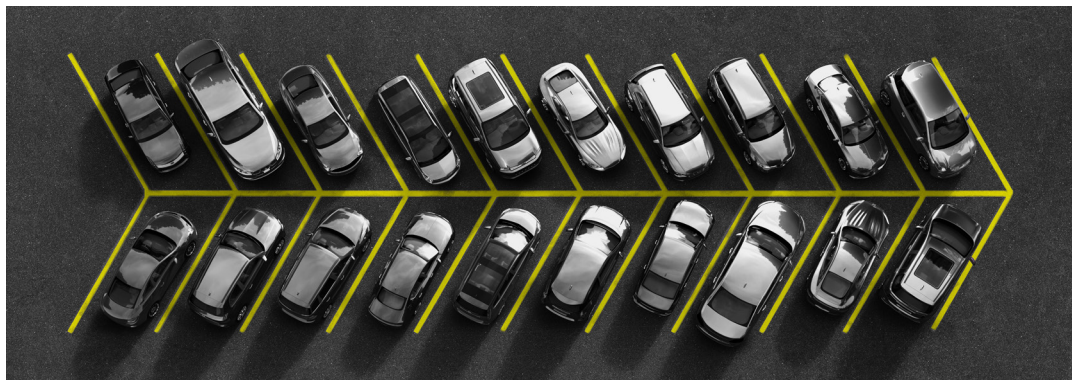


## Industry Top Trends 2022

### Global Autos

#### Bumpy Recovery With Rising Costs And Supply-Demand Imbalances



*This report does not constitute a ratings action*

January 25, 2022

#### Authors

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

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

**Claire Yuan**  
Hong Kong  
+852 2533 3542  
claire.yuan  
@spglobal.com

**Lukas Paul**  
Frankfurt  
+49 693 399 9132  
lukas.paul@spglobal.com

**David Binns**  
New York  
+1 212-438-3604  
david.binns@spglobal.com

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

#### Additional Contacts

**Asa Watanabe**  
**Ben Tsocanos**  
**Margaux Pery**  
**Stephen Chan**  
**Minjib Kim**  
**Marta Bevilacqua**  
**Luisa Vilhena**  
**Humberto Patino**

#### What's changed?

**Our global light vehicle sales forecasts face further downside pressure.** We now expect a slower recovery in 2022 compared with our October 2021 forecast of 4%-6%.

**Supply chain disruptions and inflation will further delay improvement to 2023.** Semiconductor-related chip shortages continue to limit visibility on auto production.

**We project EV sales will accelerate.** There is some upside to our forecasts for battery electric vehicles (BEVs) and plug-ins making up 15%-20% of the global light vehicle fleet in 2025.

#### What are the key assumptions for 2022?

**Ability to offset inflation varies.** Automakers with a stronger presence in North America are likely to offset this pressure through pricing than European and Chinese automakers.

**Credit metrics should stabilize to pre-pandemic levels by 2023.** Capital expenditure and research and development remain high, so recovery will depend on financial discipline, cost reduction, and volume.

**Suppliers face near-term rating downside.** They will continue to bear the brunt of supply chain shortages and the ripple effect of higher costs.

#### What are the key risks around the baseline?

**Production volatility and inflation could persist into 2023, constrain ratings.** Visibility remains low because the supply-demand imbalance of chips, amplified by production shutdowns and COVID-19 surges.

**Faster transition to EV poses greater risk for free cash flows.** Traditional automakers could reduce the EV market share gap versus Tesla, but high battery costs will lead to margin dilution.

**Slower growth in demand.** If consumer demand stalls in China and the U.S. it could weigh on revenue and margin recovery.

