MOODY'S INVESTORS SERVICE

CROSS-SECTOR RATING METHODOLOGY

Rating Methodology

Financial Statement Adjustments in the Analysis of Nonfinancial Corporations

This rating methodology replaces the *Financial Statement Adjustments in the Analysis of Non-Financial Corporations Methodology* published in March 2023. We have aligned our approach to financial statement adjustments for hybrid instruments to our approach in the *Hybrid Equity Credit* methodology.

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Introduction

This cross-sector rating methodology explains our approach to making financial statement adjustments for nonfinancial corporations.[1] We adjust companies' reported financial statements to improve analytical insight from the perspective of assessing credit risk and to improve the comparability of financial data between peers. When computing credit-relevant ratios, we use adjusted data and base our ratings, in part, on those ratios.

Our adjustments do not imply that a company's financial statements fail to comply with applicable accounting rules. Our goal is to enhance the analytical value of financial data for credit analysis.

We recognize that achieving full comparability of financial statements on a global basis is impossible due to different measurement, recognition, presentation and disclosure practices that exist within and across various countries, regions and accounting regimes.

[1] Nonfinancial corporations include utilities and corporate infrastructure, REITs, asset managers and insurance brokers. The adjustments described in this cross-sector methodology apply unless specified otherwise in sector-specific methodologies.

However, where our key metrics may be significantly affected by differing accounting treatments that are generally well-disclosed, we make adjustments to improve the quality and comparability of the data. Over time, as global reporting and analytical issues evolve, we may modify or add to our adjustments.

This methodology discusses standard adjustments to financial statements prepared under US, Japan and other local country generally accepted accounting principles (collectively referred to as GAAP in this publication unless noted otherwise) and International Financial Reporting Standards (IFRS). The adjustments we discuss herein may be unique to US GAAP, Japan GAAP or IFRS but may also be applied to other accounting jurisdictions, collectively termed “local GAAP,” whenever it is appropriate to do so in order to make statements more comparable to corporations that report under US GAAP or IFRS. Certain adjustments are considered standard adjustments and are designed to encapsulate adjustments across all nonfinancial corporates, where applicable and where disclosure permits. In limited circumstances, the way that we adjust an entity’s financial information may differ from the standard adjustments indicated in this document because we think a different adjustment approach is more analytically appropriate. Where differences from standard adjustments are pervasive in a particular industry, we will generally note this in the industry methodology.

In addition to the standard adjustments, we may also make non-standard adjustments to financial statements for other matters to better reflect underlying economics and improve comparability with peer companies. Non-standard adjustments tend to involve a higher degree of analytic judgment. For example, we may adjust financial statements to reflect estimates or assumptions that we believe are more suitable for credit analysis.

We may not make standard or non-standard adjustments that would apply to a non-financial corporation in situations where the amounts involved are immaterial to our analysis. We may apply a materiality threshold to determine whether or not to make a financial statement adjustment.

Purpose and application

In general, we adjust financial statements to improve analytical insight from the perspective of assessing credit risk and to improve the comparability of a company's financial statements with those of its peers. In standardizing certain adjustments, our goal is to enhance consistency of our global approach across countries and industries, and to promote transparency for market participants. We adjust those items for which reliable source data is available. However, we are cognizant of differences in reporting requirements and accounting regimes and take such limitations into consideration when conducting our analysis.

More specifically, we adjust financial statements for the below reasons:

» *Apply accounting principles that we believe more faithfully capture underlying economics.* One example is our view that the sale or transfer of receivables (for example, securitizations and factoring arrangements) has debt-like financing characteristics that should be recognized on the balance sheet.

» *Improve comparability by aligning accounting principles*. For example, we adjust LIFO (last-in-first-out) inventories so that all companies in a peer group measure inventory on a comparable FIFO (first-in-first-out) basis.

» *Reflect estimates or assumptions that we believe are more appropriate for credit analysis in a company’s particular circumstances*. These adjustments typically relate to judgmental areas such as asset valuation allowances, impairment of assets and contingent liabilities. No standard adjustment falls in this category as the calculations are too company-specific. Instead, we adjust financials in this area based on individual facts and circumstances.

We make comprehensive adjustments to complete sets of financial statements and then calculate ratios based on adjusted financial statements. As a result, our basic financial ratios do not contain complicated add-backs to the numerators and denominators, but instead are simpler constructs based on fully adjusted sets of financial statements.

Our adjustments can affect all three primary financial statements (balance sheet, income statement and cash flow statement) with a focus on adjusting amounts that are most likely to affect the credit metrics we use in the application of our sector methodologies.

Our objective is to fully adjust interim reporting periods in the same manner as we adjust full-year financial statements. However, in some cases this may not be possible due to more limited accounting disclosures that are made in interim reporting periods. In such cases, we use our judgment in determining whether or not an adjustment can be made and how it should be calculated. Where there is lack of interim disclosure information for an adjustment, we generally use the prior annual disclosure to make estimates.

We may use "unadjusted financials" (i.e., publicly reported financials) and "adjusted financials" (i.e., publicly reported data plus adjustments) to generate peer comparisons and quantitative data by industry. This data facilitates comparability and more transparent communication.

Standard adjustments

Standard adjustments are identified below along with the applicable accounting regime. For example, the defined benefit pension plan adjustment applies to US GAAP, IFRS and Japan GAAP while the off-balance-sheet finance lease adjustment only applies to Japan GAAP.

Exhibit 1
Standard adjustment application

	US GAAP	IFRS	JGAAP
Defined benefit pension plans	x	x	x
Operating leases (off-balance sheet)	x	x	x
Leases (on-balance sheet)	x	x	-
Off-balance sheet finance leases	-	-	x
Restricted cash	x	x	x
Hybrid instruments	x	x	x
Securitizations and factoring arrangements	x	x	x
Non-intangible asset amortization reported within funds from operations	x	x	x
Capitalized interest	x	x	x
Acquisition-related deferred and contingent consideration liabilities	x	x	x
Classification of on-balance sheet financial guarantees	x	x	x
Inventory reported on a LIFO cost basis	x	-	-
Consistent measurement of funds from operations	-	x	x
Cash flow presentation of interest and dividends	-	x	-
Capitalized development costs	-	x	-
Interest expense related to discounted long-term liabilities other than debt	-	x	-
Unusual and non-recurring items	x	x	x

Source: Moody's Investors Service

The following exhibit provides a brief description of each standard adjustment. Each standard adjustment is described more fully later in this report.

