

# Industry Top Trends 2018

## Autos



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## Overview

- **Ratings Outlook:** Rating trends across the sector remain broadly stable; 72% of issuers have a stable outlook. This reflects globally steady sales and some degree of headroom in the ratings due to low adjusted debt, improving business mix, higher technology content, and cost reductions from continuous restructuring. Offsetting factors include ongoing pressure on pricing, high research and development (R&D) spending, high capital expenditure (capex), and the prospect of increased regulatory costs or fines.
- **Forecasts:** Steady credit metrics are expected in 2018, despite auto manufacturers increasing R&D spending and capex to comply with environmental regulation and to protect their competitive position vs peers in the supply of a wide range of electrification options. Slightly improving forecasts for suppliers are reflective of both the benefits of cost reduction measures over the last few years and the acceleration of electrification, which is likely to result in higher content per car in the next two to three years.
- **Assumptions:** We expect global auto sales to increase by about 2%-3% in 2018 and 1%-2% in 2019, consistent with our projections of GDP growth hovering at around 2% in Europe and the U.S., 5.5% in the Asia-Pacific region, and in the 2%-3% range in Latin America. Global light vehicle sales are expected to trend toward 96 million units in 2018 and 98 million units in 2019.
- **Risks:** Pressure on profitability from price competition, higher commodities costs, increasing R&D expenses, and higher residual risk at large original equipment manufacturers' (OEMs) captive finance operations, which is linked to lower used car prices and the accelerated decline of diesel as a share of new car registrations. Geopolitical risks persist, and we see them as mainly linked to decisions on trade agreements (i.e., NAFTA and Brexit negotiations) that could in a worst-case scenario result in additional costs for the industry.
- **Industry Trends:** The electrification of powertrains is accelerating and is likely to be the most significant and potentially disruptive industry trend in coming years, and comes in response to widespread tightening of environmental regulation, in particular in China and Europe. Additional spending levels are already underway and captured in our base-case forecasts, but how this trend will impact our assessment on business risk, for example, will take time to emerge. We see autonomous driving as a more long-term disruptive trend associated with the commoditization of cars and changes in consumer preferences. Investments in autonomous driving are more of a risk for the sector as a whole, given the significant deployment of companies' resources toward these technologies.

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# Ratings trends and outlook

