AUTODATA





LAUNCH

Fiat Cronos revitalizes factory Argentina in Cordoba

INTEGRATION OF MERCOCUL

Are we really one block only?

ETHANOL FLIRTS WITH THE ELECTRIC VEHICLES

Will it be marriage from this relationship?

DISTRIBUTION NETWORK

Number of concessionaires will stop falling in 2018

AUTODATA QUESTIONS

New section premieres with Greg Scheu of ABB



The automakers are officially consolidating their industrial structures as being from Mercosul.

The main brands already installed in the region, mainly in Brazil and Argentina, are optimizing more and more their productions and dividing their activities in an organized way between the two countries. This will create a whole new business structure and needs between vehicle manufacturers, their suppliers and the market.

The objective of this AutoData seminar is to show how this new automotive industry of Mercosur is being designed and how the companies in the automotive industry will operate from now on in both industrial and market terms.

INVITED SPEAKERS (*)



ANTONIO MEGALE
President of Anfavea



LUIS FERNANDO PELÁEZ GAMBOA
President of ADEFA



PABLO DI SI President of Volkswagen América do Sul



CARLOS ZARLENGA
President of General Motors Mercosul



ANTONIO FILOSA
CEO of FCA Argentina



MARCOS VINICIUS FORGIONI
Vice-President of International Sales
and Marketing of MAN



FELIPE ROVERA
Director of Process Development
Corporation

(*) Speakers still subject to confirmation.

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4 » INDEX

SUPPLIERS
WILL IT BE ENOUGH
AUTOPARTS?

14

The main practical question that the automotive sector faces today in Brazil is: will it be missing pieces/parts/automotive parts? The answer will certainly be yes, and as of the second semester, if nothing is done now

LAUNCH FIAT CRONOS 22

The new Fiat sedan gave the Argentine unit of FCA the same technological standards and quality of production of the Brazilian factories of Pernambuco and Betim, MG



STRATEGY MERCOSUL

28

Automakers in Brazil and Argentina make efforts to make the automotive Mercosul in fact one single block, but it bumps in the difference of size of the markets

TECHNOLOGY ETHANOL + ELECTRIC VEHICLES **32**

The ethanol, biofuel that has in Brazil its greatest exponent, is perfect for electric mobility. But the relationship will depend on too much development to turn into marriage

MARKET CONCESSIONAIRES

38

As Alarico Assumpção Jr. of Fenabrave says, the distribution network has left the ICU. We probably will not see new houses this year, but neither should we close the doors

6

B

44

47

LENSES

The backstage of the automotive industry. And the situations in the hornet's nest that nobody pokes.

FROM THE TOP

Carlos Zarlenga, president of GM Mercosul, defines the alliance of the company in the region

AUTODATA ASK

We choose a theme monthly and invite a specialist to respond

PEOPLE & BUSINESS

Executive moves and other news from the Brazilian automotive industry

END OF CHAT

The most relevant and irrelevant headlines of the month, handpicked by our editors » EDITORIAL

Seriousness, relevance and good humor

By Marcos Rozen, editor

or us from AutoData Editora the mission of a magazine is very simple: it should be relevant to the reader. If it is not, it will not even serve to decorate the waiting room. And to be relevant a magazine needs the serious and dedicated work of its team of journalists and art.

We are attentive to any and all movements that may, in any way, be relevant to you, noble reader. Before writing, the journalist must listen. And listen a lot - what, in the journalistic jargon, we call rushing.

In the specific case of AutoData, not only the most important and traditional but the only Brazilian monthly publication dedicated from the first to the last page to the coverage of the automotive industry, this relevance needs to be further deepened. The information contained here helps the executives understand the direction of this transatlantic: what is the weather forecast, the size of the waves, where there may be icebergs, submerged rocks and coral reefs. And even, perhaps, hidden treasures.

These information helps countless companies in the long-term automotive chain better plan their actions, adjust business management modes, production schedules, investments, hiring. AutoData helps in automotive decision making. And this is how it should be, as this is what is relevant to our reader.

But it is important not to confuse seriousness with severe. A serious magazine does not have to be grumpy. On the contrary: a touch of good humor makes it much more pleasurable to read themes, yes, very serious, as the one treated on the cover of this March edition. But it is precisely this lightness that allows us to call attention to face directly and immediately subjects that we can not leave for later. And that helps the reader to look for the best solutions.

Here in our newsroom we still believe a lot in the relationship that people have with the magazines they read, both on paper and in the digital format. And we can ensure that, on our side, we work extremely hard to make AutoData more and more relevant every time. We hope, however, that not even for that, dear reader, you will always have it around by mere professional obligation, but also for pure and simple pleasure.









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REDUCTIONISM

Things that happen in times of reductionism, when companies can believe that business managers with an on-board marketing MBA are excellent potential press and public relations managers, in one of those early shows that the wrong ball will come into the pocket to ruin the game: the Porsche subsidiary in Brazil indicated the business administrator Rodrigo Soares, an MBA holder in marketing, as his new press and PR manager. In a statement, Rodrigo has "extensive experience in the automotive segment", in which he started his career in 2004. He does not tell where.

REDUCTIONISM 2

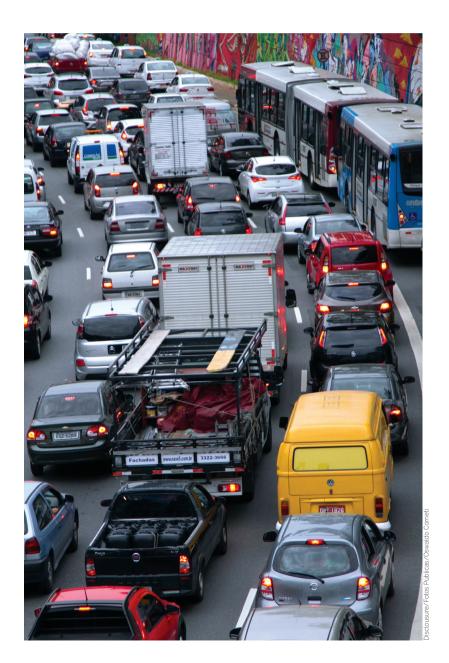
But Porsche says that since 2015 Rodrigo has been its sales manager, "playing a key role in the company's solid growth". I do not know Rodrigo and I do not think he has any friendly journalists to turn to at a time like this to inquire about the opportunity - is it worth it? Because this world which he enters, now, I believe, must be exercised by specialized people.

REDUCTIONISM 3

It must be one of those domestic solutions in the guise of poor economy. We're tired of seeing this. I firmly believe that press and PR professionals, people of the communication area, assume these positions - just as managers, certainly, have their place in the corporate structure. The cases in which this type of indication works are an absolute exception. Unless Porsche Brazil has a great experience with professionals performing functions outside of their expertise area.

TRUST IS A RISK

Relying on numbers, indexes, and statistical data from public agencies is a risk, as shown by Inrix, based in Kirkland, Washington, near Seattle, www.inrix.com. Its task was to measure congestion in 1 thousand 360 cities in 38 countries on all continents. Sao Paulo, which in 2016 was the sixth most congested city in the world, gained two positions last year - and moved to fourth place, overtaking San Francisco, California, and Bogota, Colombia, and retaining its leadership in South America. Its ICI, of the Inrix Congestion Index, is 16.9 versus 18.3 in Los Angeles, California, the very first in the rankings. Here in 2017, 22% of drivers' time was spent on traffic jams, which represented 86 hours. Obvious cause: the increase of the allowed speed in the marginal avenues of the Pinheiros and Tietê rivers?



FORD



Will Ford remain active in South America as a vehicle manufacturer? This question is asked about Ford and about half a dozen other manufacturers. But in case there are more clues available. Everything began to be clearer on Thursday. February 8, with the release of a report by the journalist Caio Bednarski, of Agência AutoData de Noticias: mentioning the source of the auto parts supplier industry, it anticipated the closure of Focus's production at the General Pacheco plant in the Province of Buenos Aires until 2019 and left the door open for the question: and-thenew-generation: -where-will-itbe-produced? And in the middle of this Argentine balaio is also the destination of the Ranger pickup, which has no trace of succession.

FORD 2

In the penultimate week of
February the Coluna de Carro Por
Ai, edited from Brasilia, DF, by José
Roberto Nasser, and distributed
nationally, also faced the subject.
Nasser removed the list of major
shareholders from the board of the
company and the crucial question:
What-is-the-future-of-Ford? As one
notices, the background of this story
is long. It could also imply the end of
activities at the Taboão factory, in São
Bernardo do Campo, SP, today Fiesta
and Cargo, with all the strength being
granted to Camaçari, BA, now Ka

and EcoSport. There, in 2019, a new product would be born to replace Fiesta and Ka, a 2-for-1 exchange. As heard, and sometimes read, the size of the company's success in the region-and that is to say analysts. Specially because of the automotive world is on the eve of another great revolution, like the one of the Fordism institute and its assembly lines. But nothing to do with the so-called old times.

FORD 3

Thus, at the same time that it is desired to stop the prejudice here, it is essential to prepare the presumably remaining structure for the new times - in which the company, with its history and tradition, also wants to play a highly relevant role, just like what happened in the first revolution. as the vice-president Rogelio Golfarb admitted in a conversation during the Detroit Motor Show in January. Perhaps this is the predominant strategic thinking applied to operations in South America: to reduce the organization to prepare the future. (In the case of the near future will be composed of several electric alternatives and the long term of several levels of autonomous direction with very high incidence of technology and connectivity. But Always on board the v-e-h-i-c-l-e-s.)

FORD 4

Whoever notices realizes the great cast of Ford agreements outside the world of cars and inside the world of artificial intelligence and high connectivity. Anyone who talks to Ford guys around the world understands better what the company plans to focus on: nothing less than the first place in the future of mobility. Since the synthesis, almost a general law: in South America shrinking would be synonymous to grow over the coming years.

ON THE OTHER HAND IN RIBEIRÃO...

The lack of proper professionals in their proper places generates incredulity and much laughter in the good newsrooms of the world. Well, pay attention to this: on the same day that AutoData received the press release from Porsche. the release of Ribeirão Preto. SP. arrived. With a catastrophic title, as Jean Melé would label it. creator of the deceased. and combative, daily Popular News: New Polo Is Elected the Most Awarded Car. It is unimaginable that a press release with that title be distributed - but it was. Things happen, of course. Failure of the press office management, no doubt - but is there such a management of the quality of the material sent to the newsrooms? One more symptom of reductionism? Do you understand what I'm saving?



