Research @ Citi Podcast, Episode 22: Can Autos Survive a Triple Threat?

Recorded: January 27, 2025

Published: February 5, 2025

Host: Elise Badoy, Head of Europe, UK, Middle East and Africa Research, Citi

Guest: Harald Hendrikse, European Autos & Auto Parts Research, Citi

Transcript:

Harald Hendrikse (00:02)

There's a significant risk here, you know, Elise, these are global companies benefiting significantly from global trade, and so if that global trade becomes more difficult, then life for the car companies becomes more difficult.

Elise Badoy (00:11)

Welcome to the Research @ Citi podcast. I'm your host, Elise Badoy, Head of Europe, UK, Middle East and Africa Research at Citi. I'm delighted to be joined today by Harald Hendrikse, who heads up our Auto and Auto Parts Research in Europe. And today we're going to look and discuss the future of the European car industry. So I'm going to start by asking Harald to set the scene. Where do you think the industry is today? And can we just take a step back, understand the structure, and then perhaps we look at how investors are positioned.

Harald Hendrikse (00:42)

Hi, yes, thanks so much for having me on, Elise. If we look at the global automotive industry, it's one of the biggest, you know, industrial manufacturing sectors in the market in certain countries with significant automotive manufacturing. You know, up to as much as 10% of the workforce can be employed in the automotive industry and related industries like, you know, dealers and things like that. So it's an important industry globally. And the key manufacturing countries really, globally, you know, firstly, U.S.; in Europe, Germany, France, to a lesser degree, Italy; Eastern Europe, countries like Slovakia. And then globally now, you know, China's become obviously an incredibly important competitor. Korea and Japan, you know, are really the big automotive manufacturing, you know, countries.

The automotive industry has historically always been reasonably cyclical. The sort of run rate of global car sales right now is in the sort of 82 million region per year. This is passenger cars, excluding commercial vehicles and trucks. But that's been very cyclical in the last five or six years. So the high, all-time high back in oh, ‘17, early ‘18 was as much as you know, 88, 89 million units. And then during COVID, when we had very specific supply-and-demand problems, you know, sales dropped as low as sort of 74 million. So, you know, we're kind of in that sort of 20% plus or minus range. And obviously, the demand for cars tends to really depend on consumer strength. So consumer confidence, employment scenarios, wage growth, things like obviously interest rates. A lot of cars are generally speaking financed, and so interest rates and credit availability can be very important drivers as well. And in long term, we have a little bit of growth in the industry basically from obviously global population growth and specifically the global population with rising income. So emerging markets, firstly, over the last 20 years, China has been super important. China has added over 20 million units to the industry over the last 20 years or so.

And then secondly, like I say, credit availability is a really, really important driver, especially in the more mature markets. If we think about the sort of global growth in demand, it's very, very limited. So apart from China, global growth in automotive demand has been only about 20, 30 basis points per year on a compound basis over the last 20 years. If we then include China, it's as much as 2.6, 2.7% growth. So that's been a really important driver to the global market. And obviously, the question now is given that China is slowing down and the growth in China has slowed down, where's the next big emerging market going to be? The most obvious one that comes to mind is probably India, and that market is starting to develop and starting to become more important. But that's really what is, you know, driving global growth. Markets like Japan, U.S. and Europe are reasonably mature.

The auto industry is an incredibly competitive industry. There's a lot of fixed costs in automotive manufacturing, and so pricing power tends to be pretty limited, and most auto manufacturers, essentially are always trying to sell one extra car each quarter because the marginal profitability of that car is very, very high. And so it tends to be very, very competitive, significant discounting, especially in the downturns during the market times, and, you know, that is deteriorating now. Pricing was very, very strong during COVID, which was a very unusual situation, but we're now going back to a situation where globally, the OEMs are discounting slightly more heavily, and pricing is again coming under pressure. So globally, you know, lots and lots of competitors over 50, 60 car companies globally, between them with probably over a hundred brands and over 2,000 individual nameplates of cars available in individual markets. And of course, as we now change technology from ICE combustion engine cars towards BEVs and PHEVs, there's an even greater level of choice for the consumer, which in many ways can be a little bit confusing for the consumer as we change from one to the other technology.

