Automotive Suppliers Rating Methodology

Corporates

Call for comments

Scope welcomes market participants' comments on its proposed methodology.
Please send your comments by 6 March 2025 to consultation@scoperatings.com.

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1. Introduction

[1] This methodology is the latest update of the Automotive Suppliers Rating Methodology, which details Scope's approach to rating automotive suppliers. It complements Scope's General Corporate Rating Methodology and supersedes it in event of conflict, inconsistency or ambiguity. The updated methodology is not expected to impact outstanding ratings.

[2] This update contains the followings changes :

i) Extending the scope of application to global from European as the automotive supplier industry is deemed global, just like the car manufacturer industry, with no credit-relevant specifications for regional automotive suppliers;

ii) Changing the assessment of entry barriers to the industry to Medium from High in light of the dynamic changes of the industry and the high fragmentation of the market, still resulting in a BB assessment for the Industry Risk Profile;

iii) Aligning the phrasing of the qualitative assessment of market share with the definitions from Scope's Credit Rating Definitions;

iv) Enhancing the description of volatility when assessing operating profitability;

v) Providing reference points that we typically use when assessing innovativeness;

vi) Providing typical information and data sources used in the analytical process;

vii) Editorial changes.

2. Scope of application

[3] 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.

[4] 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 and are primarily covered in Scope's Retail and Wholesale Rating Methodology.

[5] This methodology is applied to automotive suppliers on a global level.

3. The automotive supplier industry

[6] The 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.

[7] 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.

[8] 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.

[9] 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.

[10] 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.

[11] 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.

[12] 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.

[13] 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.

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

4. Information/Data sources

[15] In the analytical process Scope typically takes into account the following sources of information. Not all of the listed information will be considered for every rated entity. Moreover, Scope may consider additional sources of information if necessary.

