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Analysts

- Maude Tremblay - Criteria
+1 312 368 3203
maude.tremblay@fitchratings.com
- Megan Neuburger – North America
+1 212 908 0501
megan.neuburger@fitchratings.com
- Alex Griffiths – EMEA
+44 20 3530 1709
alex.griffiths@fitchratings.com
- Saverio Minervini - Latin America
+1 212 908 0364
saverio.minervini@fitchratings.com
- Buddhika Piyasena - APAC
+65 6796 7223
buddhika.piyasena@fitchratings.com
- Jeremy Carter - Global
+44 20 3530 1391
jeremy.carter@fitchratings.com

Corporate Rating Criteria

Effective from 27 June 2025 to 9 January 2026

Master

Scope

This Master Criteria report identifies factors that Fitch Ratings considers when assigning Issuer Default Ratings (IDRs) or instrument ratings. These criteria apply globally to new ratings and the surveillance of existing ratings. Not all rating factors in these criteria may apply to each individual rating or rating action given the broad range of entities within Fitch's corporates portfolio.

Additional criteria reports, including those specific to a sector, a class of liability, a particular form of cross-sector risk or a particular form of corporate structure, supplement the application of these Master Criteria and are available at [fitchratings.com](https://www.fitchratings.com).

Key Rating Drivers

Qualitative and Quantitative Factors: Fitch's corporate ratings reflect qualitative and quantitative factors encompassing the business and financial risks of issuers and their individual debt issues.

Key Rating Factors

Sector risk profile	Financial profile:
Country risk	• Profitability
Management and corporate governance	• Financial structure
Business profile	• Financial flexibility

Source: Fitch Ratings

Historical and Projected Profile: Projections are developed with a three- to five-year time horizon. Combined with typically at least the last three years of operating history and financial data, this constitutes one typical economic cycle of the issuer under review. These projections are used in a comparative analysis in which Fitch reviews the strength of an issuer's business and financial risk profile relative to its industry or rating category peer group.

Weighting of Factors Varies: The weighting between individual and aggregate qualitative and quantitative factors varies between entities in a sector as well as over time. As a general guideline, where one factor is significantly weaker than others, this weakest element tends to attract a greater weight in the analysis.

Rating Approach

The Corporate Rating Criteria provides an umbrella framework which guides our ratings for corporate issuers at the level at which the global diversity and dynamism of the corporate sector can be captured on a common basis. Companies may span multiple industry categories, some of which are quite small and present idiosyncratic characteristics, and also generally face market forces.

Starting from the range of rating categories most appropriate for a corporate's sector risk profile, the analysis of the country risk, operational and financial characteristics of the issuer enables rating committees to determine the most appropriate peer group and, informed by historical and forecast comparisons, to narrow down the rating outcome to a notch-specific level. Issuers with high investment-grade ratings are likely to demonstrate strong financial and operational flexibility. Ratings may be capped in sectors that possess greater volatility in credit metric performance than others over normal cycles.

Though climate risk is not captured as a separate rating driver, Fitch will consider if the scoring of any rating driver should also be influenced by risks arising from climate change. Fitch's analysis will focus on entities in the sectors most exposed to long-term climate risks. Climate-related risks are evolving, can cut across an organisation and manifest themselves, at times, in unpredictable ways. More details on climate-related risks can be found in [Appendix 9](#).

Sector Navigators

Sector Navigators guide the application of these criteria's concepts on a sector-specific basis. However, the Navigator factors are not exhaustive. We supplement the Navigators with a Peer Analysis section in our research which explains the positioning of the issuer's rating against its peers and/or the relevant Navigator thresholds, and other considerations that affect the rating that are not included in the Sector Navigator. This may include Country Ceiling and linked ratings (e.g. government related entities, or parent and subsidiary linkage) considerations, for instance.

An issuer's IDR would normally be expected to lie within the three-notch band centred around any reasonable combination of the mid-points of the Navigator's Key Factors. Where this is not the case, the difference will be explained in the Peer Analysis section.

Navigator Selection: Fitch will use the Sector Navigator that best captures the sector the issuer operates in, allowing a more sector-specific view of these criteria's Key Rating Factors and peer comparison. The Generic Navigator may be used if no appropriate sector Navigator exists. If issuers straddle several sectors, Fitch may prepare one Navigator for each relevant sector or focus on the most dominant sector.

Non-Application of Navigators: Navigators are unlikely to be used when issuers are assessed under the [National Scale Rating Criteria](#) or where the Navigator factors do not adequately reflect the risk profile of the issuer (e.g. an issuer that straddles multiple sectors and none are dominant).

More details on Sector Navigators can be found in [Appendix 8](#).

Sector-Risk Profile and Country Risk

Sector-Risk Profile

Fitch determines an issuer's standalone rating within the context of each issuer's industry fundamentals. Industries that are in decline, highly competitive, capital intensive, cyclical or volatile are inherently riskier than stable industries with few competitors, high barriers to entry, national dominance, and predictable demand levels.

While sectors differ greatly (and issuers can often combine a variety of sectors in their operations), the Navigators' sector risk profile provides a typical standalone rating range for issuers in a variety of industries. The upper boundary of the range is not a hard standalone rating cap for issuers in the industry. However, an issuer rated higher than the boundary would be expected to be a clear positive outlier on most financial and business characteristics. It is unlikely that any issuer would be rated on a standalone basis by more than a couple of notches above the upper boundary.

Country Risk

Fitch's assessment of country risk on an issuer's ratings comprises two distinct considerations: operating environment (OE); and transfer and convertibility risk ("T&C risk" or "Country Ceiling").

Related Criteria

- [Sector Navigators – Addendum to the Corporate Rating Criteria \(June 2025\)](#)
- [Corporates Recovery Ratings and Instrument Ratings Criteria \(August 2024\)](#)
- [Country-Specific Treatment of Recovery Ratings Criteria \(March 2023\)](#)
- [Corporate Hybrids Treatment and Notching Criteria \(April 2025\)](#)
- [Parent and Subsidiary Linkage Rating Criteria \(June 2025\)](#)
- [Government-Related Entities Rating Criteria \(July 2024\)](#)
- [Third-Party Partial Credit Support Rating Criteria \(May 2024\)](#)
- [Sukuk Rating Criteria \(June 2022\)](#)
- [National Scale Rating Criteria \(December 2020\)](#)
- [Aircraft Enhanced Equipment Trust Certificates Rating Criteria \(June 2023\)](#)
- [DIP \(Debtor-in-Possession\) Rating Criteria \(November 2020\)](#)

Operating Environment

Every issuer exists within an OE, which is a combination of:

- Economic Environment: the location of its revenue, income and assets;
- Financial Access: the funding environment; and
- Systemic Governance: the systemic governance of its primary location.

OE operates as an asymmetric consideration in that it will only have an impact on the issuer's rating when it is negative. Companies can succeed and fail in the most hospitable environments, typically rendering that environment a neutral ratings consideration. However, a higher-risk environment can actively constrain a company's potential and overall credit profile.

In emerging markets especially, the OE can result in a lower rating profile by one to two notches, depending on the level of challenge posed by that environment. This rating would effectively be the issuer's underlying rating before any consideration of the Country Ceiling.

Please refer to [Appendix 8](#) for a more detailed description of our OE approach.

Transfer and Convertibility Risk

Fitch's Country Ceilings represent a general constraint on an issuer's foreign-currency ratings where the relevant country ceiling is lower than 'AAA'. A Country Ceiling can be exceeded in certain circumstances, as detailed in [Appendix 6](#). In extreme cases, a rating could be constrained at a level lower than the Country Ceiling.

Country Ceilings are an assessment of T&C risk, capturing the risk of the imposition of exchange controls that would prevent or materially impede the private sector's ability to convert local currency into foreign currency. By extension, T&C considerations do not affect local currency ratings. See the [Country Ceiling Criteria](#) for additional detail.

While T&C risk is closely related to sovereign ratings, sovereign ratings do not have a direct effect on a corporate issuer's ratings and are not captured in our OE assessment. Sovereign ratings capture the likelihood that a sovereign issuer will default and are not a proxy of the general financial health of the economy, much less of an industrial section within a given country.

Please refer to [Appendix 5](#) for a description on how Foreign-Currency IDR, Local-Currency IDR, OE, Country Ceiling and Sovereign Rating relate to each other.

Please refer to [Appendix 7](#) on how transfer and convertibility risks affect investment holding companies.

Management Strategy and Corporate Governance

Management Strategy

Fitch considers the management's record in terms of its ability to create a healthy business mix, maintain operating efficiency, and strengthen the market position of the issuer. Financial performance over time provides a useful measure of management's ability to execute its operational and financial strategies.

Corporate goals are evaluated centring upon future strategy and past record. Risk tolerance and consistency are important elements in the assessment. The historical mode of financing acquisitions and internal expansion provides insight into management's risk tolerance.

Corporate Governance

Fitch generally focuses on the following governance characteristics: governance structure, group structure and financial transparency.

Corporate governance operates as an asymmetric consideration. Where it is deemed adequate or strong, it typically has little or no impact on the issuer's credit ratings. Where a deficiency is observed, it may have a negative impact on the rating.

[Appendix 8](#) indicates governance characteristics that are likely to be credit neutral or credit negative.

Governance and Group Structure

The purpose of assessing governance and group structure is to assess whether the way effective power within an issuer is distributed prevents (or conversely makes more likely) potential problems of a principal-agent nature (for example, management extracting value from the shareholders or debtholders for its own benefit) or principal-principal nature (for example, a majority shareholder extracting value from minority shareholders or debtholders).

Elements to take into consideration are notably the presence of effective controls for ensuring sound policies, an effective and independent board of directors, management compensation, related-party transactions, integrity of the accounting and audit process, ownership concentration and key-person risk.

Financial Transparency

Financial transparency indicates how easy it is for investors to assess an issuer's financial condition and fundamental risks. High-quality and timely financial reporting is generally considered by Fitch to be indicative of robust governance. Likewise, publishing intentionally inaccurate or misleading accounting statements is symptomatic of deeper flaws in an issuer's governance framework.

The assessment of Group Structure and Financial Transparency also takes into account the transparency of the issuer's wider group, particularly when a controlling shareholder exists. An 'aa' score is viewed as exceptional for these sub-factors and is reserved for extremely simple structures combined with exceptionally strong reporting that goes well beyond reporting standards.

Group Structure

Relations Between Group Entities

Fitch assigns the IDR to the issuer of debt which has operations that define its creditworthiness. Where the issuer is a holding company for the group, operating subsidiaries may be substantially funded by the parent, inter-group guarantees may be in place or there may be other operational or contractual features that join the group together. Thus the IDR of the holding company represents the operations of the group as a whole. Individual companies within the corporate group may be rated differently from the rest of the group, in which case Fitch assesses the group's linkages under the [Parent and Subsidiary Linkage Rating Criteria](#).

When special-purpose entities are debt-issuance funding vehicles and have no operations, Fitch typically rates the guaranteed debt of the issuer based on the ratings of the guarantor. A guarantee is considered full and worthy of the guaranteed debt being assigned the ratings of the guarantor if it covers 100% of principal payments plus all interest accrued up to the point at which all principal payments are paid.

Where a consolidated approach is not taken – for instance, because of material minority interests – Fitch typically considers the sustainability and predictability of the issuer's income resources (including group cash pooling and upstreaming of conditional dividends) used to service its debt, including the credit quality of the relevant entities and their contribution to the group's financial profile. Please see [Appendix 1](#), adjustment 6: *Adjusting Consolidated Profiles for Group Structures*.

Business Profile

Key rating factors related to the business profile cover a broad range of qualitative business risks, tailored to the industry fundamentals for each sector. Commonly observed or expected elements for a number of key corporate industries are included in our relevant Sector Navigators to guide the application of Corporate Rating Criteria concepts.

Financial Profile

The quantitative aspect of Fitch's ratings focuses on an issuer's financial profile and its ability to service its obligations from a combination of internal and external resources.

Fitch considers these factors in all the Sector Navigators: Profitability, Financial Flexibility and Financial Structure. These are assessed on a forward-looking, through the cycle basis. These are discussed in greater detail below.

Emphasis on Cash Flow Metrics: Fitch's financial analysis attributes substantially more weight to cash flow measures of earnings, coverage and leverage than equity-based ratios such as debt-to-equity and debt-to-capital. The latter rely on book valuations which do not always reflect current market values or the ability of the asset base to generate cash flow to service debt. In addition, book values are a similarly weaker measure in the analysis of loss given default than cash flow-based approaches.

However, when the repayment of the debt is more likely to come from the sale of assets than cash flow generated by operations, for instance in sectors such as property investment companies or investment holdings, and the value of the assets is based on sufficiently reliable data, Fitch may take into account balance-sheet-based ratios such as loan-to-value (LTV).

Fitch regards the analysis of trends in a number of ratios as more relevant than any individual ratio, which represents only one performance measure at a single point in time.

Sector-Specific Benchmarks: Credit metrics are not used in a determinate fashion to assign ratings as varying conclusions can be drawn from the same ratio depending on the sector under review. In its [Sector Navigators - Addendum to the Corporate Rating Criteria](#) report, Fitch specifies financial ratios consistent with the different rating categories for various sectors on a regional or global basis.

Forward-Looking Through-the-Cycle Approach

Corporate Monitoring and Forecasting Model (COMFORT)

Corporate forecasting is facilitated by the Corporate Monitoring and Forecasting Model (COMFORT). COMFORT is a forecasting model with balance sheet, profit and loss and cash flow statement used to project the key ratios in the Corporate Rating Criteria in a globally consistent fashion to generate issuer-specific financial forecasts in line with Fitch's methodologies for use in rating committees. The model does not employ any statistical modelling techniques, nor are any standard forecast assumptions applied.

COMFORT may not be used for issuers such as investment holding companies or when Fitch needs to make significant adjustments to the balance sheet structure (for example, when a large portion of the business needs to be deconsolidated or partially de-consolidated), or when the key credit ratios are based on indicators not included in COMFORT (e.g. UK networks where the focus is on regulated capital value based gearing and post maintenance interest coverage ratios), in which case forecasts will be produced using a bespoke approach.

Ratings and Stress Cases

Fitch evaluates risks of rated entities and structures under a variety of scenarios. The ratings-case and stress-case forecasts help to determine the amount of headroom in a company's credit ratings and inform the rating Outlook.

Scenarios are developed based on potential risks an issuer may encounter through both ratings and stress cases. Financial projections are based on the issuer's current and historical operating and financial performance, its strategic orientation and analysis of wider industry trends. The macroeconomic backdrop for the ratings case may be supported by Fitch's *Global Economic Outlook* commentary and forecasts.

The ratings case is defined as a set of conservative projections which form the basis of the assessment of the issuer. Ratings-case projections are developed with a three- to five-year time horizon. Combined with typically at least the last three years of operating history and financial data, this constitutes one typical economic cycle of an issuer. Fitch believes this represents a reasonable time frame for forecasts.

A stress case, defined as a scenario that may cause the rating to be downgraded by at least one notch, is also undertaken. Alternatively, Fitch may choose to prepare the stress case based on a centrally defined macro-economic downturn scenario or sector specific stress assumptions, e.g. a commodity price decline for the extraction sector.

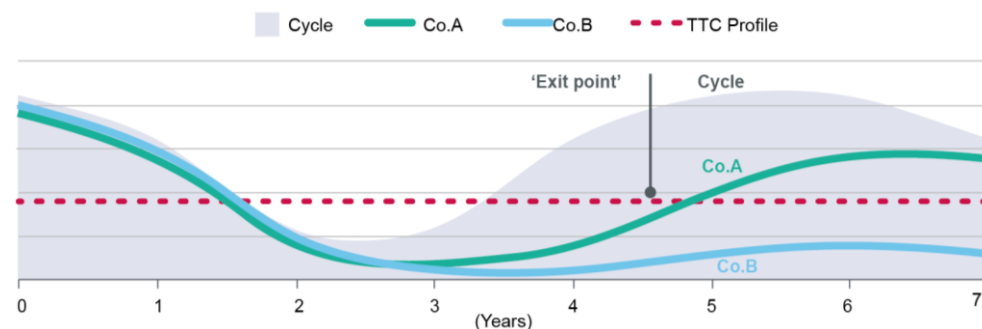
Through-the-Cycle Approach

In rating cyclical companies, Fitch's forecasts take a view on credit-protection measures and profitability "through-the-cycle". The primary challenge in rating a cyclical issuer is deciding when a fundamental shift in financial policy or a structural change in its operating environment has occurred that would necessitate a rating change.

The "Rating Through the Cycle" chart below illustrates two examples. Company A suffers during a recession, but is forecast to regain its through-the-cycle profile, represented by the dotted line, by the "exit point" 18 to 24 months after the recession trough. The dotted line represents (quantitative and qualitative) parameters consistent with a particular rating level.

Company B, on the other hand, suffers more significantly during the recession, and is unable to respond as effectively. This may be because of lower rebased ongoing cash-flow expectations, or the assumption of significant new leverage to offset cash shortfalls during the recession. It may alternatively, or additionally, be the result of a fundamental shift in the business model, risks during the recession, or transformational changes in market demand. Company B will typically see its rating lowered to match a lower credit profile, which would be represented by a parallel but lower dotted line illustrating the through-the-cycle profile of a lower rating.

Rating Through the Cycle



Source: Fitch Ratings

Application to Commodity Companies

In assessing commodity companies, Fitch projects future operational performance and financial profiles using various assumptions including market-based forward-price indications for the near term, and a "mid-cycle commodity price" for the medium-term profile. For oil and gas companies, this is called a price deck. Both the market-based and mid-cycle prices used by Fitch are conservative in nature and typically below consensus levels during periods of rising prices. Conversely, they may remain above market prices during severe market downturns where the current market prices are distorted by short-term factors.

Fitch's market-based and mid-cycle oil and gas price forecasts are not meant to be price forecasts. Rather, they are intended to reflect a corridor of future price levels for modelling and rating purposes, and for evaluating future commodity price expectations from a debtholder's perspective. In developing its forward-price assumptions Fitch takes account of industry supply and demand fundamentals, marginal producer cost levels and investment flows, among other factors.

Where commodity companies have undertaken capex expansion and these projects have yet to come on stream and their profits flow to reduce debt, perhaps just as commodity prices have fallen, Fitch's rating sensitivities may quote near-term metrics commensurate with the rating acknowledging a trough in commodity prices combined with a temporary higher debt burden. It may also quote a more normal "through-the-cycle" metric to be achieved in the near term. This analysis would have already assessed the project's qualities including its timing to completion and cost-curve position.

Cash Flow and Profitability

Fitch's analysis focuses on the stability of earnings and continuing cash flow from the issuer's major business lines. Sustainable operating cash flow supports the issuer's ability to service debt and finance its operations and capital requirements without the reliance on external funding.

While earnings form the basis for cash flow, adjustments are made for items such as non-cash provisions and contingency reserves, asset write-downs with no effect on cash and one-time charges. Please refer to [Appendix 2](#) for further detail.

Financial Structure

Fitch analyses financial structure to determine an issuer's level of dependence on external financing. Several factors are considered to assess the credit implications of an issuer's financial leverage, including the nature of its business environment and the underlying profitability from its operations (see [Appendix 2](#)).

As part of this process, an issuer's level of debt is typically adjusted for a range of off-balance-sheet liabilities by adding these to the total on-balance-sheet debt.

See [Appendix 1](#) for the standard adjustments applicable across corporates.

Financial Flexibility

Financial flexibility allows an issuer to meet its debt-service obligations and manage periods of volatility without eroding credit quality. The more conservatively capitalised an issuer, the greater its financial flexibility. In general, a commitment to maintaining debt within a certain range allows an issuer to cope better with unexpected events.

Other factors that contribute to financial flexibility are the ability to revise plans for capital spending, strong banking relationships, the degree of access to a range of debt and equity markets (domestic or international), committed, long-dated bank lines and the proportion of short-term debt in the capital structure. Where relevant, these issues are incorporated in the analysis of liquidity.

Some asset-intensive sectors, such as real estate, in certain markets, access secured debt but Fitch's analysis assesses the level of unencumbered assets relative to unsecured debt from a financial flexibility, cost and recovery perspective, which can affect the entity's IDR and unsecured instrument rating.

For very high-profile GREs and their key subsidiaries in certain markets, due to strong government linkages and the strategic nature of their operations, rating committees may assess Financial Flexibility higher than the sub-factor scores for liquidity and interest coverage in the respective Sector Navigators, recognising a good degree of funding access. Please see the *Government-Related Entities Rating Criteria* for further details on how Fitch rates GREs.

Treatment of Event Risk

"Event risk" describes the risk of a typically unforeseen event, which, until the event is explicit and defined, is excluded from existing ratings. Event risks can be externally triggered, e.g. via a change in law, a natural disaster or a hostile takeover bid from another entity, or internally, such as a change in capital structure policy, a major acquisition or a strategic restructuring. Merger and acquisition risk has statistically been the most common event risk, and serves as an example of how event risk is treated in ratings.

Event Risk Example – Treating Merger & Acquisition Risk in Ratings

Event	Rating incorporation
Company announces opportunistic acquisition, against previously declared strategy of organic growth.	Event not factored into existing ratings. Event typically generates a rating review based on materiality and impact, depending on funding mix and cost.
Company announces opportunistic acquisition, in line with previously declared intention to undertake sizeable debt-funded acquisitions over three years in the company's current sector.	Event largely factored into existing ratings. Event nonetheless generates a rating review to ensure parameters of proposed acquisition are consistent with expectations already incorporated in the rating.
Company announces intention to expand through acquisitions. No clear indication of cost or anticipated funding mix.	Event not factored into existing rating. Event typically generates a rating review, which may lead to Outlook or rating revisions, depending on Fitch's assessment of likely targets, bid sizes, valuations, the company's record in funding mixes and leverage flexibility.

Source: Fitch Ratings

Payment Force Majeure

Fitch uses the term “payment force majeure” to describe a failure to make timely payment in the case of operational interruptions to payments unrelated to parties to the transaction (e.g. civil unrest, natural disaster, cyber attack, financial infrastructure lapse, or other events of force majeure affecting the payment process itself).

While this may not immediately represent a default, Fitch would nonetheless typically deem an extended non-payment of this nature a default on the issuer, at the latest, after 30 calendar days have elapsed from the payment date. The IDR would typically be downgraded to ‘D’ or ‘RD’ and ratings on obligations would typically be downgraded to the level consistent with ‘defaulted securities. For avoidance of doubt, rating action may also be taken on the issuer and/or obligation ratings during that 30-day period.

Certain forms of non-payment caused by governmental actions (notably capital controls, deposit freezes, regulatory stays, etc.), while also outside the issuer’s control, may well qualify as the start of a default process, where they are captured in our country risk analysis and country ceiling framework.

Grace Period

Fitch considers an actual failure to pay interest or principal when due and payable based on the terms and conditions of the rated obligation (plus a grace period of the lesser of 30 calendar days or the time allowed under the transaction documentation following failure to pay) to be a default (denoted by an ‘RD’ or ‘D’ issuer/ a ‘D’ rating). Where no grace period is specified in documentation, Fitch may rate to a grace period consistent with similar obligations in the market, but typically not exceeding 30 calendar days. For non-payment caused by certain operational interruptions outside the issuer’s control (see Payment Force Majeure), Fitch would typically apply a grace period of up to 30 calendar days before downgrading to default.

Corporates Short-Term Ratings

The time horizon of short-term ratings relates to the continual liquidity profile of the rated entity that would be expected to endure over the time horizon of the Long-Term IDR, typically one economic cycle. This approach places less emphasis on favourable or unfavourable features of the liquidity profile when they are considered temporary.

Short-term ratings are assigned to obligations whose initial maturity is viewed as short term based on market convention. This means up to 13 months for corporates. Short-term ratings are linked to long-term ratings according to Fitch’s rating correspondence table as liquidity and near-term concerns are part of the long-term credit profile review.

Rating Correspondence Table

Long-Term IDR	Short-Term IDR
AAA to AA-	F1+
A+	F1 or F1+
A	F1 or F1+
A-	F1 or F2
BBB+	F1 or F2
BBB	F2 or F3
BBB-	F3
BB+ to B-	B
CCC to C	C
RD/D	RD/D

Source: Fitch Ratings

Distinguishing Between Short-Term Ratings

Fitch's Navigators incorporate factors that have specific relevance to short-term risks and liquidity. These are primarily addressed by the Financial Flexibility factor.

The Financial Flexibility factor will be used to determine the distinction between the "baseline" and "higher" option for short-term ratings at a cusp, by measuring the degree to which the factor outcome (typically measured on a lower case 'aaa' scale) exceeds the Long-Term IDR.

Specifically, the Financial Flexibility factor (mid-point of three-notch band) will need to be scored at a level equivalent to the minimum level at which the higher short-term rating would always apply, as shown in the tables below.

