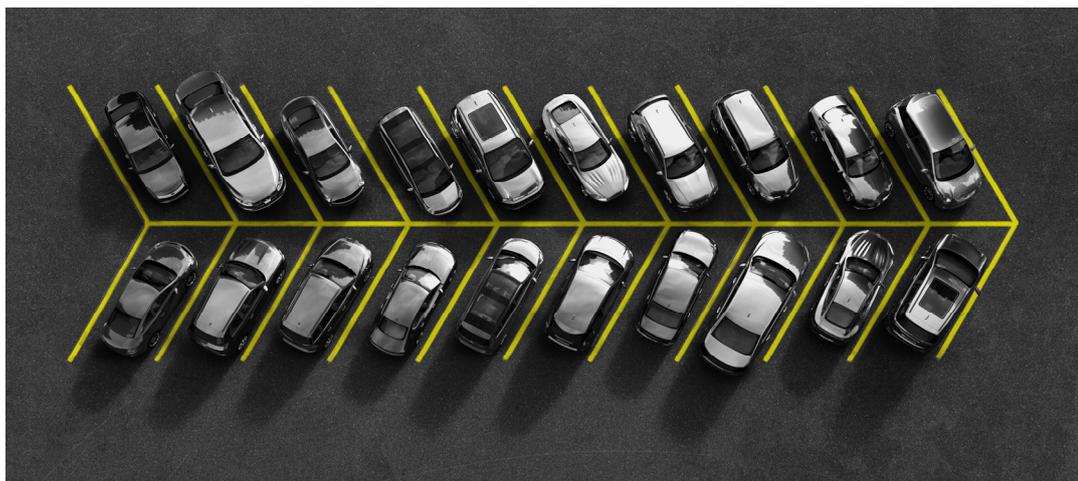


Industry Top Trends 2019

Autos

November 14, 2018



Authors

Vittoria Ferraris
Milan
+39 02 72 111 207
vittoria.ferraris
@spglobal.com

Nishit Madlani
New York
+1 212 438 4070
nishit.madlani
@spglobal.com

Katsuyuki Nakai
Tokyo
+81 3 4550 8748
nakai.katsuyuki
@spglobal.com

Key Takeaways

- **Ratings Outlook:** Rating trends across the sector remain broadly stable, despite increasing downside risks linked to profitability headwinds from strong competition and regulatory costs, trade conflict between U.S. and China, the increased likelihood of a disruptive Brexit, and weaker-than-expected automotive demand in China and other emerging markets. Ratings stability reflects some degree of headroom in the ratings of both original equipment manufacturers (OEMs) and auto suppliers due to low adjusted debt, ongoing cost reductions, and favorable product mix.
- **Forecasts:** The dilutive impact on OEM margins linked to the gradual replacement of profitable diesel by electrified powertrains is likely to emerge after 2020. Before that time we expect relatively steady credit metrics at the OEMs despite increasing research and development (R&D) spending and capital expenditures (capex) to comply with environmental regulations and to protect their competitive position versus peers in the supply of components for a wide range of electrification options. Additional cost pressure at the OEM will be transferred to auto suppliers in the form of higher R&D and capex, so resilience of margins and free cash flows will depend on product and customer diversification.
- **Assumptions:** Global auto sales increase by about 1%-2% in 2019 and 2020, consistent with our projections of GDP growth just below 2% in Europe and North America, 5.5% in the Asia-Pacific region, and in the 2%-3% range in Latin America.
- **Risks:** Persistently high pressure on profitability from price competition, high commodity costs, increasing R&D expenses, and difficulties in passing trade tariffs along to consumers. Escalating trade wars, a disruptive Brexit, and a more permanent weakness of retail sales in China and other emerging markets will add further downside pressure to our base-case.
- **Industry Trends:** With the decline of diesel, the electrification of powertrains remains the main response to widespread tightening of environmental regulation. In the absence of government policies to incentivize sales and investments in infrastructure, cost of ownership impedes large-scale demand for battery vehicles. Plug-in hybrid technologies will play an important role in the transition to electric mobility and will be key to comply with environmental standards over the next five years. Compared with electrification, autonomous driving is not yet an established trend.

