

General Corporate Rating Methodology

Corporates

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1. Introduction

This methodology provides our updated approach to assigning credit ratings to non-financial corporates.

This document provides the methodological basis for our analysis of a corporate issuer independently of its geographical focus, encompassing assessments of the general business risks and financial risks. Sector-specific corporate methodologies, which are published separately, expand on our Business Risk Profile assessment and, in some cases, provide sector-specific rating thresholds related to credit metrics. This methodology also defines credit metrics for determining financial risk irrespective of sector, except for several sectors with exceptional characteristics (page 22).

Key changes to the methodology

This methodology update contains the following adjustments:

- A more detailed articulation of the Business Risk Profile, through:
 - The provision of detailed analytical considerations for the blending between the Industry Risk Profile and Competitive Positioning through notching for the assessment of the Business Risk Profile
 - A detailed description of key factors and descriptors comprising the sub-factors of Competitive Positioning, by broad letter rating category
- Added emphasis and explanation around how and why we adopt a 'weakest link' philosophy in the relative weighting of the different methodology sub-factors
- The provision of further elaborations on the rating of fully or partially guaranteed debt
- Additional guidance around the fundamental qualitative drivers of our hybrid assessment, to provide additional assistance and nuance in the evaluation of innovative hybrid market instruments that may not directly mirror our formal equity content criteria around deferral, maturity, replacement and subordination
- A re-positioning of our Liquidity assessment as a Supplementary Rating Driver, rather than as a discrete sub-factor within the Financial Risk Profile
- A re-positioning of our assessment on parent/government-related entity support and peer context under External Rating Drivers
- The provision of a separate document listing all Industry Risk Profiles
- Editorial changes

2. Scope of application

The General Corporate Rating Methodology details the key principles and criteria we apply when assigning ratings to non-financial corporate issuers and their debt instruments. Ratings are assigned based on our [Credit Rating Definitions](#). In general, we do not perform a standalone analysis on corporate issuers that benefit from an effective guarantee provided by its parent or a public sponsor (see 5.4.1).

2.1 Issuer ratings

The issuer rating is our long-term credit rating for corporate issuers. It indicates the issuer's relative credit quality, i.e. its ability relative to peers to meet contractual, financial debt obligations as a going concern, on time and in full. It does not consider the ranking and priority of debt payments upon a hypothetical default of the issuer.

When determining the issuer rating, we perform a forward-looking analysis using qualitative and quantitative information. Alongside past financial data, the analysis considers the potential impact of likely future events on an issuer's credit risk profile (forecasts).

Issuer ratings are assigned to legal entities only. Depending on the legal and operational structure of a group, we can assign an issuer rating either to a holding company of a group on a consolidated basis or to individual entities within that group. For the latter, we look at legal ties, intercompany guarantees and interdependent operations (such as centralised group financing or cash-pooling) to determine the entity level at which we apply the issuer rating.

Importantly, the scope of consolidation which we factor into our assignment of the issuer rating reflects the totality of all obligations, the servicing of which ultimately falls to the issuer's responsibility, regardless of whether this responsibility is contractual, economic, or deemed otherwise effective in practice based on our examination of the issuer and its surrounding legal entities.

Issuer ratings are not assigned to bankruptcy-remote vehicles.

Although we generally do not apply a country cap on our ratings, we typically see limited room for a positive rating differential for issuers headquartered in countries with a non-investment grade sovereign rating. The positive rating differential depends on our assessment of the transmission channels, the sovereign risk acuity (identifying the sovereign-level risk factors that would impact the issuer) and the risk sensitivity of the issuer. Where the dynamics of an issuer's market of operations may be impacted by the operating environment pertinent to the issuer's geographic footprint, we explicitly aim to capture the resulting credit dynamics within our Business Risk Profile assessments or through peer context.

2.2 Rating Outlook

A rating is accompanied by an Outlook that can be Stable, Positive or Negative. This indicates the most likely direction of the rating if it were to change in the next 12 to 18 months. A rating change is not automatic, however.

A rating change may occur if the issuer's BRP and FRP reach above or below our expectations. For example, if the issuer's financial profile is better than anticipated and we expect the improvement to be sustainable.

A Positive Outlook indicates that if a rating were to change, it would entail an upgrade; a Negative Outlook indicates a potential downgrade; and a Stable Outlook implies that we do not anticipate the rating to change over the next 12 to 18 months.

Outlooks apply to long-term issuer ratings. There are no Outlooks on short-term or long-term debt instrument ratings.

2.3 Debt ratings

Our debt ratings reflect our credit opinion on the relative credit quality of the corporate debt instrument or a corporate debt category. Debt ratings can be issued on both short-term and long-term debt.

Long-term debt ratings are assigned to long-term debt instruments, taking into account the likely recovery of the debt instrument in a hypothetical default scenario.

Short-term debt ratings express an opinion on debt instruments with a typical initial term of up to 13 months, e.g. commercial paper, in line with our [Credit Rating Definitions](#). Short-term ratings correlate with the issuer rating and liquidity position (see 6.4 below).

2.4 Local and foreign currency ratings

Unless otherwise specified, our issuer and issue ratings apply equally to liabilities in local and foreign currency.

For issuers located in countries assessed by Scope with a sovereign credit quality of BB+ or below (non-investment grade), we may assign both foreign and local currency ratings.

For issuers located in non-investment grade countries, transfer and convertibility risks could play a greater role in determining our local and foreign currency ratings compared to issuers located in investment grade countries. Our local currency and foreign currency ratings may differ if we consider that there is a higher risk that debt denominated in non-domestic currencies would not be reimbursed. This rating differential would capture the risk that an issuer may be prevented from honouring its debt obligation in full and on time due to government-imposed restrictions on foreign-currency payments, leading to a higher risk of default on foreign currency liabilities.

Conversely, we view transfer and convertibility risks as negligible in investment grade countries and in the euro area. As a result, in those countries, issuer and debt foreign currency ratings are at the same level as their respective local currency ratings.

Any rating differential between local currency and foreign currency ratings reflects our view of the likelihood of the government imposing capital controls, including restrictions on sourcing foreign currency or transfers of foreign currency to investors. In this case, we typically cap foreign currency ratings at the level of the foreign currency rating of the sovereign in which the issuer is domiciled.

Conversely, if the issuer has earmarked adequate foreign currency reserves to repay outstanding foreign currency debt and these resources are sufficiently protected from capital controls (for example, via accounts or assets outside the country of residence), we will not apply such a cap.

3. Information and data sources

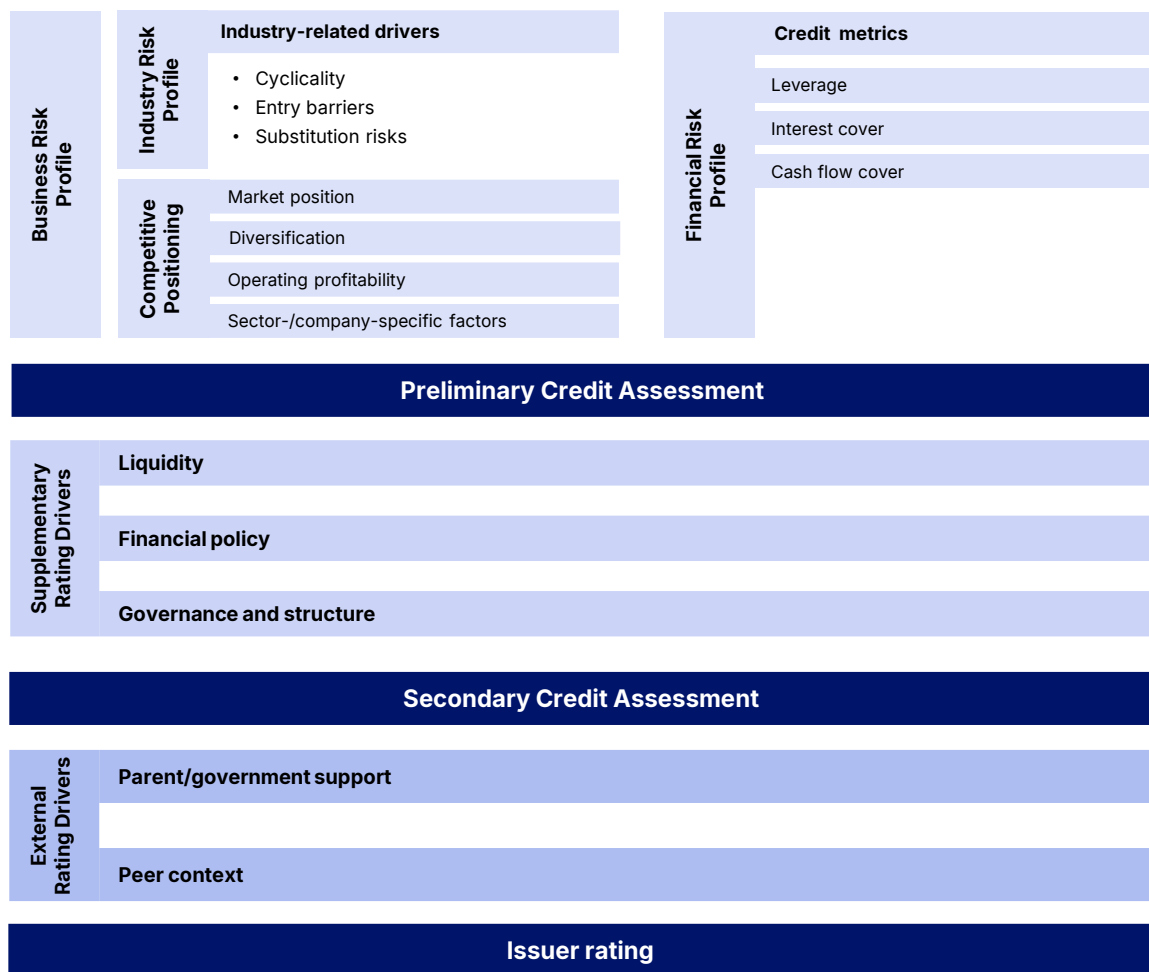
The following sources of information are typically considered in the analytical process. Not all of the information listed will be considered for each rated company. In addition, Scope may consider additional sources of information where appropriate.

- Audited financial statements¹
- Unaudited interim financial statements
- Press releases
- Presentations and information from conference calls and capital market days
- Financial forecasts and budgets if available and accessible
- Research on the industry, rated entity and relevant jurisdictions
- Data from external providers, e.g. consensus estimates, debt placements
- Management meetings (in case of issuer participation)
- Loan documents, e.g. debt prospectuses, bank loan agreements
- Valuation reports from external assessors
- Scope's internal data, e.g. spreading of historical financial results, detailed multi-year forecasts, peer group data, credit views on the captive finance business

¹ In rare cases, we could consider unaudited and/or pro-forma consolidated accounts in the rating analysis. This could be the case for newly formed entities which cannot provide audited financials.

4. Key components

Figure 1: Scope's corporate rating approach



5. Issuer rating

We assess an issuer's credit risk profile by analysing its Business Risk Profile (BRP) and Financial Risk Profile (FRP) using a transparent, fundamental and forward-looking approach, described in detail below. This results in a rating that is objective and reproducible.

The rating committee determines the relative importance of each rating driver. In general, our analysis of investment grade companies (rated BBB- and above) focuses on the BRP, while non-investment grade (rated BB+ and below) ratings are usually assigned with a stronger focus on the FRP (see below for additional guidance). Depending on the size, outreach, cash flow volatility and vulnerability of the rated entity, we may give more weight to the weaker risk profile. For specific business models and markets, we may adjust the weighting between sub-factors of the BRP and FRP, as well as between the BRP and FRP.

Individual sub-factors within each of the BRP and FRP are assessed according to the steps prescribed herein and using the individual rating labels ranging from AAA to C, mirroring our rating scale. Relevant sub-factors, as described in detail below, combine to yield an assessment for each of the BRP and FRP, which are then combined to yield an intermediate and consolidated credit assessment for the company, the Preliminary Credit Assessment.

We do not publish prescriptive weightings for either the BRP, the FRP, or the individual sub-factors comprising our approach. Corporate credit quality results from the interaction of these different sub-factors, which will exhibit a wide range of possible dynamics depending on the features specific to the company's product, market, strategy, execution capacity, supply chain positioning, funding plans, cyclical timing, among other factors. The ultimate weighting of each sub-factor is a rating committee decision, after careful examination of all credit drivers of the company, individually and collectively.

Importantly, however, we apply a weakest link philosophy to how we assign the weightings in our ratings construction. When combining the BRP and the FRP, and when combining the individual sub-factors within each of the BRP and the FRP, we tend to weigh more heavily factors that we assess as being less credit-accretive, i.e. with a lower rating label. Moreover, the wider the difference in rating labels across the relevant factors, the less weight we generally apply to a positive outlier. As noted above, the precise weighting values for a given company are assigned through a rating committee decision.

This weakest link approach actively recognises the fact that default likelihood and expected loss, as embedded into our rating scale and rating definitions, changes geometrically – not linearly – as we move up and down the rating scale. In other words, default risk tends to accelerate as one moves down the rating scale, on average – individual factors that create credit drag will likely create more risk than the counter-balancing benefit that accrues from individual factors creating credit uplift, even if the rating labels of these two factors are symmetrical. Put differently, on average a corporate issuer faces a myriad possible pathways to corporate default, while its pathways to AAA are likely much narrower.

We combine the Preliminary Credit Assessment with the following Supplementary Rating Drivers (see page 22), each of which may result in an adjustment to the ratings, articulated in notches to the Preliminary Credit Assessment:

1. liquidity
2. financial policy
3. governance and structure

The inclusion of the three Supplementary Rating Drivers above yields the Secondary Credit Assessment, after which we apply two External Rating Drivers (see page 25), each of which may also result in notches of adjustment to the Secondary Credit Assessment. These are:

1. parent/government support
2. peer context

We customise the rating process to incorporate features specific to the sector and the issuer, evaluated in a local context.

Our analysis is based on historical and forecast data, typically for the next two to three years. We also derive forecasts for our rating analysis, which take into account an issuer's strategy and planning for the future. Our forecasts may deviate significantly from those of the issuer.

