

Brazilian automotive market

Covid-19 impacts

Specialized material
Authorized disclosure
2020



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Important!

"The purpose of the analysis is to understand the behavior of the automotive sector considering the impacts of Covid-19."

Our investment thesis!

"With the retraction of income, a drop of 6.8% of GDP and projected unemployment of 18.6% for 2020, sales of new vehicles lose their power, which favors the aftermarket due to the need to maintain the circulating fleet. "



Sector Data:

- In 2019, 89.8 million light vehicles were sold (GlobalData);
 - Brazil accounted for 3.0% or 2.7 million (Anfavea).
- Also in 2019, Brazil sold 101,300 trucks and 20,900 buses (Anfavea);
- The circulating vehicle fleet reached 45.5 million units (Anfavea), with an average age of around 10 years;
- The automotive chain (Auto parts, Assemblers, Replacement etc.) added to the GDP of 2019 around R \$ 220 billion (IBGE).

Methodological considerations



Why is it important to detail the methodology?

- The TCP Partners economy team understands that the effects and measures to curb the spread of Covid-19 have caused a “break in the data series” known to make projections. In economics, this type of statistical event is called “Lucas critique”, by economist Robert Lucas¹.
 - *Example of Lucas critique: even with interest rates at the lowest level in history and high credit volume, families are not making vehicle purchases, which led to a 76% ² drop in sales in April / 2020. Under normal conditions, these two (interest rate and credit volume) components are decisive for car sales.*
- The data series from February to April 2020 was used from the following sources:
 - Public institutions (Central Bank, IBGE, etc.);
 - Publicly traded companies listed on the stock exchange;
 - Associations and institutions (Anfavea, Sindipeças, FGV etc.);
 - Serasa, Bloomberg.

Notes:

⁽¹⁾ Lucas, Robert (1976), "The Phillips Curve and Labor Markets", American Elsevier, vol. 1, pag. 19–46, New York, isbn 0-444-11007-0;

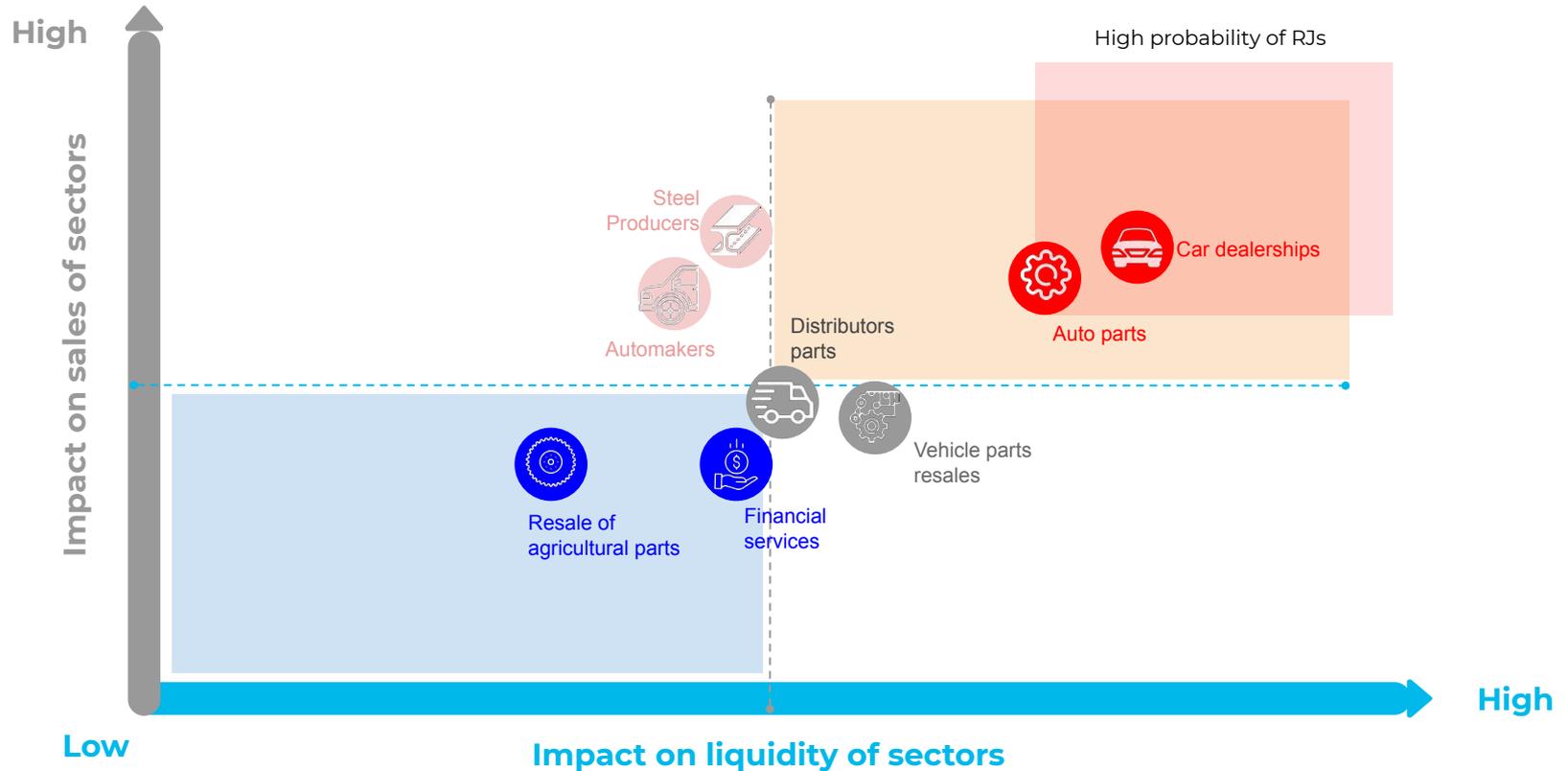
⁽²⁾Fenabrave data.