And lastly, also on the automotive market, like I said, financing availability very, very important. As a result of that, a lot of the car companies have built up their own banks. They have financial services companies inside them that can be very large. Some of the European car companies have between 150 and 250 billion euros worth of assets, financial assets on their balance sheet as they're financing their own customers. And so, again, the availability of financing in the market there is very, very important. And those financial services earnings streams have become very important to the companies involved. And then really the last thing to highlight. Elise. in terms of trying to really explain the industry where we are today is obviously the fact that partly due to new competition like Tesla and Chinese competition like BYD, and partly to do with global CO_2 concerns and therefore, much more— much tighter CO_2 emissions legislation, the technology in the industry is changing, and so having had combustion engine cars — petrol, diesel — for a very long time, obviously, the share now of electric vehicles is increasing. For the electric vehicles, we talked specifically about battery electric vehicles which are pure electric vehicles, and their penetration is up to roughly 25, 26% in China is now pure BEV. In Europe, it's about 15%, and in the US, it's between 8 and 9%. So that's becoming a much more important market, and the car companies are having to adapt and change their technology, their skill sets, the people that they employ to try and address those new capabilities and get the most efficient and most price competitive electric vehicles to market. So quick introduction there to the automotive industry. Elise, I'm sure that's bringing up a lot of questions.

Elise Badoy (05:47)

Already, yes, and a lot of acronyms to unpick and more questions. I think it's fair to say you've just highlighted that the industry has gone through a lot of change, which has been obviously also the opportunity for investors to make some choices and to put some

interesting investing bets. But there are many structural issues, so do you want to go through this? And I mean, I want to ask the question about regulation and obviously, emissions. Do you think Europe will change the EU CO_2 regulation? Is that on the table?

Harald Hendrikse (06:19)

So look, you know, as you and I both have experienced through our careers in this industry, the structural issues can be, you know, significant and can be damaging and it feels like more and more so investors are really concentrating on the long-term winners relative to the long-term losers, and structural issues in the automotive industry tend to suggest to many investors that a lot of the European car companies, the global car companies, are not in the winning category at this time, right? In terms of the structural issues, I've already highlighted to some of them, but most obviously the overall situation that's the Chinese market, that was a very, very strong growth market for 20 years. A lot of car companies, especially the German car companies — BMW, Mercedes, Porsche, Volkswagen — made a lot of money in China between 2005 and 2022-23. But that market has become much, much more competitive. The local competition has really risen both in terms of technology as well as design, as well as cost-competitiveness. The overall EV supply chain in China is incredibly competitive and so the Chinese are able to make very cheap electric vehicles. And so that level of competition has changed very, very significantly and global OEMs have lost market share in China. So that's really the first big structural issue. And so especially for the Germans who get a lot of their earnings from the Chinese market, that is an issue that investors are very concerned about and a number of OEMs had profit warnings last year with relation to those Chinese profitability levels.

The second point then obviously is, you know, written in the rest of the world, to what degree will that new China competition come into the rest of the world, right? Thirty, 40 years ago already, maybe 50 years ago now, the Japanese came and took a lot of market share in markets like Europe and the U.S. More recently, it was the Koreans and really now it's the Chinese. And so, the Chinese around the world are taking an enormous amount of share, as well as the share that they've taken in China. But the response, you know, we're in a different geopolitical world now, Elise, as you know, and the response in the U.S. is to put 100% tariffs on BEVs from China and Europe has responded recently with up to 48% tariffs on Chinese EVs as well. So U.S. and Europe really trying to keep the Chinese competition at bay at this time. But if you look at other markets, Asia ex-Japan, ex-China, the Chinese are taking a lot of share. They're taking a lot of share in Latin America, taking a lot of share in Africa. So, you know, the world environment from a competitive standpoint is changing, and of course, you know, people are concerned that the legacy car companies — Volkswagen, Renault, Stellantis — obviously at risk from that new competition.

And then two other structural concerns, as you already mentioned, the whole EV transition, the technology transition towards EV is very, very difficult. We can go in more detail there, but there's a lot of different technologies involved. And obviously, specifically in Europe driven by what I think is right to say is pretty aggressive or certainly ambitious CO_2 legislation. And so the European OEMs have to improve their CO_2 emissions by 15% in 2025, by 55% by 2030, and by 100% in 2035, i.e., the EU is essentially banning ICE cars or pure ICE cars from 2035, and in an environment where European countries have not necessarily had very attractive stimulus for consumers, the demand just hasn't been strong enough at this stage to put us on the path to be able to achieve those targets. And so a lot of people are concerned that the European OEMs cannot meet those targets and therefore, will start to face penalties under the penalty regime, which is part of the legislation, which some people have calculated could be very significant for 2025. We don't think that those penalties

are going to be quite as big. I think we always underestimate the ability of these companies to change their overall makeup of sales, to push EV product into the market, even cheap EV product into the market. There's a lot of new models coming into the market, so maybe we can talk about that a little bit more. So we don't think the penalties are going to be quite as big, but obviously the question then arises competitively, when you have a very competitive U.S. and Chinese industry, you have a completely different approach in the U.S., post the election now, which will help the competitiveness of companies like Ford and GM, then why would the EU punish the European car companies? And so it is our opinion that at least the penalty regime as part of the emission standards, will be deferred and the penalties that investors currently are scared about will probably not be paid in 2026 but maybe paid in maybe '27, '28 as we move to a multi-year compliance regime whereby the car companies will have more leeway to sometimes be a little bit behind schedule on the regulatory standards and then make up by being ahead of the standards in other years when some of the new products have come out.

