European Automotive Suppliers Rating Methodology

Corporates

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Table of Contents

1. Introduction ... 3
2. The European automotive supplier industry ... 3
3. Rating drivers ... 4
3.1 Business risk profile ... 5
3.1.1 Industry-related drivers ... 5
3.1.2 Competitive positioning ... 5
3.2 Financial risk profile ... 7
3.2.1 Credit metrics ... 7
3.2.2 Cash flow ... 7
3.2.3 Liquidity ... 7
3.3 Supplementary rating drivers ... 8
3.3.1 Financial policy ... 8
3.3.2 Parent/government support ... 8
3.3.3 Peer context ... 8
3.3.4 Governance and structure ... 8
3.4 Environmental, social and governance (ESG) assessment ... 8
4. Issuer rating ... 8
5. Additional methodology factors ... 8
6. Appendix ... 8
6.1 Related documents ... 8

1. Introduction

This methodology is the latest update of the European Automotive Suppliers Rating Methodology, which details Scope's approach to rating European automotive suppliers and complements the General Corporate Rating Methodology published on 15 July 2022. The methodology update has no impact on outstanding ratings.

This update introduces the following changes:

- Extended guidance on the assessment of business risk profiles, including the 'A' and 'AA and above' categories, as well as 'B' and 'CCC and below' categories;
- Fine-tuning of some key rating assumption ranges;
- Clarification regarding the composition of Scope-adjusted EBITDA (capitalised R&D);
- Further clarity on industry-specific ESG factors;
- Minor editorial changes.

Our General Corporate Rating Methodology lays down the key principles and criteria applied when assigning ratings to corporate issuers and their debt instruments.

This methodology describes how we analyse the corporate credit risk of automotive suppliers based on our assessment of business risk and financial risk profiles, which is complemented with an analysis of supplementary rating drivers. It provides guidance on the ratings of European automotive suppliers but may be applied to non-European issuers when appropriate.

We define automotive suppliers as companies that generate the majority of their revenue and funds from operations from the production of parts and the distribution of services to automotive manufacturers known as original equipment manufacturers (OEMs) or to the respective secondary markets (aftermarkets). The latter comprise, for example, parts for replacement, appearance or performance. Wholesale or retail companies without material sales from production (such as aftermarket distributors) are not covered by this methodology.

2. The European automotive supplier industry

The European automotive supplier industry is a cyclical and highly fragmented industry. Market participants range from large, global multiproduct companies serving both OEMs and the aftermarket, to small, local producers only manufacturing product sub-components for other automotive suppliers. Product groups include tyres, exteriors, chassis, powertrains, interiors and electronics.

Automotive supply, like the automotive industry as a whole, is a global industry. Suppliers of OEMs tend to follow their customers around the globe and set up manufacturing facilities close to their clients. Price competition is fierce within the industry.

A distinction is generally made between tier-one and tier-two (or lower) suppliers, according to their importance in the supply chain. While tier-one suppliers usually deliver products directly to OEMs, tier-two (or lower) corporates mostly supply other automotive suppliers with sub-components or raw materials. Tier-one suppliers typically enjoy greater pricing power and higher profitability than tier-two (or lower) suppliers.

Products and services in the industry tend to differ substantially with regard to complexity, R&D requirements and the capital intensity of production. Stricter emissions standards are placing an enormous strain on the industry, entailing significant investment in R&D. In many cases, R&D is done jointly by OEMs and the automotive suppliers, which requires innovative capacity and weighs on short-term cash flow.

The automotive supplier industry is highly capital intensive. Due to significant upfront investments in fixed assets, which are generally necessary to pre-finance production capacities and generally high working capital requirements, an automotive supplier's cash flow tends to be volatile in the course of a product cycle. As a result, automotive suppliers generally have negative cash flow during the ramp-up phase of a new product and substantial positive cash flow can only be achieved when production volumes increase in a later phase. Meaningful positive cash flow is, however, not guaranteed, and is heavily dependent on the success of the OEM's business. The latter is subject to cyclical macroeconomic factors, such as consumer confidence and GDP growth.