Sensitivity analysis of impacts on sales and liquidity of the automotive chain

Sales and liquidity matrix of automotive sub-sectors

Matrix that measures impacts on sales and liquidity (annual)



1. **Automakers:** sales of vehicles are expected to decrease by ~ 47%, reaching 1.48 million. With no signs of recovery in the Argentine market, Brazil's largest importer, foreign sales are expected to reach one of the lowest shipments recorded since the formation of Mercosur;
2. **Auto parts:** auto parts manufacturers have a strong correlation (> 80%) with the activity of automakers, however, production is expected to fall at a similar intensity. Even if there is a perception of sales resumption in the aftermarket and agricultural machinery markets, it will be insufficient to support the drop in exports and sales by OEMs. We have observed chain rearrangement to serve local productions;
3. **Distributors:** we anticipate that distributors will drop ~ 25% in sales in 2020, with greater selectivity in the credit analysis of their retail chain and, on the other hand, financial institutions should gradually resume lines;
4. **Vehicle parts resale:** we have noticed that retailers of light and heavy vehicles are expected to resume sales after the third quarter of 2020. The TCP Partners economy team estimates that the segment may benefit from the vehicle's propensity to maintain vis acquisition of new vehicles, due to the consequences of reduced economic activity;
5. **Resale of agricultural parts:** Resale of agricultural parts: wholesalers and retailers of agricultural parts are expected to have a year of sales growth due to the aversion to buying new machines (tractors, harvesters and motorized sprayers) by producers who must preserve cash. TCP's economy team expects that producers will decide to maintain the current fleet, which favors sales of spare parts;
6. **Vehicle dealerships:** in order to preserve income (in the case of families) and cash (in the case of companies), the dealerships will have a reduction in sales of ~ 47% for light vehicles and ~ 51% for trucks.

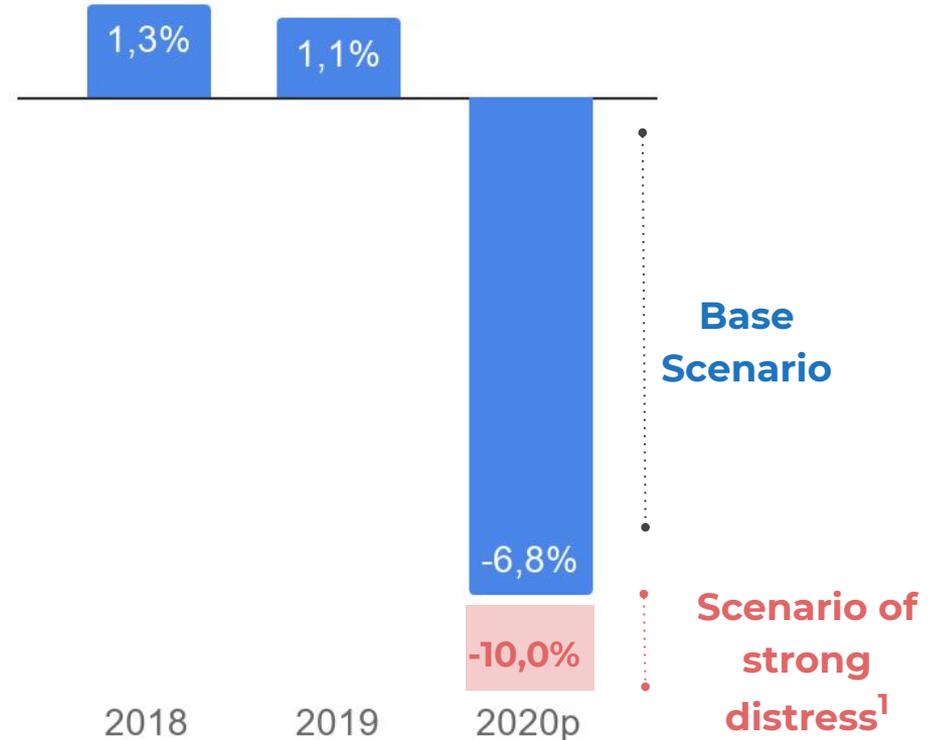
Economic Projections



Analysis:

Covid-19 is impacting almost all economic activities and will make **Brazil** have **the biggest GDP drop in its history**. In the **base** scenario, GDB will **fall by 6,8%**. In the scenario of **strong distress**, the fall will be **-10%**, due to **the worsening of industrial activities and trade**.

Brazil GDP
(%, annual variation)



Source: IBGE. TCP Partners forecast.

(1) Considers worsening Industrial GDP and Service and Trade GDP;

p = TCP Partners projection

Analysis:

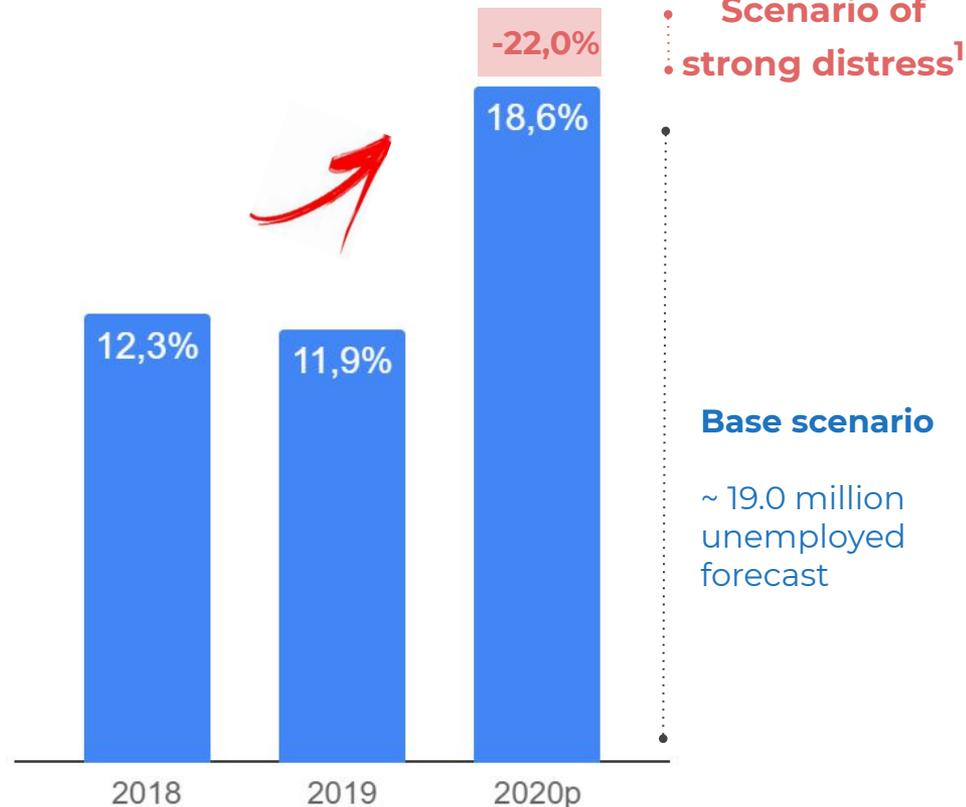
In Feb / 20 before **Covid-19**, **Brazil** had **12.3 million unemployed**, and came from a decreasing curve. With the impacts of Covid-19 and the necessary actions (such as isolation), **we forecast an unemployment rate of 18.6%**, which may reach 22.0% in the distress scenario. The base scenario suggests that Brazil may have **19 million unemployed in 2020**.