Exhibit 2

Financial statement adjustments in the analysis of nonfinancial corporations

Adjustment	Purpose
Defined benefit pension plans	To recognize as debt the amount by which total pension obligations are underfunded or unfunded (subject to equity credit); to recognize the service cost as the best estimate of the cost of the pension plan; and to recognize cash contributions in excess of service cost as the repayment of pension (debt).
Operating leases (off-balance sheet)	To recognize operating leases as a debt-like financing obligation and a purchase of the underlying assets, requiring an adjustment to rent expense on the income statement to reclassify it as interest and depreciation, and to make corresponding adjustments to the cash flow statement.
Leases (on-balance sheet)	To recharacterize lease liabilities as debt obligations on the balance sheet (if not already classified as debt); to establish consistency for treatment of operating leases across accounting regimes by recharacterizing rent expense to interest and depreciation for US GAAP; and to make corresponding cash flow statement adjustments and recognize principal payments as capital expenditures in investing cash flows.
Restricted cash	To include only cash that is available to repay debt in net leverage and other ratio calculations.
Hybrid instruments	To classify instruments with characteristics of both debt and equity in accordance with Moody's classification of hybrid instruments, which sometimes differs from the accounting treatment, by adjusting interest expense, dividends and related cash flows consistent with our classification of the hybrid instrument.
Securitizations and factoring arrangements	To recognize off-balance sheet securitization and factoring arrangements as collateralized borrowings.
Non-intangible asset amortization reported within funds from operations	To recognize amortization of assets that are not intangible as changes related to operating assets by adjusting such amortization from FFO to changes in other operating assets and liabilities or changes in working capital.
Capitalized interest	To recognize as current-period interest expense any interest capitalized during the period; adjust PP&E on the balance sheet accordingly, and, where necessary, to recognize capitalized interest as an operating cash outflow.
Acquisition-related deferred and contingent consideration liabilities	To recognize as debt-like financing obligations deferred and contingent liabilities undertaken by the purchaser as part of the consideration for an acquisition, we reclassify any unrealized gains and losses that result from the revaluing of these liabilities as non-recurring expenses; and ensure any cash flows related to these liabilities are classified as financing cash flows.
Classification of on-balance sheet financial guarantees	To recognize financial guarantees that are sufficiently material to be included on the balance sheet as debt.
Inventory reported on a LIFO cost basis	To adjust inventory recorded on a LIFO cost basis to FIFO value.
Consistent measurement of funds from operations (FFO)	When reported cash flow from operations starts with a line item other than net income, to adjust income tax and/or financing line items so that adjusted FFO is consistent with cash flow statements that start cash flows from operations with net income.
Cash flow presentation of interest and dividends	To recognize dividends received and interest paid and received as operating cash flows, and to recognize dividends paid as financing cash flows.
Capitalized development costs	To recognize intangible assets for capitalized development costs as operating expenses by removing them from the balance sheet, by expensing development costs capitalized in the current year, and by removing the amortization expense related to previously capitalized assets; and to recognize capitalized development costs as an operating cash outflow.
Interest expense related to discounted long-term liabilities other than debt	To adjust interest expense to reclassify the accretion of discounted long-term liabilities other than debt as an operating expense.
Unusual and non-recurring items	To reclassify the effects of unusual or non-recurring transactions and events to a separate category on the income and cash flow statements. Our analytical ratios that include income or operating cash flows generally exclude amounts in those separate categories.

Source: Moody's Investors Service

Non-standard adjustments

In addition to the standard adjustments, we may also make non-standard adjustments to financial statements for other matters to better reflect underlying economics and improve comparability with peer companies. While not a comprehensive list, below are some examples of non-standard adjustments that we might make based on the underlying facts and circumstances of each issuer:

» Debt reported at fair value based on the election of a "fair value option;"

» Multiemployer pension plan (MEPP) withdrawal settlement liabilities reported on the balance sheet;

» Debt-like reverse factoring arrangements;

» Replace equity method income or loss in EBIT with cash distributions for real estate investment trusts (REITs) and other commercial real estate firms;

» Exclude income or loss attributable to non-controlling interests from EBIT for entities where the integral role that the non-controlling shareholders play in the company's business increases the likelihood of regular cash distributions.

Defined benefit pension plans

There are two types of defined benefit pension plans: (i) "pre-funded" plans, where companies are required to set aside assets in a separate trust to fund future benefits; and (ii) "unfunded" plans, where companies are not required and elect not to set aside assets in a separate trust. Part 1 of our discussion addresses both types of plans. Part 2 addresses an incremental adjustment that is unique to unfunded plans.

We do not give equity credit for supplemental retirement plans for directors and executives, which are often unfunded. One example that is used in the US is a supplemental executive retirement plan (SERP) that provides tax-deferred retirement income to executives. Unlike single-employer pension plans (SEPs) which are protected by the Employee Retirement Income Security Act (ERISA) with, among other things, minimum funding levels and benefit guarantees, SERP benefits are largely at risk. Despite the lack of regulatory protection, we view SERP obligations no differently than SEP obligations due to the contractual nature of these plans and how they operate in bankruptcy in many jurisdictions. As such, the standard adjustments we make for SERPs are identical to, and made together with, those we make for SEPs. We do not give equity credit for SERPs.

We do not consider other post-employment benefits (OPEB) of nonfinancial corporations, such as health benefit plans, as debt-like obligations. Among other considerations, our treatment considers the lack of regulatory protection, funding flexibility and treatment in bankruptcy in many jurisdictions.

The reporting issue – Part 1

Accounting standards require companies to record on the balance sheet pension liabilities equal to the total amount that individual plans are underfunded. The underfunding is calculated as the amount of the projected or defined benefit obligation (PBO or DBO) less the fair value of plan assets on a plan-by-plan basis. Any plan where the fair value of plan assets exceeds the defined liability is reported as a pension asset (if recoverable).

On the income statement, current service cost, past service cost, gains or losses on settlement and curtailment and net interest on the defined benefit liability/asset are recorded, but flexibility exists under IFRS in particular as to the line items under which these amounts are recorded – for example, net interest may be recorded in EBIT or in interest expense.

Cash contributions to a pension trust are classified as an operating cash outflow on the cash flow statement, whether these relate to minimum required contributions or amounts in excess of minimum requirements that are intended to reduce plan underfunding.

Our analytical response – Part 1

We treat the pension liability reported on a company's balance sheet as a debt-like liability because of the contractual and regulatory nature of pension obligations. Any overfunded plan (shown on the balance sheet as a pension asset) is excluded from our adjustment because pension assets are restricted to each particular plan and cannot be used toward the obligations of other plans that are underfunded.

On the income statement, we consider service cost to be the best estimate of the cost of the pension plan, and we use an implied interest expense on pension-related debt.

On the cash flow statement, we view cash contributions in excess of service cost as the repayment of (pension) debt.

How we adjust the financial statements – Part 1

The following exhibit describes our adjustments related to underfunded defined benefit pension obligations.

Exhibit 3

Standard adjustments for unfunded defined benefit pension plans – Part 1

Balance sheet	We reclassify as debt the pension liability recorded on the balance sheet.
Income statement	» We reclassify as-reported defined benefit costs (or income) to non-recurring income/expense, with the exception of the actuarially determined current-period service cost that is included in EBIT. » We attribute interest expense to pension-related debt using an interest rate that represents our estimate of average borrowing cost for an issuer based upon its rating.
Cash flow statement	We reclassify employer cash pension contributions in excess of service cost from operating cash outflows to financing cash outflows. We do not adjust the cash flow statement if pension contributions are less than the service cost.

Source: Moody's Investors Service

The reporting issue – Part 2

For countries such as Germany and Austria with an unfunded pension system, there are a number of significant differences compared with pre-funded plans. In particular, unfunded pension arrangements:

» Result in the inclusion of the gross defined benefit obligation as a pension liability on the balance sheet (there are no plan assets);

» Typically have no statutory requirement for cash pre-funding; and

» Allow a long time horizon to deal with the actual funding of pension payments, which provides the sponsoring companies with a choice of how to meet their obligations.

Our analytical response – Part 2

For unfunded pension plans that generally lack the jurisdictional and legal requirement to fund the plan, we consider the defined benefit liability to be only partially "debt-like." To improve comparability with pre-funded pensions, we simulate a pre-funding of pension obligations for companies that are not required to pre-fund. Given the long-term horizon for payment of pension obligations and the general predictability of the payment streams, the company may have time to secure the necessary financing. In cases where the company has the ability to easily access the capital markets, we may assume that management's targeted debt and equity mix will be used to fund future pension obligations.

