Fitch Ratings

企業
全球

企業評等準則

主要準則

本報告更新並取代 2020 年 12 月 21 日*《企業評等準則》*。

範圍

主要準則報告裡明訂了惠譽授予發行人評等或工具評等所考量的各種因素。這些準則適用於全球的新評等，以及現有評等的監測。有鑑於惠譽的企業組成包含各種實體，因此準則中涵蓋的評等因素並非一概適用於個別評等或評等行動。

額外的準則報告，包括個別產業、債務類別、特定跨產業風險或特定企業架構的報告，能針對主要準則報告的運用提供補充說明，請連往 fitchratings.com 參閱報告內容。

發行人評等：發行人違約評等 (IDR) 旨在評估非金融公司發行人違反財務義務之相對脆弱性，並與跨產業群組及跨國對象相互比較。發行人往往同時具備長、短期 IDR。由於這兩類 IDR 均以發行人的基本信用特性作為依據，因此兩者之間存在某種關聯性 (請參閱第 8 頁的*企業短期評等*)。

工具評等：針對違約情況下納入優先支付的順序，以及債權回收可能性等其他資訊，綜合評等已發行之個別債務。如需瞭解惠譽如何授予工具評等，請參閱惠譽的*《企業債權回收評等和工具評等準則》*。

主要評等理由

質化和量化因素：惠譽之企業評等同時反映了質化與量化因素，包括發行人及其發行個別債務之商業和財務風險。

主要評等因素

產業風險概況	財務狀況
國家風險	• 現金流量與獲利能力
管理策略/治理	• 財務結構
集團架構	• 財務彈性
事業概況	

來源：惠譽

過往績效和狀況預測：預測資料涵蓋期間為 3-5 年。通常再加上至少最近三年的營運記錄和財務資料，即可構成覆核發行人之典型經濟週期。此類資料將用於可比性分析；相對於同業或評等類別之同業群組，本機構將藉此覆核發行人之商業和財務風險概況實力。

各因素權重不同：個別與整體質化和量化因素之間的權重，將隨實體之產業別和時間流逝而所有不同。一般而言，若單一因素明顯較其他因素薄弱，則最薄弱之因素多半會在分析中獲得較大權重。

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評等方法

*《企業評等準則》*提供一種綜合架構，指引我們藉由可反映全球多元化和企業產業動力的共通依據，釐清企業發行人的合理評等。個別受評企業可能跨多個產業類別，部分類別的規模頗小且具特異性，通常亦須面對快速推動、往往未受監管的市場力量。

評等的起點，始於最合乎相關企業所屬產業風險概況的評等類別範圍，並由評等委員會分析發行人所在位置風險、營運和財務特性，從而決定最適合之同業群組，並從歷史和預測可比項目，將評等結果的範圍縮小至子級微調的層面。擁有高投資等級評等之企業發行人，料將展現強大的財務和營運彈性。在正常週期中，信用指標表現的波動性高於其他類別者，其評等可能設有上限。

產業導航

針對特定產業情況，產業導航報告針對準則概念的應用提供指導。然而，導航報告並未涵蓋所有因素。惠譽的研究報告包含「評等推算」一節，作為針對導航報告的補充說明。該節說明發行人評等相對於同業及/或相關導航門檻的地位，以及其他影響評等卻未納入產業導航報告的考量。舉例來說，這類考量包括國家評等上限和關聯性評等 (例如政府相關實體評等或母子公司關聯性) 的考量。

正常情況下，發行人 IDR 可預期的會落在導航報告重要因素中間點合理組合的三個子級範圍內。若實際情況並非如此，此差異會在「評等推算」一節中說明。

導航選擇：惠譽會使用能如實反映發行人經營產業的產業導航報告，針對準則的主要評等因素和同業比較提供更多特定產業觀點。若無適當的產業導航報告，則可使用一般導航報告。若特定發行人橫跨若干產業，惠譽針對每種相關產業彙編個別的導航報告，或是鎖定最具主導地位的產業。

評等導航的非適用性：如果依照某些準則來評估發行人 (例如*《投資控股公司評等準則》*或*《國家級評等準則》*)，或是導航報告所述因素無法適度反映發行人的風險概況 (例如發行人涉足諸多產業，但這些產業皆未佔有主導地位)，則不會使用導航報告。

產業導航之詳情請見*附錄 6*。

產業風險概況與國家風險

產業風險概況

惠譽根據個別發行人的產業基本面框架下決定發行人的獨立評等。處於衰退期、高度競爭性、資本密集、週期性或波動性產業，其風險理當高於競爭對手稀少、進入門檻高、國內居主導支配地位、需求量可預測之穩定產業。

不同產業之間固然大不相同 (而且發行人通常在他們的營運中同時結合數種產業)，導航報告的產業風險狀況為不同產業的發行人提供了典型的獨立評等範圍。對於該產業的發行人，評等範圍的上限並非硬性的獨立評等上限，但是評等高於上限的發行人，其狀況必然顯著優於多數同業的財務和商業特性。然而，任何發行人的獨立評等，都不可能比相關產業上限高出幾個等級。

國家風險

惠譽評估發行人的國家風險包含兩種不同的考量，即其經營環境 (OE) 與匯兌風險 (又稱「T&C 風險」或「國家評等上限」)。

經營環境

所有發行人所處的經營環境中，均為下列因素的綜合呈現：

- 經濟環境：其營收、所得和資產的所在位置；
- 資金取得：融資環境；以及
- 系統性治理：其主要位置的系統性治理。

經營環境屬於不對稱之考量因素，只有在經營環境為負面時，發行人評等才會受到影響。即使在最適宜的環境中，企業仍可能面臨成功和失敗兩種結局，通常致使環境成為中性考量。但風險較高的環境卻可能主動地限制企業的潛力和整體信用狀況。

特別是在新興市場中，經營環境可能導致評等狀況降低一至二個子級，端視相關環境的挑戰程度而定。在考量國家評等上限之前，此評等可視為有效的發行人基礎評等。

如需瞭解經營環境評估方式的詳細說明，請參閱*附錄 6*。

匯兌風險

若相關國家評等上限未達「AAA」，惠譽的國家評等上限代表發行人外幣評等面臨之一般限制。在特定情況下，可超過國家評等上限，詳情請參閱*《高於國家評等上限之非金融企業評等準則》*。

國家評等上限是一種對匯兌風險的評估，反映出匯兌管制阻止或嚴重妨礙民間將當地貨幣轉換為外幣的風險。進一步來說，匯兌考量並不影響當地貨幣評等。如需詳細說明，請參閱*《國家評等上限準則》*。

值得注意的是，雖然匯兌風險與主權評等有密切關聯性，但主權評等並不直接影響企業發行人的評等，也不會反映在我們對於經營環境的評估。主權評等反映主權發行人可能發生違約之可能性，並非代指該經濟體之整體財務體質，亦無法代表特定國家中的某一產業部門。

關於外國貨幣 IDR、本國貨幣 IDR、經營環境、國家評等上限和主權評等之彼此關聯性說明，請參閱*附錄 5*。

管理策略與企業治理

管理策略

惠譽針對發行人集體管理階層的過往記錄，包括其創造健全業務組合、維持營運效率，以及強化市場地位的能力，均予考量評估。長期的財務績效，亦能有效衡量管理階層執行營運和財務策略之能力。

企業目標的評估，著重於未來策略和過往紀錄。風險容忍度和穩定一致程度，均是重要的評估元素，過往歷史反映的融資收購和內部擴充模式，則可看出管理階層的風險容忍度。

企業治理

惠譽通常聚焦於下列治理特性：治理架構、集團結構和財務透明度。

企業治理屬於不對稱之考量因素；倘若治理程度足夠或穩健，對於發行人之信用評等通常僅有極小影響或不具影響性。若觀察到任何缺失，此項考量仍將損及賦予之評等。

附錄 6 所列治理特性，皆可能對於評等產生中性影響、負面評價和調降評等的壓力。

治理和集團結構

評估治理和集團結構之目的，在於評估發行人的內部分權途徑是否有效，據以防範 (或是反而促成) 發生委託人—代理人性質 (例如，管理階層為牟求私利而獲取股東或債務持有人的價值)，或是委託人—委託人性質 (例如，多數股東獲取少數股東或債務持有人的價值) 的潛在問題。

納入考量的因素尤指能否呈現有效控制，以確保政策周全、有效且獨立之董事會、管理階層的薪酬、關係人交易、會計和稽核流程的完整性、所有權集中，以及重要人員風險。

財務透明度

財務透明度反映投資人能否輕易評估發行人的財務狀況和基本面風險。一般而言，惠譽係將優質且及時的財報，視為健全治理的象徵。同樣地，刻意公佈不正確或帶有誤導嫌疑的會計報表，則是發行人治理架構中出現重大弊端的徵兆。

評估集團結構和財務透明度時，也要考量發行人整體集團的透明度，尤其是當集團中存在控制股東。這類次級因素的「aa」評分可視為例外情況，僅出現在集團結構極為簡單，結合遠超出報告準則的強健報告表現。

所有權、支援和集團因素

集團實體之間的關聯

惠譽將 IDR 授予債務發行人，發行人的營業狀況亦有助於界定發行人的信譽。若發行人為集團控股公司，營業子公司的大部分資金可能來自於母公司，並聯合集團進行集團內擔保，或提供其他營運或合約功能。因此控股公司的 IDR 代表整體集團的營業。

集團實體若是採用圈限或隔離資金，惠譽將依*《母子公司評等關聯性評等準則》*評估集團關聯性；若該實體為投資控股公司，則將運用*《投資控股公司評等準則》*中的分析法。

若特殊目的實體為發行債務之融資工具，且未實際營業時，惠譽通常依據擔保人的評等，為發行人的擔保債務評等。擔保項目若能涵蓋了 100% 的本金款項，以及支付所有本金款項前累計的所有利息，即視同可充分支應各項符合擔保人評等的擔保債務。

倘因顯著之少數股東權益等情況，而未採取合併方式時，惠譽通常需考量用以償債之收益資源之可持續性和可預測性 (含集團共用現金，以及上繳之條件式股利)，包括相關實體之信用品質及其對集團財務狀況之貢獻。請參閱*附錄 1*。

營業概況

與事業概況相關的關鍵評等因素，涵蓋了各種質化商業風險，專為各產業之行業基本面所量身訂製。一些主要公司行業的常見觀察或預期要素皆包含在我們相關的產業評等導航，為*《企業評級準則》*概念的應用提供指導。

財務狀況

惠譽企業評等之量化因素，著重於發行人財務狀況及其合併內外部資源之償債能力。

惠譽在所有產業評等導航中考量下列這些因素：獲利能力、財務彈性和財務結構。這些因素都會根據前瞻式完整週期法進行評估。接下來的章節將針對這些因素進行更詳盡的探討。

著重於現金流指標：相較於負債權益比和負債資本比等以權益為基礎的比率，惠譽所採財務分析方法明顯分配較多權重予現金流衡量指標。以權益為基礎的比率需依賴帳面估值，未必能反映出資產基礎之當前市值或產生現金流償債之能力。此外，分析違約損失時，採帳面價值之衡量法同樣較為薄弱，不如以現金流為基礎之衡量法。

然而在房地產投資公司或投資控股公司等產業中，若償債款項較可能來自於出售資產而非營業所創造現金流，且資產價值係以充分可靠之資料為依據，惠譽仍可能考慮資產負債表比率，例如貸款價值比率 (LTV)。

惠譽認為，分析幾個比率之趨勢，較分析單一比率更為攸關，因單一比率僅代表單一時間點的單一績效衡量指標。

產業別基準：信用指標并非決定授予評等之决定性因素，此係相同比率在審查中的不同產業裡仍有變化所致。根據惠譽在各區域或全球之因素觀察，或對受評發行人之判斷推論，惠譽透過*《產業導航報告 - 企業評級準則附錄》*報告所發佈之財務比率，均符合個別產業中的不同評等類別。

前瞻式完整週期法

預測模型「COMFORT」

企業預測係以企業模擬與預測工具「COMFORT」完成。COMFORT 為預測模型，透過資產負債表、損益表和現金流量表，預測*《企業評等準則》*所設數種情境中的重要比率。

該模型未採用任何統計模擬技巧，亦未採用任何標準預測假設。主要目的在於佐證惠譽的評等分析，所以必須確認所預測的重要比率，符合全球一致性，進而得到符合惠譽方法論的發行人財務預測，提供予評等委員會使用。

針對投資控股公司等發行人，或是惠譽需要大幅調整資產負債架構 (例如，大部分的業務需要解散或部分解散) 等情況，COMFORT 模型未必適用，屆時將以量身設計的方式進行預測。

評等案例與壓力情境

惠譽在各種情境中評估受評實體及結構的風險，以確保評等穩定可靠。評等案例和壓力案例的預測，有助於決定調升公司信用評等的空間大小，並據以決定評等展望變動的適宜程度。

情境的發展主要參考的是發行人在評等案例和壓力案例中可能承擔的潛在風險。財務預測係以發行人當前和過往的營運及財務績效、策略方向，以及產業大趨勢的分析為基礎。惠譽透過最近一期*《全球經濟展望》*的評論和預測，擬訂了評等案例的總體經濟背景。

評等案例係指一套保守預測，構成了評估發行人的基礎。評等案例預測的时间段為 3-5 年，通常再加上至少最近三年的營運記錄和財務資料，即可構成覆核發行人之典型經濟週期。惠譽相信此為合理的預測期間，超出此時間範圍的預測則較為欠缺實質意義。