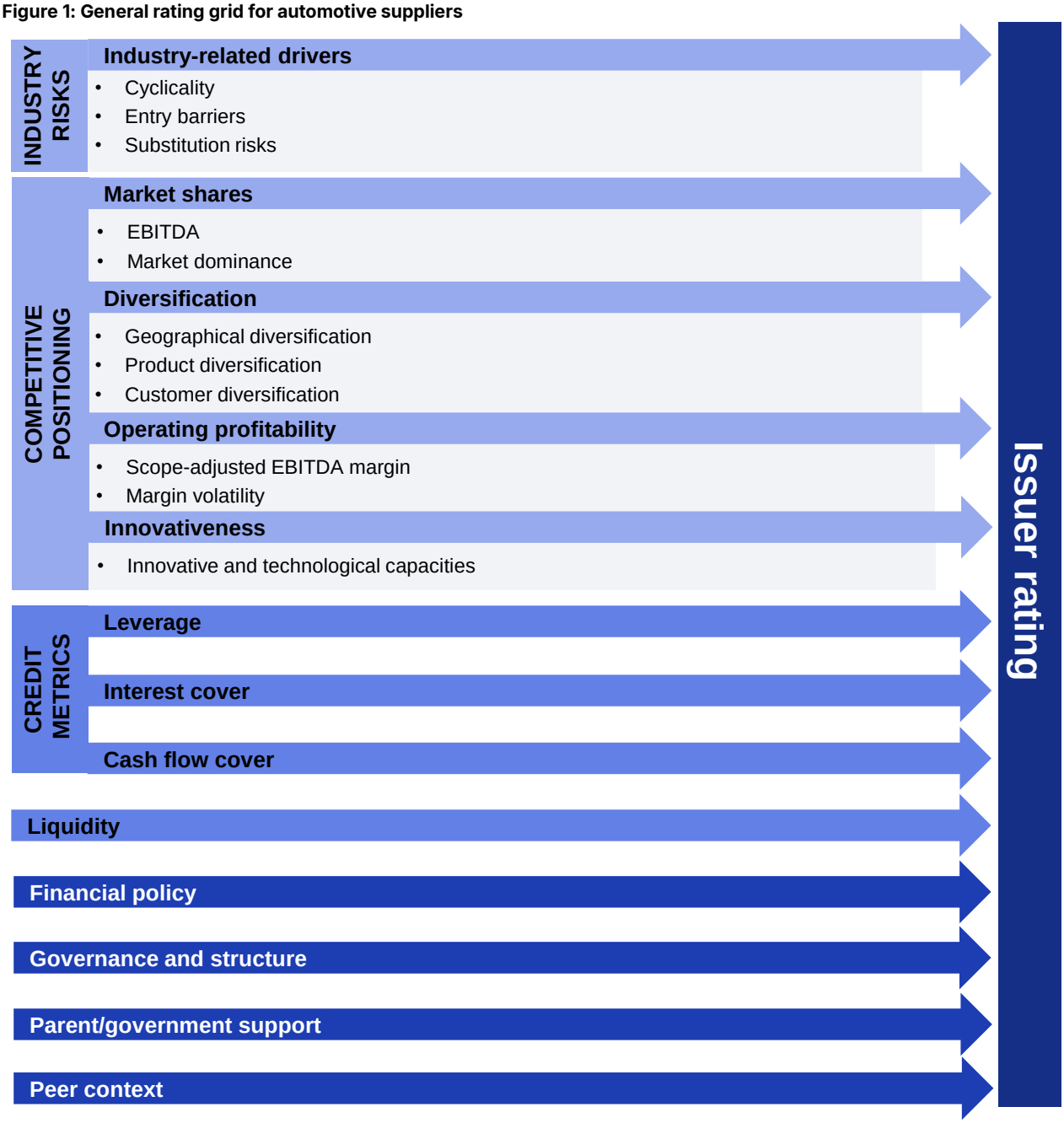
- Audited financial statements
- Unaudited interim financials
- Press releases
- Presentations and information from conference calls/Capital Market Days
- Financial forecasts/budgeting of the rated entity, if available/accessible
- Research on the industry, rated entity and relevant jurisdictions
- Data from external data providers, e.g. consensus estimates, debt placements
- Management meeting (in case of issuer participation)
- Loan documentation, e.g. debt prospectuses, bank loan agreements
- Valuation reports from external assessors

[16] Scope internal data, e.g. spreading of historical financials and detailed forecasts for the next few years, peer group data.

5. Key components

[17] We apply our rating methodology for automotive suppliers as outlined in Figure 1. The rating analysis takes into account credit risk factors specific to Automotive Supplier Corporates as specified in this sector methodology as well as factors common to all industries such as management, liquidity, legal structure, governance and country risks which are explained in more detail in the General Corporate Rating Methodology. The following business risk and financial risk indicators are non-exhaustive and may overlap; some may not apply to certain corporates. We may add issuer-specific rating factors, and a company's business model is decisive for the applicable indicators. No rating driver has a fixed weight in the assessment. Please refer to the General Corporate Rating Methodology for more detail.

Figure 1: General rating grid for automotive suppliers



5.1 Business risk profile

5.1.1 Industry-related drivers

[18] We assess the industry fundamentals of automotive suppliers by examining the following industry drivers:

- Cyclicality
- Entry barriers
- Substitution risk

Cyclicality

[19] 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.

[20] Automotive suppliers with a strong exposure to the less cyclical aftermarket business (e.g. replacement parts, components and systems) tend to have less volatile revenues and cash flows. 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. The aftersales market is less dependent on the economic cycle than the supply of products and services to the OEMs. This applies in particular to the tyre manufacturers which derive the vast majority of their revenues (around 70-80%) from the replacement market. In contrast, companies with short lead times and no contribution from aftersales tend to have more volatile and less predictable cash flow.