Consequently, for unfunded pensions, an additional adjustment may be made to the balance sheet to incorporate an "equity credit," which reduces the amount of the defined benefit liability that would otherwise be added to debt. However, excess liquid funds reduce the likelihood of additional equity being raised, and any equity credit we attribute is therefore typically calculated after excess liquid funds have first been taken into account. Excess liquid funds are discretionary amounts of cash and marketable securities that exceed day-to-day needs for operations.

We do not further adjust the income statement or the cash flow statement for companies with unfunded pension obligations, other than to align interest expense with the adjustment to debt described in Part 1.

In circumstances where a company's financial policy is to pre-fund a previously unfunded pension obligation, we typically continue to treat the arrangement as unfunded until the plan assets amount to, or are expected to amount to, approximately three-quarters of the defined benefit obligation.

How we adjust the financial statements – Part 2

The following exhibit describes our adjustment related to unfunded defined benefit pension plans.

Exhibit 4

Standard adjustments for unfunded defined benefit pension plans – Part 2

Balance Sheet	We record an "equity credit" that simulates funding of the company's unfunded pension plans. Our adjustment: » Reverses a portion of the debt recognized in Part 1 of our adjustment for defined benefit pension plans, and » Recognizes a corresponding increase in equity.
Income Statement	We do not further adjust the income statement for unfunded pension plans, other than to align interest expense with our adjustment to debt.
Cash Flow Statement	We do not further adjust the cash flow statement for unfunded pension plans.

Source: Moody's Investors Service

Leases

We have divided the lease adjustment into three parts, and we determine which to use for a given issuer based on that issuer's accounting for leases.

For companies reporting under any accounting standards, we may consider that a company's reported lease obligations understate the commitment due to very short, but essential, leases or overstate the commitment due to very long, but likely flexible, terms. We generally consider these cases qualitatively in our analysis, regardless of the adjusted financial metrics. We may also consider a non-standard adjustment. Additionally, if we believe executory contracts that do not meet the accounting definition of a lease have debt-like qualities, we may choose to make a non-standard adjustment to treat these contracts like debt.

The reporting issue – Part 1

This section addresses our approach for issuers that have adopted accounting rules requiring all leases to be recorded on the balance sheet.

The economic distinction between capital/finance leases[2] and operating leases is insignificant, but US GAAP accounts for these leases differently on the income statement and the cash-flow statement. Companies that report under IFRS report all leases similar to US GAAP finance leases. As a result, there is not full comparability between companies that report under IFRS and US GAAP, nor between companies that lease assets versus those that buy them.

When entering a lease, a company records a liability and a leased asset, and the total lease obligations are discounted by a company-determined rate implicit in each lease. However, the cash flow statement does not reflect a capital expenditure. The balance sheet treatment under both US GAAP and IFRS generally aligns with our analytical view,[3] but the cash flow statement requires adjustment to reflect our view that leases are similar to an asset purchase.

Under IFRS and for US GAAP finance leases, over the life of a leased asset, companies recognize depreciation expense and interest expense on the income statement, and divide the lease payment between interest expense and principal repayment on the cash flow statement. Under US GAAP, operating lease payments are reported as rent expense on the income statement and as an operating cash outflow on the cash flow statement. Therefore, an adjustment is necessary to establish consistency between accounting standards and

2 IFRS 16 and ASU 2016-02, Leases (Topic 842) accounting standards use the term "finance lease" instead of "capital lease" used in older accounting standards. In the following sections of this publication, we use the term finance lease, in line with the new standards.

3 The US GAAP standard requires operating leases to be recorded separately from debt on the balance sheet, thus requiring a reclassification from liabilities to debt, as explained in the section on how we adjust the financial statements.

to reflect our view that leases are similar to an asset purchase. Additionally, some US GAAP companies report certain changes to operating lease balances above FFO, creating inconsistencies.

Our analytical response – Part 1

On the balance sheet, our approach involves reclassifying lease liabilities to debt in US GAAP and reclassifying the lease asset to property, plant and equipment, if necessary.[4]

To better align US GAAP to IFRS reported income statement numbers and to reflect the transaction's economics, we reclassify rent expense on US GAAP income statements to interest using the weighted average lease discount rate disclosed by the issuer (capped at rent expense), and allocate the remainder to depreciation. We do not make any adjustments to the income statement for companies reporting under IFRS 16.

To reflect our view that leases are similar to a purchase of property, we adjust cash outflows for capital expenditures. On the cash flow statement, we reclassify both operating lease depreciation expense (from operating activities) and lease principal repayments (from financing activities) to capital expenditures (as an investing activity). Additionally, when changes to operating lease balances are reported above FFO on the cash flow statement, we reclassify to below FFO.

How we adjust the financial statements – Part 1

The following two exhibits describe our Part 1 adjustments for leases.

Exhibit 5

Standard adjustments for leases reported under IFRS 16

Balance sheet	We reclassify the lease asset to property, plant and equipment, if necessary.
Income statement	No adjustments made.
Cash flow statement	We reclassify lease principal payments from financing cash flow to capital expenditures.

Source: Moody's Investors Service

Exhibit 6

Standard adjustments for leases reported under US GAAP ASC 842

Balance sheet	We reclassify lease liabilities to debt.
Income statement	We reclassify rent expense to interest and depreciation expense using the following calculation, and we adjust operating expenses (or cost of goods sold and selling, general and administrative expenses) proportionally: » Lease Interest Expense = Lease liability times the disclosed weighted average lease discount rate (capped at rent expense); » Lease Depreciation Expense = Rent Expense less Lease Interest Expense
Cash flow statement	We reclassify lease depreciation expense from operating cash flow to capital expenditures and lease principal payments from financing cash flow to capital expenditures. We also reclassify any changes to operating lease balances from above FFO to below FFO in the operating section, as necessary.

Source: Moody's Investors Service

The reporting issue – Part 2

This section addresses our approach for issuers that do not record operating leases on the balance sheet.[5]

Accounting standards used by companies for which we apply this adjustment typically distinguish between finance and operating leases, and the accounting for the two is very different. Those accounting standards view finance leases as the acquisition of a long-term

4 We do not generally reduce lease-related obligations for sublease commitments, given the limited information available to evaluate the inherent counterparty credit risk. However, we may qualitatively consider the value of sublease income, which, if significant, can differentiate credit profiles.

5 More specifically, this treatment is used for issuers that have not adopted ASC 842 Leases (for US GAAP reporters) or any similar local country accounting principles.

property right and the incurrence of debt. During the lease term, companies depreciate the capitalized property right and divide the lease payment between interest expense and the repayment of debt.

In contrast, those accounting standards view operating leases as executory contracts that are treated as being off-balance sheet and are generally accounted for on a pay-as-you-go basis. That is, companies do not recognize operating leases as the incurrence of debt but simply report lease payments as rent expense on the income statement and as an operating cash outflow on the cash flow statement.

Further, those accounting standards distinguish between finance and operating leases using arbitrary bright line tests. As a result, companies sometimes structure transactions to achieve different accounting, even though the economic distinction between finance and operating leases is generally insignificant. This results in diminished comparability between companies that account for similar economic transactions differently and between companies that lease assets versus those that buy them.