分析師亦需處理壓力案例，意指可能造成至少降等一級的情境。

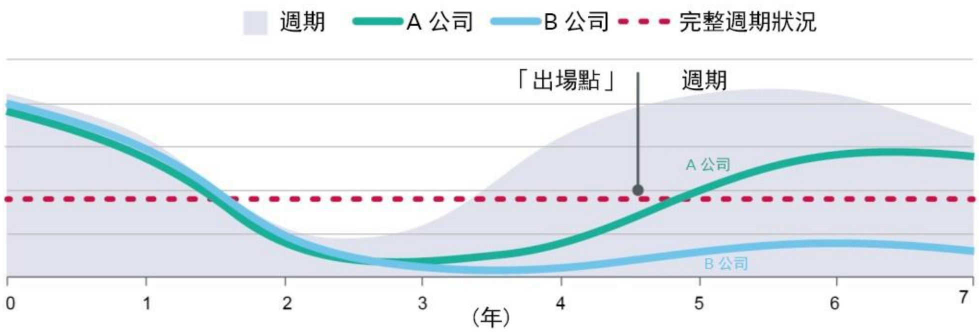
完整週期法

如欲評等週期性公司，惠譽之預測著眼於信用保護措施和「完整週期」之獲利能力。對週期性發行人進行評等時，主要的挑戰在於，財務政策一旦發生根本變化，或經營環境發生結構改變時，必須決定是否必須變更評等。

下圖「評等完整週期」顯示出兩個高度格式化的範例。A 公司經歷景氣衰退期，但預測景氣達到谷底後，可於 18 至 24 個月的「出場點」回歸完整週期的初始狀況，以虛線為代表。虛線代表 (質化和量化) 係數已符合特定評等水準。

反之，景氣衰退期 B 公司所遭受的損失更大，因此無法有效地因應。原因可能在於下調持續現金流的預期值，或是假設景氣衰退期新槓桿比率可大幅抵銷現金缺口；以及/或是因為營運模式發生根本變化、景氣衰退期所承受的風險，或是市場需求的轉型變化。常見的情況下，會發現 B 公司的評等調降至符合其下降的信用狀況，以下方平行的格式化虛線為代表，呈現出較低評等之完整週期狀況。

評等完整週期



來源：惠譽

適用於大宗商品公司

評估大宗商品公司的信用評等時，惠譽採用各種假設以預測未來營運績效和財務狀況，包括近期市場的遠期價格跡象，以及中期曲線的「週期中大宗商品價格」。就石油與天然氣公司而言，此即價格鋪底。惠譽採用的市價和週期中價格皆屬保守性質，通常低於漲價期間的市場預期水準。相反地，若現行市價受到扭曲的短期因素影響，可能仍然高於市場明顯下挫期間的市價。

惠譽的市場和週期中石油與天然氣價格預測，目的並非在於預測價格；而是意圖反映出未來的價格水準走廊，以供模擬和評等之用，並可從債務持有人的角度，評估未來大宗商品價格預期值。進行遠期價格假設時，惠譽需考量產業供需基本面、邊際生產成本水準，以及投資流量等因素。

若大宗商品公司已擴大資本支出，但相關專案尚未投產，因此未能以其利潤流減輕負債時，或許隨著大宗商品價格下跌，惠譽的評等敏感性亦可能引用近期指標，相當以評等承認大宗商品價格低點和暫時性負債增加；亦可能引用近期所達到、較為正常的「完整週期」指標，此項分析可能已經評估專案的品質，包括完成時間和成本曲線部位。

現金流量與獲利能力

惠譽之分析著重於獲利的穩定程度，以及發行人主要業務線持續產生之現金流。在不依賴外部資金的情況下，持續之營運現金流可支撐發行人的償債能力，並提供營運所需資金和滿足資本要求。

盈餘雖構成現金流的基礎，仍須針對非現金準備和緊急預備金、不影響現金之資產減記，以及一次性費用等項目進行調整。如需瞭解詳情，請參閱*附錄 4*。

財務結構

惠譽分析財務結構，以確定發行人依賴外部資金之程度。評估發行人財務槓桿之信用影響時，需考量之若干因素包括了業務環境的性質，以及來自於營運活動之主要資金流 (請參閱*附錄4*)。

在此過程中，惠譽一般會適時調整發行人債務水準，即將資產負債表外之債務納入表內，以提高資產負債狀況之整體債務水準。

請參閱*附錄 1* 關於適用於全企業的標準調整。

財務彈性

財務彈性容許發行人在不損及信用品質的情況下，履行償債責任和管理波動期間。發行人資本化程度愈保守，財務彈性愈高。一般而言，能將債務控制在一定範圍內、相對於現金流或貸放成數 (LTV) 之承諾，可協助發行人更妥善地應對非預期之突發事件。

其他影響財務彈性之因素，包括修訂資本支出計畫之能力、強大的銀行關係、接觸各種債權和股權市場 (國內外) 的程度、獲得承諾之長期銀行額度，以及資本結構中短期債務所佔比例。此類議題均已納入流動性分析。

一般而言，投資級公司主要取得無擔保債務。在部分市場中，某些資產密集型產業 (例如不動產) 取得擔保債務，但惠譽的分析卻從財務彈性、成本與回收的角度，評估無負擔資產相對於無擔保債務的水位，因其可能影響該實體的 IDR 和無擔保工具的評等。對於次投資級的公司，其優先等級債務形式分析法的詳細說明均載於*《企業債權回收評等和工具評等準則》*。

事件風險之處理方法

「事件風險」描述通常無法預見的事件之風險，直到該等事件明朗並被明確定義前，都被排除在現有評等外。事件風險可由外部觸發，例如法律變動、天災、其他實體惡意公開收購；或由內部觸發，例如資本架構政策之變動、重大收購或策略性重組。從統計上來看，合併與購併風險乃是最常見之事件風險，可作為如何將事件風險納入評等或排除之範例。

事件風險案例 – 處理評等的合併以及收購風險

事件	是否納入評等
公司宣布投機性收購，違反先前宣稱的自然成長策略。	事件不納入現有評等。通常會依據事件的重要程度與影響進行評等覆核，端視資金組合和成本而定。
公司宣布投機性收購，符合先前宣稱在三年內於公司所處產業中進行大規模債務融資收購之意圖。	大部分事件納入現有評等。儘管如此，仍進行評等覆核以確保目前的收購活動參數與已涵蓋在評等內的期望一致。
公司宣佈以收購方式擴充之意圖，但未明確指出成本或預期資金組合。	事件不納入現有評等。通常進行接受評等覆核且可能導致展望或是評等變動，端視惠譽根據可能目標、競標量、估值、公司融資組合紀錄以及槓桿彈性的評估結果而定。

來源：惠譽

企業短期評等

短期評等期間與指定日期之後的 13 個月，並無明確的關聯性；反而與受評實體的持續流動性狀況有關，亦即可望於長期 IDR 期間 (通常為一個景氣循環) 持續者。就暫時流動性而言，此法較不強調流動性狀況的有利或不利特色。

債務之初始天期，依市場慣例視為短期者，得授予短期評等。就企業而言，13 個月以下均可視為短期。依據惠譽的評等對照表，長短期評等之間具有關聯性，係因流動性和近期顧慮皆為長期信用狀況審查之項目。

評等對照表

長期 IDR	短期 IDR
AAA 至 AA-	F1+
A+	F1 或 F1+
A	F1 或 F1+
A-	F1 或 F2
BBB+	F1 或 F2
BBB	F2 或 F3
BBB-	F3
BB+ 至 B–	B
CCC 至 C	C
RD/D	RD/D

來源：惠譽

區分短期評等

惠譽導覽所納入的因素均與短期風險及流動性有特定相關性。影響這些評等的主要導覽因素為財務彈性因素。

此因素是由影響財務政策紀律、流動性、固定費用/利息覆蓋率及貨幣波動的次級因素構成。藉由測量財務彈性因素結果 (通常以小寫「aaa」級別來測量) 超過長期 IDR 的程度，用於決定短期評等「基線」以及「較高」選項之間的區別。

具體而言，財務彈性因素 (三個級距範圍的中點) 的評分需要等同較高短期評等一律適用的最低等級，如下表所示。

達到較高短期評等所需的最低財務彈性因素

F1+	aa-
F1	a
F2	bbb+

來源：惠譽

推導整體財務彈性因素時，分析師給流動性次級因素的權重較高，如果其他次級因素 (固定費用/利息涵蓋率、財務紀律以及外匯曝險) 呈現實質性弱點，採用它們為主要影響因素。

在套用較高短期評等選項時，依據導覽因素
還需滿足兩項「管控」條件：

- 用於衡量槓桿和中長期資本結構的財務結構因素 (三個級距範圍的中點)，對於發行人 IDR 而言不構成實質性的弱點。具體而言，財務結構因素評分應等同或高於以下閥值：

達到較高短期評等所需的最低財務結構因素

F1+	a
F1	bbb
F2	bbb-

來源：惠譽

- 經營環境因素 (評等範圍的上限) 至少需要為「a-」，以確保結果不會過度偏袒處於弱司法管轄區內的低槓桿實體，弱司法管轄區本質上與獲得較高短期評等結果的機制相左。

評等委員會也會額外考量其他因素，例如企業治理或其他重大短期不確定性，這些因素可能優先於上述的一般性原則。

根據我們的 *《母子公司評等關聯性準則》* 或 *《政府相關實體評等準則》* 之規定，當發行人的長期評等與母公司或資助者一致時，其短期評等也會一致。當發行人的評等採用由上至下的級距基礎時，取兩個短期評等中的較高者為準，並以支援母公司的短期評等為上限。當發行人的評等採用由下至上的級距基礎時，將依照其自身基礎採用上述基本原則選定短期評等選項。

企業信用意見模型

企業信用意見模型 (CCOM) 可產生非公开、任意時間點、显示信用状况的模型化信用意見 (MBCO)。

CCOM 運用量化方法監控先前提出的信用意見 (CO)，並提出新的 MBCO。CCOM 通常應用於美國中期市場中工業領域 (即非金融業) 的槓桿融資公司。

CCOM 運用特定的發行人群組進行校準，這類發行人代表了所有依據模型接受評估的發行人，並承認受限於可用之資料集。具體而言，CCOM 運用序數邏輯迴歸模型，反映了惠譽槓桿融資團隊所辨識的重要信用指標與先前提出之評等與 CO 之間的關係。

獨立變數包含四種基本信用指標：整體槓桿率、平均利息、EBITDA 利潤率及營收。惠譽將檢視各種變數與實際指標之間的關係，將其加以量化，再根據一個美國區域群組進行校準。對於某些產業和在某些情況下，如果統計分析不支持納入某些變數，模型可能不會特別強調這些變數。

CCOM 亦根據分析規則提供綜合性覆蓋限制，這些規則旨在更能呈現委員會對於模型的最終結果、控制潛在離群值結果，並針對規模極小的實體設下規模限制。具體而言，要運用這項模型之要求為經惠譽調整 EBITDA 至少 500 萬美元。

提出經惠譽調整 EBITDA 最低水位的原因在於，惠譽相信針對特定規模以下之實體提出包括 MBCO 在內的信用指標並不適當，因為這些實體與一般公司債務發行人的表現有所不同，因此超出一般對流動性、法律結構和其他類似考量的大致期待。

模型使用 EBITDA，其計算以借款人報告的經調整 EBITDA 為基礎，亦考量根據惠譽營運 EBITDA (請參閱*附錄 4*) 所做的類似調整，但會受到適用於 MBCO 所適用的資訊限制影響。

在委員會階段，分析師會檢視模型結果，同時搭配簡單的流動性比率計算 (惠譽明確定義之可動用現金加上循環額度，再除以計入股權信用之總負債金額)，並根據對產業的瞭解、指標水準之間的不一致或任何認為具相關性的其他因素，與 CCOM 模型所建議的結果相比較後，考量應授予較高或較低的 CO (一般為調整一級)。

雖然使用 CCOM 推導出的 CO 不包含預測數據或敏感性分析，但是對 CCOM EBITDA 所做的調整可包含前瞻要素。模型只會產生介於「b+*」到「<=ccc+*」範圍內的結果。

使用 CCOM 推導出 CO 時，會以群組為基礎，並將其作為決定中期市場擔保貸款憑證 (CLO) 評等的因素之一。如需更多關於信用意見的詳細資料，包括不同的資訊標準，請參閱*《信用意見：與信用評等的關鍵差異》*(2019 年 2 月) 和*《評等定義》*(2020 年 6 月)，位於 www.fitchratings.com。

MBCO 水準的主要信用指標範圍範例

MBCO 水準	債務/EBITDA 槓桿 (x)	利息涵蓋率 (x)	流動性比率 (%)
<=ccc+*	>8	<1	<10
b-*	6.5-8	>1	10-15
b*	5-6.5	>1	10-15
b+*	<5	>1	>15

來源：惠譽　評等

資訊及限制

會計

惠譽之評等過程概未包括查核發行人的財務報表。不過，惠譽得考量發行人所選擇之會計政策，針對發行人財務報表反映財務績效之充分程度，發表專業意見。

由於不同的會計準則可能影響發行人的財務状况報告，因此惠譽可能針對評等過程進行調整，據以提升其在與同業群組中其他業者之財務資訊可比較性；此類調整包括使用各種不同的會計準則。

惠譽用於調整之一般原則，將回歸至現金的衡量指標：即現金餘額、現金流和現金需求。

惠譽分析師通常採用依據國際財務報告準則 (IFRS) 或美國一般公認會計原則 (US GAAP) 準備之查核完成帳目。若無法取得此類報表，惠譽將採用依當地 GAAP 所編製的帳目、所提供之其他報表，以及管理階層公開之意見，從而就可比較性分析進行適當調整，但稽核人員或其他受聘覆核的人員，必須具備充分的品質和揭露資訊。