Source: IBGE. TCP Partners forecast.

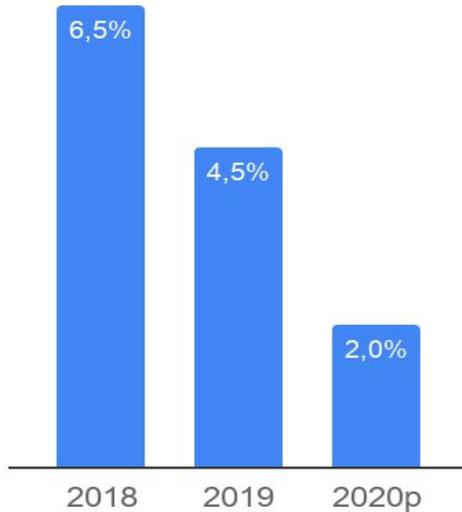
(1) Considers worsening Industrial GDP and Service and Trade GDP;

p = TCP Partners projection

Unemployment rate (%, annual variation)

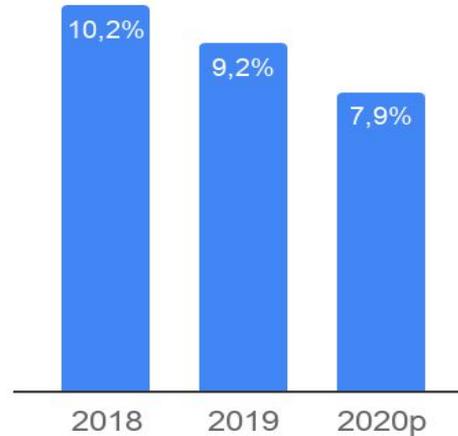


Selic rate
(%, per year)



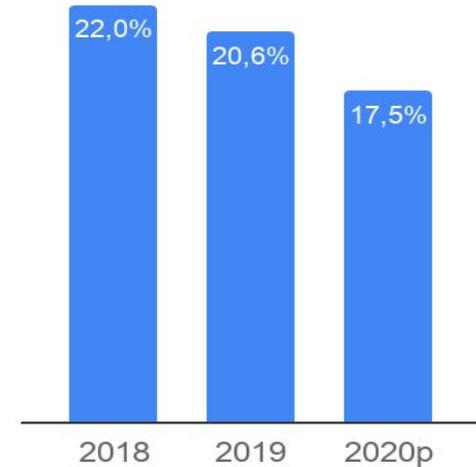
The Central Bank has been using the Selic rate as a monetary instrument to stimulate the credit market.

Average BNDES Rate
(%, per year)



Actions for the economic recovery will lead BNDES to reduce the average rate of its lines.

Interest Rate Acquisition of Individual Vehicles
(%,per year)



With the fall in income and employment, banks are expected to apply lower interest rates to encourage vehicle purchases.



Vehicle sales projections

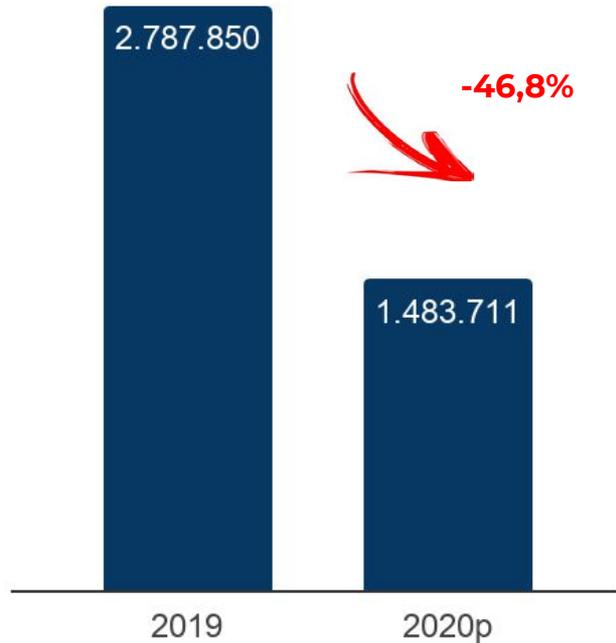




Demand components weakened

- Sales of light vehicles depend on bank credit, employment and income. In the short term, these factors present limited behaviors;
- In the case of truck sales, it is observed that the GDP operating -6.8%, the current truck fleet meets the demand for cargo from the economy's activities, that is, it is not necessary to acquire new trucks;
- Bus sales that were supposed to be driven by the 2020 municipal elections were impacted by the allocation of the budget for health spending in line with the drop in tax revenue.

