MOODY'S INVESTORS SERVICE

CROSS-SECTOR RATING METHODOLOGY

Financial Statement Adjustments in the Analysis of Financial Institutions

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This rating methodology replaces "Financial Statement Adjustments in the Analysis of Financial Institutions," last revised on June 13, 2017. We have updated our lease adjustment to incorporate changes in accounting standards. We have also updated some outdated links.

Summary

This cross-sector rating methodology discusses our analytical adjustments to the financial statements of financial institutions, specifically, banks, securities firms[1], finance companies, and insurance companies.[2] We adjust reported financial statements to better reflect the underlying economics of transactions and events and to improve the comparability of financial data. We calculate credit-relevant ratios using adjusted data and consider these ratios when determining ratings. We have long adjusted financial data to improve analytical insight from the perspective of assessing credit risk.

Our adjustments do not imply that a financial institution'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 the host of different measurement, recognition, presentation and disclosure practices that exist within and across different countries, regions and accounting systems. However, where our key metrics may be significantly affected by different accounting treatments that are generally well disclosed, we make adjustments to improve the quality and comparability of the data.

[1] Securities firms comprise securities industry market makers and securities industry service providers.

[2] The adjustments described in this cross-sector methodology apply to banks, securities firms, finance companies and insurance companies unless specified otherwise in sector-specific methodologies. Asset managers, insurance brokers, and clearing houses are covered by our cross-sector credit rating methodology that discusses financial statement adjustments in the analysis of non-financial corporations. This report can be accessed using the link in the Related Publications section.

The adjustments we apply to bank financial statements are generally also applied to the financial statements of securities firms and finance companies. As such, this document refers to banks, securities firms, and finance companies collectively as "banks." When a financial statement adjustment does not apply to all industry sectors, we identify which of these industry sectors are affected by the particular adjustment.

This report discusses our adjustments to banks' and insurers' financial statements prepared primarily under International Financial Reporting Standards (IFRS), US GAAP, and (for insurers only) regulatory accounting principles, which in the US are Statutory Accounting Principles (US SAP). The adjustments are also applied to financial statements prepared in other accounting jurisdictions (collectively, "local GAAP") whenever it is appropriate to do so to make them more comparable to the financial statements of peers globally.

Certain adjustments are considered standard adjustments, which may apply to banks, insurance companies, or both in some cases, and which are designed to encapsulate adjustments across all entities in these sectors, where applicable and where disclosure permits.[3] 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.

In addition to these standard adjustments, we may also make non-standard adjustments to financial statements for other matters to better reflect underlying economics and improve comparability with peers. Non-standard adjustments affect far fewer entities than standard adjustments and tend to involve a higher degree of analytic judgment. For example, we may make non-standard adjustments where local GAAP or the interpretation of GAAP or IFRS for an issuer differs from the norm in an area that would affect our analysis.

Adjustments – Purpose, Methods and Transparency

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 sectors, 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 following reasons:

» To apply accounting principles that we believe more faithfully capture underlying economics. One example of this is our adjustment for hybrid securities. Here, we reclassify securities with both debt and equity characteristics according to our classification framework, which often differs from how these securities are reported in financial statements.

» To improve comparability by aligning accounting principles with what we consider to be the highest quality alternative for our analytic purposes, when necessary information is available. For example, under IFRS, derivative assets and liabilities with the same counterparties are generally reported on a gross basis, while under US GAAP, derivative assets and liabilities with the same counterparties that are subject to master netting arrangements are generally reported on a net basis. In these cases, we make an adjustment to consistently present derivative assets and liabilities with the same counterparties on a net basis.

[3] Standard adjustments may not be made in situations where they are applicable but the amounts involved are immaterial to our analysis.

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 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 the 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 a lack of disclosed information for an adjustment that could be significant, we would generally be conservative in making related estimates and assumptions to avoid giving the entity any undue credit.

Our adjustments focus on the balance sheet and income statement. Adjustments to the cash flow statement or statement of changes in shareholders' equity are less common because information in these statements is generally not used as a source for our ratios in these sectors.

We are aware of significant differences among reporting regimes that cannot be addressed via adjustment and may be considered qualitatively in our analysis. An example of such a difference for insurers is reported insurance reserve balances. US GAAP, US SAP, IFRS, and various local GAAPs prescribe differing reserving standards. It would be impossible for a financial statement user to determine, with any degree of precision, the amounts by which reserves determined under one reporting framework would need to be adjusted to be wholly comparable to that which would be determined under a different framework. Another example is reporting for investments where presentation and measurement practices can vary by jurisdiction based on accounting regime and management assumptions.