Additional Contacts

Lawrence Orłowski
Anna Stegert
Eve Seiltgens
Margaux Pery
Amano Machiko
Leo Hu

Ratings trends and outlook

Global Autos

Chart 1

Ratings distribution

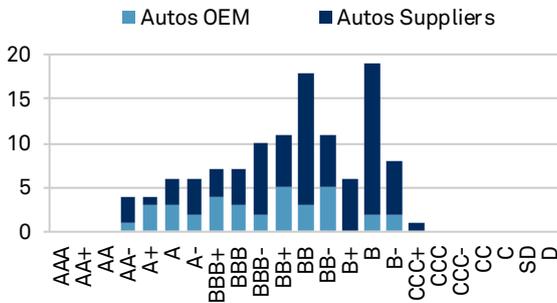


Chart 2

Ratings distribution by region

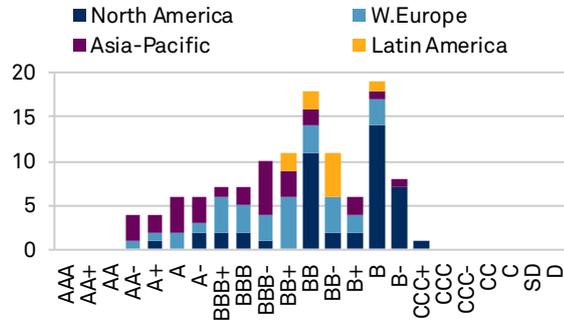


Chart 3

Ratings outlooks

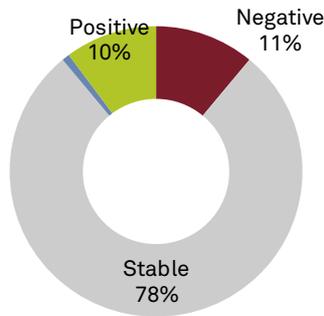


Chart 4

Ratings outlooks by region

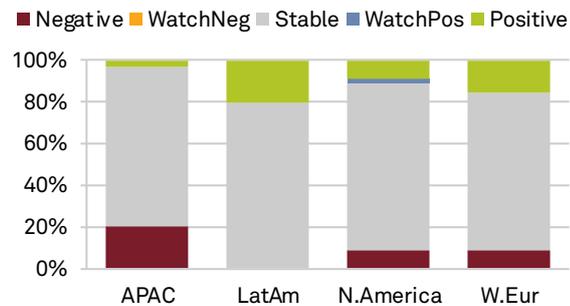


Chart 5

Ratings outlook net bias

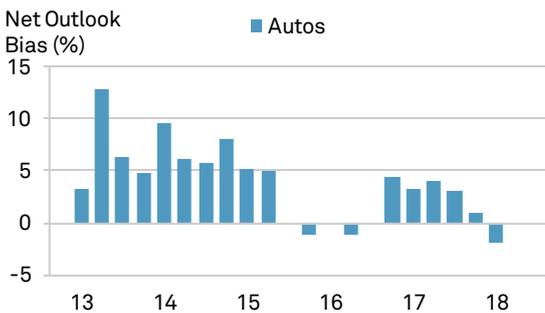
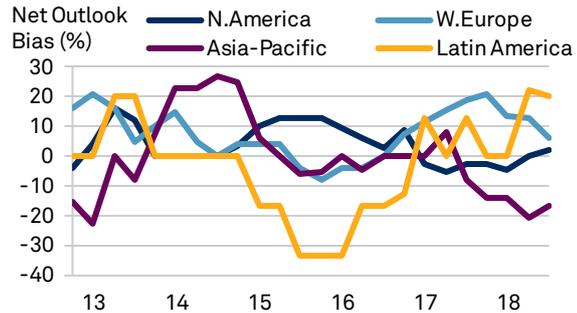


Chart 6

Ratings net outlook bias by region



Source: S&P Global Ratings. Ratings data measured quarterly with last shown quarter ending September 30, 2018

Despite weakening in market fundamentals for the industry, the global rating outlook remains stable for the global automotive sector. The deteriorating outlook bias, however, reflects increasing headwinds linked to earnings pressure from strong competition, higher commodity costs, the impact of trade tariffs, and unexpected deceleration of the Chinese market and the increasing likelihood of a disruptive Brexit. This trend could be exacerbated if the current deterioration in consumer sentiment in China proved more permanent than we expect at this stage, which is not yet reflected in our base case that assumes no downwards revisions to our GDP forecasts for the region (staying at an expected 6.5% for 2019 and 6.3% in 2020, compared with 6.9% in 2017). Considering the

importance of the Chinese market for all global manufacturers (approximately one third of the global annual light vehicle sales) and low growth expectations for Europe and the NAFTA region, a more permanent deterioration of local market conditions would likely change the picture for the whole industry. This is not our expectation currently.

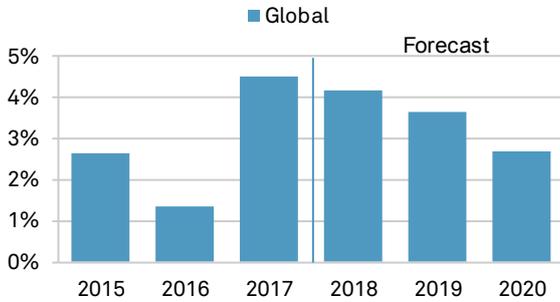
Overall, rating stability also characterizes the auto supplier industry. Still, suppliers could be impacted by higher cost pressure at OEMs beyond such temporary issues as production delays in Europe posed by the introduction of the new standard for fuel economy and emissions (WLTP--Worldwide Harmonized Light Vehicle Test Procedure). We also believe ratings, when compared with OEMs, are more exposed to unpredictable impact on their financial structure of debt-funded mergers and acquisitions (M&A) and corporate restructuring. The nature and the impact of unpredictable risk is not necessarily captured in the specific forecast for the individual suppliers.

Industry forecasts

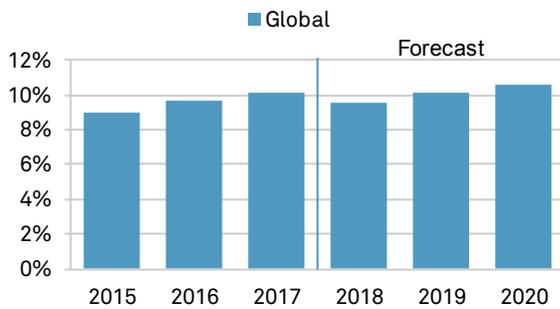
Auto OEMs

Chart 7

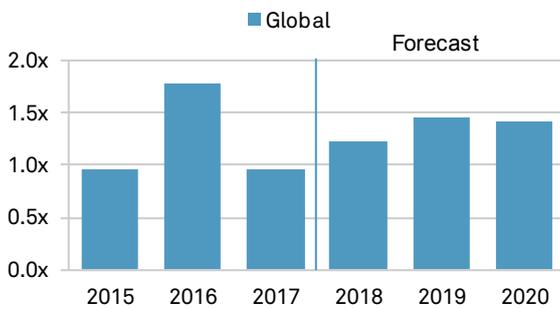
Revenue growth (local currency)



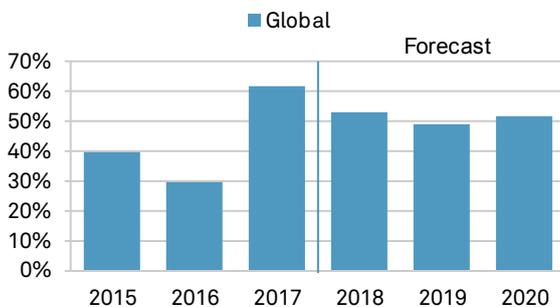
EBITDA margin (adjusted)



Debt / EBITDA (median, adjusted)