By Vicente Alessi, filho
Suggestions, criticisms,
comments, offenses
and the like for this column
can be directed to the email
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The man who changed the frontage

ecently the purists of the national automotive sector were shocked: the almost 100-year-old facade of General Motors' Gate 1 on Goiás Avenue, in São Caetano do Sul, state of São Paulo, was altered. Without a warning or ceremony, the traditional writing General Motors of Brazil that had Always been at the entrance was replaced by General Motors Mercosul.

It was a way of showing the internal and external public that a new and unprecedented structure, which completely unified the manufacturer's operations in Brazil and Argentina, was born.

The man who ordered the exchange of the plate was the Argentine Carlos Zarlenga, 44, president of GM Brazil since September 2016 and GM Mercosul from January 2017, when the new structure was

created. He has made a career in the manufacturer from the finance area, and GM has pilgrimed in several markets - even in Uzbekistan.

In this exclusive interview he tells how the integration process worked last year, the new investments from the manufacturer here, your concerns about Rota 2030 and so much more. In addition to revealing, of course, your reasons for having the plate replaced.

How does this GM integrated production work in Brazil and Argentina?

What we did was to create a structure around the operation that already existed, the production itself was already integrated. The separation of operations from Brazil and Argentina was almost artificial. How can you separate two countries where we sell practically the same products? Today the complementarity of our portfolio is almost 99%, practically everything we sell here sells there. In the supply chain, we have companies from there attending plants here and serving factories there from here. And generally they are the same companies, global, and even regional ones too, they are often the same here and there. Consumers are also very similar. Networks here and there have the same problems, the same need for efficiency, to improve processes, to learn from each other. In fact, what we did was formalize what already existed.

What kind of gains has this unification generated for GM?

The advantage of doing this is that all the bureaucracy that was hidden, trying to benefit from two separate companies, disappears. So we reduce costs, accelerate decision-making and generate more interesting job opportunities for people. It also increased regional understanding: many here on GM's executive committee already had responsibility for Argentina, but this happened through a person who was there. From that, they said that they knew the Argentine market, but after we joined the operations they realized that they did not. Several things that they thought were the same here and they discovered that no, they were not, and from there everything became super integrated, and I think it is working well. We always do an employee satisfaction research, and I was a bit concerned about the results as it was a major change. We did a survey in



"Uncertainty about energy efficiency goals calls into question the industry investment"

the second half of last year, a few good months after integration, and the result was that both the excitement and the satisfaction grew, both expressively. It has been very positive.

And did she have to work on the historic frontage?

We are the same company, the same business, we are 100% together, and for that we have to give up some things. They have to let go of being called GM Argentina, and here we have to give up being called GM of Brazil. There is nothing wrong with tradition and experience, they are there and no one will ever take away what has happened. GM Mercosul is only a way forward, to create a new tradition.

How does GM Mercosul work geographically for the management of positions?

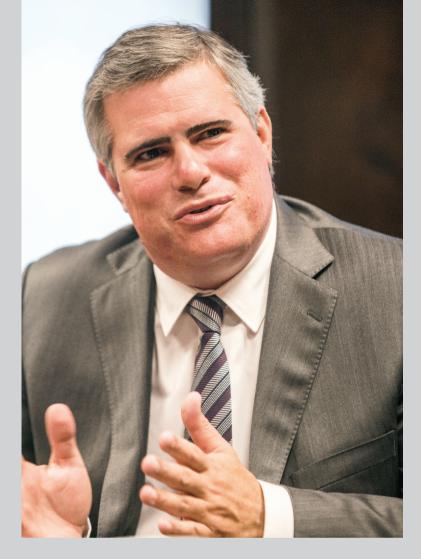
It does not depend on the country. We picked up where the talents were and that is it, whatever the location. We selected the best: some areas are in Argentina, others here in Brazil, always serving the entire region. The sales team, for example, now there is a person who is responsible for Mercosul, and below it are others responsible for three areas. with similar volumes, each one with a responsible person. We have an intelligence team, divided in parts, always with the best, independent of the country. The same goes for finances and other areas. In your opinion, what about Rota 2030? I think pension and Rota are separate issues. The automotive sector benefited greatly from Inovar-Auto, in technology, growth, investment. We negociated a whole year, having the right date for Inovar's finalization and a plan that came into the certain future after which a change of opinion would eventually take place. I do not think that's good. It does not generate the credibility to invest long term in Brazil. There have been many conversations with the government in this first two months, through Anfavea or even the individual automakers, and I sincerely hope that there is a way to reach an agreement on Rota 2030. The investments that are being made now were designed to energy efficiency levels that are within this plan, but without knowing what the goals will be, given the uncertainties, the industry's investment is in doubt. This is a sector that works in the long run and needs clear rules.

Do you believe that Rota can be approved, but only part by part, in stages, instead of a complete package?

I think what is being discussed so far is well-founded, has a good basis, the talks were solid. I think that it should it be approved the way it is. Again: if it does not get the approvement, it gives the industry a message of uncertainty, that the rules are not clear in the country to invest. It may vem happen that one part is approved and not the other one, but I would say that it would generate even more doubts, expectations and uncertainties for the future.

You have just confirmed a new GM investment in Brazil. Can this Rota 2030 issue affect global credibility to the point where we think there may be no GM in Brazil in the future?

No, I think this is very radical. But I can clearly say that when there is a long-term plan, such as Rota 2030, it represents the base from which you invest. Yes, we have now confirmed an investment generated from this expectation of Rota 2030 (see page 20). Changing the rules in the middle of the road makes us rethink the future. But because of that, are we going



"The growth of the Brazilian industry in Reais was much higher than in units last year"

to announce changes in GM's strategy? No, not at all, because I think Rota 2030 is coming out.

The lack of an automotive policy in Brazil can also disrupt integration in Mercosul?

Today we have a convergence work of standards in the two countries that has started and it has been evolving very well. Not everything we wanted has happened, but the theme has evolved. The discussion of integration today is a

central thing, something different a year and a half ago. The agreement of standards, consumption, emissions, security... is a key point for everyone, including Anfavea and Adefa. In this context, when trying to change highly complex things like the regulations of both countries, it is always good to see that a long-term plan exists. It is so much easier to believe in this convergence when there is a step like the one Rota 2030 has given than when there is not. And there are other points, such as free trade talks. I think that opening up to the industry with the European Union is a good thing. But there can be no free trade with the EU if there is no Brazil with Argentina and with Mexico. Can we believe in these long--term proposals when we do not even close the norms of the country's own industry? Everything is less believable. I believe the government will understand that point.

This scenario of the first two months, with investments, several launches and sales growth, can not be interpreted in Brasilia, DF... Can we say that as a sign that the sector is doing very well alone and does not need Rota 2030?

I do not underestimate the understanding that there is in Brasilia about the average terms of development of the automotive industry. I think the country and the government understand how it works. And that the investment of GM was worked on the previous cycle thinking clearly in the norms that would apply from now on. The growing market this year is much more related to the recovery of consumer confidence than to the products themselves. I think there is this understanding. I am optimistic and I believe this theme will evolve this trimester.

Imagining that Rota 2030 comes without considering P&D incentives: how much would it disturb the modernization of national vehicles?

What is the total tax burden of the au-

tomotive industry in Brazil? We speak of a number around 50%, it is one of the largest in the world. So when we talk about tax benefits for the automotive industry, when looking at the whole package, the whole bill is not a big difference. The point here is that all elements are linked: energy efficiency is tied to an investment that has to be done, which was thought within the investment that the government also makes to develop the technologies, as happened in Inovar-Auto. If you take one part and do not take another part, everything has to be rethought. In Innovating the industry generated R\$ 40 billion in investments and the corresponding part of the government was very small compared to that.

What is the projection of GM Mercosul production growth for 2018 compared to 2017?

22%, from 517 thousand units to 630 thousand, or just over 100 thousand additional units from one year to the next one. We are growing in market share in Brazil and Argentina, even in the fourth quarter of last year we have already grown above the industry average. In October we estimated a total market of 2.4 million to 2.6 million, and we are now growing from 2.5 million to 2.7 million, and quite close to 2.7 from 2.5.

What is the reason for this new expectation?

First: January. It is a record not to forget. It was a very strong month compared to what we expected. December was equally strong, just like November and also February. Consumer confidence continues to grow, we have not had a month of reduction of this index since July 2016. Second: a series of launches have happened, really new things in the market. It is not only a car exchange for another one equal to 0 KM, they are really new products, evolutions that did not exist before. This creates a willingness in people to return to the market. Third: The expectation of employment is better, this

"The first thing needed to understand the autonomous car business model is to produce an autonomous car"

has an important impact. There is less apprehension in people about losing their job. In our surveys the consumer is confident to make an investment on a new car.

What explains this increase of reliability even in the present circumstances?

If you're a GM employee, you're a little more confident today than you were in 2013. The worst is over, in the end that's what everyone believes. And month after month we keep seeing the market grow. The most interesting thing is that people usually evaluate the growth in volume, in units, but if we make an analysis in Reais we will see that the evolution is much bigger, even discounting the inflation. The old products were all replaced by models with much more technology. with a much higher average ticket. So the industry's growth in Reais was much higher than in volume last year. The consumer has spent more to buy better cars, with more technology, more content, etc.

Did this help the profitability?

We improved a lot. We report a much better 2017 than 2016 but with almost similar volume, very close, with little growth. Anyway, we are below what we have already reached as a peak. One important factor is that we have greatly lowered the company's balance during the crisis, which should work for this year and next year as well. In 2013 we reported balance in South America, 2014, 2015 and 2016 were years of losses and 2017 we returned to break even after three years.



What about markets where GM does not have good results it does not get ...

GM is number one in South America. we made investments, our brand has a very strong recognition here, almost the best in the world. South America is a key point, strategic and focus of GM. It's not me who says that, it's Mary [Mary Barra, global CEO]. I really think about this, it is linked to the work we did during the crisis. If we were out of balance today, without improving profitability, I do not know if the answer would be the same. In fact, neither should it be: we are in a business in which the investment must generate return for the shareholders. But the way we are, with growth prospects added to the investments, I understand that you will hardly find a GM moment in the past better than the current one.



GM wants to be ahead in connectivity in the region. What are the plans?