We ensure that our issuer ratings are applied consistently and transparently within and across sectors. Our analysis incorporates a peer comparison, i.e. an issuer's credit profile compared with those of its rating peers. When considering peer context as part

of External Rating Drivers, we consider the predictability and volatility/sustainability of a company's operational environment. Aspects such as emerging market risk or execution risk related to the transformation of a company's business model can result in considerable uncertainty and low transparency, which we also consider in our analysis.

5.1 Business Risk Profile assessment

We adopt a forward-looking approach when analysing an issuer's BRP, taking into account the issuer's market and sector dynamics as well as business drivers. We divide the BRP into the Industry Risk Profile (IRP) and Competitive Positioning.

The IRP is integrated into the assessment of the BRP by applying notching to the assessment of a rated entity's Competitive Positioning. This approach ensures that significant disparities between industry-level risk and company-specific strengths are reflected in the final assessment. For instance, BRPs for companies with a weak Competitive Positioning in highly rated industries may be up-notched, while those with a strong position in vulnerable sectors may be down-notched.

Typically, negative and positive adjustments are limited to one notch; however, in exceptional cases – particularly for strong companies operating in low-rated industries – multiple notches may be applied. Our methodology generally emphasises caution by moderating the BRP for strong companies in weak sectors to capture inherent vulnerability, while up-notching for high-rated industries is reserved for rare cases where the entity demonstrably benefits from resilient sector characteristics.

Importantly, we refrain from applying the broader IRP when the rated entity's sub-sector exposure is not adequately represented by the overarching IRP.

Appendix 8.4 shows examples how we typically apply the notching.

5.1.1 Industry Risk Profile

Industry-related drivers aim to capture the general drivers for the underlying industry and consist of three sub-categories:

1. Cyclicalities: risk of volatility in revenue and operating profits for the foreseeable future compared with past industry performance
2. Entry barriers: level of protection for a company operating in an industry. These comprise high capital requirements, regulation, technological requirements, customer relationships, R&D requirements and distribution channels.
3. Substitution risks: the risk and vulnerability of an industry to technological obsolescence/maturity. Here, we consider megatrends or transition risks (i.e. technological, ecological or demographic) as well as structural shifts that can influence the industry's trajectory and increase risk and vulnerability.

All three industry drivers are classified as either high, medium or low risk, according to the following:

- Cyclicalities (five-year compound annual growth rate of revenue and peak-to-trough dimension)
 - High risk: growth highly correlated with GDP or other macroeconomic indicators; high amplitude of change
 - Medium risk: growth closely linked with GDP or other macroeconomic indicators
 - Low risk: no negative change over time and higher average growth than GDP or other macroeconomic indicators
- Entry barriers
 - Opinion-based: e.g. based on the number of competitors
- Substitution risks
 - Opinion-based: from observations, technological developments, product features, impact on strategic decisions, budgets and product production (marketing, R&D, technology, innovation) affecting an entire sector. Specific substitution risks affecting a rated entity in a given industry are captured in the assessment of Competitive Positioning.

The industry matrix (Figure 2) shows how we derive the IRP from our combined assessment of cyclicalities, entry barriers and substitution risk. The combination of cyclicalities and entry barriers yields an initial outcome, which is divided into two values, e.g. BB/BBB (see below). The value on the left of the table below is used when substitution risk is high; the value on the right when it is medium or low. For example, medium entry barriers and medium cyclicalities would yield an initial outcome of BB/BBB, and incorporating a high substitution risk would result in a final IRP of BB.

Figure 2: Scope's Industry Risk Profile matrix

Barriers to entry Cyclicity	Low	Medium	High
High	CCC/B	B/BB	BB/BBB
Medium	B/BB	BB/BBB	BBB/A
Low	BB/BBB	BBB/A	A/AA

All outstanding IRPs are laid out purely for reference in the following document: [Defined Industry Risk Profiles](#)

5.1.2 Competitive Positioning

The analysis of Competitive Positioning aims to capture the individual drivers of the rated company. As such, Competitive Positioning differentiates between broad industry risks (described above) and the risks faced by the issuer in its specific market of operation within the industry, which may comprise a sub-set of the broader industry and exhibit market dynamics that are distinct from the sector assessment as a whole. Among others, these sub-sets can manifest through the range of product categories in which the issuer is present, specific geographic characteristics, differing market performance through the cycle compared to the sector average, and differences between global sector features and narrower market definitions which may either exacerbate or alleviate credit risk for the issuer. These issuer-specific risk characteristics are explicitly captured through the Market position and Diversification sub-factors within Competitive Positioning, as described below.

For each company, we analyse:

- **Market position:** (historical and projected trends): this sub-factor aims to capture the most salient factors that systematically and directly affect an issuer's credit quality in the specific markets within which it buys and sells products and services, namely:
 - the dynamics, drivers, and observable history of the issuer's specific market of operation, i.e. the attributes and perimeter of the specific market within which the company sells its products and competes within its broader industry and the extent to which this market is deemed to be inherently credit-supportive to the issuer,
 - measures of the issuer's current and expected position in this market, and
 - the issuer's specific competitive differentiators, whether technological, regulatory, or economic.
- As noted above, these characteristics are informed by, but remain distinct from, the IRP: two different issuers within the same broad industry may each address markets (whether product or geographic) with dramatically different characteristics and thus with a different foundation for credit quality. Defining and examining the company's directly relevant addressable market is therefore the starting point for the BRP – this differs from, and complements, the IRP.
- In this context, we construct our market position factor with three sub-factors:
 - specific market characteristics,
 - market positioning, and
 - competitive differentiation, which is further articulated through technological, regulatory and economic lenses.
- As a general rule, high market shares/strong market positions will likely go hand in hand with better access to private and public tenders, the opportunity to benefit from economies of scale, and more robustness of cash flow compared to immediate competitors. However, this relative positioning versus immediate competition may still not provide much credit benefit if the company's immediate market environment creates a credit drag. In other words, credit differentiation may become more muted if all competitors are subject to the same overarching credit negatives from their market environment.
- These dynamics may well be present in a sub-segment of an industry with overall credit-positive attributes. For example, an issuer may benefit from a strong market position in a narrow and more vulnerable sub-segment of a broadly vibrant industry category and may also benefit from only moderate entry barriers into its business. The market position sub-factor captures the addition of these different features, each of which may generate distinctive credit attributes that need to be evaluated separately and together in order to gauge the ultimate credit value to the issuer.
- **Diversification** (products, geographies, customers, suppliers, assets and sales channels): a high degree of diversification tends to reduce cash flow volatility by allowing the issuer to benefit from i) different demand patterns; ii) better resilience of supply and distribution chains; and iii) limited exposure to individual customers' payment behaviour and creditworthiness.

In our analysis, we identify the seven global regions: Europe, North America, Latin America, Oceania/Australia, Asia, Africa and the Middle East. European geographical regions are defined according to the EU's NUTS (Nomenclature of Territorial Units for Statistics) classification > click [here](#) for the Eurostat definitions. We only consider regions where the issuer has sufficient exposure.

Concentration risk, for example, due to an issuer's limited number of customers, suppliers or products and therefore limited ability to diversify cash flows, increases vulnerability to external developments and consequently could lead to significant fluctuations in credit metrics and ultimately undermine the viability of an issuer's business model. Concentration risk could therefore limit our assessment of a company's BRP. High concentration could be partially mitigated by very strong market positions, such as monopolistic structures, and/or inelastic demand patterns.

Importantly, diversification only offers credit benefits insofar if the units of diversification:

- are demonstrably counter-cyclical to each other, or otherwise ensure that sources of weakness in some will be effectively offset by robustness in others, and
- each of these units of diversification fundamentally creates credit support, notably through proven cash flow generation potential and reliable growth prospects.

Increased diversification into credit-destructive activities can only be credit-neutral at best, and most likely credit-negative. Similarly, a high level of customer granularity will confer limited credit benefits if all customers exhibit similar demand behaviours, or if the company's customer base provides only weak cash flow and growth prospects.

As a result, in the same way that market position must necessarily be gauged in the context of the issuer's directly relevant market dynamics, Diversification also includes an assessment of the credit-supportive attributes of the issuer's overall product base. A high degree of nominal diversification across a product base with differentially robust growth prospects and an equally resilient supply chain paints a very different credit picture than the same degree of diversification across products with only narrow customer appeal and a high risk of obsolescence or sudden changes in demand. By definition, these attributes also serve to capture the credit benefits of demand construction, supply chain resilience, and the resilience or vulnerability of distribution channels. We then gauge diversification in terms of the range of products offered in the context of this product articulation and in terms of geographic footprint. For completeness and consistency, geographic diversification also references the market articulation features noted above.

In line with the above, the three building blocks of our diversification sub-factor are as follows:

- product characteristics
 - product diversification
 - geographic diversification
- **Operating profitability** (profitability margins and their volatility): the relative size of profitability margins compared to other companies in the industry indicates the extent to which future cash generation is protected, e.g. by patents, quasi-monopoly structures within the issuer's service territory, or the provision of goods/services for basic human needs, creating barriers to entry. We use the volatility of profitability margins to determine the stability of an issuer's internal financing capabilities. While we do not expect direct correspondence between operating profitability margins and other market position factors, we would generally anticipate that the company's overall market positioning will generally direct operating profitability towards a similar ranking compared to global sector averages. As a result, we also seek to identify the extent to which market positioning fully translate – or do not translate – into expected levels of profitability. For example, whether these considerations enter into our assessment of operating profitability depend on how we expect metrics to perform over the next up- or down-cycle.
 - **Sector/company-specific factors:** the individual sector/company-specific drivers are detailed in the separate sector methodologies. For instance, the drivers in an innovation-driven industry might be R&D-to-sales or the number of patents correlating to sales growth; for consumer products a rating driver is brand strength.

For diversified companies based on our above criteria, we give adequate weight to all key business units and the potential benefit that diversification may bring to a company's overall structure.

The Competitive Positioning factors represent the benchmarks for the rated company within its underlying industry. For example, we consider the industry margin to be the achievable operating margin, on average, for a company of the indicated rating.

Crucially, the IRP and Competitive Positioning are assessed independently.

Corporate strategy and management quality are not explicit rating drivers as these are i) difficult to measure objectively; and ii) reflected indirectly in the Competitive Positioning and ultimately in the FRP. A successful strategy will be reflected in higher

margins and stronger competitive advantages. Accordingly, we do not look at these explicitly or in isolation, but as embedded qualitative factors that permeate and influence the aforementioned company-specific drivers.

Our corporate rating approach also captures rating drivers for companies with operations spanning multiple distinctive industries, often reflected in the family ownership structures that are more present in Europe. For a company's BRP, we examine its entire structure by assessing the IRP and Competitive Positioning for each key division and then apply a weighted average blend of underlying risks and ratings. This enables the BRP to reflect the regimented aggregation of a company's economic drivers, and their credit attributes, rather than concentrating on a core division and then providing an uplift for diversification at a later stage.

Below is a summary table of our BRP guidance, by broad letter category, for the market position and diversification factors as well as the sub-factors embedded within each of these two factors:

- 1) market position: i) specific market characteristics; ii) market positioning; and iii) competitive differentiation: a. technological, b. regulatory, and c. economic.
- 2) diversification: i) product characteristics; ii) product diversification; and iii) geographic diversification.

1. Market position	AAA	AA	A	BBB
Specific market characteristics	<ul style="list-style-type: none"> → Broad product/service categories, competitors, and supply chains are universally understood and codified; economic cycles are global, vigorously researched and commented by market participants, in a data-rich environment. → Market share and trend information is comprehensive, granular, clear and publicly available from multiple global sources. → Sets the standard and trends for other global markets and economies. → Universally recognised as essentially impervious to external shocks compared to all other sectors. 	<ul style="list-style-type: none"> → Broad categories, competition and supply chains are universally well-understood and globally researched, with rich global data enabling clear market share comparisons in all regions; economic cycles are also well-understood and globally measured. → Market may be susceptible to external shocks, with differences in opinion in predictability, but with ample data surrounding peak and trough performance over a long history. 	<ul style="list-style-type: none"> → Broad categories, competition and supply chains are universally well-understood and globally researched, with global data enabling consistent market share definitions and comparisons. Economic cycles are well-understood. → Some vulnerability to unpredictable external shocks impairs predictability and may result in divergences globally, balanced by a long and data-rich history of cost and earnings behaviour across regions, supply chain and asset types. → A long history of drivers for entries/exits into the market based on market conditions; break-even pricing is well understood across all categories, with some regional variation/unpredictability. 	<ul style="list-style-type: none"> → Broad categories, competition and supply chains are clearly-defined, globally well-understood and researched, but immediately relevant narrower sub-categories may lack consistent publicly available data from multiple sources, albeit data defensibly suggests sub-categories should perform broadly in line with broader categories. → Cycles are generally well-researched globally, but lack of definitive clarity on sensitivity to specific external shocks and predictability of cycles, including cost pass-throughs and disruption risk across the entire supply chain. → Regional performance is less data-rich and creates uncertainty about the susceptibility to global vs local trends, and therefore ultimate definition of relevant market as global or regional.
Market positioning	<ul style="list-style-type: none"> → Clear global leader across all relevant product categories, with specific market characteristics rated AA or higher and most comprehensive product offer in the sector 	<ul style="list-style-type: none"> → Clear global leader in at least one broad and global product category, with specific market characteristics rated AA or higher 	<ul style="list-style-type: none"> → Mostly ranked first in key markets, with specific market characteristics rated BBB or higher 	<ul style="list-style-type: none"> → Mostly ranked second in key markets, with specific market characteristics rated BBB or higher

1. Market position	BB	B	CCC	CC
Specific market characteristics	<ul style="list-style-type: none"> → Relevant market and market shares are specifically articulated more around specific sub-sets of a global market, including by broad category, narrower category sub-sets or large regional/continental markets. → Data is publicly available, but not consistently and from global sources – mechanisms of transmission between global market trends and more narrowly defined and immediately relevant sub-sets are therefore more subject to differing opinions and interpretations and more reliant on analyst interpretation of sub-set barriers to entry for the issuer. → Market susceptibility to large external shocks is unclear or lacks global consensus data. 	<ul style="list-style-type: none"> → Product categories are global, but the issuer-relevant market is articulated specifically around specific products, customer types, distribution channels or national/local geographies, with unclear performance links between global trends and data, and narrower market definitions. → Disruption from large external shocks, including market entry of global competitors or large macro disruptions, is largely untested, or data-rich history of cyclical performance in the context of global trends is not widely and publicly available. → Vulnerability and defensibility of defined market in the context of major shocks is therefore not clearly tested. 	<ul style="list-style-type: none"> → Issuer-relevant market data is scarce and tied only to narrow sub-sets (by geography, product category, supply chain or distribution channel), not well-researched globally, lacks a visible market consensus on performance and cycle drivers and is substantially reliant on analyst interpretation based on issuer-specific data. → Lack of clarity on broader versus narrower market perimeters, and susceptibility to new larger entrants or global economic shocks. 	<ul style="list-style-type: none"> → Issuer-relevant market data is not readily available, competitive and cyclical dynamics are difficult to ascertain, with definitions resulting from interpretation by a narrow range of market participants.