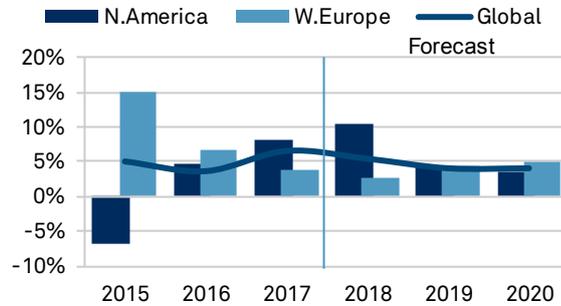
FFO / Debt (median, adjusted)



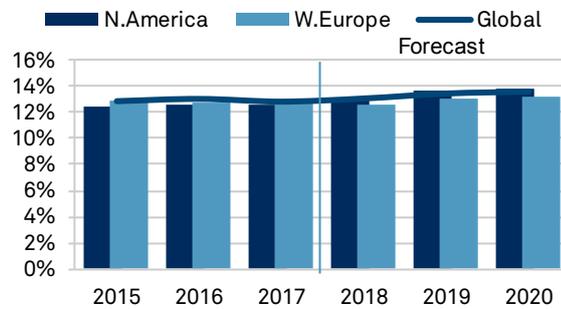
Auto Suppliers

Chart 8

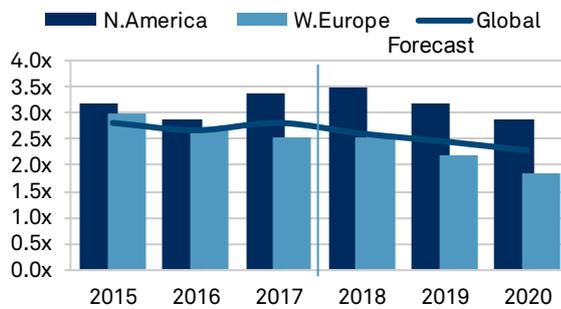
Revenue growth (local currency)



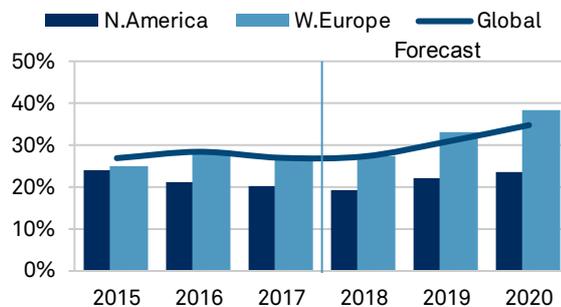
EBITDA margin (adjusted)



Debt / EBITDA (median, adjusted)



FFO / Debt (median, adjusted)



Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. OEMs--Original equipment manufacturers. FFO--Funds from operations.

Auto OEMS

We expect largely steady credit metrics for global OEMs supported slowing growth of revenues and adjusted EBITDA margins in the 9%-10% range over 2018-2020. We project nonrecurring costs in 2018 to weigh on margins, as a result mainly of tightening environmental regulations in specific regions, namely WLTP in Europe, coupled with some market distortion caused by U.S.-China tariffs. We believe margins in 2019 and 2020 will be supported by ongoing cost reduction measures by OEMs deriving mainly from the reduction of platforms and the optimization of the mix. Offsetting factors will include inflexible R&D spending (we estimate at 10-11% of automotive revenues), commodity inflation, pricing pressures in major markets such as U.S. and China, foreign exchange (FX) headwinds and trade tariffs. Our view on top line growth and margins is consistent with an average industry adjusted funds from operations (FFO)/debt hovering around 50% and a range of adjusted net debt/EBITDA hovering around 1-1.5x. Aggregated credit metrics are updated to Nov. 7 and reflect our latest forecast based on global OEMs guidance communicated with their third-quarter 2018 results. However, they don't capture evolving risks around a slowdown in demand from China and a potential of escalating trade tensions that could cause a wider weakening of industry conditions. We also do not include exceptional and/or unpredictable developments such as litigation issues (beyond some specific cases), potential impact from acquisitions or spin-offs and disposals, and additional trade tariffs.

Auto Suppliers

We also expect broadly stable credit metrics for auto suppliers over 2018- 2020. We project low-single-digit growth of revenues in the next three years in line with automakers and adjusted EBITDA margins around 13% supported by the diversification of clients, products, and regional markets. Significant R&D is likely to weigh on margins. This explains our view of steady credit metrics, namely adjusted net debt/EBITDA in the 2.0x-2.5x range and adjusted FFO/debt hovering at around 30%.

In Europe, the resilience of ratings to profit warnings by suppliers of the caliber of Continental, Michelin, Valeo, and Schaeffler confirms the headroom of credit metrics under the current ratings. We see this headroom partly absorbed by a deterioration in the industry global growth scenario, mainly linked to the slowdown of the sizeable Chinese market. Diminished financial flexibility could be an issue in the case of large debt-funded acquisitions, which could trigger rating transition. The drive to reposition the product offering continues among auto suppliers in Europe. The announced spin-off of Continental's powertrain business, the spin-off of Garrett Motion from Honeywell, and the spin-off of Autoliv's active security business all respond to the need to increase investments to manage a secular transition of the automotive industry towards sustainable mobility and higher safety standards.

In North America, we are assuming fairly stable metrics from 2018 to 2020. We see median EBITDA margins trending in the range of 12% to 14%, debt to EBITDA averaging just above 3.0x, and free operating cash flow (FOCF) to debt in the low teens. The most likely risks to our current forecast would be falling consumer confidence due to rising interest rates or the inflationary impact of an escalating trade tensions with China. Other risks to current forecasts include increased acquisition activity that pushes up debt leverage and makes more likely operational missteps due to integration issues.

Key assumptions

Auto OEMS

1. Lower growth of light vehicle (LV) sales in the industry's main markets

We toned down our expectations for LV sales in the industry's main markets, namely in Europe and in China for 2019-2020 and, at the same time, we maintain our view of a relatively flattish trend for the U.S. market LV sales despite better-than-expected performance in 2018 to date.

2. Downside risk building on margins

Increasing headwinds in the form of higher pricing competition, foreign exchange volatility, consequences from trade tariffs, environmental costs, and restructuring costs will keep margins under pressure, making it challenging for OEMs to get closer to their business plan ambitions over 2019-2020.