We were the first with MyLink and then we added OnStar. And we will have even more, revolutionary items in this market, things that the customer does not expect, especially in entry-level cars. GM has a global view of three zeros: zero emissions, zero crash and zero congestion. At the same time GM is developing its car-sharing brand, Maven, which we is expanding in Brazil and Argentina, because we think there is an important need, and we will be able to do that because we have OnStar. You can even do that without it, but the way we solve it is very useful, very good for the client. We want to lead the sharing world-wide, not only in the United States, but also to lead the electrification in South America and Mercosul.

Is GM seeing a radical change in the business model?

If we look at the next ten, fifteen years, I think there will be na importante change. The transportation services segment will be a part of GM's DNA, no doubt.

Do you have a clear vision of what is about to come, including the autonomous?

The exact business model of the autonomous world I do not know. There will still be a lot of testing, we have a lot to learn and absorb up to this point. The important thing is that to understand the business model of the autonomous car world the first thing required is to have a standalone car. And GM will have one. commercially viable, on the street next year. It is now leaving the production line, not being handmade. The amount of information we generate daily through the tests we do almost nobody has. There are a lot of people saying 'it's going to be like this or like that', but they forget about one thing: technology is not simple. It is very difficult, it is far from being a commodity. Evolution is step by step, but we will get to the marke before others

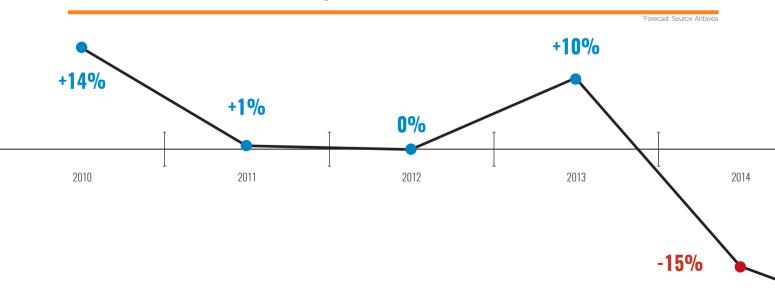
A good problem. But still a problem.

One side, the optimistic assemblers and on the other a weakened chain base: the automotive sector's challenge this year is to adjust this connection so that there are no missing parts on the assembly line.

hew! The first two months of 2018 closed with an increase of almost 20% in sales, and it seems that the year should be positive in the domestic market in two fat digits, which add up to the 9% growth recorded in 2017 compared to 2016.

Domestic sales are linked to the pull of exports, which are expected to hit a new record in 2018, to 800 thousand units. With this, of course, the production increases: in 2017 it was 25% better than 2016 and

The seesaw of the Brazilian production of automobiles



Anfavea's forecast for this year, up 13%, is already seen by many executives as pessimistic, especially because of the results of the first quarter - the projection was calculated by the association in December.

Everything looks great and there would be only reasons to celebrate, if it was not for the automotive sector full of nuances and extremely particularities. This strong advance in production, even more coming from a panorama that the numbers of manufacturing of double digits vehicles of 2014 to 2016, do not find support of linear form by the whole chain.

That's because on the one hand there are much more optimistic automakers. anxious to recover losses, that talk about growing their individual producing numbers in the range of 20% or even more, 25%. And on the other side there are suppliers, especially Tier 2 and 3 down, much more conservative, still with the wounds from crisis, working with index from one digit for a rise on their lines for that year.

This mismatch, naturally, can run into

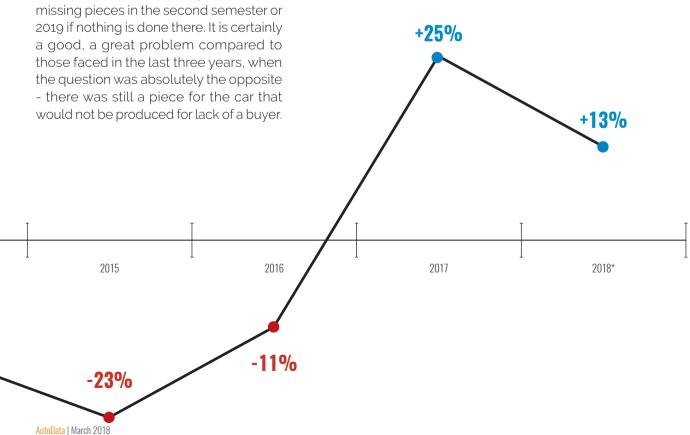
But it's still a problem, and it needs to be faced immediately.

VW ALREADY FELLS IT

With regard to the possibility of gaps in the supply of components on the far--away assembly line, the most worried is Volkswagen which speaks of growing 20% this year. For the company the question is not if there will be a lack of parts: there is a lack of parts already.

Pablo Di Si, president for South America, reveals that since the end of last year VW of Brazil have incomplete cars in their patios, awaiting components for the finalization of production. To minimize the issue the manufacturer promotes sort of scan to verify the situation of its suppliers, both in terms of capacity and financial health.

"There is a fear of not growing so much because of a lack of parts. There are suppliers that have difficulty even in buying raw material, so we are being proactive in helping the chain, so that it can follow





"There are suppliers in difficulties even to buy raw material"

Pablo Di Si, Volkswagen

us at the same pace. And overall it's responding well".

One of the VW initiatives was to bring BNDES suppliers closer, with the support of the manufacturer's purchasing and financial staff.

Carlos Zarlenga, president of GM Mercosul, shares the concerns of VW's colleague. He believes that "supplier capacity will be a challenge that the entire industry will have to cope with in the next three to four years by the expected growth rates."

The executive understands that for the chain "growing is difficult, it requires working capital, maintenance and investments that need to be done in a time of recovery from the crisis". One of the issues involved in the process, in its view, is that during the golden phase of the Brazilian market "many investment decisions were not the best from the point of view of efficiency and sustainability. Some suppliers have improvised stocks just to meet demand, without worrying about expertise, the quality".

So, it reveals, GM have been talking about it with its suppliers since last year



"We do not discard the possibility of producing in three shifts in Brazil"

Marco Silva, Nissan

trying to fill any gaps that threatens their spreadsheets. "Hopefully we'll find the way. So far it's working, but the strongest part of the growth has not come yet", he warns.

GM's projection is to grow its production by 22% this year, in addition to factories in Brazil and Argentina. The executive says that so far the manufacturer did not register a lack of components, partly because of "rationalization work done by the supplier network during the crisis".

MORE AND EVEN MORE

In turn, Nissan endorses the chorus of statistics well above Anfavea: it plans to raise its production indexes by 25% in the country in 2018, thanks to large part to the consolidation of Kicks' local production, launched in the second half of 2017.

Marco Silva, president of Nissan Brazil, reveals that for the suppliers, in practice, the increase will be even greater, in addition to the growth of the production itself the manufacturer still conducts a program to increase the nationalization indexes, replacing imports.

"We are now discussing with suppliers the possibility of a new increase in production beyond what is already contracted". A Nissan study found that 80% of the partners are optimistic and see this as an opportunity, but 20% have some resistance. "It comes from the past three years, when some have failed to survive and those who have succeeded have barely survived. For these a reaction takes more time to happen, it depends on how much they are capitalized".

For this group Nissan is carrying out individualized studies, also offering financial, technical and management support, even if these are restricted cases, according to Silva.

Nissan works in Resende, RJ, in two full shifts, but if there is "consistency in market growth" it may even have a third shift. "We do not discard this possibility".

A person who do not share these concerns is Stefan Ketter, COO of FCA Latin America. For him, it's a question of "how

each company works. In Pernambuco, for example, everything is prepared, we manage from twelve months ahead. It must not have any lack of parts there. We work hard on the preventive issue".

The same concept was repeated in the unit of Betim, MG, and according to the executive "we have never had so little pieces problems as now". He believes that any bottlenecks are currently under control and some additional difficulty may occur a little further in two to three years. "Working well with the suppliers, we will succeed. If there is a problem, it will be something related to a bad management."

ON THE OTHER HAND

On the other hand, the suppliers do show some caution, but the vast majority guarantees that they can keep pace with the increase in demand, each one in its own way. But, similarly, they reveal their concerns about links downstream from Tier 3, which they see as weakened.

Marcos Antonio Zavanella, president and CEO of Schaeffler South America, reveals that 2017 surprised positively by closing with a 15% increase in the production. By 2018, the company works with a one-digit increase in the productive index, which does not worry the executive:

"Some automakers really expect to grow above average, but this should be offset by reduction in others. If we add all the projections of the most optimistic companies the calculations do not match, a cake is bigger than 100%. The market has a certain limitation to grow".

He tells that in this first two-month period the production already runs above this one digit, "which is good, it helps to use factory capacity, reducing total costs" - in some areas Schaeffler is working on two shifts and others on three shifts. Last year, he even hired two hundred employees for production.

He confirms that the bottom part of the chain "is fragile, with complicated financial health. There are signs that some companies are failing to sustain themselves by delaying taxes and salaries". For him "so-



"There are optimistic automakers, but the market has a certain limitation"

Marcos Zavanella, Schaeffler

mehow they have to be helped, because the biggest concern today is how much the chain will be able to sustain growth."

The president reminds that several companies have to pay for raw materials and wages before receiving payment for their supplied parts, which complicates cash flow especially those that are not of multinational profile. "We have already supported some in a more complicated situation, anticipating payments and even paying for raw material purchases".

Gilberto Heinzelmann, president of Zen, argues that the company has good room for maneuver in its OEM operations, spare parts and export operations, which helps "hit the sails to sail with any wind". Last year its production grew 15% and for this year the projection is even stronger, 25%.

"It may seem like an extremely optimistic number, but the base is low", he says. Zen closed the third round in 2016 and began its reactivation in the second half of last year, in part to attend new export contracts, particularly for Mexico.

The executive explains that the com-



"Who depended exclusively on the OEM suffered a lot"

Gilberto Heinzelmann, Zen



"The support of the matrix in the crisis has now left us in a privileged position"

Jürgen Kneissler, Cooper Standard

pany is quite verticalized, which reduces its dependence on links below itself in the chain. But for him "the ones that depended exclusively on OEM supply suffered a lot, there is a financial stress on several links. The automakers will have a lot of work to do to get everything right."

DIVINE SHEPHERD

Who is also working with double-digit projection for 2018 is Cooper Standard, according to Jürgen Kneissler, its director general for South America: from 20% to 25% over 2017, which was already 15% better than 2016.

The company currently operates mostly in two shifts, but some areas have already advanced to the third one.

The executive believes that the company is in a "privileged situation", as it had the assistance of the US headquarter during the crisis, which left it ready for the reaction that is happening now. "If we need to, we can grow even more this year".

