

China Auto:

Soft Demand Heightens Competition

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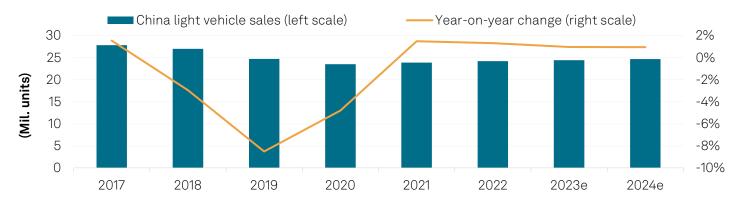
October 10, 2023

Key Takeaways

- What do we expect over the next 12 months?
 - China's domestic light vehicle sales to **increase by 0%-2%** in 2023-2024.
 - Growth in domestic electric vehicle sales will decelerate to **15%-25%** over the period.
- Downside risks:
 - Macro headwinds cast uncertainty on light vehicle demand.
 - **Prolonged price wars** and rising electrification weigh on carmakers' margins and cash flows.
 - Trade hurdles would complicate Chinese carmakers' expansion overseas.
- Credit implication:
 - Rating downgrade risk has heightened for Geely entities. Zhejiang Geely's EBITDA margin fell to 4.3% in the first half of 2023.
 - We see rating buffers for Beijing Auto, BAIC Motor, Johnson Electric, and Yanfeng International.
 - The positive rating outlook on CATL reflects our expectation of improving business strength and sustained net cash position.

Muted Momentum Ahead

LV sales to see limited growth in 2023-2024



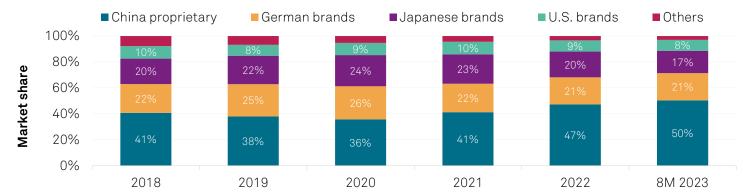
EV sales growth decelerating



LV--Light vehicles include passenger vehicles and light commercial vehicles. EV--Electric light vehicle. YoY--Year on year. e--Estimate. Sources: China Association of Automobile Manufacturers, Wind, S&P Mobility, S&P Global Ratings.

- China's domestic light vehicle (LV) sales could rise 0%-2% in 2023-2024.
 - Unit sales in the first eight months this year were largely flat.
 - Continuous price cuts, better seasonality will support sales for the rest of the year.
 - Soft consumer sentiment amid macro headwinds will constrain growth in 2024.
- Sales growth of domestic electric light vehicles will likely decelerate to c. 15%-25% over 2023-2024.
 - Sales were up about 30% (excluding exports) in the first eight months this year.
 - Improving product offerings and purchase incentives continue to support rising electric vehicle (EV) adoption.
 - EV penetration could rise toward 40% by 2025.

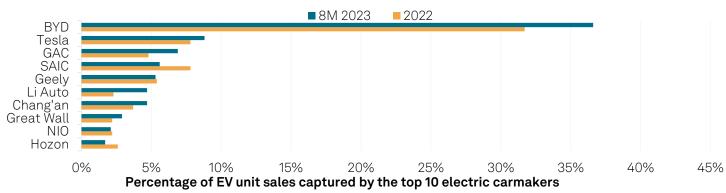
Competition Is Escalating



Local brands continue to gain traction

Sources: China Passenger Car Association, S&P Global Ratings.

EV producers are racing for share

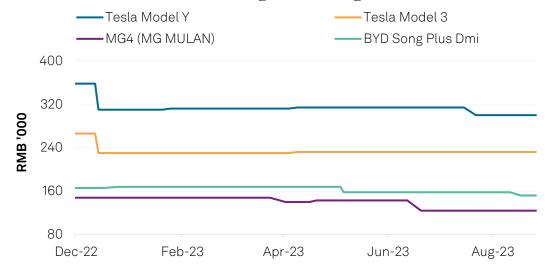


GAC--Guangzhou Automobile Group. Sources: China Association of Automobile Manufacturers, China Passenger Car Association, S&P Global Ratings.