Entry barriers

[21] The automotive supply industry benefits from significant barriers to entry, mainly due to (i) high capital intensity, especially in the ramp-up phase, (ii) the provision of technological innovation that meets stringent regulatory requirements, and (iii) the establishment of long-term relationships with OEMs. However, the accelerating transformation of the automotive industry towards electric and hybrid vehicles, as well as the increasing shift from traditional hardware suppliers to suppliers with software-based solutions, is contributing to an increasingly fragmented market and the emergence of small, highly specialised players. In light of this ongoing transformation, we believe that barriers to entry are weakening, leading to our assessment of medium barriers to entry for the industry as a whole, although we note that the amplitude of barriers to entry varies widely across sub-segments.

Substitution risk

[22] 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: Scope's Industry risk assessment on automotive suppliers

Cyclicality \ Entry barriers	Low	Medium	High
High	CCC/B	B/**BB**	BB/BBB
Medium	B/BB	BB/BBB	BBB/A
Low	BB/BBB	BBB/A	A/AA

[23] Based on its high cyclicality and medium entry to barriers, the automotive supply industry is assessed at B/BB. In combination with a medium substitution risk, the industry risk assessment is positioned at BB.

5.1.2 Competitive positioning

[24] We assess the competitive positioning of a company in the automotive supply industry by examining the following risk drivers:

- Market shares
- Diversification
- Operating profitability
- Innovativeness.

Market shares

[25] 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 shares 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	10 to 150	< 10
Market dominance	(Very) strong position in core product group		Good position in core product group	Moderate position in core product group	(Very) weak position in core product group	

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

Diversification

[26] 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.

[27] **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.

[28] **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.

[29] **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 diversification	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 diversification	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 diversification (top three in % of sales revenue)	< 10		10 to 30	30 to 50	50 to 75	> 75

Operating profitability

[30] 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.

[31] 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.

[32] Our analysis also considers the volatility of operating margins. High margin volatility is typically associated with a limited ability to pass on higher costs or adjust the cost base in the event of significant changes in demand (volumes). Auto suppliers with high margin volatility could also be affected by a similarly high volatility in their operating cash flow, which could limit their access to external financing. In contrast, auto suppliers with high pricing power, more variable cost structures, the ability to reduce operating costs in a timely manner through productivity and efficiency measures, and the ability to adapt to market conditions during downturns tend to have low margin volatility.

[33] We would typically base our assessment on margin fluctuations over an extended period of time, including (a) stress period(s) and our forecast horizon. For example, we would typically classify the volatility of operating profitability as high, medium or low based on the EBITDA margin range or a standard deviation of an auto supplier's EBITDA margin compared to the relevant peer group.

Figure 5: Operating profitability by rating category

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

Innovativeness

[34] 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 more vulnerable to competitive threats and greatly exposed to substitution risks. The latter may result in a loss of market share and weaken the company's competitive position. Furthermore, as part of the traditional OEM-supplier relationship, less innovative and mature products are subject to structural price declines, reflecting annual productivity givebacks. This is a strong incentive for suppliers to maintain a regular flow of new, innovative products.

[35] The accelerated transformation of the automotive industry requires that suppliers permanently innovate in order to preserve their competitiveness, keep strong differentiating features and ultimately protect margins.

[36] Amid mounting climate-related risks, product innovation also plays a key role in addressing energy transition, which requires innovative solutions to reduce emissions or improve fuel efficiency. These opportunities extend well beyond powertrain improvements and encompass a wide range of clean-tech solutions, carbon abatement technologies, light-weight solutions or alternative material-based products.

[37] Lastly, innovativeness is a safety net for those suppliers which fear to be commoditised in an (all) electric world.

[38] R&D expenditure as a percentage of sales (R&D/sales) is a key indicator of 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. Hence, we regard automotive suppliers with a high R&D ratio to show stronger innovation which would sustain their market positions.

[39] Besides the capacity to invest in R&D, what matters is the suppliers' ability to launch a regular flow of new products as signalled by new patent registries, what these products bring in terms of innovation and to what extent they address the megatrends which drive current and future industry growth.