Market positioning	→ Top-tier player in key markets for an issuer's specific market characteristics rated BBB or A, or number one in an issuer's specific market characteristics mapping to BB	→ Second-tier player in an issuer's specific market characteristics mapping to BB or below, number one in an issuer's specific market characteristics mapping to B, or top-tier in market definition rated CCC or below	→ Second-tier in an issuer's specific market characteristics categories mapping to B or below	→ Weakly positioned or new entrant in a highly fragmented market, including indiscernible market share on broad product category on a regional scale, third-tier in an issuer's specific market characteristics rated B, or number one in an issuer's specific market characteristics rated CCC or below
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1. Market position		AAA	AA	A	BBB
Competitive differentiation	Technological	→ Clear global leader in setting technology standards for the entire sector, with proven high returns on technology investments; technology is proved to significantly reduce competitive threats and to create large market share gains. No expected competitive threats across any products.	→ Clear technological leader with global trend-setting reach in at least one broad product category, with a clear history of resulting large gains in overall company market share and profitability; technological advantage is expected to remain for the foreseeable future and enable the issuer to fend off most competitors in most circumstances.	→ Technological innovator with proven resulting market share gains across key markets and a history of positive returns on technological investments. → Pace and scale of successful technological investments and resulting overall market share gains are less pronounced than for global sector leaders and may be eroded over the medium term by new market entrants or by continued investment from global sector leaders.	→ Technological investments in line with global top-tier sector operators and proved to maintain market share and earnings quality, with a measurable history of positive returns on technological investments and a robust culture of innovation in products and within the firm. → No expectations of market share loss relating to technology in the medium term.
	Regulatory	→ Regulation effectively eliminates competition, eliminates volume/price risk, and guarantees high returns on investments through long-standing contractual agreements and commercial arrangements with no expectation of policy changes.	→ Regulation effectively limits competition to a small number of players in the relevant market. Economic performance is not guaranteed but a long history of high and timely returns on investment through regulatory mechanisms, with limited effective price/volume risk compared to all other sectors. Framework is very well-established, with no anticipated policy changes in the foreseeable future.	→ Regulation sets high entry costs attainable only by well-established global operators, with uncertain economic benefits and potential for balance sheet and cash flow effects of entry costs. → Issuers bear full price/volume risk, no economic certainty around cost recoupment, but an observable global history of regulation supporting and enabling innovation, with high returns and earnings for market players. → A history of policy changes suggests a risk of changing regulation over the long-term only.	→ Regulation does not limit new entrants or protect from price/volume risks and imposes compliance costs requiring sustained cash flow generation, balance sheet capacity and access to funding, and may subject issuers to periodic and potentially sharp increases in costs and strategic limitations tied to permitting, fines for breaches in compliance and reputational risk with customers and suppliers. → A history of policy change suggests potential changes over the medium term, which require continuous adaptation and planning.

	Economic	<ul style="list-style-type: none"> → Global price premium from product and technological superiority, undisputed pricing power across global product categories, sector-leading cost structure with history of flawless execution of cost reductions and adaptation, all of which create higher and less volatile profitability than all global peers through the cycle and in the event of large demand shocks, better working capital management and cash conversion than all peers and supply chain disruptions unlikely even under a severe adverse economic shock. 	<ul style="list-style-type: none"> → Longstanding global price premium and pricing power in several but not all key products or regions, owing to product leadership in several categories. → History of best-in-class cost structure, flawless cost reductions, best-in-class working capital management and cash flow conversion, ensure margins and cash flow generation well in excess of global peers except in the event of significant and unforeseen demand shocks. → Supply chain is proved highly resilient through the cycle, though may experience disruptions in large demand shocks but without endangering cash flow generation ability and credit metrics. 	<ul style="list-style-type: none"> → Price premium and pricing power are clear in one key product but not all and may not be sustainable over the medium term, but with prospects for remaining at least in line with global sector averages. Continued innovation and investment will be required to regain and maintain pricing power. → Cost structure and cash flow conversion continue to support free operating cash flow above global averages and over the entire cycle. Supply chain expected to remain resilient through most conditions, including temporary demand shocks. 	<ul style="list-style-type: none"> → No significant or sustainable pricing power compared to global industry peer averages; cost structure yields profitable operations across most cycles but not a significant competitive advantage; cash flow conversion capacity likewise ensures positive free operating cash flow on average over most of the cycle, with no impact to credit ratio assessments; supply chain resists normal cyclical peaks and troughs but is vulnerable to disruption during demand shocks.
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1. Market position		BB	B	CCC	CC
Competitive differentiation	Technological	<ul style="list-style-type: none"> → Technological investments are more focused on rectifying unfavourable earnings or market share trends, with later adoption than market leaders, and uncertain or uneven success in fending off gradual market erosion from technological changes. → New technologies or entrants will likely pose a threat of market share loss and will require sizeable investments over the medium term. 	<ul style="list-style-type: none"> → Little technological innovation, or slowness in adapting, product and processes based on legacy technologies with limited prospects for large-scale technological investments. → Market share erosion already in evidence, and likely to accelerate over the medium term. 	<ul style="list-style-type: none"> → Lagging technology is a proven competitive disadvantage, especially compared to global market trends, and has resulted in market share erosion that is likely to continue over the medium term, with very limited culture, track record or planning for innovation. 	<ul style="list-style-type: none"> → Technology is largely obsolete, with measurable impact on demand; new technologies in the market pose significant short-term market share threats
	Regulatory	<ul style="list-style-type: none"> → Regulation actively encourages new market entrants and rapid technological innovation, with a history or well-documented market expectation of changes in market share and unclear product positioning. Risk of overspend and low returns is borne entirely by sector operators, with high reputational risks and an expectation of more volatile credit metrics as a result. → Policy environment is overall unpredictable, requiring continuous spend and vigilance. 	<ul style="list-style-type: none"> → Regulation requires immediate and significant changes to business and funding strategies, with evidence of existing market share erosion and expected immediate step-changes in credit quality. → Policy environment is volatile and subject to continued changes over the short term, creating a wide range of possible financial and strategic scenarios for the issuer. 	<ul style="list-style-type: none"> → Regulation creates immediate expectation of market share loss and significant earnings, balance sheet and rapid deterioration in credit risk to the issuer. 	<ul style="list-style-type: none"> → Regulation creates immediate high risk of business continuation issues and/or insolvency risk for the issuer, requiring immediate creditor negotiations

	<p>Economic</p>	<ul style="list-style-type: none"> → Pricing in line or below global averages, with little pricing power across supply chain and customer base; cost structure less flexible than global averages and struggles to generate as much profitability except during the most supportive upcycles. Working capital is difficult to control throughout the cycle and yields uneven free operating cash flow, with longer periods of negative free operating cash flow possible during a downcycle. → Assets are underused and investment returns are lower compared to the average of global sector peers. Supply chain is vulnerable to disruptions and bottlenecks and will likely add financial pressure during downcycles. 	<ul style="list-style-type: none"> → No pricing power and consistent price discounting required to compete compared global sector peer averages; inflexible cost structure with no history of successful cost cutting; unlikely to be profitable during downcycles; cash flow conversion allows free cash flow generation only during the most supportive upcycle conditions, likely also with sub-par asset utilisation. → Cost structure line items are higher than large peers compared to revenues, and supply chain is likely to suffer disruptions from normal cyclical changes in demand. → Immediately vulnerable to any price-cutting from competition. 	<ul style="list-style-type: none"> → Pricing, cost structure and working capital are uneconomical and unsupportive of cash flow generation, even in strong upcycles. Assets are maladapted and under-utilised with limited prospects for improvement; supply chain is prone to disruptions across normal industry cycles. 	<ul style="list-style-type: none"> → Economic construct and circumstances cannot support the company's current business and balance sheet, over the short term and the long term.
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2. Diversification	AAA	AA	A	BBB
<p>Product characteristics</p>	<ul style="list-style-type: none"> → Very high demand, growth history and forecasted future growth well in excess of economic growth and through economic cycles. Highly price inelastic and globally consistent demand; no exposure to changing consumer preferences; behaves as an essential purchase with no risk of technological obsolescence or alternatives for customers 	<ul style="list-style-type: none"> → Demand is expected to remain very robust and show positive growth through both up- and down-cycles; purchases are very difficult to defer other than in severe economic stress; high and global growth potential with little exposure to consumer preferences. Inelastic demand with no foreseeable risk of product obsolescence. 	<ul style="list-style-type: none"> → Demand growth expected to continue exceeding economic growth on average, albeit with more muted positive growth during downcycles, due to a degree of price elasticity. Product will face long-term obsolescence risk, but currently faces limited exposure from consumer preference changes, combined with broad global appeal. 	<ul style="list-style-type: none"> → Consistent demand through production cycles, and predictable for the foreseeable future. Some innovation allows for margins and earnings differentiation, which offsets both variability from changing consumer preferences and a degree of predictable and proven demand elasticity throughout the cycle. Product is discretionary but not easily deferrable outside a pronounced downcycle.
<p>Product diversification</p>	<ul style="list-style-type: none"> → Most comprehensive product offering in the global industry, with product characteristics rated AA or better, specific market characteristics rated AA or better, and proven counter-cyclical effects spread across more than six product categories 	<ul style="list-style-type: none"> → Fully diversified across 4-5 broad product categories with product characteristics rated AA and specific market characteristics rated AA or A, with proven counter-cyclical dynamics between products. 	<ul style="list-style-type: none"> → Fully diversified across 3-5 broad product categories with product characteristics rated A and specific market characteristics rated BBB or higher, with proven counter-cyclical dynamics between products. 	<ul style="list-style-type: none"> → Equally diversified across at least 3-4 broad categories with demonstrable counter-cyclical effects, with product characteristics rated BB or BBB and specific market characteristics rated BBB or better
<p>Geographic diversification</p>	<ul style="list-style-type: none"> → Full global diversification, any concentration in line with relative market sizes, for market articulation rated BBB or better. 	<ul style="list-style-type: none"> → Globally diversified, and more so than most global sector peers, with room for market share expansion in one added large geographic region, for market articulation rated BBB or above 	<ul style="list-style-type: none"> → Worldwide presence, with 2-3 principal regions accounting for at least 20% of revenues each; one large regional/continental region is likely less developed; and market articulation is rated BBB or better. Diversification and concentration by large geographic regions are measurably better than the average of large global sector peers. 	<ul style="list-style-type: none"> → Worldwide presence, diversification and concentration are in line with sector averages of large global operators, for market articulation rated BBB or better. For market articulation of BB, 2-3 principal regions are at least 20% each of total revenues. Unlikely for market articulation of B or below.

2. Diversification	BB	B	CCC	CC
Product characteristics	→ Limited growth potential beyond current demand and subject to price elasticity in line with cyclical swings. Clear history of purchase deferrals during downcycles, volatility tied to changing consumer preferences; technological obsolescence is already manifesting globally.	→ Product has narrow or only task-specific customer appeal and/or limited history of consistent performance through the cycle; demand is vulnerable to rapidly changing consumer preferences and highly price-elastic even under modest cycles, considered both narrow and discretionary.	→ Product is already becoming obsolete and in secular decline, highly sensitive to economic cycles with evidence of disappearing demand during even modest economic downcycles; highly price elastic, highly discretionary, increasingly niche.	→ Product is entirely vulnerable to sudden changes in consumer preferences; narrow and very niche consumer appeal; demand is more elastic than most products globally and may disappear even under very mild economic downcycles; long-term survivability of product is entirely untested and prospects are highly unclear.
Product diversification	→ Two-product counter-cyclical diversification for specific market characteristics rated BBB or A, or three products for specific market characteristics rated BB, or five products for specific market characteristics rated B or below.	→ One segment is over 50% of sales, other segments have proven counter-cyclical effects, for specific market characteristics rated B or better, or three equal products for specific market characteristics rated CCC. Single segment for specific market characteristics rated BB or better.	→ One segment is over 90% of sales, for a market articulation rated B or better, or two equal products for specific market characteristics rated CCC.	→ Single segment with a market articulation rated B or lower.
Geographic diversification	→ Strong regional/continental concentration, with smaller activities in other regions, for a market articulation rated BB or better. For a market articulation rated B or lower, worldwide diversification and concentration in line with global sector averages.	→ Predominant presence and strategic anchor in a single country, or a small group of adjacent countries within a broader geographic region, for a market articulation rated B or above	→ Predominant presence and strategic anchor and aspirations in limited discrete areas within a single country, for a market articulation of B.	→ Predominant single-location presence and strategic anchor, for a market articulation of B or below.

5.2 Financial Risk Profile assessment

As part of our forward-looking analysis of the FRP, we assess the issuer's financial leverage, cash flow generation and ability to cover interest and principal payments (debt service).

We focus on cash-flow-based ratios such as leverage ratios, interest coverage and cash flow coverage. These are good indicators of credit risk as they tend to be less distorted by accounting policy than ratios based on P&L or balance sheet items. Liquidity considerations are not reflected with the assessment of the FRP but captured within the Supplementary Rating Drivers as a possible adjustment to the Preliminary Rating Assessment.

Importantly, liquidity is also a central component of an issuer's financial robustness, and thus credit quality, but is also significantly a function of a company's access to capital. Therefore, liquidity is highly dependent on a company's relationship with its creditors, its inherent capacity to attract investors and favourable valuations for the assets that support its credit narrative, and the characteristics and trends that define the market for funding to which the issuer has access.