# Ratings trends

## Global Autos

Chart 1

Ratings distribution

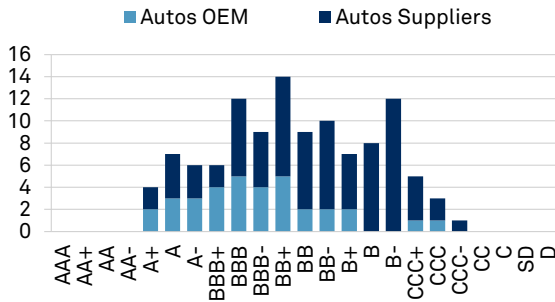


Chart 2

Ratings distribution by region

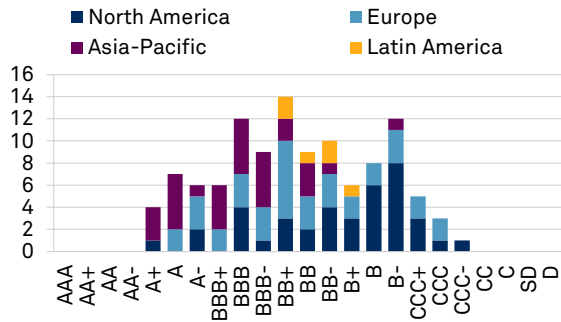


Chart 3

Ratings outlooks

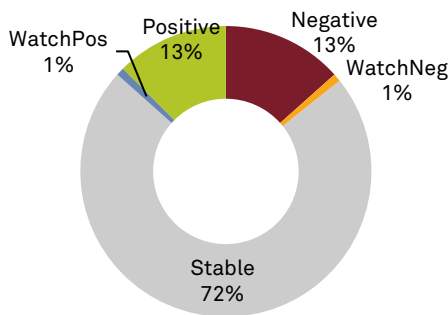


Chart 4

Ratings outlooks by region

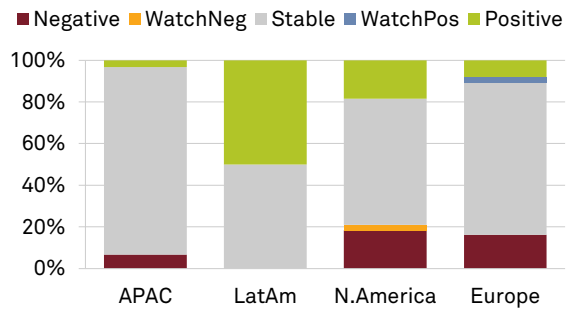


Chart 5

Ratings outlook net bias

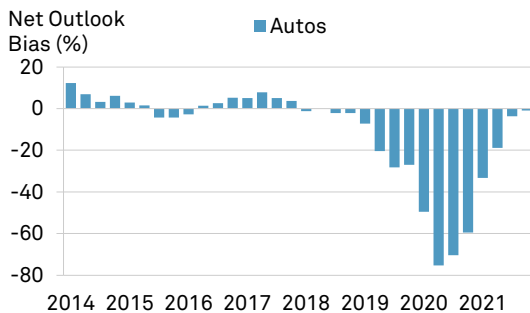
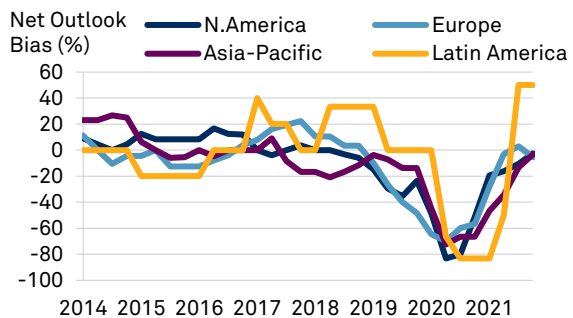


Chart 6

Ratings net outlook bias by region



Source: S&P Global Ratings. Ratings data measured at quarter end.

# Autos

## Ratings trends and outlook

### **The negative outlook bias remains elevated, albeit lower compared with April 2020.**

Downgrade risk in autos has materially receded since April 2020 with under 20% of issuers with a negative outlook or ratings on CreditWatch negative) (see chart 3). The negative rating bias in the global automotive sector (the gap between potential bond downgrades and potential bond upgrades) is under 10% from over 80% in April 2020, roughly in line with the historical auto sector average (see chart 6). Relative to the corporate average, autos along with aerospace and defense and utilities still reflect somewhat elevated downgrade risk, reflecting an uptick in disruptions in these industries.

**Global automakers have adequate headroom for the ratings despite an extended supply chain crisis.** Cash flow adequacy metrics in 2022 will weaken versus our prior expectations but remain in line with ratings thresholds for most automakers. We expect the combined effect of pricing, volume, and product mix to offset inflationary cost pressure in North America and China for most of 2022. For U.S. and Asia-Pacific (APAC)-based automakers that have a stronger presence in the highly profitable North American light trucks market, pent-up demand and low inventory could keep transaction prices high in 2022. For U.S. automakers, we expect ongoing cost-reduction, lower restructuring costs and better working capital (from leaner inventories) to support improved free operating cash flow (FOCF) to debt in 2022 after a large automotive free cash outflow in 2021 (for Ford and GM). For EMEA-based automakers, we forecast mix and pricing to be less supportive in 2022 compared to 2021. Combined with high raw material costs, cost pressure from the rapid growth of EV sales, and some working capital build-up, this will likely cause FOCF to fall short of highs seen in 2020-2021, but remain robust. This is also because some of the headwinds will be compensated by ongoing cost-optimization measures and EV subsidies. In the volume segment, cost reduction efforts might need to be reinforced to offset inflation and the sluggish sales recovery. For Chinese auto OEMs, we expect higher sales volume, reduced input cost pressure (PPI inflation pulling back since Nov 2021) and better working capital management to help improve their margins, cash flows, and leverage. For popular EV models in that market, we've seen narrowing discounts or price hikes in the past six months amid tight supply.