Also, certain reporting regimes require acquisition costs incurred in the production of new or renewal insurance business to be deferred and amortized over the life of the applicable contract (deferred acquisition costs, or DAC), while others (US SAP, several local GAAPs in Asia) proscribe capitalization of acquisition costs. Differences in companies' business models, production platforms, and cost structures preclude standardized adjustments to record a proxy-DAC asset for companies that do not report such an asset in their filings.

Adjustments – Nature and Mechanics

Standard Adjustments

The following describes the standard adjustments applicable to financial statements of financial institutions. The table below indicates if an adjustment is applicable to both banks and insurers, or to banks only, or to insurers only. This decision is based in part upon whether the key ratios in each sector are affected by the financial reporting issue that is addressed by the adjustment. The issues addressed by the standard adjustments that do not apply to a particular sector may be addressed through non-standard adjustments in instances where they are present and materially affect key metrics important to our analysis.

		Applicability		
Item	Description	Banks & Insurers	Banks Only	Insurers Only
Hybrid Securities	To classify securities with characteristics of both debt and equity following our classification scheme. For banks, we adjust interest expense and dividends consistent with our classification of the hybrid security.	X		
Defined Benefit Postretirement Plans	To eliminate the effects of artificial smoothing of defined benefit plans' expense.	X		
Noncontrolling Interests of Minority Shareholders	To reclassify positive noncontrolling interest balances in shareholders' equity to liabilities or the mezzanine section of the balance sheet.	X		
Leases	To re-characterize lease liabilities as debt obligations (if not already classified as debt) and re-characterize associated rent expense into an implied interest expense and depreciation cost.	X[4]		
Fair Value of Own Debt Affected by Changes in a Bank's Creditworthiness	To reverse the cumulative impact of changes in a bank's creditworthiness on the fair value of its own debt and related gains/losses recognized in net income.		X	
Balance Sheet Netting of Financial Asset and Financial Liabilities	We net derivative asset and liability amounts, together with related collateral, that are eligible for offset under enforceable master netting agreements but are presented on a gross basis on the balance sheet.		X	
Reclassification of Certain Deferred Tax Assets	To reclassify certain deferred tax assets that will be realized regardless of future taxable income and can absorb losses in a resolution to an account that is not subject to capping in our calculation of tangible common equity (TCE).		X[5]	
Deferred Tax Liabilities Associated with Tax-Deductible Goodwill and Other Intangible Assets	To reallocate the deferred tax liabilities associated with tax-deductible goodwill and other intangible assets derived from business combinations against the carrying amounts of these assets.		X	
Goodwill and Other Intangible Assets Attributed to Noncontrolling Interests of Minority Shareholders	To remove the noncontrolling interests' share from goodwill and other intangible assets to avoid their double-counting in the calculation of TCE.		X	
Risk Weightings of Sovereign Debt Securities	To increase reported risk weighted assets (RWAs) for those banks whose investments in sovereign debt securities are risk-weighted lower than the weightings provided in the Basel standardized framework.		X	
Operating Debt	To segregate operating debt, and equity supporting operating debt, from financial debt.			X

A more detailed explanation of each of our standard adjustments follows.

[4] The lease adjustments apply to securities firms and finance companies, but not to banks.

[5] The adjustment for deferred tax assets and the adjustment to risk weightings of sovereign debt securities apply to banks, but not securities firms and finance companies.

Non-Standard Adjustments

We may also make non-standard adjustments based on the underlying facts and circumstances of each issuer. We provide examples and explanations of these after the section on standard adjustments.

Standard Adjustments That Apply to Both Banks and Insurers

Hybrid Securities

The Reporting Problem

Hybrid securities are financial instruments with characteristics of both debt and equity that are used by banks and insurers to finance their operations and in some cases to meet regulatory capital requirements. Some hybrids are required to be split between debt and equity components under IFRS, whereas under US GAAP, the entire balance is normally reported in either debt, equity, or noncontrolling interest.

For some instruments, accounting standards focus on legal form, even though the economics of these instruments suggest a different classification. For example, accounting standards classify certain preferred stocks as 100% equity, even though they have attributes of debt.

Our Analytical Response

We classify hybrid securities based on their relative debt and equity characteristics. Depending on the features of a hybrid security, the hybrid may not in substance represent pure debt or pure equity, so we place hybrids in a basket from A (closest to debt) to E (closest to equity) on the debt-equity spectrum. We score a hybrid's features relative to how closely they replicate the features of common equity and weigh the hybrid according to feature type. As a result, for example, we may view a particular hybrid security as 75% debt and 25% equity, while accounting standards may require the instrument to be reported as 100% equity, 100% debt, or something in between.