Our analytical response – Part 2

Our rationale for capitalizing operating leases centers around the view that leases have debt-like financing characteristics that reduce a company's borrowing capacity. Leases are contractual commitments for future cash outlays, and failure to make the contractual payments can result in adverse consequences that eventually lead to a default. In the absence of lease financing options, a company would normally borrow money to purchase the asset. For credit analysis, capitalizing operating leases enhances comparability between companies that buy assets financed with debt and those that lease assets.

Our approach entails adjustments to the balance sheet, income statement and cash flow statement. On the balance sheet, our approach emphasizes a present value (PV) concept. The present value of minimum lease commitments reflects an estimate of an issuer's legal liability. Our debt adjustment (matched by an equal adjustment to assets) uses an estimate of the PV of committed lease liabilities, with a floor and cap that enhances comparability, since our PV calculation is an estimate. The use of a floor also reflects our view that PV may significantly understate the economic liability for companies with very short tenor leases that will be renewed because the assets are needed in ongoing business operations.

We further believe that a PV concept overstates the economic liability of very long leases because long leases tend to have conditional terms, often contain explicit break clauses, and in practice can often be exited for less than the full payment. Therefore, we cap the debt adjustment at 10x annual rent expense.

On the income statement, we align interest expense with our debt adjustment by reclassifying rent expense to interest and depreciation expense. This approach is similar to the accounting treatment for finance leases. We multiply the operating lease debt adjustment by an interest rate that represents a theoretical average borrowing cost for each issuer based upon its rating, with the remaining portion of rent expense being allocated to depreciation expense. On the cash flow statement, our adjustment moves lease depreciation expense out of cash flow from operations and into capital expenditures within cash flow from investing activities.

How we Adjust the financial statements – Part 2

We increase balance sheet debt and fixed assets by an amount that equals the greater of:

1. The present value of minimum lease commitments (capped at 10x), or
2. A sector multiple times annual rent expense.[6]

Present value of minimum lease commitments

The present value of minimum lease commitments is calculated by discounting minimum lease commitments disclosed in the company's footnotes by an intermediate-term interest rate that is estimated based on the issuer's rating. We recognize that interest rates for a given rating category differ regionally, and all-in borrowing costs differ between issuers in the same region. However, these

[6] We typically do not offset rent expense with sublease income because there is often a mismatch between the duration of the sublease and the head lease, and sublease income often comes with counterparty credit risk. However, we may qualitatively consider the value of sublease income, which, if significant, can differentiate credit profiles.

differences will fluctuate over time, and we believe that using a common rate and approach is a transparent way to make an adjustment that is globally consistent to enhance comparability.

In most jurisdictions, GAAP does not require companies to segregate committed lease liabilities of greater than five years. In these cases, the "thereafter" portion is discounted assuming that the year five liability will remain flat in subsequent years. This assumption may overstate PV for issuers with very long leases, but we think this is a reasonable way to make the analytical adjustment for global comparability given insufficient detail in financial statement disclosures. The 10x cap is a separate mechanism to address issues related to very long leases.

Sector multiple times annual rent expense

Sector multiples have been set to levels that approximate the sector's median-implied PV multiple and range from 3 to 6. Medians were determined by reference to the present value of minimum lease commitments/annual rent expense for each rated issuer with leases in a sector. The process for establishing the proposed sector multiples has also included a degree of judgment in some cases. For example, in sectors with a small number of issuers for which the median is less meaningful, we considered the type of leased assets and made a comparison to sectors with similar assets and lease profiles to determine the multiple. Refer to the Appendix for a listing of sector multiples.

In very rare cases, we may utilize a non-standard multiple or cap if an issuer has sufficiently unique characteristics. Adjustments to rent expense are expected to be rare.

We typically use the minimum lease commitment for the next year (as disclosed in the financial statement footnotes) instead of rent expense when annual rent expense is not disclosed.

The following exhibit summarizes our Part 2 adjustments to capitalize operating leases.

Exhibit 7

Standard adjustments for operating leases

Balance sheet	We increase debt and fixed assets by an amount that equals the greater of (i) the present value of minimum lease commitments, capped at 10x; or (ii) a sector multiple times annual rent expense.
Income statement	We reclassify rent expense to interest and depreciation expense using the following calculations, and we adjust operating expenses (or cost of goods sold and selling, general and administrative expenses) proportionally: » Lease Interest Expense = Lease debt times an intermediate-term interest rate based on the issuer's rating (capped at rent expense); » Lease Depreciation Expense = Rent Expense less Lease Interest Expense.
Cash flow statement	We reclassify lease depreciation expense from operating cash flow to capital expenditures.

Source: Moody's Investors Service

The reporting issue – Part 3

This section addresses our approach for issuers under Japan GAAP (JGAAP) or other local country GAAP where accounting standards allow off-balance sheet treatment that do not record operating or other leases on the balance sheet.

Under JGAAP, companies are allowed to report some types of finance lease transactions on a pay-as-you-go basis, just like operating lease transactions. Companies recognize these lease payments as lease expense on income statements and as operating cash outflows on cash flow statements.

If JGAAP or other local country GAAP standards change to be very similar to either IFRS or US GAAP on-balance sheet lease reporting, we would likely apply the lease adjustment outlined in Part 1 above.

Our analytical response – Part 3

We view an off-balance sheet finance lease as a debt-like transaction, similar to off-balance sheet operating leases as reported by companies to which Part 2 of this adjustment applies.

How we adjust the financial statements

The following exhibit describes our Part 3 adjustments to capitalize off-balance sheet finance leases.

Exhibit 8

Standard adjustments for off-balance-sheet finance leases

Balance sheet	We increase both debt and fixed assets. We assume the debt amount to be the PV of the unpaid lease amount as disclosed in a footnote.
Income statement	We reclassify rent expense to interest expense and depreciation expense, and we adjust operating expenses (or cost of goods sold and selling, general and administrative expenses) proportionally.
Cash flow statement	We reclassify lease depreciation expense from operating cash flow to capital expenditures.

Source: Moody's Investors Service

Restricted cash

The reporting issue

There are circumstances where the reported balance sheet cash and cash equivalent balances of an entity are not available for general purposes, resulting in what is commonly described as restricted cash. Examples of restrictions include exchange controls (government-imposed limitations on the purchase, sale or transfer of currencies) and other legal requirements, such as cash held in escrow. Although the amount of material cash and cash equivalent balances that are not readily available for general purposes by the company is required to be disclosed separately, the balance sheet presentation of restricted cash is not always consistent. Under IFRS, restricted cash is generally included within the cash and cash equivalents balance. However, restricted cash is often presented as a separate asset in other accounting jurisdictions.

Although the restrictions on cash usually render it unavailable to repay debt, restrictions are sometimes imposed to ensure that the cash may be used only to repay debt.

Our analytical response

To ensure that our net leverage and other ratio calculations exclude cash that is not available to repay debt, we remove restricted cash from the cash and cash equivalents balance, unless the restriction is specifically to earmark for debt repayment or doesn't preclude the cash from being available for debt repayment. In cases where restricted cash is not included in the cash and cash equivalents balance but is available to repay debt, we increase cash and cash equivalents by reclassifying the available amount of cash from restricted cash assets to cash and cash equivalents.

How we Adjust the financial statements

The following exhibit describes our adjustment for restricted cash.

Exhibit 9

Standard adjustments for restricted cash

Balance sheet	» We reduce cash and cash equivalents by excluding cash reported within cash and cash equivalents that is not available to repay debt. » We increase cash and cash equivalents by including restricted cash not reported within cash and cash equivalents that is available to repay debt.
Income statement	No adjustments made.
Cash flow statement	No adjustments made.