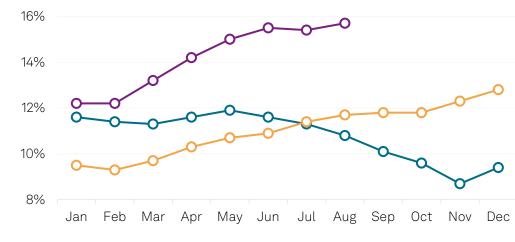
- We expect Chinese local brands in aggregate to maintain solid market position over the next 24 months.
- With rising EV penetration, international brands which are normally laggards in EV have been losing edge. Increasing collaborations between foreign and Chinese EV auto makers, to leverage the latter's production platform and software capability, could become a trend in the next 12-24 months.
- The EV market is becoming more crowded with new entrants and rapidly expanding product portfolios at existing players. In our view, industry consolidation is likely in 3-5 years.
- Competitive products and better cost control will underpin the leading position for BYD and Tesla in China's EV market over the next 1-2 years.

Pricing Pressure Will Remain High

- Soft demand will keep the pricing environment unfavorable. Price competition will likely endure over the next 12 months.
- Carmakers that have relatively high EV penetration yet still small absolute EV sales volume could see more material margin dilution relative to peers.
- OEMs that can ramp up sales quickly for better economies of scale and continuously improve product offerings will be better able to offset the pricing impact on margins.



Price war for EVs could linger for longer



---2021 **---**2022 **---**2023

Larger discounts on ICEs to stimulate sales

ICE-Internal combustion engine. China Passenger Car Association, S&P Global Ratings.

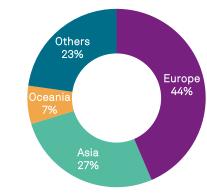
Sources: ModiAuto.com, 16888.com, S&P Global Ratings.

Chinese Carmakers' Overseas Adventures Will Be Bumpy



China's auto export growth is likely to decelerate in 2024

Trade hurdles could dampen EV export



Sources: China Customs, China Passenger Car Association, S&P Global Ratings.

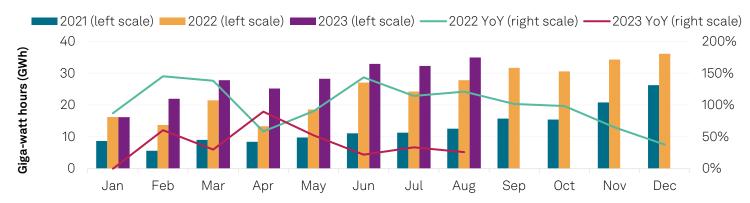


- Passenger vehicle (PV) exports could reach
 4.1 million units in 2023. Export growth is
 set to decelerate in 2024, given a high base.
- Trade hurdles are emerging. The antisubsidy probe announced by the EU on EVs imported from China could hinder EV export after 2024. Europe accounted for over 40% of China's EV exports year-to-date.
- The above investigation will likely have a limited impact on rated carmakers. Among them, Geely Auto has the highest export exposure. Exports accounted for 17% of its total sales volume in the first nine months, with diversified destinations including Eastern & Northern Europe, the Middle East, and Southeast Asia.

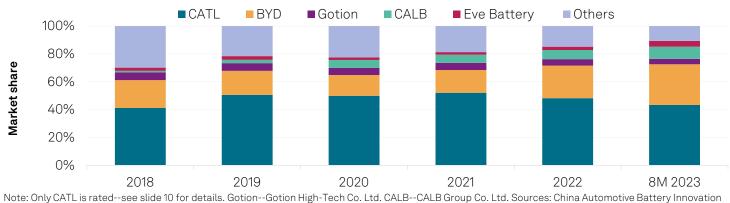
No breakdown into EV and ICE for 2024. Note: ICE--Internal combustion engine, PV – passenger vehicle. Sources: China Association of Automobile Manufacturers, China Passenger Car Association, China Customs, S&P Global Ratings.