**Auto suppliers will face mixed results.** We expect slightly weaker credit metrics compared with our previous expectations for most auto suppliers. Most of our investment-grade suppliers globally have the flexibility to accommodate market headwinds such as volatility in light vehicle production, higher input costs, and the expected increase in shareholder returns, while maintaining cash flow metrics for their current ratings. Ratings upside will be limited as a weaker revenue and margin outlook, combined with the decision to distribute additional cash to shareholders, will slow down improvement in their credit metrics. Cash flow will stay below our upside triggers for most issuers, even with a significant cut to overhead costs and lower restructuring costs in 2022. Higher raw material, transportation, and labor costs are other challenges that could somewhat limit the improvement in profits and cash flow. In addition, for some suppliers with high powertrain exposure, a further acceleration of EV sales could pose additional headwinds. Beyond 2022, challenges for these suppliers could grow if they are exposed to OEMs deciding to in-source a large part of electric powertrain components. Pressure on ratings will be worse for suppliers with tight liquidity (typically those we rate 'B' or below) and weaker negotiating leverage with automakers. Our outlooks on most of these issuers is negative following low or materially negative FOCF in 2021 because of weaker profitability and cash outflows linked with inventory built up in the back half of 2021. These suppliers (typically with high customer concentration, lower-than-average EBITDA margins, and narrow product focus) remain susceptible to pricing pressure from

customers and could face difficulties absorbing higher launch costs for onboarding new programs and working capital volatility.

**Our ratings on truck makers appear resilient for now.** Measures to decrease fixed-costs and focus on high-margin products and services support our profitability forecasts for most of the truck makers we rate. For many truck makers, including PACCAR, Volvo, Daimler Trucks and Traton, we expect performance to reach pre-pandemic levels in 2022. The recent rise of raw material prices could erode fixed cost reductions and benefits from increasing volumes in 2022-2023. Upside is limited as the transition to alternative power trains could constrain margin and FOCF improvements.

## Main assumptions about 2022 and beyond

### 1. Volumes recover to pre-pandemic levels by late 2023 as operating headwinds persist

We currently project further normalization of supply chain conditions and improvements in 2023, noting that the degree of uncertainty inherent in our forecast has increased, given the multitude of supply-side bottlenecks and an often-unclear path to their resolution.

### 2. Inflationary pressures could delay material improvements in credit metrics

We expect automakers and suppliers to face widespread inflation of input costs. This could slow the pace of leverage reduction for issuers that had a spike in debt during 2020.

### 3. Partnerships, spin-offs, and joint ventures (JVs) will help mitigate cash flow burden linked to electrification and other digital solutions

The sheer size of investments will increasingly induce auto OEMs to share costs with partners.

**Volume recovery to pre-pandemic levels only by late 2023 as operating headwinds persist.** Our forecast for the global light market assumes that component shortages will remain a serious constraint on vehicle production in the first half of 2022, followed by a gradual rebound in the second part of the year. We currently project further normalization of supply chain conditions and improvements in 2023, noting that the degree of uncertainty inherent in our forecast has increased, given the multitude of supply-side bottlenecks and an often-unclear path to their resolution. These include the recent rapid spread of the Omicron variant, slow recovery in chip supply, rising interest rates and fuel prices (especially in North America) and the resultant impact on consumer affordability.

**Inflationary pressures could delay improvements in credit metrics.** In 2022, we expect automakers and suppliers to face widespread inflation of input costs. This could slow the pace of leverage reduction for several issuers that had a spike in debt during 2020. Although we expect OEMs will be able to pass on some cost increases through pricing, mitigating the full impact will require successful execution of on-going cost reduction programs. High raw material costs (which comprise the largest component of variable costs for automakers), and high labor and freight costs will constrain material improvements in profitability and cash flow until 2023 (compared to mid-2022 earlier). We expect steel and aluminum prices to ease in 2022 and 2023 after a large spike in 2021. However, we expect several automakers to face higher material costs in 2022 (compared to 2021) given that their previous contracts were priced at much lower levels in late 2020 coming out of the pandemic depths. If raw material inflation headwinds appear likely to persist into 2023 as supply normalizes, it could lead to downward revisions in our margin assumptions for several issuers. Improved supply towards the second half of 2022 will cap the ability pass through raw materials, labor, and logistics

costs, and require flawless execution of cost cutting programs to contain the margin impact. Additionally, we anticipate higher manufacturing and advertising costs as production and dealership inventory levels normalize.