Source: Moody's Investors Service

Hybrid instruments

The reporting issue

Hybrid instruments have characteristics of both debt and equity instruments. For a given hybrid instrument, we may consider whether the mix of such characteristics suggests a different classification from the accounting treatment. For example, certain subordinated instruments accounted for as debt have important equity-like attributes, and certain instruments accounted for as equity have debt-like attributes.

Our analytical response

Where hybrid instruments are material and we consider them to be relevant to our analysis of an issuer, we ascribe equity credit based on the instrument 's particular features using our hybrid equity credit methodology.

We adjust an issuer's balance sheet in accordance with the level of equity credit we ascribe to its hybrid instruments. In doing so, we adjust the classification in current accounting, which may classify instruments as all debt, all equity, partly debt and partly equity, or in some cases, non-controlling interest. For example, we may ascribe 50% equity credit and make the corresponding reclassification to equity to a subordinated instrument that is classified as 100% debt based on accounting standards. In certain cases, we limit the amount of equity credit we ascribe.

We also adjust the income statement and cash flow statement to reflect interest expense or dividends, depending on our balance sheet classification. For example, if we consider a portion of a debt instrument as equity-like, we typically reclassify the corresponding amount of interest expense to common dividends. Conversely, if we consider a portion of an equity instrument as debt-like, we typically reclassify the corresponding amount of preferred dividends as interest expense.

How we adjust the financial statements

The following two exhibits describe our adjustments related to hybrid instruments.

Exhibit 10

Standard adjustments for reclassification to equity for hybrid instruments classified as debt

Balance sheet	We reclassify to equity (i.e., preferred stock) hybrid instruments classified as debt, based on the hybrid basket treatment assigned to the particular hybrid instrument.
Income statement	We reclassify interest expense to preferred dividends for the calculated equity portion of hybrid instruments based on the hybrid basket treatment.
Cash flow statement	We reclassify interest paid (an operating cash outflow) to preferred dividends (a financing cash outflow) for the calculated equity portion of hybrid instruments based on the hybrid basket treatment.

Source: Moody's Investors Service

Exhibit 11

Standard adjustments for reclassification to debt for hybrid instruments classified as equity

Balance sheet	We reclassify to debt (i.e., subordinated debt) hybrid instruments classified as equity, based on the hybrid basket treatment assigned to the particular hybrid instrument.
Income statement	We reclassify preferred dividends to interest expense for the calculated debt portion of hybrid instruments based on the hybrid basket treatment.
Cash flow statement	When paid, we reclassify preferred dividends (a financing cash outflow) to interest expense (an operating cash outflow) for the calculated debt portion based on the hybrid basket treatment.

Source: Moody's Investors Service

Securitizations and factoring arrangements

The reporting issue

Companies often report as a sale the transfer of receivables to a factor or a securitization trust. In most cases, the primary motive of the arrangement is to obtain cash at a low cost. Transactions that certain accounting standards treat as sales result in non-comparable reporting among companies. The financial statements of companies that borrow from traditional sources (for example, a draw on a revolver to fund working capital needs) appear different from those of companies that raise cash from the sale of receivables, even though the economics of the borrowings are likely to be very similar. The sale of receivables may temporarily improve financial ratios because of the potential for debt reduction. However, we generally consider that the sale of receivables does not reduce the credit risk of the issuer for several reasons: the related receivables usually represent some of the best assets on the balance sheet; in some cases, companies maintain collection risk through a deferred purchase price or similar deferred payment arrangement with the third party; the sale of such prime assets reduces future financial flexibility; and the issuer would face an eventual drain on cash if it were to stop selling the receivables. The sale of receivables also is likely to have an adverse effect on expected credit losses because the remaining assets for the company's creditors typically will be less liquid with greater uncertainty around their value.

Our analytical response

When cash is raised from the value of working capital assets, we see little analytical difference between sale/securitization and collateralized borrowing. Accordingly, our credit analysis focuses on the cash impact – both the short-term benefit and the longer-term risk if the arrangement terminates – rather than the accounting treatment. Our adjustment makes the standard assumption that these programs do not continue and, if the unwinding of a receivable factoring or securitization arrangement would result in cash consumption, we typically treat such arrangements as being no different than a collateralized borrowing for credit analysis purposes and adjust the financial statements where necessary.

For some issuers, the disclosure of factoring and securitization transactions may be limited or absent even when the amounts are material. Where issuers report accounts receivables that are materially lower than peers of comparable size in the same industry and geography, such differences may result from undisclosed factoring and securitization transactions or negotiation of non-standard terms of payment with their customers, or they may simply reflect enduring differences in the basic nature of their business. Unless we believe that the difference in receivables relative to revenue reflects fundamental business differences, we may estimate how debt would change if the amount of accounts receivable were normalized, without changing the financial ratios we publish, and qualitatively consider this in our risk analysis for the rating.

Exceptions where we would not treat such arrangements as collateralized borrowings are rare, but two examples are:

» Storm recovery securitization bonds for a regulated utility, where enabling legislation has been passed to allow the utility to raise funds and impose a future levy on customers explicitly to repay those funds. We consider that the regulatory and legislative support makes these arrangements different from other receivables securitization transactions. Where the financial statements do not include a debt amount and we do not make an adjustment, we continue to qualitatively consider other impacts on the utility, such as potential reduced ability to implement future rate increases.

» Bank Acceptance Draft Discounting (BADD) in mainland China. The issuance, acceptance and discounting of Bank Acceptance Drafts (BAD) are governed by the PRC bills law and related regulations in China. They are a structural part of the payment and settlement regime in that country and are supported by a nationwide inter-bank drafts settlement system. We consider these arrangements different from other receivables securitization/discounting transactions. The likelihood that the arrangements would unwind is extremely low. The exception applies to all BADD transactions in China.

How we adjust financial statements

The following exhibit describes our adjustments for arrangements that sponsors report as sales, which we consider to be analytically more appropriately represented as debt transactions.

Exhibit 12

Standard adjustments for securitizations and factoring arrangements

Balance sheet	We increase debt by the ending balance of uncollected or unrealized assets that the company transferred in the securitization arrangement as of the balance sheet date. We also increase assets of the appropriate category by the same amount.
Income statement	We impute interest expense on the amount of additional debt recognized, at the company's short-term borrowing rate (or a proxy),[7] and reduce other expense by the same amount.
Cash flow statement	We reclassify amounts in operating cash flow, investing cash flow and financing cash flow categories: » We reclassify the initial cash inflow from operating cash flow to financing cash flow and any inflow from the collection of beneficial interests that are reported in investing cash flow to operating cash flow. » For each subsequent period, we base the amount of reclassification on changes in uncollected or unrealized sponsor assets in the securitization arrangement from the beginning to the end of the period. For example, if the amount of uncollected receivables in the securitization: – increases from the beginning to the end of the year, we reclassify the amount of that increase from cash inflow from operations to cash inflow from financing activities. – decreases from the beginning to the end of the year, we increase operating cash flow by that amount and decrease financing cash flow.

Source: Moody's Investors Service

Non-Intangible asset amortization reported within funds from operations

The reporting issue

FFO is a non-GAAP metric that we define as operating cash flow before changes in working capital and changes in other short-term and long-term operating assets and liabilities. Due to the lack of specific accounting guidance on the presentation of items within the reconciliation of operating cash flow in an indirect method cash flow statement, companies may present as amortization changes in asset balances that we consider are more accurately classified as changes in other short-term and long-term assets and liabilities or changes in working capital. Most commonly, this is presented as amortization of an operating asset, such as a right of use asset in US GAAP, or non-cash amortization. This has the effect of increasing reported FFO. Amortization of intangible or capital assets acquired through investing activities should be included in the calculation of FFO, but all other items characterized as amortization are changes relating to operating assets and should therefore be reclassified from FFO to changes in other short-term and long-term assets and liabilities or changes in working capital. Although less likely, this reporting issue can also apply to cash flow from operations before changes in working capital where an asset within working capital is being amortized.