Battery Market – Evolving Competitive Landscape

The pace of battery installation is slowing



Tier-two players are gaining share amid intensifying competition

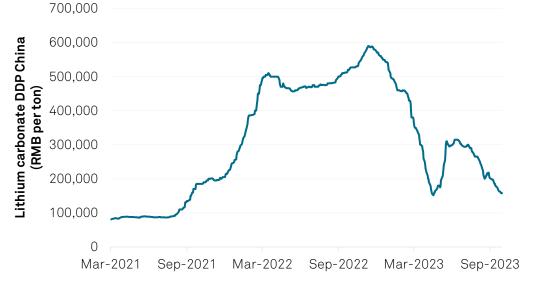


Note: Only CATL is rated--see slide 10 for details. Gotion--Gotion High-Tech Co. Ltd. CALB--CALB Group Co. Ltd. Sources: China Automotive Battery Innovation Alliance, S&P Global Ratings.

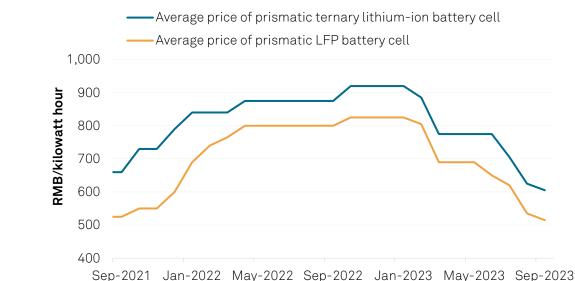
- Growth in battery installations will continue to downshift over the next 24 months as EV production growth slows.
- We believe the Chinese battery market is over supplied with the ratio of battery installation-to-production dropping to 48% in the first eight months in 2023 from 76% in 2020.
- That said, major tier-two battery producers (e.g., BYD, CALB) have been gaining market share since 2022 with EV producers diversifying battery supply to lower costs.
- With technology advantages, strong market reputation and diversified customer bases, CATL's share in China should remain at c.40%. Its share fell to 43% in the first eight months of 2023 amid intensifying market competition.

Moderating Material Costs May Alleviate Margin Strain From The 2H 2023

- Lithium carbonate prices could continue to moderate, due to demand worries and growing supply post-pandemic.
- Falling raw material prices and less robust demand should continue to drag battery prices for the rest of 2023.
- EV producers should see lower production costs from the second half, after digesting raw material inventory purchased at high prices.
- Margins of leading battery producers could improve slightly with better economies of scale and raw material cost falling faster than battery prices.



Lithium carbonate price could remain weak



Battery price trending down since February

RMB--Chinese renminbi. LFP--Lithium iron phosphate. Source: iccbattery.com

RMB--Chinese renminbi. DDP--Delivered duty paid. Source: S&P Global Commodity Insights.

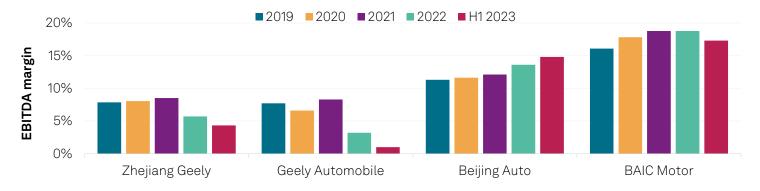
Electrification Is Weighing On Select Carmakers

Geely is in the fast lane of electrification

Sales volume (thousand units)	8M 2023	8M 2023 YoY	8M 2023 EV penetration	2023 EV penetration target
Zhejiang Geely Holding Group Co. Ltd.	1,500-1,600*	14%-19%*	26%-31%*	n.a.
Geely Automobile Holdings Ltd.	985	15%	25%	40%
Beijing Automotive Group Co. Ltd.	1,077	15%	6%-9%*	n.a.
BAIC Motor Co. Ltd.	650-700*	18%-23%*	7%-10%*	n.a.

Note: 1) EV penetration rate refers to EV sales as a percentage of the entity's total auto sales. 2) Penetration rates of China FAW and Beijing Auto are our estimates. 3) EV--Electric light vehicle includes pure electric and plug-in hybrid electric light vehicles. 4) * are estimated ranges., 5) 8M 2023 refers to the first eight months of 2023. YoY--Year on year. Sources: Company reports, S&P Global Ratings.