Cooper Standard has now decided to formalize an investment plan that has spent the last two years in calm water, and from April it will set up a new production unit in the municipality of Divina Pastora, in the State of Sergipe, to attend FCA in Goiana, PE. "We are going to produce there, it is already decided." Production begins in the second half, but Kneissler points out that the initiative is more related to logistics strategy than to the market reaction itself.

In turn, Célio Takata, Director of OEM Sales of NGK do Brasil, says the company was very pessimistic about 2017. It was

expected a decrease for 2016, but the second half helped and the result ended in a tie, helped by exports. For 2018 the company follows the forecast of Anfavea, that is, at the house of 13%, although the executive considers this index as "very optimistic".

He justifies this position by explaining that there are factors for this year that need to be balanced in regards to sales projections, such as soccer world cup and elections. "The market is still not very balanced".

By the technical characteristic of spark plugs production system, NGK's main product, the company always operates in two shifts - it can not reduce to one but can not also grow to three.

This does not, however, prevent an increase in supply, explains Takata. During the crisis, NGK insured itself well by exporting to other units around the world and now, if necessary, can negotiate with the Japanese parent company a new local production design that privileges the supply of the domestic market itself.

This support from the matrix was fundamental to the company in the last two years, in which it not only maintained investments but also hired employees, although in figures not disclosed by the executive.

A new nationalization has already been confirmed: more modern and durable spark plugs imported by the company from Japan will be produced in Mogi das Cruzes, SP, later this year. "We are preparing to increase capacity not only for this year, but even further ahead, 2020, 2021,



"We consider the current projection of Anfavea as quite optimistic"

Célio Takata, NGK



"January gave scope for the projection of 2018 to seem conservative"

Gisela Pinheiro, Basf

as part of the investment cycle started in 2016."

Gisela Pinheiro, Basf's Vice President of Materials and Functional Solutions for South America, reveals that the company also works in line with Anfavea's expectations. "But January gave us enough room to question this number, which seemed conservative based on the result."

In any case, she understands that projections of around 20% to 25% in 2018 are "very aggressive", but ensures that Basf is prepared if necessary - the company's operations run in three shifts in some areas since the end of last year.

The executive believes that for the chain, the quickest and easiest way to meet growth beyond expectations is to increase the pace of work. "There is still idle capacity. In addition to that hiring would do well to the economy itself, since the unemployment rate is one of the only ones that have not yet reacted with greater intensity".

HEAVY WORK

About commercial vehicles the scenery is even more impressive. After a violent retraction the reaction seems to come with the same intensity: in the first two months sales of trucks and buses grew 58% compared to the same period of 2017, according to Fenabrave.

Luis Marques, Meritor's marketing and aftermarket manager for South America, adds that for the systemists in the segment the crisis scenario was even more devastating than for the automakers, "because when everything began to fall

they still had stock of parts available".

Because of that this is precisely the opposite: "Our growth rhythm at this moment is better than the factories' themselves, because not only do we have to replenish this stock but also account for exports".

That is why Meritor grew 30% in production volume in 2017 and projects to surpass 20% in 2018.

He reminds that the basis for comparison is still extremely low, and estimates that the truck market this year, even with this strong statistical increase, will be close to half that achieved in 2011, the golden age. This, by its accounts, would represent a 20% increase in the production of the industry compared to 2017.

Signs of the times, several automakers of the segment even shortened a period of collective vacations at the end of last year, "something that was not seen much" - and that Meritor monitored.

The company operates in two shifts but only in some areas, which gives it some scope to make even stronger the production if necessary. Third shift, for now, not even think about it.

Marques endorses the understanding that also in this area "the chain is weak. The resumption brings challenges not only for us, but for the whole industry."

Speaking of industry as a whole, Sindipeças, the largest representative of the segment, was contacted by AutoData to expose their impressions on this delicate and important issue. But, until the closing of this edition, did not return the request of interview with the president of the association, Dan loschpe.



"The truck factories shortened collective, which had not been seen for some time"

Luis Marques, Meritor



Greg Scheu, of ABB

Graduated in electrical engineering in 1983 from the University of Delaware in the United States, the same year he started working at Westinghouse Electric in product and sales management. In 1986 he moved to Allen-Bradley, now Rockwell Automation, where he became vice-president of sales. In 2000 he was appointed CEO and Chairman of Source Alliance, acquired by ABB in 2001. In the Swiss company he was named Head of Global eBusiness. From then on, he passed several positions until he was appointed as a member of the board in 2012, a position he has accumulated since 2015 together with the positions of president for the Americas region and also of the Group of Services and Business Integration. He is also a board member of NEMA, the national association of electric industry manufacturers in the United States.

Is the automotive future, inevitably, low-emission?

What we see is the emerging model that more and more cars are becoming electric. And we are still on the first days of that. There is no doubt that car manufacturers will move their product lines to offer low emission. We see this happening even with high-performance cars: BMW, Porsche and, of course, Tesla. People are becoming more socially aware and want to drive something green so they can have a sustainable return.

In this movement, what is the next step?

We will see fleets of cars as part of large systems, such as the vehicles used by governments, powered by electricity. They will be made to be more affordable because the cost of technology is clearly falling: the batteries, the engines. As soon as carmakers adopt these standards, what will come will be mass production as well as what is happening with the Tesla Model 3. They offer the car in a basic version for \$ 35 thousand and the idea as a whole is get more people to drive them.

What is the model to supply the electric cars? Is it similar to the fuel stations we have today?

What needs to happen is a joint effort by the governments with private initiative to ensure that we have charging stations, as people need to have the same freedom to drive an electric car as they do when driving a gasoline-powered car so they can go wherever and whenever they want. There will not only be the possibility of charging them at home, but also in stores, or also charging stations that offer not only gasoline but also electric charging. All of this will happen after the initial steps.

5

Are you sure this is a movement with no return?

Imagine yourelf, sharing the use of a car that does not harm the environment and fuel is coming from the sun or the wind. In other words: any circle of how you do things is sustainable. And when you look at the current moment, these network connections will be more and more frequent. The power grid can handle that. ABB, of course, knows this system very well, we are involved and we can help our clients, make the right plans and together build these connections.

4

Is there any concern about the infrastructure so the electric energy can be sold in these places?

The cool thing about electricity and electric charging cars is that you do not need to build plumbing, you do not need large underground tanks. Electricity is available in many places so that entrepreneurs of this system have the capacity to offer charging stations. But the settings of these stations need to be scaled correctly because they require a big charge.

6

How much time are we talking about? Around 5 years?

It will take some time. I think we're still heading there. More vehicles will be available, more and more charging stations will be set up and after that, the cost of the electric car will decrease and become more accessible to people. Some are predicting that by 2025 auto factories will be completely converted and all new models will be electric. Others say it may be around 2035. It's hard to predict the exact year, but I think all of these things come together in the future and that's going to be very positive. As we say at ABB: let's write the future together.

7

Do you drive an electric car?

Yes, I drive an electric car! I do not own one, but I drive one.

8

Why did ABB decide to sponsor Formula E?

Formula E is the perfect partner for us. This is about innovation in high performance and how technology can help us guide a more sustainable world. We decided to sponsor this category because we see ABB's ideal in it: to develop leading and pioneering technology in a variety of ways so that we can help society and the world as a whole.

LAUNCH » CRONOS

By Leandro Alves

The lord of Mercosul's time

Manufactured in Argentina, Fiat Cronos represents the unification of FCA production standards in all factories of the region

n 2016, when Sergio Marchionne was in Cordoba, Argentina, to announce \$ 500 million to the factory unit of one of the oldest brands in that country - Fiat will turn 100 in 2019 - little has been said about the integration that led the Ferreyra neighborhood have the same references for the production and quality of the FCA units in Brazil for the first time.

22

This is perhaps the best news about Cronos, a premium compact sedan that has just been launched - sales started at the end of February in Brazil and Argentina: from now all models produced by FCA of the Jeep and Fiat brands in the region have the same technology and quality standards of the multi-brand company's global industrial system.

It was up to Stefan Ketter to lead this development, which took 195 laser welding robots to stamping, a chain of local suppliers, many of them just arrived in Argentina, as well as promoting reformulation of the whole production process, turning Cordoba into a sister of Goiana, the Jeep factory in Pernambuco, and Betim, MG.

"It's a complete production project. We can say that Cordoba is competitive with all our factories. It is the mirror of Pernambuco and Betim now", says the world's vice president of manufacturing of FCA





"Cordoba is now a mirror of Pernambuco and Betim" Stefan Ketter



and COO of the Latin American region, without hiding the enthusiasm.

Not by accident Ketter, despite the global mission of driving the global manufacture of FCA, has its base in South America. Here is a relevant market for the aspirations of Fiat and Jeep. In addition to that, the excellent performance of the Goiana plant motivated the company to make this transition in its productive units here. Thus, despite the declarations made at the time of the announcement of the investment in Cordoba, it was to be expected that the FCA, as it is happening with other manufacturers, would promote the unification of production standards in the region.

IN 24 MONTHS

Even before making public the intention to produce a totally new vehicle in Argentina a process of transferring knowledge and manufacturing requirements began in Minas Gerais, according to Claudio Demaria, FCA's director of engineering: "All of the industrial development took place in Betim. We also performed the trainings of the Argentine factory floor team here in Brazil. This process has occurred in the last 24 months".

Only the automation for the welding

The production of Cronos attracted four new suppliers to Argentina. 53% of the content of the sedan is produced at the same place

of the steel structures promoted a jump in the quality due to the precision that this technology offers in the assembly of the vehicle, something still innovative of for the Argentine factory. Demaria highlights this important investment as one of the most relevant of the cycle: "Robots have raised the factory automation index from 15% to 85%. The efficiency and accuracy of these equipment are requirements that we do not give up in the production of a vehicle. I believe that this investment was very important to Cordoba".

Parallel to the development of the project in Betim, Ketter was ahead of the conversations with the seventy suppliers of more than six hundred parts of Cronos. "This process required a lot of courage from our part to make a new car in Argentina".

Of these seventy companies in Argentina that supply the production four are newly installed in the country. "They are global suppliers that work with us in Pernambuco". Twenty suppliers, including the four newcomers, are in Cordoba. In total,







53% of the content of Cronos is made in Argentina - that index will rise rapidly to 55%, according to Ketter. From 5% to 10% of the pieces are imported and the rest comes from other Latin American countries, mainly from Brazil.

The production unit also received a new final assembly line and tests for automatic transmission, greater automation of all manufacturing stages, an automatic adhesive application system and new product quality validation áreas of the product. "We now have the best manufacturing technology available, our employees are even more motivated and prepared, and partners who will ensure the success of Cronos", Ketter believes.