## Global Autos

Chart 1 – Ratings distribution

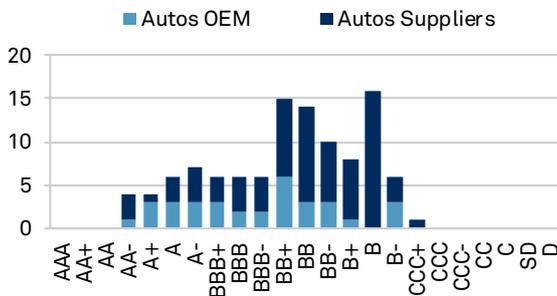


Chart 2 – Ratings distribution by region

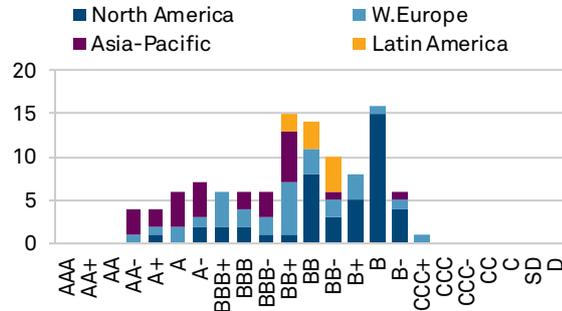


Chart 3 – Ratings outlooks

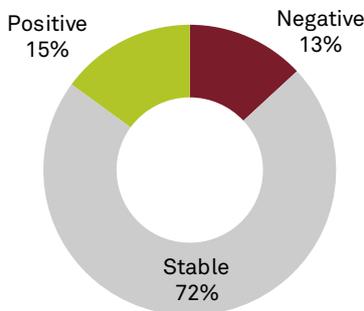


Chart 4 – Ratings outlooks by region

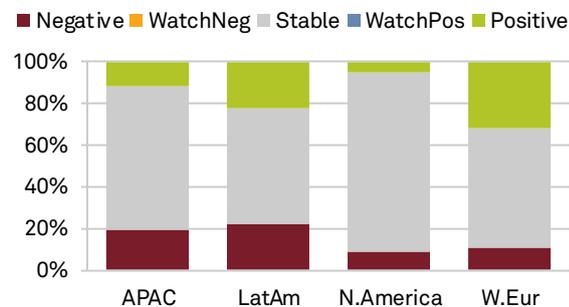


Chart 5 – Ratings outlook net bias

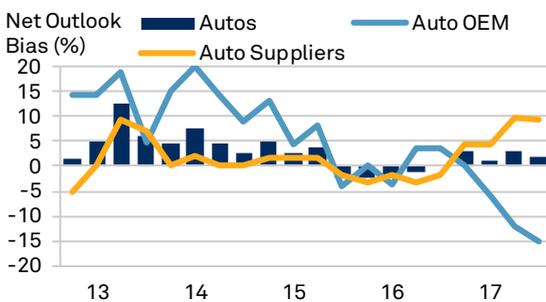
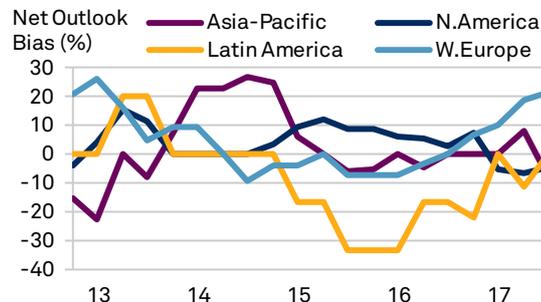


Chart 6 – Ratings net outlook bias by region



Source: S&P Global Ratings. Ratings data measured quarterly with last shown quarter ending September 30, 2017

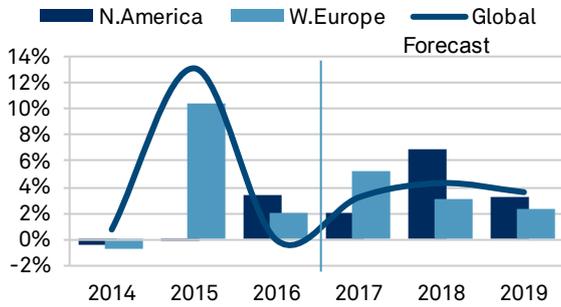
The global rating outlook is largely stable for the global automotive sector. In the **U.S.**, we see limited upside. We think ratings are approaching a ceiling for most U.S. carmakers and suppliers, with nearly 80% of those we rate having a stable outlook. Furthermore, nearly 75% of U.S.-rated issuers are at or above pre-recession rating levels. In **Europe**, we foresee the rating environment being broadly stable over the next two years, with only a few exceptions. We believe that, despite supportive market fundamentals, rating upside will be limited due to continued high R&D and capex spending to invest in new models and meet heightening environmental standards.

In **Asia-Pacific**, the credit quality of Japan's automobile and auto components industries is likely to stay on a stable path for the next year or two, supported by steady revenue sources and companies' sound financial health. We expect rating trends across the **Latin American** auto suppliers industry to remain mostly stable for 2018 and 2019, with just one issuer having prospects for a higher rating on potential improvement in leverage levels. Our stable outlook also reflects our expectation that issuers' key credit metrics will remain commensurate with their rating category amid global vehicles growth slowdown and potential operating setback from NAFTA renegotiation or termination. The aforementioned is mainly underpinned by improved macroeconomic conditions, already-booked platforms, continued cost efficiency measures bolstered to improve profitability and cash flow generation, maintenance of leading market positions, and initiatives aimed to reduce leverage.

## Industry forecasts

### Auto OEMs

Chart 7 – Revenue growth (local currency)



### Auto Suppliers

Chart 8 – Revenue growth (local currency)

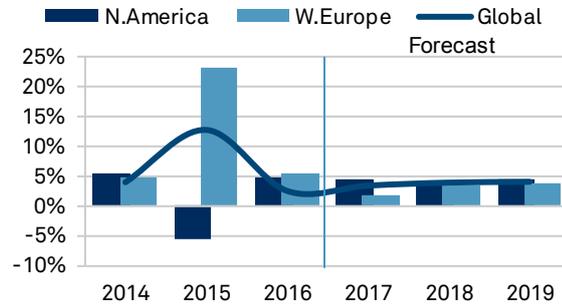


Chart 9 – EBITDA margin (adjusted)

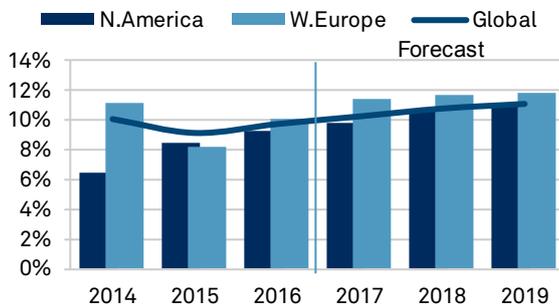


Chart 10 – EBITDA margin (adjusted)

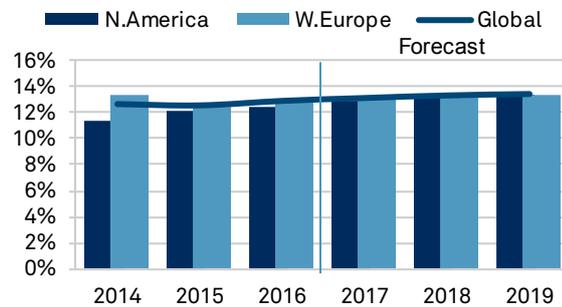


Chart 11 – Debt / EBITDA (median, adjusted)

