due to its high dependence on population purchasing power in the aftermarket;

(ii) Faster-than-expected adoption of electric light vehicles, impacting the application outlook for friction materials;

(iii) Fiercer than expected competition, particularly from imported products;

(iv) Hiking short-term and/or long-term interest rates, with potential negative implications on consumers' purchasing power;

Marcopolo

(i) Slower-than-expected recovery of road buses, largely exposed to tourism and leisure activity (impacted during the pandemic);

(ii) Fiercer competition in the urban buses segment vs. other mobility alternatives (e.g.: ride sharing);

(iii) Slowdown in *Caminho da Escola*'s government orders;

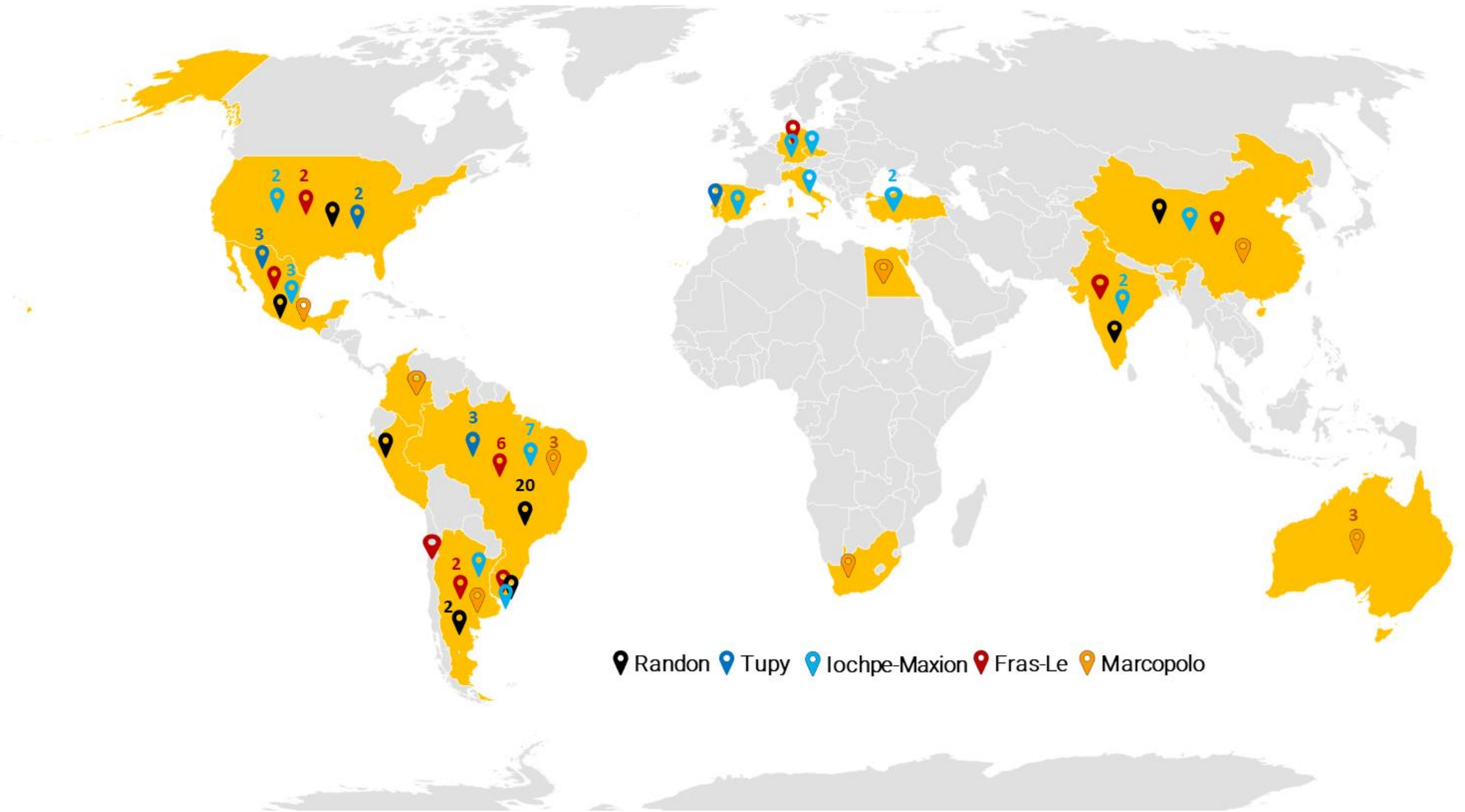
(iv) BRL appreciation negatively impacting the profitability of exported products (~22% of sales);

(v) Higher-than-expected increase on raw material prices (high exposure to D2C customers);

Source: XP Research.

Industrial Footprint

Brazilian Auto Parts' Companies With Industrial Facilities Spread Worldwide



Source: Company Data and XP Research.