Faster electrification weighs more on profitability



- Zhejiang Geely, Geely Auto: While our base case factored in improving margins and leverage in 2024, intensifying price competition could hinder the group's margin restoration and deleveraging.
- We revised the outlook on CATL to positive in April 2023. We expect the company to hold its No.1 position in China and increase presence in Europe while maintaining a net cash position.
- We generally see rating buffers for other OEMs and suppliers. Higher operating efficiency, lower raw material costs, modest volume growth and improving product portfolios should underpin better financial metrics.

Note: Zhejiang Geely's EBITDA margin is with proportionate consolidation of Polestar since 2022. Sources: Company reports, S&P Global Ratings.

Margin And Leverage The Key Rating Drivers

		Rating downside triggers		Latest forecast				
Company	Issuer credit rating	Leverage	EBITDA Margin	Debt/EBITDA	FFO/debt	EBITDA margin	Sales volume growth	Key rating drivers
Beijing Automotive Group Co. Ltd.	BBB/Stable/	FFO/Debt < 12%	n.a.	2022A: 2.9x H1 2023: 2.7x 2023E: 2.5x 2024E: 2.3x	2022A: 18.8% H1 2023: 20.7% 2023E: 22.7% 2024E: 25.1%	2022A: 13.6% H1 2023: 14.8% 2023E: 13.3% 2024E: 13.0%	2022A: (15.6%) H1 2023: 22.2% 2023E: 14.0%-16.0% 2024E: 5.0%-7.0%	Sales momentum of JV brandsRestructure of proprietary brands
BAIC Motor Co. Ltd.	BBB/Stable/	FFO/Debt < 12%	n.a.	Net cash	Net cash	2022A: 18.8% H1 2023: 17.3% 2023E: 17.3% 2024E: 17.0%	2022A: (8.2%) H1 2023: 24.1% 2023E: 14.0%-16.0% 2024E: 3.0%-5.0%	Sales momentum of JV brandsRestructure of proprietary brands
Geely Automobile Holdings Ltd.	BBB-/Negative/	Debt/EBITDA>2.0x	< 6%	Net cash	Net cash	2022A: 3.2% H1 2023: 1.0% 2023E: 3.3% 2024E: 4.7%	2022A: 7.9% H1 2023: 13.1% 2023E: 9.0%-11.0% 2024E: 5.0%-7.0%	 Volume, mix and cost control to offset rising EV sales Rating to move in tandum with rating on the parent
Zhejiang Geely Holding Group Co. Ltd.	BBB-/Negative/	Debt/EBITDA>2.0x	< 6%	2022A: 2.5x H1 2023: 2.4x 2023E: 2.3x 2024E: 1.9x	2022A: 22.4% 2023E: 24.6% 2024E: 34.4%	2022A: 5.7% H1 2023: 4.3% 2023E: 5.5% 2024E: 6.3%	2023E: 11.0%-13.0%	 Volume, mix & price to offset rising EV sales High investment in EV could drag free operating cash flow (FOCF)
Contemporary Amperex Technology Co Ltd.	BBB+/Positive/	Debt/EBITDA~1.5x	< 11%	Net cash	Net cash	2022A: 13.7% H1 2023: 16.9% 2023E: 17.1% 2024E: 17.3%		 EBITDA and OCF expansion to cover capex Ability to maintain competitive position in the EV battery market
Johnson Electric Holdings Ltd.	BBB/Stable/	Debt/EBITDA>1.5x M	laterially deteriorates on a sustained basis	2023A: 0.6x 2024E: 0.5x 2025E: 0.3x	2023A: >60% 2024E: >60% 2025E: >60%	2023A: 12.4% 2024E: 13.1% 2025E: 13.3%		 Volume growth and cost cutting to improve margin Maintain positive FOCF and keep low leverage
Yanfeng International Automotive Technology Co. Ltd.	BBB-/Stable/	Debt/EBITDA>1.5x	< 6%	2022A: 1.8x H1 2023; 0.6x 2023E: 1.4x 2024E: 0.9x	2022A: 53.2% 2024E: >60% 2025E: >60%	2022A: 4.8% H1 2023: 6.8% 2023E: 5.1% 2024E: 5.3%		 Stable creditworthiness of its parent - Huayu Automotive Working capital management and leverage control