Due to regulatory oversight and the importance of capital adequacy to a bank's standalone financial strength, hybrids issued by banks behave differently than those issued by non-banks.[6] This, in turn, affects how we treat bank hybrids from an equity credit perspective, which is discussed in our methodology for banks.[7]

How We Adjust the Financial Statements

On the balance sheet, we classify hybrid securities in accordance with our assigned basket, which captures its relative equity and debt features. Often this classification requires an adjustment from the treatment in current accounting under various accounting regimes.

For banks, securities firms, and finance companies, we also adjust the income statement to reflect the appropriate weighting between interest expense and preferred dividends/noncontrolling interest distributions, depending on our balance sheet classification. For example, if we deem a portion of a debt instrument as "equity-like," we reclassify the pro-rata amount of interest expense to preferred dividends. Conversely, if we deem a portion of an equity instrument as "debt-like," we reclassify the ratable amount of preferred dividends and/or relevant noncontrolling interest distributions to interest expense.

[6] Non-banks include securities firms, finance companies, and insurers for the hybrid securities standard adjustment.

[7] See our methodology for rating banks. For non-banks, see our cross-sector methodology for assigning hybrid equity credit. For non-bank speculative-grade issuers, hybrid instruments receive either full equity credit or none, based on the characteristics of the instrument. This treatment reflects the lower certainty (relative to investment-grade issuers) that hybrid coupons will be paid, particularly if debt default can be avoided. A link to these and other sector and cross-sector credit rating methodologies can be found in the Related Publications section of this report.

Below, we describe our adjustments related to hybrid securities.

Balance Sheet (Banks, Securities Firms, Finance Companies, and Insurers)

When public disclosure is not sufficient to make the hybrid security basket assessment, we may seek to obtain the necessary information directly from the issuing entity. Should a financial institution fail to provide the necessary information to record the adjustment, we will not assign any equity credit to that instrument.

Financial institutions often have outstanding several different types of hybrid securities, sometimes with many different instruments issued under each type. The hybrid amounts may be included in equity or liability accounts or as part of the mezzanine section of the balance sheet under US GAAP. We review the various sources of information that we have on each instrument, including the financial statement disclosure notes and the deal documents. We may also ask the issuer to reconcile between the various sources of information to ensure that our listing is complete and accurate.

When disclosure permits, we identify each hybrid that is eligible for partial or full debt or equity treatment under our basketing framework and classify each instrument in accordance with the weights we assign to its debt and equity features. After summing the respective debt values and equity values, we make the associated reclassification entries on the balance sheet to the hybrid debt account (limited by our hybrid credit cap,[8] where applicable) and to shareholders' equity.

Income Statement (Banks, Securities Firms, and Finance Companies)

We 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," we reclassify the ratable amount of interest expense to preferred dividends. Conversely, if we deem a portion of an equity instrument as "debt-like," we reclassify the ratable amount of dividends to interest expense.

If we do not obtain sufficient detail to calculate the equity credit for a particular hybrid security, we generally treat the entire distribution as interest expense.

Income Statement (Insurers)

For insurers, earnings coverage and cash flow coverage metrics compare earnings to total fixed distributions, inclusive of interest and dividends on preferred stock. Therefore, an income statement adjustment is currently unnecessary for hybrid securities of insurers.

Defined Benefit Postretirement Plans

The Reporting Problem

The measurement of defined benefit plans' expense (or income) under both IFRS and US GAAP is distorted by artificial smoothing mechanisms. This permits the deferral of large losses and gains and can result in incongruous reporting, such as recording income during a period when the economic status of a plan deteriorates.

Our Analytical Response

Our goal is to recognize the expense of defined benefit plans without the effects of artificial smoothing, such as the amortization of prior service cost and actuarial gains and losses. We view the period's actuarially

[8] See our methodology for rating banks. For non-banks, see our cross-sector methodology for assigning hybrid equity credit. A link to these and other sector and cross-sector credit rating methodologies can be found in the Related Publications section of this report.

determined service cost as being the most suitable and comparable measure of the core cost of providing these plans, and include this in our measure of banks' pre-provision income and insurers' net income. For banks, we also consider the interest cost on the gross projected benefit obligation (PBO) and the actual earnings on plan assets as being other important measures that should be tracked, and include these in adjusted other non-operating income/expense. For insurers, we do not include interest costs or actual returns on plan assets in income, as doing so would result in asymmetry between accounting for pension plan assets and accounting for assets supporting insurance liabilities, investment activities that we believe to be economically similar.

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 calculation of ratios that use debt.[9] Because assets cannot generally be transferred from one pension trust to another, in most cases, we adjust debt by the gross underfunding. 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 our standard practice to present liabilities before any anticipated tax benefits.

How We Adjust the Financial Statements (Banks)

The following describes our adjustments related to defined benefit postretirement plans for banks.