We think challenges for suppliers are more pronounced than for OEMs as they face volatile production volumes, which complicates working capital management and input cost inflation, which is often not fully passed through to automakers. Though most suppliers can typically pass through the majority (though not all) of raw material price increases, either through established contractual mechanisms or negotiations, this is typically much less straightforward for other cost items such as labor, logistics, and energy costs. Moreover, efficient working capital management will be a challenge for suppliers given production disruptions at automakers, which we expect to persist for most of 2022. These factors will weigh on suppliers' profitability and cash flow this year. That said, many larger suppliers have initiated large-scale cost reduction efforts since 2019, which will yield increasing amounts of savings over 2022 and 2023 and help to protect credit metrics to a certain degree. Smaller, less-diversified suppliers may have limited bargaining power with their OEM clients, which affects their ability to obtain compensation for input costs and low volumes. For these companies, who often have below-average profitability and limited liquidity buffers, rating downside could materialize in the course of 2022 absent material improvements in industry conditions.

**Partnerships, spin-offs, and JVs will mitigate the cash flow burden of electrification and other disruptive trends associated with autonomous vehicles and connected services.** We think the sheer size of investments will increasingly induce auto OEMs to share costs with partners. For instance, Ford/VW, GM/Honda and Volvo Cars/Geely Auto will continue to optimize synergies through joint-purchasing, joint-development of new technologies, and platform sharing, while keeping their own stand-alone operations. Ford's ongoing efforts to share costs and expertise on design and engineering with Volkswagen AG--including access to Volkswagen's modular electric drive platform--will somewhat reduce the burden of investments in mobility and electrification over the next three to five years. We expect shared investments in vehicle electronics and software, autonomous technology, such as recent initiatives by Stellantis and Amazon and earlier Stellantis and Foxconn, to gain importance, given the need to secure the right expertise and scale for investments in these areas to be successful. Investments in autonomous vehicle technology will remain credit neutral for the foreseeable future until regulatory hurdles ease and meaningful monetization through widespread commercialization appears imminent.

Among suppliers, we expect issuers to realign more operations toward electrification and divest nonstrategic units similar to Continental's spin-off of Vitesco Technologies, its powertrain activities, in September 2021. This will be an important step since the shift toward electrification will require material investments in the ramp-up phase. Traditional suppliers such as American Axle and Garrett Motion face displacement risk from electrification and will invest in developing solutions to cater to different automaker drivetrain strategies given the limited visibility on the success relative to their traditional products. Even higher rated suppliers like BorgWarner will need to demonstrate new product wins, largely through acquisitions, to maintain market share compared with larger and better capitalized peers such as Magna, Continental, and Robert Bosch.

Among truckmakers, PACCAR is developing--or forming relationships with partners to develop--alternatives to diesel-powered trucks, including battery electric models currently available as well as hydrogen fuel cell technology. Daimler Truck (DT), like AB Volvo and in contrast with TRATON, is also developing alternative power train technologies for its trucks, both powered with batteries and hydrogen. DT, TRATON, and AB Volvo recently entered into a nonbinding agreement to install and operate a high-performance public charging network for battery electric heavy-duty long-haul trucks and coaches across Europe.

## Credit metrics and financial policy

**Limited deleveraging prospects.** In 2020, several issuers suspended dividend payments to shareholders to offset volatility in FOCF. By late 2021, several issuers received board approvals for share buyback programs, which we think will limit their ability to reduce debt and likely prevent significant improvement in debt leverage from current levels. For instance, several investment-grade suppliers still have some flexibility to step up shareholder returns while maintaining leverage within their financial policy targets. This would further constrain improvements in our adjusted credit metrics beyond what our updated base-case scenario. We believe issuers in the 'BB' category and above will modulate shareholder returns in line with operating performance to achieve this target, and that management will refrain from making further material debt-funded acquisitions during this period. Several suppliers such as BorgWarner, Faurecia, and Lear engaged in acquisitions in 2020-2021 and we now estimate a slower and more uncertain deleveraging path after those acquisitions close. A few issuers including Faurecia have also issued equity and have expressed the desire to consider asset disposals once market conditions improve. We think issuers will carefully manage capital allocation to preserve their balance sheets while increasing investments to establish competitive market position. For automakers, this will entail allocating higher capital toward vertical integration actions for battery cells, components, raw materials, and charging infrastructure. For auto suppliers, this includes investments in new product categories such as EVs and related contents and high-performance compute or advanced driver-assistance systems (ADAS).

**Strong liquidity offers good financial flexibility for higher rated issuers.** Liquidity remains solid at large automakers because of prudent financial policies and strong cash flows from their captive operations. Strong cash balances will help automakers fund the capital outlays related to battery capacity expansion and engineering and product development activities, which will support their competitive advantage over the next decade.