These relatively volatile cash flows are mitigated by order backlogs from current long-term contracts and a revenue contribution from aftersales (e.g. the replacement business). While a large order backlog may protect a company's utilisation of production capacities for a foreseeable timeframe, cash flows generated by aftersales tend to be less cyclical and more predictable than those

generated by direct supply to OEMs. Moreover, the aftersales market is less dependent on economic cycles than the supply of products and services to OEMs.

Parameters that can qualify an automotive supplier for an investment grade rating are a stable and substantial revenue base, strong cash flow and sufficient innovativeness in core product groups to safeguard a strong market position. Other parameters are strong geographical, product and customer diversification. Predictable cash flows, supported by a sound order backlog or a large contribution from aftermarket sales, strong profitability and financial measures are further indicators of an investment grade rating.

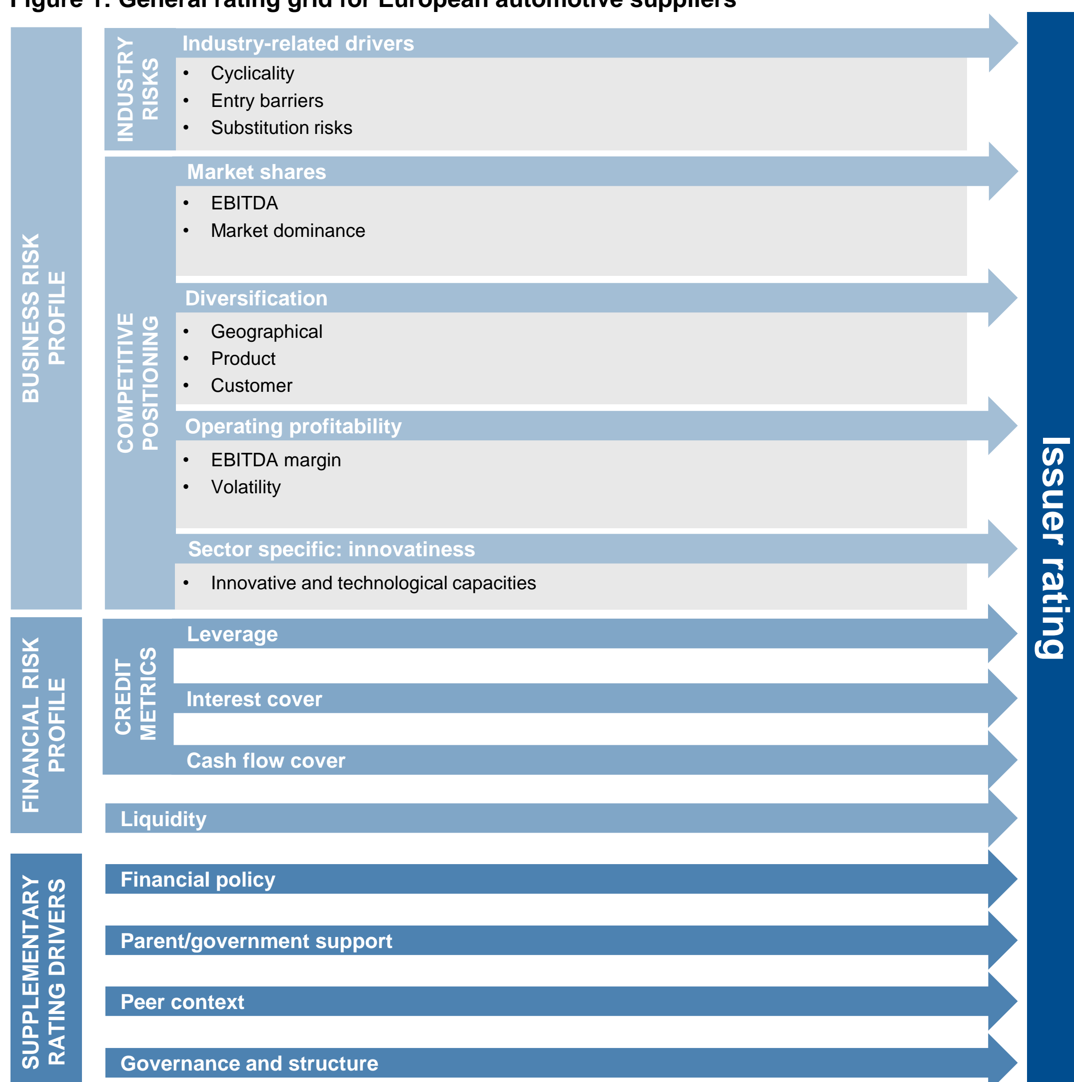
In contrast, a small, volatile revenue base, vulnerable cash flow and low innovativeness can be indicators of a non-investment grade rating. Further parameters include weak diversification in terms of geography, product range and customer base. In addition, less predictable cash flow, volatile profitability and weak financial measures tend to indicate a non-investment grade rating.