7 For the proxy, we typically estimate the short-term rate as a rate that is somewhat lower than the long-term borrowing rate associated with the company's long-term rating.

Our analytical response

When reported as an add-back above a company's changes in other operating assets and liabilities and changes in working capital, we reclassify amortization of operating assets (non-intangible amortization) from FFO to changes in other operating assets and liabilities or changes in working capital (i.e., remove from FFO), depending on the nature of the asset being amortized.

How we adjust the financial statements

The following exhibit describes our adjustment for non-intangible asset amortization:

Exhibit 13
Standard adjustments for non-intangible asset amortization

Balance Sheet	No adjustments made.
Income Statement	No adjustments made.
Cash Flow Statement	We decrease other operating cash flow, increase changes in other operating assets and liabilities or changes in working capital by the amount of non-intangible amortization.

Source: Moody's Investors Service

Capitalized Interest

The reporting issue

We generally assess the operations of a business separately from the financing of that business. This separation enables a more accurate presentation of business operations, which is often the primary source of cash to repay debt.

However, accounting standards sometimes commingle operating and financing activities. One example is capitalized interest where, under certain circumstances, GAAP and IFRS require a company to capitalize interest costs as a part of property, plant and equipment (PP&E). In the year the company capitalizes interest, reported fixed assets, income and cash flow from operations are all higher relative to what would have been reported had the company expensed all interest.

Our analytical response

We consider capitalized interest as a cost of financing (i.e., interest expense) that should be expensed when incurred. This requires modifications to the balance sheet, the income statement, and, where appropriate, the cash flow statement.

How we adjust the financial statements

The following exhibit describes our adjustments to expense interest capitalized:

Exhibit 14
Standard adjustments for capitalized interest

Balance sheet	We reduce PP&E by the amount of interest capitalized during the period.
Income statement	We increase interest expense by the amount of capitalized interest during the current period.
Cash flow statement	Where not reported as interest paid, we reclassify capitalized interest from investing cash flow (capital expenditures) to operating cash flow.

Source: Moody's Investors Service

Acquisition-related Deferred and Contingent Consideration Liabilities

The reporting issue

As part of an acquisition of a company, the consideration transferred, or total purchase price, may include consideration that is to be paid to the sellers at a future date. This consideration can come in the form of a deferred payment, such as a seller-financed note payable, or as a contingent consideration where a future amount to be settled is dependent upon a future event or performance. At the close of an acquisition where the deferred or contingent arrangement is accounted for as a liability on the balance sheet, it is generally settled in cash and is therefore a form of seller-financed debt. However, this liability is generally not included in reported debt.

During each subsequent reporting period, the deferred or contingent liability is remeasured through the income statement, creating unrealized income statement gains and losses that can introduce significant volatility in earnings from one period to the next.

In some cases, the eventual settlement of this debt-like obligation is settled through a cash outflow that affects cash flows from operations.

Although they may have similar structures, liability instruments that are not considered to be part of the purchase price (consideration transferred) are out of the scope of this adjustment. Acquisition-related liabilities that are out of scope would include a traditional earn-out structure that may affect compensation or staffing costs. As the employees working in these structures must maintain employment to receive compensation, we follow IFRS and US GAAP and view these as compensatory arrangements (not part of the cost of acquisition but related to future operations of the combined company) and do not consider these to be in the scope of this adjustment.

Our analytical response

We believe that in almost all cases[8] deferred or contingent consideration liabilities represent debt-like obligations. In the absence of these seller financing options, a company would normally borrow money to fund acquisitions. Where deferred or contingent liabilities are material and identifiable as part of a deferred purchase price, we reclassify these amounts into short- or long-term-debt.[9]

We view any income statement gain or loss related to the revaluation of the liability subsequent to the acquisition as separate from core operations and therefore move it to other non-recurring expenses, outside of EBIT, to capture core earnings more accurately and reduce volatility in our key metrics.

On the cash flow statement, in cases where cash outflows related to deferred consideration affect operating cash flow, we reclassify these outflows from operating cash flow to financing cash flow.

How we adjust the financial statements

The following exhibit describes our adjustment related to contingent and deferred consideration liabilities transferred at acquisition.

Exhibit 15

Standard adjustments for acquisition-related deferred and contingent consideration liabilities

Balance sheet	We increase debt by reclassifying the deferred or contingent purchase consideration liability recorded.
Income statement	We reclassify any unrealized gains and losses due to revaluing these liabilities to non-recurring income/expense.
Cash flow statement	We reclassify any cash outflows related to deferred consideration that impact operating cash flow to financing cash flow.

Source: Moody's Investors Service

8 We do not make this adjustment for pharmaceutical/life sciences companies where the payout for contingent consideration is significantly dependent on the achievement of milestones. We believe that these instances are better handled qualitatively as there may be little correlation between the liability accrued and the eventual payouts.

9 Liabilities related to put options are excluded from this adjustment.

Classification of on-balance sheet financial guarantees[10]

The reporting issue

Financial guarantees entered into by companies are reported on the balance sheet at fair value. The financial guarantees are typically issued on behalf of related parties and rarely reach a fair value material enough to be classified as liabilities on the guarantor's balance sheet due to the low likelihood of default by the guaranteed party. Financial guarantees material enough to be on the balance sheet indicate a risk of future cash outflow for the guarantor, and we therefore include such guarantees as debt at the full value of the guarantee, even if full value exceeds fair value.

Our analytical response

We add the full value of on-balance sheet guarantees to debt.

How we adjust the financial statements

The following exhibit describes our adjustment for on-balance sheet guarantees:

Exhibit 16

Standard adjustments for classification of on-balance sheet financial guarantees

Balance sheet	We reduce other liabilities by the fair value of the on-balance sheet guarantee and increase debt by the full amount.
Income statement	We reclassify any unrealized gains or losses due to recording or revaluing these liabilities to non-recurring income/expense.
Cash flow statement	In the event of an operating cash outflow being reported, we reclassify this outflow as a financing outflow.

Source: Moody's Investors Service

Inventory reported on a LIFO cost basis

The reporting issue

US GAAP allows the LIFO (last-in-first-out) cost method for carrying inventories on the balance sheet, but IFRS and other local GAAP do not allow this accounting choice. In periods of rising prices, the LIFO method can cause the carrying value of inventory on the balance sheet to be well below FIFO (first-in-first-out) value, replacement cost, and market value. As a result, the balance sheets of companies electing the LIFO cost method are not comparable to those that follow FIFO or other methods.

Our analytical response

We adjust inventories that companies report under the LIFO cost method to the FIFO cost method when the LIFO value of inventory is less than that the FIFO value. This adjustment improves comparability among companies reporting under these two different inventory accounting methods. It also states LIFO inventory at the most recent cost of inventory.

This adjustment only affects the balance sheet. We do not adjust the income or cash flow statements.

How we adjust the financial statements

The following exhibit describes our adjustment to inventory measured on a LIFO basis for reporting purposes.