Income Statement

We reverse all as-reported defined benefit costs (or income).

We remove all as-reported defined benefit costs (or income) with the exception of the actuarially determined current period service cost. We include the current period service cost in our measure of banks' pre-provision income. In addition, we record the plans' interest cost less the actual gains (or plus the actual losses) from the plans' assets in our adjustment to income.

We adjust income tax expense to appropriately tax-effect the adjustment entries.

How We Adjust the Financial Statements (Insurers)

The following describes our adjustments related to defined benefit postretirement plans for insurance companies.

Balance Sheet

Under US GAAP and IFRS, companies are required to record the funded status of their retirement plans on the balance sheet. We record an adjustment to reclassify underfunded pension obligations (Projected Benefit Obligation "PBO" less plan assets), which are generally reflected as an "other liability" in reported financial statements, as financial debt.

We do not generally consider unfunded OPEB liabilities as debt-like (due to funding flexibility and treatment under bankruptcy law) and, therefore, these obligations will be reflected as "other liabilities", if not already reported as such.

Income Statement

We reverse all as-reported defined benefit costs (or income).

[9] We do not make a standard adjustment to reclassify underfunded pension obligations as debt for purposes of our analysis of banks because doing so has no impact on any of the key metrics used in our analysis.

We remove all as-reported defined benefit costs (or income) with the exception of the actuarially determined current period services cost. In addition, we adjust earnings to reflect the imputed financing cost of the underfunded pension liability as interest expense. The incremental borrowing rate used to calculate interest expense on such underfunding is the US intermediate term corporate bond interest rate based on the insurer's insurance financial strength rating.

We adjust income tax expense to appropriately tax-effect the adjustment entries.

Noncontrolling Interests of Minority Shareholders

The Reporting Problem

Noncontrolling interests of minority shareholders (otherwise known as minority interests) are generally recognized as part of shareholders' equity under IFRS and US GAAP. However, by their nature, they provide loss absorption only for debt holders at the subsidiary level where the minority shares are held, and not for creditors at the level of the entity being analyzed (the parent entity).

Our Analytical Response

In general, we believe that noncontrolling interests of minority shareholders should be excluded from shareholders' equity, because they do not provide loss absorption for creditors at the level of the entity being analyzed.

Under IFRS and US GAAP, a negative amount can be recognized in shareholders' equity for noncontrolling interests, representing negative equity at the subsidiary level. In this circumstance, we believe that noncontrolling interests of minority shareholders should remain in shareholders' equity because the entity being analyzed (the parent entity) could be responsible for covering those losses.

How We Adjust the Financial Statements

We do not adjust the financial statements when noncontrolling interests in shareholders' equity are negative at the end of a reporting period. The following describes our adjustment related to positive noncontrolling interest balances for minority shareholders recognized in shareholders' equity.

Note that the standard adjustment for hybrid securities (described earlier in this document) is applied when hybrid securities are classified as noncontrolling interests.

Balance Sheet (Banks)

We reallocate noncontrolling interests that are classified as part of shareholders' equity into a noncontrolling interests account within liabilities.

Balance Sheet (Insurers)

We reallocate noncontrolling interests that are classified as part of shareholders' equity into the noncontrolling interests account within the mezzanine section of the balance sheet, which is a component of capital[10] in our insurer metrics.

[10] "Capital", as defined in our insurer metrics, includes shareholder's equity, mezzanine capital (including NCI after this adjustment), and financial debt. Please see our sector methodologies on insurers and banks for more details on definitions of capital and equity used in financial metrics.

Leases

The Reporting Problem

We have divided the lease adjustment into two parts, and we determine which to use for a given issuer based on that issuer's accounting for leases.[11]

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.

The Reporting Problem – Part 1

This section addresses our approach for issuers that have adopted accounting rules requiring operating leases to be recorded on the balance sheet.[12] The economic distinction between capital/finance leases[13] 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, companies record a liability and a leased asset, often classified in property, plant and equipment, and the total lease obligations are discounted by a company-determined rate implicit in each lease. The balance sheet treatment under both US GAAP and IFRS generally aligns with our analytical view,[14] but the cash flow statement does not reflect a capital expenditure.

Under IFRS and for US GAAP finance leases, over the life of an 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 adjustment is necessary to obtain consistency between accounting standards and to reflect our view that leases are similar to an asset purchase.

Our Analytical Response – Part 1

On the balance sheet our approach involves reclassifying lease liabilities to debt in US GAAP. No adjustments are made in IFRS.

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

[11] We adjust the financial statements of insurers, securities firms and finance companies for leases because it affects debt/EBITDA and similar metrics that we use in analyzing such entities. We do not adjust the financial statements of banks because the adjustment would not affect banks' key credit metrics.

