

RATING IMPLEMENTATION GUIDANCE

Moody's Approach to Global Standard Adjustments in the Analysis of Financial Statements for Non-Financial Corporations

Standardized Adjustments to Improve Global Consistency

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Summary

Moody's adjusts financial statements to better reflect the underlying economics of transactions and events and to improve the comparability of financial statements. We compute credit-relevant ratios using adjusted data and base our debt ratings, in part, on those ratios.

This report discusses Moody's Standard Adjustments to financial statements prepared under US, Canadian and Japan accounting principles (these are collectively referred to as GAAP in this publication unless noted otherwise) and International Financial Reporting Standards (IFRS). Those adjustments we discuss herein may be unique to 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 these more comparable to statements of non-financial corporations that report under either GAAP or IFRS.

In addition to the Standard Adjustments, Moody's analysts may also make non-standard adjustments to financial statements for other matters to better reflect underlying economics and improve comparability with peer companies. For example, we may adjust financial statements to reflect estimates or assumptions that we believe are more suitable for credit analysis.

With the use of Standard Adjustments, Moody's research includes, for each rated company, the nature and amount of all Standard Adjustments and those other adjustments that we make based on publicly available information. We also published key financial ratios reflecting the adjustments we make to financial statements. Our financial ratios in most cases do not contain complicated add backs to the numerators and denominators, but instead are based on fully adjusted sets of financial statements.

Our adjustments do not imply that a company's financial statements fail to comply with GAAP or IFRS. Indeed, many of our adjustments are inconsistent with current accounting principles. Our goal is to enhance the analytical value of financial data for credit analysis and not to measure compliance with accounting rules.

Changes to Our Global Standard Adjustments

This Methodology summarizes the most common global standard adjustments to financial statements of non-financial corporations that report under US, Canadian and Japan GAAP and IFRS. It replaces three separate documents that had addressed these issues separately for financial statements prepared in accordance with US and Canadian GAAP, International Financial Reporting Standards (IFRS) and Japan GAAP.

This document provides an up to date summary of adjustments related to FASB reporting requirements for pension plans, including a section for multi-employer pension plans and supplemental employer pension plans (SERPs). We also discuss various non-standard adjustments and the possibility of changes to the lease adjustment related to FASB's proposal to bring operating leases on balance sheet.

Adjustments – Purpose, Methods and Transparency

In general, Moody's adjusts financial statements to better reflect, for analytical purposes, the underlying economics of transactions and events and to improve comparability of a company's financial statements with those of its peers. More specifically, we adjust financial statements to:

- » ***Apply accounting principles that we believe more faithfully capture underlying economics.*** One example is our view that operating leases create property rights and debt-like obligations that we should recognize on balance sheets. Most of our standard adjustments fall in the accounting principle category.
- » ***Identify and segregate the effects of unusual or non-recurring items.*** By stripping out these effects, improves the ability to perceive the results of ongoing, recurring and sustainable activities. Our standard adjustment "unusual and non-recurring items" addresses this category.
- » ***Improve comparability by aligning accounting principles.*** For example, we adjust LIFO inventories so that all companies in a peer group measure inventory on a comparable, in this case FIFO, basis.
- » ***Reflect estimates or assumptions that we believe are more appropriate, for analytical purposes for credit analysis, in the company's particular circumstances.*** These adjustments typically relate to highly 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.

Our adjustments do not imply that a company's financial statements fail to comply with GAAP or IFRS. Indeed, many of our adjustments are inconsistent with current accounting principles. Our goal is to enhance the analytical value of financial data and not to measure compliance with rules.

Moody's has long adjusted financial data to improve analytical insight. The purpose and concepts of adjustments are not new and Moody's has published a number of previous methodologies that discuss analytic adjustments. In standardizing certain adjustments, our goal is to enhance consistency of our

global approach, among analysts, and across countries and industries and to promote transparency for market participants.

We publish key financial ratios that reflect the adjustments we make to financial statements. We make comprehensive adjustments to complete sets of financial statements and then compute ratios based on the 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 affect all three primary financial statements, which, after our adjustments, continue to interact:

- » **Balance sheet:** We adjust the value of certain items, removing the artificial effects of smoothing permitted by accounting standards, recognizing certain off-balance sheet transactions, and change the debt versus equity classification of certain hybrid financial instruments with both debt and equity features.
- » **Income statement:** We eliminate the effects of certain smoothing, recognizing additional expenses, attributing interest to new debt that we recognize, and segregating the effects of unusual or non-recurring items.
- » **Cash flow statement:** We adjust the cash flow statement to be consistent with our adjustments to the balance sheet and income statement. For example, we identify and segregate the cash effects of the unusual transactions and events that we separate on the income statement.

We warehouse "unadjusted financials" (i.e. publicly reported financials) and "adjusted financials" (i.e. publicly reported data plus adjustments) in a database and use it to generate peer comparisons and quantitative rating criteria by industry. This data facilitates rating comparability and more transparent communication.