On the whole, the cyclicality of the business makes it challenging for automotive suppliers to achieve ratings in the highest investment grade categories.

3. Rating drivers

We apply our rating methodology for automotive suppliers as outlined in Figure 1. The following business risk and financial risk indicators are non-exhaustive and may not apply fully to individual automotive suppliers. Each company's business model determines the applicable indicators.

Figure 1: General rating grid for European automotive suppliers



3.1 Business risk profile

3.1.1 Industry-related drivers

We assess the industry fundamentals of European automotive suppliers by examining the following industry drivers:

- Cyclicality;
- Entry barriers;
- Substitution risks.

Cyclicality – high

To minimise the need for rating changes due to cyclical volatility, we include the impact of economic cycles in the rating whenever possible. The automotive industry is highly cyclical. Based on historical data, the 10-year compound annual growth rate of sales for the automotive supplier industry was about 4%, already reflecting a high peak-to-trough during the 2008-2009 downturn with a 10% collapse of average sales in the industry. Production and sale volumes in the industry are strongly connected to OEMs’ business and overall economic development.

Barriers to entry – high

Despite the fragmented and still-maturing structure of the market as well as the small size of existing players, we regard the sector’s barriers to entry as high. This is based on relatively high capital intensity, particularly in ramp-up periods, and substantial R&D requirements for some product groups. However, traditional hardware component suppliers will be increasingly challenged due to the shift toward software-enabled solutions as the automotive industry accelerates its transition to electric vehicles.

Substitution risk – medium

Substitution risk for the automotive supplier industry is medium. As part of the entire automotive supply chain, the industry is closely connected to the overall production of vehicles. Despite the existence of several other means of transportation, such as the train or airplane, the independence and flexibility provided by motor vehicles is not easily replaceable. Our analysis takes into account megatrends or transition risks in the industry, including technological and ecological transitions. One example currently affecting the automotive industry – and consequently the supply chain for passenger cars – is the growth of shared vehicle services and ecological mindsets regarding different modes of transport. While these trends do not make the entire underlying industry redundant (e.g. cars and light vehicles are still being produced), the size and growth of the automotive supplier industry may be affected in the future.

Figure 2: Industry risk assessment matrix for automotive suppliers

European automotive suppliers		Entry barriers		
		Low	Medium	High
Cyclicality	High	CCC/B	B/BB	BB /BBB
	Medium	B/BB	BB/BBB	BBB/A
	Low	BB/BBB	BBB/A	AA/AAA

High cyclicality and high barriers to entry lead to a combined assessment of BB/BBB for the automotive supply industry. Complemented by a medium to high substitution risk, this translates into a final industry sub-rating of BB.

3.1.2 Competitive positioning

We assess the competitive positioning of a company in the automotive supply industry by looking at the following risk drivers:

- Market shares;
- Diversification;

- Profitability;
- Innovativeness.