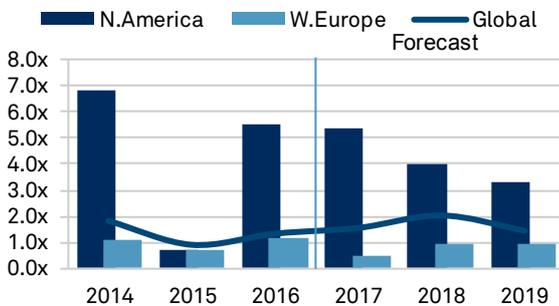


Chart 12 – Debt / EBITDA (median, adjusted)

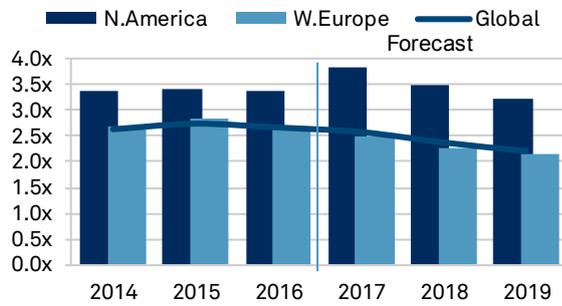


Chart 13 – FFO / Debt (median, adjusted)

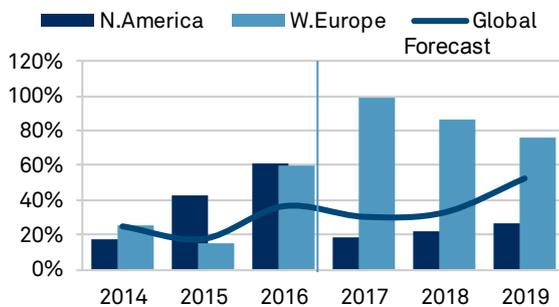
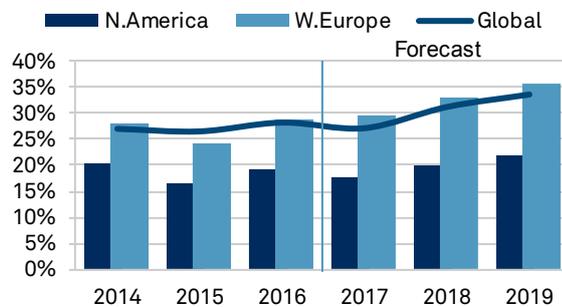


Chart 14 – FFO / Debt (median, adjusted)



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.

We believe global automotive demand is likely to remain stable, largely in line with our previous expectations. We see China's outlook remaining stable to positive, the U.S. market showing some signs of softening, and European markets mostly continuing on a moderate growth trend. Visibility remains low in markets such as Brazil, Russia, and India because of likely volatility and macroeconomic uncertainty. We note that these markets account for less than 8% of global vehicle sales, while China alone represents one-third.

In the **U.S.**, auto industry growth is falling behind our earlier expectations in 2017, with a sales decline of 2%-3%. In 2018 and 2019, we think light vehicle sales could weaken slightly from 2017 levels (relative to our prior expectations) but stay at a relative healthy total of 16.5 million-17 million units per year. For Ford and GM, we see limited likelihood for ratings rising again over the next 12-24 months given increasingly competitive conditions. We incorporate modest declines in margins in our forecast for 2018 and 2019 to account for higher commodity prices (mainly steel), large engineering expenses for autonomous and electrification-related technologies, increased regulatory costs, and pricing pressure in several key markets. Those factors will be partly offset by cost efficiencies. For Tesla, we expect lower initial gross margins of the Model 3 due to under-absorption of labor and overhead costs in 2017 and early 2018, with modest improvements later in 2018, and gross margins approaching 25% in 2019 through ongoing cost reductions and improved manufacturing efficiency. We expect PACCAR and Navistar's EBITDA margins to be slightly up in 2018 due to ongoing cost-management efforts and increasing sales.

For U.S. auto parts suppliers, we believe credit quality has approached a peak, with signs of a modest deterioration in EBITDA margins for about one-third of our issuers (consistent with the normal cyclical nature inherent in the automotive business). For the majority of issuers, we expect steady low-single-digit revenue growth in 2018 as new business wins and higher-value content are offset by foreign currency headwinds and higher commodity prices. We expect EBITDA margins for most U.S. suppliers to be flat to slightly up, albeit with increased downside risks, as they focus on improving their manufacturing and engineering footprint and cutting operational costs.