Randon

Management and Shareholder Structure

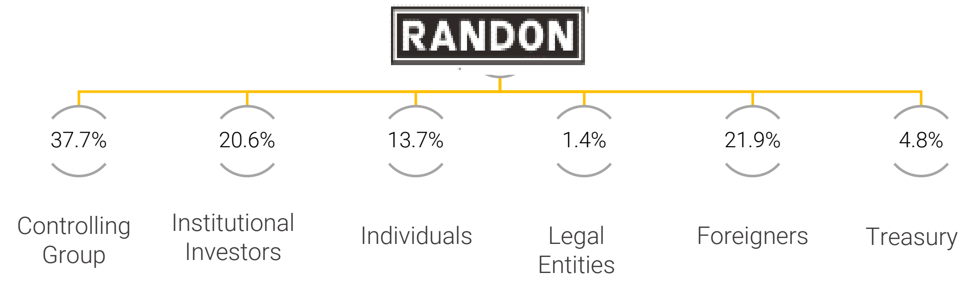
Figure 137: Executive Officers

Name	Position
Daniel Raul Randon	CEO
Paulo Prignolato	CFO and IR Director
Sergio Lisbão Moreira de Carvalho	Vice President Director
Daniel Martin Ely	Vice President Director
Alexandre Randon	Director

Figure 138: Board of Directors

Name	Position
David Abramo Randon	Chairman
Alexandre Randon	Vice-Chairman
Pedro Ferro Neto	Member
William Ling	Member
Ana Carolina Ribeiro Strobel	Member

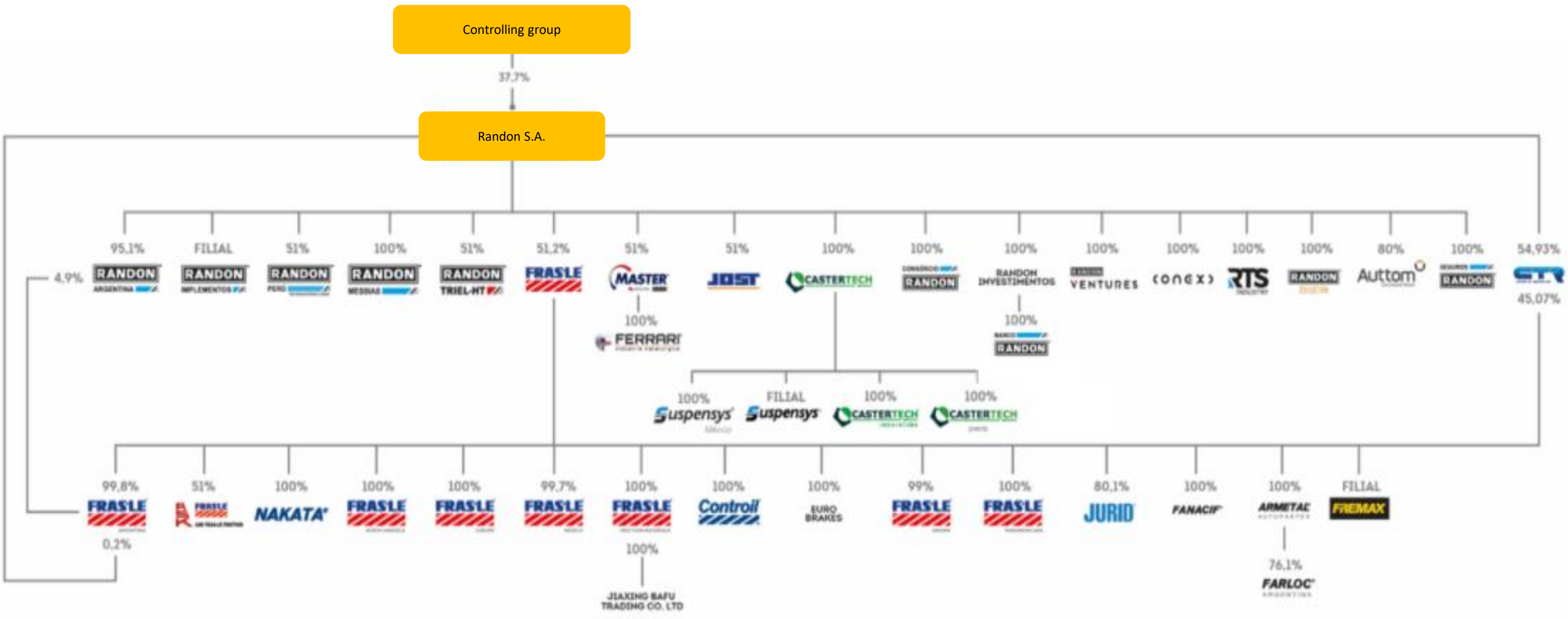
Figure 139: Shareholder Structure



Source: Company Data and XP Research.