Minimum Financial Flexibility Factor Required to Achieve Higher Short-Term Rating

F1+	aa-
F1	a
F2	bbb+

Source: Fitch Ratings

In deriving the overall Financial Flexibility factor, analysts will give greater weight to the Liquidity sub-factor, with the other sub-factors factored in if they show a material weakness.

Two "control" conditions, also based on Navigator factors, are also required for the higher short-term rating option to be applied:

- The Financial Structure factor, which measures leverage and the medium- to long-term capital structure, is not a material weakness for the issuer in relation to its IDR. Specifically, the Financial Structure factor level needs to be scored at or above the thresholds below:

Minimum Financial Structure Factor Required to Achieve Higher Short-Term Rating

F1+	a
F1	bbb
F2	bbb-

Source: Fitch Ratings

- The OE factor (upper-end of rating band) will need to be at least 'a-' to ensure that the results do not unduly favour lowly levered entities in weaker jurisdictions that are inherently incompatible with the higher short-term rating outcome.

Additional consideration will also be given by rating committees to other factors, such as corporate governance or other material short-term uncertainties, which could override the general rule set outlined above.

Where an issuer's long-term ratings are equalised with a parent or sponsor based on our Parent and Subsidiary Linkage Rating Criteria or [Government-Related Entities Rating Criteria](#), the short-term ratings will also be equalised. Where an issuer's rating is supported on a top-down notching basis, the higher of the two short-term rating options will apply, capped at the supporting parent's or sponsor's short-term rating. When an issuer's rating is supported on a bottom-up notching basis, the short-term rating option will be based on the issuer's IDR, including support. The same considerations described above apply to choosing between the higher or lower short-term rating, capped at the supporting parent's short-term rating.

Corporate Credit Opinion Model

The Corporate Credit Opinion Model (CCOM) produces model-based Credit Opinions (MBCOs) that are private, point-in-time, credit designations.

The CCOM uses a quantitative approach for both updating previously assigned Credit Opinions (COs) and assigning new MBCOs. The CCOM is applied to industrial (i.e. non-financial) leveraged finance companies, typically in the mid-market in the US.

The CCOM is calibrated using a pool of issuers that is representative of those to be evaluated using the model. Specifically, the CCOM captures the relationship between key credit metrics identified by Fitch's leveraged finance team and previously assigned ratings and COs, using an ordinal logistic regression model.

The independent variables used in the model are four basic credit metrics: total leverage; average interest; the EBITDA margin; and revenue. The relationship between each of these and actual indications assigned is examined, quantified and calibrated against a regional pool for the US. For some sectors and in some instances, the model may de-emphasise some variables if statistical analysis does not support their inclusion.

The CCOM also has an integrated overlay of limitations based on analytical rules intended to better-represent final committee outcomes with respect to the model output, control potential outlier results and impose scale restrictions on small entities. For example, for the model to apply, Fitch requires a minimum Fitch-adjusted EBITDA of USD5 million. In addition, companies with Fitch-adjusted EBITDA of below USD20 million will be capped at an IDCO of b-* across all sectors, reflecting the disadvantages of small scale and lack of diversification inherent in smaller companies, as detailed in many of Fitch's Sector Navigators.

The reason for the minimum Fitch-adjusted EBITDA level is that Fitch believes that it may not be appropriate to assign credit indications, including MBCOs, to entities below a particular size, below which entities behave differently to typical corporate debt issuers and therefore fall outside broadly common expectations related to liquidity, legal structure and other similar considerations.

The model uses a computation of EBITDA which starts from the borrower's reported, adjusted EBITDA but considers similar adjustments to those made under Fitch operating EBITDA (see [Appendix 2](#)), subject to the informational limitations applied to MBCOs.

At the committee stage, analysts review the model output in conjunction with a number of additional factors that CCOM is unable to directly consider. These factors include sector and company specific business characteristics, issuer liquidity and any additional qualitative factors (such as imminent maturities, covenant breaches, maturity extensions, pay-in-kind (PIK) optionality, etc.) deemed relevant in determining whether a higher or lower CO may be warranted (typically by a single-notch adjustment) relative to that suggested by the CCOM model.

While COs derived using the CCOM do not contain forecast data or sensitivity analyses, adjustments made to CCOM EBITDA and interest may include forward-looking elements. The model only produces results in the 'b+*' to '<=ccc+*' range.

COs derived using the CCOM are used, on a pooled basis, as one input in the determination of mid-market collateralised loan obligation (CLO) ratings. For more details on COs, including the different informational standards, please see [Credit Opinions: Key Differences with Credit Ratings](#) (February 2019) and [Rating Definitions](#) at www.fitchratings.com.

Information and Limitations

Accounting

Fitch's rating process is not an audit of an issuer's financial statements. However, the issuer's choice of accounting policies may inform Fitch's opinion on the extent to which an issuer's financial statements reflect its financial performance.

Since different accounting standards can affect the presentation of an issuer's financial position, Fitch may adjust figures as part of the rating process to enhance the comparability of financial information across the peer group, including where different accounting standards are used. The general principle Fitch applies in its adjustments is to get back to measurements of cash: cash balances, cash flow and cash needs.

Fitch typically uses audited accounts that are prepared according to either International Financial Reporting Standards (IFRS) or US Generally Accepted Accounting Principles (US GAAP). If such statements are not available, Fitch will use accounts in local GAAP, other statements provided and management comments to make appropriate adjustments for comparative analysis, provided the disclosure and quality of the auditors or other reviewing parties employed is adequate.

Data adjustments performed by Fitch, while standardised as far as possible, will still contain differences between issuers, and for the same issuer over time, generated by differences in accounting framework, issuer financial and accounting policy choices, audit advice to issuers and national and regional variations in accounting and reporting practice.

The standardised financial adjustments performed by Fitch analysts typically require varying levels of ancillary disclosure and/or subjective estimates. Such ancillary disclosure may be insufficient, either in absolute terms, or reliably over the course of an issuer's ongoing disclosure, for Fitch to apply standardised adjustments. Fitch works with audited and unaudited financial statements, issuer projections and Fitch-prepared projections, all of which represent aggregated data points embedding varying degrees of approximation.

In preparing forecasts, Fitch further aggregates financial data points to produce summary projections that are comparable with those derived from historical statements. These projections unavoidably contain further informational compression through aggregation.

Data Sources

Key assumptions underlying these criteria are developed by the analysis of data on corporates and their vulnerability to credit risk. This includes the analysis of the key rating drivers and their performance over prolonged periods, analytical conclusions drawn from financial reports, public and private sector information, and analytical information received from issuers and other market participants. Assumptions are derived from experienced analytical judgement using such information.

For Climate Vulnerability Signals (Climate.VS), our core regulatory and policy risk scenario is the Inevitable Policy Response's (IPR) Forecast Policy Scenario that limits global warming to 2°C. This scenario is updated periodically, at which point we will update our sector Climate.VS accordingly. The scenario used as the basis for our analysis is described in the respective Fitch sector-level Climate.VS reports. The IPR is a consortium that develops scenarios around the policy response to climate change. The scenario is available here: <https://www.unpri.org/sustainability-issues/climate-change/inevitable-policy-response>.

For [Appendix 6: Exceeding the Country Ceiling](#), the key assumptions underlying these criteria are developed by the analysis of historical precedents of foreign exchange transfer and convertibility controls imposed by governments and their impact on the ability of corporates to service their foreign-currency (FC) commitments.

Information Usage by Fitch

The primary source of information for ratings is the public information disclosed by the issuer, including its audited financial statements, strategic objectives, and investor presentations. Other information reviewed includes peer group data, sector and regulatory analyses, and forward-looking assumptions on the issuer or its industry.

Fitch's analysis of the issuer's record will include consideration of some or all of:

- three or more years' audited financial statements;
- three or more years' operational data regarding the underlying assets and business of the group;
- pro forma financial statements, which are often subject to some form of third-party review;
- when key assets are at a relatively early stage of operation, an expert assessment of the operations of these specific assets in an established sector including financial results.

In most cases, the public disclosure of a major capital markets issuer should be sufficient for Fitch to assign a rating.

Direct participation from the issuer can add information to the process. The level, quality and relevance of direct participation itself, however, varies between issuers, and also may vary for each individual issuer over time. For more detail on the topic of issuer participation in the rating process and how this is communicated to rating users, see the *Rating Solicitation and Participation Disclosure Policy* at www.fitchratings.com/ethics.

The exact composition of data required to assign and maintain ratings will vary over time. Amongst other factors, this reflects that:

- the operational and financial profiles of rated issuers evolve constantly;
- different and fresh challenges from macroeconomic, financing or other environmental factors will arise for rated issuers over time

which may require greater or lesser emphasis on specific information elements in the rating calculus.

Fitch's own rating criteria will evolve over time, and with them, the relative emphasis placed on specific elements.

Where the information falls below an acceptable level for any reason, Fitch will withdraw any affected ratings. Whether the information available is sufficient and robust enough to allow a rating to be assigned is decided by a rating committee.

Rating Assumption Sensitivity

Fitch's opinions are forward looking and include Fitch's views of future performance. Ratings are subject to positive or negative adjustment based on actual or projected financial and operational performance. The list below includes a non-exhaustive list of the primary sensitivities that can influence the ratings and/or Outlook.

Sector Risk: Changes in long-term growth prospects, competitive intensity and volatility of the relevant industry resulting from social, demographic, regulatory and technological developments.

Country Risk: Deterioration in an issuer OE due to weakening of the general economic environment, financial market health and systemic governance in the countries where the issuer is operating as well as Country Ceiling changes.

Business Risk: Developments in an issuer's ability to withstand competitive pressures as shown in its position in key markets, its diversification, its level of product dominance, its ability to influence price and its operating efficiency.

Financial Risk: Changes in an issuer's financial profile either due to the impact of operational developments, the issuer's management financial policy or the availability of funding in a case of market disruption potentially leading to liquidity pressures.

Event risk may also have material implications for corporate ratings.

Limitations of Corporate Rating Criteria

Ratings, including Rating Watches and Outlooks, assigned by Fitch are subject to the limitations specified in Fitch's Ratings Definitions and available at <https://www.fitchratings.com/site/definitions>.

Variations from Criteria

Fitch's criteria are designed to be used in conjunction with experienced analytical judgment exercised through a committee process. The combination of transparent criteria, analytical judgment applied on a transaction-by-transaction or issuer-by-issuer basis, and full disclosure via rating commentary strengthens Fitch's rating process while assisting market participants in understanding the analysis behind our ratings.

A rating committee may adjust the application of these criteria to reflect the risks of a specific transaction or entity. Such adjustments are called variations. All variations will be disclosed in the respective Rating Action Commentaries, including their impact on the rating where appropriate.

A variation can be approved by a ratings committee where the risk, feature, or other factor relevant to the assignment of a rating and the methodology applied to it are both included within the scope of the criteria, but where the analysis described in the criteria requires modification to address factors specific to the particular transaction or entity.

Criteria Disclosure

The following elements are included in Fitch's Rating Action Commentary and issuer research reports.

- A Peer Analysis section which explains the positioning of the issuer's rating against its peers and/or the Navigator thresholds, and describes additional considerations affecting the rating not included in the Navigator. These include in particular cross-sector criteria considerations such as the Country Ceiling or Parent-Subsidiary/Government Related Entity relationships. Ratings that fall out outside the three-notch band centred around any reasonable combination of the mid-points of the Navigator's Key Factors will be explained in this section.
- A description of those factors most relevant to the individual rating action.
- For Climate VS: in rating reports, we disclose the issuer's Climate.VS, and, if it is 45 or above for 2035, we further disclose the nature of the potential climate risks to the issuer, and whether these risks are directly incorporated in the rating derivation – and if so how and with what impact, and if not why not. We will disclose how the issuer's published transition plans (if any) may affect the issuer's creditworthiness. Where credit-relevant climate risks are a Key Rating Driver, these will continue to be disclosed in the Rating Action Commentary.
- When adjusting for leases under Appendix 1 for sectors that consider lease-adjusted metrics, we will disclose if the 'as reported' lease liability is adjusted using a multiple and what the multiple is.
- When adjusting for minority interests under [Appendix 1](#), we will disclose when we use the net income attributable to minorities to adjust EBITDA-based coverage and leverage metrics as an alternative approach, instead of dividends.
- When determining the applicable Country Ceiling of a multi-national, the split of assets and revenues by country, combined with the typical profit margin by type of business, is used as a proxy, when a detailed split of EBITDA by country of origin is not available.
- The applicable Country Ceiling when it is exceeded.
- When an uplift above the Country Ceiling is based on the coverage of hard-currency (HC) external debt service in the rating horizon on a rolling basis. Fitch will disclose when the thresholds are not met in any particular year, but are sufficiently strong on average to allow the notch uplift.
- When more than a three-notch uplift above the Country Ceiling has been applied because a strong, supportive foreign parent and substantial multinational operations ensure that the company has clear financing sources outside the purview of the applicable Country Ceiling or Ceilings.
- When rating investment holding companies (IHCs) and we do not assess the credit strength of at least 85% of the portfolio's value, we will disclose the proportion of the portfolio value that is assessed, why the 85% threshold was not met and explain why not meeting the threshold has no impact on the IHC's rating.

Appendix 1: Main Analytical Adjustments

Reflecting the aggregated and approximate nature of the source data, Fitch applies a series of common adjustments, outlined below. Adjustments that are not material to the credit analysis do not have to be made.

Fitch encourages an analytical climate where financial statements are regarded as a source material, providing broad indications of the financial position, rather than as a comprehensive register of immutable facts. The limitations of the source material – corporate group financial statements – are many and varied.

For example, it is not unusual for major groups to be composed of hundreds of legal entities. Financial statements present a high-level consolidated picture, but material differences will exist in the precise financial position – income, expense, obligations and cash-generating ability – of different legal entities within a consolidated group, which may be swept up and masked by the process of accounting consolidation.

Similarly, the apparently smooth and orderly sequential flow of the published income and cash flow does not reflect an actual linear flow of payments through a company's hands or a legal waterfall of priorities, but rather aggregates a theoretical flow. In practice, the company does not write a cheque for its entire annual operating expenditure, followed the next month by one amount for its annual interest bill, followed by one instalment for its tax bill, followed only then by one payment for its annual capital expenditure (capex) bill and so on.

Furthermore, financial statements present only a snapshot of assets and liabilities and are subject to often very broad and subjective decisions on accounting treatments.

1. Leases

Approach Is Accounting Treatment-Neutral Regardless of Accounting Standards

We seek to provide globally comparable credit metrics by bridging differences in US GAAP and IFRS financial statement accounting, rebasing income statements and cash-flow metrics to be consistent globally, adjusting reported leases where necessary, and excluding capitalised leases from debt for many sectors.

Leases Are Treated as an Operating Expense

IFRS 16 diverges in the treatment of lease costs in the income and cash flow statements. In the income statement, costs are reported as depreciation of a leased asset and interest cost on the lease liability. Principal and interest payments related to the lease liability are shown in the cash flow statement. While IFRS allows some flexibility in the classification of interest costs as operating or financing cash flow, Fitch will classify any lease-related interest costs under operating cash flow.

In contrast to IFRS, US GAAP provides separate disclosure for finance leases and operating leases, and treats operating lease costs as an expense in both statements.

Fitch addresses these differences by reclassifying any lease costs reported under depreciation and interest as operating costs in the income statement and as an operating cash outflow in the cash flow statement. This reclassification also applies to finance lease-related costs and cash flows reported under US GAAP. EBITDA and operating cash flow will be lower than reported figures, as a result.

We primarily use income statement-based metrics to adjust financial statements for lease costs. We may substitute this with cash lease costs, if they better represent an issuer's ongoing lease burden.

Leases Are Not Classified as Debt in Most Sectors

In the vast majority of sectors, Fitch classifies lease liabilities, including finance leases under US GAAP, as 'other liabilities' rather than debt. Therefore, these sectors use non-lease adjusted credit metrics.

Certain Sectors Capitalise Leases for Lease-Adjusted Leverage Metrics

For issuers in the following Sector Navigators, where physical locations or transportation assets are essential to their core business, we consider lease-adjusted leverage metrics based on IFRS 16/ASC 842 reported lease liabilities.

Sector Navigators that Consider Lease-Adjusted Leverage Metrics

• Airlines	• Hotels
• Food retail	• Non-food retail
• Gaming ^a	• Restaurant companies
• Generic ^a	• Shipping
• Healthcare providers ^a	

^aThese Sector Navigators permit the use of both lease- and non-lease adjusted metrics.
Source: Fitch Ratings

The magnitude of the reported lease liability can be influenced by lease length and discount rate variations, among other things. We therefore supplement our analysis with the following considerations. This is not an exhaustive list, and Fitch has the discretion to adjust the reported lease liability as it considers appropriate to achieve issuer comparability.

1. Fitch may adjust the reported lease liability if it views the reported figure as misaligned with that of its peer group or to smooth out variations in lease length and discount rates. Fitch will calculate an issuer's implied lease multiple by dividing the IFRS 16/ASC 842 reported lease liabilities by a Fitch-defined lease expense (see the *Summary Adjustments* section below for its computation). The implied multiples of peers are then compared and calibrated to create a peer multiple for Fitch-defined sectors or categories. In some cases, a representative peer multiple may be based on a hypothetical standardised lease length and discount rate.

Fitch does not automatically adjust the reported lease liability for an issuer with a materially different multiple compared with peers. Instead, Fitch will conduct a deeper analysis of the issuer's property strategy to determine if an adjustment is warranted, and may consider matters such as business model and property mix. For example, an issuer whose business model is less reliant on long-dated leases compared with its peers may be justified in having a lower implied lease multiple.
2. Fitch will also assess the issuer's financial flexibility to meet fixed obligations by analysing the issuer's property strategy and EBITDAR fixed-charge coverage. This ratio measures the company's ability to meet annual interest and lease obligations.

For issuers that use local GAAP where IFRS or US-GAAP equivalent lease liabilities are not reported, we will consider the implied peer multiple described above.

Hybrid Sectors and Issuers

Certain Sector Navigators have the option to use lease- or non-lease adjusted metrics. Fitch may select the appropriate treatment to match the characteristics of the business with the Sector Navigator to which it is most closely aligned.

In addition, many issuers have characteristics that straddle different Sector Navigators. Where appropriate to the issuer's business model, Fitch may present additional ratios to complement the approach outlined above. For example, a cinema chain, which we would classify as a media company, is likely to have real-estate rentals as a major cost and an important part of the business model. We would complement the core unadjusted credit metrics comparable with other media credits with lease-adjusted metrics to allow fuller comparison with retail peers that may also be relevant.

Other Analytical Considerations

Leases with Variable Components

Under the accounting standards, companies are required to capitalise variable lease payments linked to inflation or an index but can exclude payments tied to sales or other operational

metrics that can vary across companies based on the stage of business cycle. Where it facilitates a more meaningful comparison among peers, Fitch may adjust reported liabilities to include some or all expected variable lease liabilities.

Short-Term Leases

We exclude short-term lease costs from total lease expense. Short-term leases are defined as any leases with a term of 12 months or less.

In order to aid comparability between issuers renting varying mixes of assets of different types, such as real estate and motor vehicles, for example, Fitch may exclude leased assets that have a short average useful life of five years or less.

Summary Adjustments

The tables below summarise the general adjustments we make to financial statements.

IFRS Adjustments

Line item	Treatment
Balance sheet	
Right of use assets	No adjustment to balance sheet.
Lease liabilities	No adjustment to balance sheet. Do not classify as unadjusted debt.
Income statement	
Depreciation of right of use assets (a)	Reclassify as lease expense.
Interest on lease liabilities (b)	Reclassify as lease expense.
Cash flow statement	
Payment of principal element of lease liabilities (financing cash flows)	Reclassify an amount equal to (a) as cash operating lease expense (a reduction in operating cash flows).
Interest paid on lease liabilities	Reclassify an amount equal to (b) to cash operating lease expense (a reduction in operating cash flows). ^a
Credit metrics	
For sectors in which lease adjustments are considered relevant	Use IFRS 16 lease liabilities and add debt to lease-adjusted ratios. When an implied peer/hypothetical standardised lease multiple is used, substitute IFRS 16 lease liabilities with lease-equivalent debt computed as (a+b) multiplied by the relevant multiple.
For all sectors, if relevant per sector Navigator	Compute EBITDAR fixed-charge coverage with (a+b) classified as a fixed cost.

^a Unless already classified as an operating cash outflow.

Note: Income statement metrics are our primary measure for lease costs. However, Fitch can use cash-flow based lease values instead of income statement values where the cash lease cost is more representative of the company's lease burden.

Source: Fitch Ratings

US GAAP Adjustments

Line item	Treatment
Balance sheet	
Right of use assets	No adjustment to balance sheet.
Lease liabilities	No adjustment to balance sheet. Do not classify as unadjusted debt.
Income statement	
Depreciation of finance lease assets (a)	Reclassify as lease expense.
Interest on finance lease Liabilities (b)	Reclassify as lease expense.
Operating lease expense (c)	Unchanged.
Total lease expense	Computed as (a+b+c).
Cash flow statement	

US GAAP Adjustments

Line item	Treatment
Payment of principal element of finance lease liabilities (financing cash flows)	Reclassify an amount equal to (a) as cash lease expense (a reduction in operating cash flows).
Interest paid on finance lease liabilities	US GAAP default is to classify as operating cash outflows. If so, no adjustment; otherwise reclassify an amount equal to (b) as cash lease cost (a reduction in operating cash flows).
Cash payments in respect of operating leases	No change.
Credit metrics	
For sectors in which lease adjustments are considered relevant	Use ASC 842 lease liabilities and add to debt in lease-adjusted ratios. When an implied peer/hypothetical standardised lease multiple is used, substitute ASC 842 lease liabilities with lease-equivalent debt computed as (a+b+c) multiplied by the relevant multiple.
For all sectors, if relevant per sector navigator	Compute EBITDAR fixed-charge coverage with (a+b+c) classified as a fixed cost.

Note: Income statement metrics are our primary measure for lease costs. However, Fitch can use cash flow-based lease values instead of income statement values where the cash lease cost is more representative of the company's lease burden.

Source: Fitch Ratings

Please see the 'Worked Examples' section below for examples of Fitch's adjustments to IFRS and US GAAP reporting.

Worked Examples

Company A: Adjusting IFRS 16 to Fitch's Lease Treatment (Income and Cash Flow Statements)

Company A lease assumptions (EURm):

- P&L lease operating costs: 190
- We have assumed cash and P&L rent payments are the same (190). In reality, the P&L lease expense amount is unlikely to be exactly the same as the cash expense due to the effect of linear depreciation and non-linear interest.
- Cash interest paid for all lease obligations: 80 (classified in cash flow from financing for illustrative purposes)
- Cash repayment of principal for lease obligations: 110

Fitch Adjustments - IFRS

(EURm)	YE18 new IFRS	Fitch lease adjusted	YE18 adjusted	
Revenue	1,000	-	1,000	
COGS	0	-	0	
SG&A	-160	-190	-350	↓
D&A leases	-110	110	0	
Other D&A	-260	-	-260	
Total D&A	-370	110	-260	↑
EBIT	470	-80	390	↓
Interest expense associated with leases	-80	80	0	
Other interest expense	-90	-	-90	↓
Total interest expense	-170	80	-90	
EBT	300	-	300	↔

Fitch Adjustments - IFRS

(EURm)	YE18 new IFRS	Fitch lease adjusted	YE18 adjusted	
EBITDA	840	-190	650	↓
EBITDAR	840	-	840	↔
Cash flow statement				
EBITDA	840	-190	650	↓
Cash interest	-90	-	-90	
Cash tax	0	-	0	
Other items	0	-	0	
FFO	750	-190	560	↓
CWC	10	-	10	
CFO	760	-	570	↓
Cash flows from investing activities	-325	-	-325	
Principal portion of lease expense	-110	110	0	
Interest portion of lease expense	-80	80	0	
Other cash flows from financing activities	-200	-	-200	
Cash flows from financing activities	-390	-	-200	↑
Net decrease (-)/increase (+) in cash	45	-	45	↔

Source: Fitch Ratings

Company B: Adjusting ASC 842 to Fitch's Lease Treatment (Income and Cash Flow Statements)

In this case, the accounting treatment remains the same under ASC 842 and companies continue to maintain separate financial statement disclosures of operating lease expense and finance lease expense. To achieve global comparability in credit metrics, we will adjust to treat finance leases as an operating expense (no longer a split of D&A and interest).