In **Europe**, following better-than-expected performance in 2017 on improving economic conditions in the area, which we assume will consolidate, we expect demand for cars to remain steadily in the 2%-3% range over the next two years. Based on this, we expect single-digit growth in revenues for both OEMs and suppliers over the next two years. The rating environment for European car manufacturers should remain generally stable over the next two years. We believe that, despite supportive market fundamentals, rating upside will be limited due to continued high R&D and capex spending to invest in new models and meet heightening environmental standards. Meeting these standards could be even tougher if the decline of diesel's market share accelerates, to the benefit of petrol. It remains to be seen whether automakers will be able to defend the profitability of their industrial operations while investing in electrification and digitalization--costs that can't be postponed in light of mounting competitive pressure and stricter environmental regulations. However, these costs' impact on ratings should be viewed on a case-by-case basis because many OEMs have strengthened efforts to reduce other costs.

We expect European car suppliers to reap benefits from ongoing cost reductions and commitment to higher efficiency. We see strong order books in response to the acceleration of electrification and, in some cases, the sharing of development costs with OEMs. In the longer term however, competition in a full electric mobility environment will increase for auto suppliers.

In **Asia-Pacific**, overall market trends are broadly in line with our expectations. However, we now see higher risk in China's market than we did at the beginning of 2017. In Japan, due to the prospect of a steady economy and low interest rates, we expect the recent steadiness in Japan's new car sales (+8.1% through August 2017) to continue over the next one to two years. The Association of Southeast Asian Nations' (ASEAN's) six major countries--Indonesia, Thailand, Malaysia, the Philippines, Vietnam, and Singapore--posted steady auto sales growth of 6% during the first eight months of 2017. Considering stabilized commodity prices and a steady regional economy, we believe solid growth is likely to continue in ASEAN. Conversely, we see a slowdown in China. We expect auto volume growth in China over the next two to three years at a pace close to or

in line with GDP growth. Ongoing competitive pressure due to industry overcapacity and increasingly sophisticated consumer tastes will likely continue.

In Asia-Pacific, the credit quality of automobile and auto components issuers is likely to stay on a stable path for the next year or two, supported by steady revenue sources and many companies' sound financial health. Higher sales incentives in North America will weigh on profitability, as intensifying competition in emerging markets and rising raw material prices continues. Nevertheless, we believe these companies are likely to maintain generally stable profitability underpinned by geographically-diversified business portfolios. For example, a slowdown in U.S. sales would be partly offset by favorable sales in Japan and ASEAN. Also contributing to steady profit margins is technological competitiveness in battery vehicles (EVs) and other types of environmentally-friendly cars to meet tighter environmental regulations, as well as autonomous driving technologies. Ongoing efforts to reduce costs have been major mitigating factors against foreign exchange rate fluctuations.

In **Latin America**, political uncertainties linger in Brazil, which could weigh on industry and consumer confidence, despite our expectations for recovering macroeconomic conditions. Brazilian demand is still weak but expected to improve by 2018, commensurate to its GDP growth. The sound global demand for commercial vehicles will partially mitigate the weak Brazilian market and will continue to support the industry in spite of U.S. market softness. We believe that the recovery of the Brazilian market will continue in 2018, mainly supported by commercial vehicles, the appreciation of the Brazilian real, and lower inflation. Latin American auto suppliers are highly dependent on the North American market--specifically Ford, FCA, and General Motors, which account for a significant portion of Latin American auto supplier revenues. A softer U.S. market could drag on Latin American auto suppliers. In our view, Brazilian auto suppliers' revenues will continue to come mostly from its foreign operations and exports during 2018. We note that less than 20% of Brazilian auto suppliers' revenues are generated domestically. Brazilian issuers have continuously implemented efficiency initiatives to reduce costs and hence improve profitability, which we expect to continue during 2018.

## Key assumptions

### Auto OEMs

<b>1</b>	<p><b>Steady economic environment</b></p> <p>We assume a supportive economic environment for the global automotive sector, including a recovery in Latin America and Russia.</p>
<b>2</b>	<p><b>Headwinds to EBITDA margins</b></p> <p>We assume limited opportunity to improve profitability for most automakers because of increasing pressure from regulatory and environmental costs, commodity inflation, potential adverse consequences from trade agreements, and Brexit and potential litigation-linked costs.</p>
<b>3</b>	<p><b>High capex and R&amp;D</b></p> <p>We assume capex and R&amp;D costs to represent an increasing percentage of sales over the next years, which will limit financial flexibility prior to the next downturn.</p>

### Steady economic environment

Global macroeconomic trends appear supportive of steady auto sales for the coming year or two. We expect global GDP growth in 2017-2019 to accelerate to 3.6%-3.7% from 3.1% in 2016. Specifically:

- In the **U.S.**, we assume steady GDP growth year-on-year (real GDP growth in the 2.0%-2.3% range in 2018 and 2019), and rising housing starts and gasoline prices. Other supportive factors include still-satisfactory data on vehicle affordability, an upturn in homeownership among young adults, and single-family building permits being at a 10-year high. If these trends are sustained in 2018 and 2019, it could support steady demand for autos in the U.S.
- We believe the economic environment for car sales will remain favorable in **Europe**, where we estimate GDP growth at 1.9% in 2018 and 2019. We project unemployment will continue to decline to below 8% over the next two years from the double-digit peak reported during the recession, thus supporting consumer confidence. Other supporting factors include extremely accommodative financing conditions, which we expect will characterize the whole of 2018.
- In **Asia-Pacific**, we see real GDP growth hovering at approximately 5.5%-5.6% in 2018 and 2019, driven by GDP growth in China and India, two key markets for the auto industry.
- In **Latin America**, economic recovery is underway and we estimate annual growth of real GDP in the 2%-3% range over 2018 and 2019.

### Headwinds to EBITDA margins

We assume automakers will compete in an environment characterized by commodity inflation and increased regulatory and environmental costs. For some global OEMs, potentially higher litigation risk could add to cost pressure, not necessarily from fines, but more from the need to repair any alleged wrongdoing with specific reference to upgrades of emission-linked software/hardware.

Soft performance in some key markets is seen in combination with the risk of increased pricing pressure. In the U.S., we assume this trend will intensify over the next 12-18 months, which could hurt new-vehicle margins given the correlation between new car and used car prices after several years of competitive pricing.

Our forecast does not reflect the potential impact of trade agreement revisions (NAFTA) or increased tariffs (related to Brexit). NAFTA is under renegotiation talks between Canada, the U.S., and Mexico. The risk that the agreement is terminated remains. Global OEMs with plants in Mexico could be affected, which would trigger substantial revisions to supply chains. Similarly, trade-constraining agreements linked to Brexit could lead to the displacement of production outside of the U.K.

Despite the fact that most OEMs announced draconian cost reduction measures, which could support EBITDA margins in 2018 and 2019, the capacity of these initiatives to offset what we see as a general cost increase for the industry linked to environmental challenges, geopolitical risks, and disruptive trends could lose steam and result in margin pressure.

## High capex and R&D

We assume an increasing share of R&D and capex as a percentage of sales in 2018 and 2019 for global OEMs. This trend is linked to OEMs' investments in new models, the electrification of powertrains, and clean diesel to meet heightening environmental standards. We believe this will generally constrain the financial flexibility of global OEMs, although the majority of car manufacturers enjoy some headroom to absorb downside risks, as many feature zero or low S&P Global Ratings' adjusted debt levels (excluding captive finance operations), and aim to cover capex costs with operating cash flows. We expect some OEMs to try to manage increasing costs through capital alliances or business alliances with other companies.

## Auto Suppliers

<b>1</b>	<p><b>Acceleration of electrification is supportive in the medium term</b></p> <p>As OEMs are committed to providing the market with a wider range of engine electrification options across their product offering, we believe auto suppliers could benefit from new business.</p>
<b>2</b>	<p><b>Steady EBITDA margins</b></p> <p>We believe stronger order books and partial cost sharing with OEMs will support car suppliers' margins despite the impact of higher commodity cost and foreign exchange headwinds. However, margins for car suppliers exposed to lower growing markets may have already peaked.</p>
<b>3</b>	<p><b>M&amp;A partnerships and corporate restructurings</b></p> <p>We expect suppliers to consider strategic reviews of their existing business models to take advantage of new market opportunities while managing the costs linked to these opportunities.</p>

## Acceleration of electrification is supportive in the short term

While some OEMs may still opt to manufacture electrification equipment themselves, we expect suppliers to start playing a much bigger role in this. For suppliers, new electrified powertrains represent a business opportunity.

A key focus will be on suppliers that innovate and produce value-added components to assist carmakers in meeting new carbon dioxide emission and 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 include those that manufacture and design products that provide the critical electrical and electronic backbone that supports increased vehicle electrification, reduced emissions, and higher fuel economy through weight savings.

Electrification technologies, such as advanced propulsion systems and drivelines, could therefore result in more content per vehicle for suppliers, at least until fully electric vehicles become mainstream. There could be increased outsourcing of standard auto components, such as metal components and assemblies, because automakers have to focus capital investments on autonomous vehicle and electrification technologies. Seating suppliers could also benefit from increased penetration due to demand for lighter-weight seats to improve battery range.

Overall, trends toward electrification could have a neutral to slightly positive impact on suppliers' credit quality over the next three to five years as increased engineering and R&D-related spending mostly offsets increased revenue.