Figure 6: Innovativeness by rating category

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

5.2 Financial risk profile

[40] 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. Liquidity is also assessed and is central to our analysis of non-investment grade issuers.

[41] The financial risk profile indicates a company's financial flexibility and viability in the short to medium term. A company with a strong financial risk profile is more likely to be resilient to economic downturns, adverse industry dynamics, unfavourable regulation or an unexpected loss of a revenue source. The ability to retain financial flexibility during an economic downturn is a rating driver for automotive suppliers as it indicates an ability to invest at all phases of the economic cycle.

5.2.1 Credit metrics

[42] Our general assessment of credit metrics (e.g. leverage, interest cover and cash flow cover) is outlined in the General Corporate Rating Methodology.

[43] Given the strong cyclicality of the automotive industry and the significant cash flow volatility over a business cycle, we are mindful of the phase in the cycle when assessing credit metrics. The credit metrics outlined in the General Corporate Rating Methodology provide an indication of ratios that are expected to be maintained in a mid-cycle scenario under normal conditions.

5.2.2 Liquidity

[44] Our general liquidity assessment is outlined in the General Corporate Rating Methodology.

5.3 Supplementary rating drivers

5.3.1 Financial policy

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

5.3.2 Governance and structure

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

5.3.3 Parent/government support

[47] Our assessment of parent support is described in the General Corporate Rating Methodology. When assessing the credit quality of an automotive supplier that may benefit from government support, we incorporate the sovereign's or sub-sovereign's capacity and willingness to bail out an automotive supplier in financial distress, as laid out in Scope's Government Related Entities Rating Methodology.

5.3.4 Peer context

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

5.4 Environmental, social and governance (ESG) assessment

[49] Credit-relevant environmental and social factors are implicitly captured in the rating process, while corporate governance is explicitly captured at the 'governance and structure' analytical stage (see 5.3.2).

[50] The rating analysis focuses on credit quality and credit assessment drivers. An ESG factor is only credit-relevant when it has a discernible and material impact on the issuer's cash flow, and, by extension, its overall credit quality.

[51] Credit-relevant ESG factors can directly and indirectly affect all elements of the business risk profile, financial risk profile and supplementary rating drivers. This is in contrast to ESG ratings, which are largely based on quantitative scores on various rating dimensions.

[52] The corporate rating process implicitly captures environmental, social and governance (ESG) factors that have a material credit impact.

[53] 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) and reducing product waste through solutions such as the circular economy. Product innovation plays a key role in facilitating the energy transition (e.g. alternative propulsion technologies, battery technologies, software) 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 when procuring critical raw materials in emerging countries. The automotive supplier industry is also subject to tighter regulatory constraints. Lastly, automotive suppliers face reputational risks, which could have severe consequences for brand perception and business activity (e.g. Takata following its massive worldwide airbag recall).

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

6. Issuer rating

[55] 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 on the relative importance of each rating driver. The business risk profile and financial risk profile are generally weighted equally for companies perceived as crossovers between investment grade and non-investment grade. The business risk profile is typically emphasised for investment-grade companies, while the financial risk profile is mostly the focus of ratings assigned to companies that are perceived as having high yield credit profiles. However, the latter also depends on the financial risk profile. Less focus is granted to strong financial risk profiles of companies showing a weak/vulnerable business risk profile (in the B or low BB category) since for such companies, the financial risk profile is subject to higher volatility. This takes into account that the credit rating of companies with business risks that reflect weak or moderate credit quality should not be bolstered by a temporary strong financial risk profile. Hence, the weighting between the business risk and financial risk profiles is adapted to each issuer's business model and market(s).

7. Additional methodology factors

[56] For more details on our rating Outlooks for corporate issuer ratings, long-term and short-term debt ratings, the recovery analysis see the General Corporate Rating Methodology.

8. Appendix: Related documents

[57] For more information, please refer to the following documents:

- General Corporate Rating Methodology
- Government Related Entities Rating Methodology
- Credit Rating Definitions
- Retail and Wholesale Rating Methodology

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