3. Inflexible capex and R&D expenditure

New model introduction in 2019-2020 will be around new electrification features and connectivity options. We believe this to be a preliminary stage in the transition to electric mobility and we see very limited flexibility to curtail R&D and capital expenditure should we see a weakening of demand.

Lower growth of light vehicle sales in the industry's main markets

We now expect LV sales in the 1%-2% range in 2019 and 2020 in Europe in view of an economic environment that returns to its long-term GDP growth potential below 2% after overperforming in 2017. The end of the expansionary quantitative easing (QE) cycle, which we expect to happen in 2019, coupled with Brexit-related uncertainties drives our view of softer markets in Europe, driven in 2018 by Germany, France, and Spain.

Following recent weak passenger vehicle sales (1.2% year over year for the first three quarters of 2018--Source: LMC) we have also reduced our forecast for **Chinese** LV sales to merely 1%-2% in 2019, and 3%-4% for 2020, which represents a significant deceleration compared to the historic double-digit growth in this market. We link this largely to a lower perceived purchasing power in the retail sector owing to a tight liquidity environment and weak equity markets, reflecting increasing uncertainties in China's macro economy (trade war, for example). We note that, as evidenced in 2017, the Chinese government could consider measures to boost sales, as a means to renew the auto population towards cleaner environmental standards. However, absent of a major government stimulus plan, such low growth could lead to sustained profitability pressure for most domestic and international OEMs operating in China, given industrywide passenger vehicle (PV) production capacity developed locally. It is unclear to us whether the premium segment in China might be less affected by the liquidity crunch as suggested by the rumored cut of taxes on vehicles up to 1.6L only. Third-quarter results by Volvo cars do support this view while performance of JLR/Tata does not. In our view, auto upgrade demand coupled with the government's ambitious environmental targets--especially in higher tier cities--should support volumes over the next 12-24 months.

In **Europe**, the market outperformed our sales growth expectation in the first half of 2018 and volumes were up for the bulk of the automakers. The introduction of the new WLTP environment standards effective Sept. 1 distorted the market in Europe from August. Because uncertified vehicles would only be up for sale for a small percentage, dealers would be ready to offer high discounts to cut inventories. Volumes were thus very high in August and declined in September. The impact of WLTP introduction was highest for VW

and Daimler and to a lesser extent for BMW, while other automakers like PSA and Volvo did not suffer any major volatility in units sold. As high inventories built in the meantime will have to be watered down, affected OEMs might suffer from pricing pressure in the fourth quarter this year. Overall WLTP related costs will be a drag to EBITDA margin in 2018, which we expect to recover in 2019. We have not toned down our sales forecast in Europe where we expect a very moderate growth of light vehicles 1%-2%.

Our forecasts for Europe do not yet reflect the impact of a disruptive Brexit on the European automotive industry. The U.K. market represents a little less than 20% of the Western European market, and a little less than 15% of sales in Europe. U.K. was down 5.4% in 2017 and again down 7.5% in September 2018 YTD (Source: LMC), indicating a selling rate at around 2.5 million vehicles for the whole year. In a scenario of a disruptive Brexit, the impact on consumer confidence for the U.K. auto market is quite uncertain, but we estimate that a 15% decline of the U.K. market would, all other things being equal, likely result in flat markets in Europe in 2019.

In the **U.S.**, after approaching 17 million units in 2018, S&P Global Ratings expects LV sales to decline by about 1% year over year in 2019 before stabilizing in the 16.5 million-16.9 million unit range for 2020 and beyond. Despite an increasing supply of late-model used vehicles and rising new-vehicle prices, we expect sales to decline only marginally in 2019 before stabilizing at a relatively healthy annual rate of 16.8 million-16.9 million units by 2020. The slight contraction will occur because of the reduced availability of attractive auto credit, falling used-car prices, rising interest rates, and less favorable lease options. We think increased rates could cause some aggressive lenders to attempt to further increase the length of their auto loans to maintain affordability for their customers. The downside risk to this dynamic is that it could prevent many buyers from re-entering the new-car market for several years as vehicle owners who would usually trade in for a new model could end up owing more than the car is worth.

We believe an annual sales rate of around 16.5 million could represent a new normal for the industry beyond 2020 as demand conditions become more challenging. This level is still about 11% higher than the average annual sales of 14.8 million units in the U.S. between 1980 and 2017. In our view, low (albeit rising) gas prices, significant new launches, the improved fuel efficiency of trucks, and steady incentives will support automakers' current product mix in favor of trucks (nearly 69% of sales so far in 2018) over passenger cars.

We believe competition in the highly profitable pickup segment in the U.S. will intensify. Our assumption of a roughly flat housing market in 2019-2020 will likely lead to stabilizing demand for pick-up trucks, compared with the high-single-digit growth seen in recent years.

Overall, we don't expect the dip in U.S. auto sales in 2019-2020 to affect our ratings on the automakers because our forecast sales levels are still healthy enough for most automakers and suppliers to operate at historically high EBITDA margins, especially given their elevated profits on trucks. The recent agreement on the proposed U.S.-Mexico-Canada trade agreement will also reduce uncertainty on longer-term supply chain sourcing decisions for the industry.

Downside risk building up on margins

Despite generally strong first-half 2018 results and more supportive market conditions compared to our current outlook for the sector, we observed pressure on OEMs' operating margins in the first half when focusing strictly on the automotive business (net of financial business and trucks).

Since then the combination of tariffs on the U.S.-China trade, FX volatility, the underperformance in some emerging markets like in Turkey, Argentina, and Iran have clouded market prospects for the entire industry and resulted in a revision of earnings expectations by a number of OEMs (including Fiat Chrysler, BMW, and Daimler) on for 2018. We expect that a shift to electric vehicle (EV) sales will not materially impact margins in 2019-2020 as electrification options only now start to extend to the OEMs product line-up.