Company B lease assumptions (USDm):

- Operating lease expense: 40
- Finance lease depreciation & amortisation: 20
- Finance lease interest: 15
- Total lease expense under new lease treatment: 75
- Finance lease excluded from reported debt in balance sheet

Fitch Adjustments - US GAAP

(USDm)	2019 new US GAAP	Fitch lease adjusted	2019 adjusted	
Revenue	500		500	
COGS	0		0	
SG&A (excluding lease)	-160	-35	-195	↓
Operating lease expense	-40		-40	
D&A (excluding finance lease)	-80		-80	
D&A finance lease	-20	20	0	↑
EBIT	200	-15	185	↓
Interest expense associated with finance lease	-15	15	0	↑
Other interest expense	-90		-90	

Fitch Adjustments – US GAAP

(USDm)	2019 new US GAAP	Fitch lease adjusted	2019 adjusted	
Total interest expense	-105	15	-90	↑
EBT	95	-	95	↔
EBITDA	300	-35	265	↓
EBITDAR	340		340	↔
Cash flow statement				
EBITDA	300	-35	265	
Cash interest (including finance lease)	-105	15	-90	
Cash tax	-20		-20	
FFO	175		155	↓
CFO	175	-20	155	
Cash flows from investing activities	-50		-50	
Repayment of finance lease liability	-20	20	-	↑
Cash flows from financing activities	-20	20	-	
Net decrease (-)/increase (+) in cash	105	-	105	↔

Source: Fitch Ratings

2. Hybrids

Analytical Approach

For more details, see [Corporates Hybrids Treatment and Notching Criteria](#).

The Corporate Hybrids Treatment and Notching Criteria are directed at hybrids purchased by unaffiliated investors that are expected to exercise all available remedies. It does not apply to holding-company (HoldCo) payment-in-kind (PIK) notes or shareholder loans that:

- are issued at a HoldCo level outside a restricted group (i.e. where cash flow is controlled within a group of companies) or,
- are held by affiliated investors (e.g. the private equity sponsor in a leveraged buyout transaction) whose economic and strategic interests are expected to remain aligned with those of common equity holders.

Please see the adjustment 7: *HoldCo PIK and Shareholder Loans* section below for the treatment of these instruments.

3. Pensions

Analytical Approach

Defined-benefit (DB) pension scheme deficits are financial obligations, but due to their long-term nature and uncertain timing and amount are not viewed by Fitch as a debt obligation for the purpose of computing its standard leverage metrics. Instead, our focus is on the cash flow implications of pension arrangements.

Where pension schemes are significant to a company, Fitch reflects the impact of such schemes primarily in its cash-flow modelling. If it is determined that a pension scheme could be material to the ratings analysis, analysts investigate the scheme further to ascertain the likely implications of a pension deficit on the cash payments an issuer is scheduled to make into the scheme. Expectations of increasing cash payments are reflected in Fitch's forecasts to gauge the effect on the overall credit profile of the issuer.

Impact on Credit Metrics

Fitch's funds from operations (FFO) and other cash flow measures are stated after recurring pension contributions. Any expectation of a change in pension contributions are factored into

Fitch's cash flow forecasts as an adjustment to FFO. The impact of these potential changes is reflected in measures of cash generation and in leverage and coverage ratios.

Where a company makes a large one-off contribution to a pension scheme and this is considered exceptional, it may be shown below FFO. While this will leave some cash flow performance measures unaffected (compared with a case where there is no payment), it would be felt in leverage and coverage metrics through its impact on net, and often gross, debt.

Adjusted leverage metrics based on accounting valuations are calculated but are primarily a guide as to what is a significant pension liability worthy of further investigation. One tool for the initial screening of a pension deficit is pension-adjusted leverage as compared with non-pension-adjusted leverage. This is computed by taking a traditional leverage metric, such as gross adjusted debt: EBITDAR, and adding pensions items to the top and bottom line:

$$\frac{(\text{Gross debt} + \text{Lease Adjustment} + \text{Fitch Pension Deficit})}{(\text{EBITDA} + \text{Rents} + \text{Current Service Cost})}$$

For IFRS reporters, for both funded schemes (i.e. when companies are obliged to hold assets to cover eventual pension payments) and non-funded schemes, Fitch includes the full IFRS pension deficit. The measure taken is liabilities less assets as measured at the balance sheet date, stripping out the effect of unrecognised actuarial gains. This is sometimes referred to as the "funded status" of the scheme.

For US GAAP reporters, Fitch includes unfunded pension liabilities, as determined under GAAP.

Where funding valuations show a deficit in jurisdictions we would describe as "funded", action may have to be taken to close this deficit over a reasonable period (often interpreted as approximately 10 years). An increased pension deficit can therefore lead to an immediate cash flow drain. By contrast, in "unfunded" jurisdictions where there is no requirement to fund defined benefit pension obligations, there is often no cash flow impact from changes in the reported deficit.

In order to reflect the wide variations in pension valuations over the economic cycle, Fitch examines the effect of adjusting for pensions over a period of several years. Where pension-adjusted leverage is materially higher than leverage without pension adjustment, Fitch investigates the nature of the pension obligations in more detail to assess whether significant pension-related cash outflows are a possibility within the ratings horizon.

4. Debt Factoring

The treatment of factoring arrangements may vary by issuer. To ensure peer comparability, we consider the economic substance of the transaction and typically adjust to bring factoring back onto the balance sheet. We view factoring as an alternative to secured debt, regardless of the legal recourse to the originator.

Where factoring has been treated by the issuer as an asset sale (i.e. not treated as debt on the balance sheet), and provided disclosure is both sufficient and reliably consistent Fitch will reverse the accounting treatment and adjust financial statements as set about below for its analytical purpose.

Balance Sheet

- Assets: the relevant section of the balance sheet is increased by the outstanding amount of factored assets at the closing date.
- Liabilities: the section "other debt secured" is increased by the same amount.

Cash Flow Statement

- Working-capital cash movements are decreased (increased) by the year-on-year increase (decrease) in outstanding factoring funding at the closing date.
- Cash flow from financing is increased (decreased) by an identical amount.

Exclusion to Factoring Adjustment

We would treat factoring as a genuine asset sale and not as a super-senior financial debt only in exceptional circumstances:

- The structural features of the receivables factoring demonstrate that risks have been fully transferred to its creditors. A factoring should be ring-fenced (i.e. isolated from the other debt of the group), and its creditors only have recourse to the assets bought, with no recourse to the originator; and
- The nature of the assets sold in the factoring programme must be of a non-recurrent operational nature so that the interruption of the factoring would not lead to the assets reconstituting themselves on the balance sheet of the issuer with the concomitant immediate liquidity requirement to fund these newly originated assets.

Given the recurrent nature of the underlying assets, factoring of trade receivables and inventory is unlikely to be treated as an asset sale unless the assets pertain to a business line that has been or will soon be discontinued at the date of the assessment.

Treatment of Factoring Lines in Liquidity Analysis

Fitch would generally not consider unused amounts in committed factoring facilities as a source of liquidity as these facilities typically include covenants on the seller and eligibility criteria for the receivables which may be more difficult to meet in a stress scenario. This differs from Asset-Backed Loan Revolvers (which may be secured by asset receivables and inventory), which Fitch would consider for liquidity purposes.

However, we would treat the factoring lines as short-term debt for the purposes of liquidity analysis. This reflects the notion that during periods of stress, factoring lines could be withdrawn and an issuer would have to access alternative senior funding to support its working capital cycle.

Reverse Factoring

Unlike factoring facilities, we treat reverse factoring facilities as akin to ordinary debt facilities and therefore do not assign extraordinary priority status. Its treatment in our financial adjustments and recovery analysis will therefore depend on our assessment of its relative seniority, based on its structural, contractual or practical features.

Provided there is sufficient and reliably consistent disclosure, Fitch would adjust the debt for extension in payable days resulting from a reverse factoring transaction if the resulting payable days were materially longer than the normal industry practice.

For example, assuming an outstanding amount of confirming of EUR100 million, with an extension of payable days from 60 days to 180 days, Fitch would consider that the 120 days extension is akin to financial debt and would add to financial debt 120/180 of the outstanding amount, i.e. EUR67 million.

Fitch will reverse the accounting treatment and adjust the financial statements as set out below for its analytical purpose:

Balance Sheet

- Liabilities: the relevant section of the balance sheet is decreased by the extension amount of factored liabilities at the closing date.
- Liabilities: the relevant debt line (typically 'other unsecured debt') is increased by the same amount.

Cash Flow Statement

- Working-capital cash movements are decreased (increased) by the year-on-year increase (decrease) in outstanding factoring funding at the closing date.
- Cash flow from financing is increased (decreased) by an identical amount.

5. Cash Adjustments

Analytical Approach

Readily available cash is used in our net debt metrics (principally in leverage ratios) and in assessing immediate resources for liquidity. The "readily available" component of Fitch's definition of cash points to the timely, unconditional availability of cash to the rated entity and the reasonable certainty that the attributable value at par is available.

Readily available cash may not include, for example, forms of restricted cash, a period-end cash balance that is not sustained throughout the year, operational cash demands, and other types of cash not freely available for debt reduction or where its timeliness for liquidity purposes is questionable.

The concept of cash being “readily available” to the rated entity also, where practicable and disclosed, takes into account where the cash is located within the corporate group or jurisdiction, and if there are material costs (tax in particular), contractual permitted dividend payment mechanisms, or capital controls, affecting its availability to the rated entity.

Discount for Various Types of Instruments

Three- to 12-month cash deposits are normally treated as readily available cash except when Fitch is aware that a corporate is lodging its cash with lower-rated banks, in which case that cash may be excluded. Similarly, money-market funds are typically treated as cash where they are located in developed jurisdictions and used by a corporate whose financial policies Fitch believes to be broadly conservative.

Fitch also haircuts the value of different types of financial instruments classified as marketable securities based on their characteristics such as vulnerability to changes in interest rates and inflation and market liquidity, independent of any ratings the instruments may have as these market-driven characteristics are generally not encompassed in a credit rating.

For equities, a 100% discount is employed except in exceptional circumstances.

Cash and Cash Equivalents, Marketable Securities

Description (% of face value)	Corporate adj.
	Readily available cash
Cash	100
Cash deposits/bank certificates of deposits	100
Government bond	100
- Irrespective of maturity (6 or >12-month timed deposit), deposits can be treated as readily available cash - Subject to counterparty-risk check (i.e. not all cash lodged in ‘CCC’ banks) - Where government bonds/treasuries are in the ‘B’ rating category and below, amounts invested are treated as per equities below	
Fixed-income investment-grade bond funds	70
Diversified high-yield fixed-income bond funds	0-40
Equity fund, equities	
Start at 0% of face value unless there are good grounds for a higher percentage treatment, as presented to, and agreed by, the rating committee.	

Source: Fitch Ratings

Working-Capital-Related Adjustments

Intra-Year Variation

If a company’s period-end net debt levels are markedly different from the average during the year, Fitch may adjust the period-end cash balance to reflect average net debt levels or intra-year peak to trough changes in working-capital requirements. An example would be a retailer reporting just after the peak festive season, thus showing a flattering picture of high cash and low inventories when compared to its typical quarterly cash and working-capital positions.

Exceptionally, working capital fluctuations may span multiple years. Fitch may apply a similar adjustment as above over the affected years if there is a clear recovery path or timeline that supports the pass-through nature of these fluctuations in the medium term.

In any case, we would expect the company to be able to meet its actual financial obligations as they fall due despite the ‘smoothing’ nature of these adjustments.

Sustainable Negative Working Capital

Where companies have structurally negative working-capital requirements, increasing activity creates a cash inflow. Conversely, a decreasing revenue base equates to a shrinking negative capital position and cash outflows.

If Fitch is concerned that the beneficial negative working-capital position may reverse or prove to be volatile, analysts may increase debt for the lack of cash, or reduce the cash to reflect this potential cash outflow.

Blocked Cash

Fitch excludes blocked cash from the calculation of its financial metrics. Blocked cash is cash that is segregated for a particular purpose, e.g. defeasement of debt or other types of financing, cash set aside for a deferred consideration, litigation or margin calls or if it is located in parts of the group where cash is not accessible due to capital controls or other constraints. Conversely, blocked cash for the purpose of the redemption of a specific debt instrument can be re-classified as readily available cash.

Where the cash cannot be freely moved between offshore and onshore entities and/or there is an elevated risk that the foreign operations may be separated from the domestic issuer, Fitch will exclude the foreign cash from its liquidity and net leverage analysis and consider analysing the credit on a geographic deconsolidated basis.

6. Adjusting Consolidated Profiles for Group Structures

In the majority of the cases, the consolidated accounts of an issuer are an appropriate basis to rate the group. This assumes that assets flow freely within the group and there is joint and several responsibility for group liabilities. This common responsibility informs the group's financial strategy and creditors recourse, and our assessment of the group's consolidated credit profile.

Financial Adjustments

The most common adjustments Fitch makes to consolidated accounts are listed below. The extent of the adjustments depends on the materiality and level of disclosure available.

Full Deconsolidation

- This is typically applied to effectively ring-fenced subsidiaries or financial services subsidiaries.
- Replacement of one segment of the group's EBITDA or FFO contribution to the consolidated profile with the sustainable cash dividend received from that entity. This acknowledges that the profitability conveyed in the EBITDA or FFO is not of equal direct benefit to the rating as the rest of the group's operations – the cash fungibility is less than that for other operations. Analysts will consider the stability and record of sustainable dividends received; dividends that have not been stable over previous years will be excluded.

This adjustment usually reduces that part of the group's contribution; very occasionally dividends and proportionate EBITDA or FFO may be broadly similar.

- Fitch will also typically deduct the debt (and assets) and attributable profits from the consolidated profile as far as this is possible from available data, even if only to calculate key metrics rather than all the financial figures.
- If entities are deconsolidated, "equity value" still remains in theory for the potential benefit of the parent creditors, which can limit loss severity in a default. This makes little difference to investment-grade ratings, where loss severity has a very small role in the rating calculus. Exceptionally, if the equity value were very significant and highly marketable, this may exert a favourable influence on our consideration of the entity's liquidity profile. For the speculative-grade rating universe, where instrument ratings have a greater weight to recovery upon default, this equity stake can be of a greater input to the rating.

Proportional Consolidation

- This approach may be more appropriate in 50:50, or 60:40 joint ventures or similar mixed ownership structures (including e.g. call options when certain conditions are met), where equal partners provide equity support or the joint venture's funding expects support from its owners, and importantly, cash fungibility is stronger given the relatively greater control.

- Joint ventures with a significant level of leverage and deemed unlikely to be supported by the parent are likely to be fully deconsolidated as their cash-flow generation will be primarily used to service debt at their level with sustainable dividends only being included in the analysis of the parent.
- This approach may also apply if the level of minority interest in a subsidiary is high (typically one-third of economic interest or more).

Adjustments for Minority Interests

If an entity is fully consolidated yet significant minorities exist, Fitch may:

- deduct the cash dividend paid to minorities in arriving at FFO and adjust EBITDA-based coverage and leverage metrics for these dividends; or
- where these adjustments could be distorting (for example when a dividend paid to minorities is significantly lower than their share of net income) net income attributable to minorities may be used to adjust EBITDA-based coverage and leverage metrics as an alternative approach, in which case the adjustment will be disclosed in the Rating Action Commentary.

More generally, Fitch has the discretion to deconsolidate or reconsolidate relevant financial metrics e.g. debt, to reach a more accurate representation of the issuer's consolidated credit profile. For instance, we may reconsolidate certain liabilities where we believe that the obligation is likely to be serviced by the issuer. This may include nominally non-debt arrangements that present debt-like obligations. The principles described in the *Adjusting for Structured JVs* section below are relevant for this determination.

By contrast, deconsolidation may be appropriate where retaining the entirety of the relevant entity's metrics in the consolidated credit profile overstates the extent of access to the relevant entity's assets.

Rating Approach

Even if the consolidated profile is the appropriate basis for the assessment of creditworthiness of the parent, it does not necessarily mean that all entities within a group will be rated at the same level. The Parent and Subsidiary Linkage Rating Criteria provides further details on how we rate parent and subsidiary companies within a group. It may also apply to determine the rating of deconsolidated subsidiaries if Fitch assesses the parent exerts sufficient control over the subsidiary for a qualifying parent and subsidiary relationship to exist.

Fitch will assign an IDR to all debt issuing entities within a group, except for funding vehicles and a few other circumstances as described in our Parent and Subsidiary Linkage Rating Criteria.

Where a parent holds, generally, non-controlling stakes in other companies as investments with, normally, separate funding and no operational integration, we will analyse the parent as an investment holding company, as set out in Appendix 9.

Adjustments for Structured JVs

Corporates sell minority stakes in existing or newly established JVs to financial sponsors with the objective of raising equity capital, formally strengthening both their capital structure (with an immediate reduction of net leverage at closing) and their liquidity profile. The JVs are generally debt-free and fully consolidated. In these transactions, the financial sponsors aim to limit their risk exposure, to reduce the funding costs related to the acquisition of the minority stakes ('back-leverage') and increase the return predictability.

When assessing the debt or equity treatment of minority interests in these structured JVs for corporates, we consider that a financial instrument with a scheduled repayment term and fixed coupon (either cash or pay-in-kind) is intrinsically debt-like, and an instrument which is permanent and has a variable return dependent on the underlying business performance is intrinsically equity-like. Consequently, in our assessment and application of treatment, we focus primarily on the nature of the payments to the JV and to the financial sponsor (in essence akin to dividend versus coupon) and on the mechanism defining the financial sponsor's exit (uncertain in terms of timing and/or valuation versus largely pre-determined).

Factors in Determining Debt or Equity Treatment for Minority Interests

Factor	Debt treatment	Equity Treatment
Nature of Cash Flows for the JV	JV's cash flows have limited exposure to the underlying business performance.	JV's cash flows retain most exposure to the underlying business performance.
Financial Sponsor Exit Mechanism	Financial sponsor has a put option. The corporate has a call option with strong incentive to exercise.	Financial sponsor's exit will depend on the business performance and market appetite for the stake in the asset. The corporate has a call option whose exercise is genuinely uncertain.
Distribution Policy of the JV, Economic Rights of JV's Shareholders	Distributions from JV are largely fixed in absolute terms, with limited exposure to the underlying business performance. Financial sponsor has materially higher economic rights than its stake in the JV and/or priority on the JV's distributions.	Distributions from the JV are based on a payout and largely depend on the underlying business performance. Economic rights between the corporate and financial sponsor are largely similar to the stakes held in the JV, and there is no priority on distributions.
Construction and Availability Risk (where relevant)	Risks born mostly by the corporate.	Risks are shared, with some protection for financial sponsor.

Source: Fitch Ratings

Other Considerations

Most transactions present some features consistent with debt treatment and others consistent with equity treatment, reflecting the somewhat hybrid nature of the underlying agreements between the corporate and the financial sponsor. Fitch will consider the factors listed in the above table (and any other relevant factors) holistically when deciding on a debt or equity treatment.

As described in the *Financial Adjustments* section above, Fitch's key leverage ratios include the deduction of the dividends to third parties from the EBITDA in the denominator, so the cash flow leakage earmarked to the minority interests would be captured in the leverage also for equity treatment, although with a lower impact compared to a debt adjustment.

In addition to the treatment of the minority interest as debt or equity, Fitch will also consider the impact of the loss of control on potentially important assets on the corporate's business profile. Moreover, we would factor in the rating the group structure complexity and the rigidity of the cash flow leakage, especially where the corporate undertakes multiple (or very large) transactions of this nature.

Nature of Cash Flows for the JV

Fitch is more likely to treat arrangements designed to artificially generate stable cash flows to a JV, which do not vary in line with risks and rewards of the underlying business of the JV, as debt. Where risks and rewards are more in line with standard commercial transactions Fitch would consider the transaction more equity-like.

When the JV is selling its products or services mostly to third parties, Fitch expects that it would naturally retain a material exposure to its underlying business performance. Sometimes this exposure can be mitigated through long-term selling contracts with third parties (power purchase agreements, tolling agreements), but this in itself would not affect the possibility of considering this factor as consistent with equity treatment. Fitch would then assess the risk-sharing framework between the corporate and the financial sponsor as shareholders of the JV through the factor 'Distribution Policy of the JV, Economic Rights of JV's Shareholders'.

When the JV is selling its products or services mostly to the corporate, the key driver of the assessment is the risk-sharing framework of the corporate with the JV and ultimately the financial sponsor. In particular, Fitch would assess whether the cash flow stability of the JV has been artificially de-risked. Fitch recognises that in some sectors, such as infrastructure, utilities, telecom and real estate, volatility of cash flows may be inherently low. In many other sectors,

we would expect more volatility and, if the cash flows of the JV are largely fixed regardless of the corporate's performance, this factor would be more consistent with debt treatment.

In these transactions, Fitch would also assess the conditions related to liquidated damages deriving from a breach of the corporate undertakings related to the transaction. Compensation from the JV and/or the corporate to the financial sponsor covering the direct consequences of the breach would contribute to equity treatment, while a compensation that ensures the achievement of the target return for the financial sponsor under any scenario would indicate unbalanced risk-sharing and may contribute to debt treatment.

Financial Sponsor Exit Mechanism

The presence of a put option for the financial sponsor to sell its stake in the JV to the corporate would lead to debt treatment. On the other hand, a call option for the corporate to buy back the stake held by the financial sponsor generally provides flexibility about the nature and timing of the decision, being more consistent with equity treatment.

However, in some cases the corporate could be highly incentivised to exercise the call, if material incentives to the exercise are in place. This could be the case if the absence of the call exercise would trigger for example:

- A material step-up of the fee or price paid by the corporate to the JV (in cases where the corporate is the key customer).
- Relevant changes in the corporate governance and/or distribution policy of the JV to the benefit of the financial sponsor.
- The possibility for the financial sponsor to force the corporate to sell its majority stake in the JV at the same conditions agreed by the financial sponsor with a third party ('drag-along rights'), in order to improve the appeal of the sale to third parties and the visibility of the financial sponsor's exit.
- Existing disproportionate distributions to the benefit of the financial sponsor to continue indefinitely.

Fitch would assess which incentive is in place and its strength from the corporate's perspective. In this context, the magnitude of the increase in the price paid by the corporate to the JV or of the continuing unbalanced distributions in absence of the call exercise would be important indicators for the assessment.

Also, in the presence of a possible 'drag-along' of the corporate in the sale of the JV, Fitch would consider the strategic relevance of the assets owned by the JV for the corporate, in order to assess the strength of the incentive to exercise the call. The importance of the assets owned by the JV could also reduce the corporate's flexibility to unwind the structure if the underlying arrangements with the financial sponsor become onerous over time.

The time horizon for the exercise of the call or put option is not a key consideration, but exceptionally long windows could contribute to the equity treatment for this factor. Moreover, the mere possibility to settle the call or put option in shares is not a key factor per se, but it could be a positive consideration if the conversion ratio is set at the start of the transaction and is not detrimental for the existing shareholders.

Distribution Policy of the JV, Economic Rights of JV's Shareholders

A rigid distribution policy based on a fixed amount (or fixed yield) to be paid by the JV irrespective of the underlying business performance would contribute to debt treatment. On the other hand, a payout-based dividend policy (including 100% payout) would be consistent with equity treatment, assuming that the available cash flows show a sufficient exposure to the dynamics of the underlying business.

A rigid dividend policy that allows for a payment in kind (PIK) option offers more cash flow flexibility compared to a cash-only case, but that would not be sufficient to consider this factor consistent with equity treatment. The assessment would also depend on characteristics such as the length of the dividend deferability period, the capitalisation of the unpaid dividends and the possibility to completely omit payments, at least in some circumstances. A longer dividend

deferability period and the ability to omit payment in some circumstances would be considered equity-like features in the assessment of this factor.

Disproportionate and/or priority claims on distributions from the JV to the financial sponsor would contribute to debt treatment. However, limited disproportions may be considered customary for these transactions and still consistent with equity treatment, while a material imbalance would also represent an incentive to exercise the call option, if present.

Construction and Availability Risk

Fitch deems customary for the financial sponsor to require some protection from construction and availability risks, given that these risks are typically out of their control. Therefore, some caps to the financial sponsor's risk exposure (for example in relation to cost overrun) would still be consistent with equity treatment, while an almost complete insulation from these risks would be more consistent with debt treatment. This factor would be assessed where relevant and in conjunction with the others.

7. HoldCo Payment-in-Kind (PIK) and Shareholder Loans

This section applies to shareholder loans or HoldCo PIK loans, notes or other instruments/obligations common in LBO transactions that:

- are issued at a HoldCo level outside a restricted group (i.e. a HoldCo PIK) or,
- are held by affiliated investors (e.g. the private equity sponsor in an LBO transaction) whose economic and strategic interests are expected to remain aligned with those of common equity holders (i.e. a shareholder loan).