[12] Both the IASB and FASB issued accounting standards which require all companies with operating leases to record an obligation that was previously off balance sheet. The IASB issued International Financial Reporting Standard 16 Leases (IFRS 16) in January 2016. For companies reporting under US GAAP, FASB issued ASU 16-02 Leases, to be included in Topic 842 in February 2016.

[13] 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 proposed standards.

[14] 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.

(from operating activities) and lease principal repayments (from financing activities) to capital expenditures (as an investing activity).

How We Adjust the Financial Statements – Part 1

The exhibits below describe Moody's Part 1 adjustment for leases.

Standard Adjustments for Leases Reported under IFRS 16	
Balance Sheet	No adjustments made.
Income Statement	No adjustments made.
Cash Flow Statement[15]	We reclassify lease principal payments from financing cash flow to capital expenditures.

Standard Adjustments for Leases Reported under US GAAP (ASU 16-02)	
Balance Sheet	We reclassify lease liabilities to debt.
Income Statement	We reclassify rent expense to interest and depreciation expense using the following calculation: » 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[16]	We reclassify lease depreciation expense from operating cash flow to capital expenditures. We also reclassify lease principal payments from financing cash flow to capital expenditures.

The Reporting Problem – Part 2

This section addresses our approach for issuers that do not record operating leases on the balance sheet.[17] Accounting standards for companies for which we apply this adjustment typically distinguish between finance and operating leases, and the accounting for the two is very different. The accounting standards view finance leases as the acquisition of a long-term 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, 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, these accounting standards distinguish between finance and operating leases using arbitrary bright line tests. As a result, companies 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.

[15] We adjust the cash flow statement of securities firms and finance companies because it affects the cash flow metrics that we use in analyzing such entities. We do not adjust the cash flow statement of insurers because the adjustment would not affect insurers' key credit metrics.

[16] We adjust the cash flow statement of securities firms and finance companies because it affects the cash flow metrics that we use in analyzing such entities. We do not adjust the cash flow statement of insurers because the adjustment would not affect insurers' key credit metrics.

[17] More specifically, this treatment is used for issuers that have not adopted IFRS 16 (for IFRS reporters), ASU 16-02 Leases (for US GAAP reporters), or any similar local country accounting principles .

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.

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 to enhance comparability due to the imprecision of our PV calculation. 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

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 among issuers in the same region. However, these 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, accounting standards do 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 and Annual Rent Expense

Sector multiples are set to levels that approximate the sector's median-implied PV multiple (calculated by dividing the present value of minimum lease commitments by annual rent expense for each issuer). Sector multiples used are as follows:

Sector	Multiple
Finance Companies	3
Insurers	4
Securities Firms	5

When annual rent expense is not disclosed, we use the minimum lease commitment for the next year (as disclosed in the financial statement footnotes).

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.

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 calculation: » 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[18]	We reclassify lease depreciation expense from operating cash flow to capital expenditures.

Standard Adjustments That Apply Only to Banks

Fair Value of Own Debt Affected by a Change in a Bank's Creditworthiness

The Reporting Problem

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. Changes in fair value each period are recognized as gains or losses in other comprehensive income (OCI).[19]

[18] We adjust the cash flow statement of securities firms and finance companies because it affects the cash flow metrics that we use in analyzing such entities. We do not adjust the cash flow statement of insurers because the adjustment would not affect insurers' key credit metrics.

[19] USGAAP nonpublic companies are allowed to continue reporting these changes in net income until fiscal year 2019 financial statements. For these entities we reverse any impact of changes in the market's view on a bank's creditworthiness related to the fair value of its own debt recognized in current period net income. We adjust income tax expense to appropriately tax-effect our adjustment. This income statement adjustment only applies to banks that recognize such changes in fair value in net income and not to those banks that recognize such changes in fair value in OCI.

Companies that measure their own debt at fair value must consider the market's view on their own creditworthiness in the calculation. A company that has experienced a significant deterioration in its creditworthiness would likely have a decline in the fair value of its debt due to the widening of its credit spread.

A decrease in the market's view on a bank's creditworthiness increases tangible common equity (TCE). The opposite is also the case: an increase in the market's view on a bank's creditworthiness reduces as-reported TCE. This accounting result is counterintuitive and not reflective of our view of a bank's creditworthiness.

Our Analytical Response

Increased (reduced) TCE as a result of a deterioration (improvement) in the market's view on a bank's creditworthiness result in misleading reported financial metrics. We make an adjustment to reverse the impact of these distortions.

How We Adjust the Financial Statements

The following describes our adjustments related to banks' own debt measured at fair value.