We also believe that equity fundraisings by subsidiaries and moderate earnings growth could alleviate leverage pressure and enhance financial headroom over the next 12-24 months, as evidenced in the case of Zhejiang Geely Holdings and its subsidiary Volvo Car AB's recent initial public offering (IPO) in Stockholm fetched Swedish krona (SEK) 20 billion. Further equity fundraising is a possibility in the coming years, as automakers look to monetize their stakes in several start-ups and subsidiaries such as Rivian, Zeekr and Lotus Cars. That said, those activities depend heavily on the market environment and are thus highly uncertain.

**Refinancing risk and tighter covenant headroom looms for some 'B'-rated issuers.** Some of these suppliers (Cooper-Standard, UC Holdings) have debt maturities in 2023 and our base-case anticipates they will proactively address them prior to maturity. However, our negative outlook indicates that if performance does not trend in line with our expectations, it could be difficult to refinance or regain covenant headroom (USF Holdings) in 2022.



## Key risks or opportunities around the baseline

### 1. Production volatility and inflation could persist in 2023

Cash flow downside is particularly pronounced for many suppliers, as it may cause the currently unpredictable behavior of many OEMs, characterized by order cancellations at short notice, to continue.

### 2. Faster transition to electrification poses risk for cash flows

If EV sales ramp up materially faster than predicted, this would weaken profitability and cash flow for traditional automakers and several powertrain-focused auto suppliers.

### 3. Softening demand for autos globally due to weakened affordability

High macroeconomic uncertainty could persist through 2022 and weigh on consumer sentiment and the propensity to spend on big ticket items.

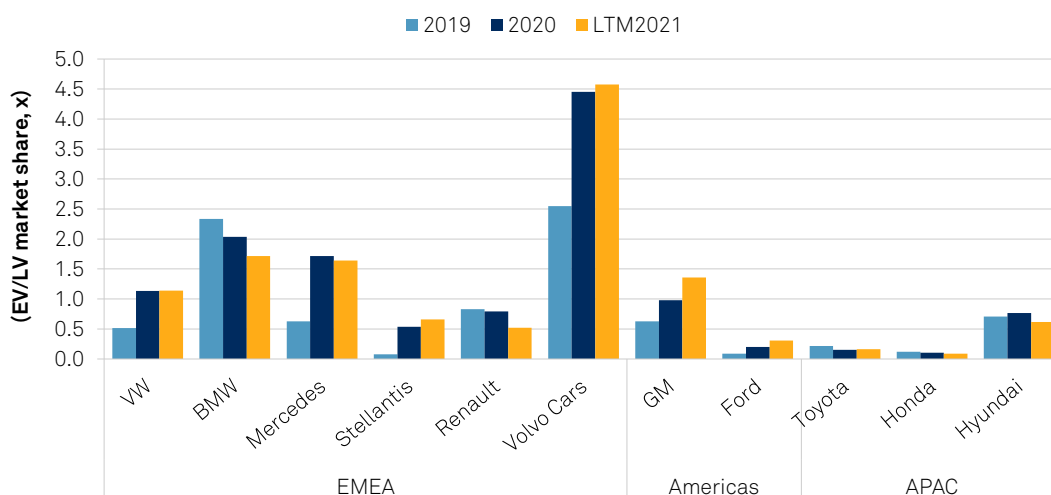
### Persistent supply chain issues will lead to downward revisions to our forecasts for 2023.

Sustainable improvements with respect to semiconductor constraints hinge on various factors. These include capacity expansion on the part of chipmakers, allocation of capacity to auto industry customers away from other sectors, and automakers' ability to redesign parts to minimize disruption. For the majority of our portfolio, we have already revised our forecasts for lower sales, EBITDA and FOCF in 2022 compared with our prior forecasts. Cash flow downside is particularly pronounced for many suppliers, as it may cause currently unpredictable behavior of many OEMs, characterized by order cancellations at short notice, to continue. This creates inefficiencies in inventory management and may delay cash collections for tooling as this is typically reimbursed by customers only when a particular program commences. Smaller suppliers could also face further risks if input cost inflation continues unabated in 2023. They tend to have weaker ability to pass-through rising commodity costs, particularly for commodities like resins and rubber vs steel which traditionally has indexed price increases.