In **Europe** the hurdles generated by the transition to WLTP added downside pressure on profitability to a limited number of OEMs, namely VW, Daimler, and to a lesser extent BMW and FCA. We thus incorporate additional nonrecurring costs on expected EBITDA in 2018 for these issuers. Despite these weakness, we do not expect EBITDA margins for most OEMs to markedly fall below our identified 9%-10% range in 2019-2020 due to ongoing efforts in rationalizing costs mainly driven by the transition to a lower number of platforms supporting a variety of models and by our expectation of a substantial review and potential termination of models no longer enjoying strong market appeal. To this end we note a structural shift of consumer preferences out of traditional compact cars into crossover utility vehicles (CUVs) and sports utility vehicles (SUVs), which could support the refocusing of products on these body styles, along with higher margins per vehicle.

In the **U.S.** market, given competitive pressure, weakening consumer affordability, and softening demand, we do not assume a meaningful uptick in North American EBIT margins for Ford and GM despite refreshed truck portfolios following recent and upcoming launches. For both automakers, we incorporate modest declines in automakers' EBIT margins in our forecast for 2019 and 2020 to account for higher expected commodity prices (mainly for steel), large engineering expenses for developing autonomous and electrification-related technologies; and elevated pricing pressure in several key markets (which may be partly offset by improved cost efficiencies).

Tightening emissions standards and increasing competition create inflexible capex and R&D expenses

Based on 2017 and 2018 data we estimate global industry average gross R&D and capex to absorb currently 10%-11% of automotive revenues. We expect little flexibility for OEMs to curtail R&D cost and investments over 2019-2020. We believe automakers cannot delay introduction of models with enhanced electrification options, better connectivity, and increasing autonomous driving features without undermining their competitiveness versus peers, and facing challenging environmental regulations in Europe and China particularly. Because the share of diesel fueled cars continues to decline in Europe (now below 40%) we believe those automakers not yet able to offer alternatives beyond petrol might be disadvantaged to those peers able to supply mild hybrids and plug-in hybrids. The declining diesel share is an issue for automakers who need to reduce CO2 emissions and comply with stringent 2021 environmental targets (95g/km).

Table 1

Average vehicle CO₂ emissions by manufacturer

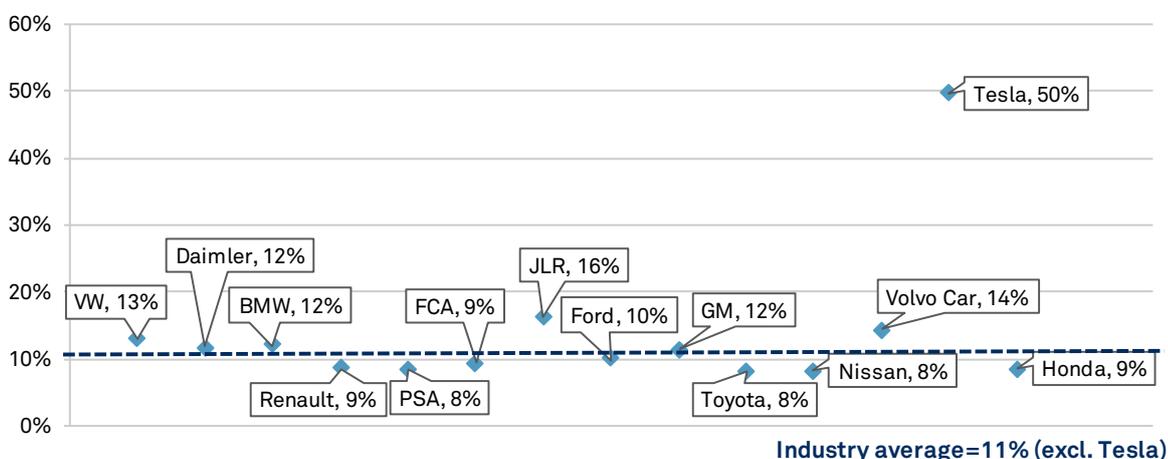
Average CO ₂ emissions (g/km)	2017	2016	2015
Peugeot	105.5	101.9	103.5
Citroen	105.5	103.3	105.6
Toyota	101.2	104.0	107.6
Renault	106.6	105.6	105.9
Skoda	115.9	111.8	115.4
Nissan	115.9	115.0	114.1
SEAT	118.1	115.8	116.7
FIAT	115.6	116.0	117.6
Mini	115.7	116.4	117.0
Dacia	116.9	117.6	121.9
Volkswagen	119.6	117.7	117.8
Ford	120.8	120.1	118.0
VOLVO	124.7	122.0	122.8
OPEL/Vauxhall	123.4	122.4	126.3
BMW	121.9	123.2	128.0
KIA	120.0	124.5	127.7
AUDI	124.3	124.7	127.3
Hyundai	122.0	124.8	127.4
Mercedes	129.1	127.5	128.1
Mazda	131.2	127.7	127.5
Average	122.4	117.1	118.8

Source: Jato (Volume weighted)

As the offer of electrified vehicles remains limited, consumers have replaced diesel with higher emitting petrol vehicles over 2017 and 2018. At the same time, SUVs have catalyzed consumer preferences to the detriment of compact cars, adding further pressure on OEMs' capacity to comply with 2021 emission targets. While battery vehicles are not yet a viable option for neither drivers (cost of ownership is too high) nor producers (too high production costs), we believe plug-in hybrid (PHV) technologies, characterized by average emissions below 50g/km, will be key to managing CO₂ emissions towards the target of 95g/km by 2021.

Chart 9

OEMs' R&D & Capex (% of Automotive Revenues)



Source: 2017 Annual reports

Auto Suppliers

1. Modest light vehicle sales in the industry's main markets

Our assumptions for LV sales, a key determinant of the auto supplier sales, have moderated for the United States, Europe, and China.

2. Headroom in credit metrics to absorb temporary setbacks and downturns

Given the cyclical nature of the auto industry, having headroom in the credit metrics is key for suppliers in being able to adapt to a range of market challenges such as operational missteps, loss of customers, or recessionary downturns.

3. Stronger M&A and corporate restructuring risk

We expect stronger ratings volatility linked to unpredictable scenarios involving M&A and corporate restructuring for auto suppliers.