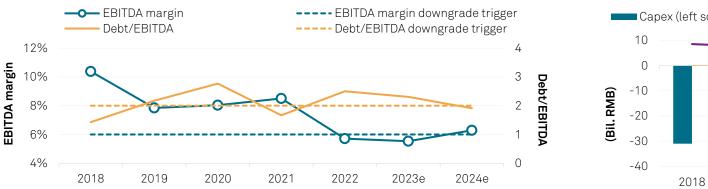
Notes: 1) Zhejiang Geely's EBITDA margin is with proportionate consolidation of Polestar since 2022. 2) BAIC Motor's downgrade trigger is the parent company Beijing Auto's metric. 3) Geely Auto's downgrade trigger is the parent company Beijing Auto's metric. 3) Geely Auto's downgrade trigger is the parent company Zhejiang Geely's metric. 4) The financial figures of Johnson Electric refer to fiscal year ending March 31. 5) Yanfeng International's EBITDA margin and the corresponding downside trigger are the parent company Huayu Automotive Systems Co. Ltd. 's metrics. FFO—Funds from operations. Sources: Company reports, S&P Global Ratings.

Zhejiang Geely Holding Group Co. Ltd. (BBB-/Negative/--)

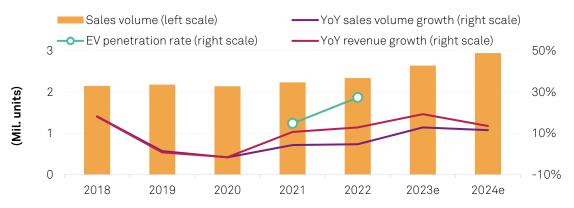
Credit highlights

Key strengths	Key risks	
Diversified geographical exposure with a wide product portfolio.	Uncertainties in the execution of its electrification strategy.	
Growing EV penetration and continuous model upgrades.	Increasing electric vehicle sales may continue to weigh on margin and leverage.	
Synergies among subsidiaries on technology platform and joint procurement.	High capital spending keeps free operating cash flow (FOCF) negative.	

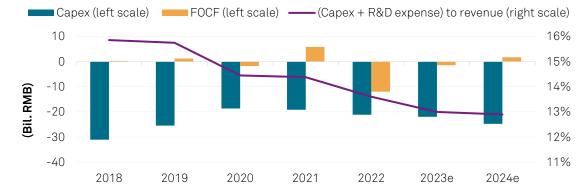
Downgrade triggers



Key operational data



Key financials



Note: 1) Zhejiang Geely's financials are under proportionate consolidation of Polestar since 2022. 2) EV penetration rate refers to EV sales as a percentage of the entity's total auto sales. 3) EV--Electric light vehicle includes pure electric and plug-in hybrid electric light vehicles. Zhejiang Geely's data also includes hybrid electric vehicles. Capex-- Capital expenditure. RMB—Chinese renminbi. e--Estimate. Sources: Company reports, S&P Global Ratings.

Geely Automobile Holdings Ltd. (BBB-/Negative/--)

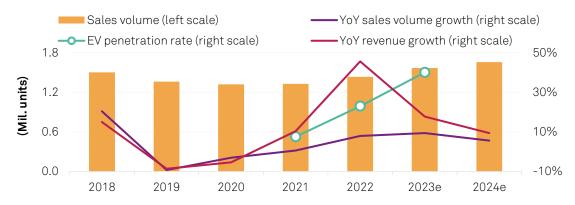
Credit highlights

Key strengths	Key risks	
Leading proprietary brand in China with wide product offerings and good brand recognition.	Uncertainties in the execution of its electrification strategy.	
Synergies with sister companies (e.g., Volvo Car AB) on technology development and procurement.	Increasing electric vehicle penetration pressurizing margin.	
Net cash position.	Strong reliance on a single market.	