The Cordoba plant has the capacity

to produce 120 thousand units in twelve months. It is important to clarify that Cronos is not a global project of the FCA, but a vehicle developed by and for the region, especially Brazil and Argentina.

According to Ketter, two thirds of the production will be exported, Brazil being the main destination. The most optimistic expectation is that up to 50 thousand units will be sold here, while another 30 thousand would target the relevant FCA markets in the region. But it is still early to evaluate the performance of the sedan, say FCA executives, who prefer to look carefully at Cronos's possible success in Colombia, Chile, Uruguay, Peru and other neighbors that eventually receive the launch - FCA did not detail, for the time being, its entire export strategy.

"It was a car designed for the consumer profiles of the region, so we believe in their good acceptance, which has very similar preferences". According to Ketter's accounts 40 thousand units should be sold only in Argentina.

During the official inauguration of the factory in early February - FCA had already started production in January to supply the dealers - the president of the local republic stressed the importance of a vehicle produced exclusively in his country: "Every time we find a Fiat Cronos let's remember that it is only made in Argentina. This means that we do not export only raw materials but high value-added products".

He also signaled new FCA investments in Argentina, although Ketter avoided when asked about the topic. "I hope to return here in three months to discuss a new project", said the Argentine president in his speech.

Considering that the Cordoba plant has the capacity to produce 250 thousand units/year and the recent investments that brought the same FCA production pattern in the region, a new project there, in fact, would not be nonsense.

There is also a project of the Argentine government to increase the jobs and industrialization of the country that is supported in the increase of the automotive activity. Objective: 1 million units produced in 2020.

During the inauguration of the production in Ferreyra, the governor of the province of Cordoba stressed the need for more investments that encourage the nationalization of the supply chain, so that the automotive industry has "solid bases in the country".

For all that it represents, since Cronos seems to close the cycle of renewal of FCA's manufacturing in South America, the expectation about this new structure, much more efficient and with new products, is great.

This cycle, which began with the Jeep factory in Pernambuco, went through the modernization of Betim and now Cordoba, which gave rise to six new products, is ending, according to Ketter.

"We offer more customer value with Toro, Mobi, Ducato and Argo. In 2016 our result was better than zero and in 2017 we had an interesting performance. We are proposing a new multi-brand business model with Jeep and Fiat, and we



particularly believe we are prepared for market growth that will help improve the result in 2018".

Using the meaning of Cronus in Greek mythology to represent the present moment of the FCA in the region, one can say that "the lord of time" inaugurates a new chapter in the history of the company.

Catching everyone's attention

The Fiat brand was supposed to have an advantage in the price position of Cronos, which began to be sold in Brazil in the last days of February. That's because it seemed certain that the model would arrive to fight directly with VW Virtus, presented at the end of 2017 - so the FCA would already know the values of the opponent's table in the time to define theirs.

But that is not the target of Fiat. Cronos has been developed and configured to compete with a more familiar public, which does not have status and innovation priorities - two prerogatives widely explored by Virtus.

The candidates to lose part of the customers with the arrival of Cronos are models that have been leading this segment for some time:
Chevrolet Prisma, Hyundai HB20S and Toyota Etios
Sedan, respectively the first, third and fourth most sold in the last year.
In addition to the well resolve design the Cronos is well-

In addition to the well resolved design the Cronos is well-equipped, comfortable and spacious, importante requirements for the

consumer, according to a market study by Fiat. It also offers the largest trunk of the category, with 525 liters. The price positioning of the versions shows that Cronos with a 1.3 engine - manual transmission and automated GSR - will respond for most customer choices. With a little more than R\$ 50 thousand you can take the family to walk, share the car with the wife, carry a lot of things in the trunk. Everything that people with this profile most wish for. With Cronos, they will be catching everyone's attention.

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When Size Matters

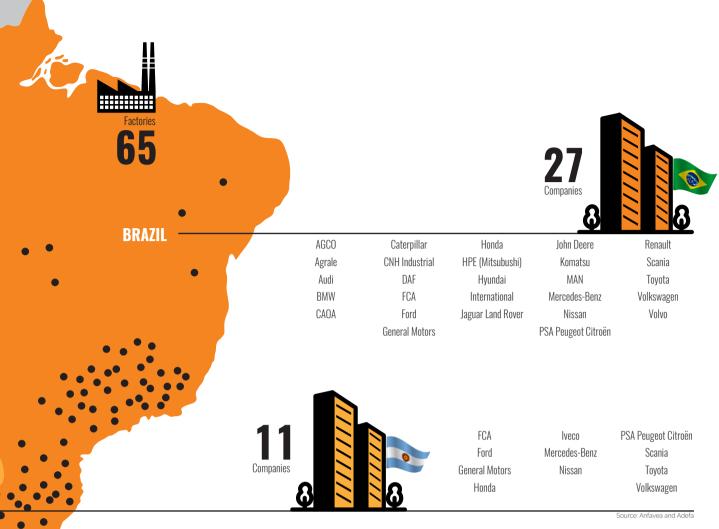
Car makers try to integrate production in Mercosul, but practices bump into differences in the size of the two markets

hat Argentina is the largest Brazilian automotive trading partner and that the two countries form virtually all of Mercosul's practical structure for a vehicle industry, there is no doubt about that.

But when it comes to evaluating this process as part of an effective common block as difficulties continue to appear, even smaller than some time ago. The

ARGENTINA

March 2018 | AutoData



difference in the size of the two countries, for example, both in production volume and domestic market, creates fissures in this relationship (see tables).

Although the established rules provide for free trade in both countries, this abysmal difference led in 2015 to the so-called flex, a formula that tries to level this balance: for every US\$ 1 that Argentina exports to the Brazilian market in vehicles and auto parts Brazil can export US\$ 1,50 free of taxes. Scheduled to last only one year, in 2016 the rule was extended to 2020.

That, however, was not enough. The Argentine government claims that several companies are disobeying this calculation and recently indicated that the country intends to individually charge, in addition to the relative taxes, fines to repress this practice.

ABOVE R\$ 2

According to data from the MDIC in 2017 the value exported by the Brazilian automotive industry to Argentina reached US\$ 6.5 billion while imports totaled just over US\$ 3.5 billion. In a simplistic account, the average was about US\$ 1.85, already reasonably distant from US\$1,50.

In volumes, Brazil exported almost 554 thousand units to Argentina last year-more than 70% of its total shipments - while imports there were 140 thousand 600 units, also according to the MDIC.

For Felipe Rovera, director of PDC, Process Development Corporation and former president of GM Argentina and Adefa, "there is a great imbalance of the volume produced in Brazil and Argentina. Around here there are projections of four million units, while there we talk about

reaching a million. There is a need for automakers to balance this gap". By its calculations, there are companies operating at flex much above US\$ 2.

One of the companies exceeding the flex calculation at \$ 1,5 is Volkswagen. Pablo Di Si, president and CEO of Volkswagen South America, revealed that the Argentine government has stipulated a deposit value for the company as guarantee. According to him the initiative "was not a surprise, because we had already talked with the headquarter about this last year".

According to the executive VW strives to "rebalance the calculation to the lowest possible value. We are working to export more to a market that grew 35% last year". One of the outputs, of course, is to expand imports from Argentina to Brazil: "We have to bring more models like Amarok and SpaceFox and also components such as transmissions".

Nissan is also in a situation of imbalance. For the manufacturer, the calculation tends to get even more complex in the first semester, since March and Versa Made in Brazil won the company of Kicks, launched in January.



According to Marco Silva, president of Nissan Brazil, the situation tends to improve from the second half of the year, when the Frontier pickup production will be started in Argentina, which will be exported to Brazil.

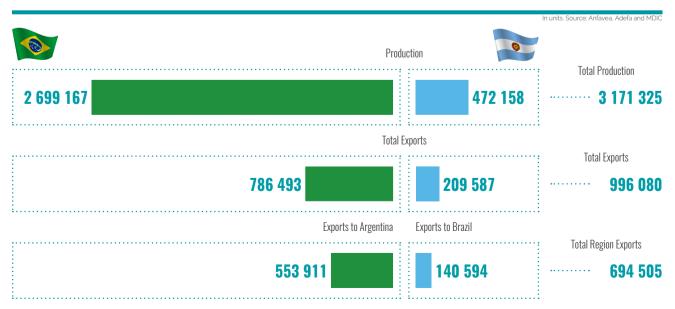
Toyota's public relations and government director, Ricardo Bastos, assures that the strategy of the company in Mercosul comes since the end of the 90s. "Our goal is to count on complementary products."

The company produces in Argentina the pickup Hilux and the SUV SW4. In total, 126 thousand units of the two models manufactured there last year, half of which were exported to Brazil. The Argentine assembly line supplies, in total, to twenty countries in Latin America and has recently gone through productive expansion that required investments of US\$ 800 million.

As for Brazilian Toyota production, Corolla and Etios, about 25% is exported to Argentina. "Integration is important because if one market has a fall in sales the other can help to face it", he said.

Fabrício Biondo, vice president of PSA Group, also considers that the complementation is a way of avoiding any local

X-ray of the automotive Mercosul in 2017





difficulties: "Brazil-Argentina integration is a reality in our plants." The Porto Real factory in Rio de Janeiro sends Peugeot 208 and 2008 and Citroën C3 and Aircross to the Mercosul's partner.

Meanwhile the El Palomar unit receives investments of US\$ 320 million for production of vehicles based on the new CMP platform of 2019. Currently it sends the Peugeot 308, 408 and Partner to Brazil, in addition to the Citroën C4 Lounge - which has just been restyled.

ENJOY

At the end of last year the governments of Brazil and Argentina began negotiations to create joint legislation in order to standardize the vehicles produced in the two countries. The objective of the measure is to reduce obstacles and costs of bilateral trade, in addition to increasing the competitiveness of products produced in the region in other markets.

According to Antônio Jorge Martins, coordinator of the MBA in strategic management of companies of the FGV au-

tomotive chain, Fundação Getúlio Vargas, "it is important to enjoy Mercosul in order to gain access to other markets. In this sense the standardization is fundamental, because it will reduce costs with the adaptation of products ".

Rovera, of the PDC, adds that "the automotive industry is the one that is better oriented in this sense and this is due to the effort of the automakers than to the role of the governments". But for him, Argentine suppliers are not in a position to compete with the Brazilian ones - again because of the very different volumes. "The Argentine government could offer some incentive to local suppliers because the logistics from Brazil to Argentina is very expensive."