Auto Sales¹ (Units)



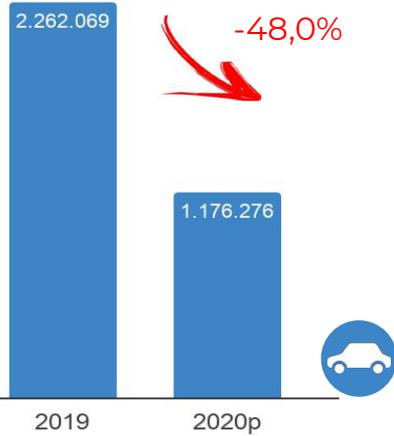
The **automotive sector** was on a consistent path of recovery, in **2019 ~ 2.8 million units were sold**. With the economic and social impacts of Covid-19, **TCP Partners** projects a **46.8% drop in 2020**, with **~ 1.5 million units being sold**.

Source: Anfavea. Created by TCP Partners.

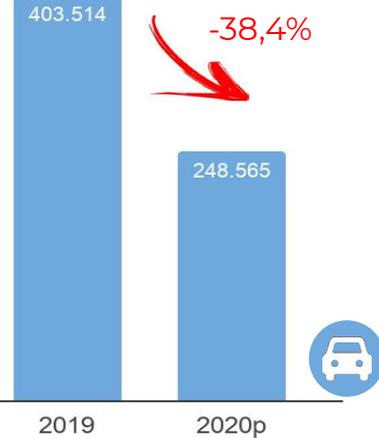
(1) Includes automobiles, light commercial vehicles, trucks and buses;
p = TCP Partners projection.

All segments suffer falls in domestic sales¹

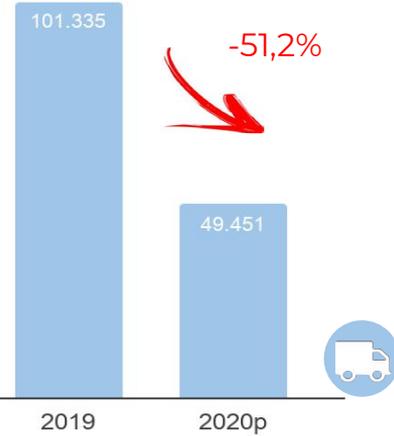
Car sales (Un.)



Com. sales Light² (Un.)



Truck sales (Un.)



Bus sales (Un.)



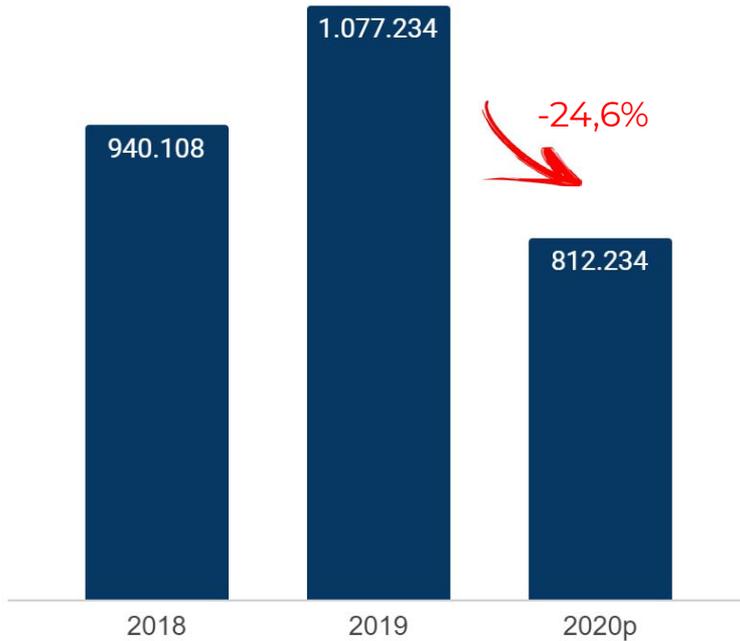
Source: Anfeava. Created by TCP Partners.

(1) Domestic and imported

(2) Class of all vehicles that have a total gross weight of up to 3.5 tonnes. Examples: SUVs, vans, etc., models: Fiat Toro, Hillux, Honda HRV;

p = TCP Partners projection..

Motorcycle retail sales (License plate registrations Un.)



Motorcycle sales were on a growth trajectory, in **2019 ~ 1.08 million units were sold, up 14.6% over 2018.**

With the **negative impacts** of Covid-19 on **employment and income**, crucial for the acquisition of motorcycles, **TCP Partners** foresee **812.2 thousand units sold in 2020, a decrease of 24.6%.**