We therefore assess liquidity as part of our Supplementary Rating Drivers, which stand outside of the BRP and FRP. For the vast majority of creditworthy companies, access to liquidity is part and parcel of being able to execute on most strategic ambitions. As a result, a change in overall liquidity prospects can quickly have a profound impact on the company's capacity to meet its obligations, in a way that both supersedes and precedes any change in market positioning or reported financial metrics, for example, in the event of an external shock to funding markets. Isolating the impact of these effects in our analysis therefore enables us to communicate effectively on the individual building blocks of credit quality.

Scope-adjusted debt (SaD)

We analyse the amount, structure and maturity of debt obligations using a forward-looking approach. Our definition of debt – Scope-adjusted debt or SaD – includes all of a company's capital market and bank debt, as well as adjustments that qualify analytically for full or partial debt treatment, including off-balance sheet debt. This commonly includes unfunded pension obligations and operating leases but can also extend to guarantees/contingencies, hybrid debt instruments or other debt-like obligations such as industrial provisions, debt-like payables and factoring.

Our adjustments include:

- Pensions: we believe that investment grade companies, as well as some BB rated corporate credits, qualify for only a partial consideration of their 'pension gap', which is the unfunded part of pension obligations expressed as the difference between the projected pension obligations and the fair value of pension plan assets. The pension gap qualifies for partial consideration if a company's pension assets are able to cover pension contributions for several years of zero free operating cash flow in times of economic stress.

This is motivated by our view that unfunded pension obligations should not always receive the same (i.e. full) debt treatment as bank or capital markets debt. This reflects pension obligations' fundamentally different and typically very long-term repayment structure compared to financial debt, which is typically due at a defined date. As a proxy for our SaD calculation we consider pension obligations expected to be paid over the next 10 years. If this information is disclosed and the below conditions are met, pension obligations will only be included partially in SaD.

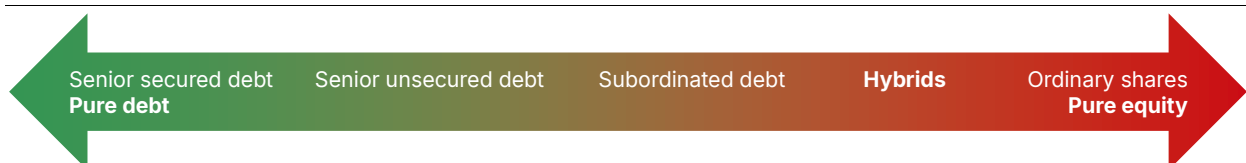
The pension gap is partially considered as debt if an issuer keeps a sustainably sufficient amount of defined pension assets. In other words, if defined assets are at least three times the amount of annual pension payments, we consider two-thirds of the unfunded pensions; if defined assets are at least six times the amount of annual payments, half the pension gap is adjusted for.

We disregard any potential pension surpluses from a temporary or sustained overfunded coverage of pension obligations. This is because such a surplus is not seen as a cash equivalent and could be the mere result of current market valuations of dedicated pension assets.

- Operating leases (applicable for issuers not reporting under IFRS 16): we use the net present value of operating lease payments for our debt adjustments, with a proxy calculated in the absence of nominal or net present value provided by the rated entity. We generally discount future operating lease payments by 5% for our debt adjustment and reclassify operating lease payments to adjust EBITDA. Scope-adjusted interest paid reflects 5% of the present value of lease commitments for the respective period. Both the discount rate and the interest rate are adjusted in line with the average interest rate applied to operating lease obligations by the rated entity where we have full transparency. The remaining amount is reclassified as depreciation expense.

- Industrial provisions such as contingent liabilities, unfunded obligations, decommissioning assets and site remediation (net of associated assets).
- Factoring: we consider factoring lines (drawn amount) that have recourse to the company (issuer) to be debt-like because the factor has the right to collect the unpaid invoice amount – due to a default of or a merchandise return by the customer – from the transferor (issuer). We may also adjust for supplier financing such as reverse factoring. However, this depends on the nature of the used factoring programme. The more frequently such funding is being deployed and the longer the payment terms from the funding provider of the factoring, the more likely we will reflect frequently drawn factoring volumes in SaD. This is particularly relevant for non-investment grade issuers that might use reverse factoring for working capital optimisation as well as a reliable means of financing. The amount considered in the SaD can include haircuts on the factoring amounts deployed as the factor usually is not required to cover the entire amounts.
- Netting of cash: generally, this is only applicable to issuer ratings in the BB category or higher and only if the cash is permanent and accessible. We therefore often apply ‘haircuts’ to reported cash and marketable securities when cash is not considered permanent. Haircuts are determined by considering all elements of a rated entity’s issuer rating. While the BRP provides an initial idea on the stability of cash generation, weak FRPs or quickly deteriorating credit metrics as well as weak governance could indicate a higher risk of cash burn. There are no retrospective changes to the applied haircuts.
- In addition to haircuts, we also deduct the non-accessible portion of reported cash and marketable securities, reflecting, for example, restrictions imposed on offshore assets, joint-venture holdings, cash trapped in captive finance operations, technical requirements (cash needs in the cash desks of retailers or airlines) or funds earmarked for specific purposes, such as operating cash needed to manage intra-year working capital fluctuations, and provisions for litigation. Other types of restrictions may also apply.
- Marketable securities are generally netted against debt if they meet the following conditions: i) the securities are listed fixed-income products without any equity feature (as such we exclude mandatory convertible bonds, hybrid bonds, etc.); and ii) these securities are issued by an investment grade-rated company. These securities are typically recorded at fair value on the balance sheet (for example, under IFRS or German GAAP) and by virtue of their actively traded status are deemed to benefit from both sufficient liquidity and transparent pricing.
- Captive finance: we typically exclude captive finance operations as well as associated assets and liabilities from the corporate/industrial activities of an issuer. This follows our view of differences in business dynamics and economic characteristics and the appropriateness of different financial measures. We typically exclude captive finance operations indifferent to the legal structure (i.e. whether or not the finance operations reside in a separate subsidiary). Depending on the materiality of captive finance operations the rating committee might deviate from this approach.
- Classification of hybrid debt securities: hybrid debt securities are instruments that have both debt and equity characteristics. They are generally complex and highly structured. A hybrid is the broad term used to describe an instrument that typically ranks behind senior (unsecured) debt but ahead of equity and in some cases can be converted into ordinary equity. However, it can incorporate numerous features that comprise either debt-like or equity-like characteristics. Such hybrid debt instruments can have multiple forms, most prominently as subordinated hybrid bonds, but also as other debt instruments such as convertible shareholder loans.

Figure 3: Hybrids within the financial instruments spectrum



Typically, hybrid debt instruments have a more complex structure than most fixed-income instruments and generally contain embedded options. These options typically allow the issuer to either redeem the security before its specified maturity, avoiding a step-up of coupon payments, or convert the security into ordinary shares. Instruments that exclusively include a mandatory conversion at maturity, such as convertible shareholder loans, are not grouped under hybrid securities.

Certain mandatory features need to be fulfilled for an equity credit to be included in SaD. Other features are optional, which, if fulfilled, can result in a higher equity credit being applied to the hybrid debt position.

Hybrid instrument features: a hybrid instrument must meet the mandatory criteria shown in Figure 4 to be granted an equity credit. If, in addition, optional features were met, we would typically grant a higher equity credit to such instruments. If an

instrument does not meet all the mandatory requirements, it is fully treated as debt. We also adjust interest paid on the hybrid debt instrument in proportion to the equity credit given.

We may also deviate from the scale based on analytical judgment.

Figure 4: Equity credit criteria

Mandatory factors to achieve a minimum of 50% equity credit		
1. Coupon deferral	Includes coupon deferral	
2. Initial maturity	Long-term maturity and no mandatory repayment	
3. Replacement	Replacement with a similar debt instrument with equal maturity and rank (subordination) is mandatory.	
4. Contractual subordination	All other current and future instruments rank before the hybrid debt instrument; hybrid debt instrument ranks before equity.	
Optional factors	100% equity credit	50% equity credit
5. Accumulation of payments	Non-accumulation of deferred interest payments (issuer not required to pay missed obligations in a later period).	Accumulation of deferred interest payments (issuer pays missed obligations in later periods).
6. Convertibility	Conversion of hybrid debt instrument into equity for the rated entity is mandatory.	Issuer has the right to convert the hybrid debt instrument.

In case of a permanent write-down of principal or a forced conversion into equity, we would likely rate the hybrid debt instrument at D and subsequently withdraw the rating since the instrument ceases to exist.

For a coupon cancellation, we would evaluate the reasons for the cancellation and assess whether this is a temporary or more permanent change in the issuer’s ability to make distributions. If the reason for the coupon cancellation is a one-off event that does not impair the issuer’s future capacity to make payments, we may not change the hybrid security’s rating. More specifically, we will not automatically consider the instrument to be in default.

In addition, both instances described above would not lead to an automatic default on the issuer rating. The issuer rating may, however, be adjusted downwards in case of a deterioration of the issuer’s credit profile.

Importantly, hybrid capital continues to be the subject of innovation by market participants, for a number of purposes where specific hybrid features may provide accounting or regulatory relief in the context of particular transaction structures. These types of instruments frequently take the form of preferred equity in a transaction’s capital stack. As such, these instruments may confer equity credit to issuers of these securities while not directly mirroring the articulation summary table above. The direct application of the above table centres more immediately on convertible hybrid instruments issued into public capital markets.

While providing an exhaustive list of possible features tied to preferred equity and related instrument innovation is both impractical and overly limited, the following five points constitute guidance that should be used to evaluate equity credit in these cases. As a general rule, the existence of the first three items together would signal 50% equity credit, while the presence of all five together would signal 100% equity credit. These points also summarise the fundamental thought process embedded in the guidance table above:

- (i) Is there a mechanism, whether contractual, economic or effective, whereby the instrument may trigger an insolvency filing of the issuer, a payment default, or a cross-default into any more senior-ranking creditor classes?
- (ii) In what format is subordination enshrined and how exhaustive are the provisions? What documentation provides assurances around claims as a going concern (any payments, including of principal, ahead of more senior-ranking creditor classes) or gone concern (in the bankruptcy waterfall of claims), and what approvals are required to modify these terms and conditions?
- (iii) In our recovery and notching analysis (see 6.3 below), what mechanisms either formally prohibit or may allow any interference of this instrument in the allocation of the value of claims at default into our estimated waterfall? What difference does the inclusion or the exclusion of the instrument make to recovery prospects across creditor classes?

- (iv) Are there any concerns with regard to structural subordination, i.e. does the issuing legal entity of the securities have any structural proximity that is at least as close to the assets of the company as any other creditor class of the consolidated Issuer?
- (v) Can we discern any overlap in the investor populations of this instrument and any other creditor classes that may create incentives to seek disordered or disproportionate recoveries in the event of financial distress?

5.2.1 Leverage

When analysing an issuer's debt protection, we assess its ability to service debt from ongoing cash flow. We evaluate the level, timeframe, certainty and volatility of expected internal cash flows relative to upcoming debt obligations.

Our analysis includes the issuer's historical financial performance as reflected in its financial reporting as well as forecasts for at least two years.

We use cash flow items when calculating the credit ratio Scope-adjusted funds from operations (FFO)/debt, reflecting our cash-oriented approach. Scope-adjusted debt/EBITDA is our second credit ratio for evaluating leverage.

5.2.2 Interest cover

Interest cover reflects an issuer's operating profitability (EBITDA), degree of indebtedness (absolute value), prevailing interest rate environment, and risk spreads paid by an issuer. Interest cover ratios can deviate substantially from leverage and cash flow cover ratios if indebtedness and interest expense are both low in absolute terms (low interest expense could be due to the interest rate environment and low risk spreads payable). Therefore, when interest cover is better than the other two measures in the financial guidance table shown in Figure 5 (leverage and cash flow cover), it does not necessarily mean that we consider this building block of the FRP to be better than the other building blocks.

5.2.3 Cash flow cover

We also assess the issuer's ability to generate cash flow, including coverage ratios relating to free operating cash flow (FOCF).

5.2.4 Other measures

Our analysis includes other industry-specific measures where appropriate.

5.2.5 Guidance on credit metrics

Short-term, intra-annual changes in financial performance measures – quarterly, semi-annually or annually – only trigger rating changes if they are significant, expected to last for at least two years, and not already factored into the ratings. This is often the case when changes in industry dynamics lead to a structural deterioration in credit fundamentals, such as a change in pricing regulations that affects an issuer's cash flow.

We examine audited annual statements, which we supplement with more recent information such as interim reports, pro-forma data and issuer forecasts (when available). We determine whether unaudited data are reliable and plausible. Our forecasts may deviate significantly from those of the issuer.

Credit metrics calculated in line with the financial guidance table are neither weighted equally nor are they assigned a mathematical weight to derive the overall assessment of credit metrics. The aggregated assessment of credit metrics is based on our credit judgment for each rating case. Considerations may include industry-related drivers, interest rate risk, issuer-specific maturity schedules, visibility of future cash flows, and a record of generating cash flows.

When assessing a rated entity's credit quality, we consider the credit metrics that represent its current and future creditworthiness, reflecting a sustained level of credit metrics and taking into account their volatility and seasonality.

Figure 5: Financial guidance table*

	Leverage		Interest cover	Cash flow cover
	Debt/EBITDA	FFO/debt	EBITDA/interest cover	FOCF/debt
AAA	Net cash ²	Net cash ²	Net interest received ²	Net cash ² and strong cash conversion
AA	< 1x	> 60%	> 10x	> 35%
A	1x to 2x	45% to 60%	7x to 10x	25% to 35%
BBB	2x to 3x	30% to 45%	4x to 7x	15% to 25%
BB	3x to 4x	15% to 30%	2x to 4x	5% to 15%
B	4x to 6x	0% to 15%	1x to 2x	< 5%
CCC and below	> 6x	Negative	< 1x	Very negative

* All these metrics are using Scope-adjusted inputs

The importance of leverage (Scope-adjusted debt/EBITDA, Scope-adjusted FFO/debt) and cash flow cover (Scope-adjusted FOCF/debt) in the assessment may depend on the issuer's business context. This includes, but is not limited to, leveraged buyouts undertaken, exposures to the sectors listed below, parent company links, and the inherent cyclicity and vulnerability of the issuer's industries and business model.