Randon

Figure 140: Corporate Structure



Source: Company Data and XP Research.

Tupy

Management and Shareholder Structure

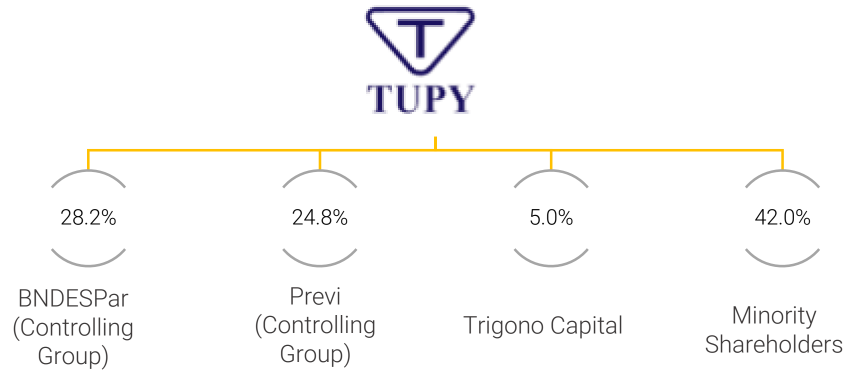
Figure 141: Executive Officers

Name	Position
Fernando Cestari de Rizzo	CEO
Thiago Fontoura Struminski	CFO and IR Director
Fabio Pena Rios	Chief Operating Officer
Ricardo Sendim Fioramonte	Chief Sales Officer
Erodes Berbetz	Chief Purchasing & Logistics Executive Officer

Figure 142: Board of Directors

Name	Position
Gueitiro Matsuo Genso	Chairman
Ricardo Doria Durazzo	Vice-Chairman
Jaime Luiz Kalsing	Director
Paula Regina Goto	Director
Claudia Silva De Azeredo Santos	Director
José Gustavo De Souza Costa	Director
Gabriel Stoliar	Independent Director
José Rubens de La Rosa	Independent Director
Ricardo Antonio Weiss	Independent Director
Silvia Pereira de Jesus Lucas	Alternate Director
Paulo Roberto Evangelista de Lima	Alternate Director
Abidias José de Souza Junior	Alternate Director

Figure 143: Shareholder Structure



Source: Company Data and XP Research.

Iochpe-Maxion

Management and Shareholder Structure

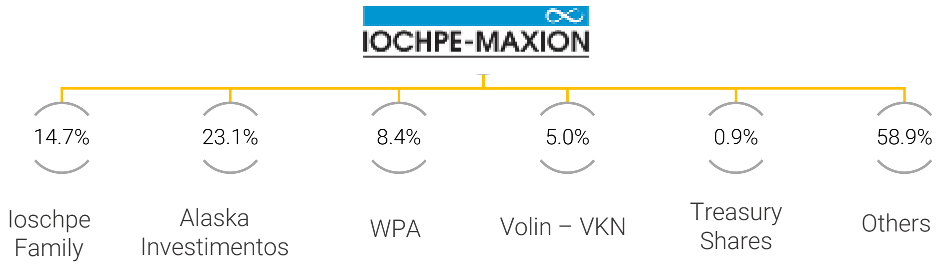
Figure 144: Executive Officers

Name	Position
Marcos S. Oliveira	CEO
Elcio Mitsuhiro Ito	CFO and IR Director
Paulo Marcio Almada dos Santos	Director

Figure 145: Board of Directors

Name	Position
Dan Ioschpe	Chairman
Nildemar Secches	Vice-Chairman
Alexandre Gonçalves Silva	Member (Independent)
Gustavo Berg Ioschpe	Member
Henrique Bredda	Member (Independent)
Iboty Brochmann Ioschpe	Member
Israel Vainboim	Member (Independent)
Mauro Litwin Iochpe	Member
Sergio Luiz Silva Schwartz	Member (Independent)

Figure 146: Shareholder Structure



Source: Company Data and XP Research.