惠譽調整數據時，業已盡可能標準化，個別發行人之間仍有差別，即使是同一發行人，隨著時間的消逝亦因下列因素而產生差異：會計架構、發行人對財務和會計政策的選擇、對發行人的稽核建議、各國和各區域之會計及報告實務的變動情形。

惠譽分析師所執行之標準化財務調整，通常需要不同程度之輔助性揭露及/或主觀性預估。於發行人持續揭露期間，此類輔助性揭露的絕對性和可靠性，可能不足以供惠譽進行標準化調整。惠譽採用已查核及未查核之財務報表、發行人的預測和惠譽準備的預測資料，所有資料均呈現近似程度不同的彙總資料要點。

準備進行機構預測時，惠譽進一步彙總若干財務資料要點，以製作出合宜的摘要預測，能與過往報表所衍生項目相互比較。由於經過彙總，此等預測難免必須進一步壓縮資訊內容。

資料來源

此類標準所採用之重要假設，來自於分析企業及其信用風險脆弱性之資料所得。包括分析主要評等理由及其長期表現、取自於財務報告之分析結論、公私部門的資訊，以及收取自發行人和其他市場參與者的分析資訊。運用此類資訊進行經驗豐富的分析判斷後，即可作出假設。

針對經營環境，惠譽根據*《主權資料比較》*報告得出生存能力 BSI 分數。

惠譽使用資訊

評等最主要之資訊來源仍為發行人公開揭露之資訊，包括經查核之財報、策略性目標和投資人報告。其他覆核資訊包括同業群組資料、產業和法規分析、對發行人或其產業之前瞻性假設。

授予和維持評等所需資料之確切構成項目因時而異；除其他因素外，此點反映出：

- 受評發行人之營運和財務狀況不斷變化，此項變化可能或多或少須在計算評等時強調特定資訊要素；
- 受評發行人因隨時間變化面臨著來自於總體經濟、融資或其他環境因素之各種嶄新挑戰，各自或多或少須強調特定的資訊要素；

惠譽本身的評等準則與時俱進，因此相對著重於特定要素。多數情況下，主要資本市場發行人之公開揭露資訊，應足以供惠譽評等參考。惟相關資訊因故未達可接受水準時，惠譽得撤回受其影響之評等。

發行人之直接參與，可能增加評等過程所能參考的資訊，但不同發行人直接參與之水準、品質和相關性均不相同，且個別發行人亦可能隨時間變化。關於發行人參與評等過程以及如何傳遞予評等用戶之詳情，請連往 www.fitchratings.com/ethics 參閱*《評等啟動和評等參與之揭露政策》*。

相較於發行人直接參與評等過程之程度，資訊水準通常顯示出較強之區域關聯性。例如在高度揭露之司法管轄區，提供有限的非公開資訊予惠譽之單一實體，其公開資訊的總量，通常超過低度揭露之司法管轄區裡，完全參與評等過程之其他發行人之公開和非公開資訊總量。惟彙總資訊因故未達可接受水準時，惠譽得撤回受其影響之評等。

惠譽的發行人紀錄分析將考量下列資訊或其中部分資訊：

- 三年或更多年度的稽核後財務報表；
- 三年或更多年度的集團旗下資產與業務運作資料；
- 例行財務報表，這類報表通常經過了某種形式的協力廠商審核；
- 若重要資產處於相對較早的營運階段，則將考量既有產業中這類資產的專家營運評估結果，包括財務績效。

評等委員會將判定可用資訊的充足與完備程度，是否足供惠譽授予評等。

FitchRatings

Corporate Rating Criteria

Master

Scope

This Master Criteria report identifies factors that Fitch Ratings considers when assigning issuer 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.

Issuer Ratings: An Issuer Default Rating (IDR) is an assessment of a non-financial corporate issuer's relative vulnerability to default on financial obligations and is intended to be comparable across industry groups and countries. Issuers may carry Long-Term and Short-Term IDRs. These ratings are related since they are based on an issuer's fundamental credit characteristics (see *Corporates Short-Term Ratings* section on page 8).

Instrument Ratings: The ratings of individual debt issues incorporate additional information on priority of payment and likely recovery in the event of default. Please see Fitch's *Corporates Recovery Ratings and Instrument Ratings Criteria* for further detail on how Fitch assigns instrument ratings.

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	• Cash flow and profitability
Management strategy/governance	• Financial structure
Group structure	• Financial flexibility
Business profile	

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.

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This report updates and replaces *Corporate Rating Criteria*, dated 21 December 2020.

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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. Individual rated corporates may span multiple industry categories, some of which are quite small in size and with idiosyncratic characteristics, and will also generally face fast-moving, typically unregulated 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. Corporate 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.

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 Rating Derivation 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 Rating Derivation 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 certain criteria (e.g. the *Investment Holding Companies Rating Criteria* or *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 6*.

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 the 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 of the relevant industry.

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").

Operating Environment

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

- Economic Environment: the location of its revenues, 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 6* for a more detailed description of our approach to the OE assessment.

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 the *Non-Financial Corporates Exceeding the Country Ceiling Rating Criteria*.

Country Ceilings are an assessment of T&C risk, capturing the risk of 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 Ceilings Criteria* for additional detail.

Please note that 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.

Management Strategy and Corporate Governance

Management Strategy

Fitch considers the collective 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 assigned.

Appendix 6 indicates governance characteristics that are likely to be credit neutral, or likely to be credit negative, putting downward pressure on ratings.

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 be in a position 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.

Ownership, Support and Group Factors

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.

Where group entities are ring-fenced or have segregated funding, Fitch assesses the group's linkages under the *Parent and Subsidiary Linkage Rating Criteria*, or where the entity is an investment holding company the analytical approach in the *Investment Holding Companies Rating Criteria* is used.

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*.

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 provide guidance for the application of the concepts of the *Corporate Rating Criteria*.

Financial Profile

The quantitative aspect of Fitch's corporate 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 in the sections 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, 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 based on factors observed or extrapolated from Fitch's judgment on rated issuers.

Forward-Looking Through-the-Cycle Approach

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 Ratings Criteria* under a number of scenarios as set out in the criteria.

The model does not employ any statistical modelling techniques, nor are any standard forecast assumptions applied. Its primary purpose is to support Fitch's rating analysis by ensuring the key ratios are projected in a globally consistent fashion in order to generate issuer-specific financial forecasts in line with Fitch's methodologies for use in rating committees.

The COMFORT model 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), in which case forecasts will be produced using a bespoke approach.

Ratings Case and Stress Scenarios

Fitch evaluates risks of rated entities and structures under a variety of scenarios to ensure rating stability. The ratings-case and stress-case forecasts help to determine the amount of headroom in a company's credit ratings and inform the appropriateness of a change in 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 performances, its strategic orientation and analysis of wider industry trends. The macroeconomic backdrop for the ratings case may be supported by Fitch's latest *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 the issuer under review. Fitch believes this represents a reasonable time frame for forecasts beyond which projections are less meaningful.

A stress case, defined as a scenario that may cause the rating to be downgraded by at least one notch, is also undertaken.

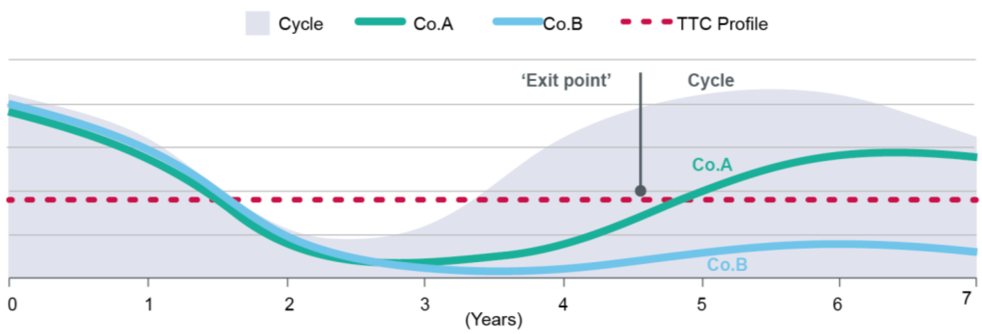
Through-the-Cycle Approach

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 the OE has occurred that would necessitate a rating change.

The "Rating Through-the-Cycle" chart below illustrates two highly stylised examples. Company A suffers through the 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, in a stylised manner, 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' credit rating, 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 influenced by distorting 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 must be made for such items as non-cash provisions and contingency reserves, asset write-downs with no effect on cash and one-time charges. Please refer to *Appendix 4* 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 principal funds flows from operations (see *Appendix 4*).

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 level.

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, or relative to cash flow or LTV, 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.

Investment-grade companies typically access predominantly unsecured debt. 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 sub-investment-grade companies, the analytical approach to forms of prior-ranking debt is detailed in *Corporates Recovery Ratings and Instrument Ratings Criteria*.

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 triggered, such as a change in policy on capital structure, a major acquisition or a strategic restructuring. Merger and acquisition risk has statistically been the single most common event risk, and can serve as an example of how event risk may be included or excluded from 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 current acquisition 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

Corporates Short-Term Ratings

The time horizon of short-term ratings does not explicitly relate to the 13 months immediately following a given date. Instead, it 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. The primary navigator factor addressing these issues is the Financial Flexibility factor.

This factor is composed of sub-factors addressing financial policy discipline, liquidity and fixed-charge/interest cover ratios and exposure to currency volatility. This 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 (fixed-charge/interest coverage, financial discipline and foreign-exchange exposure) being mainly factored in if they show a material weakness.

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

- The Financial Structure factor (mid-point of three-notch band), 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 would 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 by their nature would work against achieving 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 short-term rating level. When an issuer's rating is supported on a bottom-up notching basis, the short-term rating option will be chosen on a standalone basis, using the rationale outlined above.

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 monitoring 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, acknowledging the limited dataset available. 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 ultra-small entities. Specifically, the model requires a minimum Fitch-adjusted EBITDA of USD5 million for the model to apply.

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 4*), subject to the informational limitations applied to MBCOs.

At the committee stage, analysts review the model output in conjunction with a simple liquidity ratio calculation (Fitch-defined readily available cash plus available revolver divided by total debt with equity credit) to consider whether a higher or lower CO may be warranted (typically by a single-notch adjustment) relative to that suggested by the CCOM model, based on sector knowledge, conflicting metric levels or any additional factor deemed relevant.

While COs derived using the CCOM do not contain forecast data or sensitivity analyses, adjustments made to CCOM EBITDA 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* (June 2020) at www.fitchratings.com.

Indicative Examples of Key Credit Metric Ranges for MBCO Levels

MBCO level	Debt/EBITDA leverage (x)	Interest coverage (x)	Liquidity ratio (%)
<=ccc+*	>8	<1	<10
b-*	6.5-8	>1	10-15
b*	5-6.5	>1	10-15
b+*	<5	>1	>15

Source: Fitch Ratings

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 quality of the auditors or other reviewing parties employed and disclosure 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 the agency's forecasts, Fitch further aggregates a number of financial data points to produce summary projections that are comparable with those derived from historical statements. These projections thus 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 OE specifically, we derive the Viability Rating BSI scores from the latest *Sovereign Data Comparator* report.

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.

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 and this evolution may require greater or lesser emphasis on specific information elements in the rating calculus;
- different and fresh challenges from macroeconomic, financing or other environmental factors will arise for rated issuers over time, which in turn each require greater or lesser emphasis on specific information elements.

Fitch's own rating criteria will evolve over time, and with them, the relative emphasis placed on specific elements. In most cases, the public disclosure of a major capital markets issuer should be sufficient for Fitch to assign a rating. Nonetheless, where the information falls below an acceptable level, for any reason, Fitch will withdraw any affected ratings.

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.

Information levels generally show a stronger relationship to geography than to the level of the issuer's direct participation in the rating process. In high-disclosure jurisdictions, the sum of public information alone for an entity providing limited non-public information to Fitch will often exceed the sum of public and non-public information for other issuers in low-disclosure jurisdictions who participate fully in the rating process. Where the aggregate information falls below an acceptable level for any reason, Fitch will withdraw any affected ratings.

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.

Whether the information available is sufficient and robust enough to allow a rating to be assigned is a decision for a rating committee.

Rating Assumption Sensitivity

Ratings are sensitive to assumptions about the following factors: industry risk, OE, company profile, management strategy/governance, group structure, cash flow and earnings, capital structure and financial flexibility.

Fitch's opinions are forward looking and include Fitch's views of future performance. Non-financial corporate 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.

Industry 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 possible imposition of foreign-exchange controls.

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.

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 Rating Derivation 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 the impact of Parent-Subsidiary 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.
- The choice of the lease multiple used if it deviates materially from the conventional multiples described in *Appendix 1*.
- A description of those factors most relevant to the individual rating action.

Appendix 1: Main Analytical Adjustments

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.

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.

1. Leases

Analytical Approach

Lease accounting standards IFRS 16 and ASC 842, both effective for accounting periods beginning 1 January 2019 ("the New Standards") marked a significant change in lease accounting. The rationale for the approach taken below has been outlined in our report *Exposure Draft: Leases Rating Criteria*.

Approach is Accounting Treatment-Neutral Regardless of Accounting Standards

We expect ratings to be globally consistent and credit metrics comparable across geographies. 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; adopting consistent lease terms and costs based on asset life rather than lease length; and excluding capitalised leases from debt for many sectors.

Lease Costs are Treated as an Operating Expense

The New Standards diverge in the treatment of lease costs in the income and cash flow statements. IFRS 16 treats all leases much as finance (aka capital) leases are accounted for today. In the income statement, costs are reported as depreciation of a leased asset and interest cost on the lease liability. In the cash flow statement, principal and interest payments related to the lease liability are shown. While IFRS affords some flexibility in classification of interest costs (operating or financing cash flows), we expect both to be most frequently classified under financing activities.