Lower growth of light vehicle sales in the industry's main markets

LV sales are a key determinant of OEM-exposed auto supplier sales and therefore underpin our forecast assumptions. While overall sales trends are slowing, we do not expect credit ratios to be materially affected. For the United States we see LV sales declining about 1% in 2018 and 2019. For Europe we expect LV sales to increase 1% to 2% in 2018 and 2019. And for China we forecast LV sales to be flat to up 1% in 2018 and 1% to 2% in 2019. Slower light vehicle growth reduces flexibility for auto suppliers but that in itself should not impact ratings, all other things being equal, as evidenced by profit warnings from Continental, Michelin, Valeo, and Schaeffler in Europe.

Headroom in credit metrics to absorb temporary setback and downturns

While the acceleration of electrification put pressure on costs and weaker deliveries in Europe and China hit top line growth in 2018, the headroom built into the credit metrics still supports rating stability for large global suppliers like Continental, Michelin, Valeo, and Schaeffler. This is because free cash flow is lower but still significantly positive, and we expect credit metrics to remain in line with these expectations. Financial policy will be critical, as M&A could substantially reduce the headroom. Generally large listed auto suppliers have debt and liquidity levels to provide sufficient cushion in line with their current ratings. On the other hand, the private, sponsor-owned suppliers tend to have significant higher debt leverage and make market setbacks more problematic in terms of credit ratings. Moreover, smaller and more concentrated suppliers might suffer from higher competition and less favorable funding conditions when compared to the past.

Despite bleaker market prospects, new electrified powertrains and enhanced connectivity continue to represent a business opportunity for auto suppliers. The increasing electrification of powertrains and drivelines, could therefore result in more content per vehicle for suppliers, at least until fully electric vehicles become mainstream. Even then, obsolete auto parts like gearboxes, tanks, and exhaust pipes will eventually be replaced by battery cooling systems, inverters, and sophisticated power electronic solution.

Suppliers have a key role in the innovation and production of value-added components to reduce new carbon dioxide emission and improve fuel economy standards. For example, products such as turbochargers or direct fuel injection, both of which improve internal combustion engine (ICE) efficiency. Components such as turbochargers and power electronics solutions will experience increased demand as vehicle electrification accelerates. Other suppliers that could benefit from the secular transformation of the automotive industry include manufacturers and designers of systems that provide the

critical electrical and electronic backbone supporting increased vehicle electrification, reduced emissions, and higher fuel economy through weight savings.

Stronger M&A and corporate restructuring risk

From a rating perspective, the resilience of auto suppliers to deteriorating market conditions is a function of the headroom built in their credit metrics. M&A and corporate restructuring, based on what we observed so far in 2018, have reduced this headroom. At the same time, diversifying the product mix, opening new markets, and acquiring new technologies remain the suppliers' main strategic goals to preserve their competitive advantage in more competitive markets, and M&A--or less financially impactful partnerships--remain essential in their strategies. Still, large and complex acquisitions, for example, may be difficult to integrate smoothly and introduce significant risk despite existing credit metric headroom.

Key risks and opportunities

Auto OEMS

1. Escalation of trade tensions between the U.S. and Europe/China

A potential extension of trade tariffs on Europe/China-sourced vehicles earmarked for the U.S. market would be an additional concern for the industry. In view of the high competitiveness of the U.S. market evidenced by ever-increasing incentives, we believe OEMs would have a hard time passing through the increased costs from the tariffs without dampening demand.

2. Disruptive Brexit

The potential of a disruptive Brexit scenario could have disruptive effects on supply chain, halt production, and hold back recovery prospects for the U.K. markets.

3. A sharp downturn in the global economy in 2019

A sharp economic downturn in China could reduce our growth outlook.

Escalation of trade tensions between the U.S. and Europe/China

The trade war between the U.S. and China, focused on autos, is already weighing on the earnings of carmakers globally. Fiat Chrysler and Daimler already announced they would miss their earnings targets for 2018.

The potential 25% tariff on cars sourced in the EU and imported into the U.S. would hurt all automakers, but the severity depends on their production flexibility and sourcing options. The escalating trade tensions add to the concerns about the industry's profitability and earnings linked to the transition to electric mobility, full connectivity of cars, and autonomous driving. In Europe we believe Jaguar Land Rover (JLR), and to a lesser extent Volvo (which is, however, building a plant in the U.S.) would be less resilient to the introduction of trade tariffs for the U.S. market.

For Ford and GM we do not incorporate a large impact given their limited degree of exports and high reliance on joint-ventures that produce locally in China. Though we expect to see more localization, especially for Ford's Lincoln brand, the direct impact of tariffs is not likely to be material. However, the indirect effect of trade wars in general, namely through commodity price increases has already led to significant headwinds for both companies. We expect this could persist in 2019.

For Tesla, we anticipate tariffs from China to lead to a significant cost disadvantage versus local OEMs.

Also, a rise in tariffs on automobile and auto component imports into the U.S. would have an inevitable negative impact on automakers in Japan/Korea. For example, we estimate Toyota Motor Corp.'s ratio of local production to total unit sales in the U.S. is over 50% and Nissan Motor Co. Ltd.'s is over 60%. Even if these automakers produce some vehicles in the U.S., they may import key components such as engines and transmissions. Meanwhile, Honda Motor Co. Ltd. has localized production in the U.S. and lifted the ratio of its local production to total car sales to about 70%. This leads us to expect higher U.S. tariffs will affect Honda less than Toyota and Nissan

No-deal Brexit scenario

We observe little progress on industry-specific negotiations around Brexit. Under WTO rules, a 10% tariff would be applied to all cars traded between the EU and the U.K. Extra cost generated by this tariff would be either passed on to the consumers or absorbed by automakers.

The uncertainty linked to the outcome of negotiations is already weighing on costs as automakers and suppliers start to stockpile parts to prevent a major disruption in production. Automakers with solid U.K. based production or assembly footprint need to make alternative plans for their logistics, which could trigger additional investments. At the same time the prospects of the U.K. light vehicle market remain weak, with sales down 7.5% in the first nine months of 2018 (after declining 5.4% in 2017 already).