Di Si, of VW, in turn, says that producing parts in Argentina has a reduced cost when compared to Brazil. "So much so that Volkswagen produces transmissions there that are exported here. Other automakers do the same". He points out that "in general the agenda of the Argentine government has as a goal also to make local auto parts stronger".

The Perfect Wedding



Ethanol emerges as a good global possibility to pair with electrics, from hybrids to fuel cell

he uncertainties surrounding the incentives for automotive research and development have not, at least for the time being, stopped explorations for new technologies for ethanol engines.

Vegetable fuel, which has its greatest exponent in Brazil, emerges as a strong global player in the direction of new technologies. It is defended by engineers and their associations, and already has at least two important projects in advanced stage.

One of them is from Nissan, which uses biofuel to generate hydrogen so it can move fuel cell-powered vehicles. The prototype was assembled on an NV200 van and uses SOFC technology, the Solid Oxide Fuel Cell.

The vehicle was shown in Brazil, where it passed test battery, and at the end of last year returned to Japan to continue



Where do we find fuel cell powered car fueled with ethanol? Ask at the lpiranga gas station

the researches. The Brazilian branch looks forward to the next steps of the matrix for the project.

According to Ricardo Abe, Nissan's engineering manager, the technology is the ideal for developing countries that already use ethanol - that is, Brazil fits like a glove.

"It is one of the alternatives under study by Nissan for the future, which will be electrified. The advantage of using SOFC is its ease of operation in countries that do not have a ready-to-build structure for electric vehicles."

For now, the reformer, the equipment that separates hydrogen from ethanol, is one of the system's biggest technical challenges. "Currently it occupies part of the useful area of the vehicle, and we are trying to reduce its size to provide better practical use."

TWENTY KILOMETERS PER LITER

The prototype already obtained satisfactory levels of autonomy: it covered six hundred miles with thirty liters of ethanol, in other words, it obtained a mark of twenty km/l.

Besides the van another prototype of Nissan with SOFC technology was tested in Brazil. "The vehicles were instrumented and as the country has availability of ethanol in any place, we supply and we roll in many conditions. These data were recorded and shipped to Japan, which now processes information and continues the development, as well as all fuel parts, ethanol recognition and system durability."

There is no exact definition of when a large-scale commercialization of the technology could begin, but it will certainly be after 2020. "It is not by technical innovation alone. We rely on the entire supply chain and system suppliers to make it commercially viable," says Abe. He believes, however, that "within the matrix there are several projects under development and we believe that this is the easiest to reach Brazil one day."

A study about SOFC at the Federal University of the ABC, or simply UFABC, found

a way to eliminate the reformer inside the system. But the professor responsible for the research, Daniel De Florio, regrets that no automaker has shown interest.

For him, this is due to a gap in the advanced research and engineering systems in Brazil, since in this field the works have been mostly carried out by the manufacturers' headquarters.

UFABC research has been conducted since 2006 in collaboration with IPEN--USP and the French government. "We have recently shown that the reformer in not needed, which implies a better use of the energy generated by ethanol. This concept is known as the Solid Oxide Fuel Cell to direct ethanol or Direct-Ethanol SOFC." The operation occurs through internal reforming or direct oxidation: "Some characteristics of SOFCs such as operating temperature and anode materials, the fuel electrode, play the role of the reformer".

For the professor, "this is a research in which Brazil is well ahead, since we are the second largest producer of ethanol in the world and ours, unlike what happens in the United States, does not compete with the food issue."



For De Florio the concept itself is new. "A few years ago we talked about SOFC just for stationary power generation. Until recently there was a convergence that the low-temperature fuel cells would be used. Toyota's Mirai was based on this technology. But it needs to be fueled with pure hydrogen, which dificulties its amplitude in the Market."

ON THE WAY OF BSB

Toyota is another automaker of Japanese origin with important projects in the area of ethanol. In Brazil it is going on a fast rythm to a innovative solution, that of the flex hybrid vehicle, that is, accepting ethanol or its mixture with gasoline in any proportion as a liquid fuel, which drives the engine to the explosion which in turn feeds the electric motor batteries. The tests are taking place in a Prius imported from Japan.

In the next few years the automaker will launch in Brazil the new generation of Corolla, based on the same platform of the current Prius, the TNGA, Toyota New Global Architecture - which could eventually facilitate things for local production also the model with this new hybrid technology flex.

As part of the development of a Toyota flex hybrid, the next step will be the São Paulo-Brasília trip on board the prototype - about 1 thousand kilometers separate the two cities.

According to Ricardo Bastos, director of public and governmental relations at Toyota, "new environmentally responsible technologies, such as the flex hybrid system, will enable Brazil to move forward in a new phase of technological improvement of the whole chain. And they will also increase their competitiveness for the development of new sustainable solutions."

There is no stipulated date - or even certainty - for a possible arrival of the Toyota hybrid flex to the market, but the odds seem pretty strong for the short or medium term.

Unica, the Sugar Cane Industry Union,

"The hybrid needs some adaptations to become flex, but it's not a NASA project"

Alfred Szwarc, Única's consultant



March 2018 | AutoData

which represents the ethanol industry, is participating with Toyota in the flex hybrid project. Alfred Szwarc, his emissions and technology consultant, says that "ethanol has had room in the market for many years and seeks partnerships in electromobility."

He, who is an engineer, does not see great difficulties in the technical part.

"It is necessary to adapt the combustion engine to ethanol, to redo its calibration and related aspects, but it is not a NASA project."

In his view hybrid flex technology represents "a perfect marriage, by adding the qualities of high energy efficiency with the environmental".

The Unica consultant reveals that "Toyota warned us about the possibility of the nationalization of this technology, and the talks have been happening on for about two years. The hybrids should be part of the new mobility scenarios and we see good opportunities for the coexistence of hybrid version with flex engine. The next step would be plug-in flex hybrids, though probably in a smaller number of models."

In the end, Szwarc is betting on technologies that use electric batteries or fuel cells with energy generated from ethanol. "One of the great barriers to electric, besides costs, is the autonomy. And the Nissan prototype has already shown that this issue can be overcome"

By the calculations of the engineer today 30% of the price composition of an electric car comes exclusively from the batteries.

Other segments, besides the passenger car market, can also make use of ethanol, such as public transportation and agribusiness. "If the conditions are attractive there are advanced developing technologies and promising prototypes," says the consultant of Unica.

GOING BY BUS

The engineer Márcio Massakiti is one of the people responsible for the Electric Vehicle Program of Itaipu Binacional, which works on the electric mobility projects. The

company develops a hybrid bus project powered by ethanol.

The first experiment came in 2010, demonstrating a prototype, in which the internal combustion engine supplies mechanical energy to an electric generator.

Currently, with a contribution of R\$ 10 million from Finep, Itaipu finishes a work on improving the prototype of the bus, with the review of tests. A second phase will be the opening of an announcement by Finep for public call of automakers interested in the production of the bus.

According to Massakiti "the vehicle brings efficiency of 85% in energy consumption, while in the Otto cycle the performance is only 15 to 20%."

For Marcos Clemente, vice president of the AEA, Brazilian Association of Automotive Engineering, "it is not about discussing whether the future belongs to the internal combustion engine or the electrification. It is better to have both, and the participation of each technology will depend on the characteristics of each region. And in Brazil it is viable to use ethanol."

For him, there is still room to improve the efficiency of the explosion engines in the coming years: "Internal combustion engines with any fuel will still be important in 2030, 2040, but they will be even more efficient than the current ones. This search will continue through more compact systems, combustion generating even greater thermal load with turbo, direct injection, more sophisticated admission controls. And the idea is to make future engines optimized for high-octane fuels."

For Clemente, it makes more sense to encourage the use of biofuels in detriment of fossil fuels in Brazil. "The country has besides ethanol, for example, biogas, biodiesel, bio-kerosene, biomass. It's brilliant."

FOR THE END OF DIFFERENCE

One discussion that has been around for some time, both in the technical area and in the negotiation tables, is the reduction of the difference in consumption of flex-fuel engines when fueled with gasoline and with ethanol. For the representative



The prototype of Toyota Prius hybrid flex will make test-trip from Sao Paulo, Capital, to Brasilia, DF, definitely an interesting destination

of the EEA, "if there is high octane fuel at the pump and incentives to increase the autonomy, the use of ethanol will grow in the country."

He explains that "the discussion is about getting good gasoline from good ethanol with almost great regulation for the two of them." Currently Brazilian hydrated ethanol has 92.4% purity and the rest is water, while in the United States this index is 98.2%. "It would be necessary to verify the implication of this in the circulating fleet. There could be a gradual migration to unification."

The evolutionary sequence, for him, would be to continue developing internal combustion in order to take advantage of ethanol. On that scale, later, the flex hybrids and then fuel cell would come. "Ethanol fuel cell vehicles, like the Nissan project, have sensational appeal, but before that, they need to solve engineering issues."

Bosch of Brazil, a pioneer in technology that eliminates the need for gasoline small tanks for the cold start of vehicles fueled by ethanol, undergoes internal restructuring to deal with electrification. Fabio Ferreira, director of products, reveals: "We see in ethanol a chance to improve the global emission of CO2. The increased mixing of ethanol with gasoline tends to improve the

environmental issue in several countries."

For the executive, the challenge is to improve the efficiency of ethanol engines in order to achieve greater autonomy and reduce the consumption gap for gasoline. And also emissions, "remembering that in 2022 we will have the entry of the new PL7 emission standard".

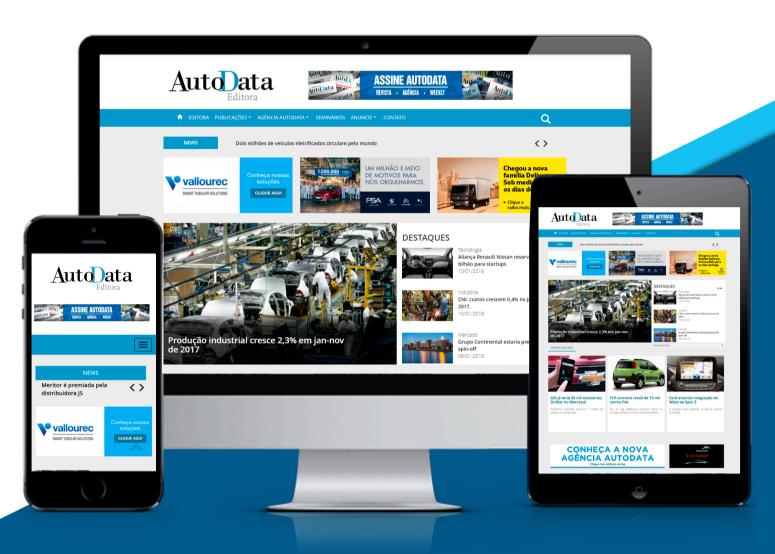
Ricardo Takahira, from SAE's Electric and Hybrid Vehicles Commission, advocates the adoption of policies that encourage research and development in this area. "Ford could do with the Fusion Hybrid the same as Toyota studiesto do with the Prius."