And then the last thing is more of a short-term rather than a structural concern, but still a big concern for investors right now is obviously global trade and specifically global tariffs. Car companies basically have significant manufacturing bases, like I say, Germany, South Korea, Japan, very big manufacturing bases. Most car companies globally export from those manufacturing bases to the U.S. And so to the degree that the U.S. imposes any sort of import duties on those imports, the competitiveness of those cars in the U.S. will be impacted and you could assume that most global car companies will therefore lose market share in the U.S. market if they cannot change their manufacturing facilities to avoid those import duties. So, we'll see where we go with that, but there is potential for disruption there and obviously, investors are positioned, you know, to hedge themselves against that risk.

Elise Badoy (11:30)

Exactly. So obviously, you've highlighted the structural issues. I can't wait to dig a little bit deeper about the tariffs question, which obviously everyone's asking and the global trade environment. But before we do that, can we take a little step back, technical step back, for some of our listeners to explain what are battery electric vehicles vs. EVs? And, you know, you've mentioned these various new developments. Can we just understand quite quickly the strategic aspects of that?

Harald Hendrikse (11:56)

Yeah, actually, that's a good question on the strategy side. Look, just to explain the acronyms, we're very concentrated on BEV, which stands for battery electric vehicle, so that's pure electric, you know, all the power coming from the battery and driven through electric motors to the wheels. ICE is internal combustion engine. That's where we're coming from, which can be either petrol or diesel. And then in between, we have a whole range of other solutions. But the key solutions, and we're seeing strong growth in these solutions, particularly in the Chinese market in the last 12 or 18 months, which is firstly PHEV which is a plug-in hybrid vehicle, where again, you know, we have an electric drive system, but we also have an ICE system. But because we've got the electric drive, it means that we can have a smaller ICE engine with less power and therefore less fuel consumption. And so a PHEV is still very much based on a combustion engine, but much, much more efficient and much more efficient from a CO_2 perspective. And then we have this new acronym now called EREV, which is an extended range electric vehicle. And that basically is essentially an electric vehicle driven on the electrics with electric motors, but it has a very, very small combustion engine in it, which can recharge the battery whilst you're driving. And so, hugely extend the range of an electric vehicle and potentially reduce the size of the battery, which is

expensive and potentially very, very heavy and therefore improves the efficiency very significantly. And so the Chinese really at the forefront of starting to provide the market with a full range of electric options as alternatives to the ICE. We think that that's very important because a lot of people have different driving dynamics, right? If you're driving around a city in a very urban environment, you might only be doing 20, 25 kilometers each way. In which case, a small electric car, fully battery electric is very, very relevant and is a very, very cheap way to drive. But if you're driving or commuting much further distances, then that becomes more difficult. You may not have access to charging infrastructure, and so for those instances, a PHEV or even an EREV is potentially more interesting. And I think that's exactly what we're seeing in China. Not everybody is going to want to have the same solution to their problems.

Technically, we sort of split the sort of move in car technology in sort of three different segments. So it's not just the electric drive that's changing. So the whole power train is moving from a combustion engine to electric drive with electric motors, inverters, converters, charging systems. So there's a lot of new electronic manufacturing capability required there. But at the same time, the car is moving from being a sort of analog device to becoming a more digital device, and so we're going to a much more centralized power and compute system having historically had as many as anywhere between 100 and 250 ECUs distributed around the car. So a huge change in the overall control system of the car, and so the electronic architecture, you know, essentially the nerve system of the car, is changing very, very significantly and it's quite a difficult thing to do because you're having to integrate all of these different ECUs, the brain powers, you're trying to integrate a huge number of components around the car into these new electronic systems and control systems and so a very, very difficult step and something that's going to take a lot of the legacy car companies at least five, if not ten years in terms of weaving that into their existing product plans.