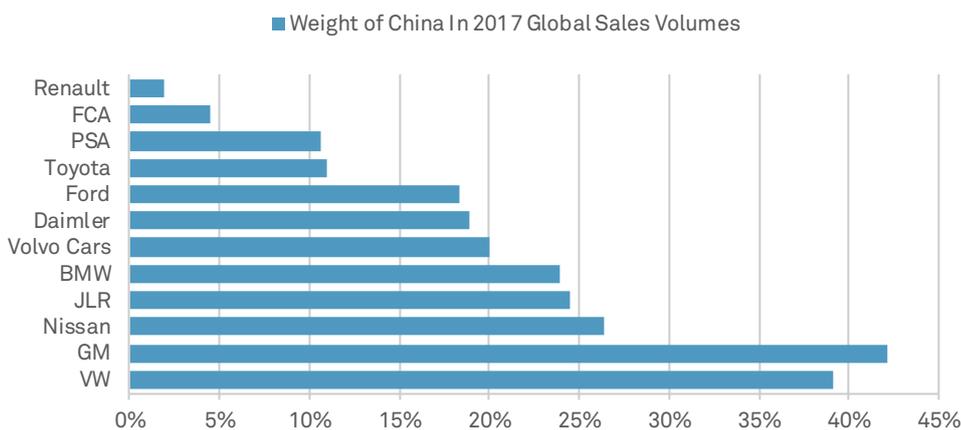
The consequence of a disruptive Brexit could reach far beyond the weakness of the U.K. market, as a no-deal scenario would necessarily call for a major rethinking of production/assembly and sourcing logistics for both OEMs and auto suppliers, resulting in incremental investments. In the meantime, two pre-eminent auto suppliers, namely Schaeffler and Michelin, announced their intention to close plants in the UK.

A sharp downturn in the global economy in 2019

A sharp downturn of the global economy is currently not factored in our base case for OEMs. Our current view of LV sales is driven by stability in the macroeconomic environment and by interest rates, which will increase from very low levels in the U.S. and Europe. With this in mind, the deceleration of the Chinese market is a risk, although we deem the present weakness there as temporary, linked to the Chinese government’s plan to control the growth of indebtedness in the country. We do not exclude a scenario in which the Chinese government could reinstate incentives to support the market, which was the case in 2017, because replacement of the vehicle population is key for supporting the environmental ambitions of the country.

Chart 10

Weight of China In 2017 Global Sales Volumes



Source: S&P Global Ratings

In other regions the recessionary risk appears low. For the U.S., per our economists, the current odds of a recession remain at 10%-15%, though the risk of a trade war pushes it closer to the higher end of that range. In this pessimistic scenario, business confidence sours as trade disputes and geopolitical rancor intensify. The current U.S.-China trade war could escalate, with both sides instituting a 25% tariff on each other's goods. Under this scenario, U.S. GDP growth declines in the fourth quarter of 2019 and the first quarter

of 2020, effectively placing the economy in recession (when viewed under the broad definition of two quarters of declining GDP).

We estimate that U.S. LV sales will decline by 3%-6% year-over-year under this scenario, dipping toward 16.1 million-16.3 million units in 2019-2020. We also assume that automakers will pass on, at most, 50% of their increased costs to consumers as they look to avoid a sharp decline in volumes. This could add meaningful downside pressure to the EBIT margin targets of most automakers over the next few years.

Auto Suppliers

1. Rising R&D costs

We believe that the risk of increasing R&D costs is material for auto suppliers, now that the industry is fully committed to deliver new products and explore new technologies that reduce emissions, increase fuel efficiency, and lower the cost of electric battery vehicles.

2. Adapting to logistic changes and product rationalization at OEMs

Reconfiguring the supply chain to adapt to more localized production, coupled with the need to align product offerings to changing consumer preferences, could generate unexpected costs or loss of future revenue for the auto supplier industry depending on their flexibility and product mix.

3. Consolidation expected in the industry

We expect consolidation among auto suppliers as a result of softer market conditions, the need to maintain bargaining power vis-à-vis their customer, and challenges linked to the transition to full electric mobility.

Rising R&D costs

The risk of rising R&D costs can be material for auto suppliers who intend to protect their competitive advantage with their clients, as partially demonstrated by auto suppliers Continental and Valeo in their profit warning on 2018 earnings. More specifically, the challenge of complying with tightening environmental standards while market preferences increasingly shun diesel is an issue for both OEMs and suppliers. Auto suppliers need to develop the products now in order to comply with emissions regulations that will be in effect over the next two to three years. At the same time, suppliers are investing in the electric vehicle parts such as inverters and electric motors. Moreover, to prepare for the future deployment of autonomous vehicles, large suppliers such as Aptiv and Bosch are creating the key components and software to enable these vehicle platforms. But between making R&D investments now and seeing potential returns on these investments at an undefined later date, EBITDA margins could come under pressure.

To mitigate this possibility, many suppliers are entering partnerships to share development costs of new products. This was the case when Valeo partnered with Siemens in 2016 to develop high voltage components and systems for hybrid and electric vehicles, but expected return on investments only four years later in 2020. Similarly, French auto supplier Faurecia and German auto supplier ZF have joined forces to work on interiors for autonomous cars that are not expected to be on the road for at least a couple of years.

Adapting to logistic changes and product rationalization at OEMs

In light of escalating trade tensions, the cost of vehicles will rise for consumers. To what extent these higher costs are passed along to the consumer will in part depend on the ability of the supply chain to reconfigure itself efficiently. As the result of OEMs adapting to emerging risks linked to reconfigure the supply chain of OEMs and to changing market preferences, suppliers will be required to optimize their manufacturing footprint and fine-tune their product launches in order to minimize light vehicle price increases.

Consolidation expected in the industry

In the aftermarket space in North America there are many smaller firms that make a variety of auto parts, including starters, alternators, brake pads, air filters, fuel pumps, and windshield wipers. As the auto parts aftermarket is now dominated by a handful of big box retailers, there is a need for smaller manufacturers to improve bargaining power. For instance, Tenneco's consolidation of Federal-Mogul and its expected spin-off of its aftermarket business is aimed at gaining the requisite scale to improve its bargaining power with the big box retailers, namely Autozone, O'Reilly, and Advance Auto Parts, which dominate the space.