The standard adjustments are identified below as well as the applicable accounting regime. For example, the Pension Adjustment applies to US/Canadian GAAP, IFRS and Japan GAAP. while, the Finance Lease Adjustment only applies to Japan GAAP.

Standard Adjustment Comparison

	US GAAP	IFRS	JGAAP
1. Defined benefit pensions	x	x	x
2. Operating leases	x	x	x
3. Finance leases	-	-	x
4. Capitalized interest	x	x	x
5. Capitalized development Cost	-	x	-
6. Int. Expense related to discounted long term liabilities other than debt	-	x	-
7. Hybrid securities	x	x	x
8. Securitizations	x	x	x
9. Inventory on a LIFO cost basis	x	-	-
10. Consistent measurement of Funds from Operations – Different Measures of Working Capital	-	x	-
11. Unusual and non-recurring items	x	x	x
12. Other analytical non-standard Adjustments	x	x	x

Adjustments – Nature

The following describes the Standard Adjustments applicable to GAAP and IFRS financial statements and also refers to related previously published methodologies.

TABLE 1

Standard Adjustments and Corresponding Methodologies

Adjustment	Purpose	Separate Methodologies that Are Related
Underfunded and unfunded defined benefit pensions	To eliminate the effects of artificial smoothing of pension expense permitted by accounting standards and recognize as debt (to the extent appropriate) the amount the pension obligation is underfunded - or is unfunded. We also change the classification of cash contributed to the pension trust on the cash flow statement under certain circumstances.	Analytical Observations Related To US Pension Obligations, January 2003 (77242) Analytical Observations Related To "Underfunded" Pension Obligations When using UK and IAS GAAP, May 2003 (78060) Multiemployer Pension Plans: Moody's Analytical Approach, August 2006 (98445)
Operating leases	To capitalize operating leases and recognize a related debt obligation. We re-characterize rent expense on the income statement by imputing interest on the debt (one-third of rent) and considering the residual amount (two thirds of rent) as depreciation. On the cash flow statement we reclassify a portion of the rent payment as being a debt principal payment and also simulate capital expenditures for newly acquired assets under operating leases.	***
Office-balance sheet finance leases	To capitalize off-balance-sheet finance leases and recognize a related debt obligation. We re-characterize rent expense on the income statement by imputing interest on the debt (one third of rent) and considering the residual amount (two-thirds of rent) as depreciation. On the cash flow statement we reclassify a portion of the rent payment as being a debt principal payment and also simulate capital expenditures for newly acquired assets under finance leases.	***

TABLE 1

Standard Adjustments and Corresponding Methodologies

Adjustment	Purpose	Separate Methodologies that Are Related
Capitalized interest	To expense the amount of interest capitalized in the current year. On the cash flow statement, we reclassify capitalized interest from an investing cash outflow to an operating cash outflow.	***
Capitalized development costs	To expense development costs capitalized in the current year and adjust intangible assets on the balance sheet accordingly. On the cash flow statement, we reclassify capitalized development costs from an investing cash outflow to 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.	***
Hybrid securities	To classify securities with characteristics of both debt and equity following Moody's classification scheme, which sometimes differs from the GAAP treatment. We adjust interest expense, dividends and related cash flows consistent with our classification of the hybrid security.	Revisions to Moody's Hybrid Tool Kit, July 1, 2010 (125615) Hybrid Securities Analysis – New Criteria for Adjustment of Financial Ratios to Reflect the Issuance of Hybrid Securities, November 2003 (79991)
Securitizations	To adjust the sponsor's accounting for securitizations that do not fully transfer risk and that are accounted for as sales of assets. Moody's views those transactions as collateralized borrowings.	Securitization and its Effect on the Credit Strength of Companies: Moody's Perspective 1987-2002, March 2002 (74455) Changing the Paradigms: Revised Financial Reporting for Special Purpose Entities, May 2002 (74947) Demystifying Securitization for Unsecured Investors, January 2003 (77213)
Inventory on a LIFO cost basis	To adjust inventory recorded on a LIFO cost basis to FIFO value. We do not adjust the income statement.	***
Different measures of working capital under IFRS	To adjust working capital where appropriate to include the difference between tax paid and the current tax expense and net interest paid and the interest expense	
Unusual and non-recurring items	To reclassify the effects of unusual or nonrecurring 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.	***

***Moody's has not published separate Methodologies or Special Comments that expands upon the background for this adjustment

In addition to the Standard Adjustments, Moody's may also make non-standard adjustments to financial statements for other matters to better reflect underlying economics and improve comparability with peer companies. For example, analysts may adjust financial statements to reflect estimates or assumptions that they believe are more appropriate for credit analysis.

In most cases we can compute our Standard Adjustments based on public information. In contrast, we compute non-standard adjustments using public or private information. Despite our goal of transparency related to adjustments, we are limited in what we are able to publish related to adjustments that we base on private information.