In contrast to IFRS, US GAAP continues previous accounting in the income and cash flow statements, maintaining separate disclosure between finance leases and operating leases, and treating operating lease costs as an expense in both statements.

Fitch addresses these differences by making adjustments to reclassify any lease costs reported under depreciation and interest as operating costs in the income statement or operating cash outflow in the cash flow statement. This reclassification also applies to finance lease-related costs and cash flows reported under US GAAP, to achieve global consistency. EBITDA and FFO will be lower compared with reported figures as a result.

Leases Are Not Classified as Debt in Most Sectors

Fitch does not classify lease liabilities, including finance lease liabilities under US GAAP, as debt in any sector other than airlines and shipping. In all other sectors, these liabilities are classified as 'other liabilities' rather than debt.

In most sectors, we focus on credit metrics with no lease adjustment.

For a minority of sectors in which the lease/buy decision is a core financial decision, we focus on lease-adjusted leverage metrics, which include a lease-equivalent debt based on a multiple of rent expense.

Sector Navigators and their corresponding lease treatments are summarised below:

Multiple (8x rent)	As reported amount (IFRS16/ASC842)	Opex (lease debt excluded from total leverage)
Generic Food Retail Non-Food Retail Hotels Restaurant Companies Gaming	Airlines Shipping Generic (Transportation only)	Aerospace & Defense Alcoholic Beverages APAC Property/REITS Asia-Pacific Regulated Network Utilities Asia-Pacific Utilities Australian Regulated Network Utilities Auto Suppliers Automotive Manufacturers Building Materials Building Products Business Services (Data & Processing) Business Services (General) Chemicals Chinese Homebuilders Commodity Processing and Trading Companies Consumer Products Diversified Industrials and Capital Goods EMEA Real Estate and Property EMEA Regulated Networks EMEA Utilities Engineering and Construction Generic Latin America Utilities Latin America Real Estate Media Medical Devices, Diagnostic and Products Midstream, Pipelines and Master Limited Partnerships Mining Non-Alcoholic Beverages Oil & Gas Production Companies Oil Refining and Marketing Oilfield Services Packaged Food Pharmaceuticals Protein Steel Technology Telecommunications Tobacco Companies U.S. Utilities, Power and Gas U.S. Equity REITs and REOCs U.S. Healthcare Providers U.S. Homebuilders

Source: Fitch Ratings

Given the wide variability in companies that may use the Generic Navigator, issuers that fall under this Sector Navigator have the option of using either the multiple or opex approach. The approach taken will depend on the degree of reliance on real estate. If the issuer is heavily reliant on real estate and it forms a core element of its operations, the multiple approach is likely to be more appropriate. The choice of approach and rationale will be detailed in Fitch's reports on the issuer.

Many issuers have characteristics that straddle different navigators. Where appropriate to the issuer's business model, Fitch may present additional ratios to supplement the core 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 important part of the business model. Here we would supplement the core unadjusted credit metrics comparable with other media credits with lease-adjusted metrics to allow fuller comparison with retail peers which may also be relevant.

Summary Adjustments

The tables below summarise the adjustments we make to financial statements for issuers reporting under the New Standards.

IFRS Adjustments

Line item	Treatment
Balance sheet	
Right of use assets	No adjustment to balance sheet.
Lease Liabilities	No adjustment to balance sheet, classify as other liabilities not 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 costs (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 still considered relevant	Compute lease-equivalent debt as (a + b) multiplied by a multiple (default 8x) and add to debt in lease-adjusted ratios. For transport substitute with IFRS 16/ASC 842 lease liabilities.
For all sectors, if relevant per sector Navigator	Compute FFO interest coverage and FFO fixed-charge coverage with (a+b) classified as a fixed cost.

[a] Unless already classified as an operating cash outflow.
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 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 charge (c)	Unchanged (total lease expense =a+b+c).
Cash flow statement	
Payment of principal element of finance lease liabilities (financing cash flows	Reclassify an amount equal to (a) as cash lease costs (a reduction in operating cash flows).

US GAAP Adjustments (Cont.)

Line item	Treatment
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 still considered relevant	Compute lease-equivalent debt as (a + b + c) multiplied by a multiple (default 8x) and add to debt in lease-adjusted ratios. For transport substitute with IFRS 16/ASC 842 lease liabilities.
For all sectors, if relevant per sector navigator	Compute FFO interest coverage and FFO fixed-charge coverage with (a+b+c) classified as a fixed cost.

Source: Fitch Ratings

Please see pages 20 and 21 for worked examples of Fitch's adjustments to IFRS16 and US GAAP reporting.

Lease Capitalisation Sectors Other than Transport

For sectors in where we consider leases to be a core financing decision, such as those relying heavily on real estate, we capitalise using a multiple approach based on standard asset lives and discount rate assumptions. This contrasts with the New Standards, which base capitalisation on lease terms that can vary dramatically across geographies and entities, leading to a loss of comparability between entities that we would consider similar.

We will use the income statement charge (depreciation of leased assets + interest on leased liabilities + operating lease charge (US GAAP)) as the basis of our rent-multiple adjustment.

Fitch capitalises this number, hereafter referred to as the "lease charge", using a multiple to create a debt-equivalent. This represents the estimated funding level for a hypothetical purchase of the leased asset. Even when the asset may have a shorter lease financing structure, Fitch's debt-equivalent assumes a purchase of the asset for its full economic life. This enables a broad comparison between rated entities that incur debt to finance an operational asset and those that have leased it.

The standard 8x multiple is appropriate for assets with a long economic life, such as property, in an average interest-rate environment (6% cost of funding for the corporate). The multiple can be adapted to reflect the nature of the leased assets: lower multiples for assets with a shorter economic life, and mostly in emerging markets, to reflect sharply different interest-rate environments in the countries concerned. Fitch may vary the multiple when there is a strong reason to believe that a higher or lower multiple is more appropriate for an individual issuer, market sector, or country. The choice of the multiple used, if the result of its use deviates materially from the conventional multiples derived from the two tables on the following pages, will be noted in Fitch's research on the issuer .

Relevant Multiple (x) Per Interest-Rate Environment and the Leased Asset's Remaining Useful Life

		Interest rate environment (%)				
Leased asset's economic life	Leased asset's remaining useful life	10	8	6	4	2
50	25	7.1	8.3	10.0	12.5	16.7
30	15	6.0	6.8	7.9	9.4	11.5
15	7.5	4.3	4.7	5.2	5.8	6.5
6	3	2.3	2.4	2.5	2.7	2.8

Source: Fitch Ratings

We do not hold periodic minor resets of derived thresholds to add value to our analysis. Although today's interest rates are low in various developed markets, many companies' existing long-dated leases were incurred during periods of "normal" or higher than today's interest rates. Since companies have a steady stream of amortising lease profiles, more recent interest-rate changes have not translated into lower lease charges.

Fitch however differentiates and reviews periodically the multiple used in countries where interest rates are significantly higher or lower that in the reference OECD countries such as Germany, the US, France, Italy or the UK where the 10-year government bond yield median over the 2003-2018 period ranged typically between 3.5% and 4.5%, which after adding the risk premium for a good-quality corporate risk is broadly consistent with the 6% interest rate environment used for defining the lease multiples.

For countries, such as Japan, where the median 10-year government bond yield is closer to 1%, a 9x multiple is more appropriate. At the opposite end, in countries such as South Africa or Russia where the median 10-year government bond yield is above 8%, a multiple of 6x should be used. For issuers with a multinational assets base, Fitch may use a blended approach depending on which countries leased assets are located. If this level of detail is unavailable or Fitch is aware that the country-specific multiple is not appropriate (for example, when leases are denominated in hard currencies), Fitch may either use the standard 8x multiple or take the multiple of the most relevant country for the issuers if one dominant country of operations can be defined.

Where there is evidence for a class of asset that a company's borrowing costs to acquire the asset would be more reflective of global than local financing costs, both in the same currency, Fitch may use an 8x multiple in jurisdictions where a different multiple is the norm for leased financings. Examples of such asset classes include aircraft and ships, which are typically financed in US dollars in global and local markets. Rating committees will evaluate this case by case and relevant evidence may include consideration of interest rate costs (including lessee premiums) implicit in operating or finance leases and absolute lease payments.

Country-Specific Lease Standard[a] Capitalisation Multiples

8x multiple	7x multiple	6x multiple	Other multiples
APAC			
Malaysia, Thailand, China/Hong Kong, South Korea	Australia, New Zealand	India, Philippines, Sri Lanka, Vietnam	Indonesia: 5x Japan : 9x Singapore: 9x Taiwan: 9x
Americas			
Bolivia, Canada, El Salvador, Guatemala, Panama, US	Argentina, Chile, Peru, Venezuela	Dominican Republic, Mexico	Brazil: 5x Colombia: 5x Costa Rica: 4x
EMEA			
Belgium, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Ireland, Italy, Lithuania, Netherlands, Norway, Portugal, Saudi Arabia, Slovakia, Slovenia, Spain, Sweden, UK	Bulgaria, Greece, Hungary, Poland, Romania, Serbia	Azerbaijan, Georgia, Iran, Kazakhstan, Moldova, Namibia, Russia, South Africa	Switzerland: 9x Luxembourg: 9x Turkey: 5x Ukraine: 5x Belarus: 5x

[a] Standard refers to the multiple applied to assets with a 15-year average remaining life
Source: Fitch Ratings

When Not to Capitalise

Even for sectors in which Fitch considers the capitalisation of leases to be relevant, we can also choose not to capitalise certain leases, acknowledging cases where a lease has more the character of an operating cost rather than a payment under a longer-term funding structure. Fitch would consider not capitalising lease commitments in the following cases:

- Leased assets that have a short average remaining useful life of five years or less (implying a multiple of 3.0x to 3.5x). Since rated entities are usually leveraged above 3x, it makes little difference if these types of leased assets are included.
- Leased assets that are linked to a specific concession or contract with a finite term, where the lease obligations on bespoke assets co-terminate with completion or expiry of the contract.
- The rated entity has no choice but to lease fixed assets owned or managed by third parties (airport terminals, national infrastructure access, other "regulated" shared services). This is not intended to capture situations where issuers have spun off assets into separately traded entities, as for example, with TMT companies and their tower masts. This exception to capitalise lease payments is meant to capture situations where the purchasing of the asset is not an option for sector participants.
- Where the company has demonstrably been able to manage its lease costs to match the stage of the business cycle, making lease payments more akin to a variable operating cost rather than a long-term financial commitment. This may also lead to the capitalisation of a lower, base level of operating lease expenses when the rentals above that level have proved to be flexibly managed across the cycle.

Airlines and Other Transportation Sectors

For transport (primarily airlines, buses, shipping), we deviate from the multiple approach and use IFRS 16/ASC 842 reported lease liabilities as our lease adjustment to reflect the unique features of the leasing model for these sectors.

We believe the New Standards provide the most appropriate measure in this sector because:

- The aircraft and shipping markets are global and do not have the regional lease length variations we see in other sectors, such as real estate;
- We believe the opportunity to recast lease contracts as service contracts is limited, given the highly developed financing sector backing aircraft and other transport asset leasing;
- Many transport companies make frequent use of finance leases, often consisting of non-linear payment terms and/or purchase options, and which are often actively managed. In these circumstances, there is unlikely to be enough data in the public domain to determine an appropriate multiple to reflect these nuances, potentially leading to misleading comparisons. The New Standards allow this complexity to be incorporated in a consistent manner;
- Publicly available global databases exist that provide basic ownership and leasing data on an aircraft-by-aircraft basis in this sector. This will allow us to take into account any major distortions caused by lease length variations, due perhaps to a very young and growing fleet, and reflect these in our rating triggers, if appropriate.

Other Analytical Considerations

Leases with Variable Components

Under the New Standards, companies are required to capitalise variable lease payments linked to inflation or an index (LIBOR, other interest rates) but can exclude payments tied to sales or other operational metrics that can vary across companies based on the stage of business cycle. To avoid any loss of comparability, we, by default, treat all variable lease costs as part of the total lease charge.

However, when disclosure is both sufficient and reliably consistent, we may reflect the additional flexibility provided by the variable component by discounting the rental amount used in the computation of the debt equivalent, when this adjustment is made.

Short-Term Leases

We exclude short-term lease costs from the calculation of the lease-equivalent debt. Short-term leases are defined as any leases with a term of 12 months or less or leases ending within 12 months of date of first implementation of New Standards.

Cash Flow Metrics

In response to the complexities introduced by the New Standards, we introduced two additional cash-flow-based metrics defined as: [CFO-capex] divided by gross debt and [CFO-capex] divided by net debt. There are several benefits the use of these metrics:

- All non-discretionary asset costs are accounted for in this measure, be they lease costs, services, or maintenance capex;
- The metrics are a good complement to EBITDA/FFO margin metrics, as they account for the recurring capex and associated funding needed to maintain a certain level of market positioning and profitability;
- They remove the noise of shareholder capital allocation (mainly common dividends) to assess the true financial flexibility/capacity available to a company to repay all of its debt, absent external pressures.

The importance and use of these ratios vary due to capex patterns intrinsic to each sector. The new ratios are most directly relevant for sectors, such as telecommunications or industrials, in which companies tend to have relatively steady capex, but carry less analytical significance for utilities, natural resources, gaming, or airlines sectors, where capex is typically more volatile and growth-oriented. When relevant to the individual sector, the new ratios are shown in the Ratings Navigator.