## Steady EBITDA margins

We see strong order books in response to the acceleration of electrification and, in some cases, the sharing of development costs with OEMs. At the same time, we believe suppliers continue to reap benefits from ongoing cost discipline. We expect new business wins and higher value content will be partly offset by foreign currency headwinds and higher commodity prices. We expect EBITDA margins for most U.S. suppliers to flatten out as they focus on improving their manufacturing and engineering footprint and cut operational costs. European car suppliers will reap benefits from ongoing cost reductions and commitment to higher efficiency. We expect suppliers in Asia-Pacific to maintain stable profitability underpinned by geographically-diverse business portfolios. We believe that the softness of the North American market is a factor that could drag on Latin American auto suppliers given their concentration on this market (both geographically and by customer), although some auto suppliers in the region will partly mitigate this risk through diversification in Europe.

## M&A, partnerships, and corporate restructuring for auto suppliers

International cooperation between OEMs and suppliers is becoming more common. In one instance, a new company called HERE, which provides mapping data and related services, is owned by a consortium of German automotive companies, including Audi, BMW, and Mercedes. Other examples include the cooperation between leading car companies Audi, Daimler, Tesla, Toyota, and Volvo with auto suppliers like Bosch, ZF Friedrichshafen, Autoliv, and Nvidia to develop artificial intelligence technology for the European New Car Assessment Program (NCAP) safety certification for the mass deployment of self-driving vehicles. We expect this trend to continue over the next few years.

Recent actions by large suppliers are noteworthy. Delphi's announced spin-off of its powertrain business underscores the need to focus its resources on advancing active safety, connectivity, and electrification amid increasing competition from large industry players and cash-flush Silicon Valley firms. Autoliv's recently announced strategic review to consider spinning off its electronics business is another signal that indicates the importance of agile innovation as global suppliers compete for tens of billions of dollars in orders from automakers on the cusp of a massive transition to electric and self-driving vehicles.

In our view, auto suppliers will need to be more proactive in offering new products to OEMs instead of waiting to get a new order, which is why we expect to see more partnerships emerge in developing new products. A recent example is the strategic partnership for developing cutting-edge interior and safety technologies for autonomous vehicles between ZF Friedrichshafen and France-based Faurecia, both leading global systems suppliers for cars and trucks. Another example is the agreement between German auto-supplier Continental and Chinese car-making start-up Nio to work together in the fields of EVs and autonomous vehicles.

## Key risks and opportunities

### Auto OEMs

<b>1</b>	<p><b>Tightening environmental constraints</b></p> <p>Complying with short term environmental regulation is already a challenge for most OEMs and new EU emission targets for 2025-30 confirm the tightening trend.</p>
<b>2</b>	<p><b>Risk of overinvestment and duplication of technologies</b></p> <p>The attempt to seek a first mover advantages could lead OEMs to overinvest and duplicate technologies for which there is not yet clear evidence of superior competitiveness.</p>
<b>3</b>	<p><b>Asset deterioration and lower profitability of captive finance operations</b></p> <p>A less accommodative policy is expected to hurt the profitability of captive finance operations, and for OEMs with a material share of leased assets, we see a risk of asset deterioration linked to the decline of diesel.</p>

### Tightening environmental constraints

Compliance with 2019-2020 environmental constraints sits high on the agenda of global OEMs and represents, in our view, the bulk of increased R&D costs. Pressure may vary depending on macro regions. Europe and China--where environmental constraints could be particularly stringent--are driving the change and supporting the acceleration of powertrain's electrification. OEMs have had a good track record in reducing emissions year after year, but the increasing consumer perception of diesel as a threat to public health may turn the diesel option into a below-average investment versus hybrid petrol vehicles, which could make it challenging for automakers to hit their targets (average 95g/km by 2021 in Europe). The uncertainty of environmental regulation beyond midterm targets paves the way for full electric mobility. China is a frontrunner in the competition, having announced a quota of new EVs imposed on new car sales in 2019. EVs are still expensive to produce on high battery cost and low production volumes. A successful mass introduction of EVs is contingent upon the provision of generous public incentives, increased supply of batteries, and the build-up of efficient infrastructure, all issues linked to different countries' energy and industrial policies. This explains the large percentage of electric vehicles in new car sales in Norway and China versus low percentages in countries like Italy and the U.S. The powertrain electrification is likely to be the single most important mega-trend in the next decade and OEMs cannot defer investments in electrification with the risk of undermining their future competitive position, but the profitability of these investments is not fully transparent.

### Overinvestment in technologies

We recognize the potential for electrification, autonomous vehicles, and new mobility services such as ridesharing to shake up the auto industry landscape, even with many questions about risks related to regulations, safety, technology, and insurance. We believe these issues will have a mixed impact on the credit quality of both carmakers and auto suppliers.

Autonomous driving is likely to be less disruptive for the industry at this time, in our view, as it not only depends on supply-driven innovation, but also regulatory developments. As such, it could impact large markets like the U.S. and China first, but be delayed in Europe, where reaching a consensus among different governments could prove more challenging. Given that investment in autonomous driving doesn't currently enjoy high visibility on commercial returns, players might see it as less of a priority at this stage.