Aftermarket analysis



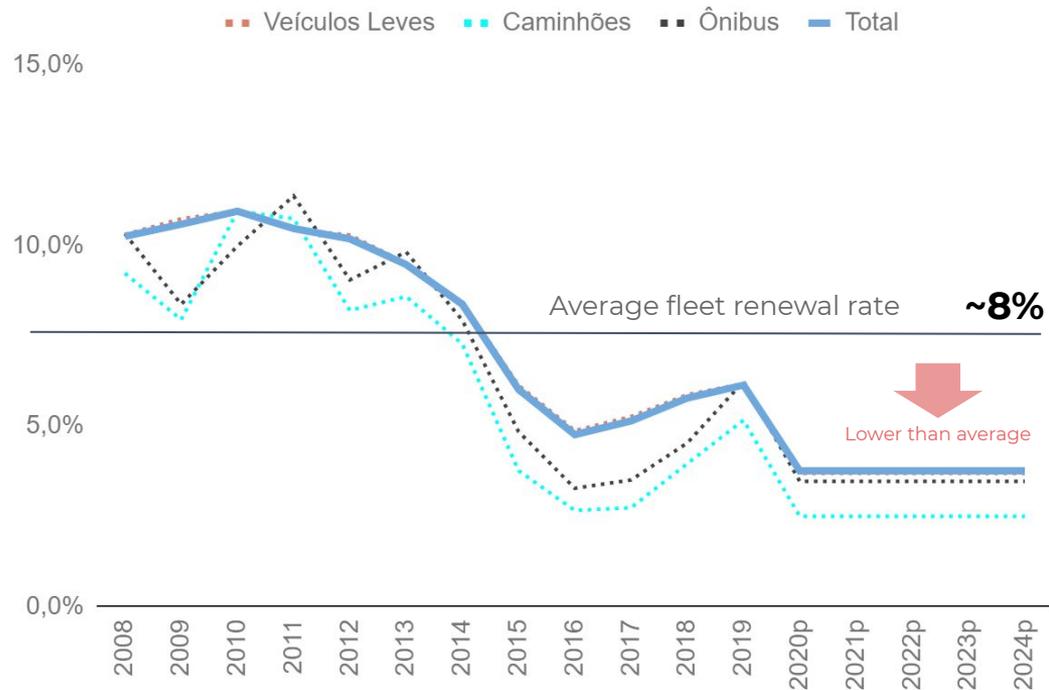


Spare parts market to recover in V

- With the drop in sales of new vehicles, the fleet renewal rate will be below the average rate of the last 10 years;
- With the speed of fleet renewal reduced, sales of spare parts are expected to have a boost from the third quarter of 2020;
- We use the retail sales of parts in the state of São Paulo as a sample basis, which is expected to drop 28.1% in 2020, but will grow 25.5% in 2021.

Circulation fleet renewal rate

$$(\beta = [(sales / circulating fleet) \times 100])$$

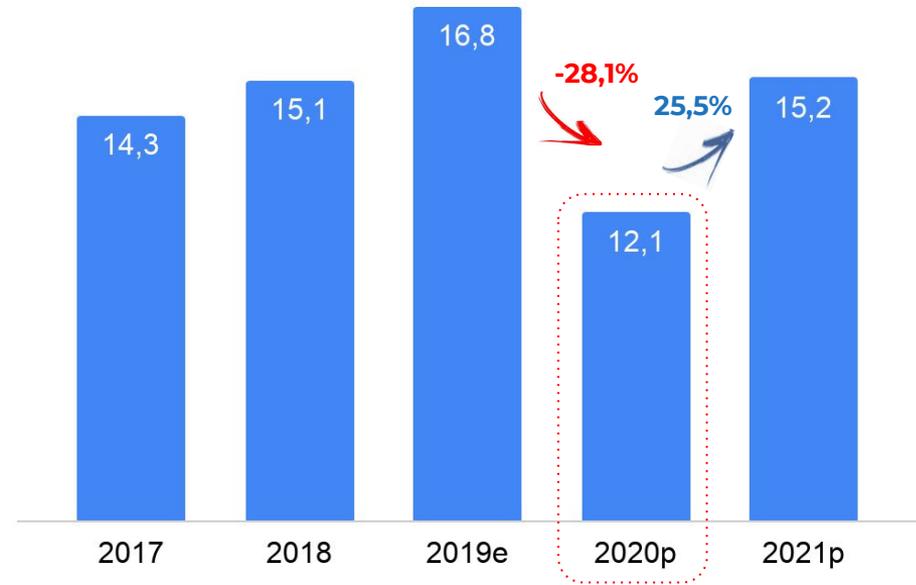


With the sharp reduction in **sales of new vehicles (-46.8%)** in 2020, whose trend is expected to prevail in 2021, **fleet renewal will slow down** in the coming years, remaining below the **average renewal rate of ~ 8% in the last ten years. The lowest renewal rate** can be **positive** for companies that specialize in **replacement for the next 4 years.**

The **sales of auto parts and accessories retailers in the state of SP**, prepared by Fecomércio SP, with data from SEFAZ SP, closed 2019 with ~ **R \$ 17 billion**, an increase of 11.2%. For **2020, TCP Partners' forecast** is a **28.1% drop**, due to the impacts of Covid-19. This research is important to understand the **trend of auto parts retail**, as **São Paulo holds ~ 30% of the circulating vehicle fleet** in Brazil (Sindipecas).

Actual sales of parts and accessories¹ in the State of SP

Billions of R \$



Source: Fecomércio SP, Sefaz SP, Sindipecas, BACEN. Created by TCP Partners.
e = estimated; p = TCP Partners projection.

How is the survey obtained? The São Paulo State Retail Trade Survey (PCCV) has 100% coverage of the retail sectors, considering all the information of the companies covered by the CNAE 2.0 code related to the retail sector. The use of data from the São Paulo State Finance Department (SEFAZ) is subdivided into 16 regions, which cover all 648 municipalities in São Paulo, and have an average coverage of 83% of all retail revenue, which gives the new PCCV a degree of precision and reliability far superior to that of any other similar research. Search link:

<https://www.fecomercio.com.br/pesquisas/indice/pccv>

Comparisons of sector EBITDA multiples





Parts dealers with better margins and multiples (EBITDA)

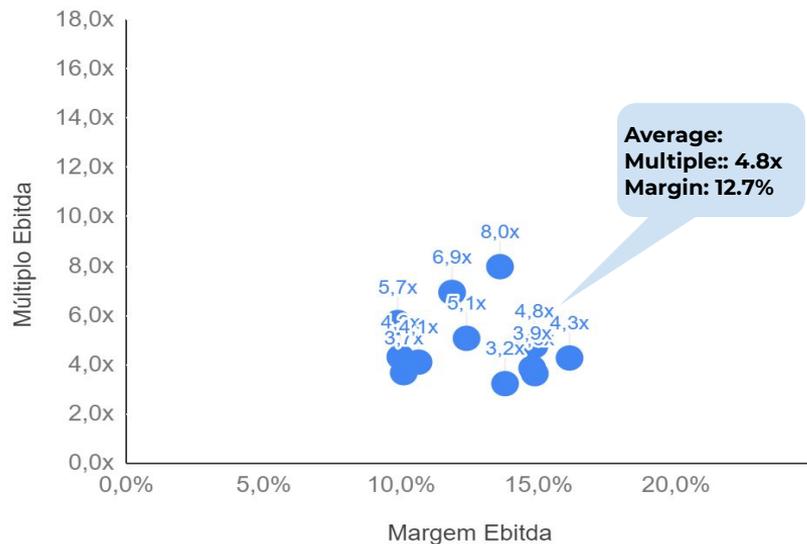
- Using as sample base 12 parts manufacturers and 4 dealers listed on the Brazilian and USA stock exchanges, an average difference between the EBITDA margins of 2.34 pp was identified.
- The average of the EBITDAs multiple, negotiated on 5/7, for the samples was 4.8x for parts manufacturers and 12.8x for parts dealers.