Worked Examples

Company A: Adjusting IFRS 16 to Fitch's Proposed Lease Treatment (P&L & Cash Flow Statement)

Company A Lease Assumptions (EURm):

- P&L lease operating costs old IFRS: 170 (linear amortisation)
- P&L lease operating costs new IFRS: 190 (non-linear interest drives higher expense)
- Total cash outflow leases: 170 (on a cash basis, total payment does not change under new standard)
- Although cash outflow is lower than P&L, for illustrative purposes, we have assumed cash and P&L rent payments are the same (190)
- In reality, under IFRS 16, lease expense amount is unlikely to be exactly the same as previously due to the effect of linear depreciation and non-linear interest. In this example, old lease expense is 170 but 190 (110+80) under new IFRS
- 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
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 FASB 842 (new US GAAP) to Fitch's Proposed Lease Treatment (P&L & Cash Flow Statement)

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

Assumptions:

- Operating lease expense: USD40
- Finance lease depreciation & amortisation: USD20
- Finance lease interest: USD15
- Total adjusted rent expense under new lease treatment: USD75
- 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
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, or "LBO", transaction) whose economic and strategic interests are expected to remain aligned with those of common equity holders.

See *HoldCo PIK and Shareholder Loans* on page 30 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: operating EBITDAR, and adding pensions items to the top and bottom line:

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

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.

Impact on Recovery Analysis

Bespoke recovery analysis carried out for 'B+' rated and below credits may include a pension deficit, where significant, as a creditor in the capital structure. Pension liability rankings may vary depending on country-specific insolvency frameworks. Accounting estimates can be used unless there is evidence that these differ significantly from the amount that would actually be claimed on a liquidation or restructuring. See Fitch's *Corporates Notching and Recovery Ratings Criteria* for more details.

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.
- 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.

Impact on Credit Metrics

Where factoring has been treated by the issuer as an asset sale 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.

Impact on Recovery Analysis

Whether secured or non-recourse funded, and reconsolidated, the practical importance of this core working-capital funding leads to its treatment as senior-ranking debt. This seniority of ranking features in recovery analysis and facilitates immediate replacement funding. In case the originator benefits from an alternative unsecured credit facility as a backup, receivables factoring will however not be treated as a super-priority claim.

For the purpose of the recovery analysis, "factoring funding" is defined as the highest amount authorised to be drawn in the last 12 months preceding the analysis, or the latest drawn amount, if this is the only information available.

Case 1: Liquidation Approach

If the receivables sold are off balance sheet without recourse to the originator, Fitch assumes that all of the receivables shown on the balance sheet (which exclude the sold receivables) are to be used for the recovery of the on-balance-sheet debt and no adjustment needs to be made to reflect the impact of the factoring programme.

In the less frequent case that the factoring is on balance sheet due to recourse to the originator, Fitch treats the factoring debt as super-senior and includes the impact of over-collateralisation. Fitch seeks details on the maximum over-collateralisation requirements that apply to receivable factoring to protect the factoring's lenders against losses and dilutions (such as credit notes) and to cover funding costs. If no information is available, a standard rate of 125% of the factoring funding can be assumed for formally structured programmes. For non-structured factoring transactions, a 105% over-collateralisation rate can be used instead. Fitch would then determine an appropriate discount given the quality and diversity of the group's customer base and the value already taken out by the factoring creditors. In our worked example it amounts to 50%. The value of the receivables after this haircut is assumed to be the value available at the time these assets are sold.

Liquidation Valuation — Illustrative Asset Recovery, Separating Out a Receivables Factoring

(EURm)		Group	Factoring	Remaining group
Factoring programme amount	(A)	0	50	
Over-collateralisation rate (%)	(B)		125	
Maximum level of receivables pledged	(C)=(A)x(B)		63	
Value of receivables before haircut	(D)	85	63	22
Haircut assumption (%)	(E)			50
Receivable value available for recovery net of haircut assumption	(F)= (D)x(1-(E))	11	0	11
Asset recovery for the group				
Receivables		11	0	11
PP&E		100		
Inventory		25		
Total available for debt recovery		136		

Source: Fitch Ratings

In the table above, we assume that the over-collateralisation of EUR13 million (EUR63 million-50 million) is all absorbed by funding costs and losses at the factoring level.

Case 2: Going-Concern Valuation

In a going-concern scenario, Fitch has to make a decision on the elements listed below.

- Whether the entity and/or its creditors have ensured that the receivables factoring has remained available to the group perhaps by increasing (if possible) or maximising the over-collateralisation, or ensuring that good-quality receivables have been routed through the factoring. This implies that the receivables of the group are, at best, of the same quality. The receivables could be left outside the factoring programme because of concentration reasons, i.e. over "per obligor" limits, beyond which the factoring would give no funding, lower quality (such as receivables in serious arrears), or because of location in jurisdictions where it is difficult to gain security over these assets.
- Whether the receivables factoring is likely to close down. If so, senior debt (likely to be super-senior debt) at the entity level has to be arranged to fund the remaining working-capital liquidity requirements of the group.

For the purpose of Fitch's analysis, unless it is clear from the factoring documentation that the factoring programme will continue to be available, the agency will assume a worst-case scenario, i.e. the factoring programme closes down and has to be replaced by an equivalent super-senior facility.

If the credit profile of the group were to deteriorate, it is likely that the quality and quantity of eligible receivables would start declining and therefore the amount of factoring would decline. Fitch assumes that the reduction in volume of receivables would be of the same proportion as the agency's EBITDA discount applied to calculate the distressed EV.

However, Fitch's analysts continue to have the latitude to present logical recommendations that may increase or reduce the recovery ratings suggested by the valuation and the notching. It depends on views about the OE or a particular company. For instance, if the factoring is exposed to a part of the business which is more seasonal and/or cyclical, or if the company has high operating leverage, meaning that a minimal reduction in sales and receivables would have a very high impact on EBITDA.

Reverse Factoring

This consists in a financial institution paying a supplier of an issuer at or before the maturity of the trade payables. The amount under the trade payable would, as a result, be owed by the issuer to the financial institution with a final maturity often significantly extended as compared to the maturity of the original payable had the reverse factoring arrangement not been in place.

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 CUR100 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. CUR67 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 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.

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

	Corporate adj.
Description (% of face value)	**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 Equity fund, equities	0-40
• 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.

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.

In situations 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

Analytical Approach

In the majority of entities rated by Fitch, consolidated financial statements are a reasonable basis for the assessment of the economic ability of a group to make use of the resources available to it to service its debt, and the identification of the true extent or potential extent of its liabilities. This is the case when the consolidated entities operate as one economically integrated group with cash generated in one part of the consolidated group accessible to other parts of the group, most notably the debt-raising entities and the expectation that the obligations issued by one part of the group enjoy a claim upon the operations of other parts of the consolidated group and this common responsibility informs the group's financial strategy and creditors' recourse.

Even if the consolidated profile is the right basis for the assessment of credit worthiness, it does not however necessarily mean that all entities within a group will be rated at the same level as explained in Fitch's *Parent and Subsidiary Linkage Rating Criteria*.

Factors such as ownership structure, funding arrangements, and location-based restrictions may however be such that the consolidated profile does not provide the most appropriate picture to assess the credit quality of the rated legal entity, typically the top parent company, and there is consequently a need to "redraw the boundaries", in most cases with some form of deconsolidation. The decision to deconsolidate would generally be the result of an assessment of weak linkage between the parent and the subsidiary being considered for deconsolidation based on the assessment of the legal, operational and strategic linkages described in more detail in the above-mentioned criteria.

More rarely, Fitch may also consolidate certain debts which an issuer has been able to deconsolidate, where Fitch believes that debt is likely to be serviced by the issuer, directly or indirectly, for example for strategic reasons. The presence of significant minority interests may also require adjustments to consolidated financial ratios as profits attributable to minority shareholders within the group structure are not available to service debt at the parent level.

Subordination issues, either due to characteristics of the debt instruments or the location of the debt in the group structure are reflected in Recovery Ratings as applied to debt instrument ratings. However, if the degree of subordination or access to cash flow within the group structure changes the default likelihood of an issuing entity, this can also affect the IDR. For example, a rated entity may be more of a holding company (HoldCo) in receipt of contingent dividend income streams rather than a parent with direct access to all consolidated profit streams. Similarly, prior-ranking funding at lower risk subsidiaries may result in the parent only having direct access to riskier activities rather than to the whole group as portrayed in the consolidated accounts.

Financial Adjustments Made

The most common adjustments Fitch makes to consolidated accounts are listed below.

Full Deconsolidation

- Replacement of one segment of the group's EBITDA or FFO contribution to the consolidated whole with the sustainable cash dividend received from that entity. This acknowledges that the inherent profitability conveyed in the EBITDA or FFO is not of equally direct benefit to the rating as the rest of the group's operations – the cash fungibility is less than that for other operations. Usually this 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.
- Rating committees look closely at the stability and record of sustainable dividends received when adding them back to the EBITDA or FFO. Fitch excludes dividend flows that have not been stable over the past few years.
- If entities are deconsolidated, "equity value" still remains in theory for the potential benefit of the parent creditors, which can limit loss severity given 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

Where information is available, a proportionate consolidation approach may be more appropriate in 50:50, or 60:40 joint ventures 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.

JVs with a significant level of leverage and deemed unlikely to be supported by the parent are however 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.

Adjustment for Minority Interests

If an entity is consolidated (as if 100% owned) yet significant minorities exist, thus dividends are paid to those minorities, Fitch may:

1. deduct the cash paid minority dividends from FFO and adjust EBITDA-based coverage and leverage metrics for these dividends;
2. choose proportionate consolidation for the less than 100% ownership if the level of minority interest is high (one-third of economic interest or more); or
3. 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.

7. HoldCo 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:

- 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 an LBO transaction) whose economic and strategic interests are expected to remain aligned with those of common equity holders.

For instruments that do not demonstrate these features, please refer to *Appendix 1: Main Analytical Adjustments; 2. Hybrids* on page 22.

If instruments that come under this adjustment are present in a financing and legal group structure, Fitch will assess if and how they should be taken into consideration in the rating assessment of an entity.

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 in place such that the IDR reflects the relative default probability of the specified group that will include the rated entity. In groups with heavily engineered capital structures, such as LBOs or high-yield issuers, 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. The test is whether the instrument increases the probability of default of the rated entity's debt.

- Subordination and Lack of Security**:** structural subordination of the instruments when they are issued by an entity outside the rating perimeter 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. Possession of independent enforcement or acceleration rights would weigh towards debt treatment.
- Non-Cash Interest Payment**:** the instruments are PIK-for-life (i.e. without cash-pay obligations or options) 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 debt instruments in the rated entity's IDR perimeter 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 rated entity or group of entities, then effective structural subordination can exist. In addition, if there are provisions in the documentation that in Fitch's view provide sufficient protection against cross-default or cross acceleration, the IDR of the rated entity will not be affected.

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.

Only an Equity Claim

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.

Intercompany Loan Claim

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 and decision tree. 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 perimeter's debt quantum.

Junior-Ranking Security Over Rated Entity Assets

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). This could effectively bring the instrument within the ring-fencing of the rated entity and potentially affect the rated entity's IDR.

However, if the access to the security package is granted without any independent acceleration or enforcement rights whatsoever, then Fitch would most likely consider that sufficient subordination still exists to protect the senior lenders (provided that the security package and the subordination arrangements are enforceable within the relevant jurisdiction).

Security Granted Over the HoldCo PIK Issuer

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 entity and therefore will not have an impact on its IDR, unless a change of control clause at the rated entity level can be triggered.

Possible Contagion Through "Change of Control" Clause

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 or Cash-Pay

PIK-for-Life

If an instrument does not impose any obligation on an issuer to pay cash interest for the life of the instrument (including non-eligibility to pay in cash (toggle)), 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, a HoldCo PIK or shareholder loan default is less likely than a rated entity default, and the overall risk of default for the rated entity is not increased.

Cash-Pay

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 which means that they may at some point increase the borrower's cash obligations. In cases where the borrower has the option 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.

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 have to, or elect 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 this instrument 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.

Fitch would however include in its analysis of the rated entity the level of dividend required to service the debt at the HoldCo issuer level. This may result in a change to the IDR, depending on the resulting level of financial flexibility still available to the rated entity. If the ring-fencing is not sufficiently strong, then the HoldCo PIK or shareholder loan would be considered an obligation of the rated entity and the switch to a cash-pay obligation would increase the probability of default accordingly.

Final Maturity

Final Maturity Longer than Restricted Group Debt

If the final 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.

Final Maturity Shorter than Rated Entity's Debt

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 when the instruments at the rated entity level are still outstanding. In practice, if the HoldCo PIK or shareholder loan issuer is ring-fenced, then the options for the group and/or its ultimate shareholders would be as follows:

1. To allow the HoldCo PIK/shareholder loan instrument to default. Assuming that the rated entity is performing adequately, Fitch expects that shareholders will take steps to prevent this occurring. If the rated entity is already performing badly, this is likely to be already reflected in its IDR and the default of a HoldCo PIK/shareholder loan instrument, if structured as a subordinated instrument and provided the rated entity and the security ring-fencing arrangements are effective, would probably not have a further detrimental impact on the IDR.
2. To arrange to refinance the instrument with a similar, longer-dated instrument outside the rated entity. This would be a credit-neutral event for the rated entity and therefore would not affect the IDR.
3. To repay the instrument from equity sources outside the rated entity by either an IPO or a direct equity injection from shareholders.
4. To refinance the instrument by refinancing all of the group's debt, including at the rated entity level.
5. To repay the instrument by selling the group to another owner and prepaying all group debt, including at the rated entity level.