He argues that "the challenge is not to have public policy. We've never had a local P&D. We came to expect a good time with flex, which is actually a calibration. Now we have no serious policy of electric and hybrid. Flex was the height of autonomy and local P&D but lately we have lost everything due to the adoption of global platforms. We only put specific circuits."

Takahira warns that "if nothing is done towards electrification our auto parts park will disappear. The whole world gives signs that things are changing and I think we have how to position ourselves and work on parallel solutions with the automotive world that converge."

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From soup to roast beef

Number of houses in the distribution network should not grow in Brazil this year. But at least it will stop falling.

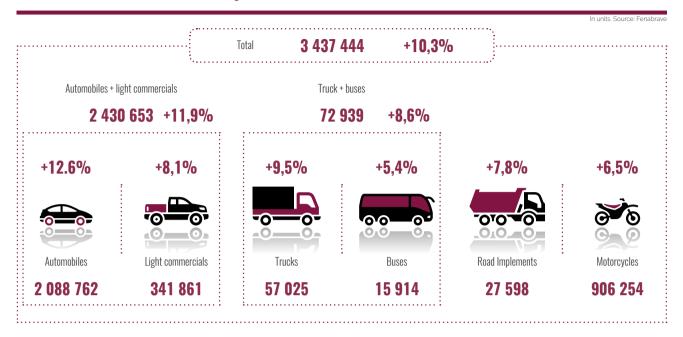
he concessionaire network in Brazil will stop reducing its size in 2018. This is the expectation of Alarico Assumpção Jr., president of Fenabrave, National Federation of Automotive Vehicle Distribution.

According to the calculations of the entity, the country lost 1 thousand 274 homes in the last three years, considering from January 2015 to January 2018 - 726 were car and light commercial dealers, 196 of trucks, buses and agricultural machinery and 352 of motorcycles.

In practice, the total number of stores that closed the doors is higher, 1 thousand 890, but the final average is lower by the opening, in the same period, of 616 stores, especially the brands that were structuring new networks such as Audi, BMW and Jeep, plus some premium motorcycle brands.

To reach this number Fenabrave had to make a complicated calculation. Until then the reference used was to close CNPJs, but the association realized that this process masked the truth: sometimes the concessionaire closed the business of a unit but kept the CNPJ active not to

Fenabrave's Market Projections for 2018



afford even more costs and bureaucratic processes and, even, perhaps, thinking of retaking business one day.

The association then isolated the CNPJs that spent at least six months without issuing a single invoice for the sale of vehicle 0 KM. And then in this period the 7 thousand 330 became 6 thousand 56, including the CNPJs created for new ones.

The impact of these closures on the labor market was brutal, says Fenabrave. For their accounts, 169.5 thousand jobs in the concessionaires network were cut in these three years, considering in this calculation the vacancies lost by the houses that stopped working and also the ones that wiped out their staff, even keeping the doors open.

OUT OF ICU

But this scenario, as it seems, is now past. For Assumpção Jr., "2015 and 2016 represented the worst moment of the automotive industry, with no precedent. The last quarter of 2017 showed some recovery, but regrettably we have returned ten years in volume".



Or, in colloquial language, "the distribution sector is still hospitalized but has left the ICU and recovers in the bedroom. You've stopped having only soup, and now you're going to have roast beef."

Fenabrave's projections are optimistic and indicate sales in 2018 about 10% higher than last year, considering the average of all segments of the distribution (see full table above). Assumpção Jr. considers that the economic scenario ahead justifies the projections, and guarantees that "what sells car is cheap interests and what sells truck is GDP".

In the first item, it covers the fall in the Selic rate, the current default rates at a controlled level and a probably higher appetite of the banks for increasing their portfolios of the segment as fundamental factors. "Banks were earning with inflation, and as it is now low institutions should be more willing to finance more customers."

About the second one, it uses Fenabrave's own economic advice as a reference, which indicates a 3.5% increase in GDP for this year.

In addition to the good scenario of the

"What sells cars is low interests and what sells trucks is GDB"

Alarico Assumpção Júnior, president of Fenabrave

first two months, which closed at a high of 19,5% in sales – 18.,% in lightweight and 58% in heavy, according to Fenabrave -, the president of the entity also points another promising index: in the last semester of 2017 segment of the distribution hired four thousand people. "We are still very far from recovering what was lost, but it is a very positive fact for those who until the previous period was firing."

Regarding the size of the network Assumpção Jr. understands that the number of homes today is sufficient to cover what is expected this year. "It will take us a few years to seek the basis we have lost. We need more consistency, which we still do not have. There is no way to recover everything we have lost in a semester or a year: it is very little time."

In other words: no new houses in the short term. "The current network is in the size of the volume projected for 2018. New concessions only with a larger volume, which should occur around 2021 or 2022."

SAME SIZE IN DIFFERENT HANDS

This does not necessarily mean that the network profile should remain without moving. For the president of Fenabrave the process of buying and selling concessions must continue, although the times for sales seem to be much better.

"There have been some movements in the market in recent years, there was a group that bought another group, exchange of ownership etc., but this is natural of the activity, they were not initiatives directly linked to the crisis."

For him, inclusively, the issue of size is not automatically correlated to financial issues of the business of selling cars, trucks and the like: "There is no standardization: it is not because the dealer is small or big that he is going well or not so well in terms of capitalization".

According to the entity 90% of the Brazilian network of dealers is still formed by companies with national capital, originated from family businesses, although part is already professionalized.

The changes like that must continue: "There is room for large groups to grow more. Those interested in selling will have people interested in buying, regardless of the reason: it may be financial difficulty, lack of a successor... but this process is natural", insists the leader. "For example, if you have five dealers who sell twenty units a month, then one or two groups tend to do it. It is the process, not a consequence of the crisis."

The leader even makes a point of applauding the heavy goods segment, about trucks, buses and agricultural machinery. "Without disregarding the work done in the field of light the evolution in the distribution of heavy goods is enviable. The work on staff qualification was very strong, there was a new look at this point and a strong professionalization. Talent makes the difference, and at this point a lot of things have been done and realized."

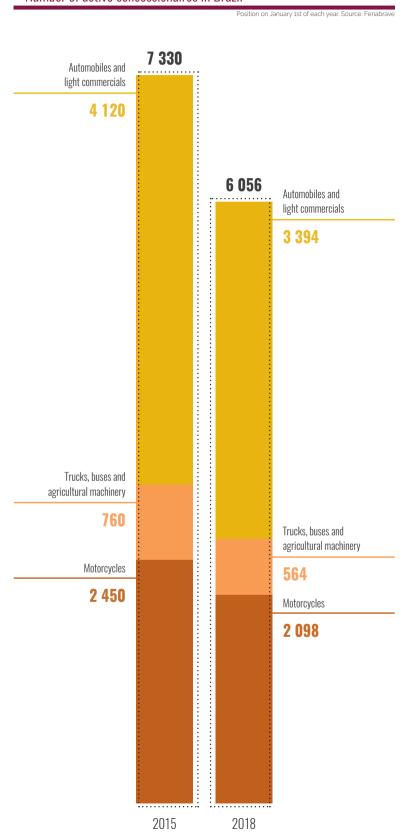
Regardless of the hands that control the houses, what seems not to be shaken is the old maxim that a good relationship with the network is the first and funda-

"The fact when a factory that has a good relationship with the network obtains expressive selling numbers is not a mere coincidence "

Daniel Kelemen, president of Abrahy

Wiping the net

Number of active concessionaires in Brazil



mental success recipe for the automaker that wants good sales numbers.

An excellent example of this is General Motors, the market leader in the last two years under the Chevrolet brand. According to Carlos Zarlenga, president of the manufacturer, "this moment that GM is living today, market leadership, has everything to do with the relationship with the network. Big part of our success is because of them."

PART OF THE HOUSE

The executive explains that recently a work has been done with the dealers, "mainly during the crisis, to improve the performance and the quality in the distribution". The Chevrolet network today has the ideal size, he calculates.

For Zarlenga "the dealers are not commercial partners, they are part of the house. We worked the strategy together with Abrac [Brazilian Association of Chevrolet Dealers], and their structure is very good. We react quickly to what the network informs us, it is our challenge as a team".

The president of GM Mercosul reveals that when the Chevrolet portfolio was totally renewed in the Country "it was the dealers who gave us the way, the best way to reach the consumer. We really believe in their customer knowledge".

One item that has always been discussed in the relations of the manufacturers with their distributors is the profitability, and according to Zarlenga there was also good evolution here: "it has improved a lot and at this point and the volume helps. But it is importante to mention that the network did a great job with the reducing costs. Now I say to them: keep the cost at the level you are at and let sales grow".

Who also agrees with the theory that good relationship means good result is Daniel Kelemen, president of Abrahy, Brazilian Hyundai Dealers Association, founded in 1994. A good summary is the current situation of the brand in the market, as the leader states: "Everything that is produced, is sold".

The HMB network, which markets the Hyundai produced in Piracicaba, SP, or the HB20 and Creta lines, has approximately three hundred places of sale controlled by 80 economic groups. The president of Abrahy does not see much room for an increase in the number of houses in 2018 – on the other hand no store has been closed in the last two years.

About the relationship with the factory Daniel Kelemen defines it as "very good". According to him "any change is always discussed. The dialogue is open and always assumes that issues on one side affect the other, regardless of which side it is".

A good example of this friendly bond was Abrahy's last meeting - the event is held every two years. In 2017 it was based in Cancún, Mexico, and lasted four days, going through a holiday in Brazil, November 15: there was not only a 97% adhesion of the network, but for Hyundai Motor Brasil the president of the manufacturer and its sales director participated.

He points out that it is "no coincidence" the connection of the good relationship with the factory by the excellent sales numbers of the national Hyundai vehicles - the HB20 hatch, even five years after its launch, ended last year as the vice-leader in the most sold ranking models in the country in 2017, behind only the Chevrolet Onix. Creta was in ninth place, ahead of direct competitors such as Jeep Renegade, Nissan Kicks and Ford EcoSport.