Comparison between auto parts manufacturers and dealers

According to the **companies listed on exchanges** in the **USA and Brazil**, **dealers** have **higher multiples and margins compared to auto parts companies**, reflecting expectations of **resumption of sales** due to the need to **repair the fleet**.

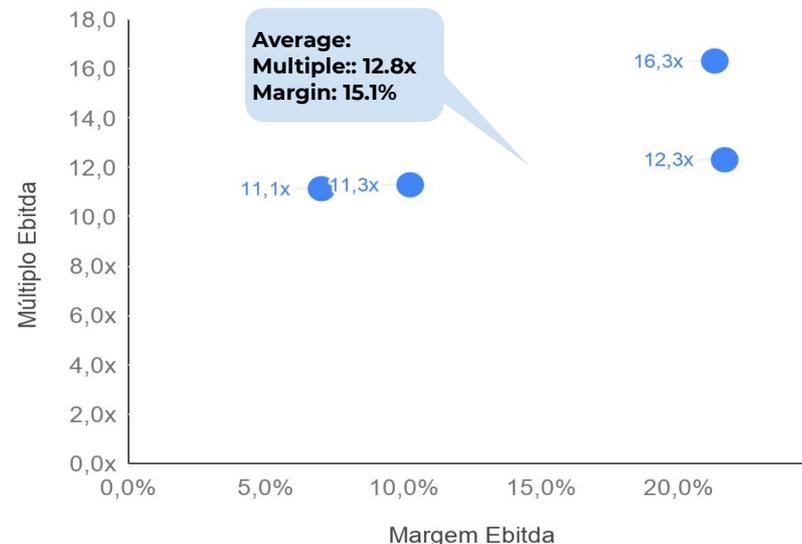
Auto Parts Manufacturers¹

Margin (%) vs Multiple (x) - EBITDA



Auto Parts Dealers²

Margin (%) vs Multiple (x) - EBITDA



Source: YFinance. Created by TCP Partners.

(1) Companies listed on the North American and Brazilian stock exchanges;

(2) Companies listed on the US stock exchanges.

AutoZone

AZO:US / NYSE
 Ebitda Margin: 21.69%
 Ebitda Multiple: 12.31x

Bloomberg



O'Reilly Automotive

ORLY:US / NASDAQ
 Ebitda Margin: 21.33%
 Ebitda Multiple: 16.31x

Bloomberg



Advance Auto Parts

AAP:US / NYSE
Ebitda Margin: 10.25%
Ebitda Multiple: 11.29x

Genuine Parts Company

GPC:US / NYSE
Ebitda Margin: 7.02%
Ebitda Multiple: 11.14x

Bloomberg

AAP:US New York
Advance Auto Parts Inc [COMPANY INFO](#)

+ ADD TO WATCHLIST

MARKET CLOSED

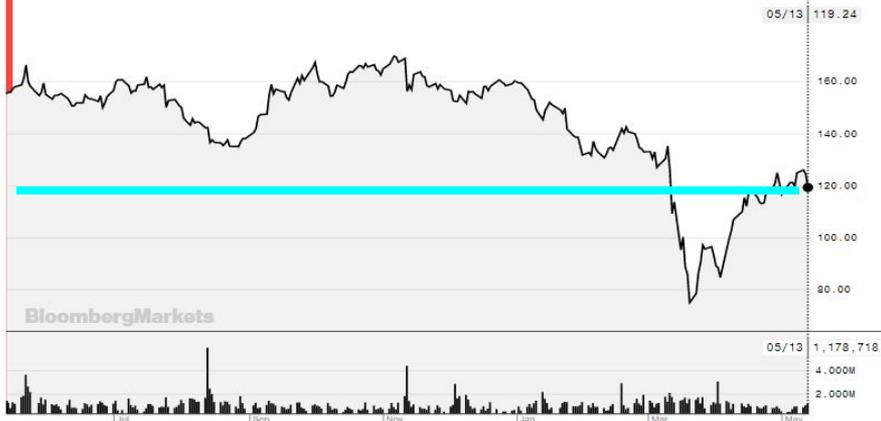
AS OF 08:40 PM EDT 06/13/2020 EDT

119.24 USD -5.26 -4.22% ▼

1D 1M 6M YTD 1Y 5Y

MINIMIZE CHART

Q Add a comparison



Bloomberg

GPC:US New York
Genuine Parts Co [COMPANY INFO](#)