We see investments in autonomous driving as more of a risk for the sector as a whole, given the significant deployment of companies' resources toward similar technologies. Ultimately, a narrow set of factors will determine what technologies make it to market, determined mainly by insurers,

regulators, and consumers. This is unfamiliar territory for many carmakers, and they are competing with large, cash-rich, powerful technology-focused companies such as Google and Apple, and large electronics makers such as Samsung, alongside auto industry disruptors such as Tesla. In our view, through ongoing collaborative partnerships, automakers and suppliers will work increasingly together to share long-term investments with incremental design and engineering-related synergies.

If a carmaker's autonomous vehicles are more likely to be ready for large-scale commercial deployment without human drivers sooner than expected, it could lead to an improved business risk profile assessment because it would create a sustainable competitive advantage. The rapid deployment of self-driving fleets could help first movers establish significant barriers to entry, particularly in major metropolitan areas, where penetration of autonomous ridesharing over vehicle ownership is likely to be higher. However, a risk factor is that autonomous driving in cities will reduce the importance of branding and lead to a more commoditized experience for passengers who are no longer drivers.

### Lower profitability of captive finance operations and risk of asset deterioration

The normalization of monetary policy in advanced economies has entered a new phase, with the U.S. Federal Reserve aiming to shrink its balance sheet and the European Central Bank to taper asset purchases. Rising borrowing costs might reduce margins for auto captive finance operations, which heavily rely on capital markets.

We note that a potential decline in the value of diesel cars could hit residual values, thus leading to losses at large auto manufacturers' captive finance operations that have material leasing businesses, in particular in the premium segment, where the share of diesel is highest. The risk is higher where the decline of diesel is more visible, namely in Europe.

### Auto Suppliers

<b>1</b>	<p><b>Reliance on new product development</b></p> <p>Suppliers will need to proactively invest in the development of new products, as a substantial share of combustion engine-linked traditional business will eventually subside.</p>
<b>2</b>	<p><b>Acquisition of new technologies</b></p> <p>The ongoing drive toward improving technology will put suppliers in front of the 'make or buy' dilemma.</p>
<b>3</b>	<p><b>Increasing competitive pressure with the transition to electric mobility</b></p> <p>We will see only few large suppliers in the market in the long term.</p>

### Execution risk on new product delivery

Execution on product delivery is the main risk we observe for auto suppliers as large OEMs get ready for significant product launches in 2018, 2019, and beyond. OEMs are racing to extend electrification options to their entire fleet of vehicles and competition is high among car manufacturers trying to be first to provide the largest variety of engine types. Operational efficiency and focus on product quality are thus paramount for car suppliers over the next few years. The consequences of product failure can be fatal, as observed in the air bag recall by Takata that preceded the company's default on \$270 million in debt before summer 2017.

### Acquisition of new technologies

In our view, auto suppliers will need to be more proactive in offering new products to OEMs instead of waiting to get a new order, which is why we expect to see more partnerships emerge for developing new products. We expect that the pressure to acquire new technologies will remain high

for car suppliers. Cost sustainability remains the major challenge that we expect car suppliers to continue to tackle with partnerships and acquisitions. A recent example is the strategic partnership for development of cutting-edge interior and safety technologies for autonomous vehicles between ZF Friedrichshafen and France-based Faurecia, both leading global systems suppliers for cars and trucks. Another example is the agreement between German auto-supplier Continental and Chinese carmaking start-up Nio to work together in the fields of EVs and autonomous vehicles.

### **Increasing competitive pressure with the transition to electric mobility**

In the longer term, competition in a full electric mobility environment will increase for auto suppliers. Beyond 2030, when electrification technologies catch up to meet the power, load, and duty requirements of larger vehicles, and fully electric vehicles become more mainstream, there will be significant downside to suppliers' business risk profiles because the majority of the traditional auto supplier segments linked to the ICE powertrain will become obsolete. The complexity of a fully electric vehicle and the number of parts is much less than combustion fueled cars. In the longer term, possibly beyond 2035, these trends will likely create an extremely narrow set of mega-suppliers with enhanced diversity, scale, and profitability. This trend accelerates the need for corporate restructuring and revision of the business models, which we already see are underway.

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### **Related research**

- Global Auto Industry 2018: At a Crossroad, Oct 10 2017
- S&P Global Expects U.S. Auto Sales To Decline Modestly To 16.8 Million-16.9Million Units in 2018 and 2019, Oct 5, 2017
- Japan Corporate Credit Spotlight: Automobiles And Components, Oct 4, 2017
- No Smooth Ride For German Carmakers After Federal Election, Sept.25, 2017
- Credit FAQ: Could Allegations Of Collusion And Declining Diesel Sales Stall European Automakers?, Aug 7, 2017