The table in Figure 5 can be applied to all non-financial sectors that we cover except for the following (largely covered by sector methodologies):

- Real estate
- Airports
- Investment holdings
- Utilities

This is because we consider the financial drivers of the above sectors to be different to those of most production-focused industries, necessitating a different analytical approach. This can involve the use of different metrics (loan/value ratio) or the assignment of rating implications to existing metrics (such as Scope-adjusted debt/EBITDA) that differs to the implications defined under this methodology.

5.3 Supplementary Rating Drivers

Supplementary Rating Drivers complement our analysis of the factors and drivers of the BRP and the FRP. They are reflected via notching based on the Preliminary Credit Assessment as the starting point.

Our supplementary analytical aspects cover:

5.3.1 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 we believe liquidity can only be partially expressed by coverage ratios (see below).

Definition: our liquidity assessment reflects cash sources compared to cash uses. This assessment can influence the Preliminary Credit Assessment positively or negatively and can affect the final rating.

Our analysis examines the following cash sources that result from a company's central cash pooling at group level:

- Balance sheet cash (end of preceding year),
- Balance sheet marketable securities (end of preceding year),

² On a sustained basis which would not be jeopardised by cyclicity and/or industry disruptions.

- Committed bank lines (tenor exceeding one year),
- Committed factoring lines (tenor exceeding one year),
- Expected positive FOCF,
- Liquid inventory (mainly for agricultural or trading companies).

Likewise, our analysis takes into account the following cash uses:

- Scheduled debt repayments,
- Expected negative FOCF.

All of the above, except for bank lines or factoring lines, may be subject to haircuts reflecting the assessment of restricted cash or cash equivalents. While expected FOCF may not be subject to a specific analytical haircut, the analytical forecast of FOCF may include additional conservative assumptions, in particular for issuers whose liquidity we judge to be low or vulnerable to unexpected impacts. In addition to the above, we might consider other factors, i.e. the use of reverse factoring lines to better capture liquidity risk, especially for companies with a non-investment grade FRP. This follows our view that access to reverse factoring can weaken liquidity at a time of stress, with the termination of existing reverse factoring lines potentially leading to sudden and significant working capital outflow over a matter of weeks or months.

As a general rule, available sources of cash should be sufficient to cover all foreseeable cash uses at least over the next 12 months. The analysis is extended to a longer time horizon when cash uses over the foreseeable future require a staggered amount of cash sources, e.g. in the case of larger debt maturities or significant funding needs for organic/inorganic capex. In addition, our analysis takes into account the rated entity's ability to finance envisioned cash uses, and its record of rolling over maturing debt positions, including its access to various sources of external funding.

Coverage of below 110% typically points to inadequate liquidity and could have a negative impact on the credit assessment by up to four notches in most cases within the Secondary Credit Assessment, but is not capped by this. The magnitude of down-notching for inadequate liquidity is subject to the rating level of the Preliminary Credit Assessment and the time horizon over which liquidity risks could crystallise. If an issuer depends on external funding or asset disposals to cover operating cost, capital expenditure, interest payments and negative fluctuations in working capital for a prolonged period, we could classify liquidity as inadequate even if a point-in-time calculation suggested coverage of above 110%. In general, if liquidity is classified as inadequate, the Secondary Credit Assessment and issuer rating is unlikely to be rated above the B category.

Coverage sustained at above 200%, as demonstrated by the company's track record, can result in a rating upside of up to two notches within the Secondary Credit Assessment. However, companies with a Preliminary Credit Assessment in investment grade are highly unlikely to be granted an upnotching for liquidity considerations as such rating levels already assume adequate liquidity and very low refinancing risk.

A company's liquidity needs to be seen in a regional context and non-mechanistically. For example, in certain European countries the provision of committed lines is not customary – even for investment-grade issuers – as fees are deemed too high. A too-narrow, numbers-based approach would assess liquidity as inadequate in this instance. Therefore, we also examine soft factors such as the company's reputation and support provided by its banking group, particularly in adverse conditions.

Covenants: We also assess liquidity by looking at debt covenants, which allows us to gauge the issuer's response to potential short-term calls on liquidity. The covenant review considers the nature and trigger level, consequences of breaches as well as the existence of process for waivers. To ensure that the issuer complies with financial covenants, we rely on information such as certificates of compliance and public statements by the issuer. In particular, we focus on the issuer's ability to comply with financial covenants for leverage and debt service coverage for at least the next 12-18 months, including sensitivity analyses. Compliance with covenants is a critical element of our analysis in the event of a rating deterioration. Depending on the covenant headroom or the time to the end of the grace period to restore covenant compliance, as well as likelihood of covenant waiver, we may consider debt subject to acceleration as short-term debt in our liquidity analysis.

5.3.2 Financial policy

This captures: i) management's risk appetite for discretionary spending (such as for acquisitions, dividends and share buybacks) and the extent to which these are funded by debt; and ii) management's ratings commitment, both credit positive and negative. For example, when a debt-funded acquisition causes short-term deviations from stated financial policies, we believe

management's commitment to maintaining the rating level is usually stronger among family-owned companies than non-owner-managed companies. We reflect this in our financial policy assessment based on a company's record and level of commitment.

Family ownership: under the FRP we examine whether cash on the balance sheet reflects a cautious financial policy – a common feature of family-owned businesses. Liquidity may also have positive implications in times of economic stress as excess cash can act as a cushion.

5.3.3 Governance and structure

Corporate governance guidelines lay out rules for corporate behaviour and how companies monitor the enforcement of these rules. Corporate governance is a 'soft' rating factor reflecting a company's due diligence in meeting governance guidelines. To avoid double-counting, our corporate governance assessment excludes factors covered elsewhere in our rating assessment. Our opinion of corporate governance will have either a neutral or negative impact on the issuer rating.

Although a company's governance cannot drive up the rating, it is nevertheless important when determining a credit rating. For example, adequate corporate governance is the minimum standard for rated issuers, while weak corporate governance is likely to put downward pressure on a rating.

Weak corporate governance or credit-weakness related to a rated entity's structural setup could be reflected by a negative adjustment via Supplementary Rating Drivers or directly reflected in the company's BRP and/or FRP.

We review corporate governance guidelines and document any concerns regarding the structure, execution and enforcement of corporate governance as well as any inadequacies. We include any concerns in our publications and make comparisons with established standards. If we identify significant issues that would affect our ability to reach clear conclusions and form a measured opinion on corporate governance, we will decline to rate the issuer.

We review three key governance areas during the rating process³:

- i) external governance (company control): this covers, but is not limited to, the quality of public governance, transparency of local financial markets and financing sources, accounting frameworks, property law, bondholder rights, as well as any past, pending or upcoming issues with regulatory authorities and tax offices or other legal issues. We only review company behaviour relative to the appropriate regulatory and legal frameworks. However, we would typically regard as credit-negative factors which are detrimental to creditors and increase default risks. In particular, we would negatively reflect governance concerns in case of inadequate/inconsistent reporting methods and the failure to disclose key information in a timely manner.
- ii) internal governance (clarity, transparency and independence): this covers, but is not limited to, idiosyncratic weaknesses in the rated entity's control and oversight structures, such as the makeup and functions of the board of directors, the existence of committees tasked with governance, the effectiveness of management and the corporate culture, as well as the quality of both internal financial reporting, internal control mechanisms and risk management. In particular, limited independence of a rated entity's managing and/or governing bodies or apparent conflicts of interest (either theoretical or practical) could trigger a credit-negative rating adjustment. Moreover, weak internal governance could be shown by key person risk which could evolve as a significant risk to the company's cash flow or reputation. Other factors signalling potentially credit-negative internal governance are inadequate or frequent changing of financial planning, the misuse of bond proceeds or bribery.
- iii) transparency of ownership and control (corporate structure): this covers, but is not limited to, ownership structure and transparency, independence from and significant transactions with related parties (such as sister companies under the same roof or other entities outside of the overarching group structure), the relationship with independent auditors, and mechanisms in place to address issues, if any. For instance, we could reflect negative rating adjustments when a rated entity displays complex corporate structures with different group entities raising multiple layers of debt seniorities, which makes the ranking for credit claims difficult to ascertain and could complicate a workout in case of a company default. Likewise, we could reflect frequently negatively changing and/or non-transparent corporate structures that may prevent creditors from realising claims in a default scenario. Moreover, cash pooling with entities outside of the rated entity's scope of activity could result in cash outflows to the detriment of creditors, which in turn would warrant negative rating adjustments.

³ Examples provided are not covering all cases for which we could reflect negative rating adjustments.

5.4 External Rating Drivers

External Rating Drivers finalise our analysis. They are reflected via notching based on the Secondary Credit Assessment as the starting point.

5.4.1 Parent⁴/government support

When assessing the credit quality of an entity that may benefit from parent/governmental support, we incorporate the owner's capacity and willingness to support the entity when under financial stress. We aim to capture potential support or even a malus from the ultimate owners, which may have both credit-positive and credit-negative implications. In terms of the rating impact, all options are possible, from the full equalisation of the rated entity's issuer rating with that of the parent (name equality, debt guarantees or other supportive factors in the case of high strategic importance) to no notching from the parent's rating. An ownership malus can be incurred if a parent is unable to provide financial support to its subsidiary and is instead extracting significant cash from its subsidiary through intercompany loans or dividends to shore up its own credit position or that of other group companies. We assess the subsidiary's strategic importance to the parent as either significant or less significant. We also consider the extent of a parent's support to its subsidiary, including explicit guarantees or letters of credit. More implicit forms of parent commitment could be provided by name equality, the use of the same banks, or common treasury operations. When assessing parent support related to a public sponsor, we apply our '[Government Related Entity Rating Methodology](#)'.

5.4.2 Peer context

We take into account peer group considerations at an early analysis stage, particularly with regard to a rated entity's BRP against direct industry peers. At a later stage of the assessment (within the analysis of External Rating Drivers), we may reflect additional considerations in a peer context with the aim of ensuring consistency across the rating spectrum pertaining to the issuer rating, with both credit-positive and credit-negative implications.

Negative rating adjustments can be particularly important for rated entities that we deem non-investment-grade and whose Secondary Credit Assessment without peer context is positively impacted by a strong FRP. Such negative adjustments reflect our view that financial positions and setups can quickly change for these companies compared to other rated entities with the same Secondary Credit Assessment, which are, however, not deemed equally vulnerable to external or internal developments. Factors that could point to such vulnerabilities are, for instance, a rated entity's limited scope and outreach, significant country-specific risks related to the core market, concentration risks, and a potential adverse regulatory exposure that could significantly alter the rated entity's cash flow profile.

Likewise, positive rating adjustments can be made for peer context if we deem the Secondary Credit Assessment too conservative and to overstate the default risks, although such cases are rare. Factors that grant a positive rating adjustment could be low country-specific risks or risk mitigants related to a supportive regulatory environment or a (quasi)-monopoly status of the rated entity that are not sufficiently reflected in the BRP and overall Secondary Credit Assessment.

5.5 Issuer rating

The final issuer rating is based on our analysis of the BRP, FRP and Supplementary Rating Drivers and External Rating Drivers. The rating committee decides on the relative importance of each rating driver. For the Preliminary Credit Assessment, the BRP and FRP are generally weighted equally for companies perceived as crossovers between investment grade and non-investment grade. The BRP is typically emphasised for investment grade companies, while the FRP 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 FRP. Less focus is granted to strong FRPs of companies showing a weak or vulnerable BRP (in the B or low BB category) since for such companies, the FRP is subject to higher volatility. This takes into account that the credit rating of companies with weak or moderate BRPs should not be bolstered by a temporarily strong FRP. Hence, the weighting between the BRP and FRP is adapted to each issuer's business model and market(s).

⁴ We define a parent as a company or entity that has ownership or control over the rated entity, called the subsidiary. This relationship is typically established through a controlling interest, either directly or indirectly, through a stake of more than 50% of the rated entity's share capital, or through other mechanisms that allow the parent to actively exercise significant influence over the subsidiary's operations, finances and strategic decisions. The latter occurs when a parent with a minority interest in the rated entity is actively exerting control over the subsidiary, e.g. through (i) significant voting rights via shareholder agreements or proxy voting rights; or (ii) the active exertion of board influence through the right to appoint or influence board members.
We could also consider a group of different shareholders that demonstrate joint control and speak with one voice to the rated entity as a single shareholder.

5.6 Specific considerations for small and medium-sized enterprises (SMEs)

While the corporate rating methodology applies to all corporates, we recognise that SMEs have specific characteristics, which we incorporate into our rating analysis. These characteristics can be observed in their market position, management quality and corporate governance.

For SMEs, cash flow can be more volatile than for larger peers due to their smaller scale, making them more vulnerable to adverse market effects. We account for this by focusing more on liquidity when rating SMEs. Depending on the SME's market positioning and sensitivity to economic cycles and/or external/internal business disruptions, we also conduct a prudent and conservative assessment of an entity's FRP.

Despite their size, SMEs may benefit from strong positions in their key markets, which can provide some cash flow stability. Therefore, we examine SMEs' positioning in their core markets in addition to their size. Still, given their predominantly limited size and scope we might use negative adjustments under peer context consideration to reflect our view that financial positions and setups can quickly change for these companies compared to other rated entities with the same Secondary Credit Assessment which are, however, not deemed equally vulnerable to external or internal developments (see peer context).

Management quality and governance are particularly important when rating SMEs. Contrary to large entities, which are often listed and highly scrutinised by shareholders, SMEs' management quality and governance are generally less tightly controlled. Therefore, a specific rating driver we apply for SMEs is a record of solid strategy and management quality, as these can stabilise cash flow.

Although governance structure cannot drive the ratings upward, it is important when determining an SME's issuer rating. Adequate corporate governance is the minimum standard for rated entities; weak corporate governance, on the other hand, is likely to put downward pressure on the rating. We conduct an explicit corporate governance assessment for all corporate ratings (page 24).

6. Debt ratings

6.1 Long-term debt rating

Long-term debt instrument ratings reflect our opinion on an issuer's creditworthiness with respect to its long-term debt instruments. These ratings are linked to the issuer rating and are determined through an upward or downward adjustment relative to the issuer rating.