Alarico Assumpção Jr., from Fenabrave, also believes in the importance of this relationship and understands that most networks in the country maintain healthy relationships with their respective brands. "Even during the worst moment of the crisis, most associations have preserved extremely respectful behavior with their factory. Many walked hand in hand, without any trouble. Of course there are brands that had more difficulties than others and were more affected. But overall, much of it behaved well in terms of relationships".



WRONG AND IMMORAL

A classic point regarding the friction of networks with its factories is about the direct sales, which, according to Fenabrave, closed 2017 at almost 40% of total sales of automobiles and light commercials.

This result was four percentage points higher than in 2016 and eleven points higher than in 2015 and 2014.

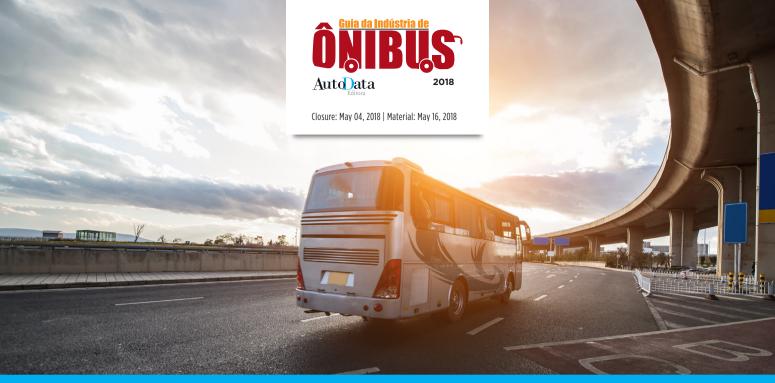
About this strong increase in the index, the president of Fenabrave argues that "it was not the direct sales that went up but the retail that went down" - which, of course, in its understanding, generated a statistical increase in direct sales of the total result.

In any case, Assumpção Jr. does not minimize the situation and warns that "Fenabrave is not against direct sale, but against the way it is done: what we consider wrong and immoral is the price practiced. We have a commercial contract that must be respected. We are legitimate children of the factories, and you can not sell a car cheaper to your neighbor than to your own son".

There has been progress, he says, as a process of self-regulation signed jointly with Anfavea and Confaz, the National Council of Finance Policy. According to Fenabrave in sixteen states of the Fleet Federation that anticipate in twelve months the sale of the vehicle purchased by direct mode must pay the respective taxes for this period.

But the association president confirms that there is still work to be done about that, including in the factory-network relations itself. "Brand associations also have their responsibility. Many of them still do not have conventions dealing with this chapter, and should work on the subject. Those who have and make use of it have no problem with that".

Despite this scenario and in all it seems to be, respecting Fenabrave's logic, the trend is to reduce at least statistical direct sales in 2018, considering that retail probably will grow, thus reversing the participation curve of each modality in the the internal market.



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Obviously it will also bring the complete datasheets of all the chassis and bodywork manufactured by each of these companies

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EXCLUSIVE 1

Ford might shut down the production of Focus's current generation in Argentina, according to a statement from the manufacturer to suppliers. The information was revealed exclusively by AutoData News Agency.

EXCLUSIVE 2

Vidroforte Group, from Caxias do Sul, RS, obtained approval for the request for judicial recovery. The measure includes eight companies of the group, which operates in the supply of glasses for the automotive and civil construction industry. The information was also disclosed exclusively by Agência AutoData.

EXCLUSIVE 3

Another information uniquely revealed by the AutoData Agency was the expansion of the business model for sales of Unidas used cars, with the inauguration of four more houses that work in an 'outlet' style: East and South areas of São Paulo, Capital, Rio de Janeiro, RJ, and Recife, PE.

REGIONAL MEETING MWM

MWM Motores held its first regional meeting with the distribution network, named MWM On The Road, in Jundiai, SP. The plan is to promote ten more editions in Brazil and abroad in 2018, addressing the company's expectations and strategies.

POLICE CAR

Troller has supplied 50 units of the T4 model to the Government of Ceará: they will be used as vehicles for Policing Tourist Battalion, Fire Department, Detran and other state agencies.



CH4PA

CAR MOVED POWERED BY BIOMETHANE

CH4PA prototype, powered by biomethane, was presented at the 30th Rural Coopavel Show, in Cascavel, PR. Itaipu Binacional project with the International Center for Renewable Energies-Biogas, CIBiogás, and the Austrian development agency. Idea is mixed vehicle for use in the field, particularly family farming.

HUNDREDTH SCHULER

The Prensas Schuler celebrates the sale of the hundredth line of hot stamping for the automotive industry. The first was sold in 1993, for US Ford.



SHC AND JLR

The Grupo SHC, by Sergio Habib, inaugurated the concessionaire Jaguar Land Rover GB Cars Anália Franco, located in the East Zone of São Paulo, Capital. This is the second house of the group for the brand in the city, added to the Villa Lobos unit, located in the neighborhood Vila Leopoldina, Zona Oeste, very close to the headquarters of the Brazilian company. With this inauguration now the whole SHC Group arrives to the mark of 45 concessionaires, of the brands Jac Motors, Citroën, Peugeot and Volkswagen, besides the own Jaguar Land Rover.

WHITE-HOT

The white color dominates the world market for light vehicles, with almost 40% of the preference. The conclusion is a global Basf study on data for 2017. In Europe, white, black, gray and silver added up to 78% of the total color preference.

JMALUCELLI AND CASE IH

JMalucelli Agromáquinas Ltda. is the new Case IH reseller in the State of Paraná, with three branches in the cities of Cascavel, Medianeira and Vitorino. And so it becomes the only dealer to offer both the agricultural machinery lines and the manufacturer's construction.



LUCHETTA

Pablo Luchetta is the new CEO of YPF Brasil: until then, sales manager. He succeeds Ramiro Ferrari, who returns to the headquarters in Argentina with the mission of seeking new international business.



CARVALHO

Ricardo Garcia da Silva Carvalho was named executive director of Belgo Bekaert Arames, BBA, ArcelorMittal partnership and Bekaert Group in Brazil. Until then vice president of Human Resources and IT of ArcelorMittal Central and South America.



BASTOS

Adolpho Bastos was appointed General Director of Lots for Latin America. The company, part of the Scania group, arrives in Brazil offering expertise identification and improvement opportunities in transportation flows, with a view to reducing environmental impacts and improving customer profitability.



SPINETTO

Marco Spinetto, head of strategic innovation and knowledge management at Pirelli, represented the company in the Tire Technology of the Year award ceremony at the Tire Technology Expo 2018 in Hannover, Germany.



GALHOTRA

Kumar Galhotra is Ford's new president for North America. He succeeds to Raj Nair, fired for inappropriate behavior under the company's code of conduct.

GM INVESTS 1

GM detailed another part of its investment cycle of R\$ 13 billion in Brazil for the period 2014-2020: R\$ 1.2 billion will go to the São Caetano do Sul, SP unit, which will have its 250 thousand / year to 330 thousand units / year, besides incorporating technologies of Industry 4.0.

GM INVESTS 2

GM also inaugurated new facilities at the Joinville, SC motor plant: R\$ 1.9 billion gave origin to a new building that houses block machining lines, heads, sub-assembly of heads and assembly of engines.



GM INVESTS 3

As a result, the Santa Catarina factory quadrupled in size from 15,000 m^2 to 61,800 m^2 . Annual capacity for engines also took strong leap, from 120 thousand to 420 thousand. Four hundred new direct and indirect Jobs.

1 965 751 KM

Iveco has identified a Stralis 570S 41T NR model with exact 1 965 751 kilometers driven in Grande Porto Alegre, Rio Grande do Sul. Its engine, Cursor 13, remains in its original condition and has never been repaired.

NCAP GLOBAL CONGRESS

Global NCAP, which brings together regional vehicle safety review organizations, will hold its first world congress from 26-29 September in Delhi, India. Latin NCAP's experience will be one of the topics under discussion.

ECOSPORT FOR PCD

Ford has launched the EcoSport SE Direct 1.5 AT to serve the PCD and fleet segment, always in direct sales. Abour line 2019, R\$ 68,7 thousand. 1.5L 137 hp engine and six-speed automatic transmission.



GEELY BUYS 1

China's Geely paid \$ 9 billion for 9.7% stake in Daimler. With this, its chairman and founder, Li Shufu, became the largest individual shareholder of the German automaker, surpassing the Kwait government, which holds 6.8% of the company.

GEELY BUYS 2

In December Shufu spent another \$ 3.9 billion to become Volvo Trucks' largest shareholder. By 2010, it had already acquired Volvo Cars for \$ 1.8 billion from Ford. Geely, by the way, started producing cars only in 1997.

GEELY BUYS 3

Geely is also owner of Lotus, legendary British manufacturer of sports cars and competition; Proton, the Malaysian automaker; Terrafugia, startup developing a flying car and LEVC, manufacturer of the legendary London black cabs.

is the current number of vehicles - automobiles. light commercial vehicles, trucks and buses - in Brazil, according to data from Anfavea.

43 597 357 25 642 582

was the Brazilian fleet of motor vehicles ten years ago, also according to figures from Anfavea published in its 2018 yearbook.

"We are angry because the truth is not being told, the problem is thrown to others"

José Alberto Paiva Gouveia, president of Sincopetro, Trade Union of Petroleum Derivatives Retail in the State of São Paulo, in an interview with Radio Bandeirantes commenting on Petrobras' decision to disclose the price in Reais of gasoline and diesel charged in the refineries.

300 000

units is the projection of Argentine industry exports for 2018

is the jump that this volume would represent for 2017: last year Argentina exported 209.6 thousand units.

"Volkswagen will take measures to ensure that its research is aligned with its ethical and moral standards"

A statement from the manufacturer, alleging that monkeys and human beings were exposed to toxic gases during emissions in Germany

"There is lack of supervision of all kinds: city hall, State, ANP, everyone"

A gas station owner who did not want to identify himself on the adulterated fuel trade in the city of São Paulo, in an interview with the News program SPTV1, Rede Globo

81,1%

of the energy consumed in the world comes from fossil fuels

2,5%

comes from hydroelectric plants

0.8%

comes from wind and solar systems

Source: International Energy Agency. Data referring to 2016, the latest available.

"All the work that has been done, compared to other countries, is to take off the hat." Stefan Ketter, CEO of FCA for Latin America, about Rota 2030,