Standard Adjustment #1: Defined Benefit Pensions

There are two types of defined benefit pension schemes – “pre-funded” schemes where companies are required to set aside assets in a separate trust to fund future benefits and “unfunded” schemes where companies are not required and elect not to set aside assets in a separate trust. Part 1 of our discussion of this adjustment addresses both types of schemes. Part 2 addresses an incremental adjustment that is unique to unfunded plans. In circumstances where a company starts to voluntarily pre-fund a previously unfunded pension obligation, Moody’s will continue to treat the arrangement as unfunded until the plan assets amount to 75% of the PBO, or are expected to reach this level in the near future.

The Reporting Problem

In certain accounting regimes current accounting standards often fail to recognize or fully recognize on the sponsor’s balance sheet the amount and/or nature of its economic obligation to its pension trust and employees, in part because of extensive artificial smoothing mechanisms permitted in pension accounting. Artificial smoothing also distorts the measurement of pension expense. The smoothing mechanisms permit the deferral of large losses and gains, which can result in incongruous reporting such as:

- » Recording pension income during a period when the economic status of the plan deteriorates, and
- » Recording pension related assets on the balance sheet when the pension plan is underfunded

On the cash flow statement, standards require companies to classify cash contributions to the pension trust as an operating cash outflow in the cashflow statement, including the portion that is reducing plan underfunding, which arguably represents the reduction of debt. As a result, cash from operations (CFO) is diminished for a contribution to the trust that is more akin to a financing activity.

Moody’s Analytical Response – Part 1

Moody’s believes that a sponsor’s balance sheet should reflect a debt-like liability equal to the underfunded status of the pension plan (except as noted in Part 2 below for unfunded schemes). We measure that liability at the balance sheet date as the excess of the actuarially determined projected benefit obligation/defined benefit obligation (PBO/DBO)¹ over the fair value of assets in the separate pension trusts. As assets cannot generally be transferred from one pension trust to another, in most cases, we adjust debt by the gross underfunding of all underfunded trusts.

Because of the contractual nature of pension obligations, we view the pension liability as “debt - like”. Thus, we classify it as debt on the balance sheet and include it in the computation of ratios that use debt. We also record a related deferred tax asset which tempers the impact of our debt adjustment on equity. Because of the inherent uncertainty in the timing and amount of future tax deductions, it is Moody’s standard practice to present liabilities before any anticipated tax benefits.

On the income statement, our goal is to report pension expense absent the effects of artificial smoothing, such as the amortization of prior service cost and actuarial gains and losses. We view pension expense to equal the year’s service cost, plus interest on the gross pension obligation (PBO), minus actual earnings on plan assets². However, volatility in the performance of the pension plan

¹ Some argue that a better measure of the pension obligation is the accumulated benefit obligation, or ABO. Unlike PBO/DBO, ABO does not assume future compensation increases for employees. Moody’s believes that PBO/DBO is the better measure for a company that is a going concern.

² We limit the amount of gains on assets to the amount of interest to avoid recording pension income that is probably not sustainable. Also, in general, plan sponsors cannot utilize the gain on pension plan assets to satisfy non-pension related obligations and the monetization of plan assets may give rise to significant tax penalties.

assets is not reflected in EBIT because Moody's reflects actual earnings on plan assets in "other non-recurring expense" and excludes this caption from EBIT.

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

How Moody's Adjusts the Financial Statements – Part 1

The following table describes Moody's adjustments related to underfunded defined benefit pension obligations.

TABLE 2 Standard Adjustments for Underfunded Defined Benefit Pensions (All Jurisdictions)	
Balance Sheet	We adjust the balance sheet by recording as debt the amount by which the defined benefit pension obligation is underfunded. Our adjustment: recognizes the gross underfunded pension obligation (PBO/DBO - FMV of assets) as debt, and removes any remaining intangible pension assets and liabilities recognized under GAAP or IFRS.
Income Statement	We adjust pension expense to eliminate smoothing, and exclude net periodic pension income. Moody's: reverses all pension costs; recognizes the service cost, which Moody's considers the best estimate of the operating cost of the pension plan (in proportion to COGS, Operating Expenses and SG&A); recognizes interest cost on the PBO/DBO in other non-recurring income/expense; attributes interest expense to pension-related debt, which we reclassify from other non-recurring income/expense to interest expense; adds or subtracts actual losses or gains on pension assets (but only in an amount up to the interest cost after attributing interest expense to pension-related debt) in other non-recurring income/expense.
Cash Flow Statement	We adjust the cash flow statement to: recognize only the service cost as an outflow from cash from operations (CFO), and reclassify employer cash pension contributions in excess of the service cost from an operating cash outflow (CFO) to a financing cash outflow (CFF). We do not adjust the cash flow statement if pension contributions are less than the service cost.