If instruments that come under this adjustment are present in a financing and legal group structure, Fitch will assess if such instrument should be treated as debt or non-debt of the rated entity. The test is whether the instrument increases the probability of default of the rated entity's debt.

The concept of "rated entity" can apply to both a single legal entity and a group of borrowing entities with cross-guarantees and/or cross-default mechanisms or covenant restrictions in place such that the IDR reflects the relative default probability of the specified group that will include the rated entity. This specified group of entities is often called a "restricted group".

Fitch considers that the following factors tend to support the treatment of HoldCo PIKs and shareholder loans as non-debt of the rated entity.

- **Subordination and Lack of Security:** structural subordination of the instruments when they are issued by an entity outside the restricted group and contractual subordination when issued by the entity that issues the LBO debt via an inter-creditor agreement as well as the absence of security over (and guarantees from) the rated entity.
- **Non-Cash Interest Payment:** the instruments are PIK-for-life (i.e. without cash-pay obligations of any sort) during the life-time of the transaction.
- **Longer-Dated Final Maturity:** the instruments' effective final maturities are longer dated than any of the more senior-ranking debt elements in the rated entity's capital structure.

Factors that would, in contrast, favour inclusion of these instruments in the rated entity's debt quantum include the inverse of the features noted above. They could be complemented by elements such as marketability and transferability of the loan (mostly relevant for shareholder loans), and the large size of the instrument relative to the group's overall capital structure.

Structural Subordination and Ring Fencing

This is key to analysing the impact that a HoldCo PIK or shareholder loan default may have on the rated entity. In theory, if the PIK or shareholder loan issuer is outside the restricted group, then effective structural subordination can exist. If a default under a subordinated HoldCo PIK or shareholder loan would not trigger a default at the rated entity, through a cross-default, cross acceleration or otherwise, then a default on such instrument would not increase the probability of default at the rated entity debt.

Furthermore, if effective ring-fencing exists (i.e. the rated entity and its assets can be legally separated from other related companies and grant enforceable security over their assets in respect of the holders of the senior debt and the junior debt), then the debt outside the rated entity is not legally an obligation of the latter and does not increase its probability of default.

Structural subordination of the HoldCo PIK or shareholder loan is reinforced if the only assets of the instruments' issuer are shares in the rated entity (rather than an intercompany loan) and proceeds are paid out directly to shareholders as a dividend (most likely in the case of a HoldCo PIK) or used to acquire new shares in the rated entity, as then the HoldCo issuer (and its creditors) has only a residual equity claim on the rated entity.

Provided that intercompany loans granted by the HoldCo are subordinated to all other claims of the rated entity and are effectively deeply subordinated shareholder loans, then these loans could be considered closer to an equity claim than a debt claim.

The ultimate decision to treat the instrument as debt or non-debt of the rated entity will depend on other characteristics described in the following sections. In the context of an LBO structure with a formal inter-creditor agreement, the terms of the agreement are a crucial determinant in Fitch's ratings analysis. Fitch would review the terms of this document and, where available, the accompanying legal view, to form a view on the enforceability of the inter-creditor terms, especially the subordination arrangements which vary from jurisdiction to jurisdiction.

Security and Guarantees

Any security or guarantees from the rated entity for the benefit of HoldCo PIK or shareholder loan would enable a lender to claim on the rated entity, or to influence insolvency or restructuring proceedings, and could lead to the inclusion of the instrument in the rated entity's debt quantum.

Some HoldCo PIKs or shareholder loans, although issued by a HoldCo, might have the additional benefit of junior-ranking security over assets of the rated entity (e.g. rank third after first-priority senior secured loans and second-priority mezzanine loans). In such a scenario, a default under the HoldCo PIK or shareholder loan could allow the holders of such instrument to foreclose on the assets of the rated entity which could, in turn, trigger a default under the debt of the rated entity. However, if the holders of the shareholder loan or HoldCo PIK do not have independent acceleration or enforcement rights whatsoever, then Fitch would most likely consider that sufficient subordination still exists to protect the senior lenders at the rated entity (provided that the security package and the subordination arrangements are enforceable within the relevant jurisdiction).

In certain cases, the HoldCo PIK or shareholder loan holders may be granted security over shares in the HoldCo issuer itself, which may give the HoldCo PIK or shareholder loan holders additional comfort that they can enforce their rights as shareholders in the HoldCo Issuer. However, in most cases this in itself does not increase the risk of default of the rated, unless a change of control clause at the rated entity level can be triggered.

If HoldCo PIKs or shareholder loans were somehow to experience a default whilst the rated entity is still performing, then enforcing on the HoldCo issuer share security may constitute a "change of control" at the rated entity level. This could trigger a mandatory prepayment event for the secured debt and a change of control put option for a high-yield instrument thereby increasing the probability of default of the rated entity.

PIK-For-Life

If an instrument does not impose any obligation on an issuer to pay cash interest for the life of the instrument, and the instrument is a bullet repayment instrument, then the risk of a payment default does not materialise until the final maturity date. In this case the HoldCo PIK or shareholder loan instrument does not impose any additional cash obligations on the rated entity or the HoldCo issuer itself until final maturity, so the risk of a rated entity default is not increased, assuming a later final maturity.

Furthermore, given the incurrence-style financial covenants typical of HoldCo PIK deals, and provided that the HoldCo PIK or shareholder loan documentation has been drafted to be no more restrictive than the rated entity's documentation, in theory a non-payment default should

also be almost impossible if there is no such default at the rated entity level. Therefore, the overall risk of default for the rated entity is not increased.

Cash-Pay and Cash/PIK Toggles

Although HoldCo PIK notes and shareholder loans are often PIK-for-life, there may be periods of interest in such instruments that become mandatorily or optionally payable in cash. In instances where PIK instruments convert to mandatory cash-pay obligations, this toggle feature could increase the rated entity's cash obligations and similarly increase the likelihood of default of the rated entity. To the extent a future cash pay obligation is assumed to be satisfied through cash upstreaming from the rated entity (and is reflected as such as a cash interest obligation in the modelling and analysis of the rated entity), then such cash toggle would weigh against equity treatment.

In cases where the borrower has the option, but no future obligation, to pay interest in cash, Fitch believes it to be unlikely that this election will be made, as once the company is in a position to service more cash-pay debt, it should be more economical to refinance the HoldCo PIK notes with senior secured debt or cash-pay high-yield notes at a lower cost of debt. Should the borrower ultimately choose to make optional cash payments on account of HoldCo PIK notes, such cash payments would be more akin to discretionary dividend distributions and would not weigh in favour of debt treatment.

The source of payment of any cash interest in the case of a HoldCo PIK or shareholder loan switching to cash-pay would be the rated entity when the HoldCo issuer has no operations or cash flow of its own and would be reliant on the upstreaming of dividends or other forms of restricted payment out of the rated entity, as is typically the case in LBO structures.

In practice, the rated entity documentation usually includes limitations on the ability of the rated entities to upstream cash to the detriment of the rated entity lenders or investors (there may be some debt leverage threshold). Depending on the drafting of such limitations, this would either limit or entirely prevent the upstreaming of cash for the purposes of dividends or payment of cash interest on a subordinated instrument such as a HoldCo PIK or shareholder loan.

Should the issuer of the HoldCo PIK or shareholder loan instrument have to make a cash payment in relation to its PIK or shareholder loan instrument, this, depending on the details of the documentation, may lead to a payment default on the HoldCo PIK or shareholder loan before the final maturity. The level of ring-fencing of the rated entity and existing inter-creditor arrangements would then determine how the instrument lenders would be treated. Assuming that there is adequate ring-fencing, the HoldCo PIK or shareholder loan issuer would be assessed separately on the basis of the cash flow available to it to fund its debt service.

Final Maturity

If the final effective maturity of the HoldCo PIK or shareholder loan is beyond that of all rated entity debt, the risk of payment default on the instrument's principal will not affect the probability of default on shorter-dated senior obligations.

Should the HoldCo PIK or shareholder loan fall due for repayment while other debt obligations are still outstanding, this could increase the risk of the HoldCo defaulting and potentially trigger a default at the rated entity. If a default on the HoldCo PIK or shareholder loan would result in a change of control event, cross default or otherwise cause a default at the rated entity level then the HoldCo PIK or shareholder loan must be viewed as debt of the rated entity.

However, if the terms of the HoldCo PIK/shareholder loan instrument are sufficient to allow the agency to determine it will not increase the probability of default of the rated entity's IDR, then a shorter maturity at outset will not change this determination. However, there may be a greater degree of event risk as the final maturity date of the instrument approaches.

Additional Considerations in Favour of Debt: Transferability of Shareholder Loans

If the shareholder loan can be transferred to third parties independently of equity interests, third-party holders may be inclined to enforce remedies if and when available. Furthermore, creditor composition considerations (voting upon restructuring provisions, ownership of other tranches of debt in order to force certain rights) may distort expected behaviour of the creditor

hierarchy tree. This can be aggravated if the shareholder loan represents a material proportion of the capital structure such that its holders could have a potential negotiating stance with other creditors.

8. Debt Fair-Value Adjustments

Analytical Approach

Fitch aims to reflect debt in its credit metrics at the amount payable on maturity. This assumes that the issuer will remain a going concern.

Balance-Sheet Impact

- Local-currency debt is analysed on the basis of cash principal due on a going-concern basis. The impact of fair-value adjustments and derivatives is eliminated from debt.
- For foreign-currency debt, the cash principal outstanding will generally be translated at the period-end spot rate. Debt is translated at the contracted rate where a derivative has been used to fix the rate at which the debt is repaid.
- For notes issued at a discount, or with interest paid only at the end of the instrument's life (such as PIK notes) the cash principal taken will be the total amount payable, whether described as principal or interest, at the reporting date.

Operating Profit Impact

Where the movement in fair value is included in operating profit, this is excluded from Fitch's EBITDA and EBITDAR calculations.

These non-cash movements are excluded from the agency's cash flow-based measures such as FFO.

9. Adjustments for Financial Services Activities

In this section, financial services (FS) operations generally refer to entities established to support their parent's activities by providing financing to the group's customers. These adjustments do not constitute a standalone rating for the FS operations.

FS operations can take a variety of forms. They may be operations within the group, and may be fully or majority-owned subsidiaries. They may be financed by the parent company, e.g. through intercompany loans, benefit from parent support or issue their own debt. They may also have bank status.

Issuer Comparability: We aim to allocate capital between the corporate entity and its FS operations to enable comparability between similar corporate issuers with and without FS operations, and to ensure that FS operations' risks are reflected in our assessment of the corporate entity.

Adjustment Application: Our analysis focuses on debt that funds identifiable financial receivables. A ready market of third-party finance providers must be available for these types of assets for this adjustment to apply.

Self-Sustaining FS Operations: We assume a capital structure for the FS operations that is sufficiently robust for that entity to support its debt without reliance on the corporate entity. We apply a hypothetical capital injection from the corporate entity to the FS operations to achieve a target capital structure that is indicative of a self-sustaining credit profile for the FS operations.

Accounting Treatment Agnostic: We are indifferent to the accounting treatment of the FS operations in the group's accounts. Our main consideration is whether the identifiable assets are readily financeable by third parties and, if required, a hypothetical capitalisation of the FS operations by the corporate entity to achieve a Fitch-defined target capital structure. If the debt is non-recourse, for example in a securitisation, we will include that funding in the FS operations' debt.

Consolidated FS Operations

If the FS operations are consolidated in the corporate entity's accounts, Fitch will deconsolidate the FS operations from the corporate entity and assume a hypothetical capital injection to achieve the target standalone capital structure for the FS operations.

FS Operations Deconsolidation

Fitch will deconsolidate the FS operations' debt proxy or actual debt (if lower) from the corporate entity. The FS operations' EBITDA (or alternative appropriate metric) will also be deconsolidated where disclosed and material.

Hypothetical Capital Injection from the Corporate Entity to the FS Operations

Analysis Based on Relevant Financial Institutions Criteria: Fitch will assess whether the FS operations requires a hypothetical capital injection by reference to the most relevant Financial Institutions criteria. In most cases, this is the [Non-Bank Financial Institutions Rating Criteria](#) relating to "high-balance-sheet-usage finance and leasing companies", and, less frequently, the [Bank Rating Criteria](#).

References to financial benchmarks in the relevant Financial Institutions criteria are based on Operating Environment factor scores under those criteria, instead of those listed in the Corporate Rating Criteria.

FS operations may comprise both Non-Bank Financial Institutions and Bank elements. We would typically analyse these hybrid FS operations through the Non-Bank Financial Institutions Rating Criteria lens since the wider financing operations are the reason behind the bank's existence.

Parent Funding of the FS Operation Capitalisation: Where a hypothetical capitalisation is appropriate, we assume the corporate entity funds the capital injection either by an increase in gross debt, a reduction in cash, or a combination of the two. A cash reduction would be appropriate where the corporate entity has sufficient cash to sustain the hypothetical capitalisation and its own operational cash requirements across the rating horizon. An example of the adjustment is available below.

Assessment Under the Non-Bank Financial Institutions Rating Criteria

Where the Non-Bank Financial Institutions Rating Criteria applies, Fitch uses a range of gross debt/tangible equity multiples up to 7x for the FS operations per the "Gross Debt/Tangible Equity Ratio" table below to determine the extent of additional FS capitalisation, if any, required to be provided by the corporate entity. Lower quality assets and/or a weaker funding profile typically translate into a lower target leverage profile.

The ratio varies according to an assessment of the asset quality (AQ) and funding, liquidity and coverage (FLC) factor scores, which is provided by the Financial Institutions group. AQ and FLC are defined in the Non-Bank Financial Institutions Rating Criteria relating to "high-balance-sheet-usage finance and leasing companies".

The FLC benchmark score will equal the corporate entity's rating where the FS operations are reliant on the corporate entity for funding since these funding requirements will be reflected in the corporate entity's rating, or where we believe the corporate entity would act as a backstop should the FS not be able to access external funding sources. Where this is the case, the FLC component will be driven by the corporate group.

The FLC may be lower than the corporate rating under the following scenarios:

- Fitch believes the corporate entity's willingness to provide funding is less likely, such as with joint venture structures;
- The FS operation is heavily reliant on wholesale external funding sources and it is meaningfully larger than the corporate entity, therefore calling into question the corporate entity's ability to provide funding support; or
- The FS operation is heavily reliant on short-term and/or uncommitted funding sources, which Fitch believes could introduce additional material near-term funding risks beyond those reflected in the corporate entity's rating.

The AQ and FLC factor scores feed into the table below to determine the target capital structure for the FS operations:

Gross Debt/Tangible Equity Ratio for an FS Operations Classified as a Finance and Leasing Company

		Funding, liquidity and coverage					
		Unstable (ccc and below)	Less stable (b)	Generally stable (bb)	Typically stable (bbb)	Stable (a)	Very stable (aa and above)
Asset quality	Considerably weak (ccc and below)	0	1	1	1	2	3
	Poor quality (b)	1	1	1	2	3	4
	Below average (bb)	1	1	2	3	4	5
	Average (bbb)	1	2	3	4	5	6
	High quality (a)	2	3	4	5	6	7
	Very high quality (aa and above)	3	4	5	6	7	7

Source: Fitch Ratings

Where there is sufficient financial information on the FS operations, we will compare the company's reported leverage ratio against our target ratio. If the reported ratio is lower than our target ratio, we will not allocate more debt to the FS operations to attain our targeted capital structure and the reported FS debt (and EBITDA) is simply deconsolidated.

Where the reported ratio is higher than our target capitalisation or no reported ratio is available, Fitch will make the hypothetical capitalisation adjustment. To estimate the proxy debt and equity for the FS operations, Fitch will use the FS operations' receivables as a base and allocate proxy debt and equity to produce the financial adjustments described in this section. For example, if the target leverage ratio is 3x, we will assume three quarters of the receivables base is allocated to debt and the remaining quarter is allocated to equity.

Where the information available to Fitch is such that we are unable to determine or appropriately estimate the target leverage ratio, the target debt/equity ratio will be 0x. Effectively, Fitch will not deconsolidate the debt associated with the FS operations.

Assessment Under the Bank Rating Criteria

Where the Bank Rating Criteria applies, the target capital and hypothetical capitalisation requirements for the FS operations are defined by reference to the upper-bound of the Capitalisation & Leverage benchmarks outlined in the Bank Rating Criteria instead of the "Gross Debt/Tangible Equity Ratio" table above. The target capital ratio has a floor of 'bb'. In other words, we would expect the bank FS operation will need to be capitalised to a minimum of the upper bound of 'bb' for the relevant operating environment in all circumstances. The target capital ratio is defined as common equity Tier 1 capital or Fitch Core Capital relative to risk-weighted assets.

If the bank is rated under our Bank Rating Criteria, we will compare the bank's Viability Rating (VR) to that of the corporate entity. If the bank is rated the same or stronger than the corporate entity, no capitalisation adjustment will apply.

Conversely, if the bank's VR is lower than the corporate entity's rating, we would assume capitalisation to reach the upper bound of the implied Capitalisation & Leverage factor score that is equal to the corporate entity's rating.

For example, if the Fitch-rated bank has a VR of 'bb' whereas the corporate entity is rated 'BBB' with an 'a' operating environment, the target capital ratio will be 14%, i.e. the upper bound for the 'BBB' rating category, which ranges 9%-14% (based on the Bank Rating Criteria).

Alternatively, if the Fitch-rated bank has a VR of 'b' whereas the corporate entity is rated 'B' with an 'a' operating environment, the target capital ratio will be 9% since the 'bb' floor would apply, i.e. the upper bound for the 'BB' rating category, which ranges 7%-9% (based on the Bank Rating Criteria).

Where the bank is unrated, we will compare the bank's implied Capitalisation & Leverage factor score against the corporate entity's IDR. If the factor score is the same or stronger than the corporate entity, no capitalisation adjustment will apply. If the factor score is weaker, we would assume capitalisation to reach the upper bound of the implied Capitalisation & Leverage factor score that is equal to the corporate entity's rating.

Where the unrated bank has a CET1 ratio of 11% in a 'bbb' operating environment, the implied Capitalisation & Leverage factor score (based on the Bank Rating Criteria) would be 'bb'. If the corporate entity is rated 'BBB', we would assume capitalisation to a target capital ratio of 19%, i.e. the upper bound for the 'BBB' rating category, which ranges 13%-19%.

Example of the Adjustment

The example below represents a summary of a car manufacturer's financial statements with its non-bank financial institution FS operations that have an actual gross debt/tangible equity ratio of 8.3x. To achieve a gross debt/tangible equity ratio of 7.0x, we adjust the FS operations' reported equity by EUR1,300 million, financed by a EUR1,300 million increase in the gross debt or cash reduction at the corporate operations.

Debt Increase at Corporate Entity

(EURm)	Consolidated group	Core corporate	FS operations	FS adjustments		Adjusted profile	
				Core corporate	FS operations	Core corporate	FS operations
Readily available cash	33,000	27,500	5,500	-	-	27,500	5,500
Receivables	69,000	3,500	65,500			3,500	65,500
Other assets	118,000	109,000	9,000	1,300		110,300	9,000
Total assets	220,000	140,000	80,000			141,300	80,000
Equity	69,200	61,400	7,800		1,300	61,400	9,100
Adjusted financial debt	95,000	30,000	65,000	1,300	- 1,300	31,300	63,700
Other liabilities	55,800	48,600	7,200			48,600	7,200
Total liabilities	220,000	140,000	80,000			141,300	80,000
Debt/ tangible equity			8.3				7.0

Source: Fitch Ratings

Cash Reduction at Corporate Entity

(EURm)	Consolidated group	Core corporate	FS operations	FS adjustments		Adjusted profile	
				Core corporate	FS operations	Core corporate	FS operations
Readily available cash	33,000	27,500	5,500	-1,300		26,200	5,500
Receivables	69,000	3,500	65,500			3,500	65,500
Other assets	118,000	109,000	9,000	1,300		110,300	9,000
Total assets	220,000	140,000	80,000			140,000	80,000
Equity	69,200	61,400	7,800		1,300	61,400	9,100
Adjusted financial debt	95,000	30,000	65,000		-1,300	30,000	63,700
Other liabilities	55,800	48,600	7,200			48,600	7,200
Total liabilities	220,000	140,000	80,000			140,000	80,000
Debt/ tangible equity			8.3				7.0

Source: Fitch Ratings

The mechanics of the adjustment are the same for entities where the Bank Rating Criteria applies, once the target capital ratio has been determined per the *Assessment Under the Bank Rating Criteria* section above.

Deconsolidated FS Operations

If the FS operations are not consolidated with the corporate parent, Fitch will assess if it may require an equity injection. If so, Fitch factors the financial impact in its forecasts for the rated corporate entity.

Appendix 2: Guide to Credit Metrics

Fitch uses a variety of quantitative measures of cash flow, earnings, leverage and coverage to assess credit risk. The following sections summarise the key credit metrics used to analyse credit default risk. Sector-specific credit metrics are described in the Sector Navigators - Addendum to the Corporate Rating Criteria.

Definitions of Cash Flow Measures

	Revenue
-	Operating expenditure (including depreciation and amortisation)
-	Estimated lease expense ^a
+	Depreciation and amortisation
=	EBITDA ^b
+/-	Recurring dividends received from associates less cash dividends paid to minority interests ^c
-	Cash interest paid (net of interest received and excluding interest on lease liabilities)
-	Cash tax paid
+/-	Other changes before FFO ^d
=	Funds flow from operations (FFO)
+/-	Change in Fitch-defined working capital
=	Cash flow from operations (CFO)
+/-	Non-operational cash flow
-	Capex
-	Ordinary dividends paid to shareholders of the parent company
=	Free cash flow (FCF)
+	Receipts from asset disposals
-	Business acquisitions
+	Business divestments
+/-	Exceptional and other cash-flow items
=	Net cash in/outflow
+/-	Equity issuance/(buyback)
+/-	Foreign exchange movement
+/-	Other items affecting cash flow ^e
=	Change in net debt
	Opening net debt
+/-	Change in net debt
	Closing net debt

^a Includes IFRS16/ASC842 lease depreciation and interest. See [Appendix 1 Main Analytical Adjustments](#), section 1. *Leases* for further details.

^b EBITDA plus estimated lease expense for capitalised leased assets equates to EBITDAR.

^c Associate dividends may be excluded from EBITDA, FFO and CFO if non-operational or non-recurring

^d Implied balancing item to reconcile operating EBITDAR with funds flow from operations

^e Implied balancing item to reconcile FCF with change in net debt

Source: Fitch Ratings

Definitions of Key Concepts

EBITDA and EBITDAR	EBITDA is a widely used measure of an issuer's unleveraged, untaxed cash-generating capacity from operating activities. Fitch usually excludes extraordinary items, such as asset write-downs and restructurings, in calculating EBITDA — unless an issuer has recurring one-time charges which indicate the items are not unusual in nature. Fitch would also exclude movements in fair value contained in operating profit. Fitch's EBITDA is computed after deducting estimated rental expense based on the depreciation of leased assets plus interest on lease liabilities. The use of EBITDAR (EBITDA plus estimated lease expense for capitalised leased assets) improves comparability across industries (e.g. retail and manufacturing) that exhibit different average levels of lease financing and within industries (e.g. airlines) where some companies use lease financing more than others.
Funds flow from operations Post-interest and tax, pre-working capital	FFO is an alternative measure of the firm's cash flow after meeting operating expenses, including estimated lease expense, taxes and interest. FFO is measured after cash payments for taxes, cash received from associates, interest and preferred dividends paid, and after dividends paid to minority interests, but before inflows or outflows related to working capital. Fitch's computation subtracts or adds back an amount to exclude non-core or non-operational cash inflow or outflow. FFO offers one measure of an issuer's operational cash-generating ability before reinvestment and before the volatility of working capital. When used in interest coverage and leverage ratios, net interest is added back to the numerator.
Change in Fitch-defined working capital	Fitch calculates the change in working capital through the annual swings in trade receivables, trade inventory, trade payables and any other relevant working-capital item. It also includes analytical adjustments that affect working capital, such as factoring, where sold receivables are added back to trade receivables to reverse the effects of factoring on working capital.
Cash flow from operations Post-interest, tax and working capital	CFO represents the cash flow available from core operations after all payments for ongoing operational requirements, estimated rental expense, cash received from associates, dividends paid to minority interests, interest paid, interest received, preference dividends and tax. CFO is also measured before reinvestment in the business through capex, before receipts from asset disposals, before any acquisitions or business divestment, and before the servicing of equity with dividends or the buyback or issuance of equity.
Free cash flow Post-interest, tax, working capital, capex and dividends	FCF measures an issuer's cash from operations after capex, non-recurring or non-operational expenditure, and dividends. It also measures the cash flow generated before account is taken of business acquisitions, business divestments, and any decision by the issuer to issue or buy back equity, or make a special dividend.
Liquidity	Factors that contribute to financial flexibility are the ability to revise plans for capital spending, strong banking relationships, the degree of access to a range of debt and equity markets, committed, long-dated bank lines and the proportion of short-term debt in the capital structure. These issues are incorporated in the liquidity concept. The liquidity score is calculated as the amount of readily available cash to service or meet debt and interest obligations, including availability under committed lines of credit and after taking into account debt maturities within one year and also factoring expected FCF generation over the coming year.
Committed bank facilities	In corporate analysis — and particular financial ratios — sources of liquidity include headroom, or undrawn funds, under committed bank facilities relevant for the period. Bank facilities which (i) are a contractual commitment to lend, (ii) have more than one year until maturity, and (iii) Fitch believes that the relevant bank will lend such amounts taking into account breach of covenant or other considerations, can be included as a source of liquidity. Not all countries have such long-term committed bank funding facilities.
Debt and net debt	Recognising the cultural differences in the approach of analysts and investors worldwide as well as sector-specific approach to leases, Fitch evaluates various debt measures as part of its analysis. Debt represents Fitch-defined debt, reflecting application all analytical adjustments to the reported debt per the application of Fitch criteria but excluding lease-equivalent debt. The only difference between debt and lease-adjusted debt is the addition of capitalised lease debt to the latter, in accordance with Appendix 1 Main Analytical Adjustments, section 1. <i>Leases</i>. Net debt is debt minus (freely available/unrestricted) cash based on Fitch's readily available cash. This "freely available cash" may be adjusted for restricted or blocked cash, operational cash requirements within the group, and other forms of cash not freely available for debt reduction. To the extent that liabilities are covered by designated restricted assets that receive 100% credit under the Cash and Cash Equivalents, Marketable Securities table under Appendix 1 Adjustment 5 Cash Adjustments, this portion of the liabilities can be excluded from the gross debt calculation.