Item (1) above could result in a change of control event at the rated entity level if the HoldCo PIK/shareholder loan investors enforce their security over HoldCo PIK / shareholder loan issuer shares. Items (2) to (5) above constitute event risk for an issuer, which is not generally included in the assessment of an IDR. In cases where event risk is clearly increasing (e.g. as the final maturity date of a short-dated HoldCo PIK instrument approaches), Fitch may decide to apply a Rating Watch where there is some visibility of potential specific events.

Therefore, provided that the other terms of the HoldCo PIK/shareholder loan instrument are sufficient to allow the agency to determine it has no impact on 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

Transferability of Shareholder Loans

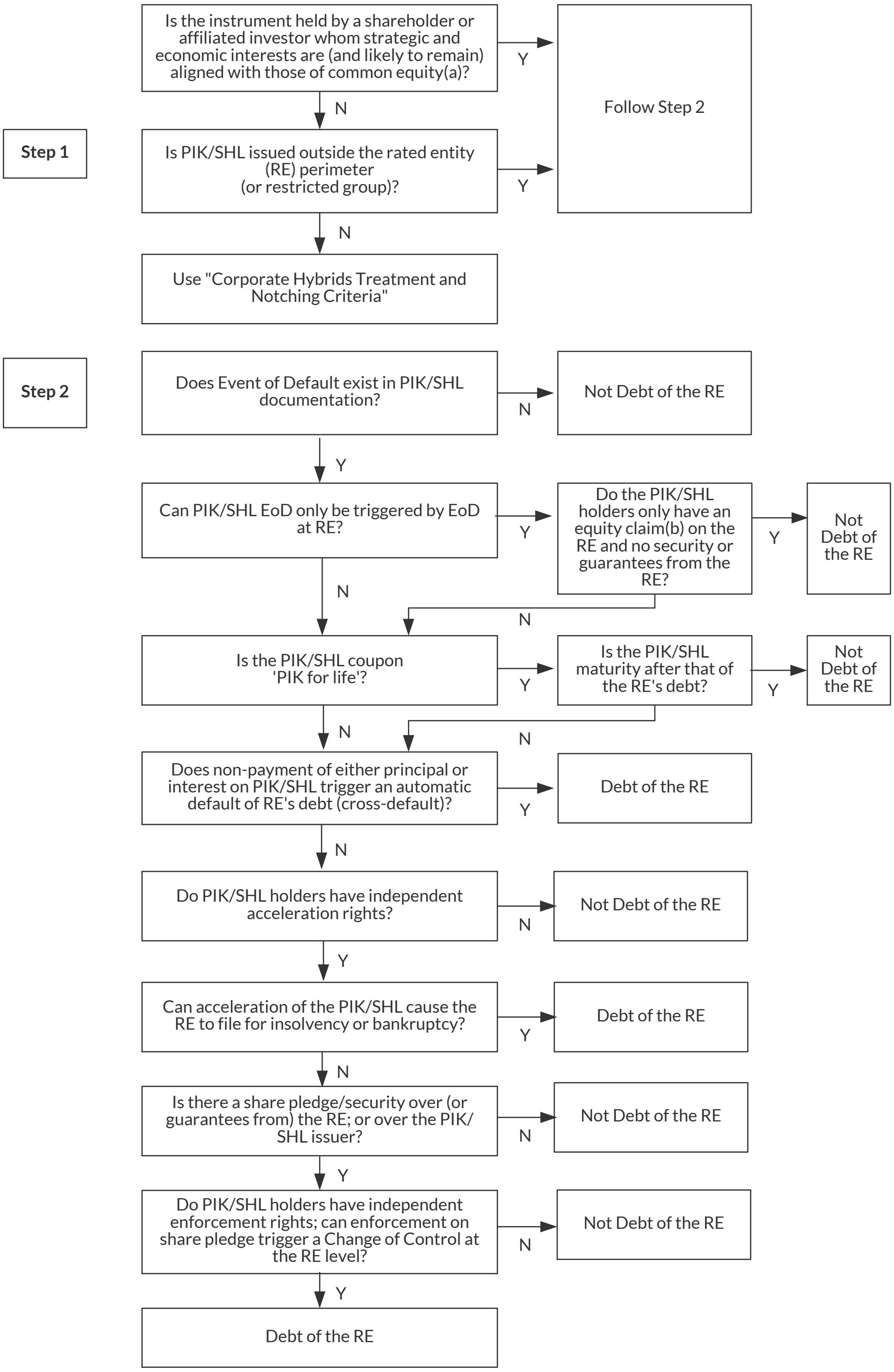
Fitch would expect the shareholder to remain the holder of the instrument and the interests of the shareholder loan holders and those of the common equity holders to be aligned. Otherwise, if the shareholder loan can be transferred to third parties independently of equity interests, creditor composition 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.

Such issues may be more acute for private equity owned companies whose shareholders typically have a shorter-term investment horizon than a strategic shareholder with long-term commitment and incentive to support the rated entity. However, to date, evidence is not conclusive that a particular private equity sponsor, or its fund's time-horizon, has consistently treated its investment or the restricted group's senior creditors adversely. In Fitch's experience, each sponsor has reacted to events based on the merits of each transaction.

Decision Tree

The decision tree below summarises Fitch's analytical steps in assessing the features of PIK instruments and shareholder loans that would lead Fitch to treat them as debt of the rated entity. The materiality and transferability considerations described above would not, in isolation, lead Fitch to treat the instruments as debt. They could however feature in addition to other elements of the decision tree leading to a debt treatment. The approach taken by Fitch to assess the debt treatment of SHL and PIK instruments is holistic in nature and cannot be summarised in a decision tree which would be applicable to all cases given the wide variety of characteristics these instruments can exhibit. The decision tree below does not therefore supersede the criteria described in the previous pages but should rather be seen as a tool helping to analyse fairly simple cases.

Decision Tree To Consider Whether the PIK Instrument/Shareholder Loan (SHL) is Debt of the Rated Entity (RE) or Not



[a] Fitch considers interests are aligned if it believes that the holders of the SHL/PIK instrument are unlikely to exercise all available remedies in case of default (i.e. a shareholder action to force an insolvency would be an unlikely scenario). This can be reinforced by the fact the shareholder loan cannot be transferred to third-parties, independently of equity interests.
[b] If the PIK or SHL instrument is lent at the RE level, Fitch does not consider the shareholder loan to have only an equity claim. Further analysis of the characteristics of the instrument are required, following the decision tree.
Source: Fitch Ratings, transaction documents

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 – payment-in-kind - 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 movements, as non-cash, are excluded as a matter of course 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 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 on page 39.

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". In some situations, the FLC benchmark score will equal the corporate entity's rating where the FS operations are almost entirely reliant on the corporate entity for funding since these funding requirements would have been included in the corporate entity's rating. Where this is the case, the FLC component will be driven by the corporate group. 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				
		Prone to change (b)	Less stable (bb)	Generally stable (bbb)	Stable (a)	Very stable (aa and above)
Asset quality	Poor quality (b)	1	1	2	3	4
	Below average (bb)	1	2	3	4	5
	Average (bbb)	2	3	4	5	6
	High quality (a)	3	4	5	6	7
	Very high quality (aa and above)	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* dated 28 February 2020).

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* dated 28 February 2020).

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* dated 28 February 2020) 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 CUR1,300 million, financed by a CUR1,300 million increase in the gross debt or cash reduction at the corporate operations.

Debt Increase at Corporate Entity:

(CURm)	Consolidated group	Core corporate	FS operations	FS adjustments Core corporate	FS adjustments FS operations	Adjusted profile Core corporate	Adjusted profile 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:

(CURm)	Consolidated group	Core corporate	FS operations	FS Adjustments Core corporate	FS Adjustments FS operations	Adjusted Profile Core corporate	Adjusted Profile 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: 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* at www.fitchratings.com.

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	Higher	Moderate	Moderate	Lower
Strategy	Higher	Moderate	Moderate	Lower
Cash flow	Higher	Higher	Moderate	Moderate
Leverage profile	Moderate	Higher	Higher	Moderate
Governance and financial policy	Moderate	Moderate	Moderate	Moderate
Refinancing risk	Lower	Moderate	Higher	Higher
Liquidity	Lower	Moderate	Higher	Higher

Source: Fitch Ratings

For example, high refinancing risk and weak liquidity would inevitably 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.

Complementing Sector Navigators

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.

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.	**Constantly 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 for a potential trade buyer or monetisation of assets.	**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 the possibility that third parties, such as strategic investors, may provide support. Such support may take the form of equity	**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
			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 3: 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 issuers that have instruments and other financial obligations owned 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 original contractual terms; and
- the restructuring or exchange is conducted to avoid bankruptcy, similar insolvency or intervention proceedings, or a traditional payment default.

When an exchange or tender offer that Fitch considers to be distressed is announced, the IDR will typically will be downgraded to 'C'. Completion of the DDE typically results in an IDR being downgraded to 'RD' (Restricted Default). Affected instrument ratings will be changed accordingly. Shortly after the DDE is completed, an IDR will be re-rated and raised to a performing level, usually still low speculative-grade.

The most common application of these criteria is to bond and bank 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.

DDE Criteria for Bonds

Material Reduction in Terms

A material reduction in terms could feature any one or a combination of the following:

- Reduction in principal;
- Reduction in interest or fees;
- Extension of maturity date;
- Change from a cash pay basis to PIK, discount basis or other form of non-cash payment;
- Swapping of debt for equity, hybrids or other instruments;
- Cash tender for less than par if acceptance is conditional on a minimum aggregate amount being tendered, or if combined with a consent solicitation to amend restrictive covenants. If either of these conditions is not evident, then cash tender offers for less than par will not be DDEs, unless other circumstances indicate that failure of a large percentage of creditors to participate in the tender would likely contribute to the entity defaulting; and/or
- Exchange offers or cash tenders that are accepted only if the tendering bondholder also consents to indenture amendments that materially impair the position of holders that do not tender.

Fitch will review the circumstances of any exchange offer and consider the impact of each of these factors.

The purpose of this test is to exclude situations where an investor is being fairly compensated for accepting an offer, and is at least indifferent about what is being offered and the original contractual terms. In practice, however, this judgment can be highly subjective and dependent on factors, such as an investor's/market's perception of, and appetite for the issuer's credit risk, or the value attributable to the granting of additional security.

Our presumption when any of the above is present is, therefore, 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 likelihood of this is more remote for a distressed issuer.

Conducted to Avoid Bankruptcy, Similar Insolvency or Intervention Proceedings, or a Traditional Payment Default

The test is designed to exclude situations where performing companies launch tenders to amend the terms of their bonds to take advantage of market pricing, excess liquidity, expediency or other factors. We do not consider these situations DDEs.

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

Indications that this may be a DDE include an issuer making explicit public statements that it may be forced to default on an instrument if the exchange is not completed or an issuer having an untenable liquidity profile.

DDE Criteria for Revolving Credit Facilities and Term Loans

Material Reduction in Terms

A material reduction in terms, by itself, is not sufficient for an amendment to a revolving credit or term loan to be classified as a DDE. The flexibility of loans compared with bonds, and the frequency with which loans are amended across the spectrum of credit quality, make it difficult to have a categorical determination of a DDE for a loan.

For example, extending the maturity and reducing the interest on a revolving loan could result either from an improvement or deterioration in credit quality, and non-payment defaults caused by covenant violations are commonly waived or amended. Amendments to maturity dates and pricing are commonplace for credit facilities for a variety of reasons (including the issuer taking advantage of improvements in credit quality, for example).

In addition to the examples in the bonds section, a material reduction in terms could feature any one or a combination of the following:

- The introduction of PIK interest (but not the exercise of a previously agreed PIK option);
- An exchange of debt for equity.

Conducted to Avoid Bankruptcy, Similar Insolvency or Intervention Proceedings, or a Traditional Payment Default

A material reduction in terms by itself would not be considered at DDE unless one or a combination of the following factors is present:

- The issuer's declared intention to file for bankruptcy if the loan amendment is not accepted;
- A reduction in terms coupled with a concurrent bond exchange considered to be a DDE;
- Above-market compensation (e.g. equity in addition to rather than in exchange for debt or interest materially above market);
- A significant reduction in terms coupled with an obvious, significant deterioration in credit quality; and/or
- Use of a formal court process (including forms of European pre-insolvency schemes of arrangement) to change original contractual terms to impose changes upon creditors outside a formal bankruptcy or insolvency framework (such as Chapter 11 in the US).

Additional Considerations for Other Financial Obligations

Factors suggesting a DDE for obligations, such as leases include:

- A public or semi-public process;
- The involvement of all or a substantial portion of one or more classes of obligors;
- Explicit written reference to the process being undertaken to avoid default;
- The use of a court-sanctioned or court-supervised process; and/or

- The potential for some members of a creditor class being compelled to engage in an exchange against their will by a majority vote.

Ratings Implications

IDRs

Pre-Execution

On the announcement of a prospective debt exchange offer that Fitch determines to be a DDE, the IDR will typically be lowered to 'C'. In situations where the completion of the DDE is subject to material uncertainty – for example, because of a minimum acceptance level that the agency believes may not be reached – a Rating Watch Negative classification may be used as an alternative to lowering the IDR to 'C'.

For non-financial corporates, 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, to reflect the likelihood of the impending default, the IDR of the issuer will be lowered to 'C' as described above, but 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 the 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 normal Recovery Ratings criteria, but in order to not create ratings volatility, these instrument ratings can stay at the same rating level for up to 90 days. If the DDE is not executed within 90 days, Fitch will review the execution and timing of the DDE and the likelihood of the unaffected instrument ratings maintaining their creditworthiness. The IDR changes when the DDE transaction is executed, including registering its 'RD', but unaffected instrument ratings will not change unless their creditworthiness changes as a result of the post-execution profile. Fitch expects this situation to apply to non-financial corporate entities with IDRs of 'B-' and lower.