There are other longer term forces pushing the industry toward consolidation. The transition from internal combustion engine (ICE) vehicles to battery electric vehicle will move the industry in this direction as well. The mechanics of battery vehicles is less complicated compared to that of the traditional ICE-powered cars. The likely consequence is that with few parts needed, there will be fewer suppliers. The majority of the traditional auto supplier segments linked to the ICE powertrain will eventually face obsolescence.

Over the long term, these trends will likely create a narrow set of mega-suppliers with enhanced diversity, scale, and profitability. Already, recent M&A activity and corporate restructurings, such as BorgWarner, Delphi Technologies, and Dana Inc., are laying the foundation for existing players to transform themselves into more efficient suppliers for a low-emissions and ultimately zero-emissions age.

This report does not constitute a rating action.

Cash, debt, and returns

Global Autos

Chart 11

Cash flow and primary uses

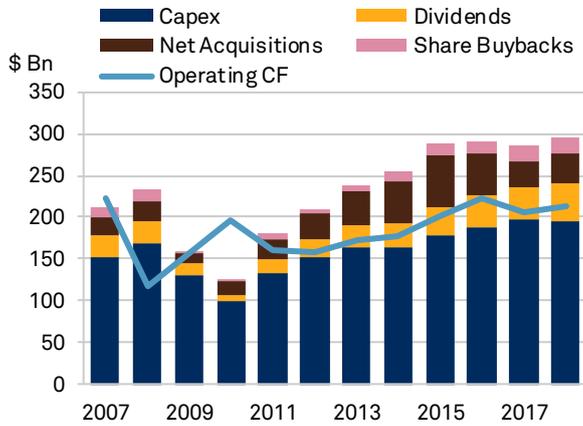


Chart 12

Return on capital employed

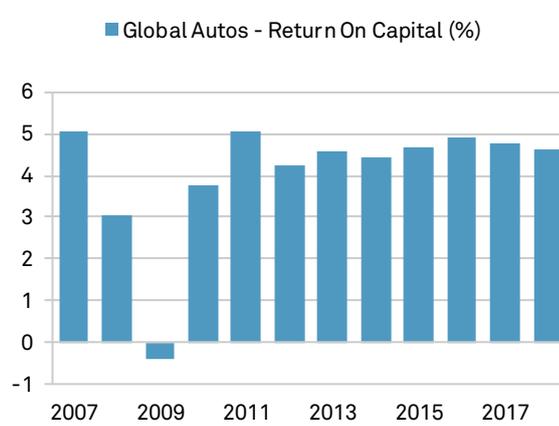


Chart 13

Fixed versus variable rate exposure

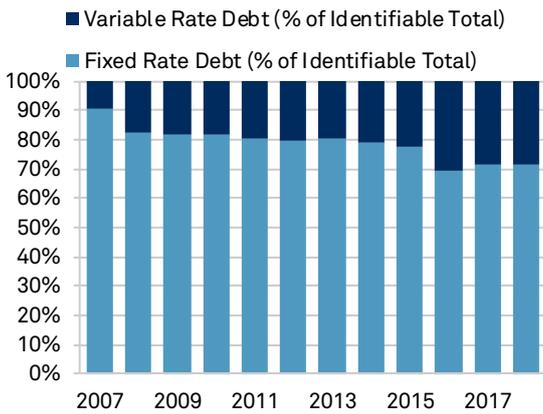


Chart 14

Long term debt term structure

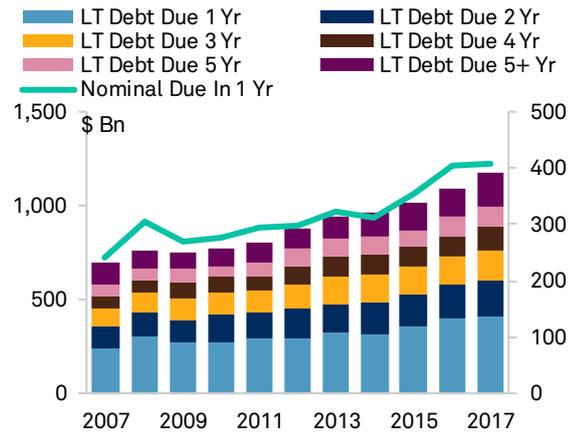


Chart 15

Cash and equivalents / Total assets

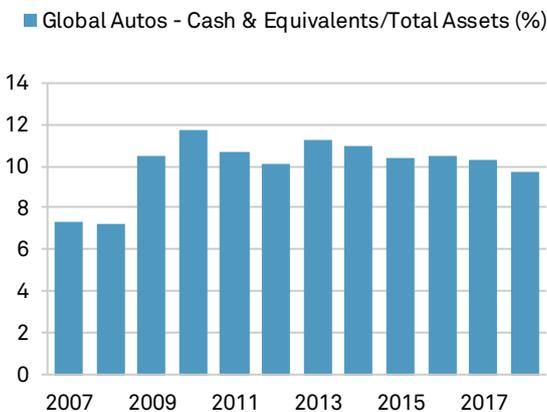
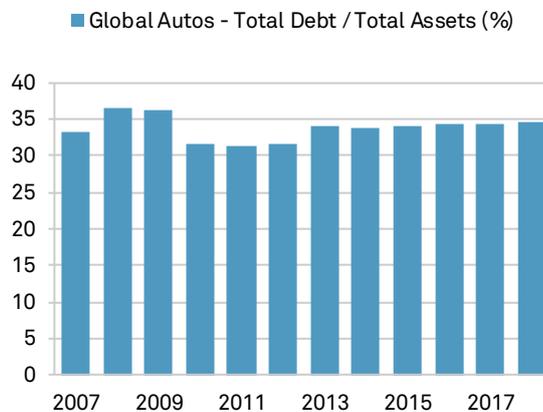


Chart 16

Total debt / Total assets



Source: S&P Global Market Intelligence, S&P Global Ratings calculations

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