For the ratings of guaranteed debt instruments⁵, we take into account unconditional and irrevocable guarantees and the capacity of external⁶ guarantors to accommodate the guaranteed debt instrument on a timely basis. Such guarantees are taken into consideration when the guarantee provides a credit enhancement to a rated debt instrument, e.g. when the guarantor has a stronger credit profile than the issuer of the debt instrument.

However, the value of a guarantee considered for the expected recovery of guaranteed debt instruments depends on: i) whether the debt instrument is fully or partially guaranteed; and ii) whether the guarantor is rated investment grade or non-investment grade.

We typically grant full value to guarantees covering the entire debt amount. In such cases, the rating of the guaranteed debt aligns with the corresponding debt category rating of the guarantor. This alignment reflects the actual transfer of risk and the guarantor's legal obligation to meet the debt obligations if the issuer defaults.

By contrast, rating alignment does not apply to partial guarantees provided by external guarantors. In these cases, we consider both the guarantor's credit strength and the proportion of debt that is guaranteed. As there is no full risk transfer to the guarantor, the guarantee only affects the expected recovery of the rated debt instruments in the event of an issuer default.

Guarantees from investment grade-rated guarantors are recognised in full for the guaranteed portion (e.g. 80%, 50%). This reflects our general assumption that an investment grade guarantor can ensure timely payment of principal and interest of the guaranteed debt position. Furthermore, the guarantor's rating already accounts for off-balance sheet exposures such as guarantees provided to other entities.

⁵ A guarantee will not change the seniority of a debt instrument. A senior unsecured obligation that benefits from a guarantee will retain its classification and not become a (senior) secured instrument.

⁶ Guarantees from guarantors which are within the scope of consolidation of the rated entity are not considered.

However, partial guarantees from non-investment grade guarantors are subject to stress, with greater stress applied to guarantees from lower-rated entities. This reflects uncertainty regarding the guarantor’s ability to honour its obligation if the issuer defaults. Specifically, we assign no value to partial guarantees from guarantors rated in the C to CCC range.

The following table summarised our approach:

Figure 6: Scope’s reflection of guarantees from external guarantors for debt ratings

Guarantor \ Amount guaranteed	Full amount	Partial amount
Investment grade	Rating alignment between debt rating and rating of the guarantor	Guaranteed amount is fully reflected in the recovery analysis
Non-investment grade	Rating alignment between debt rating and rating of the guarantor	Guaranteed amount is stressed, e.g. 25% for guarantees from guarantors rated in the BB category, 50% for guarantees from guarantors rated in the B category and 100% for guarantees provided by guarantors rated from C to CCC

We might rate a specific debt instrument of an unrated issuer (i.e. an unrated subsidiary) if the timely payment of debt service (interest and principal payments) of the former is guaranteed by the rated entity as the quasi-issuer of that specific debt instrument.

Our rating approach depends on whether the issuer rating is: i) investment grade; or ii) non-investment grade.

6.2 Debt ratings for investment grade issuers

The ratings on senior unsecured debt and its investment grade issuer typically correspond with recovery rates on the debt averaging 30% to 50%. This reflects the tendency among investment grade issuers to rank senior unsecured debt below material secured debt.

Instrument ratings for investment grade issuers depend on their debt structure and jurisdiction. Typically, we would rate:

- Senior secured debt one notch higher than the issuer rating
- Senior unsecured debt equal to the issuer rating
- Subordinated debt one to two notches lower than the issuer rating and two notches lower for hybrid securities

The above are only guidelines. We may deviate from them if, for example, i) the issuer’s characteristics support the assumption that the enterprise value upon default could be materially different from historical levels; ii) the issuer’s debt structure is atypical, and we judge that the debt instrument rating requires a different approach; or iii) other circumstances require a different approach.

6.3 Debt ratings for non-investment grade issuers

We perform a customised recovery analysis when rating the long-term debt instruments of non-investment grade issuers and assume a hypothetical default situation.

This analysis establishes the recovery rates of debt instruments by taking into account the estimated value of claims available for creditors at the point of default (VCD), as well as the size and ranking of claims in the debt waterfall.

6.3.1 Estimated value of claims at default

In order to determine the VCD, we take the higher of: i) the estimated enterprise value at default, assuming operations are a going concern after the default; and ii) the estimated enterprise value at default in a liquidation scenario (estimated liquidation value) with post-default operations that are not a going concern. This assumes that the preferred scenario is the one creating the most value for bondholders.

The value for the first scenario (going concern) is estimated by multiplying the likely EBITDA at default with the EBITDA multiple considered realistic at default. This multiplier is based on our assessment of the company’s Competitive Positioning and the industry in which it operates. The adequacy of an estimated proxy at a simulated hypothetical point in the future is therefore closely linked to the BRP. The adequacy of the multiplier is likewise subject to the hypothesised prevailing multiples for issuers

assumed to be defaulted in the future as well as investor appetite for distressed assets at the point of emergence from a default-driven situation such as through restructuring.

The value for the second scenario (liquidation) is estimated by aggregating asset values and assuming asset haircuts reflecting the liquidation status, thus assuming a similar asset structure to the one at default. Our calculation may include accounts receivables, inventory, and property, plant and equipment. Haircuts are based on, but not limited to, the issuer's industry, the ability to convert certain assets into cash and counterparty credit quality. Haircuts also reflect analytical judgment on the marketability of assets.

A haircut is then applied to the higher of the two values, reflecting the estimated costs related to the administration of the default. This discounted value is the VCD.

6.3.2 Allocation of VCD to the waterfall of debt obligations

We determine the likely recovery rate for a defaulted debt instrument by allocating the VCD to the debt instruments according to the waterfall of claims at the time of the rating.

Recovery rates are categorised from 0% to 100% as follows:

- Excellent: 90% to 100%
- Superior: 70% to 90%
- Above average: 50% to 70%
- Average: 30% to 50%
- Low: 10% to 30%
- Very low: 0% to 10%

The instrument ratings are determined by adjusting the issuer rating upwards or downwards based on these recovery rates. This is applied as follows:

- Excellent (90% to 100%): up to three notches above the issuer rating (limited to two notches for unsecured debt instruments)
- Superior (70% to 90%): up to two notches above the issuer rating
- Above average (50% to 70%): up to one notch above the issuer rating
- Average (30% to 50%): instrument rating corresponds to the issuer rating
- Low (10% to 30%): up to one notch below the issuer rating
- Very low (0% to 10%): up to three notches below the issuer rating

The above guidelines apply to the large majority of non-investment grade issuers. However, we may deviate from these based on the issuer's circumstances, the debt issue, or bankruptcy proceedings in the issuer's jurisdictions. In addition, we take into account the sensitivity of the expected recovery to changes in underlying assumptions, particularly regarding the application of advance rates. The more sensitive the expected recovery rate, the more conservative the notching. We also cap the rating at BBB for senior secured debt of non-investment grade issuers and BBB- for senior unsecured debt of non-investment grade issuers.

Two generic examples of our approach on the recovery analysis of non-investment grade issuers are provided in section 8.3 (recovery analysis)

6.4 Short-term debt rating

6.4.1 General considerations

Short-term debt ratings usually apply to commercial paper or Billets de Trésorerie and to unsecured debt instruments typically maturing within 365 days in the European commercial paper market or 270 days in the US commercial paper market. Many large European non-financial corporates issue commercial papers in both markets.

When rating short-term debt that is guaranteed by another entity, we take into account whether the issued short-term debt is unconditionally and irrevocably guaranteed and assesses the capacity of the guarantor to accommodate the guaranteed short-term debt on a timely basis.

Among the drivers of the short-term debt rating are the issuer's fundamental long-term credit quality as reflected by its issuer rating, the issuer rating's stability, and the issuer's liquidity. Unlike our long-term issue ratings, short-term debt ratings do not incorporate the likely recovery of the debt instruments in a hypothetical default scenario.

6.4.2 General relationship between short-term and long-term rating scales

The issuer rating not only indicates the issuer's relative credit quality but also provides a long-term measure of its fundamental credit quality. It only implicitly reflects short-term credit quality, i.e. within the longer-term assessment of the issuer's fundamental credit quality.

Although an issuer's short-term rating correlates with its issuer rating, the relation between the two is not fixed. Low credit quality in the short term generally reduces long-term credit quality, whereas high short-term credit quality does not necessarily increase the issuer's long-term credit quality.

When assigning short-term ratings, we assess the issuer's fundamental long-term credit quality (as reflected in the issuer rating), the issuer's liquidity position, and the stability of the long-term rating as reflected in the rating Outlook. The latter is particularly important for issues rated borderline around S-2, S-3 or S-4.

Downgrades from S-2 or S-3 might significantly worsen or even preclude access to capital markets (short-term funding). This makes issuers of these short-term debt instruments more reliant on liquidity.

For further details, see [Credit Rating Definitions](#).

6.4.3 Liquidity

In addition to the issuer rating and its stability, the short-term rating is also driven by the issuer's liquidity, which indicates its ability to refinance its upcoming short-term debt from both internal and external sources. It consists of the following:

- i) Internally provided liquidity cover (%): coverage of short-term debt by the sum of internally generated cash flow, available unrestricted cash and marketable securities, and predictable proceeds from asset disposals;
- ii) The issuer's externally and internally provided liquidity cover (%): coverage of short-term debt by internally provided liquidity and contractually committed credit lines; and
- iii) The issuer's banking relationships and standing in the capital markets.

An issuer's liquidity indicates its resilience to refinancing or liquidity risk. Most commercial paper investors hold the securities until maturity and then roll over with new issues by the same issuer. Therefore, maturing commercial paper is often refinanced by new issues.

Liquidity risk arises if investors are no longer willing to refinance maturing short-term debt. This situation could be unrelated to the issuer such as a general market contraction or market disruption; or be specific to the issuer, such as negative publicity, a deterioration of its credit quality, a deterioration of confidence in the issuer, expected downgrades, or lawsuits. If an issuer cannot refinance maturing commercial paper with new issues, it has to seek other ways to fulfil short-term debt obligations.

When assigning a short-term rating, we aim to minimise short-term rating fluctuations. We therefore focus on an issuer's sustainable liquidity position, for example, by excluding one-off effects such as cash proceeds from unusual asset disposals. This analysis also incorporates an issuer's financial policy and how well this has been implemented.

While we consider 'externally and internally provided liquidity cover' as the most important driver in our assessment of the liquidity position, there is no fixed weighting applied for the three key analytical elements listed above:

We assess an issuer’s liquidity position as:

- adequate, i.e. neutral in the overall assessment of short-term credit quality;
- better than adequate, i.e. a positive rating driver for short-term ratings considered borderline between two short-term ratings (crossover credits); or
- worse than adequate, i.e. a negative rating driver for crossover credits.

Our assessment of the liquidity position is outlined below.

Figure 7: Components of an issuer’s liquidity position

Liquidity position	Better than adequate (positive analytical driver)	Adequate (neutral analytical driver)	Worse than adequate (negative analytical driver)
Internally provided liquidity cover	Above 50%	About 40% to 50%	Below 40%
Internally and externally provided liquidity cover	Above 100%	About 100%	Below 100%
Banking relationships and standing in the capital markets	More than five well-established bank relationships with highly reputable banks of strong credit quality; strong standing in capital markets	Four to five well-established bank relationships with highly reputable banks of strong credit quality; medium standing in capital markets	Fewer than four well-established bank relationships with highly reputable banks of strong credit quality; weak standing in capital markets

6.4.3.1 Internally provided liquidity cover

This measure indicates an issuer’s ability to repay its short-term debt (defined as debt maturing within 12 months, including commercial paper). The calculation includes internally provided liquidity, i.e. free operating cash flow and the issuer’s unrestricted cash and marketable securities. We consider internally provided liquidity cover of 40% to 50% to be adequate, cover below 40% to be worse than adequate, and above 50% to be better than adequate.

Figure 8: Internally provided liquidity cover (%)

Internally provided liquidity cover (%)
<p>Cash sources: Scope-adjusted FOCF, if it is positive (t) + unrestricted cash/cash equivalents (t-1) + marketable securities⁷ (t-1) + liquid inventories (t-1)</p> <p>Cash uses: Short-term debt (t-1)⁸ + Scope-adjusted FOCF, if it is negative (t)</p>

6.4.3.2 Externally and internally provided liquidity cover

This measure indicates an issuer’s ability to repay short-term debt using liquidity from both internal and external sources. This includes contractually committed bank lines specific to the commercial paper, or other bank lines for general business purposes.

The existence of external bank lines does not, however, guarantee that drawings can be made. For example, covenants could limit drawings in the event of a material adverse change. We therefore analyse the covenants for the committed credit lines and regularly monitor ‘covenant headroom’. We also consider an issuer’s short-term financial policy as well as its track record in implementing this. We only include bank lines in our calculation if these are available to cover short-term debt.

⁷ We may apply discounts to the book or market value of such sources of liquidity depending on the asset type.

⁸ We may include long-term debt in the cash uses of our liquidity calculation when it could be subject to accelerated repayment due to limited headroom under maintenance covenants (see also 5.3.1).

Externally and internally provided liquidity cover of about 100% is considered adequate for the overall assessment of liquidity; below 100% is a negative driver; above 100% is seen as positive.

Figure 9: Externally and internally provided liquidity cover (%)

Internally provided liquidity cover (%)
<p>Cash sources: Scope-adjusted FOCF, if it is positive (t)</p> <ul style="list-style-type: none"> + unrestricted cash and cash equivalents (t-1) + marketable securities⁷ (t-1) + unused committed bank facilities (t-1) + committed unused factoring lines (t-1) + liquid inventories (t-1) <p>Cash uses: Short-term debt (t-1)⁸</p> <ul style="list-style-type: none"> + Scope-adjusted FOCF, if it is negative (t)

6.4.3.3 Banking relationships and standing in the capital markets

In terms of refinancing, issuers with well-established banking relationships are better placed than those with no such relationships. In addition, issuers with a high standing in the capital markets are more able to re-issue commercial papers, even upon a contraction of a specific market. Indicators of a company's standing in the capital markets could be credit-default swap spreads or share price movements. Signs of good market access – and thus a high standing in the capital markets – include a historically high frequency and volume of debt issuances and the diversity of market access.