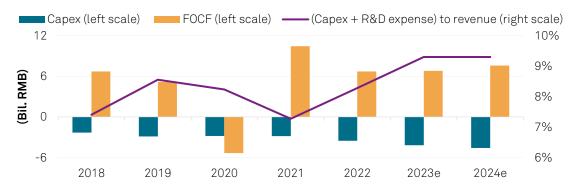
Revenue and margin trend



Key operational data



Key financials



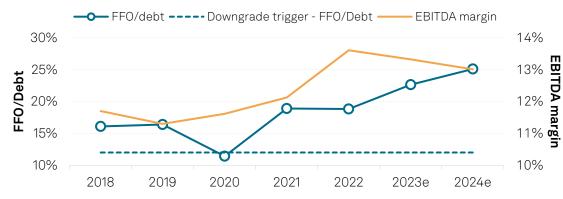
Note: 1) Geely Automobile Holdings Ltd. is a core subsidiary of Zhejiang Geely Holding Group. The rating is equalized to the rating on the parent company. Please refer to slide 10 for the downside triggers of both Geely Automobile Holdings Ltd. and Zhejiang Geely Holding Group. 2) The EV sales volume and penetration rate of 2023e is the company's target. 3) EV penetration rate refers to EV sales as a percentage of the entity's total auto sales. 4) EV--Electric light vehicle includes pure electric and plug-in hybrid electric light vehicles. e--Estimate. FOCF--Free operating cash flow. Capex-- Capital expenditure. Sources: Company reports, S&P Global Ratings.

Beijing Automotive Group Co. Ltd. (BBB/Stable/--)

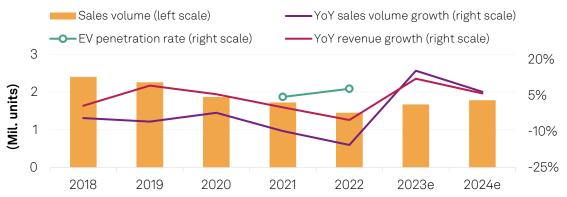
Credit highlights

Key strengths	Key risks	
Solid position in the high-end passenger vehicles and commercial vehicles market.	Pressure on profitability due to intensifying price competition and rising electrification.	
Strong and stable alliance with large global original equipment manufacturers (OEMs).	Uncertainties in turning around loss- making proprietary brands.	
Very high likelihood of extraordinary support from the Beijing municipal government.		

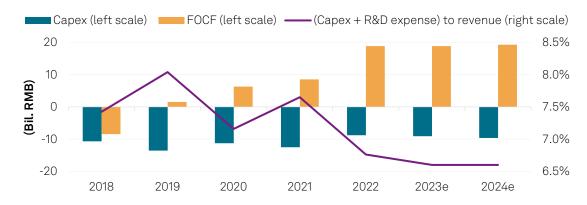
Margin and downgrade trigger



Key operational data



Key financials



Note: 1) EV penetration rate refers to EV sales as a percentage of the entity's total auto sales. 2021 and 2022 penetration rates are based on our estimate. 2) EV--Electric light vehicle includes pure electric and plug-in hybrid electric light vehicles. e-Estimate. FFO--Funds from operations. FOCF--Free operating cash flow. Capex-- Capital expenditure. RMB—Chinese renminbi. Sources: Company reports, EV Volumes, S&P Global Ratings.

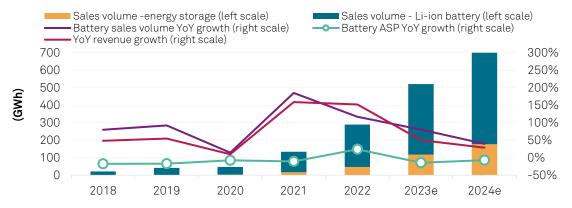
Contemporary Amperex Technology Co. Ltd. (BBB+/Positive/--)

Credit highlights

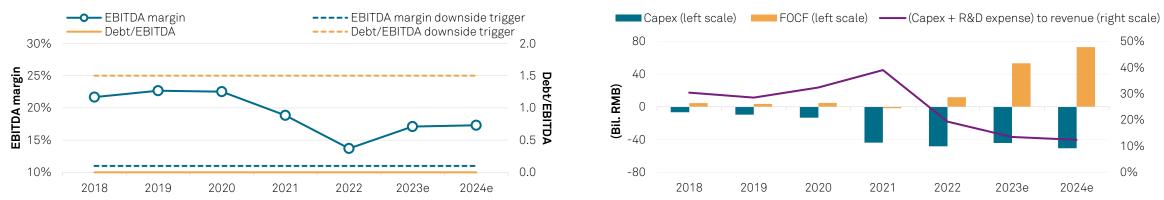
Key strengths	Key risks	
Leading market position in the global EV battery industry.	Moderating revenue growth given decelerating EV sales growth in China.	
Strong customer relationships with major automakers.	Intensifying competition could threaten market share and constrain margin improvement.	
Sustained net cash position with positive free cashflow generation.	Uncertainty in overseas expansions amid geopolitical tensions.	