+ ADD TO WATCHLIST

MARKET CLOSED

AS OF 08:40 PM EDT 05/13/2020 EDT

70.63 USD -3.54 -4.77% ▼

1D 1M 6M YTD 1Y 5Y

MINIMIZE CHART

Q Add a comparison



USA - selected shares of auto parts manufacturers

Dana

DAN:US / NYSE
Ebitda Margin: 10.25%
Ebitda Multiple: 4.10x

Cummins

CMI:US / NYSE
Ebitda Margin: 13.60%
Ebitda Multiple: 7.97x

Bloomberg



Bloomberg



Mahle-Metal Leve

LEVE3:BZ / B3

Ebitda Margin: 14.85%

Ebitda Multiple: 4.76x

Ioche Maxion

MYPK3:BZ / B3

Ebitda Margin: 9.97%

Ebitda Multiple: 4.31x

Bloomberg



Bloomberg



Múltiplos de mercado: distribuidores de peças

Moeda	Ticker	Companhia	Valor da Empresa (bilhões)	Faturamento (bilhões)	Lucro ou Perda Operacional (bilhões)	EBITDA (bilhões)	Caixa (bilhões)	Dívida total (bilhões)	Margem EBITDA	Margem Operacional	# de Ações Emitidas (milhões)	Preço da Ação (Data: 07/05/20)	EV-to-EBITDA	EV-to-Revenue
USD	ORLY	O'Reilly Automotive, Inc.	R\$35,56	R\$10,22	R\$1,90	R\$2,18	R\$0,29	R\$6,45	21,33%	18,59%	74,20	R\$396,21	16,31x	3,48x
USD	AZO	AutoZone, Inc.	R\$32,25	R\$12,08	R\$2,24	R\$2,62	R\$0,20	R\$8,38	21,69%	18,51%	23,35	R\$1.031,00	12,31x	2,67x
USD	AAP	Advance Auto Parts, Inc.	R\$11,24	R\$9,71	R\$0,68	R\$1,00	R\$0,42	R\$3,24	10,25%	6,97%	69,26	R\$121,55	11,29x	1,16x
USD	GPC	Genuine Parts Company	R\$15,04	R\$19,22	R\$1,10	R\$1,35	R\$0,35	R\$4,44	7,02%	5,71%	145,38	R\$75,32	11,14x	0,78x

Máximo									21,69%	18,59%			16,31x	3,48x
Mediana									15,79%	12,74%			11,80x	1,91x
Média									15,07%	12,44%			12,76x	2,02x
Mínimo									7,02%	5,71%			11,14x	0,78x

According to the 4 parts dealers listed on US stock exchanges, the median EBITDA margin was 15.79% and the EBITDA multiple was 11.8x.

Auto parts manufacturers listed on the stock exchange

Múltiplos de mercado: autopeças

Moeda	Ticker	Companhia	Valor da Empresa (bilhões)	Faturamento (bilhões)	Lucro ou Perda Operacional (bilhões)	EBITDA (bilhões)	Caixa (bilhões)	Dívida total (bilhões)	Margem EBITDA	Margem Operacional	# de Ações Emitidas (milhões)	Preço da Ação (Data: 07/05/20)	EV-to-EBITDA	EV-to-Revenue
BRL	<u>LEVE3.SA</u>	Mahle Metal Leve	R\$1,79	R\$2,53	R\$0,30	R\$0,38	R\$0,17	R\$0,42	14,85%	12,01%	12,00	R\$128,31	4,76x	0,71x
BRL	<u>SHUL4.SA</u>	Schulz S.A.	R\$0,67	R\$1,06	R\$0,10	R\$0,13	R\$0,32	R\$0,54	12,38%	9,09%	50,92	R\$8,77	5,07x	0,63x
BRL	<u>TUPY3.SA</u>	Tupy S.A.	R\$2,79	R\$5,16	R\$0,38	R\$0,77	R\$0,84	R\$1,53	14,86%	7,34%	144,04	R\$14,57	3,64x	0,54x
BRL	<u>MYPK3.SA</u>	lochpe-Maxion	R\$4,31	R\$10,02	R\$0,71	R\$1,00	R\$0,65	R\$3,14	9,97%	7,05%	152,37	R\$11,92	4,31x	0,43x
BRL	<u>FRAS3.SA</u>	Fras-le S.A.	R\$1,13	R\$1,37	R\$0,11	R\$0,16	R\$0,21	R\$0,49	11,85%	7,79%	214,57	R\$3,94	6,93x	0,82x
USD	<u>MGA</u>	Magna International	\$14,63	\$39,43	\$2,37	\$3,98	\$1,28	\$4,99	10,09%	6,00%	298,92	\$36,54	3,68x	0,37x
USD	<u>DAN</u>	Dana Inc	\$3,66	\$8,38	\$0,56	\$0,89	\$0,65	\$2,86	10,63%	6,71%	144,48	\$10,02	4,10x	0,44x
USD	<u>MTOR</u>	Meritor, Inc.	\$2,24	\$3,97	\$0,27	\$0,39	\$0,51	\$1,42	9,87%	6,68%	72,26	\$18,35	5,71x	0,56x
USD	<u>CFI</u>	Cummins Inc.	\$24,48	\$22,58	\$2,32	\$3,07	\$2,03	\$3,84	13,60%	10,27%	147,53	\$153,68	7,97x	1,08x
USD	<u>BWA</u>	BorgWarner Inc.	\$7,01	\$10,17	\$1,23	\$1,64	\$0,83	\$2,04	16,13%	12,09%	206,70	\$28,05	4,27x	0,69x

Máximo									16,13%	12,09%			7,97x	1,08x
Mediana									12,99%	7,25%			4,29x	0,57x
Média									12,73%	8,25%			4,80x	0,61x
Mínimo									9,87%	6,00%			3,23x	0,37x

In the case of manufacturers, the **median EBITDA margin** was **12.99%** and the **EBITDA multiple** was **4.29x**.



TCP Partners economic analysis team



Ricardo Jacomassi

- Partner at TCP - Chief Economist, Responsible for the M&A and Market Strategy area;
- Specialist in the 13 most important sectors of the Brazilian economy;
- Experiences in important companies in the financial and industrial sector;
- Experience in developing economic analysis, M&A operations, turnaround, corporate governance, family businesses and advice from the board of directors;
- Graduado em Economia pela PUC/SP e Graduated in Economics from PUC / SP and Production Engineering from Univest (incomplete).
- Specialization in Econometrics / FIEP, Macroeconomics / Cepal / ONU, Valuation / Saint Paul, Turnaround / FGV and Leadership for Young Talents / FGV



Nathielle Trevisol

- TCP Associated
- Mergers and Acquisitions Analyst;
- Economic research and analysis;
- Market strategy;
- Worked in the administrative / financial and controllership areas with focus on financial planning.
- Experience in public relations and market strategy for the commercial department.
- Graduation in Economic Sciences from PUC / SP



Francielli Pires

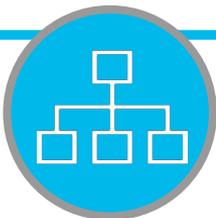
- TCP Associated
- Advises the commercial areas, company analysis and sectorial research;
- Acted as administrative and financial responsible in the areas of accounting, financial management and controllership;
- Graduation in Business Administration from Anhembi Morumbi / SP



About TCP

TCP was **founded in 2008**, headquarters in **São Paulo**, and present in **18 states**, is **specialized** in business **advisory and services**.