## Cash, debt and returns

### Global Autos

Chart 15 – Cash flow and primary uses

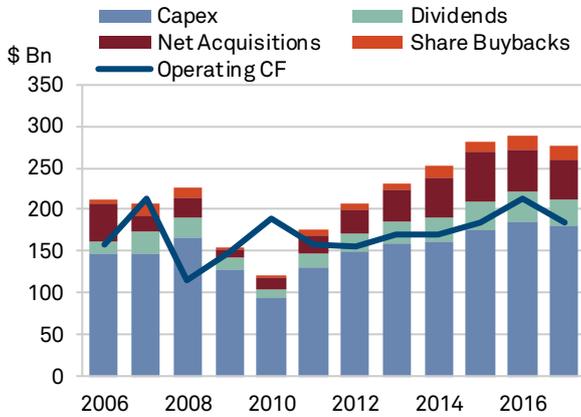


Chart 16 – Return on capital employed

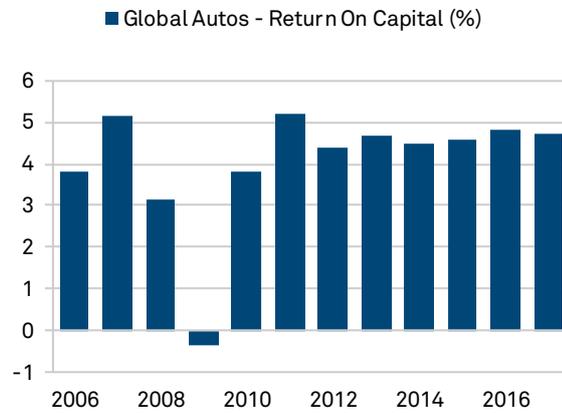


Chart 17 – Cash and equivalents / Total assets

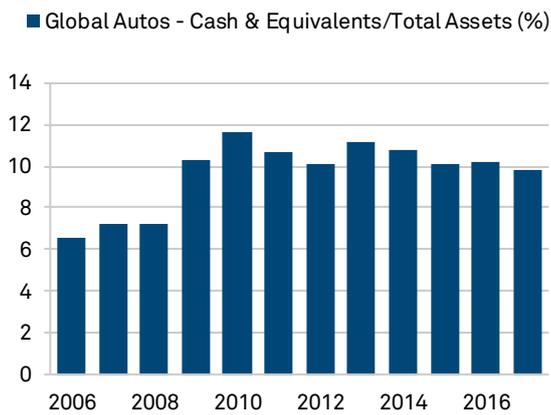


Chart 18 – Total debt / Total assets

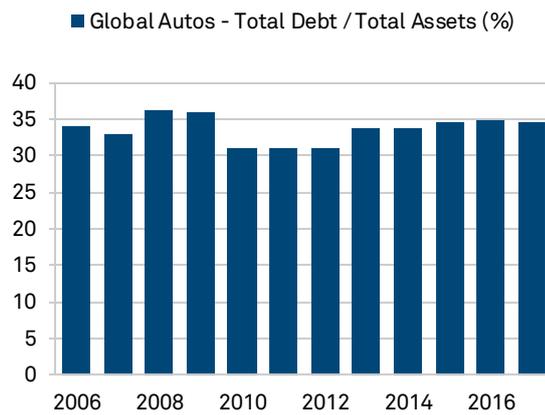


Chart 19 – Fixed versus variable rate exposure

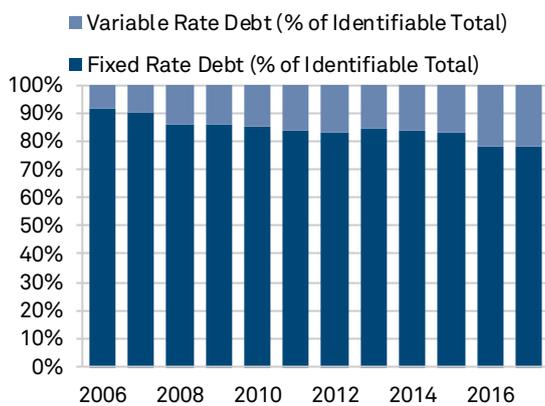
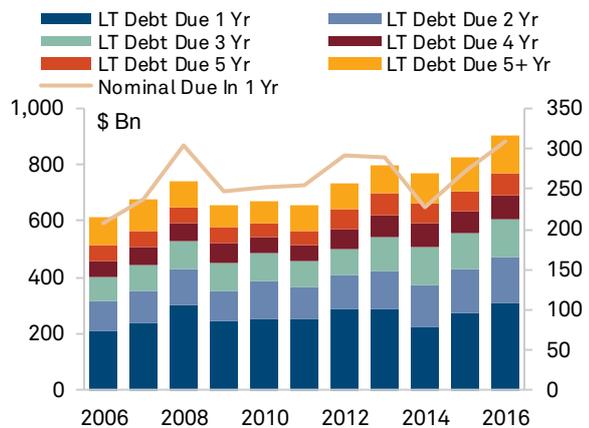


Chart 20 – Long term debt term structure



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

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