On Execution

On completion of the exchange, the IDR will be lowered to 'RD' to record the default event unless an issuer's IDR is already at 'RD' because default has already occurred in another form (e.g. uncured non-payment of coupon).

Post-Execution

Once sufficient information is available, the 'RD' rating will be re-rated to reflect the appropriate IDR for the issuer's post-exchange capital structure, risk profile and prospects in accordance with relevant Fitch criteria.

At the same time as the new IDR is assigned, all related issue ratings may be adjusted, including those that were not part of the exchange, to ensure that all ratings are consistent with applicable notching guidelines in the relevant criteria. It is difficult to define precisely the length of time that the IDR will remain at 'RD' before the new post-exchange IDR is assigned. However, it may occur contemporaneously (i.e. the IDR is downgraded to 'RD' and then upgraded to its new post-exchange level on the same day and in a single rating action commentary).

If the DDE does not close, Fitch will review the issuer's liquidity and solvency prospects and assign the appropriate IDR.

Bond Issues

Tendered Bond Issues

The ratings of securities of an issuer that are subject to a prospective DDE are likely to be lowered to very low speculative grade – typically in the 'C' to 'CCC' range – on announcement of the DDE. On completion of the exchange, the ratings of the securities subjected to the DDE will be downgraded to a level consistent with non-performing instruments, if not at such a level already (see Fitch's *Rating Definitions* at www.fitchratings.com). In most instances, this is likely to be 'CC' or 'C'. Where a security rating does not incorporate recovery prospects, as is the case for most public finance and global infrastructure ratings, the security rating will be set to 'D', as indicated by applicable criteria.

The issue ratings will then be withdrawn after a short time, reflecting that those securities have been extinguished in the exchange, if the entire issue was exchanged.

Untendered Bond Issues

The ratings of securities that are not tendered and continue to be serviced will remain at very low speculative grade – typically in the 'C' to 'CCC' range – until the exchange is completed. They will then be rated according to applicable criteria reflecting, where appropriate, the specific issue structure and recovery prospects, as well as the issuer's new financial and operating/business profile. In the event that insufficient information is available to enable Fitch to maintain ratings on any untendered bond issues, the agency will withdraw those obligation ratings.

The treatment of unaffected debt for non-financial corporates with a multi-tiered capital structure is detailed above.

New Bond Issues

Any new bond issue or loan resulting from a DDE will be rated under applicable criteria on the issuing entity's financial and operating/business profile post-exchange, with consideration given to issue structure and recovery prospects, where applicable. It is not relevant to the rating that the issuer or the new security issue was a product of a DDE.

Appendix 4: 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.

Given the limitations of EBITDA as a pure measure of cash flow, Fitch utilises a number of other measures for the purpose of assessing debt-servicing ability. These include funds flow from operations (FFO), cash flow from operations (CFO) and free cash flow (FCF), together with leverage and coverage ratios based on those measures which are more relevant to debt-servicing ability and, therefore, to default risk than EBITDA-based ratios.

Definitions of Cash-Flow Measures

	Revenues
–	Operating expenditure
+	Depreciation and amortisation
+	Long-term rentals[a]
=	**Operating EBITDAR**
+/–	Recurring dividends received from associates less cash dividends paid to minority interests[b]
–	Cash interest paid, net of interest received
–	Cash tax paid
–	Long-term rentals[a]
+/–	Other changes before FFO[c]
=	**Funds flow from operations (FFO)**
+/–	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[d]
=	**Change in net debt**
	Opening net debt
+/–	Change in net debt
	Closing net debt

[a] Analyst estimate of long- term rentals. Includes IFRS16/ASC842 lease depreciation and interest.
[b] Associate Dividends may be excluded from EBITDA, FFO and CFO if Non-Operational or Non-Recurring
[c] Implied balancing item to reconcile Operating EBITDAR with Funds Flow from Operations
[d] Implied balancing item to reconcile FCF with Change in Net Debt
Source: Fitch Ratings

Definitions of Key Concepts

Operating EBITDA and EBITDAR	Operating 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 operating 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 operating EBITDA is computed after deducting estimated rental expense based on the depreciation of leased assets plus interest on lease liabilities. The use of operating EBITDA plus estimated rental expense (EBITDAR, including capitalised lease payments) 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 the fundamental measure of the firm's cash flow after meeting operating expenses, including estimated rental 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.
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 is the third key cash-flow measure in the chain. It 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 free cash-flow 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.
Gross debt and net debt **Gross interest and net interest paid**	Debt represents total debt or gross debt, while net debt is total 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. Recognising the cultural differences in the approach of analysts and investors worldwide, Fitch evaluates various debt measures on both a gross and net debt basis. Distinctions are also made between total interest and net interest paid.

Source: Fitch Ratings

Main Leverage and Coverage Ratios

FFO interest coverage	This is a central measure of the financial flexibility of an entity. It compares the operational cash-generating ability of an issuer (after tax) to its financing costs. Many factors influence coverage, including the relative levels of interest rates in different jurisdictions, the mix of fixed-rate versus floating-rate funding, and the use of zero-coupon or payment-in-kind (PIK) debt. For this reason, the coverage ratios should be considered alongside the appropriate leverage ratios.
FFO fixed-charge coverage	This measure of financial flexibility is of particular relevance for entities that have material levels of lease financing. It is important to note that this ratio inherently produces a more conservative result than an interest cover calculation (ie coverage ratios on debt-funded and lease-funded capital structure are not directly comparable), as the entirety of the rental expenditure (i.e. the equivalent of interest and principal amortisation) is included in both the numerator and denominator.
FCF debt-service coverage	This is a measure of the ability of an issuer to meet debt service obligations, both interest and principal, from organic cash generation, after capex – and assuming the servicing of equity capital. This indicates the entity's reliance upon either refinancing in the debt or equity markets or upon conservation of cash achieved through reducing common dividends or capex or by other means.
FFO (net) adjusted leverage or total adjusted debt/operating EBITDAR	This ratio is a measure of the debt burden of an entity relative to its cash-generating ability. This measure uses a lease-adjusted debt equivalent, and takes account of equity credit deducted from hybrid debt securities that may display equity-like features and other off-balance-sheet debt. Leases are capitalised as a multiple of estimated rental expnse, with the multiple depending on the industry and interest-rate environment as laid out in *Appendix 1.1*, except for in the transportation sectors where the IFRS16/ASC842 disclosed lease liability is used. EBITDAR based ratios are computed after recurring dividends received from associates/equity method investments and dividends paid to minorities (or, alternatively, net income attributable to minorities).
FFO (net) leverage or total debt with equity credit/operating EBITDA	These ratios are have a similar function as and are defined very similarly to the adjusted ratios, although they exclude lease-equivalent debt in the numerator and/or rental expense in the denominator. These ratios are especially relevant for issuers that operate in a sector that uses the leases-opex approach (see *Appendix 1* for further details). Like EBITDAR, EBITDA is computed after recurring divdiends are received from associates/equity method investments and dividends paid to minorities (or, alternatively, net income attributable to minorities).
Pension-adjusted leverage	If, over a number of years, pension-adjusted ratios are significantly higher than their unadjusted counterparts, further investigation is performed to understand the broader risks posed to the company by its pension scheme, including a company's funding obligations in the jurisdictions in which it operates, the risks inherent in its funding strategy, and — importantly — the implications these have for the cash drain on the company's resources.

Source: Fitch Ratings

Financial Terms and Ratios

Main Terms

Fitch-defined term	Definition
Operating 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
Operating EBITDA	Operating EBIT + adjustment for Non-Recurring/Non-Recourse items +non-lease depreciation & amortisation + analyst adjustments to EBITDA
Operating EBITDAR	Operating EBITDA + estimated Lease Expense for Capitalised Leased Assets
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
Fitch defined working capital	Change in Receivables + Change in trade payables + Change in Inventory + Change in Accrued Expenses + any other changes in w/cap
Funds from Operation (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.
Total debt	Total Secured Debt + Total Unsecured Debt + Total Subordinated Debt + Preferred Stock+ Short-term non-recourse Debt + Long-tern non-recourse Debt + Securitisation Debt + Net Derivative (assets)/liabilities Hedging Principal Borrowings
Total debt with equity credit	Total Debt - Equity Credit
Total adjusted debt with equity credit	Total Debt with Equity Credit + Lease equivalent Debt + Other off Balance Sheet Debt
Readily available cash & 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 adjusted debt with equity credit	Total Adjusted Debt with Equity Credit - 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	Operating EBIT	Revenues
EBIT margin - Group	Operating EBIT including financial services operations	Consolidated revenues
EBIT margin - Industrial	Operating EBIT excluding financial services operations	Industrial operation revenues
Operating EBITDAR margin	Operating EBITDAR	Revenues
FFO margin	FFO	Revenues
FCF margin	FCF	Revenues
Capex/CFO	Capex	Cash Flow from Operations
CFO margin	Cash Flow From Operations	Revenues
Leverage ratios		
Total adjusted debt/op. EBITDAR (x)	Total Adjusted Debt with Equity Credit	Operating EBITDAR + Recurring Dividends received from Associates and Equity Method Investments - Dividends paid to Minorities (or, alternatively, net income attributable to non-controlling interests)
Total adjusted net debt/op. EBITDAR (x)	Net Adjusted Debt with Equity Credit	Operating EBITDAR + Recurring Dividends received from Associates and Equity Method Investments - Dividends paid to Minorities (or, alternatively, net income attributable to non-controlling interests)
FFO adjusted leverage (x)	Total Adjusted Debt with Equity Credit	FFO + Interest Paid - Interest Received + Preferred Dividends (Paid) + Estimated Rental Expense
FFO adjusted net leverage (x)	Net Adjusted Debt with Equity Credit	FFO +Interest Paid - Interest Received + Preferred Dividends (Paid) + Estimated Rental Expense
FFO leverage (x)	Total Adjusted Debt with Equity Credit – Lease Equivalent Debt	FFO + Interest Paid – Interest Received + Preferred Dividends (Paid)
FFO net leverage (x)	Total Adjusted Debt with Equity Credit – Lease Equivalent Debt – Readily Available Cash & Equivalents	FFO + Interest Paid – Interest Received + Preferred Dividends (Paid)
(CFO – CapEx)/Total Debt with Equity Credit (%)	Cash Flow from Operations [CFO] – Capital (Expenditures)	Total Adjusted Debt with Equity Credit - Lease Equivalent Debt
(CFO – CapEx)/Total Net Debt with Equity Credit (%)	Cash Flow from Operations [CFO] – Capital (Expenditures)	Total Adjusted Debt with Equity Credit – Lease Equivalent Debt – Readily Available Cash & Equivalents
FCF/total adjusted debt (%)	FCF	Total Adjusted Debt with Equity Credit

Main Ratios (Cont.)

Ratio	Numerator	Denominator
Total debt with equity credit/op. EBITDA (x)	Total Adjusted Debt with Equity Credit – Lease Equivalent Debt	Operating EBITDA + Recurring Dividends received from Associates and Equity Method Investments - Dividends paid to Minorities (or, alternatively, net income attributable to non-controlling interests)
Total net debt with equity credit/operating EBITDA	Total Adjusted Debt with Equity Credit – Lease Equivalent Debt - Readily Available Cash & Equivalents	Operating EBITDA+ Recurring Dividends received from Associates and Equity Method Investments - Dividends paid to Minorities (or, alternatively, net income attributable to non-controlling interests)
Total adj. debt/(CFO before lease expense - Maint. CapEx) (x)	Total Adjusted Debt with Equity Credit	Cash Flow From Operations [CFO] + Estimated Rental Expense- Maintenance Capex (total capex used if maintenance capex unavailable)
Coverage ratios		
FFO fixed-charge coverage (x)	FFO + Interest paid - interest received + Preferred Dividends paid + Operating Lease Expense for Capitalised Leased Assets	Interest Paid + Preferred Dividends Paid + Estimated Rental Expense
FFO interest coverage (x)	FFO + Interest paid minus interest received + Preferred Dividends paid	Interest Paid + Preferred Dividends Paid
Operating EBITDAR/gross interest paid + rents (x)	Operating 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 Rental Expense
Operating EBITDAR/net interest paid + rents (x)	Operating 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 Rental Expense
Op. EBITDA/interest paid (x)	Operating 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

Main Ratios (Cont.)

Ratio	Numerator	Denominator
Op. EBITDAR/(interest paid + lease expense) (x)	Operating 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 Rental Expense
CFO/capex (x)	Cash Flow from Operations [CFO]	Capital (Expenditures)
Capex/CFO (%)	Capital (Expenditures)	Cash Flow from Operations [CFO]
Liquidity ratios		
FFO debt service coverage	FFO + Interest paid minus interest received + Preferred Dividends + Estimated Rental Expense	Interest Paid + Preferred Dividends + Current Debt Maturities
Liquidity (liquidity ratio)	Available cash + undrawn portion of committed facilities + FCF	12-month debt Maturities

Source: Fitch Ratings

Navigator Ratios

Navigator	Ratio	Numerator	Denominator
Hotels	Unencumbered Assets to Unsecured Debt	Balance Sheet Value of Unencumbered Assets	Total Debt - Secured Debt
Restaurant Companies	Restaurant Level Margin (%)	Revenue (excluding revenue from franchised units) less the cost of food and beverages, labour, occupancy and other direct restaurant-level expenses (including marketing)	Revenue
Engineering and Construction	Corporate Gross Debt/Concession Book Value	Total Debt with Equity Credit, with Recourse to Rated Entity	Book Value of Concession Portfolio
U.S. Homebuilders	Net Debt/Capitalisation	Total Debt with Equity Credit - Readily Available Cash & Equivalents	Net Debt + Shareholder's Equity (excluding non-controlling interest)
U.S. Homebuilders	Cash & RCF Avail./Next Three Years Maturities	Readily Available Cash & Cash Equivalents + Available Portion of Committed Revolver	Total Debt Maturing in the Next Three Years
U.S. Homebuilders	Inventory/Debt	Balance Sheet Value of Land Holdings and Homes in Production (including Capitalised Interest), excludes 'Inventory Not Owned'	Total Debt with Equity Credit

Navigator Ratios (Cont.)