**Faster transition to electrification poses risk for cash flows.** If EV sales ramp up materially faster than predicted by our current scenario for a 15%-20% EV sales share by 2025, this would weaken profitability and cash flow for traditional automakers and several powertrain-focused auto suppliers. This is due to the lower profitability of EVs, paired with the need to maintain high research and development (R&D) and capital expenditure (capex) for electrification and digital vehicle technology (10%-15% of sales in 2019–2023). Aggressive product introductions by traditional automakers will likely come with execution risks. Traditional automakers could reduce the EV market share gap versus Tesla but high battery pack costs will remain a challenge (see chart 7). This would imply margin dilution due to product mix moving away from automakers' most profitable vehicles. Over the next two years, we do not expect any material substitution away from traditional internal combustion engines (ICE) in North America, as BEV sales will be mostly incremental. Post 2025, as BEV adoption surpasses 20% of light vehicle sales, with more models and intensifying competition, it will lead to a larger substitution away from ICE engines. This will weaken margins for automakers as contribution margins on new BEV models will remain below the current ICE engine portfolio until at least 2027. The pace at which battery costs decrease (below \$100/kilowatt-hour) amid intensifying competition will significantly affect the success of global automakers' EV strategies. Automakers are also making concerted efforts to secure a strong battery supply chain (including new battery plants and agreements to procure key components) which we view as credit positive because it could enable them to eliminate supply chain risk as they scale-up production. Meanwhile, Tesla continues to improve execution, become more efficient in production and make strides in its global expansion efforts.

Chart 7

Global EV/LV Market Share (Excluding Tesla)



EV—electric vehicles. LV—Light vehicles. Source: S&P Global Ratings.

For several European automakers, that face tighter regulation, this will imply a major shift away from internal combustion engine cars. Large research and development costs for a new generation of BEVs and a rising EV share in the sales mix will constrain EBITDA margin expansion. For non-premium automakers, this will prevent profitability from converging toward that observed by premium carmakers such as Mercedes-Benz, BMW, or also larger BEV-only players such as Tesla. For 2022-2023, we expect weaker free cash flow generation than in recent years, mostly due to pressure on margins combined with continued high investments. For a few OEMs, we also expect some cash consumption for working capital over the next few years related to the targeted change of distribution model from car dealers to direct sales, which will move more of today's dealer inventory on to automaker balance sheet. Some of the investments, especially for the European automakers, are increasingly made through joint ventures (JVs) and do not directly burden EBITDA and free operating cash flow. Another looming risk is the intense competition in China where some traditional automakers such as Ford, Daimler, and BMW will have to catch up with Tesla and several leading NEV players. We believe it could be more challenging for premium automakers to replicate its existing strong market positions in China, especially in the BEV segment, which represents about 85% of the overall Chinese EV market. Brand loyalty is less pronounced than in markets like Europe and the U.S., given the different perceptions of EV versus ICE. While affordability and driving range remain the most important factors, cutting-edge digital technology and driver-assistance features play an increasing role in consumers' purchasing decisions.

Japanese automakers also plan to increase strategic investment to develop and produce EVs and batteries. However, it is unlikely to significantly hurt short-term financials, in our view. In addition to their financial disciplines, this is also due to their continued efforts for selling hybrid vehicles, which will be moderating earning pressure. On the other hand, Japanese companies' market position could be under pressure in case of accelerated BEV adoption in key global markets.

For heavy duty truck makers, we view electrification as more technically challenging than light vehicles because of longer ranges traveled and significantly greater vehicle weight. We expect the transition to zero emission heavy-duty trucks for long-range applications to take longer and will be subject to more gradual regulatory requirements. This reduces credit risk relative to light vehicle automakers.



**Softer demand for autos.** If high macroeconomic uncertainty persists throughout 2022, this could weigh on consumer sentiment and the propensity to spend on big ticket items in the latter half of this year. Sales recovery in China remain at risk, given the negative wealth effect from property market slowdown. While the government has urged stimulus policies to boost domestic consumption at year start, as countercyclical measures to stabilize the economic growth, the effect remains to be seen. Likewise, we see certain risks to economic expansion in the U.S., in particular the impact of rising inflation, interest rates, and gas prices on consumer demand for high-priced autos. Weaker demand in these two markets, which represent large profit pools for many OEMs, could weigh on revenue and margin recovery.

## Related Research

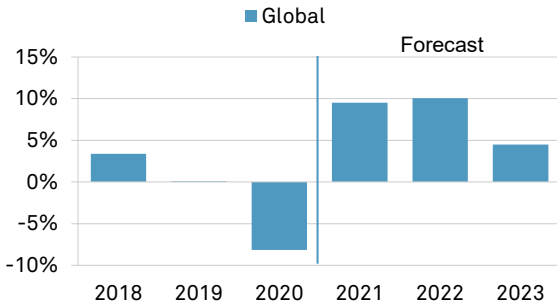
- [Global Auto Sales Forecasts: Supply Disruption Slows Recovery](#), Oct. 19, 2021
- [U.S. Auto Sales Forecast Lowered For 2021, With A Bumpy Road In 2022: EVs Gear Up To Expand Share](#), Oct. 14, 2021
- [The Hydrogen Economy: For Light Vehicles, Hydrogen Is Not For this Decade](#), April 22, 2021
- [High-Flying Battery Makers Have Much To Win And Lose](#), June 20, 2021