Balance Sheet

We reverse the cumulative impact of changes in the bank's creditworthiness on the fair value of its own debt.

We do not seek to adjust for the impact of other factors on fair value besides a change in the bank's creditworthiness. US GAAP and IFRS require specific disclosures in the financial statements in this respect. If a bank's disclosures do not specifically disaggregate the own credit-related impact from other impacts on fair value, we default to adjusting for the entire change in fair value if such a change in fair value has the effect of increasing reported equity.

Balance Sheet Netting Of Derivative Assets and Liabilities

The Reporting Problem

Disparate accounting rules to determine when derivative assets and liabilities with the same counterparty may be offset, with the net amount reported on the balance sheet, give rise to one of the most significant presentation differences between US GAAP and IFRS. Banks reporting under US GAAP often make an accounting election that is not available under IFRS, which allows them to present such positions that are covered by a legally enforceable master netting agreement on a net basis to a much greater degree than banks reporting under IFRS.

The different rules can give rise to very large differences in the reported amounts of total assets and total liabilities, especially for those entities with significant capital markets activities. This affects the comparability of leverage ratios.

Our Analytical Response

We believe the US GAAP approach provides a more relevant presentation of how banks manage the risks related to these positions in practice, since typically each day positions under a given master netting agreement (regardless of maturity) are marked-to-market and variation collateral is called for.

How We Adjust the Financial Statements

We net derivative asset and liability amounts, together with related collateral, that are eligible for offset under enforceable master netting agreements but are presented on a gross basis on the balance sheet. (The

magnitude of our adjustment is generally higher for IFRS reporters than for US GAAP reporters; however, we adjust both to arrive at a more comparable presentation.)

Reclassification of Certain Deferred Tax Assets[20]

The Reporting Problem

Deferred tax assets (DTAs) and liabilities are reported on the balance sheet when temporary differences arise between the carrying amount of an asset or liability for financial reporting purposes versus for tax reporting purposes. For example, when a bank records an allowance for loan losses, the carrying amount of its net loans will normally be higher under tax reporting than on its balance sheet because such losses typically are deducted for tax reporting purposes only when the loans are charged-off, which happens later. In this case, the bank would report a DTA in its financial statements representing the tax savings that it may realize in a future period when its taxable income is reduced as a result of charging off the loans for which it previously created an allowance.

DTAs also arise when a bank reports a loss in its tax return. Such losses can typically be carried forward and used to offset future taxable income. The estimated value of these tax savings is recognized as a deferred tax asset on the bank's balance sheet. Similarly, unused tax credits can also be carried forward as DTAs.

Our measure of TCE is a key input in our assessment of banks' capital adequacy. DTAs on a bank's balance sheet reduce a bank's reported after-tax net loss (or increase after-tax net income), and consequently, DTAs increase retained earnings, making them a component of TCE. Although DTAs are valuable to banks because they can serve to reduce future payments to taxing authorities, we consider the reported value of DTAs to be a relatively low-quality form of asset, not unlike intangibles, and thus a low-quality component of capital when compared to most other components of our measure of TCE, especially in times of stress.

Specifically, we have the following concerns with the quality of DTAs:

» Their realization often depends on future events, transactions and profitability levels that are uncertain and could take many years to achieve or may not occur.

» The recognition of DTAs is subject to recoverability analysis that is based on highly subjective assumptions. The creation and subsequent reversal of DTA valuation allowances can result in sudden, significant swings in reported shareholders' equity and regulatory capital measures, and can give rise to a swift erosion of confidence in the bank.

» Their reported value is not discounted to reflect the significant period of time (upwards of 10-15 years in some cases) it can take for them to be fully used.

» Banks may have to commit to various tax planning measures to realize the full value of their DTAs, for example by selling profitable business units or investments.

Capital regulation for banks under the Basel III regulatory framework limits the amount of DTAs included in the Common Equity Tier 1 (CET1) capital ratio, an indicator of a bank's core capital strength. DTAs that rely on future profitability must be wholly excluded from CET1 capital and remaining DTAs are restricted to 10% of CET1 capital. Also, market participants often discount the value of DTAs in their own assessment of a bank's capital adequacy, which could exacerbate external pressure on banks whose DTAs represent a significant percentage of their capital base.

[20] This standard adjustment applies only to banks and not to securities firms and finance companies because the treatment of DTAs in the calculation of our TCE / Risk Weighted Assets metric is specific to our banks rating methodology. See our methodology for rating banks for further discussion of the consideration of DTAs in our calculation of TCE. A link to this and other sector and cross-sector credit rating methodologies can be found in the Related Publications section of this report.