Source: Fitch Ratings

Financial Terms and Ratios

Main Terms

Fitch-defined term	Definition
EBIT	Gross profit - SG&A or O&M expense - R&D expense - provision for bad debts - depreciation of tangible assets - amortisation of intangible assets - depreciation of leased assets - interest charge on lease liabilities - other depreciation and amortisation excluded from SG&A - impairments included in EBIT/DA - pre-opening & exploration expense - regulatory fees + other operating income /(expenses) - securitisation amortisation.
EBITDA	EBIT + adjustment for non-recurring/non-recourse items + non-lease depreciation & amortisation + analyst adjustments to EBITDA.
EBITDAR	EBITDA + estimated lease expense for capitalised leased assets.
Estimated lease expense for capitalised leased assets	This term is used for sectors in which lease adjustments are relevant. It includes IFRS16/ASC842 lease depreciation and interest, operating lease charge and variable lease charge. However, leased assets that are not capitalised are excluded from the calculation. See Appendix 1 Main Analytical Adjustments , section 1 Leases for further details.
Cash flow from operations (CFO)	Net income + total adjustments to net income + change in working capital + recurring cash dividends received from associates/equity method Investments + investing & financing cash flow deemed as operating - dividends paid to preferred shareholders - distributions to non-controlling interests.
Changes in Fitch-defined working capital	Change in receivables + change in trade payables + change in inventory + change in accrued expenses + any other changes in working capital.
Funds from operations (FFO)	Cash flow from operations (CFO) - change in Fitch-defined working capital.
Free cash flow (FCF)	Cash flow from operations - capex - common dividends + total non-operating & non-recurring cash flow before business acquisition, business divestments and share buyback/special dividends.
Debt	Total secured debt + total unsecured debt + total subordinated debt + preferred stock+ short-term non-recourse debt + long-term non-recourse debt + securitisation debt + net derivative (assets)/liabilities hedging principal borrowings + other off balance sheet debt - equity credit.
Lease-adjusted debt	Debt + capitalised lease debt. See Appendix 1 Main Analytical Adjustments , section 1 Leases for details on capitalised lease debt calculation.
Readily available cash and equivalents	Cash + marketable securities - cash reported as restricted or blocked - cash deemed by Fitch as not readily available (including adjustments for minimum cash required for ongoing operations such as seasonality, working capital fluctuations and cash held by not wholly owned or non-recourse subsidiaries or in offshore holdings).
Net debt	Debt - readily available cash & equivalents.
Interest paid/received	Cash interest is used in coverage ratios, but if interest paid or interest received equal zero then interest expense and interest income as per the P&L is used instead.

Source: Fitch Ratings

Main Ratios

Ratio	Numerator	Denominator
Profitability/cash flow ratios		
EBIT margin	EBIT	Revenue
EBIT margin - group	EBIT including financial services operations	Consolidated revenue
EBIT margin - industrial	EBIT excluding financial services operations	Industrial operation revenue
EBITDA margin	EBITDA	Revenue
EBITDAR margin	EBITDAR	Revenue
FFO margin	FFO	Revenue
FCF margin	FCF	Revenue
Capex/CFO	Capex	Cash flow from operations
CFO margin	Cash flow from operations	Revenue
Leverage ratios		
EBITDA leverage (x)	Debt	EBITDA + recurring dividends received from associates and equity method investments - dividends paid to minorities (or, alternatively, net income attributable to non-controlling interests)
EBITDA net leverage (x)	Net debt	EBITDA + recurring dividends received from associates and equity method investments - dividends paid to minorities (or, alternatively, net income attributable to non-controlling interests)
EBITDAR leverage (x)	Lease-adjusted debt	EBITDAR + recurring dividends received from associates and equity method investments - dividends paid to minorities (or, alternatively, net income attributable to non-controlling interests)
EBITDAR net leverage (x)	Lease-adjusted debt - readily available cash & equivalents	EBITDAR + recurring dividends received from associates and equity method investments - dividends paid to minorities (or, alternatively, net income attributable to non-controlling interests)
FFO leverage (x)	Debt	FFO + interest paid - interest received + preferred dividends (paid)
FFO net leverage (x)	Net debt	FFO + interest paid - interest received + preferred dividends (paid)
FFO adjusted leverage (x)	Lease-adjusted debt	FFO + interest paid - interest received + preferred dividends (paid) + estimated lease expense for capitalised leased assets
FFO adjusted net leverage (x)	Lease-adjusted debt - readily available cash & equivalents	FFO + interest paid - interest received + preferred dividends (paid) + estimated lease expense for capitalised leased assets
(CFO - capex)/ debt (%)	Cash flow from operations [CFO] - capital (expenditures)	Debt
(CFO - capex)/net debt (%)	Cash flow from operations [CFO] - capital (expenditures)	Net debt
FCF/debt (%)	FCF	Debt
Coverage ratios		
EBITDA interest coverage (x)	EBITDA+ recurring dividends received from associates and equity method investments - dividends paid to minorities (or, alternatively, net income attributable to non-controlling interests)	Interest paid
EBITDAR fixed-charge coverage (x)	EBITDAR + recurring dividends received from associates and equity method investments - dividends paid to minorities (or, alternatively, net income attributable to non-controlling interests)	Interest paid + estimated lease expense for capitalised leased assets
EBITDAR fixed-charge net coverage (x)	EBITDAR + recurring dividends received from associates and equity method investments - dividends paid to minorities (or, alternatively, net income attributable to non-controlling interests)	Interest paid - interest received + estimated lease expense for capitalised leased assets

Main Ratios

Ratio	Numerator	Denominator
FFO interest coverage (x)	FFO + interest paid - interest received + preferred dividends paid	Interest paid + preferred dividends paid
FFO fixed-charge coverage (x)	FFO + interest paid - interest received + preferred dividends paid + estimated lease expense for capitalised leased assets	Interest paid + preferred dividends paid + estimated lease expense for capitalised assets
Capex/CFO (%)	Capital (expenditures)	Cash flow from operations (CFO)
Liquidity ratios		
Liquidity (liquidity ratio)	Available cash + undrawn portion of committed facilities + FCF	12-month debt maturities

Source: Fitch Ratings

Appendix 3: Approaching Distress in the Lowest Rating Categories

Speculative and Distressed Rating Scale

The default curve for rating experience is not linear, and ratings in the lowest category – the 'CCC', 'CC' and 'C' range – face extremely high default risk. Similarly, at the threshold of 'B' and 'CCC' categories, our ratings definitions become more direct. See Fitch's [Rating Definitions](https://www.fitchratings.com) at www.fitchratings.com.

Navigators have limitations as a tool for peer comparison when all of the business and financial characteristics of an issuer are within (or close to) the 'B' category.

Factors Differentiating Highly Speculative and Distressed Ratings

Broad sector traits are useful in understanding relative sector risk, but the differentiation between 'B' and 'CCC' category credits is significantly affected by company-specific factors relative to market sector peers. In addition to credit metrics, we typically assess a corporate's business model and operating profile, effectiveness and appropriateness of management strategy, sustainability of the capital structure (including the cost, likelihood and need to refinance), and liquidity risk. For more detail see the tables *Sample Rating Considerations for Highly Speculative Credits* and *Key Rating Considerations for Distressed Credits*.

These factors help differentiate ratings within the 'B' category but should not be considered in isolation. For example, the fact that an issuer consistently generates positive free cash flow (FCF) may seem (in isolation) a characteristic of an investment-grade rating profile. However, if two comparable issuers are constrained at the 'B' category because of their limited scale, lack of diversification or modest competitive position, consistently positive FCF through the cycle would be a differentiating factor and the issuer with this cash-flow profile would be a stronger candidate for a 'B+' than a 'B' rating. Similarly, assuming two companies have equally aggressive financial metrics, a more robust business model would support a 'B+' IDR rather than 'B' as cash flow generation through the cycle mitigates refinancing risk and limits erosion of the respective liquidity position.

Factors Have Relative Weights

The considerations described in the tables *Sample Rating Considerations for Highly Speculative Credits* and *Key Rating Considerations for Distressed Credits* do not all have the same weight in the overall rating assessment. Often, some factors completely override others, drive the rating discussion into a 'B+' versus 'B', a 'B' versus 'B-' or a 'B-' versus 'CCC+' debate and strongly influence the final rating outcome. The table below shows which factors Fitch attaches greater weight to, depending on rating levels. As a general guideline, where one factor is significantly weaker than other factors, this weakest element tends to attract a greater weight in the analysis.

Relative Importance of Factors in Determining Ratings

Higher ● Moderate ● Lower ●

	B+ vs. B	B vs. B-	B- vs. CCC+	CCC+ vs. CCC-
Business model	●	●	●	●
Strategy	●	●	●	●
Cash flow	●	●	●	●
Leverage profile	●	●	●	●
Governance and financial policy	●	●	●	●
Refinancing risk	●	●	●	●
Liquidity	●	●	●	●

Source: Fitch Ratings

For example, high refinancing risk and weak liquidity would shift the rating discussion towards 'B-' versus 'CCC+' considerations regardless of any strength in the business model or strategy. In a 'CCC+'/'CCC' debate, the absence of adequate liquidity buffers and vulnerability to unfavourable capital market conditions at refinancing would typically drive a 'CCC+' rating, while our view that default is a real possibility over the rating horizon would push a rating to 'CCC' or lower.

Conversely, when liquidity and debt maturity profiles are adequate, the debate would most likely revolve around 'B+' versus 'B' and concentrate on the relative strengths of the business model, the management strategy and the quality of cash flow.

The principal qualitative factors distinguishing 'B+' and 'B' ratings from 'B-' are confidence in the business model and the resilience of cash flow, and the ability and willingness to deleverage at a satisfactory pace given an initially aggressive capital structure and near-term maturity profile. A 'B+' rating, particularly for LBOs, generally signals more robust business models, limited execution risks and consistently positive FCF generation that support faster deleveraging so that refinancing risk remains a minimal concern, even in weak capital market conditions. An IDR would not be constrained merely due to private equity ownership.

Generally, modelling a moderate stress case leads to a debate or negative rating guidance that reflects 'CCC' category considerations (i.e. a potentially unsustainable business model, capital structure and liquidity position), it is likely the rating would be closer to 'B-' than to 'B'. In particular, this may apply where qualitative factors such as technological substitution, regulatory threats, chronically weak demand, excess capacity or lack of scale to protect margins are primary issues, especially as debt maturities approach or liquidity deteriorates.

Sample Rating Considerations for Highly Speculative Credits

Factor	B+	B	B-
Business model	Robust Business model and sector show resilience to more pronounced or prolonged downturns. Stressed economic conditions or entrance of competitors do not affect operating margins and cash flow. However, the business profile retains characteristics that prevent the IDR from reaching the 'BB' category, such as limited scale and diversification relative to larger companies. Such elements may threaten the resilience of the business profile over the long term.	Sustainable Business profile remains intact if subjected to reasonably foreseeable stresses (e.g. cyclical downturn, technological or regulatory disruption, secular operational risks). The business will have some key operating strengths (e.g. diversification of products or end-markets, clear market positioning/share, recognised brand, moderate exposure to discretionary spending, cost leadership, partly flexible cost base, high barriers to entry or specialist products leading to margins above the average for peers) that enable the company to have some earnings/margin resilience through the cycle.	Intact Business profile is intact but if subjected to reasonably foreseeable stresses it begins to show characteristics more in line with a 'CCC' "broken" business model. Key weaknesses may include small size, exposure to discretionary products, low barriers to entry/high substitution risk, and product or geographical concentration. Performance can be volatile in challenging economic conditions (e.g. negative like-for-like sales, margin pressure, and technological transition) but there is some certainty that the business could perform when those turn more benign.
Execution risk in strategy	Limited Management has a record of generally implementing a coherent and successful strategy. Any restructuring/cost-savings initiative or expansion plan has a clear, predictable outcome and carries limited operational risk. Management has the flexibility to slightly delay such plans without compromising the business model and the overall performance of the company.	Moderate Company has sufficient financial flexibility to allow it to compete with larger/better capitalised peers on product investment or brand expansion, or overcome foreseeable challenges to its plans.	Meaningful Company has limited capacity to mitigate execution risks while still deleveraging. Management may have embarked on reorganisation plans that could prove successful, but which carry costly and meaningful execution risk. Failure of strategy or restructuring could compromise the deleveraging profile but should not lead to sustained cash burn.
Cash flow profile	Consistently positive Company can generate positive pre-dividend FCF (even if in the low single digits of sales) through the cycle, including during more pronounced/prolonged downturns or under "stress" rating scenarios. This can be supported by a recurring revenue stream, high operating margins, an asset-light business model with healthy cash conversion or ability to conservatively preserve cash in periods of stress.	Neutral to positive Company can maintain neutral to positive pre-dividend FCF even in periods of moderate economic stress, often indicated by having done so in the past. Supporting factors include the ability to actively manage working capital, a proven record of cost-cutting, the ability to cut discretionary or expansion capex (e.g. store roll-outs), high margins and low operational gearing.	Volatile Company is a price taker with limited ability to pass on lower market prices to suppliers or higher input costs to customers. It may suffer from high operational gearing or have high capital commitments and face difficulties in managing working capital under economic stress. Consistent FCF generation proves difficult through the cycle.
Leverage profile	Clear deleveraging path High leverage is mitigated by a clear deleveraging plan that Fitch believes is credible and/or predictable. Alternatively, the company has moderate financial leverage relative to other 'B' issuers in the sector. If an LBO, the level of leverage may become consistent with a 'BB' category over the rating horizon.	Deleveraging capacity Current leverage is high but likely to remain consistent with a 'B' rating through the cycle. It has proven deleveraging capacity under current (and perhaps previous) capital structure.	High but sustainable Leverage metrics are weak among sector and rated peers and could quickly appear vulnerable to deteriorating capital market conditions. Under benign economic conditions leverage decreases – albeit slowly. Under stress, high leverage would leave limited margin of safety to prevent an increasing risk of default.
Governance/financial policy	Committed Management and shareholders have explicitly stated a commitment to reduce debt over time and/or not receive dividends, and we believe such plans are credible given their record and feasibility due to some specific creditor protections in the documentation (e.g. covenants, cash sweep). Governance practices, for example a lack of independent directors on the board, prevent the company from reaching the 'BB' category.	Some commitment to deleveraging Clear link exists between management and ownership objectives. Ownership willing to suffer equity dilution as a deleveraging tactic. If a recycled LBO, it has a record of voluntary debt prepayments under previous LBO structures. There is a sponsor strategy to fund M&A or expansion plans via internal cash rather than releveraging through new debt. However, despite an intention to generally reduce debt over time, management/sponsors remain opportunistic about part debt-financing acquisitions or paying dividends as authorised by loan and bond indentures.	Aggressive There is evidence of aggressive financial strategy and an intention to maintain high financial leverage, e.g. entirely debt-funded M&A or expansion plans, regular or special debt-funded dividend payments and other forms of shareholder cash distributions even if implemented within the restrictions of loan and bond documentation.

Sample Rating Considerations for Highly Speculative Credits (Cont.)

Factor	B+	B	B-
Refinancing risk	Limited Company can reduce leverage to market tolerance levels for a given sector, and in a timely manner (i.e. before debt maturities), including during adverse capital markets conditions. A materially higher cost of debt would not prevent positive FCF generation. For an LBO, the company may have a leverage profile at "exit" that enables sponsors to reasonably contemplate an IPO.	Manageable Company can further deleverage towards more conservative assumptions and refinance in less favourable capital market conditions by the time maturities fall due. It should be able to refinance even at higher cost and maintain positive FCF.	High Deleveraging will be slow under our rating case. Company relies on credit market conditions to be highly favourable when maturities fall due. Higher cost of debt could be detrimental to FCF generation but should not lead to sustained periods of cash burn.
Liquidity	Comfortable Cash on balance sheet is comfortable and in excess of minimum operational cash requirements. Adverse operating (or funding) conditions do not prevent the company from conducting business and meeting short-term obligations from available cash or internal cash flow without requiring the sale of assets or debt drawdowns. Undrawn committed credit lines remain available due to ample covenant headroom, and access to additional sources of funding is possible.	Satisfactory Some liquidity buffers are available in case of financial stress (e.g. revolving credit facility, or "RCF", availability, asset disposal). Sufficient availability exists under committed credit lines and headroom under covenants to temporarily cover short-term liquidity requirements.	Limited Deteriorating economic or business conditions could put liquidity under pressure, and the company has limited alternative sources of capital (lack of valuable assets, support from shareholder unlikely). Availability under committed credit lines could be limited while remaining in compliance with covenants.

Source: Fitch Ratings

Key Rating Considerations for Distressed Credits

Factor	CCC+	CCC	CCC-	CC
Business model	Redeemable Clear evidence of deterioration but cyclical trends or restructuring initiatives implies that the business is redeemable. The core operating assets, brand and market position are expected to survive a restructuring. Performance exhibits stable core operations or encouraging signs of a successful turnaround. Turnaround prospects may be supported by sector consolidation.	Compromised Serious deficiencies evident in an uncompetitive product offering, a weakening market position, and an eroding customer base; Operational reorganisation until now has been either ineffective or insufficient to offset the decline in operating performance. This business is not positioned for recovery.	Disrupted May no longer be viable. Severe market share or customer losses require immediate corrective actions. There is a limited window where a shift to a new business model is possible.	Irredeemable The company has a limited ability to operate on a day to day basis. Product obsolescence, regulatory constraints, adverse litigation or brand destruction confirm the business model is not viable.
Execution risk in strategy	Challenging yet achievable Restructuring is possible only with skilled management team with a record of previous successful turnarounds and relevant sector experience. Fitch believes the management has identified the flaws and has a reasonable chance of success to fix them. Restructuring can be funded with the resources available to the company.	Uncertain Partial execution or delays are expected. Ability of the management team is questionable and/or the team's incentives are not aligned with shareholders or lender. For example, the management team has been recent replaced, there may be a history of previously failed turnarounds by the same sponsor and/or management team, or the business may be underinvested for its sector and strategy.	Highly speculative The strategy is excessively ambitious or is otherwise unachievable. Management lacks the necessary sector experience, industry networks or workout experience to execute the proposed turnaround plan or no plan has been proposed.	Not credible The management has abandoned a failed strategy, has no new strategy or the new strategy is incoherent. The board of directors may have removed the management team and key leaders or other key stakeholders in the business may have departed.

Key Rating Considerations for Distressed Credits (Cont.)

Factor	CCC+	CCC	CCC-	CC
Cash flow profile	Mostly negative The company has unpredictable and mostly negative cash flow with little leeway to mitigate market or operational risks. There is low visibility on customer and/or supplier behaviour which distorts operating cash flow. The company has some discretion on spending to reduce the pace of cash burn.	Consistently negative FCF is consistently negative due to excessive cash interest payments, permanently adverse working-capital dynamics, inability to reduce capex and/or restructuring costs.	Accelerating cash outflow Exceptional items and poor operating performance led to increasingly uncertain and negative FCF. Other factors such as contingent liabilities, regulatory fines, and volatile working capital may increase both the pace and magnitude of cash outflows. A reduction in discretionary spending such as growth capex is unlikely to arrest the negative impact on liquidity.	Irreversible outflow The magnitude of mandatory expenditures such as payments to suppliers, tax authorities, regulators or other parties far exceeds the ability of the firm to generate cash.
Leverage profile	Significant outlier The leverage profile is considered excessive against sector and rated peers with unclear prospects of deleveraging under the rating case. Under stable business, economic and financing conditions the business may support the over-levered balance sheet for several years, or until debt maturity, without incurring a payment default.	Unsustainable Capital structure is unsustainable and exceeds the cash generative properties of the business. Leverage does not reduce or even increases due to payment in-kind debt component, a continuous reliance on additional debt to close liquidity gaps or deteriorating cash flow under the rating case. Payment default under financial obligations is a real possibility in the next 24 to 36 months, even under stable business, economic and financing conditions.	Disproportionate and increasing Disproportionate financial leverage, which consistently increases regardless of the underlying trading and economic environment. Payment default under financial obligations is a real possibility in the next 12 to 24 months unless restructured.	Unrecoverable A persistent decline in operating performance combined with onerous debt terms including increasing PIK interest, accrued preferred dividends, and the termination of uncommitted facilities leave no possibility of repayment. Principal default is expected within 12 months.
Governance/ financial policy	Ineffective Management plans lack sufficient detail to preserve cash or to rationalise the capital structure. Equity injection from existing shareholders may provide a temporary financial cure upon distress. However, it is not sufficient in the medium term to protect creditors' position. Equity investors are supportive of the turnaround plan but the extent of that support may be uncertain.	Uncommitted Conflict between business management and owners exposes absence of commitment on the equity side. The perception may be that the owners have "walked away". Limited ability or willingness of the shareholders to cure financial distress due to the magnitude of the addressable economic or financial losses or a low strategic importance of the company to the business owners.	Hostile The relationship between business management and owners is detrimental to executing on financial policy. There are no realistic prospects of securing new equity from existing or new investors to cure financial distress. Multiple stakeholders may be simultaneously pursuing divergent and contradictory courses of action. A fragmented investor base may make any agreement highly unlikely.	Inevitable balance sheet restructuring The company has hired debt restructuring advisors to facilitate negotiations with its lenders or it is likely to file for court protection in the next twelve months. The company may have entered pre insolvency procedures, entered into a standstill agreement prior to payment default, or announced plans to write down debt.
Refinancing risk	Off market options A timely refinancing is a possibility supported by some operational stabilisation and on terms at a premium to those prevailing in the market. Refinancing options may include amend and extend transactions. Capital markets remain receptive to the issuer, supported by sector traits and/or investors' understanding of the business model and its behaviour through the cycle. High enterprise values (EVs) in the sector suggest strategic asset value	Excessive Timely refinancing looking less likely though possible at above-market rates implied by secondary market prices. Additional financial metrics beyond leverage and interest coverage constrain the ability to refinance such as net debt to EBITDA less capex. Investors may avoid the issuer for idiosyncratic factors or the sector due to uncertain return expectations.	Unavailable Refinancing is considered unlikely with leverage at its current level, though needed within the next 12 to 24 months. Regardless of the capital market conditions prevailing at that time; investors are withdrawing from the sector, or unlikely to commit additional funds due to issuer's idiosyncratic credit issues. Secondary market implies unserviceable interest payments. There is no observable liquidity and arm's length financing is not available, however there remains	Imminent In combination with the distress inherent in a CCC- credit characteristics maturities in excess of available liquidity will occur in the next 12 months. In addition, there is no credible third party support.

Key Rating Considerations for Distressed Credits (Cont.)