The most critical assumptions in pension accounting often relate to the discount rate used to assess the present value of future payments and the assumed returns on pension assets. Where these assumptions appear unsustainable or significantly different than those of a company's peers, we will often investigate the reasons why management chose those assumptions. The explanation may cause us to change our adjustment or provide other insight into credit risk. For example, if we conclude that the discount rate is aggressive, we may request that management calculate PBO/DBO using a lower rate and base our pension adjustment on that calculation. As another example, understanding the reason for a high expected rate of return on assets³ could provide us with insight into the nature and risk of the assets in the pension trust.

The Reporting Problem – Part 2

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

- » Result in the inclusion of the gross pension obligation (in place of the net obligation) on the balance sheet;
- » Typically have no statutory requirement for cash pre-funding of the gross obligation; and

³ Note that the assumed rate of return on pension assets is irrelevant to our pension-related adjustments.

- » 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.

Moody's Analytic Response – Part 2

For unfunded pension plans, Moody's considers the PBO/DBO to be only partially "debt-like". To improve comparability with pre-funded pensions, Moody's simulates 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 will likely have time to secure the necessary financing. In cases where the company has the ability to easily access the capital markets, Moody's assumes that management's targeted debt and equity mix will be used to fund future pension obligations.

Consequently, for unfunded pensions, an additional adjustment is made to the balance sheet to incorporate an "equity credit" which reduces the amount of the gross pension obligation (PBO/DBO) that would otherwise be added to debt. However, excess liquid funds reduce the likelihood of additional equity being raised and the equity credit is therefore calculated after the excess liquid funds have been deducted from the PBO/DBO. Excess liquid funds are discretionary amounts of cash and marketable securities that exceed day-to-day needs for operations. For industrial companies, these day-to-day cash needs would typically be estimated at 3% of revenues, depending on the complexity of the company's payment streams and the efficiency of its cash management systems.

Moody's does not further adjust the income statement or the cash flow statement for companies with unfunded pension obligations, other than to align the interest expense with the adjustment to debt described in the previous paragraph. The remaining interest cost on the PBO/DBO is included in other non-recurring expense.

How Moody's Adjusts the Financial Statements – Part 2

The following table describes Moody's adjustment related to unfunded defined benefit pension obligations.

TABLE 3 Standard Adjustments for Unfunded Defined Benefit Pensions	
Balance Sheet	We adjust the balance sheet to record an "equity credit" that simulates funding of the company's unfunded PBO/DBO. 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 the interest expense with our adjustment to debt.
Cash Flow Statement	We do not further adjust the cash flow statement for unfunded pension plans.

The Reporting Problem - Multiemployer Pension Plans

Under US GAAP multiemployer pension plans⁴ are not reflected as a liability on the balance sheet. Consistent with our treatment of single employer pension plans we believe that a company's share of

⁴ Multiemployer pension plans generally cover workers from more than one employer and employer contributions, determined by collective bargaining with a labor union, fund the plan.

the multiemployer pension plan underfunding represents a long-term debt-like liability. On the balance sheet, we increase debt by the amount we attribute to the company's share of multiemployer under-funding, record a deferred tax asset related to the resulting temporary difference (generally equal to 35 percent of the incremental debt) and the difference as a reduction to shareholders' equity⁵. We adjust the income statement to recognize related interest expense. We do not adjust the cash flow statement.

Supplemental Executive Retirement Plans

A Supplemental Executive Retirement Plan, or a "SERP"⁶, is a special type of pension plan that provides tax-deferred retirement income to executives. Unlike SEP's which are protected by ERISA with, among other things, minimum funding levels and benefit guarantees, SERP benefits are largely at risk and usually unfunded. Despite the lack of regulatory protection due to the contractual nature of these plans and how they operate in bankruptcy Moody's views SERP obligations no differently than SEP obligations. As such the standard adjustments we make for SERPs are identical to, and made together with, those we make for SEPs.

Standard Adjustment #2: Operating Leases

The Reporting Problem

Accounting standards distinguish between capital and operating leases, and the accounting for the two is very different. Accounting standards view capital leases as the acquisition of a long-term property right and the incurrence of debt. During the lease term, companies amortize the capitalized property right and divide the lease payment between interest expense and the repayment of debt. In contrast, accounting standards view operating leases as executory (off-balance sheet) contracts that are generally accounted for on a pay-as-you-go basis. That is, companies simply recognize the lease payments as lease expense on the income statement and as an operating cash outflow on the cash flow statement.

For operating leases, companies don't recognize debt even though they are contractually obligated for lease payments and a failure to make a lease payment often triggers events of default, as if the obligation were debt. Further, in the eyes of lenders, incurring operating lease obligations reduces a company's borrowing capacity. Finally, in the absence of a lease financing option, the company would likely borrow the money and buy the asset; an illustration of this fact can be seen in the number of companies across industries that are selling and leasing back the same assets.