Market shares

We consider an automotive supplier's size, in terms of its EBITDA and market position, as an indicator of its economies of scale and bargaining power in negotiations with OEMs. A dominant market position in their core product group allows automotive suppliers to negotiate higher prices and enhance competitive positioning. Large size often goes hand in hand with solid diversification in terms of geographies, variety of products and customer structure.

Figure 3: Market position by rating category

Market position	AA and above	A	BBB	BB	B	CCC and below
EBITDA* (EUR m)	> 8,000	1,000 to 8,000	600 to 1,000	150 to 600	150 to 10	< 10
Market dominance	Dominant position in core product group		Moderate position in core product group	Modest position in core product group	Very modest position in core product group	

* Scope-adjusted EBITDA as defined in the General Corporate Rating Methodology

Diversification

An automotive supplier's geographical, product and customer diversification determines its ability to offset cash flow volatility arising from economic cycles, industry dynamics, regulatory changes and unexpected revenue base losses.

Geographical diversification. A wide spread of business exposures across various geographical regions with different demand patterns and diverging economic cycles reduces automotive suppliers' cash flow volatility. We believe that a strong global presence in the automotive industry's key markets, both mature and emerging, is essential for automotive suppliers. Besides providing global availability for its OEM customers, local production facilities also provide natural currency hedging.

Product diversification. We consider a well-diversified mix of products across diverse product groups to be a positive rating driver. An automotive supplier offering a wide range of products from different product groups (e.g. electrical, powertrain and chassis), combined with an aftermarket business, is able to partially offset the industry's inherent cyclicality.

Customer diversification. Solid customer diversification, measured as the percentage of revenue generated by the top three customers, is a positive rating driver for automotive suppliers. High customer concentration tends to make automotive suppliers' cash flow highly dependent on the OEMs' economic situation.

Figure 4: Diversification by rating category

	AA and above	A	BBB	BB	B	CCC and below
Geographical	Global player with a (strong) presence in key markets			Niche player with a (strong) presence in selected markets		Niche player with limited presence in selected markets
Product	Large variety of product groups combined with wide range of products	Variety of product groups combined with wide range of products	Variety of product groups combined with narrow range of products	Single product group combined with wide range of products	Single product group combined with narrow range of products	
Customer (top three in % of sales revenue)	< 10		10 to 30	30 to 50	50-75	> 75

Profitability

We regard an automotive supplier's EBITDA margin as the key indicator of profitability and efficiency. When computing Scope-adjusted EBITDA, we deduct capitalised development costs from reported EBITDA. This is usually the most material adjustment.

EBITDA margins in this industry vary depending on the automotive supplier's business segment and pricing power. Producers with an excellent market positioning have better pricing and can achieve EBITDA margins of around 20%-25%, whereas companies with a weaker market positioning, e.g. producers of lower value-added products, have single-digit EBITDA margins. Pricing pressure from OEMs, the need to innovate, and swings in raw material costs (e.g. in the absence of pass-through clauses) have a considerable impact on automotive suppliers' EBITDA margins.

Figure 5: Profitability by rating category

Profitability	AA and above	A	BBB	BB	B	CCC and below
Volatility	Low		Medium		High	
Scope-adjusted EBITDA margin (%)	> 22	16 to 22	12 to 16	8 to 12	2 to 8	< 2

Innovativeness

Innovativeness is a key success factor in the industry. Companies that have a technological advantage can impose higher barriers to entry in their respective product group, whereas automotive suppliers with less innovative products are greatly exposed to substitution risks. The latter may result in a loss of market share and weaken the company's competitive position.

R&D expenditure as a percentage of sales (R&D/sales) indicate a company's innovative capacity. Strong innovation ensures technological leadership and should translate into future revenue streams through new products. Depending on the R&D intensity required for a given product group, R&D/sales is on average about 4% but can rise to 10% or more in the industry.