7. Environmental, social and governance assessment

We implicitly capture general environmental, social and governance factors during the rating process with the sole criteria of their material impact on the credit quality of a rated entity. We only consider an ESG factor relevant to our credit rating process if it has a ubiquitously discernible and material impact on key rating factors (e.g. the rated entity's cash flow profile) and, by extension, its overall credit quality. If material, we explicitly highlight any such factor. Contrary to ESG ratings, which are largely based on quantitative scores for different rating dimensions, credit-relevant ESG drivers are mostly of a qualitative nature. Hence, identified ESG rating factors are based on an opinion in a relative context (factors are ordinal rather than cardinal).

ESG-related factors can be credit-positive, credit-negative or credit-neutral. Such factors need to be assessed through either qualitative judgement or through quantitative measures. Credit-positive and credit-negative ESG factors primarily relate to our view that a rated entity is either best-in class or lagging on factors that relate to ESG risks, thus providing either a tailwind to a rated entity's BRP and FRP, or signalling major risks regarding cash flow generation, developments in the broader industry or the rated entity's Competitive Positioning. As such, ESG-related factors would also reflect our assessment of a rated entity's business strategy that could address ESG-related risks in a stronger or weaker dimension.

ESG-related rating factors can directly or indirectly affect all key rating factors that make up our assessment of an issuer's BRP, FRP and Supplementary Rating Drivers. The importance/relevance of certain ESG factors is specific to each rated entity, industry and region, except for governance, which is universally applicable across all industries. In contrast, environmental and social variables capture risks and opportunities that are often specific to the activities of a company and the industry in which it operates.

Moreover, ESG factors may materially impact our view on the recovery of debt in a default scenario and the corresponding debt category or debt instrument rating. An issuer's ESG profile may affect the recoverability of debt positions as it can impact the value of claims at the time of a default that either relates to a liquidation value or an enterprise value under a going concern scenario. This is also displayed by a higher likelihood of more interest bidders – either for specific assets or a distressed corporate as a whole – and consequently achievable prices.

In particular, the recoverable value under a liquidation scenario can be negatively affected if ESG risks could lead to stranded assets or lower advance rates on assets. Conversely, rated entities with little ESG risk could likely achieve higher sales prices in a liquidation scenario, thereby enhancing coverage for creditors. Likewise, under a going concern scenario, the enterprise value could positively or negatively be affected by the company's ESG profile as potential acquirers would price in potential transition and/or stranded asset risk, reinvestment needs etc.

Relevant ESG factors would likely be reflected by higher or lower advance rates on recoverable assets or higher/lower multiples applied in our estimation of liquidation or multiple-based enterprise values. Naturally, we would expect higher recoveries for corporates with solid ESG profiles compared to companies with substantial ESG risk, and hence higher debt ratings, all other things being equal. We conduct an explicit corporate governance assessment during the corporate rating process (see 5.3.2). For environmental factors, we review factors such as resource management, product innovation, physical risks or efficiencies in production processes.

For social factors, we review factors such as labour management, health and safety, client relationships and supply chains, and regulatory/reputational risks.

Although our credit analysis incorporates ESG factors, they are often not an important risk driver of the actual rating. Therefore, in cases where ESG considerations are a significant driver of the rating assigned, we would only disclose the relevant risk and how our analysis accounted for it. An absence of such disclosures indicates that ESG considerations were not relevant to credit risk.

8. Appendix

8.1 Key value and metrics definitions

We use the following key ratios in our fundamental quantitative analysis to assess an issuer’s FRP. Other financial ratios, in addition to those based on cash flow, are also used in the analysis if appropriate. This could include the loan/value ratio (x) for issuers in the real estate industry and the debt/regulated asset value ratio (x) for issuers in the utilities industry.

More information on definitions of key financial items is provided in Figure 9 below. All these metrics are using Scope-adjusted inputs.

Figure 10: Our key value and metrics definitions

<table border="1"> <tr><td>EBITDA</td></tr> <tr><td>Cash flow measure</td></tr> <tr><td>Reported EBITDA</td></tr> <tr><td>+ Rental payments</td></tr> <tr><td>± Special items</td></tr> <tr><td>+ Recurring associate dividends received</td></tr> <tr><td>EBITDA</td></tr> </table>	EBITDA	Cash flow measure	Reported EBITDA	+ Rental payments	± Special items	+ Recurring associate dividends received	EBITDA	<p>Reported earnings before interest, taxes, depreciation and amortisation, plus rental payments for the year adjusted for material one-off items (cash and non-cash), subject to analytical judgment.</p> <p>Special items include one-off as well as non-cash items. These items typically include items such as provisions or release of provisions, impairments, non-cash relevant income/expenses (such as share-based payments or valuation effects), non-recurring restructuring expenses, severance payments or gains/losses on disposal of equity holdings or fixed assets. Moreover, we can adjust for capitalised expenses if deemed material.</p> <p>We typically adjust for dividend income from associates when deemed material and recurring.</p>	
EBITDA									
Cash flow measure									
Reported EBITDA									
+ Rental payments									
± Special items									
+ Recurring associate dividends received									
EBITDA									
<table border="1"> <tr><td>FFO</td></tr> <tr><td>Cash flow measure</td></tr> <tr><td>EBITDA</td></tr> <tr><td>- Interest</td></tr> <tr><td>- Tax paid</td></tr> <tr><td>± Other non-operating charges before FFO</td></tr> <tr><td>= FFO</td></tr> </table>	FFO	Cash flow measure	EBITDA	- Interest	- Tax paid	± Other non-operating charges before FFO	= FFO	<p>FFO (funds from operations) represent operating cash flows before changes in working capital and after interest (including interest on lease obligations as well as accrued interest on positions, which we treat as debt-like, such as pensions, asset retirement obligations), taxes and other non-recurring income or expenses.</p>	
FFO									
Cash flow measure									
EBITDA									
- Interest									
- Tax paid									
± Other non-operating charges before FFO									
= FFO									
<table border="1"> <tr><td>FOCF</td></tr> <tr><td>Cash flow measure</td></tr> <tr><td>FFO</td></tr> <tr><td>± Working capital changes</td></tr> <tr><td>± Non-operating cash flow</td></tr> <tr><td>- Capex (net)</td></tr> <tr><td>- Lease amortisation (if applicable)</td></tr> <tr><td>= FOCF</td></tr> </table>	FOCF	Cash flow measure	FFO	± Working capital changes	± Non-operating cash flow	- Capex (net)	- Lease amortisation (if applicable)	= FOCF	<p>An issuer’s FOCF (free operating cash flow) represents its operating cash flow after changes in working capital and non-operating cash flow (including items such as change in assets/liabilities held for sale, cash flow from discontinued operations) and reported capital expenditures (netted with fixed-asset divestitures). Acquisitions do not count as capex. For all issuers with lease obligations, we deduct the amortisation element of lease obligations⁹. FOCF represents the cash flow available for discretionary spending such as for dividends, acquisitions, share buybacks, or the reduction of financial debt.</p>
FOCF									
Cash flow measure									
FFO									
± Working capital changes									
± Non-operating cash flow									
- Capex (net)									
- Lease amortisation (if applicable)									
= FOCF									
<table border="1"> <tr><td>Discretionary cash flow</td></tr> <tr><td>Cash flow measure</td></tr> <tr><td>FOCF</td></tr> <tr><td>- Dividends paid</td></tr> <tr><td>- The other 50% of interest paid on subordinated (hybrid) debt</td></tr> <tr><td>= Discretionary cash flow</td></tr> </table>	Discretionary cash flow	Cash flow measure	FOCF	- Dividends paid	- The other 50% of interest paid on subordinated (hybrid) debt	= Discretionary cash flow	<p>This measures FOCF after dividends that is available for discretionary spending such as for acquisitions, share buybacks, or the reduction of financial debt.</p>		
Discretionary cash flow									
Cash flow measure									
FOCF									
- Dividends paid									
- The other 50% of interest paid on subordinated (hybrid) debt									
= Discretionary cash flow									

⁹ For companies reporting under IFRS, these are mostly cash repayments for lease liabilities that are recognised in the company’s statement of cash flows; for companies that do not prepare their accounts in accordance with IFRS, the amortisation element reflects the difference between the lease expense recognised in the company’s income statement and the interest on lease liabilities calculated by Scope (see section 5.2).

Interest
Cash flow measure
Interest paid - Interest received + Interest component on operating leases (if applicable) ± 50% of interest paid on hybrid debt + Interest on debt-like provisions such as pension provisions and asset retirement obligations + Other capitalised interest = Interest

Scope-adjusted interest measures the amount of annual net interest payments which need to be covered by the operating strength of a rated entity. We take into account the interest exposure as per a rated entity's cash flow statement and adjust for interest components which are accrued/capitalised and other components.

SaD
Debt measure
Reported financial debt (incl. hybrid debt instruments) ± Adjustments such as operating leases (if applicable), unfunded pensions, guarantees, provisions (if applicable), hybrid debt instruments (equity credit), off-balance sheet debt, debt-like payables (interest bearing) - Unrestricted cash and cash equivalents = SaD

SaD is a key determinant for many credit metrics. We make adjustments based on a company's annual reports (reported financial debt), which typically consist of bank loans, capitalised leases and capital market debt such as bonds but also interest-bearing shareholder loans as well as hybrid debt instruments that may be reported under the issuer's equity position. The main adjustments relate to unfunded pension obligations, debt-like interest-bearing payables, operating lease obligations, debt of captive finance and guarantees given. For specific industries (such as utilities) debt-like provisions are included if material, for example, for the decommissioning of power plants.

Netting of cash is generally only applicable to ratings in the BB category or higher, and only if the cash is permanent and accessible.

Scope-adjusted FFO/debt (%)
Debt measure
$\frac{\text{FFO}}{\text{SaD}}$

This measures an entity's cash flow compared with its debt. It uses a lease-adjusted debt equivalent and deducts equity credit resulting from hybrid debt securities that display equity-like features. The long-term operating lease charge is capitalised as a multiple of rents.

Scope-adjusted debt/EBITDA (x)
Debt measure
$\frac{\text{SaD}}{\text{EBITDA}}$

This ratio compares an issuer's debt payment obligations with its ordinary, unleveraged, untaxed cash flow before operating rent payments (EBITDA(R)). The measure uses a long-term operating, lease-adjusted debt equivalent and deducts equity credit resulting from hybrid debt securities that qualify as equity-like. Long-term operating lease charges are capitalised as a multiple of rents. This multiple is typically 8 but may vary depending on the specific industry the entity operates in and the location of the leased assets.

Scope-adjusted FOCF/debt (%)
Debt measure
$\frac{\text{FOCF}}{\text{SaD}}$

This ratio compares an entity's cash flow generation with debt levels.

<table border="1"> <tr> <th colspan="2">Scope-adjusted EBITDA interest cover (x)</th> </tr> <tr> <td colspan="2">Interest cover</td> </tr> <tr> <td style="text-align: center;">EBITDA</td> <td style="text-align: center;">_____</td> </tr> <tr> <td style="text-align: center;">Interest</td> <td style="text-align: center;">_____</td> </tr> </table>	Scope-adjusted EBITDA interest cover (x)		Interest cover		EBITDA	_____	Interest	_____	<p>This ratio compares ordinary, unleveraged, untaxed cash flow generation with its cost of financing.</p> <p>The ratio illustrates an entity's ability to cover its cost of adjusted debt. The ratio is defined as EBITDA interest cover and often modified for the lower range of the non-investment grade segment. It illustrates a company's ability to pay its cash interest expenses.</p>
Scope-adjusted EBITDA interest cover (x)									
Interest cover									
EBITDA	_____								
Interest	_____								
<table border="1"> <tr> <th colspan="2">Liquidity (%)</th> </tr> <tr> <td colspan="2">Liquidity measure</td> </tr> <tr> <td> <p>Cash sources: Free operating cash flow, if it is positive (t) + unrestricted cash and marketable securities (t-1) + unused committed bank facilities (t-1) + committed unused factoring lines (t-1) + liquid inventory (t-1)</p> </td> <td style="text-align: center;">_____</td> </tr> <tr> <td> <p>Cash uses: Short-term debt (t-1) + Free operating cash flow, if it is negative (t)</p> </td> <td style="text-align: center;">_____</td> </tr> </table>	Liquidity (%)		Liquidity measure		<p>Cash sources: Free operating cash flow, if it is positive (t) + unrestricted cash and marketable securities (t-1) + unused committed bank facilities (t-1) + committed unused factoring lines (t-1) + liquid inventory (t-1)</p>	_____	<p>Cash uses: Short-term debt (t-1) + Free operating cash flow, if it is negative (t)</p>	_____	<p>This ratio indicates a company's ability to pay its cash uses including short-term debt (excluding short-term leases) and negative free operating cash flow using available cash sources, including positive free operating cash flow (which already reflects lease payments), unrestricted cash and marketable security positions, unused committed bank facilities, unused committed factoring lines and liquid inventory.</p> <p>Free operating cash flow will be considered in the nominator if it is positive and in the denominator if it is negative. Moreover, forecasted FOCF will only include cash proceeds from asset sales when such cash inflows are highly likely, e.g. through signed contracts.</p> <p>We may include long-term debt in the cash uses of our liquidity calculation when it could be subject to accelerated repayment due to limited headroom under maintenance covenants.</p>
Liquidity (%)									
Liquidity measure									
<p>Cash sources: Free operating cash flow, if it is positive (t) + unrestricted cash and marketable securities (t-1) + unused committed bank facilities (t-1) + committed unused factoring lines (t-1) + liquid inventory (t-1)</p>	_____								
<p>Cash uses: Short-term debt (t-1) + Free operating cash flow, if it is negative (t)</p>	_____								
<table border="1"> <tr> <th colspan="2">Scope-adjusted EBITDA margin (%)</th> </tr> <tr> <td colspan="2">Profitability measure</td> </tr> <tr> <td style="text-align: center;">EBITDA excluding any dividend contribution from associated companies</td> <td style="text-align: center;">_____</td> </tr> <tr> <td style="text-align: center;">Revenue</td> <td style="text-align: center;">_____</td> </tr> </table>	Scope-adjusted EBITDA margin (%)		Profitability measure		EBITDA excluding any dividend contribution from associated companies	_____	Revenue	_____	<p>This ratio indicates a company's operating profitability, which provides an objective measure to compare companies, particularly within their relevant industries, stripping out their funding structures and taxation.</p> <p>The measure typically strips out non-recurring/one-off items as well as gains/losses from asset disposals or the release/build-up of provisions. Moreover, if material, we will adjust for capitalised expenses which have improved reported EBITDA to ensure comparability between companies with a different approach on capitalisation. Income from associates, which typically is shown below the EBITDA level, is not included in the Scope-adjusted EBITDA for the computation of the Scope-adjusted EBITDA margin.</p>
Scope-adjusted EBITDA margin (%)									
Profitability measure									
EBITDA excluding any dividend contribution from associated companies	_____								
Revenue	_____								