10 Off-balance sheet financial guarantees as well as nonfinancial guarantees, on- or off-balance sheet, are evaluated as debt-like on a case-by-case basis using a non-standard adjustment where necessary.

Exhibit 17

Standard adjustments for inventory reported on a LIFO cost basis

Balance sheet	If FIFO cost exceeds LIFO costs, we increase inventories by the amount of the LIFO inventory valuation reserve.
Income statement	No adjustments made.
Cash flow statement	No adjustments made.

Source: Moody's Investors Service

Consistent measurement of funds from operations

The reporting issue

Under some accounting standards, companies have flexibility in calculating cash flow from operating activities in cash flow statements using the indirect method. Diversity can exist in the starting point for the calculation (either net income, operating profit or pre-tax income).[11] Cash flow from operations before changes in working capital, and FFO, will be affected to the extent that working capital includes or excludes the difference between: (i) cash paid for taxes and current tax expense; and (ii) net interest paid (including any interest capitalized) and net interest expense (including any interest capitalized and excluding any interest related to discounting of long-term liabilities other than debt).

Our analytical response

Under US GAAP, the calculation of cash flow from operating activities is required to start with net income, and as a result FFO includes the amounts for current tax expense and net interest expense, rather than the amounts paid. The difference between the expense and paid amounts is reflected as a change in working capital. When a different starting point is used, adjustments to cash flow from operating activities are necessary to make the calculation of FFO consistent across accounting regimes. For example, if a company calculates cash flow from operating activities starting from pre-tax income, the difference between current tax expense and tax paid needs to be included in the measurement of working capital when calculating FFO. Or, if a company starts its calculation of cash flow from operating activities from operating income, the difference between net interest expense (including any interest capitalized and excluding any interest related to discounting of long-term liabilities other than debt) and net interest paid (including any interest capitalized) and the difference between current tax expense and tax paid both need to be included in the measurement of working capital when calculating FFO.

How we adjust the financial statements

The following exhibit describes our adjustments for the different starting points for the calculation of cash flow from operating activities.

Exhibit 18

Standard adjustments for consistent measurement of funds from operations

Balance sheet	No adjustments made.
Income statement	No adjustments made.
Cash flow statement	» If the calculation of cash flow from operating activities starts from pre-tax income, we adjust working capital by the difference between current tax expense and tax paid. » If the calculation of cash flow from operating activities starts from operating profit, we adjust working capital by the difference between: current tax expense and tax paid; and net interest expense (including any interest capitalized and excluding any interest related to discounting of long-term liabilities other than debt) and net interest paid (including any interest capitalized).

Source: Moody's Investors Service

11 The cash flow statement may appear to start at net income, but where net interest and tax expense are added back, this is equivalent to a starting point of operating profit. Similarly, where the starting point is net income, but tax expense is added back, this is equivalent to a starting point of pre-tax income.

Cash flow presentation of interest and dividends

The reporting issue

IFRS allows flexibility in the presentation of interest and dividends paid and received on the cash flow statement. All payments and receipts related to dividends and interest may be presented as operating cash flows. Alternatively, interest and dividends received may be presented as investing cash inflows, and interest and dividends paid as financing cash outflows.

Our analytical response

We define operating cash flow to include the amounts reported for dividends received and interest received as well as interest paid, but to exclude dividends paid. Therefore, where necessary, we reclassify cash flows to ensure that: (i) dividends received; (ii) interest received; and (iii) interest paid are included in operating cash flow, and that dividends paid are excluded from operating cash flow.

How we adjust the financial statements

The following exhibit describes our adjustment related to the cash flow presentation of interest and dividends.

Exhibit 19
Standard adjustments for cash flow presentation of interest and dividends

Balance sheet	No adjustments made.
Income statement	No adjustments made.
Cash flow statement	» Where the company reports dividends received as an investing activity, we reclassify the amount reported to operating cash flow. » Where the company reports interest received as an investing activity, we reclassify the amount reported to operating cash flow. » Where the company reports interest paid as a financing activity, we reclassify the amount reported to operating cash flow. » Where the company reports dividends paid as an operating activity, we reclassify the amount reported to financing cash flow.

Source: Moody's Investors Service

Capitalized development costs

The reporting issue

Provided certain criteria are met, capitalization of product development costs is mandatory under IFRS, but not permitted under US GAAP, with the exception of some internally developed software expenditures, which can be capitalized under US GAAP. Companies use different approaches to assess the future profitability of products under development and therefore the amount capitalized is dependent on judgment with respect to the profitability and expected life of the product. In addition, capitalization produces an intangible asset, which can sometimes have a relatively short life.

Our analytical response

To establish consistency across accounting regimes and best reflect the transaction economics, we view capitalized development costs, other than software, as an operating expense and believe that the analysis of profitability should consider all operating costs, regardless of whether a company recognizes that cost immediately as an expense on its income statement or as a depreciable asset on its balance sheet.

How we adjust the financial statements

The following exhibit describes our adjustments to expense capitalized development costs.

Exhibit 20
Standard adjustments for capitalized development costs

Balance sheet	We reduce intangible assets, other than software, by the cumulative amount of development costs capitalized.
Income statement	We increase operating expenses, by the amount of capitalized development costs for the period (other than software), and reclassify the amortization charge related to the capitalized development costs (including any impairment charge) to non-recurring income/expense.
Cash flow statement	We reclassify capitalized development costs (other than software), from an investing cash outflow to an operating cash outflow.

Source: Moody's Investors Service

Interest expense related to discounted long-term liabilities other than debt

The reporting issue

Under IFRS, companies discount certain long-term liabilities other than debt to present value, and record the unwinding of the discount in interest expense. This reporting distorts the relationship between interest expense and debt and impacts interest coverage ratios. It also undermines the comparability of companies, particularly when comparing a company following IFRS with a company following US GAAP, where companies generally do not report the unwinding of discounts on non-debt liabilities as interest expense.

Our analytical response

On the income statement, we reclassify the portion of interest expense resulting from the unwinding of the discount to operating expenses. This reclassification preserves the tight relationship between interest expense and debt, keeps interest coverage ratios focused on debt-related interest, and improves comparability among companies. For example, under US GAAP certain long-term liabilities, such as asset retirement obligations under FASB Statement 143, are discounted to present value. The unwinding of the discount is reported as an operating expense under US GAAP.

How we adjust the financial statements

The following exhibit describes our adjustments to reclassify interest expense arising from discounting.

Exhibit 21
Standard adjustments for interest expense related to discounting long-term liabilities other than debt

Balance sheet	No impact on the balance sheet.
Income statement	We increase operating expenses by the cost of unwinding the discounted liabilities, and reduce interest expense by that same amount.
Cash flow statement	No adjustments made.

Source: Moody's Investors Service

Unusual and non-recurring items

The reporting issue

Unusual or non-recurring items can foster misleading impressions about key trends in financial data. For example, the impact of a one-time, unusually large sale, if not separately considered, could create a misleading impression about a company's trends in market share, revenue, income and operating cash flow. Examples include:

» Unusually large transactions (creating revenues, costs or cash flows) that management does not expect to recur in the foreseeable future;

» Unique transactions, such as selling real estate by a company that rarely sells real estate;

» Transactions that have occurred in the past but that management expects will soon cease.

Our analytical response

We capture the effects of unusual and non-recurring transactions and events in separate captions on the income and cash flow statements. This enables us to more accurately portray trends in the underlying recurring core business. Our key financial ratios generally exclude the effects of unusual and non-recurring transactions that we identify.