Factor	CCC+	CCC	CCC-	CC
	for a potential trade buyer or monetisation of assets.		the possibility that third parties, such as strategic investors, may provide support. Such support may take the form of equity cures, high cost subordinated debt or asset sales. The company has negative equity value or the leverage multiple is greater than the EV multiple	
Liquidity	Minimal headroom Projected liquidity reserves are sufficient for making interest payments and covering essential maintenance investments. Any shortfall in performance against the business plan may exhaust the remaining headroom. Due to impaired internal liquidity generation there are insufficient resources to meet near term principal payments or to fund material additional exceptional expenses. Prospects for securing additional sources of liquidity remain remote. Committed facilities may already be partially drawn and repayment appears unlikely.	Poor/partly funded Total available funding (including internal cash, all committed debt and drawn uncommitted debt) sufficient only to postpone, but not to avoid a liquidity crisis. Asset sale to secure additional liquidity represents high execution risk due to current unfavourable asset price due to such factors as overcapacity, cyclical downturn and/or depressed current commodity prices. The issuer is making use of one time liquidity sources such as fully drawing on the RCF or other committed or uncommitted lines or selling assets.	Unfunded A liquidity crisis is perceived as unavoidable in the next 12 to 24 months unless a fundamental change takes place, such as fresh third-party support. Alternative liquidity sources have been explored and found to be ineffective or unavailable. The debtor has started taking value-diminishing or possibly hostile actions towards creditor interests.	De facto insolvent The financial statements contain a qualified opinion or the auditors express uncertainty regarding the ability of the company to continue as a going concern. Less than 12 months of liquidity remain and all avenues for additional funds have been exhausted. Only an extraordinary intervention from a third party can avoid a liquidity crisis.

Source: Fitch Ratings

Appendix 4: Distressed Debt Exchange

This section describes our criteria for the rating of issuers and any specific instruments that are affected by distressed debt exchanges (DDE). Application is restricted to instruments and other financial obligations held by third-party investors who would usually be expected to exercise all remedies available to them.

When considering whether a debt restructuring should be classified as a DDE, Fitch expects both of the following to apply:

- the restructuring imposes a material reduction in terms compared with the existing contractual terms; and
- the restructuring or exchange has the effect of allowing the issuer to avoid an eventual probable default.

The most common application of these criteria is to bond and loan DDEs, but this does not preclude the criteria's application to other classes of obligation, such as leases or other major contracts. However, in many of these cases, the difference between a DDE and a robust non-public bilateral negotiation occurring in the normal course of business may be slight. In these circumstances, a DDE will only be called when there is compelling evidence of its existence.

The Restructuring Imposes a Material Reduction in Terms

Fitch reviews proposed changes to the existing instrument documentation to assess a material reduction in terms compared to the existing expectations of the lenders. A material reduction in terms could feature one or a combination of the following:

- Reduction in principal;
- Reduction in interest or fees;
- Extension of maturity date;
- Deterioration in form of payment (for example, a change in currency or change from cash to non-cash payment);
- Delay in payment of principal (for example, a change in amortization schedule);
- Weakening of security or claim priority (for example, amendments that change lien priority or the swapping of debt for hybrid instruments or equity; and/or
- Exchanges that require tendering bondholders or participating lenders to consent to amendments that materially impair the position of nonparticipating lenders.

Fitch will review the circumstances of any proposed exchange or restructuring and consider the impact of each of these factors. Fitch would not consider the exercise of a clause in the existing instrument documentation, such as a previously agreed PIK option, as a material reduction in terms.

Our presumption when any of the above is present is that there has been a material reduction in terms, unless it can be clearly shown that creditors would likely be indifferent between the old and new terms.

The Restructuring Has the Effect of Allowing the Issuer to Avoid an Eventual Probable Default

This test asks whether investors face a genuine choice between the proposed terms and the existing contractual terms, or if failure of a large part of the creditor group to accept the exchange would call into doubt the issuer's ability to fulfil the existing contractual terms.

Fitch will apply the relevant parts of its criteria to determine whether it is probable that the issuer would eventually default if it did not execute the restructuring. Fitch will likely focus on factors such as whether the entity has the necessary commitment to avoid a default, whether it has an untenable liquidity profile, use of legal processes to force through the restructuring and access to financing. Fitch will have to make assumptions about the entity's access to market and alternative financing options in order to evaluate the risks.

Fitch's definition of DDE excludes situations where performing companies launch tender offers to amend the terms of their bonds or negotiate to amend their loans to take advantage of market pricing, excess liquidity, expediency or other factors.

Ratings Implications

An issuer that proposes a DDE to its investors would be assigned an IDR in the 'CCC' category due to the real possibility of default. The active pursuit of a DDE by the issuer heightens the probability of a rating downgrade so Fitch would place the IDR on Rating Watch Negative. Fitch will consider a public announcement, private announcement or a credible source of information that the issuer is seeking consent for a DDE as the basis for its rating action.

Fitch would typically move the IDR to 'C' once the DDE has been agreed with investors and a date for the exchange has been set. The IDR would remain at this level until the DDE was executed, at which point the IDR would be lowered to 'RD'.

On completion of the exchange, the ratings of the instruments subjected to the DDE will be downgraded to a level consistent with non-performing instruments, if not at such a level already. The issue ratings will then be withdrawn after a short time, the implementation period, reflecting that those securities have been extinguished in the exchange, if the entire issue was exchanged.

A DDE proposal may target one or more debt issues within an issuer's multi-tiered capital structure and certain debt issues are unaffected. In such cases, unaffected instrument ratings may stay at their existing rating levels and may be placed on Rating Watch. A Rating Watch Negative or Positive for the unaffected issues may reflect their potential ratings following the DDE, depending on analytical visibility of the post-DDE capital structure at the time of this rating action.

These unaffected instrument ratings may temporarily stretch the recovery uplifts beyond the normal Recovery Ratings criteria, but, in order to not create ratings volatility, these instrument ratings can stay at the same rating level.

If Fitch rates the new capital structure and instruments, we would immediately assign the new ratings on completion of the DDE in accordance with these criteria.

Appendix 5: Local-Currency IDR, Foreign-Currency IDR, Operating Environment, Sovereign Rating and Country Ceiling

An issuer's Local-Currency (LC) IDR incorporates the business and financial risks of the entity, as well as risks related to the operating environment. LC IDRs are generally viewed as reflecting the underlying credit quality of the company and incorporate economic/political risk and liquidity and foreign-exchange risks. While LC IDRs measure the likelihood of repayment in the currency of the jurisdiction, they do not account for the possibility that it may not be possible to convert LC into FC or make transfers between sovereign jurisdictions, i.e. transfer and convertibility risks.

The LC IDR incorporates the probability of default for all of an issuer's debt obligations (LC- and FC-denominated) in the absence of T&C risks. This factors in the probability that an issuer under stress will default on all obligations and will not pick and choose specific debt instruments on which to default. Therefore, when the LC Rating is at or below the Country Ceiling, the LC and FC Ratings are equal virtually all of the time.

The LC IDR of a corporate entity may be rated above the sovereign's LC IDR, although sovereign risk factors can often affect a financially strong entity and constrain an issuer's LC IDR at or above the sovereign's LC IDR. The degree to which the corporate LC IDRs are constrained by the sovereign LC IDR depends on a diverse set of factors and circumstances, including:

- type of business and industry position;
- exposure to the local economy;
- product destination and customer location;
- cost structure — local versus imported supplies;
- degree of regulation and importance to public policy goals;
- ownership structure;
- financial strength; and
- debt profile, i.e. capital market debt versus bank debt, and hard-currency versus local-currency debt.

Appendix 6: Exceeding the Country Ceiling

This section describes when an issuer's FC IDR can exceed the applicable Country Ceiling.

When an issuer's LC IDR is above the Country Ceiling of the relevant country, the primary driver of the FC IDR will be the Country Ceiling, which serves as a cap or limit on its FC IDR. When the LC IDR is at or below the applicable Country Ceiling, the LC IDR will be the primary driver of the FC IDR as it acts as a cap on the FC IDR.

Determining if the FC IDR can exceed the Country Ceiling requires two steps: firstly, we determine the applicable Country Ceiling; then, provided the LC IDR is higher than the applicable Country Ceiling, we assess whether the FC IDR can exceed it.

Applicable Country Ceiling: The country from which the issuer's cash flow originates defines the applicable Country Ceiling, regardless of where the company is headquartered or legally constituted. When dealing with multinational corporations with assets, operating facilities and cash flow generation in multiple countries, the approach to decide the applicable Country Ceiling is detailed below.

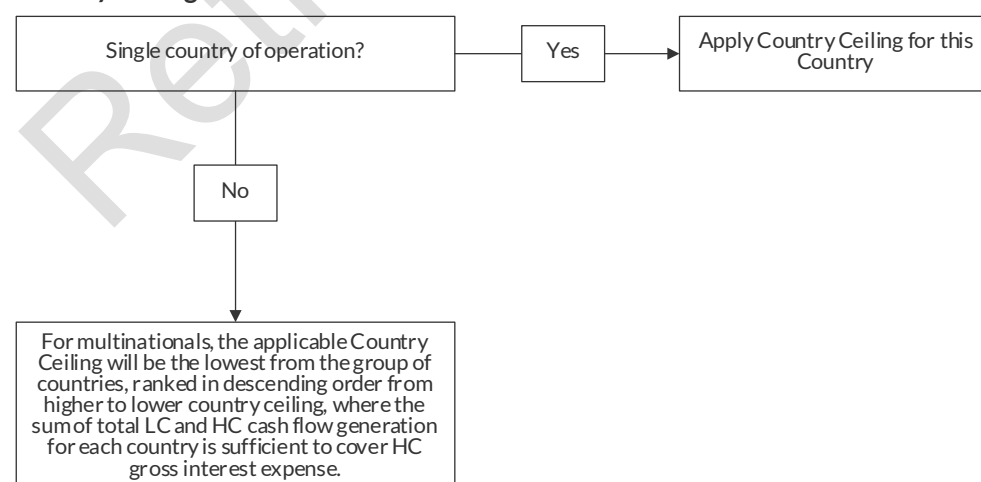
Exceeding the Country Ceiling: Considerations when determining whether a corporate's FC IDR may exceed the applicable Country Ceiling are as follows:

- **Offshore Structural Enhancements:** Debt issues that incorporate credit enhancement and mitigate T&C risks can be rated above the Country Ceiling, often by trapping FC cash flows offshore. This results in sufficient hard-currency (HC) debt-service coverage or debt-service reserves to allow the company to withstand a T&C event.
- **Strong Corporate Entities:** Corporates that are shielded from T&C constraints may also be rated above the Country Ceiling, considering substantial export earnings, foreign assets and offshore production. Support from foreign parents, or strategic partners providing financial support through foreign exchange can also allow the Country Ceiling to be exceeded.
- **Preferential Treatment by the Sovereign:** Issuers that benefit (or previously benefitted) from exemption from T&C constraints may be rated above the Country Ceiling.

Applicable Country Ceiling

Using the flow chart below, Fitch determines which Country Ceiling to apply to a particular corporate issuer.

Country Ceiling Flow Chart



Source: Fitch Ratings

If a certain country has restrictions in directing cash flows to the holding company, that country should be excluded from the list of countries used in assessing the applicable Country Ceiling.

Fitch's proxy for cash flow generation for determining the applicable Country Ceiling is EBITDA. When a detailed split of EBITDA by country of origin is not available, Fitch may use the split of assets and revenues per country and the typical profit margin by type of business as a proxy.

Hard currency (HC) is defined by Fitch as being from a highly developed economy commonly used as a reserve. Fitch considers the following currencies, which are included in the IMF's COFER publications, as reserves: the Australian dollar, Canadian dollar, Chinese renminbi, Euro, Japanese yen, Swiss franc, UK pound and US dollar.

The rigour with which the applicable Country Ceiling is analysed is a matter of practicality, and can be the first step in an iterative process. We will undertake sufficient analysis to allow us to estimate the applicable Ceiling and the allowable uplift, understanding that if we determine that the applicable Country Ceiling caps, or limits, the FC IDR below the LC IDR then we may need to deepen our analysis to be sufficiently informed to assign a final FC IDR. We may also determine that we do not need to form a firm view on the Ceiling of all applicable countries to apply the criteria.

For example, where we determine that HC cash flow generation from a few countries with high Ceilings is sufficient to support a FC IDR equal to the LC IDR, we may not form a view on the Ceilings of other countries generating a small proportion of an entity's cash flows. Likewise, where a high proportion of cash flows is generated from HC EBITDA and the LC IDR is low, Fitch may use an internally generated assessment as a proxy for the Country Ceiling. A rating committee will determine whether the depth of analysis done to determine the applicable Ceiling is sufficient to support the rating being assigned.

Once the applicable Country Ceiling is determined, the next step is to compare it to the LC IDR. If the LC IDR is lower than, or equal to, the applicable Country Ceiling, then the FC IDR is virtually always equal to the LC IDR. If the LC IDR is higher than the applicable Country Ceiling, Fitch uses the following framework to determine whether any notching of the FC IDR above the Country Ceiling is appropriate.

Framework for Notching Above the Country Ceiling

The effectiveness of financial structures, or incentives that limit a sovereign's capacity or willingness to impede an issuer's external debt service are considered as key elements that may allow an issuer's FC IDR to be rated above the applicable Country Ceiling.

Although a balance-of-payments crisis and the controls imposed as a result could last longer than six to 18 months, Fitch believes that the duration – or the interruption of private-sector debt service associated with it – will be short. With this in mind, Fitch assesses the adequacy of offshore cash reserves and cash-generation ability when rating an entity above the Country Ceiling.

If cash abroad (including future cash generation and available committed lines) covers at least 12 months of HC external debt service (including debt amortisation and interest), then a rating above the Country Ceiling is possible. Likewise, should the coverage of HC external debt service fall short of 12 months' coverage, but other factors strongly mitigate T&C risks, Fitch could still rate a company above the Country Ceiling.

Factors that may allow an issuer's FC IDR to be rated above the applicable Country Ceiling are as follows.

Offshore Structural Enhancements

HC external debt service in excess of 18 months could warrant more than a one-notch uplift from the Country Ceiling. As most sovereign crises do not usually last beyond two to three years, Fitch could go three notches above the Country Ceiling if HC external debt service of 1.5x or higher is maintained for a minimum period of two years on a forward-looking, rolling basis. Fitch will look at the trend, and thresholds do not need to be exactly met each year.

Fitch monitors the size of assets and cash flows held offshore over time. The quality and liquidity of offshore funds are likewise critical, with cash and cash equivalents held in highly rated financial institutions (investment-grade or at least three notches above the applicable Country Ceiling) and high-credit-quality instruments.

Many companies with ratings above the Country Ceiling are exporters with FC-denominated income streams, which are captured and retained offshore. From a practical perspective, these could be used to service external debt. FC trapped and held abroad is often an important driver of ratings above the Country Ceiling.

Despite the risks of government interference with FC cash flows, Fitch believes governments acknowledge the importance of a balance between appropriating an exporter's HC and allowing it to maintain sufficient HC to meet obligations and to avoid damaging the country's export capacity. As a result, Fitch discounts export EBITDA by 50% when assessing the capacity of an issuer to service its HC debt through the imposition of foreign currency exchange controls.

Fitch considers changes to laws and regulations that allow or prohibit companies from maintaining adequate funds offshore, i.e. surrender requirements. Often, lower-rated sovereigns require exporters to surrender or repatriate export proceeds within a certain period, e.g. within 180 days of export.

After factoring in a payment lag of 30 to 40 days, this provides a four- to five-month cash cushion that could be used for debt service in a crisis. Some foreign companies, as a result of transfer pricing rules, can permanently keep a certain percentage of gross export proceeds abroad and do the same with proceeds from any overseas asset sales.

Country Ceiling Uplift Guide, Exports and Offshore Operations

Notch uplift guidance above the applicable country ceiling	Debt-service coverage ratio ^a (x)	Minimum number of years maintaining HC external debt service
+ 1	1.0-1.5	1
+ 2	>1.5	1.5
+ 3	> 1.5	2

^a 50% of HC EBITDA from exports + offshore operating EBITDA + offshore readily available cash and qualifying collateral + offshore committed undrawn credit facilities and liquidity facilities)/HC external debt service.

Note: Upward notches of more than three are possible in limited circumstances. The HC external debt-service coverage should be maintained throughout the rating-case forecast period.

Source: Fitch Ratings

As summarised in the table above, Fitch's core approach is to assess the issuer's ability to service HC external debt, which includes interest and debt amortisation (excluding short-term trade finance) from recurring HC and LC cash flow generation or available liquidity, which the company can choose not to re-route to the country or countries where the Country Ceiling is applicable. This typically includes:

- HC export EBITDA: 50% from the applicable Country Ceiling country or countries,
- Offshore HC and LC EBITDA generation from subsidiaries or operations in all countries, excluding the country from the applicable Country Ceiling, provided that the Country Ceiling rating of the countries where the operations are located is (at a minimum) in the same rating category or up to three notches lower than the applicable Country Ceiling;
- Assets offshore, especially HC liquid assets defined by Fitch as readily available cash (for example, as a result of rules allowing exporters to maintain cash balances offshore) that are available for HC external debt service. Fitch may consider readily marketable collateral assets with resilient valuation as well as readily available cash deposited regularly in accounts of financial institutions rated investment-grade or at least three notches above the applicable Country Ceiling; and
- Committed credit lines and committed liquidity lines in HC from highly rated international banks that are available to pay FC debt offshore, especially credit lines without a meaningful material adverse change clause that enable corporations to draw upon committed facilities in FC in the event of a sovereign crisis or other risk events.

When dealing with multinationals that have debt allocated in different countries (regardless of the currency), Fitch also includes the debt service of those countries (both HC and LC) that are used in the calculation of the HC debt-service coverage when applying the framework to notch above the Country Ceiling.

Support from Foreign Owner/Partner

A strong foreign owner or a strategic partner that could be relied on as a source of HC foreign exchange and other financial support in the absence of a formal guarantee may allow an issuer FC IDR to be rated above the applicable Country Ceiling.

Preferential Treatment by the Sovereign

A record of historical preferential treatment by the sovereign, including exemption from past T&C constraints, exemption from surrender requirements for export proceeds, and favourable tax treatment.

No Limit on Notching Above the Applicable Country Ceiling

Fitch does not impose a limit on notches above the Country Ceiling, as the risk mitigation could in some cases be sufficient to warrant a rating that is multiple notches above the Country Ceiling.

More than three notches uplift above the Country Ceiling is reserved for credits with a strong, supportive foreign parent and/or substantial multinational operations ensuring the company has clear financing sources outside the purview of the sovereign or sovereigns of the applicable Country Ceiling or Ceilings. Such substantial risk mitigation can occur, for example, in the case of a company with a highly rated foreign parent deemed very likely to support its subsidiary's debt-service obligations. See Parent and Subsidiary Linkage Rating Criteria for further details.

However, any uplift of the FC IDR would still be limited to the LC IDR of the issuer as the LC IDR acts as a cap to the FC IDR.

Examples of Multinational's Applicable Country Ceiling and Notching Above the Country Ceiling

Each example assumes that HC gross interest expense is 25, the Country Ceiling is equal to the sovereign rating, and the entity is domiciled in a 'B' rated sovereign with fully owned subsidiaries in the other countries.

In all the examples below, we assume that the issuer has HC export EBITDA. This is a component of the HC EBITDA figure and the total EBITDA figure that is used to determine the applicable Country Ceiling. For simplicity, the actual HC export EBITDA figure is not provided for the purposes of calculating the debt-service coverage ratio.

Example 1

Country Ceiling	LC EBITDA	HC EBITDA	Total EBITDA
BBB+	10	10	20
BBB	15	15	30
BB	10	15	25
BB-	5	20	25

Source: Fitch Ratings

The applicable Country Ceiling is 'BBB' as total LC and HC EBITDA from country 'BBB+' and country 'BBB' are enough to cover the HC gross interest expense of 25. The applicable Country Ceiling is set at the lower level of these two countries, i.e. 'BBB'.

When calculating the debt-service coverage ratio to assess whether to notch above the Country Ceiling relative to the HC external debt service, only the HC and LC (10 + 10) of EBITDA generated in the 'BBB+' country, the LC and HC (10 + 15) of EBITDA generated in the 'BB' country and 50% of HC EBITDA from exports (figure not provided) in the 'BBB' country can be considered.

The LC and HC EBITDA generation in the 'BB-' country cannot be included as it comes from a country whose rating is more than three notches away from the 'BBB' applicable Country Ceiling.

Example 2

Country Ceiling	LC EBITDA	HC EBITDA	Total EBITDA
BBB	10	10	20
BB	5	10	15
B+	15	20	35
B	20	10	30

Source: Fitch Ratings

The applicable Country Ceiling is 'BB' as total LC and HC EBITDA from country 'BBB' and country 'BB' are enough to cover the HC gross interest expense of 25. The applicable Country Ceiling is set at the lower level of these two countries, i.e. 'BB'.

When calculating the debt-service coverage ratio to assess whether to notch above the Country Ceiling relative to the HC external debt service, all LC and HC EBITDA from the 'BBB', 'B+' and 'B' countries as well as the 50% of HC EBITDA from exports (figure not provided) from the 'BB' country can be considered.

Example 3

Country Ceiling	LC EBITDA	HC EBITDA	Total EBITDA
BBB	10	10	20
BB	10	10	20
BB-	10	10	20
B	10	10	20
B-	10	10	20

Source: Fitch Ratings

The applicable Country Ceiling is 'BB' as total LC and HC EBITDA from country 'BBB' and country 'BB' are enough to cover the HC gross interest expense of 25. The applicable Country Ceiling is set at the lower level of these two countries, i.e. 'BB'.

When calculating the debt-service coverage ratio to assess whether to notch above the Country Ceiling relative to the HC external debt service, all LC and FC EBITDA from the 'BBB', 'BB-' and 'B' countries as well as 50% of the HC EBITDA from exports (figure not provided) from the 'BB' country can be considered. The LC and HC EBITDA generation in the 'B-' country cannot be included as it comes from a country with a rating more than three notches away from the 'BB' Country Ceiling.

Appendix 7: Rating Investment Holding Companies

This section describes how we rate investment holding companies (IHCs). This should be read in conjunction with the Rating Navigator for IHCs included in the Sector Navigators - Addendum to the Corporate Rating Criteria.

Definition of IHC

Fitch defines IHCs as corporate entities whose main activity comprises holding generally non-controlling stakes in other companies for the purpose of generating capital gains and dividend income on a long-term basis. Operational integration between the various investments is normally non-existent, with completely separate funding arrangements.

What differentiates IHCs from industrial conglomerates is mainly the lack of control, lack of operational integration, funding being organised on a strictly separate basis, and the ultimate intention to dispose of the investments to generate capital gains, albeit with a relatively long time horizon. Conversely, conglomerates tend to control their various investments and integrate them at least within each business line, with a more centralised approach to funding. Conglomerates' investments are generally not held for the purpose of creating capital gains to be realised.

Issuers that share characteristics of both IHCs and industrial conglomerates would be analysed on the basis of this framework when the subsidiaries representing the majority of the value of the group are not controlled, or the various subsidiaries are held by the holding company as investments rather than as integrated businesses.

Holding companies with mostly controlling stakes in subsidiaries with significant operational integration and a more centralised approach to funding would be analysed on the basis of Fitch's Parent and Subsidiary Linkage Rating Criteria.

Holding companies where the majority of portfolio equity value is not derived from corporates (from financial institutions, for example) would be covered under the relevant sector's criteria (Non-Bank Financial Institutions Rating Criteria, for example).

The framework does not cover investment companies, investment funds nor alternative asset managers (such as private equity firms and hedge funds). Depending on their objectives, investment funds tend to hold a larger number of investments in a portfolio to reduce single-name risk. As a consequence of the larger number of holdings, most investment companies/funds are usually more passive investors, whereas IHCs tend to influence the strategy of the companies they are investing in. Investment companies/funds can be rated under Fitch's Non-Bank Financial Institutions Rating Criteria.

IHCs Versus Conglomerates and Investment Companies/Funds

	IHCs	Conglomerates	Investment companies/funds
Operational integration	None.	Strong within each business line. More modest across business lines.	Typically low.
Number of investments or business lines	Generally between five and 10 investments account for the bulk of the portfolio's equity value.	Usually fewer than five business lines but there may be a large number of controlled, integrated companies.	Full spectrum.
Stability of portfolio	Long-term investments with holding periods typically extending over several years.	High.	Ongoing rebalancing of investments.
Control	A few percentage points to large minority stakes and, possibly, some controlling stakes. Influence over strategy but not control.	Mostly controlling stakes. Strategy dictated by holding company.	Generally small stakes only. Usually little or no influence on strategy or management.

IHCs Versus Conglomerates and Investment Companies/Funds (Cont.)