8.2 Related documents

For more information, please refer to the following documents:

- [Government Related Entity Rating Methodology](#)
- [Credit Rating Definitions](#)

8.3 Recovery analysis (examples)

Going concern scenario

all figures in EUR m

(A) Estimated enterprise value at default assuming going concern		Year:	2028
Cash interest 2028			50.0
add: margin step-up 100 bp			25.0
add: amortisation secured debt			50.0
add: maintenance capex			20.0
EBITDA at default (implied discount)	40%		145.0
Enterprise value multiple (BRP: BB+)			4.50
Distressed enterprise value			652.5

COMMENTS

3x to 5x depending on the company's business risk profile

(B) Estimated enterprise value at default assuming liquidation		Year:	2028
	Advance rate	Available to creditors	
Property, plant and equipment	250.0	30%	75.0
Investment properties	0.0	65%	0.0
Inventories	250.0	50%	125.0
Goodwill	25.0	0%	0.0
Financial investments	25.0	50%	12.5
Receivables	475.0	90%	427.5
Tax assets	0.0	0%	0.0
Other assets, e.g. intangibles	100.0	0%	0.0
Cash and equivalents	1.2	0%	0.0
Total liquidation value (excluding cash reserve)			515.0

COMMENTS

Indicative advance rates (can vary greatly depending on nature of assets and business):

20% to 80% depending on recoverability and liquidity of main assets
 40% to 75% depending on market volatility and target rating
 around 50%
 0%
 0% to 90% depending on liquidity of underlying investment
 80% to 90% depending on counterparty's credit quality
 0%
 0%
 0%

Higher value of (A) going concern scenario or (B) liquidation scenario	652.5	652.5
less: administrative claims	10%	65.3
Adjusted value for distribution to creditors		587.3

Waterfall of debt by priority in payment					
	Obligations	Liquidation value	of which unencumbered	Recovered	Recovery rate (%)
TOTAL		587.3			
Obligations ranking prior to all debt	20.0	587.3		20.0	100%
Secured bank debt	450.0				
		567.3		490.0	100%
Secured capital market debt	40.0				
Insolvency estate after secured bank debt positions		=	77.3		
Senior unsecured debt	250.0	77.3		77.3	31%
Subordinated debt	50.0	0.0		0.0	0%
Insolvency estate after senior unsecured debt positions		=	0.0		

COMMENTS

includes e.g. tax payables, social security payments

taking into consideration collateral provided in case of liquidation and fully drawn committed, secured revolving credit facility

taking into consideration collateral provided in case of liquidation

including unsecured committed lines fully drawn, etc.

Liquidation scenario

all figures in EUR m

(A) Estimated enterprise value at default assuming going concern		Year:	2027
Cash interest			15.0
add: margin step-up 100 bp			5.0
add: amortisation secured debt			25.0
add: maintenance capex			20.0
EBITDA at default (implied discount)	35%		65.0
Enterprise value multiple (BRP: B)			3.00
Distressed enterprise value			195.0

COMMENTS

3x to 5x depending on the company's business risk profile

(B) Estimated enterprise value at default assuming liquidation		Year:	2027
	Advance rate		Available to creditors
Property, plant and equipment	2.5	30%	0.8
Investment properties	1,250.0	65%	812.5
Inventories	25.0	50%	12.5
Goodwill	0.0	0%	0.0
Financial investments	5.0	50%	2.5
Receivables	5.0	90%	4.5
Tax assets	0.0	0%	0.0
Other assets e.g. intangibles	100.0	0%	0.0
Cash and equivalents	1.2	0%	0.0
Total liquidation value (excluding cash reserve)			820.2

COMMENTS

Indicative advance rates (can vary greatly depending on nature of assets and business):
 20% to 80% depending on recoverability and liquidity of main assets
 40% to 75% depending on market volatility and target rating
 around 50%
 0%
 0% to 90% depending on liquidity of underlying investment
 80% to 90% depending on counterparty's credit quality
 0%
 0%
 0%

Higher value of (A) going concern scenario or (B) liquidation scenario	820.2
less: administrative claims	10%
Adjusted value for distribution to creditors	738.2

820.2
 82.0
738.2

Waterfall of debt by priority of payment

	Obligations	Liquidation value	of which unencumbered	Recovered	Recovery rate (%)
TOTAL		738.2			
Obligations ranking prior to all debt	20.0	738.2		20.0	100%
Secured bank debt	400.0	450.0		400.0	100%
Secured capital market debt	40.0	42.2		40.0	100%
Insolvency estate after secured bank debt positions		=		278.2	
Senior unsecured debt	250.0	278.2		250.0	100%
Subordinated debt	50.0	28.2		28.2	56%
Insolvency estate after senior unsecured debt positions		=		0.0	

COMMENTS

includes e.g. tax payables, social security payments
 taking into consideration collateral provided in case of liquidation and fully drawn committed, secured revolving credit facility
 taking into consideration collateral provided in case of liquidation
 including unsecured committed lines fully drawn, payables, etc

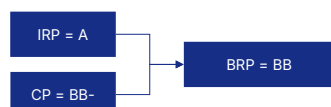
8.4 Examples for the notching approach for the Industry Risk Profile and Competitive Positioning

The following examples show how we typically integrate the assessment of the Industry Risk Profile (IRP) within the BRP, based on the notching approach from the assessment of a rated entity's Competitive Positioning (CP).

For a company with a rather modest CP assessment which operates in a robust and high-rated industry, we would typically notch up the BRP from the CP. As an example, we would positively reflect the high IRP of a telecommunications services company with a comparatively low CP given that it operates in a robust industry rated 'A'.

Positive impact from the IRP assessment on the overall BRP

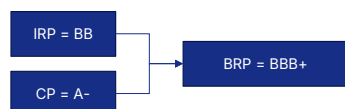
Company is deemed to benefit from solid industry stability



For a company with a rather good CP assessment which operates in a vulnerable and low-rated industry, we would typically notch down the BRP from the CP. As an example, we would reflect a negative adjustment within the BRP assessment for an airline with a comparatively high CP assessment given its low IRP, which stands at B.

Negative impact from the IRP assessment on the overall BRP

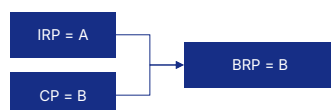
Company is somewhat vulnerable to high industry risks



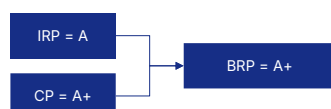
However, we would not notch up or down the BRP from the CP if either the IRP is not meaningfully different to the CP, or if we believe that the rated entity's sub-sector exposure is not adequately represented by the overarching industry assessment and that the rated entity is neither benefiting from a high-rated industry nor challenged by a low-rated industry. For example, we would typically not reflect a high IRP for a non-discretionary consumer products company that has a very low CP due to its operations in a niche segment and potential vulnerability to changes in market trends and consumer preferences. We also not reflect a low IRP for a sizeable commercial real estate company with a solid CP if the company had idiosyncratic strengths, such as high-quality leases, high barriers to entry or structural demand tailwinds that differentiate the company's BRP from that of the broader industry.

Neutral impact from the IRP assessment on the overall BRP

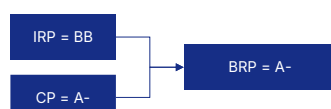
Significant positive differential between IRP and CP, but company is **not** deemed to benefit from solid industry stability



Insignificant differential between CP and IRP



Significant negative differential between IRP and CP, but company is **not** deemed to be vulnerable within a comparatively weaker industry



8.5 Examples of peer context adjustments

The following examples provide cases in which we apply a rating adjustment for peer context.

While we do not mechanically apply a country rating cap, we could apply a negative adjustment within the External Rating Drivers to a company that is assessed to have a Secondary Credit Assessment higher than the country in which it primarily operates. For example, we could apply this adjustment if we identified potential credit risks related to state finances or practices, e.g. the potential introduction of extra taxes or adverse changes to the regulatory framework, which could potentially affect the rated entity.

Likewise, we could apply a negative adjustment for peer context to the Secondary Credit Assessment of a company which shows strong fundamentals (historically and over the forecast horizon), but which operates in a market which at some point could be hampered by market practices, e.g. regulations, which are already standard in other markets.

Ultimately, we could adjust the Secondary Credit Assessment for peer context when a rated entity's Secondary Credit Assessment is positioned at a level which does not reflect its vulnerability to adverse market developments. This could be the case for small companies that operate in niche markets, whose Secondary Credit Assessment is positively impacted by (very) strong financials. As the financial setup for such companies could quickly erode, we could apply a negative adjustment in order to move the issuer rating to the appropriate rating category.

8.6 Examples of forward-looking stresses in Business Risk Profile

As noted above (Competitive Positioning, 5.1.2), we examine the components of BRP in a way that incorporates expected trends in fundamental business drivers. Specifically, we seek to identify the most likely areas of potential downside risk, and how these will transmit through our rating factors.

These can take many forms: for example, a company has a heavy concentration in a product that is subject to significant fashion risk or other changes in consumer preferences risks exhibiting sequential periods of both significant growth and significant volatility in demand, which will translate to cash flow and profitability metrics. In these instances, a rating assigned during this growth phase will likely be constrained by the combination of i) weaker scoring in product characteristics and product diversification, plus potential related effects on market characteristics and competitive differentiation scores; and ii) a scoring of credit metrics deemed to be more reflective of expected potential changes in demand over the applicable ratings horizon. In this instance, it is also likely that weaker BRP factors would be weighted more heavily, both on the basis of our 'weakest link' approach, and in order to reflect the degree of expected correlation between product volatility and credit metrics volatility.

Similarly, an issuer which faces growing structural changes in its competitive landscape – for example, due to higher regional input costs and a resultant surge in import competition – will likely be scored lower in terms of competitive differentiation and product characteristics, reflecting the extent to which we believe the erosion in the company's competitiveness will persist over the applicable ratings horizon. As described above, we would also ensure that our view of credit metrics and liquidity incorporates our expectations of how financial performance will evolve based on these changes.

In these determinations, we will source intelligence from our internal sector monitoring and research, comparisons with historical and similar trends across sectors, discussions with company management and peers, specialist sector data sources, as well as market participants.

Where there is significant uncertainty in the likelihood of specific scenarios developing, for example, in the cases of emerging technologies, or in the event of rapid structural changes in competitive landscape, we will evaluate a range of scenarios. Uncertainty creates more potential for volatility, which in turn creates heightened risk, and therefore requires a meaningful weighting of downside risk. This general analytical approach also resonates with our general weakest link approach.

8.7 Examples of impact of liquidity

As noted above (Liquidity 5.3.1), we apply a non-mechanistic approach to potential up- or down-notching tied to liquidity. Our computed liquidity ratio provides us with quantitative guidance around a company's self-sufficiency in terms of funding its operations and also gives us a consistent basis for comparison across corporate ratings.

The determination of whether liquidity is adequate or inadequate then is a function of i) whether an issuer is expected to rely on external market funding (e.g. through debt or equity inflows, asset monetisation, etc.) over the current ratings horizon, and ii) the level of certainty we can ascribe to the company's ability to access these market sources.

Liquidity issues can arise for a wide range of reasons, and most frequently a combination of inadequate cash flow generation, a need to access the market for funding, and uncertainty around the company's capacity to secure this funding. In turn, this

uncertainty can stem from a wide range of sources, including loss of investor confidence in the company, limited structural market depth for the company's specific credit profile or market of operation, or market corrections which may render prior sources of capital less available.

Market access is therefore highly variable and may not be directly captured in the BRP, FRP, other Supplementary Ratings Drivers, or directly in our liquidity ratio. The latter captures the expected need that the company will have to access market funding, but not its capacity to attract investors and creditors. As a result, down-notching for liquidity reflects the fact that this market access risk yields added credit pressure commensurate with a lower rating.

Down-notching therefore manifests in two main ways: i) as a signal that current liquidity uncertainty increases credit volatility to the point that risk is more accurately reflected by a lower rating; and ii) in more acute cases, as an adjustment that allows precise signalling of proximity to default in the event that other methodological factors do not immediately reflect this risk (for example, in the event of an unexpected exogenous shock that may not be immediately reflected in the company's business or financial statements). Finally, a significant proportion of defaults take the form of distressed exchanges (see our Credit Rating Definitions), which partly reflect a choice by management to restructure existing debt instruments in a way that shifts the burden of financial losses to creditors for the benefit of other stakeholders, and most frequently in cases where markets would likely not enable full refinancing of the company's obligations. In these instances, liquidity adjustments can be used to adjust the rating to default status.

Down-notching thus exists on a spectrum and will also reflect elements of specific market conditions and management decision-making. Down-notching by any number of notches can reflect any of the situations above and should be interpreted in the context of the resulting issuer rating.

For example, an issuer with a BB or B quality BRP and FRP may evidence uncertainty around its ability to consistently access markets over our ratings horizon, to the point that this uncertainty is credit-equivalent to meaningfully weaker cash flow generation, but does not immediately threaten solvency. In this case, a one-notch liquidity adjustment may be warranted.

Conversely, should this same issuer face an exogenous market shock – for example, a sudden spike in input costs, or a significant market correction – debt service and refinancing capacity may be eroded to the point that a distressed exchange becomes the most viable option. In this instance, we would likely use the liquidity adjustment to signal imminent default.

Liquidity notching therefore does not correlate mechanically with the BRP or FRP. Instead, liquidity notching is used to signal the added proximity to default that is generated specifically by liquidity questions. This proximity is partly a function of market conditions and management responses.

As noted above, down-notching on liquidity occurs when liquidity is deemed inadequate, at which point the issuer rating is unlikely to be rated above B.

Up-notching occurs in cases where our liquidity ratio remains consistently above 200%. These instances of up-notching are much less frequent than down-notching, and in our experience tend to be more frequently one notch as opposed to two.

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