We identify unusual and non-recurring transactions and events from public disclosures, including the financial statements and management's discussion and analysis of operations. We may also discuss those types of transactions with management to help ensure that we have considered major items and accurately quantified their effects.

For practical reasons, we generally do not adjust the balance sheet for unusual or non-recurring items. Nevertheless, we consider the possibility that an unusual or non-recurring item could materially affect the balance sheet and adjust it, if needed.

How we adjust the financial statements

The following exhibit describes our adjustments to capture the effects of unusual and non-recurring items.

Exhibit 22
Standard adjustments for unusual and non-recurring items

Balance Sheet	We adjust the balance sheet in those instances where it is material to our analysis.
Income Statement	We remove the effects of unusual or non-recurring revenues, gains or costs, from our metrics.
Cash Flow Statement	We remove the effects of unusual or non-recurring operating cash inflows and outflows from our metrics.

Source: Moody's Investors Service

Non-standard adjustments

In addition to standard adjustments, we may also make non-standard adjustments to financial statements for other matters to better reflect underlying economics and improve comparability with peer companies. Non-standard adjustments tend to involve a higher degree of analytic judgment, such as determining whether and how to make adjustments for the extension of trade payables in a payables finance arrangement. For example, we may adjust financial statements to reflect estimates or assumptions that we believe are more appropriate for credit analysis. We may also make non-standard adjustments where local GAAP or the interpretation of IFRS in a particular country or region differs from the norm in a manner that would influence our analysis.

We calculate our standard adjustments and non-standard adjustments based on public information. We are limited to publishing only publicly available information, although private information may be considered in our ratings.

We highlight a few examples of non-standard adjustments:

Debt reported at fair value based on the election of a “fair value option”

A fair value option exists under US GAAP and IFRS whereby companies can choose to measure certain of their financial assets and financial liabilities at fair value on an instrument-by-instrument basis. When a company elects this option for its debt, we may make adjustments to restate debt from fair value to amortized cost (or face value) on the balance sheet and to reverse any corresponding gains or losses recognized on the income statement related to changes in the fair value of debt.

Multiemployer pension plan (MEPP) withdrawal settlement liabilities reported on the balance sheet

Companies that withdraw from multiemployer pension plans negotiate a settlement liability with the plan to be paid over several years. The settlement liability is recorded on their balance sheet. When a company has withdrawn from a multiemployer pension plan and has a related withdrawal liability on the balance sheet, we may reclassify that liability as debt-like and the applicable portion of cash outflow as a cash flow from financing activities.

Debt-like reverse factoring arrangements

Reverse factoring refers to a form of working capital financing where a company may extend the payment dates on short-term liabilities to suppliers using a third-party financial institution: suppliers are paid on time (or earlier, as with conventional factoring) but the company pays later; the payment mismatch is bridged by the third-party financial institution, with the liability arising eventually being repaid by the company; the obligation is typically disclosed on the balance sheet within trade/other payables even though it is to repay advances made by the third-party financial institution. We may treat this liability as debt-like and the applicable portion of cash used to settle this liability as a cash flow from financing activities. However, lack of reporting disclosures and inconsistent classification may prevent us from incorporating our view into our metrics.

Equity method income or loss for REITs and other commercial real Estate firms

Companies with non-consolidated investments in other entities that use the equity method of accounting report equity method income or loss on the income statement. We typically include this income or loss in adjusted EBIT. The inclusion of equity method income or loss provides a standard quantitative starting point for income statement metrics and incorporates the risks and benefits of these unconsolidated investments into our credit analysis.

However, for REITs and other commercial real estate firms that report under IFRS, specifically IAS 40 (Investment Property), the equity method income or loss may be volatile due to the accounting for underlying investment properties at fair value, which may contribute to wide variations in reported EBIT that make comparisons across firms difficult. For this reason, for REITs and other commercial real estate firms that report under IFRS, we typically replace, in EBIT, equity method income or loss with cash distributions received by using a non-standard adjustment to reclassify the non-cash portion to unusual and non-recurring items.

Income or loss attributable to non-controlling interests

A controlling entity that owns one or more non-wholly owned subsidiaries allocates a share of net income or loss to minority equity holders as non-controlling interest. Typically, we include income or loss attributable to non-controlling interests in the controlling entity's EBIT. Allocating income to a non-controlling owner is not viewed as an operating expense, and any distributions to the non-controlling shareholders are reflected in the cash flow statement.

However, for entities where the non-controlling shareholders play an integral role in the business and a regular dividend flow to them provides a remuneration-like return, we typically use a non-standard adjustment to exclude, from EBIT, the income or loss attributable to these non-controlling shareholders by reclassifying it to other expenses. An example of where we make this non-standard adjustment is for physician practices in the private healthcare sector, which are often acquired as small businesses, and the practices' physicians are the non-controlling shareholders. Although the accounting in these instances may classify the physicians as equity holders, their integral role to the businesses makes the distribution akin to core operating costs (such as physician compensation) instead of a capital return.

Appendix – Operating lease sector multiples

Exhibit 23

Operating lease sector multiples

Sector name	Lease multiple
Aerospace and Defense	3
Alcoholic Beverage	3
Apparel	4
Asset Managers	6
Automobile Manufacturer	3
Automotive Supplier	3
Building Materials	3
Business and Consumer Services	3
Chemical	3
Communications Equipment	3
Communications Infrastructure	5
Construction	3
Consumer Services	4
Distribution and Supply Chain Services	3
Electric Generation and Transmission Cooperatives	3
Environmental Services and Waste Management	3
Equipment and Transportation Rental	3
Finance Companies*	3
Gaming	4
Generic Project Finance	6
Government-Owned Rail Network	3
Healthcare Service Providers	4
Homebuilding and Property Development	3
Independent Exploration and Production	4
Insurance Brokers and Service Companies	4
Insurers*	4
Integrated Oil and Gas	3
Investment Holding Companies	3
Large Global Diversified Media	4
Manufacturing	3
Medical Product and Device	3
Midstream Energy	3
Mining	3
Natural Gas Pipelines	6
Oilfield Services	3
Packaged Goods	3

Sector Name	Lease Multiple
Packaging Manufacturers	3
Paper and Forest Products	3
Passenger Airlines	5
Passenger Railway	3
Pay TV-Cable and Direct-to-Home Satellite Operators	3
Pharmaceutical	3
Privately Managed Airports and Related Issuers	6
Privately Managed Port Companies	6
Privately Managed Toll Roads	3
Protein and Agriculture	3
Publishing	4
Refining and Marketing	3
Regulated Electric and Gas Networks	4
Regulated Electric and Gas Utilities	4
Regulated Water Utilities	3
REITs and Other Commercial Property Firms	4
Restaurant	6
Retail	5
Securities Firms*	5
Semiconductor	3
Shipping	3
Soft Beverage	3
Software	3
Steel	3
Surface Transportation and Logistics	3
Technology Hardware	3
Technology Services	3
Telecommunications	3
Trading Companies	3
Unregulated Power Companies	6
Unregulated Utilities	6

* These sectors are covered under our cross-sector rating methodology on financial statement adjustments for financial institutions.

Source: Moody's Investors Service

Moody's related publications

Cross-sector credit rating methodologies are typically applied in tandem with sector credit rating methodologies, but in certain circumstances may be the basis for assigning credit ratings. A list of sector and cross-sector credit rating methodologies can be found here.

For data summarizing the historical robustness and predictive power of credit ratings, please click here.

For further information, please refer to *Rating Symbols and Definitions*, which is available here.

» *Contacts continued from page 1*

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