Our Analytical Response

We believe that DTAs are a lower-quality asset and doubt that they will have significant value during a bank resolution. As such, our banks rating methodology limits the amount of DTAs included in our calculation of a bank's TCE to a maximum of 10% of total TCE (the "TCE cap").

Certain national governments have permitted banks to convert certain types of DTAs into "government claims" enabling direct reimbursement from the government when a bank reports a loss or enters liquidation. Such legislation enables banks in those countries to include certain DTAs fully as a component of CET1 capital under the Basel III regulatory framework. Absent their convertibility into government claims, their inclusion in CET1 is severely restricted under Basel III.

We believe that conversion of DTAs into government claims enhances their value in a loss-making or liquidation scenario, since banks will have more regulatory headroom in their capital metrics and would be able to use the value of those DTAs when the bank may not have been able to in a timely manner otherwise. As such, we do not fully subject to the TCE cap the amount of DTAs that are eligible to be converted into government claims based on the legislation for each country.

We believe only DTAs that meet all of the following criteria should be considered eligible for partial or full exclusion from the TCE cap (Moody's eligible DTAs):

- They can be converted into a direct claim from the government in the form of a cash refund or the receipt of marketable government securities.
- Convertibility into a government claim does not depend upon the future profitability of the bank, or the bank entering bankruptcy or liquidation.
- The legal framework of the government claim is clearly established.
- The amount of the government claim DTAs is clearly disclosed in the financial statements or public regulatory filings.
- Our local currency senior unsecured rating for the country is above B2.

How We Adjust the Financial Statements

The following describes how we adjust the balance sheet to exclude from the TCE cap the amount of Moody's eligible DTAs that we believe are reasonably likely to convert into government claims and be realized in the form of a cash refund or the receipt of marketable government securities.

Step 1: We obtain the amount of DTAs eligible for conversion into government claims based on disclosure in a bank's financial statements or public regulatory filings, and the legislation in a particular country. We then determine whether the amount of eligible DTAs meets the criteria we set forth above.

Step 2: We calculate the portion of the Moody's eligible DTAs that we believe is reasonably likely to be converted into a government claim and realized in the form of a cash refund or the receipt of marketable government securities.

In countries where the conversion and realization of Moody's eligible DTAs is limited based on a ratio described in the legislation for the country or where the conversion and realization could take longer than five years,[21] we apply the following formula, which increasingly limits the amount of Moody's eligible DTAs

[21] In some jurisdictions, the realization of eligible DTAs in the form of a cash refund or the receipt of marketable government securities depends on a formula, such as the ratio of the bank's reported loss to its shareholders' equity, and can occur over an extended period.

exempt from the TCE cap the closer a bank's CET1 capital ratio[22] is to the point of non-viability for banks (5.125%).[23]

(1 – (5.125%/Reported CET1 capital ratio)) x Amount of Moody's eligible DTAs as determined in Step 1)

In countries where the conversion and realization of Moody's eligible DTAs occurs in a period of five years or less and the amount is not limited based on a ratio under the legislation for the country, we exempt from the TCE cap the full amount of Moody's eligible DTAs determined in Step 1.

Step 3: We reclassify the amount of Moody's eligible DTAs exempt from the TCE cap determined in Step 2 from the DTA account on the balance sheet to a separate "other assets" account on the balance sheet. The amount of DTAs remaining in the DTA account is subject to the TCE cap in our calculation of TCE under the banks rating methodology.

Deferred Tax Liabilities Associated With Tax-Deductible Goodwill and Other Intangible Assets

The Reporting Problem

Income tax savings generated from deductions related to goodwill that amortize for tax reporting purposes but not for book reporting purposes are not recognized in the income statement under US GAAP or IFRS. The accounting rules require an amount to be accumulated on the balance sheet as a deferred tax liability that offsets the tax savings realized each period, when the goodwill amortization deduction is taken for tax reporting purposes.

Such income tax savings arise when business combinations are structured to be taxable transactions. In these cases, the goodwill is generally tax-deductible. In the United States, for example, tax-deductible goodwill is amortized over a period of 15 years for tax reporting purposes. This generates an economic benefit for each of these years, because the amortization results in the calculation of a lower amount of cash taxes to be paid; however, that benefit does not get reflected in the bank's equity because of the build-up of the deferred tax liability.

Our Analytical Response

From a financial reporting perspective, the cash tax savings generated from the tax-deductibility of goodwill are offset by an equivalent deferred tax liability. This liability increases each year in tandem with the tax amortization and is unlikely to ever reverse. Accordingly, the financial reporting essentially ignores the economic benefits attributed to lower cash taxes that will be paid.