Solutions implemented by TCP



Operational restructuring



Financial and debt restructuring



M&A / mergers & acquisitions



IT business solutions & automation



Foundation

Beginning of a successful trajectory.



2008

2014



Complete advisory platform

- Operational restructuring / Turnaround
- Financial restructuring
- M&A / mergers & acquisitions
- IT & automation business solutions

Global presence

by becoming a member of the international networks **GSS** and BTGGA.



2016

2017



National coverage

when completing the commercial structure of the regions

TCP

becomes the most complete investment boutique in Brazil.



2019



National Commercial Team of 15 people

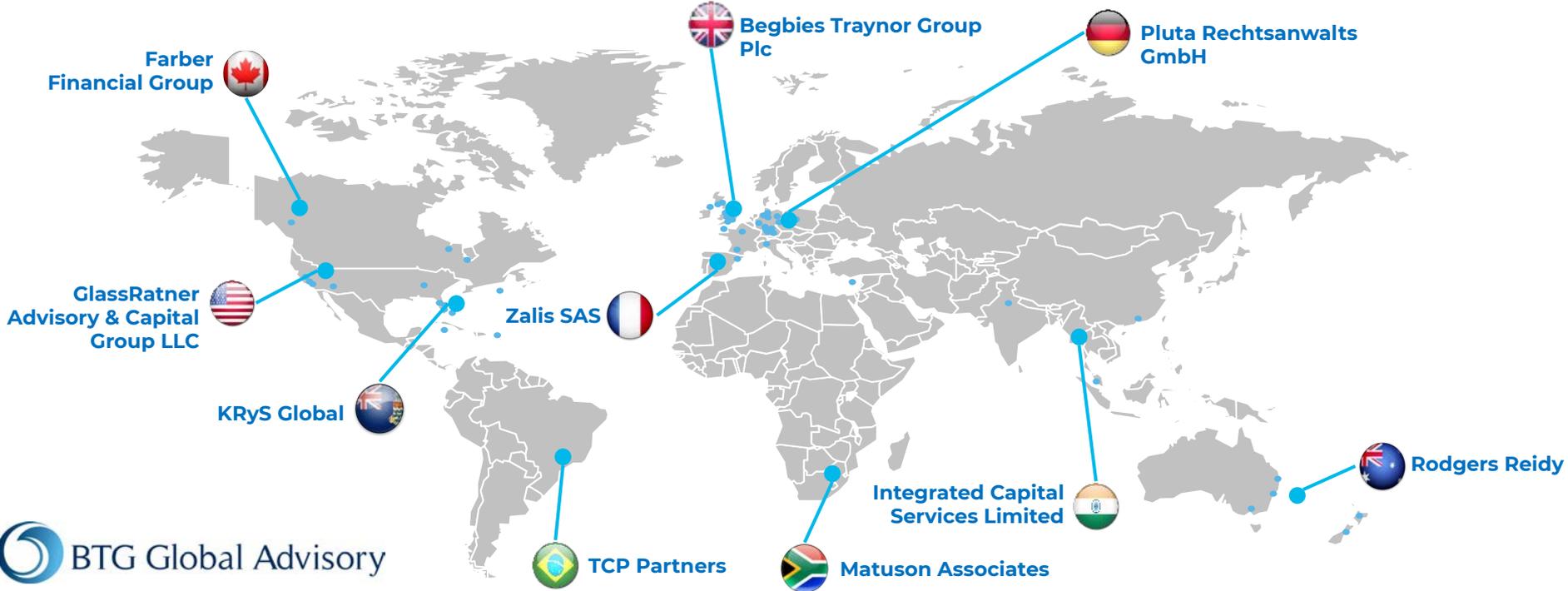


The headquarters is in São Paulo, being strategic for being alongside the main banks and funds



There are more than 35 employees who are part of the TCP team

Global performance in financial advisory - BTGGA



 BTG Global Advisory

182 offices worldwide
156 members
1.537 employees
~R\$ 200 million (2018)

TCP has access to the most **advanced management tools** through its **association** with **BTG Global Advisory** - one of the **largest international alliances** in the segment.

Our national experience



Purchase of 100% of Suatrans Equity



Acted as Ambipar's exclusive financial advisor in the transaction

June 2018



Purchase of 100% Equity from Ecosorb



Acted as Suatrans exclusive financial advisor in the transaction

June 2016



Funding of structured debt



Acted as exclusive financial advisor in fundraising

February 2016



Sale of 100% of the company to the Directors in an MBO process

Acted as exclusive financial advisor to NFP in the sale process

February 2016



Valuation and Advisory in M&A

Preparation of the company's valuation for analysis of strategic decisions



Valuation

Preparation of the company's valuation for analysis of strategic decisions



Valuation

Preparation of the company's valuation to search for investors



Sale of 100% of the capital of Battistella Distribuidora to



Acted as exclusive financial advisor to Battistella in the Transaction

Our international experience



Buyer



Advised by GSS



Buyer



Advised by GSS



Buyer



Advised by GSS



Buyer



Advised by GSS



Buyer



Advised by GSS



Buyer



Advised by GSS



Buyer



Advised by GSS



Buyer



Advised by GSS

Segments we operate in

Solutions for **customers** in **all** business segments.



Transport



Plastic Industry



Agribusiness



Transformation industry



Meat-packing industry



Automotive



Retail



Services



Health



Construction

Thank you

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