And then thirdly, once you've got a central compute system, you need a software system, an operating system, and a software system to run that on. And of course, again, although the car companies have had a huge amount of experience in integrating other people's software systems, they don't necessarily have an enormous amount of experience in writing code, originating code or even originating the most efficient code. And so there's another really big challenge for these companies at this time. So strategically, Elise, that was a really good part of your question. A lot of the legacy car companies have really struggled with the strategy around all of these things. Some of the big, big car companies, companies like Volkswagen, have basically had it not invented here or have had very much an in-house development strategy to try and develop all of these new technologies. And of course, looking back, that was incredibly ambitious simply because those skill sets didn't always exist in those companies at that time. So the companies have made an enormous amount of progress. They're producing very capable BEVs at this time. But even now, we're starting to still see developments where people are sharing things like the electronic architecture. We think over time, people are going to start sharing the BEV modules and certainly we don't need 50, 60 different operating system software in the automotive industry either. So we think again, going forward is going to become much more of a sharing model.

So we're starting to see a little bit the strategic shift in the industry where a lot of car companies were all developing their own in-house technologies, and then going forward, we think that that's going to be much more shared. So you've seen European OEMs already acquiring stakes in China OEMs, for example, to get, you know, hold of some of the Chinese technologies and the Chinese development timelines and the supply chains there. Volkswagen signed up with a company called Rivian to try and get hold of their electric architecture for U.S. and European markets. And more recently, you know, we've even seen

some M&A where some of the Japanese companies are now merging to try and reduce their cost base and to try and stay competitive. So the strategy is really emerging, Elise, and I think we're going to see much more efficient strategies going forward, where the car companies will share a lot more of their technologies and reduce the cost of these new technologies.

Elise Badoy (16:56)

Really fascinating overview. And so now elevating ourself a little bit on the world scene. We said we would talk about tariffs, but I'd like to put it in that context. Obviously, thinking about the global economy, Citi's economists are definitely noticing that we're moving the world order, so to speak, from multilateralism to essentially a system dominated by more transactional international relations and essentially more bilateral type of relationships. And how does that impact, obviously, the space? How should we think about it in that context?

Harald Hendrikse (17:30)

Yeah, thanks, Elise. I mean, look, I mean this is one of the biggest global manufacturing industries, as I highlighted at the beginning. You know, this is a very large export-import, you know, business globally. And so from that perspective, more trade barriers, trade tariffs, making it more difficult for global trade is a problem for the automotive industry, and clearly investors are positioned as such, is a rather obvious conclusion. If you look at the German OEMs — BMW, Mercedes, Audi — export, I don't know, in the region of 200,000 cars from Germany to the U.S. And they will say quite rightly that they're producing a lot of, for example, SUVs in the U.S. that they export from the U.S. as well. So, you know, they're not necessarily huge net importers-exporters, but on a gross basis, which is often how tariffs can be calculated, they are still big exporters from Europe. Porsche, basically, their global production is in Germany. So again, you know, a big export company in that respect. So investors are very scared of this development. They're very scared for the automotive industry in the future. We're a little bit less scared, partly because a lot of automotive manufacturing is already local-for-local. You know, for example, particularly in the Chinese market, most of the OEMs that are successful in the Chinese market tend to produce almost everything in the Chinese market by themselves. For the mass manufacturers, so companies like Volkswagen, Stellantis, Renault, making, generally speaking, cheaper cars and cheaper brands. Again, they tend to be more local-for-local because local consumers want product price for their market at, in some cases, much more reasonable prices. And so you have to develop your product range and your manufacturing locally to address those specific markets. So to the degree that it's local-for-local, there isn't going to be that much change. For some of the premium OEMs — BMW, Mercedes — they do have a sort of more localized manufacturing base, like I say, U.S., Germany, China, and in that respect, barriers will have some impact on the industry and may well result in some reorganization of the industry where those countries where maybe tariffs are going up will receive a little bit more investment, and the OEMs will have to think about whether they can grow, for example, their U.S. footprint to try and stay relevant and maintain their market shares in the U.S. market, but that will be a decision depending on the exact tariffs that are imposed.

The good news we think is that firstly, the risk of these tariffs to the sector is pretty much fully priced in. We think a lot of people are negatively positioned in the sector specifically for these tariff risks. And secondly, we think the absolute impact, assuming no 50% type tariffs, the absolute impact on earnings, at least over the next 12, 18, 24 months, we think is going to be a little bit less than maybe what some people are currently estimating. So there's a significant risk here, you know, Elise, these are global companies benefiting significantly

from global trade, and so if that global trade becomes more difficult, then life for the car companies becomes more difficult.

Elise Badoy (19:58)

Well, I think we are running out of time, so we will have to leave there. I have to thank you very much, Harald, for a fascinating overview. This episode of Research @ Citi was recorded on Monday, January 27, 2025. I'm your host, Elise Badoy. And join us next time as we discuss key themes and debate ahead of our Global Industrials Conference in Miami.

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