# Industry forecasts

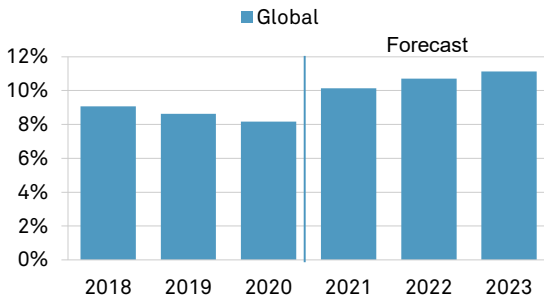
## Auto OEMs

Chart 8

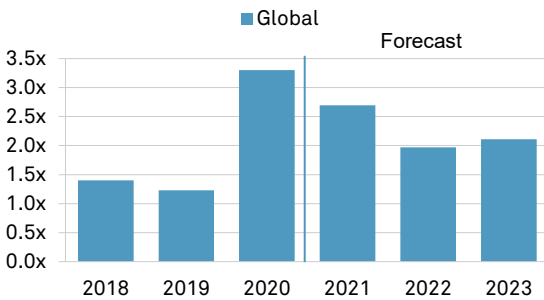
a) Revenue Growth (local currency)



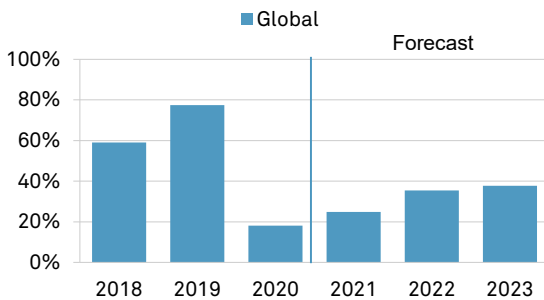
b) EBITDA Margin (adjusted)



c) Debt / EBITDA (median, adjusted)



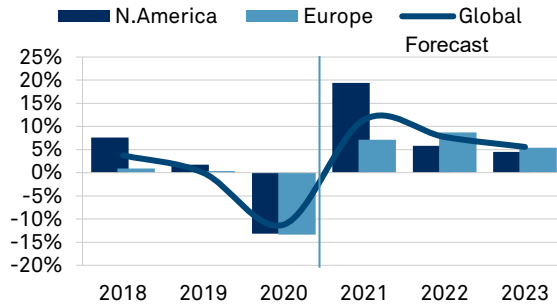
d) FFO / Debt (median, adjusted)



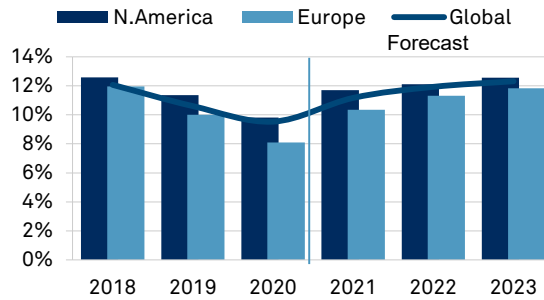
## Auto suppliers

Chart 9

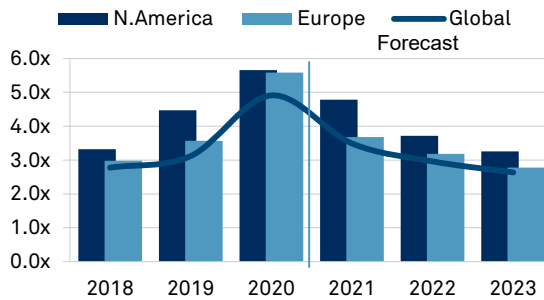
a) Revenue Growth (local currency)



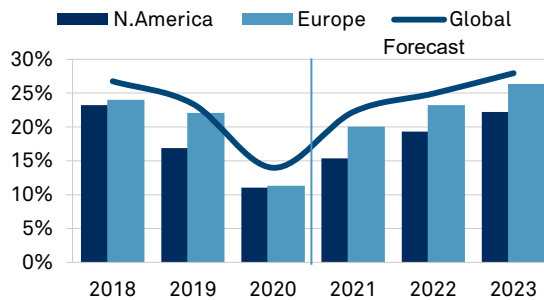
b) EBITDA Margin (adjusted)



c) Debt / EBITDA (median, adjusted)



d) 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.