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

⁵ See "[Multiemployer Pension Plans: Moody's Analytical Approach](#)" January 2006

⁶ [Large "SERPs" Are Likely to Remain Credit Negative Even If Pension Funding Improves](#) June 2010

Moody's Analytical Response

Our analytic goal is to simulate a company's financial statements assuming it had bought and depreciated the leased assets, and financed the purchase with a like amount of debt. Moody's approach entails adjustments to the balance sheet, income and cash flow statements.

We apply a multiple between 4x and 10x to current rent expense to calculate the amount of the adjustment to debt. Under JGAAP, we substitute rent expense with the minimum lease payment within one year (as disclosed in the footnotes) as there is no requirement to disclose current-year rent expense for operating leases. For example, an '8x' rent factor, while providing a quick thumbnail estimate, assumes a certain interest rate (6%) on a piece of capital equipment with a long useful life (15 years), and is not appropriate for all lease types. To accommodate a wider array of useful lives and interest rates, we generally apply a rent factors between 4x and 10x. The lease multiples contained in this document are intended to serve as general guidance and are not intended to override consideration of an individual issuer's circumstances. To the extent that facts and circumstances strongly warrant, the multiple of rent expense used to capitalize operating leases for an individual issuer may differ from the multiple generally used for that issuer's industry though we would expect a limited number of exceptions. For consistency, we will generally use the same multiple for companies by sector of activity. In most cases we capitalize operating leases at the greater of the present value of the future lease payments (discounted by the long-term borrowing rate) or the applicable lease multiple.

How Moody's Adjusts the Financial Statements

The following table describes Moody's adjustments to capitalize operating leases.

Balance Sheet	We adjust the balance sheet by adding both debt and fixed assets (usually gross plant, property and equipment). We compute this debt by multiplying current rent expense by a factor between 4x and 10x, or, if the present value (PV) of the minimum lease commitments (using the incremental borrowing rate as the discount rate) is higher, we will use the PV
Income Statement	We adjust the income statement using market convention to reclassify one-third of the rent expense to interest expense and the remaining two-thirds rent to "Depreciation – Capitalized Operating Leases" (a component of operating profit), and we adjust operating expenses (or cost of goods sold and selling, general & administrative expenses proportionally).
Cash Flow Statement	We adjust the cash flow statement to reclassify a portion of the rent expense from operating cash flow (CFO) to a financing cash outflow (CFF). We also simulate capital expenditure for newly acquired leased assets by increasing the capital expenditures line in investing cash flows (CFI) with a concomitant borrowing in CFF to fund the capital expenditures.

In August 2010, in connection with global accounting convergence, the U.S. Financial Accounting Standards Board and the International Accounting Standards Board released substantially similar exposure drafts proposing to significantly change operating lease accounting. Should the proposed accounting become effective, our lease methodology could be subject to change.

Standard Adjustment #3: Off-Balance-Sheet Finance Leases (Japan GAAP)

The Reporting Problem

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 the lease payments as lease expenses on income statements and as operating cash outflows on cash flow statements.

Moody's Analytical Response

Moody's views an off-balance sheet finance lease as a debt-like transaction, similar to the case of an operating lease. We simulate a company's financial statements assuming it had bought and depreciated the leased assets, and financed the purchase with a like amount of debt. This requires modification to the balance sheet, income and cash flow statements.

How Moody's Adjusts the Financial Statements

The following table describes Moody's adjustments to capitalize off-balance sheet finance leases.

TABLE 5
Standard Adjustments for Off-Balance-Sheet Finance Leases

Balance Sheet	We adjust the balance sheet by adding both debt and fixed assets (usually gross plant, property and equipment, and accumulated depreciation). We assume the debt amount to be the present value of the unpaid lease amount as disclosed a footnote.
Income Statement	We adjust the income statement using market convention to reclassify one-third of the rent expense to interest expense and the remaining two-thirds to "Depreciation – Capitalized Operating Leases" (a component of operating profit), and we adjust operating expenses (or cost of goods sold and selling, general & administrative expenses) proportionally.
Cash Flow Statement	We adjust the cash flow statement to reclassify a portion of the rent expense from operating cash flow (CFO) to a financing cash outflow (CFF). We also simulate a capital expenditure for newly acquired leased assets by increasing the capital expenditures line in investing cash flows (CFI) and with a borrowing in CFF to fund the capital expenditures.

Standard Adjustment #4: Capitalized Interest

The Reporting Problem

Analysts typically wish to separately analyze the operations of a business from the financing of that business. This separation enables a more accurate portrayal of business operations, which is often the primary source of cash to repay debt.

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

Moody's Analytical Response

Moody's views capitalized interest as a cost for obtaining financing (i.e. interest expense) and believes that analysis of interest coverage should expense when incurred all interest cost regardless of whether a company recognizes that cost as an expense on its income statement or as an asset on its balance sheet. This requires modification to the balance sheet and income statement.