Figure 6: Innovativeness by rating category

	AA and above	A	BBB	BB	B	CCC and below
Innovative power	Very strong track record	Strong track record	Good track record	Moderate track record	Weak track record	Very weak track record

3.2 Financial risk profile

Our assessment of an automotive supplier's financial risk profile follows the general guidance presented in our General Corporate Rating Methodology. We focus on recent and forward-looking data including (but not limited to) key parameters like leverage, interest cover and cash flow. We also assess liquidity, which is particularly important for non-investment grade issuers.

3.2.1 Credit metrics

We assess the financial risk profile of automotive suppliers using the four credit metrics set out in our General Corporate Rating Methodology. For further information and definitions, see our General Corporate Rating Methodology.

3.2.2 Cash flow

We analyse an automotive supplier's ability to generate cash flow. The visibility and predictability of a company's cash flow are reflected in its order backlog, typical lead times and cash flow contribution from aftermarket business. Sales derived from a less cyclical aftermarket business (e.g. the replacement market) and a backlog largely covering future production volumes tend to be reliable predictors of a company's cash flow. In contrast, companies with short lead times and no contribution from aftersales tend to have more volatile and less predictable cash flow. Hence, a sound backlog and stable aftermarket business tend to smooth the risk of future cash flow volatility and are credit-positive.

3.2.3 Liquidity

We assess liquidity separately from credit metrics, reflecting its different nature. We classify liquidity as either adequate or inadequate. Its implication for the ratings is ultimately subject to the rating committee's decision, as liquidity can only be partially expressed by coverage ratios. For further explanations and definitions, see page 10 of the General Corporate Rating Methodology.

3.3 Supplementary rating drivers

3.3.1 Financial policy

Our assessment of supplementary rating drivers is described in the General Corporate Rating Methodology.

3.3.2 Parent/government support

Our assessment of parent support is described in the General Corporate Rating Methodology.

3.3.3 Peer context

Our assessment of supplementary rating drivers is described in the General Corporate Rating Methodology.

3.3.4 Governance and structure

Our assessment of supplementary rating drivers is described in the General Corporate Rating Methodology.

3.4 Environmental, social and governance (ESG) assessment

During the corporate rating process, we implicitly capture environmental, social and governance (ESG) factors that have a material credit impact. ESG awareness is increasingly affecting the entire automotive supplier industry and exposing companies to ESG risks, not only directly but also indirectly through the value chain. Automotive suppliers are increasingly focused on environmental factors such as optimising the use of natural resources (e.g. water, raw materials and energy), reducing product waste, and the circular economy. Product innovation plays a key role in facilitating the energy transition (e.g. alternative propulsion technologies used for hybrid/electric vehicles) while product safety remains a must and a prerequisite for certain technological breakthroughs (e.g. driverless cars). The main social factors for the automotive supplier industry include oversight of the various tiers of the supply chain, although this is not as material as for OEMs. Automotive suppliers are under increasing scrutiny to ensure labour laws and human rights are respected, especially in emerging countries. A failure to incorporate ESG aspects in its strategy could expose a company to reputational risks with severe consequences for brand value.

The General Corporate Rating Methodology provides further detail on how ESG factors and supplementary rating drivers are incorporated into the credit analysis.

4. Issuer rating

The final issuer rating is based on our analysis of the business risk profile, financial risk profile and supplementary rating drivers. The rating committee decides the relative importance of each rating driver. The business risk and financial risk profiles are generally weighted equally for BB/BBB rated companies. The business risk profile is emphasised for investment grade companies (rated BBB- or above), while the financial risk profile is the focus for ratings at B or below. A company's size, outreach, cash flow volatility and vulnerability determine which of the risk profiles will be more heavily weighted in the analysis. The weighting between the business risk and financial risk profiles may be adjusted for specific business models and markets.

5. Additional methodology factors

The General Corporate Rating Methodology provides more detail on our rating Outlooks for corporate debt ratings, short-term ratings, recovery analysis, instrument ratings and rating categories.

6. Appendix

6.1 Related documents

For more information, please refer to the following documents:

- General Corporate Rating Methodology
- Credit Rating Definitions

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