# Cash, debt, and returns

## Global autos

Chart 10

Cash Flow And Primary Uses

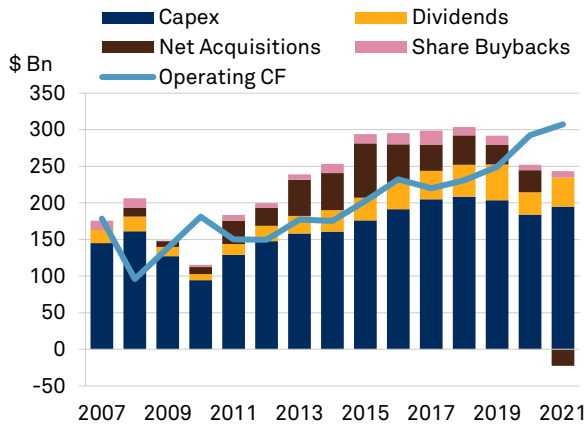


Chart 11

Return On Capital Employed

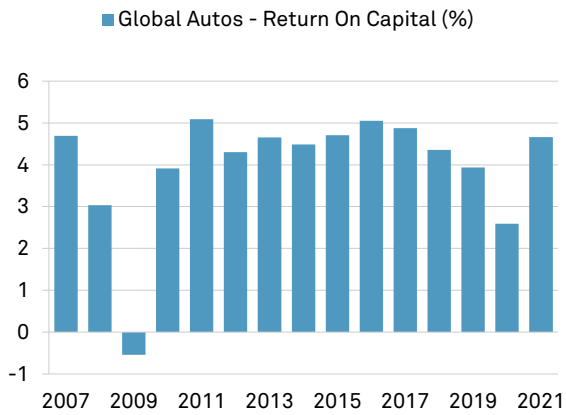


Chart 12

Fixed- Versus Variable-Rate Exposure

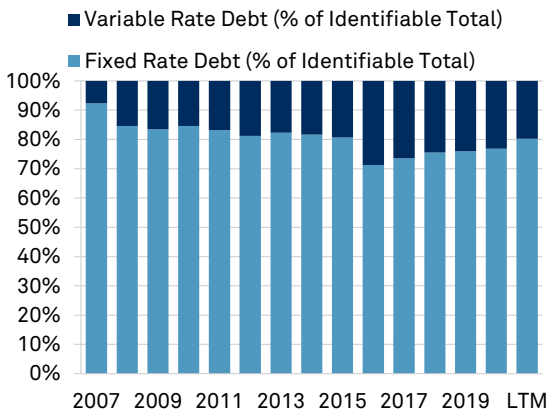


Chart 13

Long-Term Debt Term Structure

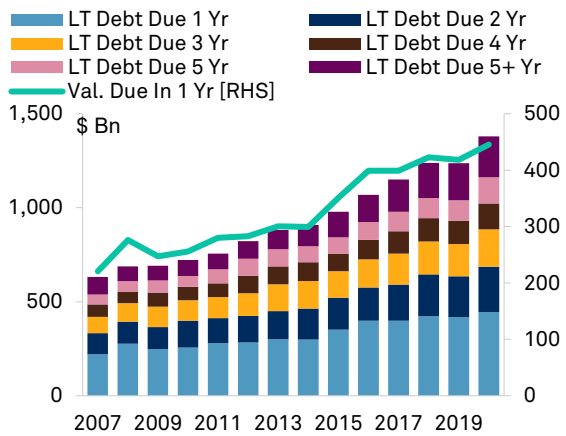


Chart 14

Cash And Equivalents / Total Assets

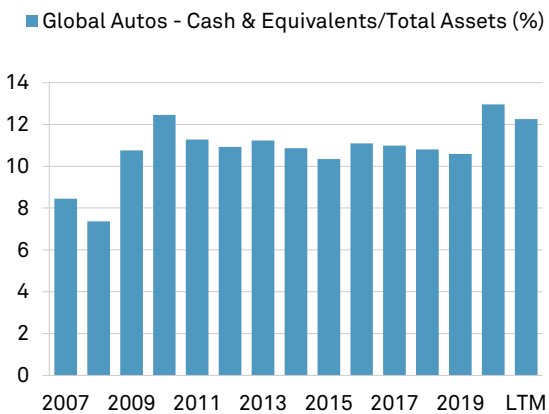
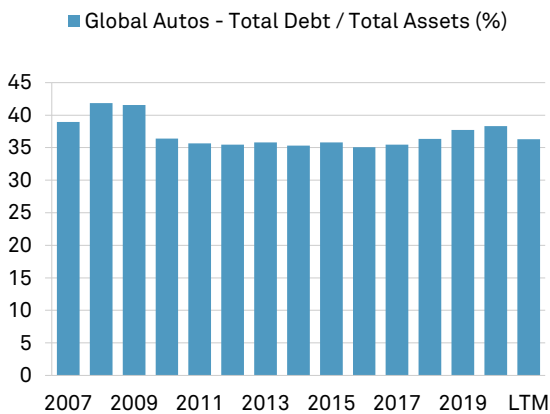


Chart 15

Total Debt / Total Assets



Source: S&P Global Market Intelligence, S&P Global Ratings calculations. Most recent (2021) figures use the last 12 months' data.

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