Funding	Strictly separate financing of holding company and the various investments.	Some centralised funding.	Strictly separate financing of the investment fund and the investments.
Value creation	Capital gains and dividend income.	Improve cash flows from operations, consolidated earnings.	Capital gains and dividend income.
Source of debt repayment	Usually sale of investments or introduction of new capital.	Cash flows.	Sale of investments.
Key risks	Liquidity and access to capital – the latter driven by asset liquidity and ability to monetise, investment portfolio valuation volatility and financial risk.	Volatility of cash flows.	Liquidity of investments and their value, dividend volatility and investor demand.
Covered by these criteria?	Yes	No	No

Source: Fitch Ratings

While the focus of this framework is on IHCs, which have a number of investments, they also cover holding companies with a minority stake in a single corporate entity.

In addition, we may assess a holding company as an IHC even if it holds majority stakes in investments if: it tends to exert moderate influence over the strategy, rather than tight control of the investment; there is little operational or organisational integration between the two; funding is strictly separate; and/or investments are expected to be sold for capital gains, albeit with a long time horizon.

Only elements that are materially different in the application of the umbrella framework guiding our ratings for corporate issuers to IHCs are described below.

Operating Environment

The operating environment (OE) solely reflects the primary location of the IHC itself. Specifically, the Economic Environment for an IHC is likely to be where it headquarters and principal, non-investment assets are located and where its staff are employed and its tax jurisdiction. In contrast, for other multi-jurisdictional corporates, the OE incorporates a blended assessment of the countries in which the corporates operate.

Management and Corporate Governance

This factor focuses solely on the IHC itself; assessment of these factors for the IHC's investments is captured in the Weighted-Average Portfolio Credit Strength by Equity Value sub-factor of the Portfolio Credit Characteristics Key Factor.

Transparency and Execution of Investment Strategy

Clear, well-articulated investment guidelines benefit our assessment of an IHC's attitude to investment risk by providing transparency and improving the predictability of future investment or monetisation events.

Fitch also assesses a company's adherence to its guidelines, as a clearly articulated strategy becomes less meaningful the more frequently an IHC deviates from it to make opportunistic decisions contrary to its stated strategy.

Public strategy commitments would be considered stronger than private policies. Where the strategy is not explicitly articulated, Fitch will consider a strategy that is readily apparent, from a long-term history of investments and divestments, commensurate with an 'bbb' assessment. A strategy that is only somewhat apparent would only be assessed as 'bb'.

Risk Appetite and Investment Track Record

An IHC's risk appetite and its risk assessment and management framework will affect its credit profile. For example, cash generated by the investment portfolio and portfolio equity value are

likely to be more stable if the business and financial risks of investments are lower. Therefore, Fitch assesses the IHC's attitude to the investments' risk – for example, stability and maturity of their markets and their market positions, consistency of dividends disbursed, financial leverage and financial flexibility – as well as the IHC's investment risk assessment framework and investment decision-making processes, where possible.

Although the overall portfolio investment record will generally be reflected in the financial performance of the IHC, we also review investment returns – value accretion and cash flow generation – against stated targets and broader market performance indicators. Where possible, we assess these returns in comparison to investments with similar risk profiles. For example, a single technology-sector investment returning more than the all-sector market index might be assessed as having a weak return if it has not performed as well as a broad technology index over the same period.

A record of poor returns – for example, repeated material write-offs, or aggressive investment decisions – would generally not be consistent with an investment-grade rating.

Portfolio Diversification

A well-diversified investment portfolio will generally offer greater stability of equity value or dividends generated than one with greater concentration, as sector-specific or geographical market-specific fluctuations will have less overall impact.

Fitch will consider a portfolio of assets as well diversified if either geographical market or sector diversification is very strong, even if concentration exists in the other metric. Similarly, Fitch will consider a portfolio of assets as moderately diversified, even if it presents a strong bias towards a single geographical market or sector, provided it is well diversified according to the other metric. If geographical exposure is to a single but large economy, Fitch will consider regional diversification within this large economy when assessing geographical diversification.

Where the equity value share of the largest asset indicates a different category from that indicated by the equity value share of the top-three assets, Fitch will generally take the lower category as its assessment for the Asset Value Concentration sub-factor.

Portfolio Credit Characteristics

Fitch assesses the average credit quality of the asset portfolio – weighted by equity value of investments – to provide an indication of both the quality of investments and the risk of equity value falling sharply from investments' financial distress and/or material decline of dividend distributions to the IHC. Because these risks do not change in a linear manner across the rating scale – the probability increases rapidly towards the lower end of the rating spectrum – we weight each investment's credit quality using the following Weighted Average Rating Factors (WARF), which are derived from 10-year observed default frequencies.

Rating Factors

Credit Strength	Rating Factor	Credit Strength	Rating Factor
aaa	0.136	bb+	8.903
aa+	0.349	bb	11.844
aa	0.629	bb-	15.733
aa-	0.858	b+	19.627
a+	1.237	b	23.671
a	1.572	b-	32.221
a-	2.099	ccc+	41.111
bbb+	2.630	ccc	50.000
bbb	3.162	ccc-	63.431
bbb-	6.039		

Source: Fitch Ratings

The following table shows an example of the calculation of Weighted Average Portfolio Credit Strength using the WARF approach.

Example – Calculating Weighted Average Portfolio Credit Strength

Asset	Share of portfolio equity value (%)	Credit strength	Rating factor (WARF)	WARF x share of portfolio equity value
Asset 1	31	b	23.671	7.3
Asset 2	28	bbb-	6.039	1.7
Asset 3	22	bbb+	2.630	0.6
Asset 4	19	a-	2.099	0.4
total	100			10.0

Closest to bb+ on WARF scale

Source: Fitch Ratings

In this example, the Weighted Average Portfolio Credit Strength by Equity Value is 'bb+' as this is closest to 10.0 (the aggregate of the final column in the example table) in the WARF table.

For this purpose, the credit strength of the investment is evaluated using the Corporate Rating Criteria, leveraging the relevant Sector Navigator and/or peer analysis. Where the investment is not covered by Fitch's Corporate Rating Criteria, we will apply the principles of the appropriate criteria – e.g. [Infrastructure & Project Finance Rating Criteria](#), Bank Rating Criteria or Non-Bank Financial Institutions Rating Criteria – to assess the investment's credit strength.

A Rating or Credit Opinion of the investment is not required as the credit quality of each investment is one of many inputs in assessing the credit profile of an IHC. Fitch will aim to form an assessment of the credit strength of 85% of the IHC's investment portfolio by value, as a minimum. Where this is not possible, Fitch will disclose the proportion of the portfolio value assessed, the reasons why the 85% threshold has not been met, and an explanation of why not meeting the threshold has no impact on the IHC's rating.

Our assessment of the individual credit strength of investments is on an LC basis; it incorporates the business and financial risks of the entity, as well as the risks relating to the OE. It excludes any Country Ceiling constraint, which reflects the risk that T&C restrictions could be put in place, which affects only the FC credit strength. This reflects the low likelihood that T&C restrictions would be in place simultaneously across all relevant jurisdictions. Our approach to T&C risks is further described on below in the *Transfer and Convertibility Risks* section, including when Country Ceilings may become relevant for investment portfolios with concentrated geographic exposure.

We also evaluate the quality and frequency of information available on investments, as this will affect Fitch's ability to monitor equity valuation and dividend generation. The Investments' Financial Transparency sub-factor is a negative modifier in the Portfolio Credit Characteristics factor; low transparency would affect our overall assessment of the Portfolio Credit Characteristics factor, but high transparency is unlikely to lift this factor. The transparency assessed relates only to the investments, as IHC-level transparency is assessed in the Management and Corporate Governance factor.

Where the Portfolio Credit Characteristics factor is assessed at 'bb' or below and is weaker than most of the others, Fitch would generally assign it a "Higher" relative importance in our Navigator assessment because the equity value of investments can deteriorate rapidly if they approach financial distress and default.

Financial Structure

As IHC's maturing debt is generally replaced with similar debt or repaid on asset monetisation, measures of debt to cash flow are generally less relevant for IHCs than for other corporates and LTV metrics better capture the funding profile of IHCs. IHCs can monetise investments to reduce debt or use equity in invested assets as security to access the debt market. Therefore, IHCs with lower LTVs have greater ability to raise debt, and/or are likely to have to monetise less of their investment portfolio, to replace maturing debt.

We assess LTVs on a gross and a net-of-cash basis. For unlisted stakes, equity value is estimated using relevant market measures, such as similar peers' enterprise value/EBITDA or price/earnings ratios. Some IHCs may maintain a higher cash buffer for risk management purposes – to address unforeseen liquidity needs related to debt servicing – or as a war chest

for investments, or both. We would give more weight to net LTVs, where such cash is deducted from debt in the numerator, if a cash balance is consistently maintained for risk mitigation purposes.

Portfolio valuation tends to be volatile, especially if an IHC's portfolio is concentrated in a relatively limited number of holdings, and monetisation can be difficult, especially if an IHC holds relatively large stakes. In addition, there can be a rapid deterioration in equity value should the investment fall into financial distress. For these reasons, the LTV consistent with each rating level is relatively low.

Fitch also calculates LTVs on a stressed valuation basis because of the potential volatility of portfolio equity value. In the case of listed stakes, Fitch haircuts the current share price by three times the standard deviation of the month-on-month percentage change in the average share price (calendar month basis) observed in the shorter of 10 years or the longest available period. For unlisted stakes, Fitch takes a more conservative approach to valuation using relevant market measures or uses a listed peer's haircut — as previously described — as a proxy. Greater weight would be placed on the stressed LTV when there is a significant difference (a category or more based on the Rating Navigator) between the unstressed and stressed LTVs, indicating greater volatility of value of the portfolio.

IHCs with illiquid portfolio assets or which are very reluctant to raise capital by selling down assets — including being unable to divest due to commitment to maintain a minimum level of ownership — will be more reliant on cash generated by investments to raise and service debt. For these IHCs, we are likely to give more weight to cash flow-based leverage — IHC-level debt/recurring cash received sub-factor — rather than LTV. Recurring cash received comprises dividends, fees and any similar recurring income.

Fitch also assesses the currency mismatch between an IHC's debt and the equity value of, or cash receipts from, its investments. The greater the mismatch, the higher the risk that leverage and debt servicing will be affected by currency movements. This is an asymmetric factor; a weaker score on this sub-factor may weigh on the overall score for the Financial Structure factor but a stronger assessment than other sub-factor scores will not raise the factor assessment.

Financial Flexibility

Financial Flexibility is key to an IHC's credit strength and is assessed through the following five sub-factors. In general, IHCs meet their capital obligations from monetisation of assets, like-for-like replacement funding or unused liquidity rather than from cash flows accrued from investments. Therefore, Asset Liquidity and Readily Available Liquidity are often of greater importance to Financial Flexibility than the IHC Cash Cover and the Stability and Control of Recurring Cash Flows.

Asset Liquidity

The ability to dispose of investments easily is an important source of financial flexibility. Broad portfolio diversification helps preserve an ability to sell assets at all times, whereas concentration in assets from one single emerging market, for example, could be viewed negatively because the depth of these markets tends to be relatively limited. The focus of the assessment is on an IHC's ability to sell down its investment reasonably quickly without triggering a significant decline in the value of the assets.

The following table provides examples of the types of assets expected for each assessment category.

Examples of Portfolio of Assets

Rating	Description of Portfolio
a	Portfolio of assets where a deep, established market exists, investment-grade assets and widely distributed securities.
bbb	Portfolio of assets where market demand exists, albeit relatively less stable compared with the 'a' rating category, investment-grade assets and widely distributed securities.
bb	Portfolio of assets where market demand exists, but could be susceptible to some modest stability concerns, investment- or non-investment-grade assets and moderately wide security distribution.
b	Portfolio of assets may include non-investment-grade assets, unlisted/material concentrated shareholdings potentially with limited free float, listed assets with significant impediments to sale, assets that are highly susceptible to market sentiment and assets with significant restrictions on disposal, weak emerging-market assets.
ccc	All, or almost all, of asset portfolio is unlisted, listed with limited float, or unable to be readily monetised for any other reason

Source: Fitch Ratings

Readily Available Liquidity

Refinancing is a key risk for IHCs as their cash flow leverage tends to be high and generally debt cannot be reduced significantly through cash distributed from assets. Sale of assets or refinancing is usually needed to repay maturing debt.

Selling investments and refinancing maturing debt may be difficult during periods of market disruption. In addition, dividends received could be under stress during periods of economic uncertainty. It is therefore important for IHCs to keep a sufficient buffer of liquidity to cover such periods and avoid clustering of debt repayments. Liquidity buffers should therefore cover a longer period than for a typical non-financial corporate entity.

We define the Readily Available Liquidity score with reference to the number of months (as defined in the Rating Navigator) for which the following liquidity ratio exceeds 1.25x, where FCF and debt maturities are over the number of months specified in the Rating Navigator:

$$\frac{\text{(cash + available undrawn committed credit lines with ample covenant headroom + free cash flow)}}{\text{(debt maturities)}}$$

We may also deduct capital funding and investments commitments in the numerator, where we believe these are likely. Highly liquid assets can be considered to offset a temporary liquidity shortfall.

IHC Cash Cover

Fitch uses cash cover to assess an IHC's ability to sustainably cover interest obligations, its own operating costs and tax, from recurring cash received. It is an indicator of an IHC's ability to meet recurring commitments without drawing on credit facilities, raising new capital or monetising assets.

IHC cash cover is defined as:
$$\frac{\text{Recurring cash received}}{\text{IHC's [interest + tax + expenses]}}$$

Stability and Control of Recurring Cash Flows

Both the likelihood of future dividend stability — informed by past variability and the likelihood of restriction on investments' dividends in the future — and the ability to influence investments' dividend distribution policies can lead to greater certainty over the ability to meet interest commitments without raising new capital or monetising assets.

Financial Discipline

We assess an IHC's financial discipline, similar to all other corporate Sector Navigators. Our focus is on the clarity and conservatism of the financial policy, as well as adherence to stated policy.

While access to capital is a form of financial flexibility, we assess it separately because weak access to capital has the ability to significantly constrain an IHC's rating. IHCs with access to many and deep capital markets will be better able to raise funds to meet obligations should other sources of liquidity be inadequate or unattractive. Limited unencumbered investments — i.e. unpledged shares in investments — can also weaken an assessment, as this indicates lower flexibility to raise additional funding.

Transfer and Convertibility Risks

Fitch considers it unlikely that T&C controls will be imposed in multiple jurisdictions at the same time thus reducing the relevance of Country Ceilings for IHCs with geographically diversified investment portfolios. Nonetheless, investments' Country Ceilings may become relevant to our analysis of portfolios with geographic concentration because the imposition of T&C controls can affect an IHC's ability to:

- get full value for monetisation of investments to a buyer willing to pay in an unaffected currency, as a buyer is likely to discount any offer in such circumstances; and
- meet FC obligations from cash flows upstreamed by investments, or from proceeds received in the local currency of the investment from the monetisation of shares.

Fitch will generally cap an IHC's LC IDR at the Country Ceiling of any jurisdiction that accounts for 75% or more of the IHC's portfolio equity value. Fitch will reflect a meaningful exposure to any jurisdiction, 50% to 74% of its portfolio equity valuation, by capping the Portfolio Credit Characteristics factor at the Country Ceiling. In both these cases, this approach is taken only if the investments' FC credit quality is constrained at the level of the Country Ceiling.

Under [Appendix 6: Exceeding the Country Ceiling](#), an individual investment's FC credit quality may be notched above the Country Ceiling or the Country Ceiling may not apply if there are substantial multinational operations that ensure the company has clear financing sources outside the purview of the sovereign. In the latter case, the FC credit quality would be the same as the LC credit quality.

Where an investment's FC credit quality is not constrained by the Country Ceiling — i.e. it is the same as the LC credit quality — that investment's value is excluded from the numerator of the above ratio to assess whether the 75% or 50% thresholds are met.

Where an investment's FC credit quality is constrained because it is notched above the Country Ceiling, the applicable cap on the IHC LC IDR or Portfolio Credit Characteristics factor will be at an average of the Country Ceiling-constrained investment FC credit profiles in that jurisdiction, weighted by applicable equity value.

These provisions of the previous two paragraphs only apply where the investment's FC credit quality exceeds the Country Ceiling due to operations or committed credit lines outside the jurisdiction of the Country Ceiling. They do not apply if the investment's FC credit quality exceeds the Country Ceiling solely due to implied support from the IHC.

See the table below for an example where an IHC has two investments, X and Y, in a jurisdiction with a Country Ceiling of 'B-'.¹

Country Ceiling Impact Examples

Asset X share of portfolio value (%)	Asset Y share of portfolio value (%)	Asset X FC credit quality	Asset Y FC credit quality	Impact	Rationale
40	20	Constrained to 'B-'. (i.e. FC = LC)	Constrained to 'B-'. (i.e. FC = LC)	Portfolio Credit Characteristics factor capped at 'B-'. (i.e. FC = LC)	The total value of constrained FC assets greater than 50% but less than 75%.
20	55	Constrained to 'B-'. (i.e. FC = LC)	Constrained to 'B-'. (i.e. FC = LC)	IHC's LC IDR capped at 'B-'. (i.e. FC = LC)	The total value of constrained FC assets 75% or greater.
55	20	Unconstrained at 'B+'. (i.e. FC = LC)	Constrained to 'B-'. (i.e. FC = LC)	No impact	Asset X's FC credit quality is unconstrained by the Country Ceiling, therefore less than 50% (i.e. 20%) of the portfolio value is affected by Country Ceiling.
40	40	Constrained to 'B-'. (i.e. FC = LC)	Constrained to 'B+'. (i.e. Country Ceiling + 2 notches)	IHC's LC IDR capped at 'B'. (i.e. FC = LC)	The total value of constrained FC assets 75% or greater. Cap at value-weighted average of constrained credit qualities.
30	30	Constrained to 'B-'. (i.e. FC = LC)	Constrained to 'B+'. (i.e. Country Ceiling + 2 notches)	Portfolio Credit Characteristics factor capped at 'B'. (i.e. FC = LC)	The total value of constrained FC assets greater than 50% but less than 75%. Cap at value-weighted average of constrained credit qualities.
25	55	Unconstrained at 'B+'. (i.e. FC = LC)	Constrained to 'B+'. (i.e. Country Ceiling + 2 notches)	Portfolio Credit Characteristics factor capped at 'B+'. (i.e. FC = LC)	The total value of constrained FC assets greater than 50% but less than 75%. Cap at value-weighted average of constrained credit qualities.
25	55	Unconstrained at 'B-'. (i.e. FC = LC)	Constrained to 'BB-'. (i.e. Country Ceiling + 3 notch)	Portfolio Credit Characteristics factor capped at 'BB-'. (i.e. FC = LC)	The total value of constrained FC assets greater than 50% but less than 75%. Cap at value-weighted average of constrained credit qualities.
30	60	Constrained at 'B-'. (i.e. FC = LC)	Constrained to 'BB-'. (i.e. Country Ceiling + 3 notch)	IHC's LC IDR capped at 'B+'. (i.e. FC = LC)	The total value of constrained FC assets 75% or greater. Cap at value-weighted average of constrained credit qualities.

Source: Fitch Ratings

Fitch may not cap an IHC's LC IDR, or Portfolio Credit Characteristics factor, if there are mitigating considerations such as:

- very robust liquidity at the IHC — excluding monetisation of assets or cash flows from investments in the jurisdiction of the potential cap; or
- clear and credible near-term path to materially reduce the exposure to the jurisdiction of the potential cap. This could involve the IHC actively working towards geographic diversification or our expectation that concentration of value is due to short-term market volatility.

In any case, an IHC's FC ratings will generally be constrained by the Country Ceiling of the jurisdiction in which the IHC itself operates.

Appendix 8: Sector Navigators

Structure of Navigator

Key Factors: Each Navigator includes a Sector-Risk Profile, an Operating Environment assessment, five Business Profile factors and three Financial Profile factors. Each Key Factor is captured on the Navigator as a three-notch wide range rather than a notch-specific assessment to provide a better reflection of the qualitative nature of the factor.

Sector-Risk Profile: This identifies typical upper boundaries for credit ratings, highlighting that not all sectors are conducive to issuers rated in high rating categories.

Operating Environment: This reflects the impact on the issuer's profile of the wider, non-sector-specific context in which it operates. Please see the *Factors Common to All Sectors: Operating Environment* section for further details on how Fitch assesses OE.

Management and Corporate Governance: This factor is common to all Sector Navigators and includes an assessment of the management strategy, the structure and quality of corporate governance, risks related to the group structure and the degree of financial transparency. Please see the *Factors Common to All Sectors: Management and Corporate Governance* section for further details.

Four Sector-Specific Key Factors: These assess the strength of the business profile of the issuer in its sector. These individual factors help position the issuer within the ranges provided under the Sector Risk Profile.

Three Financial Key Factors: Profitability, Financial Structure and Financial Flexibility factors are common to all Sector Navigators. The choice of individual ratios and their mid-points per rating category vary from sector to sector, reflecting the varying risk profile of different sectors.

How the Factors and Sub-Factors Work

Key Factors and Their Sub-Factors

Each Factor is divided into up to five Sub-Factors.

As illustrated in the below example, the left-most column's *Overall Factor Assessment* for each Factor shows the three-notch band assessment for that overall Factor as a whole. The columns further to the right then break down the Sub-Factors, with the title of each Sub-Factor, followed by the selected description appropriate for each Sub-Factor and its corresponding rating category.

Diversification

Overall factor assessment	Sub-factors	Sub-factor selected description	Category
a+	Geographic diversification	Revenue base will spread out geographically	a
a	Commercial vs. defence split	Active in both commercial and defence segments, although one dominates	bbb
a-	Programme/product diversification	Active in a large number of programmes	a
bbb+	Aftermarket presence	Moderate aftermarket presence	bbb
bbb	Customer concentration (non-prime suppliers)	Limited exposure to a particular customer, top customer less than 10% of revenue and top-five programmes less than 30% of revenue	a

Source: Fitch Ratings

The banding for Sector-Risk and OE extend from low 'b' to the upper range of the sector risk profile or OE assessment as the Sector Risk Profile ultimately reflects a form of magnet upon the upper limit of a rating without presenting a floor for the rating, and the OE does not usually have an impact on the rating if it is stronger than the credit profile of the issuer before its impact is considered.

Not all Factors or Sub-Factors have an option to select from all rating categories, acknowledging the lack of observations for some sectors at the highest rating levels. While Sub-Factors common to all sectors such as Corporate Governance are generally defined for the whole range of rating categories, i.e. from 'aa' to 'b', sector-specific Sub-Factors (such as *Commercial Versus Defence Split* in the Aerospace and Defence Navigator) are defined only for rating categories within the upper boundary of the relevant Sector Risk Profile.

In the above example, all Aerospace and Defence-specific Sub-Factors will be defined up to the 'a' rating category as the Sector-Risk profile for aerospace and defence is positioned up to the 'a+' rating level. By contrast, Sub-Factors for Building Materials' Navigators are defined up to the 'bbb' rating category as the Sector-Risk profile for that sector ranges up to the 'bbb+' rating level.

The Sub-Factor assessment is made at the simple rating category level (i.e. 'bbb', 'bb' without + or - modifiers). In contrast, after blending, the three-notch range for the Overall Factor Assessment can straddle rating categories. For example, if the assessment is borderline investment grade, a mid-point of 'bb+' (i.e. a subfactor range of 'bb' to 'bbb-') or 'bbb-' (a subfactor range of 'bb+' to 'bbb') could be indicated.

The Overall Factor Assessment balances each Sub-Factor's strengths, weaknesses and relative influence in the particular case under consideration. The Factor's three-notch mid-point is not expected to be a mathematical average of the Sub-Factors, although in some instances (if they all have equal relative importance) this may be the case. However, it is possible for one Sub-Factor to be of overriding importance in the Overall Factor Assessment.

For example, in the table below, the very weak Governance Structure weighs down heavily on the overall assessment for the Management and Corporate Governance Key Factor. The resulting three-notch band centred on 'bb-' is significantly lower than a simple mathematical average of the sub-factors, which would have yielded a result of 'bb+'.

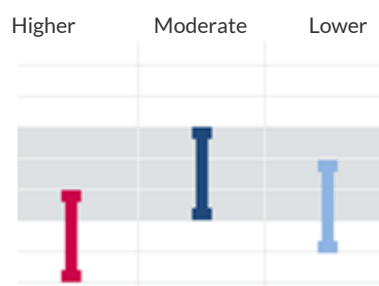
Management and Corporate Governance

Overall factor assessment	Sub-factors	Sub-factor selected description	Category
bb+	Management Strategy	Strategy may include opportunistic elements but soundly implemented.	bbb
bb	Governance Structure	Poor governance structure. Ineffective board with none or token-independent directors. Decision-making in the hands of one individual.	b
bb-	Group Structure	Some group complexity leading to somewhat misleading published accounts. No significant related-party transactions.	bbb
b+	Financial Transparency	Financial reporting is appropriate but with some failings (eg lack of interim or segment analysis).	bb

Source: Fitch Ratings

Relative Importance

All factors are deemed to be of importance in determining the rating but the Relative Importance indicator shows which factors are exerting greater or lesser influence on the final rating at the time of the analysis. The Relative Importance for each factor can be "Higher", "Moderate" or "Lower" and is reflected in the colour of the bar representing that particular factor on the graph: red, dark blue and light blue respectively:



Each rating factor assessment provides three key pieces of information:

- the overall factor assessment - depicted as a three-notch range across the rating scale;
- the Relative Importance of the factor in the credit analysis;
- the outlook for the factor using directional arrows (additional detail below).