Navigator	Ratio	Numerator	Denominator
Chinese Property Developers	Return Efficiency	Operating EBITDA + Share of results of joint ventures and associates – PRC land appreciation tax expense	Total Debt – Readily-Available Cash & Equivalents + Common Equity + Non-controlling interests in equity + Payables to Non-controlling interests – Receivables from Non-controlling interests + Guarantees for joint-ventures and associates
Chinese Property Developers	EBITDA Margin	Operating EBITDA – PRC land appreciation tax expense	Revenues
Chinese Property Developers	Capital Turnover	Revenues	Total Debt – Readily-Available Cash & Equivalents + Common Equity + Non-controlling interests in equity + Payables to Non-controlling interests – Receivables from Non-controlling interests + Guarantees for joint-ventures and associates
Chinese Property Developers	Net Debt to Net Property Assets	Total Debt with Equity Credit + Guarantees for Joint Ventures and associates – Readily Available Cash & Equivalents	Balance Sheet Value of Properties Under Development + Prepayments and deposits for land acquisition + Cash that is Restricted for Construction and Project Operations + Property-related Property, plant and equipment + Investment Property + Trade Receivables – Trade Payables + Current tax asset – Current tax liabilities – (Customer Deposit multiplied by (1-reported development property gross margin)) + Equity in joint ventures and associates + amounts due from/(to) joint ventures & associates + Guarantees for joint-ventures and associates
Chinese Property Developers	Gross Interest Paid / Implied Cash collection	Interest Paid	Revenues + Increase in Customer Deposits during the year
APAC Property/REITs	Recurring Operating EBITDA Margin	Operating EBITDA After Associates and Minorities	Revenues
APAC Property/REITs	Net Debt/Recurring Operating EBITDA	Total Debt with Equity Credit + Other Off Balance Sheet Debt - Readily Available Cash & Equivalents	Operating EBITDA After Associates and Minorities
APAC Property/REITs	LTV (Net Debt/Investment Properties)	Total Debt with Equity Credit + Other Off Balance Sheet Debt - Readily Available Cash & Equivalents	Balance Sheet Value of Investment Properties
APAC Property/REITs	Liquidity Coverage	Available Cash + Undrawn Portion of Committed Facilities + FCF	12-month Debt Maturities

Navigator Ratios (Cont.)

Navigator	Ratio	Numerator	Denominator
APAC Property/REITs	Unencumbered Asset Cover	Balance Sheet Value of Unencumbered Assets	Total Debt - Secured Debt - Readily Available Cash & Equivalents
APAC Property/REITs	Recurring Income EBITDA Interest Coverage	Operating EBITDA After Associates and Minorities	Interest Paid
EMEA Real Estate and Property	FFO Dividend Coverage	FFO	Dividends Paid
EMEA Real Estate and Property	Loan-to-Value	Total Debt with Equity Credit + Other Off Balance Sheet Debt - Readily Available Cash & Equivalents	Balance Sheet Value of PPE - Construction in Progress - Land Held for Development
EMEA Real Estate and Property	Unencumbered Asset Cover	Balance Sheet Value of Unencumbered Assets	Total Debt - Secured Debt
EMEA Real Estate and Property	Net Debt/Recurring Operating EBITDA	Total Debt with Equity Credit + Other Off Balance Sheet Debt - Readily Available Cash & Equivalents	Operating EBITDA After Associates and Minorities
EMEA Real Estate and Property	Liquidity Coverage	Available Cash + Undrawn Portion of Committed Facilities + FCF	12-month Debt Maturities
EMEA Real Estate and Property	Recurring Income EBITDA Interest Coverage	Operating EBITDA After Associates and Minorities	Interest Paid
Latin America Real Estate	Recurring Operating EBITDA Margin	Operating EBITDA After Associates and Minorities	Revenues
Latin America Real Estate	Net Debt/Recurring Operating EBITDA	Total Debt with Equity Credit +Other Off Balance Sheet Debt - Readily Available Cash & Equivalents	Operating EBITDA After Associates and Minorities
Latin America Real Estate	LTV (Net Debt/Investment Properties)	Total Debt with Equity Credit + Other Off Balance Sheet Debt - Readily Available Cash & Equivalents	Balance Sheet Value of PPE - Construction in Progress - Land Held for Development
Latin America Real Estate	Unencumbered Asset/Net Unsecured Debt	Balance Sheet Value of Unencumbered Assets	Total Debt - Secured Debt - Readily Available Cash & Equivalents
Latin America Real Estate	Liquidity Coverage	Available Cash + Undrawn Portion of Committed Facilities + FCF	12-month Debt Maturities
Latin America Real Estate	Recurring Income EBITDA Interest Cover	Operating EBITDA After Associates and Minorities	Interest Paid
U.S. Equity REITs and REOCs	AFFO Payout Ratio	US REIT-defined FFO - Maintenance Capex - Capitalised Leasing Costs	Total Common Share and Unitholder Dividends
U.S. Equity REITs and REOCs	Net Debt/Recurring Operating EBITDA	Consolidated debt - Fitch Estimated Readily Available Cash & Equivalents	Consolidated EBITDA, adjusted for non-routine items and recurring estimated cash distributions from unconsolidated joint ventures

Navigator Ratios (Cont.)

Navigator	Ratio	Numerator	Denominator
U.S. Equity REITs and REOCs	Unencumbered Assets/Net Unsecured Debt	Fitch-estimated Unencumbered Asset Value Based on a Stressed, Through-the-cycle Cap Rate Applied to Unencumbered Property Net Operating Income	Total Debt - Secured Debt - Fitch Estimated Readily Available Cash & Equivalents
U.S. Equity REITs and REOCs	Liquidity Coverage	Readily Available Cash & Equivalents + Undrawn Portion of Committed Facilities + 6-9 Quarters of Estimated Cash Flow From Operations after Common Dividends	6-9 Quarters of Pro Rata Debt Maturities + Estimated Maintenance Capex + Unfunded Development Commitments
U.S. Equity REITs and REOCs	U.S. REIT FFO Interest Coverage	Consolidated EBITDA, adjusted for non-routine items and recurring estimated cash distributions from unconsolidated joint ventures, less recurring maintenance and leasing capex.	Interest Paid + Preferred Dividends Paid
Australian Regulated Network Utilities	Return on Capital	Net Income	Total Debt with Equity Credit + Shareholders' Equity
Australian Regulated Network Utilities	Net Debt / Regulated Asset Base	Total Debt with Equity Credit- Readily Available Cash & Equivalents	As reported by issuers
EMEA Regulated Networks	Adjusted Net Debt / Asset Base (or Regulated Asset Base)	Total Debt adjusted for Pensions and Swaps - Readily Available Cash & Equivalents	Balance Sheet Value of PP&E or Regulated Asset Base (where available)
EMEA Regulated Networks	Cash PMICR	Adjusted EBITDA - Nominal Regulatory Depreciation - Cash Tax - Cash Pension Deficit Repair	Interest Paid
EMEA Regulated Networks	Nominal PMICR	Adjusted EBITDA - Nominal Regulatory Depreciation - Cash Tax - Cash Pension Deficit Repair - Annual RAV Indexation	Interest Paid + Deferred Interest
EMEA Regulated Networks	Dividend Cover	Dividends received from operating company (on a recurring basis)	Standalone debt interest of the holding company
Latin America Utilities	Liquidity	Readily Available Cash & Equivalents + Cash Flow from Operations	12-month Debt Maturities

Source: Fitch Ratings

Appendix 5: Local-Currency IDR, Foreign-Currency IDR, OE, 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 OE. 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: Sector Navigators

Structure of Navigator

Key Factors: Each Navigator includes a Sector-Risk Profile, an OE assessment, five Business Profile 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 as the latter would be artificially precise.

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 page 65 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.

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 can in turn be divided into up to five Sub-Factors.

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 well 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 programme	a
bbb+	Aftermarket presence	Moderate aftermarket presence	bbb
bbb	Customer concentration (Non-prime suppliers)	Limited exposure to a particular customer, top customer less <10% of revenue and top-five programmes <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+'.

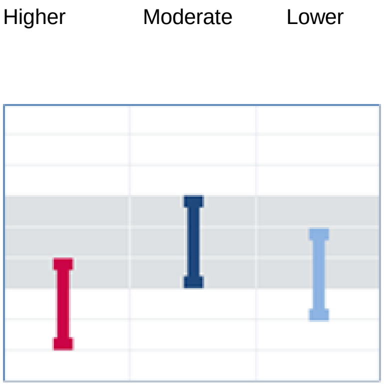
Management and Corporate Governance

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 Key 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.

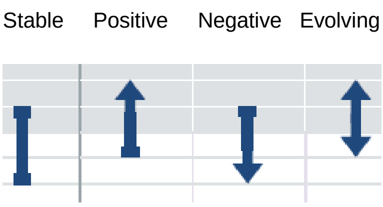
Similarly, a moderate influence factor may be significantly more likely to change and may therefore be more prominent in the rating sensitivities. The likelihood a specific factor could lead to a rating change will be a combination of the factor's absolute level, its relative importance and the speed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



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 Key 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 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*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 revenues 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 level of the countries where the majority of the Issuer’s assets are located		
Economic environment of countries where economic value is created	**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 Viability Ratings, which represent the stand-alone profiles, excluding shareholder or sovereign support, of the banks in the country (see *Bank Rating Criteria*).

Where Viability Ratings are unavailable, Fitch will use the 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

	Financial market development level of local market							
Issuer's funding characteristics.	**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

Operating Environment Inputs by Country[a]

Country	Economic Environment	Financial Market Development	Systemic Governance
Australia	aa	a	aa
Hong Kong	a	a	aa
Japan	aa	a	aa
New Zealand	aa	a	aa
South Korea	a	a	aa
Singapore	aa	aa	aa
Taiwan	a	bbb	aa
China	bbb	bb	bbb
India	bbb	bb	bbb
Indonesia	bbb	bb	bb
Malaysia	a	bbb	a
Mongolia	b	b	bb
Philippines	bb	bb	b
Sri Lanka	bb	ccc	bbb
Thailand	bbb	bbb	bbb
Vietnam	bb	b	bbb
Austria	aa	bbb	aa
Belgium	aa	a	aa
Cyprus	bb	b	a
Czech Republic	a	a	aa
Denmark	aa	a	aa
Finland	aa	aa	aa
France	aa	a	aa
Germany	aa	a	aa
Greece	bbb	b	bbb
Iceland	a	aa	aa
Ireland	a	bbb	aa
Israel	a	a	a
Italy	aa	bb	bbb
Luxembourg	aa	a	aa
Malta	a	bb	a
Netherlands	aa	a	aa
Norway	aa	a	aa
Portugal	a	bb	aa
Slovakia	a	bbb	a
Slovenia	a	bb	aa
Spain	aa	bbb	a
Sweden	aa	aa	aa
Switzerland	aa	a	aa
United Kingdom	aa	a	aa
Angola	ccc	b	b
Armenia	b	b	bbb
Azerbaijan	b	b	b
Bahrain	bb	bb	bbb
Bulgaria	bbb	bb	bbb
Croatia	bbb	bbb	bbb
Egypt	bb	b	b

Operating Environment Inputs by Country[a] (Cont.)

Country	Economic Environment	Financial Market Development	Systemic Governance
Georgia	bb	bb	bbb
Hungary	a	bb	bbb
Kazakhstan	bbb	bb	bb
Kenya	bb	b	b
Kuwait	bbb	bbb	bbb
Lebanon	ccc	b	b
Morocco	bb	bb	bb
Nigeria	b	b	b
Oman	bbb	bb	bbb
Poland	a	bbb	bbb
Romania	bbb	bb	bbb
Russia	bb	bb	b
Saudi Arabia	bbb	bbb	bbb
Serbia	bbb	bb	bb
South Africa	bbb	bb	bbb
Tunisia	bb	b	bbb
Turkey	bb	b	bb
Ukraine	b	b	b
Brazil	bbb	bb	bb
Chile	a	a	aa
Colombia	bbb	bb	bb
Mexico	bbb	bbb	b
Panama	bbb	bb	bb
Peru	bbb	bbb	bb
Uruguay	a	bb	a
Argentina	bb	ccc	bb
Costa Rica	bbb	b	a
Dominican Republic	bb	b	bb
El Salvador	b	b	b
Guatemala	b	bb	b
Jamaica	bb	b	bbb
Paraguay	bb	b	b
United States of America	aa	a	aa
Canada	aa	aa	aa
Latvia	a	a	a
Lithuania	a	a	aa
Iraq	b	b	b
Abu Dhabi	a	bbb	aa
Uzbekistan	b	b	b

[a] These *Operating Environment* scores will remain applicable until these criteria are updated by Fitch, notwithstanding the availability of updated underlying data .
Source: Fitch Ratings

Factors Common to All Sectors: 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 via the link below:

Sector Navigators - Addendum to the Corporate Rating Criteria

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