Fras-le

Management and Shareholder Structure

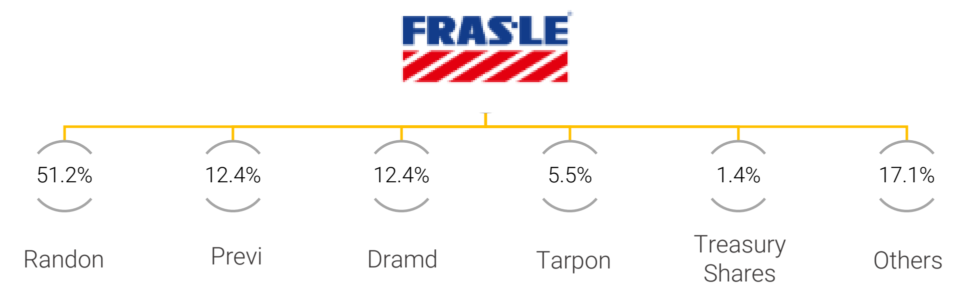
Figure 147: Executive Officers

Name	Position
Sergio Lisbão Moreira de Carvalho	CEO
Hemerson Fernando de Souza	IR Director
Anderson Pontalti	Director

Figure 148: Board of Directors

Name	Position
David Abramo Randon	Chairman
Astor Milton Schmitt	Vice-Chairman
Daniel Raul Randon	Member
Dan Antonio Marinho Conrado	Member
Bruno Chamas Alves	Member

Figure 149: Shareholder Structure



Source: Company Data and XP Research.

Marcopolo

Management and Shareholder Structure

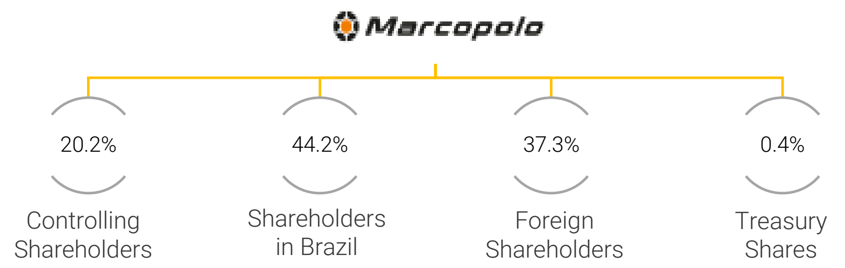
Figure 150: Executive Officers

Name	Position
James Eduardo Bellini	CEO
José Antonio Valiati	CFO and IR Director

Figure 151: Board of Directors

Name	Position
Mauro Gilberto Bellini	Chairman
Paulo Cezar da Silva Nunes	Vice-Chairman
Dan Ioschpe	Member
Denise Casagrande da Rocha	Member
Henrique Bredda	Member
Maria Aparecida Metanias Hallack	Member
José Rubens de la Rosa	Member
Eduardo Frederico Willrich	Secretary

Figure 152: Shareholder Structure



Source: Company Data and XP Research.

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15) Investment in stocks is appropriate for moderate and aggressive profile investors, according to the suitability policy practiced by XP Investimentos. Equity investments available are portion a company's capital that is traded on the market. Stock is a variable financial investment (i.e. an investment in which profitability is not pre-established and varies depending on market quotations). Investment in stock is a high-risk investment and past performance is not necessarily indicative of future results and no statement or warranty, expressed or implied, is made in this material in relation to future performance. Market conditions, macroeconomic scenario, company and sector specific events can affect investment performance and may even result in significant asset losses. The recommended duration for equity investments is medium-long term. There is no guarantee of investment return for customers' investments in stock.
16) Investment in options is preferably indicated for aggressive profile investors, according to the suitability policy practiced by XP Investimentos. In options market, the purchase or sale rights of a good shall be negotiated at a price fixed at a future date, and the purchaser of the negotiated duty should pay a premium to the seller as in a secure agreement. Operations with these derivatives are considered very high risk for presenting high risk and return relationships and some positions present the possibility of losses higher than the capital invested. The recommended duration for the investment is short-term and the customer's assets are not guaranteed in this type of product.
17) Investment in terms is indicated for aggressive profile investors, according to the suitability policy practiced by XP Investimentos. They are contracts for the purchase or sale of a certain number of shares at a fixed price for settlement within a specified period. The term of the contract is freely chosen by the investors, complying with the minimum period of 16 days and a maximum of 999 days. The price will be the value of the added share of a portion corresponding to the interest-which are set freely on the market, depending on the term of the contract. Every transaction in the term requires a guarantee deposit. These guarantees are provided in two forms: coverage or margin.
18) Investments in futures markets are subject to significant loss of principal, and are therefore appropriate for aggressive profile investors, according to the suitability policies practiced by XP Investimentos. A commodity is an object or price determinant of a future contract or other derivative instrument, which may substantiate an index, a fee, a movable value or a physical product. Commodities are considered high risk investments, which include the possibility of price fluctuation due to the use of financial leverage. The recommended duration for commodity investments is short-term and customers' assets are not guaranteed in this type of product. Market conditions and the macroeconomic scenario can affect the performance investments.
19) This institution is adhering ANBIMA Code of Regulation and best practices for the distribution activity of retail investment products.
20) XP Investments US, LLC, a broker-dealer registered with the U.S. Securities and Exchange Commission, has assumed responsibility for this research for purposes of U.S. law. All transactions arising from this research should be directed to XP Investments US, LLC, at +1 646-664-0525.

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