How Moody's Adjusts the Financial Statements

The following table describes Moody's adjustments to expense interest capitalized

TABLE 6 Standard Adjustments for Capitalized Interest	
Balance Sheet	We adjust the balance sheet to: reduce PP&E by the amount of interest capitalized during the period, adjust deferred taxes, and reduce retained earnings by the after-tax cost of the additional interest expense recognized on the income statement
Income Statement	We adjust the income statement to: increase interest expense by the amount of capitalized interest during the current period, and reduce applicable tax expense.

Standard Adjustment #5: Capitalized Development Costs

The Reporting Problem

Provided certain criteria are met, capitalization of product development costs is mandatory under IFRS, but not permitted 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.

Moody's Analytical Response

Moody's views capitalized development costs as an operating expense and believes 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 Moody's Adjusts the Financial Statements

The following table describes Moody's adjustments to expense capitalized development costs.

Balance Sheet	<p>We adjust the balance sheet to:</p> <ul style="list-style-type: none"> » reduce intangible assets by the cumulative amount of development costs capitalized. » adjust deferred taxes accordingly, and » reduce retained earnings by the cumulative amount of development costs capitalized, net of tax.
Income Statement	<p>We adjust the income statement to:</p> <ul style="list-style-type: none"> » increase operating expenses by the amount of capitalized development costs for the period, » remove the amortization charge related to the capitalized development costs (including any impairment charge), and » adjust applicable tax expense.
Cash Flow Statement	<p>We adjust the cash flow statement to reclassify capitalized development costs from an investing cash outflow (CFI) to an operating cash outflow (CFO).</p>

Standard Adjustment #6: Interest Expense related to Discounted Long-term Liabilities Other than Debt

The Reporting Problem

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 distorts our 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.

Moody's Analytical Response

In the income statement, Moody's reclassifies 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 pure 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 Moody's Adjusts the Financial Statements

The following table describes Moody's adjustments to reclassify interest expense arising from discounting.

TABLE 8

Standard Adjustments for Interest Expense Arising from Discounting

Balance Sheet	No impact on the balance sheet.
Income Statement	We adjust the income statement to: increase operating expenses by the cost of unwinding the discounted liabilities, and reduce interest expense by that same amount.
Cash Flow Statement	As the related cash outflows are reported as an operating cash flow (CFO), this adjustment has no impact on the cash flow statement.

Standard Adjustment #7: Hybrid Securities**The Reporting Problem**

Although accounted for as debt, equity or minority interest, hybrid securities have characteristics of both debt and equity instruments. For some instruments, the economics suggest a different classification from the accounting treatment. For example, certain preferred stocks are classified as 100% equity, even though these instruments have important attributes of debt.

Moody's Analytical Response

Since hybrid securities are generally not pure debt or pure equity, Moody's places a particular hybrid security on a debt - equity continuum. We assign weights to the debt and equity components of a hybrid based on the security's particular features. The weights determine where it lies on the continuum. As a result, for example, Moody's may view a particular hybrid as 75% debt and 25% equity, while accounting standards may classify the instrument as 100% equity.

On the balance sheet we classify the instrument in accordance with the weights we assign to its equity and debt features:

Basket	Debt Component	Equity Component
A	100%	0%
B	75%	25%
C	50%	50%
D	25%	75%
E	0%	100%

Often this requires an adjustment from the classification in current accounting, which often classifies instruments as all debt or all equity, or in some cases, minority interest.

We also adjust the income statement to reflect interest expense or dividends, depending on our balance sheet classification. For example, if we deem a portion of a debt instrument as "equity - like", Moody's reclassifies the ratable amount of interest expense to dividends. Conversely, if we deem a portion of an equity instrument as "debt - like", Moody's reclassifies the ratable amount of dividends to interest expense.

We apply similar thinking to the cash flow statement, again reflecting cash outflows as interest or dividends depending on our balance sheet classification.

How Moody's Adjusts the Financial Statements

The following table describes Moody's adjustments related to hybrid securities.

TABLE 9

Reclassification to Equity for Hybrid Securities Classified as Debt

Balance Sheet	We adjust the balance sheet to reclassify to equity (i.e. preferred stock) hybrid securities classified as debt, based on the hybrid basket treatment assigned to the particular hybrid security
Income Statement	We adjust the income statement to reclassify interest expense to preferred dividends for the calculated equity portion of hybrid securities based on the hybrid basket treatment
Cash Flow	We adjust the cash flow statement to reclassify interest expense (an operating cash outflow) to preferred dividends (a financing cash outflow) for the calculated equity portion of hybrid securities based on the hybrid basket treatment.

TABLE 10

Reclassification to Debt for Hybrid Securities Classified as Equity

Balance Sheet	We adjust the balance sheet to reclassify to debt (i.e. subordinated debt) hybrid securities classified as equity, based on the hybrid basket treatment assigned to the particular hybrid security.
Income Statement	We adjust the income statement to reclassify preferred dividends to interest expense for the calculated debt portion of hybrid securities based on the hybrid basket treatment.
Cash Flow Statement	We adjust the cash flow statement to reclassify preferred dividends (a financing cash outflow) to interest expense (an operating cash outflow) for the calculated debt.