Key operational data

Key financials



Downside triggers



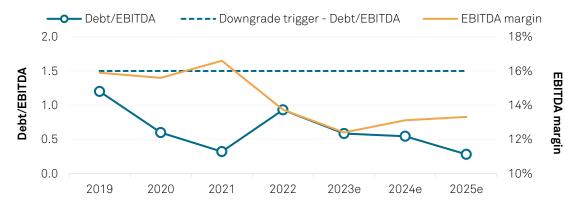
e--Estimate. ASP--Average selling price. Capex- Capital expenditure. FOCF--Free operating cash flow. RMB--Chinese renminbi. GWh--Gigawatt hours. Sources: Company reports, S&P Global Ratings.

Johnson Electric Holdings Ltd. (BBB/Stable/--)

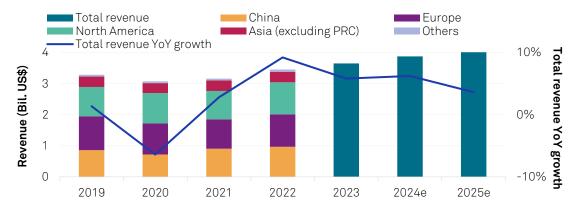
Credit highlights

Key strengths	Key risks
Solid market position in several auto parts segments.	High inflation restraining margins to below pre-pandemic levels.
Diversified customer base with evenly distributed geographical exposure.	U.S. dollar appreciation may lead to foreign exchange losses and slow profitability recovery.
Low financial leverage on prudent financial management.	

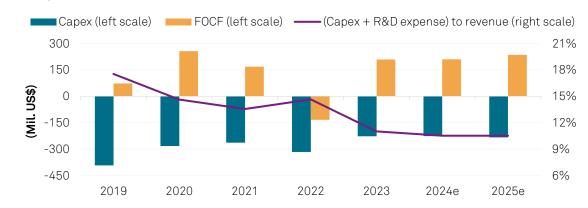
Margin and downgrade trigger



Steady revenue trend



Key financials



Note: Fiscal year ending March 31. e--Estimate. Capex--Capital Expenditure. FOCF--Free operating cash flow. Sources: Company reports, S&P Global Ratings.

Related Research

Commentary

- <u>Global Auto Sales Forecasts: The Pricing Party Is Coming To An End</u>, Oct 09, 2023
- Asian Battery Makers Are Shifting Strategies To Hold Onto Global Lead, Oct 05, 2023
- Glimmers Of Winners Emerge In Asia's EV Push, May 15, 2023
- Global Auto Sales Forecasts: Macro Risks Demand Pricing And Production Discipline, Apr 18, 2023

Tear Sheet & Rating Actions

- Tear Sheet: Zhejiang Geely Holding Group Co. Ltd., Sep 06, 2023
- Tear Sheet: Geely Automobile Holdings Ltd., Sep 06, 2023
- Tear Sheet: Beijing Automotive Group Co. Ltd., Sep 05, 2023
- Tear Sheet: BAIC Motor Corp. Ltd., Sep 04, 2023
- Tear Sheet: Contemporary Amperex Technology Co. Ltd., Jul 31, 2023
- Contemporary Amperex Technology Outlook Revised To Positive On Rising Business Opportunities; 'BBB+' Rating Affirmed, Apr 24, 2023
- BAIC Motor's Margin Will Rise Modestly In 2023, Mar 27, 2023
- Geely Auto Faces Uphill Path To Margin Recovery, Mar 23, 2023
- China Auto Manufacturer Zhejiang Geely Holding And Subsidiary Geely Auto Outlooks Revised to Negative On Margin Pressure, Nov 22, 2022



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