Those selected as “higher” indicate the factors which are more significant in determining the overall rating. The Sector Navigator does not employ any explicit factor weightings, primarily because the importance or significance of risk elements can shift rapidly over time and/or differ markedly across issuers at the same time. Further, too much science applied to weightings would imply a mathematical scoring approach fundamentally at odds with the way in which our ratings are determined. For example, an issuer with extremely high leverage may see its Financial Structure and Financial Flexibility Factors input as “higher” and every other factor input as “lower” as they play a very limited role in the rating outcome.

Credit risk is asymmetric, and therefore positive outliers tend to attract lower importance than negative outliers. Credit risk is often affected by the weakest link in a chain rather than a neatly blended average, so high risk factors often attract significantly higher importance than moderate and lower risk factors.

Relative to rating sensitivities quoted in rating research, changes to higher influence factors would typically drive rating changes and therefore tend to be closely aligned to rating sensitivities. There may, however, be instances where a higher-influence factor is considered very unlikely to change and may therefore be less prominent in the triggers for a potential rating change.

Similarly, a moderate influence factor may be significantly more likely to change and may therefore be more prominent in the rating sensitivities. The likelihood a specific factor could lead to a rating change will be a combination of the factor’s absolute level, its relative importance and the speed at which it is changing.

Relative importance means relative to other rating factors for the same entity, not relative to other issuers. If peers are very similar in terms of metrics and business mode, it is likely the relative influence of the various factors will be similar. Issuers in the same peer group with differences in business and financial profiles will usually be mapped differently even if the rating is the same to reflect that different factors will play a greater or lesser role in the rating profile.

The Outlook of the Key Factor

An indication of the outlook for each factor is provided by using arrows to denote “Positive”, “Negative”, “Stable” or “Evolving” trends.

Factor Outlook

Stable Positive Negative Evolving



If the outlook for the rating of the issuer is “Positive” for example, one would expect at least one of the rating factors to show a “Positive” outlook. As the factors are assessed with a through-the-cycle perspective, most outlooks are expected to be set at “Stable”, but especially for the faster-moving financial ratios, non-“Stable” outlooks can still be justified to denote a clear expected directional trend for a particular factor over the next 12-24 months.

The assessment of quantitative financial metrics for an issuer against the reference metrics for its rating category will be made using the entity's financial profile under Fitch's rating case over the next one to two years rather than previous performance. However, if the projected improvement (deterioration) is viewed as particularly uncertain, the positioning of the assessment may be made based on the current year's level and reflect the projected improvement (deterioration) by a "Positive" ("Negative") outlook for the factor.

For example, a leverage reduction based on yet-to-be-finalised asset sale may be reflected by assessing the Financial Structure factor in line with the current credit metrics but with a "Positive" outlook to show the expectation of improvement. If the asset sale is already complete, the assessment can be made on the basis of the expected lower leverage with a "Stable" outlook.

Factors Common to All Sectors

Operating Environment

The Operating Environment (OE) reflects the wider context in which the rated issuer operates, irrespective of its sector. This includes the broad range of factors associated with country risk, which is mostly relevant for companies in emerging markets. The OE is a blend of Fitch's assessment of the Economic Environment, Financial Access, and Systemic Governance for the issuer. The OE does not include the impact of the issuer's country ceiling.

The assessment of the Economic Environment, Financial Market Development and Systemic Governance sub-factors described below is published for selected countries.

There is no formal application of an OE "discount" in the rating analysis, but the factors that compose an OE can explain why entities in weaker markets would be rated lower than similar entities with otherwise similar profiles, in more advanced markets.

As with governance, Fitch holds the OE to be an asymmetric consideration. Companies can both succeed and fail in the most hospitable environments, rendering that environment a neutral consideration, but a higher-risk environment can actively constrain a company's potential.

OE is typically not a consideration in advanced economies. These would be environments where the combined OE is in the 'a' category or higher, which in turn indicates:

- all three sub-factors would be scored at 'a' or above;
- two of the three sub-factors are 'aa' or 'a', and the third factor is higher than 'bb'.

The above combinations are the case in most developed markets, including the US, Western Europe and Developed Asia.

Impact of the OE on the Rating

OEs of 'bbb' would only suggest a limited drag upon companies in the 'A' or above rating categories.

Mid- to high 'bb' range OE would moderately impact issuers in the 'BBB' category and more significantly in the A category.

A 'bb-' OE would start to moderately shape credit profiles in the high sub-IG lower, low IG ranges as well and would have a more significant 2-notch impact for 'BBB+' and above ratings.

A 'b+' OE would be a drag on ratings in the BB category and have a more significant impact for IG issuers. A 'b' or 'b-' OE could also be a drag for ratings in the high B category.

The Economic Environment

The Economic Environment (EE) incorporates Fitch's views on key macro variables that may affect a corporate's fundamental credit strengths, such as the stage of economic development, economic growth expectations and the relative stability or volatility of the economy as a whole.

The EE for each country is assessed by taking the "Structural" percentile rank. This reflects the vulnerability of the economy to shocks, including the risks posed by the financial sector, political risk and governance factors. It is generated from the Sovereign Rating Model (see [Sovereign Rating Criteria](#)), and adjusted for any Structural Qualitative Overlay (QO) notching impact multiplied by 10. The resulting score is then converted into an EE using the table below:

SRM Scores

Adjusted SRM structural percentile score	Economic environment
>80	aa
>60-80	a
>40-60	bbb
>25-40	bb
>10	b
10 or below	ccc

Source: Fitch Ratings

For example, a country with a structural percentile rank of 45 and a QO notching impact of -1 would end up with an adjusted score of 35 ($45 - 1 \times 10$), corresponding to an EE of "bb". In the absence of any QO notching impact, the EE of the country would be "bbb". Where the Structural Percentile Rank and accompanying QO are unavailable for a country, analysts can use the guidance in the *Operating Environment Summary Table* to assess the EE.

Issuers that operate in a single country will receive a factor equal to the country's EE. For issuers that operate in multiple countries, Fitch will take a blended view of the EE. The location of assets in weak economic environments can pull down the EE level of an issuer. For example, the likelihood of major disruption to the production process due to labour unrest is more likely in weak economies. This allows differentiation between two issuers selling in the same markets but with assets located in countries with significantly different levels of economic stability.

The EE level of an issuer can be assessed by looking at both the profiles of the countries where the economic value is created by the issuer, i.e. the destination of the issuer's products, and where its assets are located, i.e. where the products are made. The notion of economic value encompasses both revenue and profit, the relative importance of which will vary on a case-by-case basis. For example, a trading business generating high revenue but minimal profits may not be given much weight in the analysis. Conversely, a large but non-profitable division in the core business of an issuer is relevant, even if it is making little profit.

Issuer Economic Environment

Economic environment of countries where economic value is created	Economic environment level of the countries where the majority of the Issuer's assets are located		
	bbb/above	bb	b/lower
Widely diversified global footprint or more than 3/4 exposure to countries with 'aa' or 'a' Economic Environments.	aa	a	bbb
Diversified footprint with majority of countries benefiting from an Economic Environment of 'a'. Less than 25% exposure to countries with 'bb' or lower Economic Environment. Category applicable to sellers of commodities in world markets.	a	bbb	bb
Some diversification and more than 50% exposure to countries with an Economic Environment of 'bbb' or above. Less than 25% exposure on countries with 'b' Economic Environment.	bbb	bbb	bb
More than 50% exposure to countries with an economic environment of 'bb' or less. Less than 25% exposure on countries with a 'b' economic environment.	bb	bb	b
As above with limited diversification and/or more than 25% exposure on countries with 'b' Economic Environment.	bb	b	b
More than 50% exposure to countries with 'b' or lower Economic Environment.	b	b	b

Source: Fitch Ratings

Financial Access

An issuer's Financial Access (FA) is a combination of the strength of its local financial system (both banks and capital markets) as reflected in the Financial Market Development (FMD) level of the relevant country, of its own level of access to local funding and of its record and ability to access international financial markets and institutions on a sustainable basis.

An issuer with good local access but limited access to international funding gets the same input as the Financial Market Development level of its local market. The extent of the ability to tap international markets or banks on an unsecured basis defines how much the issuer can detach itself from the strength of its local financial market.

The FMD score of each country is assessed using the Banking Systemic Indicator (BSI), which is a summary measure of intrinsic banking system quality, or strength. It excludes potential support from shareholders or governments. Where a BSI is unavailable, Fitch will use the implied OE applicable to Financial Institutions in the relevant country as a proxy for the FMD. In any rare cases where none of the inputs above are available, analysts can use the guidance in the *Operating Environment Summary Table* to assess the FMD.

Issuer Financial Access

Issuer's funding characteristics.	Financial market development level of local market							
	aaa or aa	a	bbb	bb	b	ccc	cc	c
International blue-chip issuer with demonstrable access on an unsecured basis to top-tier cross-border banks and international financial markets at all points in the cycle.	aa	aa	aa	a	a	a	a	a
National blue chip with extensive relationships with domestic financial institutions or some access to top-tier cross-border banks and international financial markets. Access more vulnerable to sudden interruption than in the above category.	aa	aa	a	bbb	bb	b	ccc	cc
Issuer with strong local access but limited access to international funding.	aa	a	bbb	bb	b	ccc	cc	c
Issuer with average local access and very limited access to international funding.	a	bbb	bb	b	b	ccc	cc	c
Issuer with qualified local access.	bb	bb	b	b	b	ccc	cc	c

Source: Fitch Ratings

Systemic Governance

Each country’s Systemic Governance level is based on [Worldwide Governance Indicators](#) published by the World Bank (see *Impact of Systemic Characteristics on Ratings* table below), accounting standards as well as the quality of the audit and market regulation. An issuer will generally be assessed based on the location of its headquarters.

We apply the following weightings to the World Bank governance indicators: 3% weight to the “Political Stability” indicator, 25% to “Government Effectiveness”, 55% to “Rule of Law”, 15% to “Control of Corruption”, and 2% to “Voice and Accountability”.

Poor individual governance at issuer level (even if typical for the country) would not be reflected in Systemic Governance but in the issuer-specific Management/Corporate Governance factor.

Impact of Systemic Characteristics on Ratings

1. Systemic characteristics neutral to ratings	2. Systemic characteristics that may constrain ratings	3. Systemic characteristics that are likely to have a negative impact on ratings
Countries with a systemic governance score of 'bbb' or above	Countries with a systemic governance score of 'bb'	Countries with a systemic governance score of 'b'
Systemic factors for financial information transparency	Systemic factors for financial information transparency:	Systemic factors for financial information transparency:
Accounting standards are set by, in, or in line with an independent standard setter (e.g. US GAAP, IFRS).	Local GAAP is developed by the government or regulator and differs significantly from international GAAP.	There is no requirement for auditor independence.
Audit regulation is transparent and robust (e.g. PCAOB).	The securities regulator is weak and/or ineffective.	Little or no securities regulation exists.
Securities regulation is investor/creditor-focused (e.g. SEC).		
Source: Fitch Ratings		

Operating Environment Summary Table

	aaa	aa	a	bbb	bb	b	ccc
Economic environment	Highly stable and major advanced economy with very high degree of resilience to economic shocks.	Very stable and major advanced economy with high degree of resilience to economic shocks.	Stable and major advanced economy with a good degree of resilience to economic shocks.	Moderately stable economy which could be less advanced but with a fair degree of resilience to economic shocks.	Less stable and less advanced economy susceptible to adverse changes in domestic situation or international shocks.	Volatile and less advanced economy highly susceptible to adverse changes in domestic situation or international shocks.	Unstable economy highly susceptible to even moderate changes and in domestic or international economic situations.
Financial market development	Banking sector is highly developed and concentrated with very high barriers to entry. Highly advanced financial markets.	Banking sector is very developed and concentrated with high barriers to entry. Very advanced financial markets.	Banking sector is developed and concentrated with meaningful barriers to entry. Advanced financial markets.	Banking sector is less developed or diffuse with only moderate barriers to entry. Financial markets are developed but not deep.	Banking sector is diffuse with only limited barriers to entry. Financial markets are not fully developed.	Banking sector is very diffuse with no barrier to entry. Financial markets are less developed.	Banking sector is highly diffuse with no barrier to entry. Financial markets may be undeveloped.
Systemic governance	n.a.	Weighted average ^a of the World Bank's Worldwide Governance Indicators is in the top 20%.	Weighted average ^a of the World Bank's Worldwide Governance Indicators is in the top 30%.	Weighted average ^a of the World Bank's Worldwide Governance Indicators is in the top 50%.	Weighted average ^a of the World Bank's Worldwide Governance Indicators is in the top 60%.	Weighted average ^a of the world Bank's Worldwide Governance Indicators is in the bottom 40%.	n.a.

^a The weighted average gives a 3% weight to the "Political Stability" indicator, 25% to "Government Effectiveness", 55% to "Rule of Law", 15% to "Control of Corruption", and 2% to "Voice and Accountability".

Source: Fitch Ratings, Worldwide Governance Indicators published by the World Bank

OE Scores and Update Process

For a listing of the OE scores currently in use that were developed by Fitch through application of these criteria, click [here](#). The countries, territories and jurisdictions included in the linked exhibit are those for which Fitch has credit ratings in place as of the publication date of the linked report.

If Fitch were to assign an international scale rating to an issuer in a country not currently appearing in the linked exhibit, an OE score for that country would be developed as part of the ratings analysis.

Additionally, Fitch will periodically update the applicable OE scores based on market developments and availability of updated inputs. The updated scores would then be used in support of any ratings review.

If a new or updated OE score is not yet published in the linked exhibit, the new/updated scores would be noted by Fitch in Rating Action Commentaries of any issuer in which Fitch takes rating actions where the OE score was material to the rating outcome.

Fitch expects to update the linked exhibit approximately quarterly.

Operating environment captures the risks of doing business in the jurisdiction(s) where the issuer operates. It presents a holistic view of the jurisdiction-level challenges and opportunities that influence the issuer's credit profile.

The OE reflects the characteristics of a specific jurisdiction and is not generally issuer specific. It does not capture transfer and convertibility risks, which are reflected separately in Fitch's Country Ceiling, nor directly consider sovereign risk.

Management and Corporate Governance

The Management and Corporate Governance Factor is composed of four sub-factors: Management Strategy, Corporate Governance, Group Structure and Financial Transparency.

Management and Corporate Governance: Sub-Factors

	Management strategy	Governance structure	Group structure	Financial transparency
'aa' category	Coherent strategy and very strong record in implementation.	No record of governance failing. Experienced board exercising effective checks and balances to management. No ownership concentration.	Transparent group structure.	Financial reporting of exceptionally high standards.
'a' category	Coherent strategy and good record in implementation.	Experienced board exercising effective checks and balances. Ownership can be concentrated among several shareholders.	Group structure has some complexity but mitigated by transparent reporting.	High-quality and timely financial reporting.
'bbb' category	Strategy may include opportunistic elements but soundly implemented.	Good governance record but board effectiveness/independence less obvious. No evidence of abuse of power even with ownership concentration.	Some group complexity leading to somewhat less transparent accounting statements. No significant related-party transactions.	Good-quality reporting without significant failings. Consistent with the average of listed companies in major exchanges.
'bb' category	Strategy generally coherent but some evidence of weak implementation.	Board effectiveness questionable, with few independent directors. "Key man" risk from dominant CEO or shareholder.	Complex group structure or non-transparent ownership structure. Related-party transactions exist but with reasonable economic rationale.	Financial reporting is appropriate but with some failings (e.g. lack of interim or segment analysis).
'b' category	Strategy lacking cohesion and/or some weakness in implementation.	Poor governance structure. Ineffective board with no or only token independent directors. Decision-making in the hands of one individual.	Highly complex group with large and opaque related-party transactions or opaque ownership structure.	Defective financial reporting. Aggressive accounting policies.
'ccc' category	Strategy visibly failing, major transformation required to avoid company failure, with no better than even chance of success.	Record of failed governance practices. Instability in board membership. Dysfunctional decision-making.	Group structure sufficiently complex or compromised (e.g. disputed ownership) to materially impair strategic and financial progress.	Sustained absence of financial reporting for reasons other than force majeure, change of auditor or corporate restructuring.

Source: Fitch Ratings

Sector-Specific Factors

Please refer to the relevant Sector Navigator for the sector-specific factors contained in the Sector Navigators - Addendum to the Corporate Rating Criteria.

Appendix 9: Climate Vulnerability Signals

Climate Vulnerability Signals (Climate.VS) reflects Fitch's views on the relative vulnerability of global corporate sector and issuer creditworthiness to a rapid low-carbon transition between 2025 and 2050. We draw on the UN Principles for Responsible Investment Inevitable Policy Response (IPR) Forecast Policy Scenario as the core scenario for our analysis. Under this scenario, global warming is limited to 2°C above pre-industrial levels by 2050.

Our sector-specialist credit analysts combine this scenario with their analytical insight to generate a view on how these risks develop between 2025 and 2050.

Climate.VS focus on transition risks rather than climate-driven physical risks. This reflects our view that policy, market and regulatory risks are likely to have a more severe impact on corporates as a whole in the first half of this century than physical risks.

It considers the "financial materiality", i.e. the potential effect of climate risks on an issuer's creditworthiness and financial performance, rather than the issuer's broader impact on the economy, environment and people.

Climate.VS is used in the rating process as a screener with the goal that all relevant climate transition-related factors are considered in our analysis. Specifically, issuers that have a Climate.VS of 45 and above for the year 2035 receive further analytical scrutiny in our rating committees and disclosure in our rating reports, covering potentially relevant climate risks and whether these risks are directly incorporated in the rating derivation – and, if so, how and with what impact, and, if not, why not.

This analysis includes a more differentiated assessment of how Fitch believes a company is placed to cope with climate risk. However, in many cases, the lengthy timescale involved in the climate transition and the high level of uncertainty regarding how it will play out limits, or postpones, the impact of climate risks on current credit ratings.

Climate Vulnerability Signals for Sectors – Distribution Grid

Definition	Overall vulnerability level	Winners and losers	Business model disruption	Revenue	Costs	Other policy concerns	Risk of stranded assets	Mitigants	Finance
90 Climate-risk factors pose existential or default-equivalent threat to the credit profile.	One or more climate-related factors have the potential in a credible scenario to pose an existential threat to core business activities.	Very high failure risk for majority of entities with no diversification.	Very high. Very little potential for reinvention beyond exiting business.	Potential for complete destruction of demand under credible downside scenarios.	Market or policy-driven costs could make the business model uneconomic.	Substantial likelihood of severe regulatory intervention which will eliminate profitability, with the potential for outright bans on core product.	High risk that assets will become uneconomic before the end of their intended service life.	Few or no cost-effective mitigants. Complete business transformation required. Potential for government mitigation due to market incentive or social concerns.	Climate-related pressures on providers of finance likely to make standard financing options unavailable.
70 Climate-risk factors present significant challenges and likely to lead to deterioration of the credit profile.	Major changes to markets, regulation and business model likely to threaten profitability for an extended period.	Significant numbers of entities likely to fail or become uneconomic.	Very high, only limited number of entities likely to manage transition to a profitable model.	Potential for demand destruction, policy-induced changes to relative prices of substitutes, price pressure.	Significant rises in costs, potentially threatening profitability.	Real possibility of policies with meaningful negative effect, e.g. targeting demand reduction, raising costs, or boosting substitutes.	Risk that some assets will become uneconomic before the end of their intended service life.	Some mitigants available which, if successful, allow businesses to survive.	Climate-related pressures reduce access to finance, making many conventional sources inaccessible, but some higher cost sources remain.
50 Climate-risk factors present challenges	Solid demand drivers but material changes to products or	Minority of entities which manage the transition poorly will see	Material risks for most entities due to	Any demand pressure due to changing habits, policy and	Costs likely to rise during transition but	Policies targeted at shaping nature of product/industry.	Limited risk of stranded assets materialising if insufficient	The technology for mitigation exists, but is dependent on investment/	Climate-related factors reduce the availability of funding, but limited amounts

Climate Vulnerability Signals for Sectors – Distribution Grid

Definition	Overall vulnerability level	Winners and losers	Business model disruption	Revenue	Costs	Other policy concerns	Risk of stranded assets	Mitigants	Finance
and may weaken the credit profile.	production methods needed that may disrupt profitability.	significantly reduced profitability or, in extreme cases, fail.	technology or business model transition.	substitutes likely to be moderate at a sector level.	businesses remain fundamentally profitable, although profitability is depressed during transition.		or poorly judged investment/mitigation.	further development.	remain available through mainstream sources.
30 Climate-risk factors are not expected to affect the credit profile materially, but some adaptation may be needed.	Fundamental demand drivers neutral to positive, despite major changes to existing business models or heavy investment being required.	Majority of entities will successfully transition with little impact on profitability.	Major investment needed to mitigate risks but low risk and predictable.	Fundamental demand drivers solid.	Potential for increased costs due to investment but likelihood these can be passed on.	Limited policy threat. Potentially a key sector likely to obtain policy support.	Minority of outdated assets only.	More likely to receive direct/indirect government support.	Climate-related factors unlikely to affect funding availability if companies manage their exposures.
10 Climate-risk factors are neutral to positive to the credit profile.	Climate trend neutral to positive for sector prospects.	Possibility of business failure due to climate-related trends very low.	Limited or zero business model change required.	Clearly neutral or potentially positive effect on demand.	No or negligible impact from climate-related trends.	No foreseeable negative policy implications; potential upside from policies.	Negligible risk to asset base.	None needed.	Climate-related factors do not affect funding for sector; potential for sector to benefit from additional capital availability.

Source: Fitch Ratings

Methodology

Sectors and issuers are evaluated at five-year milestones between 2025-2050 to produce a curve that illustrates our view on relative vulnerability at various points in the transition. Climate.VS values range between 0-100. The higher the value on the curve at a specified year, the more vulnerable the credit profile to climate-related risks.

Issuer Climate.VS curves are derived from sector Climate.VS curves, based on an analysis of revenue sources in the last full fiscal year.

This revenue split is then used to create a weighted average at five-year intervals, weighted by revenue and potential rating impact by sector. For the minority of sectors, where it is impossible to generate a meaningful revenue split for issuers, or such a split may be misleading, we will estimate a split based on other factors, such as production volumes, or use the average of the last three years when the previous year's split is not representative due to exceptional, non-recurring events. Where a share of revenues (or dividend flows for an investment holding company) comes from a non-corporate sector, the Climate.VS is calculated based on the corporate sectors only.

Climate.VS reflect our current view of transition risks inherent in each sector in a specified future year. We include expected changes at the sector level, but exclude company specific changes. Fitch's Climate.VS curves are available on Fitch's website.

The actual rating impact by the referenced year may be more or less severe, depending on the issuer's climate transition strategy and degree of preparedness, as described in the next section.

Illustrative Unmitigated Credit Rating Impact

The illustrative impacts and definitions for an entity below give our view of the potential impact on the credit rating of a company by the year to which the Climate.VS relates, if corrective action is not taken. For example, a company with a Climate.VS of 70 in 2040 would face a high probability of a multi-notch downgrade by 2040 if the scenario plays out, unless the company mitigates the risk appropriately.

The illustrative rating impact is applicable to companies with average exposure to climate-related risks for their sector. Within each sector, there could be big differences in the potential rating impact, depending on the level of preparedness and specific exposure of each company. In addition, the illustrative rating impact at each level reflects the potential rating impact by a given future year, whereas credit ratings are forward-looking.

These company-specific considerations will be captured in our differentiated assessment of the issuer where its Climate.VS for 2035 is 45 or above, and disclosed accordingly in our research.

Entity Climate.VS – Illustrative Corporate Rating Implications

	10	30	50	70	90
Illustrative credit rating Impact	No downward rating pressure.	Ratings unchanged in vast majority of cases.	Rating impact expected to be limited to one notch in most cases.	High probability of multi-notch downgrade.	Potential multi-category rating impact and high default risk.

Note: This illustrates the potential rating impact under the scenario by the specified year for a representative corporate with mid-investment-grade credit profile, and a flat or slowly increasing Climate.VS in subsequent periods
Source: Fitch Ratings

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