Standard Adjustment #8: Securitizations

The Reporting Problem

Companies often report as a sale the transfer of assets, such as receivables, to securitization trusts, following accounting rules that are largely based on legal form. However, in many of these securitizations are accounted for as sales:

1. the company sponsor retains key risks related to the assets transferred to the securitization trust,
2. the company, to maintain market access for future securitization, would be "economically compelled" to rescue a prior securitization transaction, or
3. in the event that the company lost access to the securitization market, the types of assets normally securitized would quickly accumulate on the sponsor's balance sheet, through the company's normal business activities, and require alternative funding.

These facts, if present, raise complex questions about whether the analyst covering a non-financial corporation should view the securitization as a sale of assets or a borrowing collateralized by assets. The accounting and resulting numbers related to the company's financial leverage and cash flows differ significantly depending upon which view the analyst accepts.

For example, if the transaction is viewed as a sale, then the analyst accepts the accounting. That accounting removes the assets from the company's balance sheet and recognizes no debt related to the transaction. On the cash flow statement, the company classifies cash inflow from the sale of receivables in cash from operations.

However, if the transaction is viewed as a collateralized borrowing, then the analyst adjusts the company's balance sheet to record debt for the proceeds from the securitization and to include the receivables or other assets that the company securitized. On the cash flow statement, the analyst reclassifies cash inflow from the transaction from cash from operations (CFO) to cash from financing activities (CFF), viewing the proceeds as borrowing.

Accounting standards that treat collateralized borrowings as sales result in non-comparable reporting among companies. Companies that borrow from traditional sources appear different from those that borrow through securitization transactions, even though the economics of the borrowings may be similar.

Moody's Analytical Response

Moody's views securitization transactions that do not fully transfer risk as collateralized borrowings. In nearly all of the securitizations we have reviewed to date, company sponsors have retained significant risks related to the assets transferred. In those cases, we adjust the financial statements of companies that report securitizations as sales to reflect the transactions as securitized borrowings.

How Moody's Adjusts Financial Statements

The following table describes Moody's adjustments for securitizations that sponsors report as sales but that do not fully transfer risk

TABLE 11
Standard Adjustments for Securitizations

Balance Sheet	We adjust the balance sheet to increase debt by the ending balance of uncollected or unrealized assets that the company sponsor 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, and reduce other expense by the same amount. Thus, our adjustment does not affect reported net income
Cash Flow	<p>We adjust the cash flow statement to reclassify amounts in the cash from operations (CFO) and cash from financing (CFF) categories:</p> <ul style="list-style-type: none"> » Upon the initial transfer of assets, we reclassify the cash inflow from operating cash flow (CFO) to financing cash flow (CFF). » 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. <p>For example if the amount of uncollected receivables in the securitization:</p> <ul style="list-style-type: none"> – increases from the beginning to the end of the year, we reclassify the amount of that increase from cash inflow from operations (CFO) to cash inflow from financing activities (CFF). – decreases from the beginning to the end of the year, we increase cash from operations (CFO) by that amount and decrease cash from financing activities (CFF).

Standard Adjustment #9: Inventory on a LIFO Cost Basis

The Reporting Problem

LIFO (last-in-first-out) cost method for carrying inventories on the balance sheet is an accounting choice under US but is not acceptable under other GAAPs, including IFRS. 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.

Moody's Analytical Response

Moody's adjusts inventories that companies report on the LIFO cost method to the FIFO cost method. This adjustment improves comparability among companies with these two different inventory 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 Moody's Adjusts the Financial Statements

The following table describes Moody's adjustment to inventory measured on a LIFO basis for reporting purposes.

TABLE 12 Standard Adjustments for Inventory Reported on a LIFO Cost Basis	
Balance Sheet	We adjust the balance sheet to: increase inventories by the amount of the LIFO inventory valuation reserve increase deferred tax liabilities for applicable tax effects increase retained earnings
Income Statement	No adjustments made
Cash Flow	No adjustments made

Standard Adjustment #10: Consistent Measurement of Funds From Operations

The Reporting Problem

Companies using IFRS have the flexibility to use net income, operating profit or pre-tax income as the starting point for the calculation (under the indirect method) of the cash flow from operating activities in the cash flow statement. Funds from operations (FFO) - cash from operations before changes in working capital - will be affected to the extent that working capital includes or excludes the difference between (i) cash paid for taxes and the current tax expense and (ii) net interest paid and net interest expense (including any interest capitalized and excluding any interest related to discounting of long-term liabilities other than debt).

Moody's Analytical Response

Moody's believes that adjustments to working capital may be necessary to make the calculation of funds from operations (FFO) consistent with those companies who use net income as the starting point for their cash flow statement. For example, if a company reports its cash flow statement starting from pre-tax income, the difference between the current tax expense and tax paid needs to be included in the measurement of working capital when calculating FFO. Furthermore, if a company starts its cash flow statement 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 and the difference between the current tax expense and tax paid both need to be included in the measurement of working capital when calculating FFO.

How Moody's Adjusts the Financial Statements

The following table describes Moody's adjustments for the different IFRS operating cash flow starting points.

TABLE 13

Standard Adjustments for Different Measures of Working Capital and IFRS

Balance Sheet	We do not adjust the balance sheet.
Income Statement	We do not adjust the income statement.
Cash Flow Statement	<p>If the cash flow statement starting point is pre-tax income, we adjust working capital by the difference between:</p> <ul style="list-style-type: none"> » current tax expense and » tax paid. <p>If the cash flow statement starting point is operating profit, we adjust working capital by the difference between:</p> <ul style="list-style-type: none"> » 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.

Standard/Non Standard Adjustments #11: Unusual and Non-Recurring Items

The Reporting Problem

Financial statements generally do not contain enough information about unusual or non-recurring items to meet analysts' needs for information. Although companies separately display the effects of a few non-recurring transactions and events (e.g. discontinued operations and extraordinary items), accounting standards fail to require or permit companies to separately display on the face of the statements a sufficiently broad range of unusual or non-recurring items.

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 (for example, the tax benefits of deductible goodwill whose depreciable life is ending).

Inadequate information about the effects of unusual or non-recurring items can foster misleading impressions about key trends in financial data. For example, the revenues, gross margin and cash flows resulting from 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.

Moody's Analytical Response

Moody's captures the effects of unusual and non-recurring transactions and events in separate captions on the face of the income and cash flow statements. This enables analysts to more accurately portray trends in the underlying recurring core business. Our key financial ratios will generally exclude the effects of unusual and non-recurring transactions that we identify.

Generally, we identify unusual and non-recurring transactions and events from public disclosures, including 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 will consider the possibility that an unusual or non-recurring item could materially affect the balance sheet, and adjust it too, if needed.

How Moody's Adjusts the Financial Statements

The following table describes Moody's adjustments to capture the effects of unusual and non-recurring items.

Balance Sheet	We adjust the balance sheets in those instances when it is material to our analysis.
Income Statement	We adjust the income statement to reclassify the effects of unusual or non-recurring revenues, gains or costs, net of the related tax effect, to a special income statement caption that is below net profit after tax. Our computation of key ratios excludes amounts in the special income statement caption.
Cash Flow Statement	We adjust the cash flow statement to reclassify the effects of unusual or non-recurring operating cash inflows and outflows to a special caption in the operating section of the cash flow statement. Our computation of key ratios excludes amounts in the special cash flow statement caption.

Other Analytical and Non-Standard Adjustments #12

In addition to the Standard Adjustments, Moody's analysts may also make Non-Standard Adjustments to financial statements where they consider such adjustments to be appropriate to reflect unique characteristics of their region or sector. For example, analysts may adjust financial statements to reflect estimates or assumptions that they 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 an area that would influence our analysis.

In most cases we can compute our Standard Adjustments based on public information. We compute Non-Standard Adjustments using public or private information. Despite our goal of transparency related to adjustments, we are limited in what we are able to publish in relation to adjustments that we base on private information.

We will outline a few examples of Non-Standard Adjustments: adjusting debt for the election of the fair value option and bifurcation of convertible debt:

Adjusting for Debt Reported at Amounts Other Than Amortized Cost

Sometimes debt is reported at an amount other than amortized cost on the balance sheet. Analysts may adjust debt to amortized cost (or face value if amortized cost amounts are not available) in these circumstances. Two such circumstances where analysts would be expected to make adjustments, if amounts are material, are:

Debt reported at fair value based on the election of a "fair value option." A fair value option exists under U.S. 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 own debt, analysts 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 in the income statement related to changes in the fair value of debt.

Bifurcation of convertible debt. All convertible debt issued by IFRS reporting entities and convertible debt with cash settlement features issued by U.S. GAAP reporters is required to be bifurcated into two components – a debt component (calculated based what the fair value of that debt instrument would be absent the conversion feature) and an equity derivative component that is typically reported as part of shareholders' equity. Analysts may make an adjustment to the balance sheet to reverse the impact of this bifurcation and restate debt to 100% of its face value in line with the Basket A Hybrid classification.

Industry Methodologies

The standard adjustments are designed to encapsulate adjustments across all non financial corporates and in limited circumstances may be not fully capture the underlying economics of every industry. We strive to identify these instances in the applicable industry methodology and to formally document the supplemental adjustment or non-applicability of these standard adjustments.

Moody's Related Research

Rating Methodology:

- » [Moody's Approach to Global Standard Adjustments in the Analysis of the Financial Statements of Banks, Securities Firms and Finance Companies, August 2009 \(117896\)](#)

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

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