Deferred tax liabilities can also arise from other indefinite-lived intangible assets acquired in a business combination. Because we exclude goodwill and other intangible assets when we calculate TCE (because their valuations can be volatile and they are often worthless in liquidation), we also exclude the related deferred tax liabilities associated with these.

[22] When a bank does not report a CET1 capital ratio, the capital ratio used is (TCE prior to the TCE cap, minus the amount of Moody's eligible DTAs) / Risk-Weighted Assets.

[23] We use 5.125% as a proxy for the capital level at the point of failure for a bank. This level is consistent with the CET 1 capital level considered to be the point of non-viability for a bank under the Basel III regulatory framework and the capital level used as a proxy for the point of non-viability in our rating of contingent capital instruments in our banks methodology. A link to this and other sector and cross-sector credit rating methodologies can be found in the Related Publications section of this report.

Our adjustment nets the deferred tax liabilities associated with tax-deductible goodwill and other intangible assets against the respective intangible asset balances. Only the net amount of the intangibles, after deducting the associated deferred tax liabilities, is deducted from shareholders' equity when calculating TCE.

Since this adjustment is of benefit to banks, we make it only if the relevant deferred tax liabilities are explicitly disclosed in the financial statements.

How We Adjust the Financial Statements

We net the deferred tax liabilities associated with the tax-deductible goodwill and other intangible assets derived from business combinations against the carrying amounts of the assets on the balance sheet.

Goodwill and other Intangible Assets Attributed to Noncontrolling Interests of Minority Shareholders

The Reporting Problem

In a partial acquisition (i.e. acquisition of less than a 100% controlling interest in another entity), the noncontrolling interests' share is included in the value attributed to some or all[24] of the acquired intangible assets. Because we deduct intangible assets from common equity when we calculate TCE, and we also exclude noncontrolling interests from equity, we would effectively double-count the deduction of the noncontrolling interests' share of intangible assets, absent an adjustment to the reported amounts. Such double-counting, if not adjusted, would result in a lower than appropriate measurement of TCE.

Our Analytical Response

An adjustment to deduct the noncontrolling interests' share from the reported value of goodwill and other acquired intangible assets is needed to ensure that TCE is properly calculated.

How We Adjust the Financial Statements

When the amount of intangible assets attributable to noncontrolling interests is clearly disclosed or can be reasonably estimated from the financial statement footnotes, we make an adjustment to net this amount against the reported noncontrolling interests balance on the balance sheet. The adjusted balance sheet will reflect a reduction in both intangible assets and noncontrolling interests.

Risk Weightings of Sovereign Debt Securities[25]

The Reporting Problem

The standardized approach under the Basel II framework established a set of risk weights to be applied to banks' sovereign debt holdings depending on the sovereign's credit rating. However some national or regional regulators have permitted banks to apply lower risk weights for investments in their home country's sovereign debt securities (as permitted in the Basel II framework), and, in some cases, the sovereign debt securities issued by certain other countries. These practices impair the comparability of risk weighted assets (RWAs) among banks in different regulatory jurisdictions and understate the risks inherent in a bank's investment portfolio.

[24] Under US GAAP, the value assigned to all intangible assets, including goodwill, includes the noncontrolling interests' share. This treatment may also be applied under IFRS, although IFRS permits an alternative accounting treatment, in which the noncontrolling interests' share is applied to all intangible assets except for goodwill.

[25] This standard adjustment applies only to banks and not to securities firms and finance companies.

Our Analytical Response

We make an adjustment to increase reported RWAs for those banks whose investments in sovereign debt securities are risk-weighted lower than would be required under the Basel II standardized framework.

The application of regulatory discretion to the risk-weights applied to sovereign debt securities is one of the most significant issue pertaining to the consistency and comparability of RWAs globally. Numerous other diverse regulatory and bank-specific measurement practices exist to the detriment of comparability. Disclosure limitations and inherent complexities in the underlying calculations generally prohibit making standard adjustments in these other areas. Analyst-optional adjustments may be made in some of these cases, particularly where a local regulatory concession or a particular bank's practices result in a significant known difference in reported RWAs compared to peers globally.

How We Adjust the Financial Statements

We do not adjust the financial statements per se, but rather we adjust RWAs, which is an input for some of our key ratios. The adjustment reverses the bank-reported RWAs pertaining to such investments and replaces it with the RWAs calculated by applying the relevant Basel II risk-weight(s), as per the accompanying table.

Basel II Standardized Risk Weights – Sovereign Debt Holdings	
Aa and above	0%
A	20%
Baa	50%
Ba	100%
B	100%
Caa and below	150%
Unrated	100%

If banks use an appropriate internal ratings-based (IRB) model for risk-weighting sovereign exposure rather than the standardized approach (without a reduction due to a local regulatory discretion element), an adjustment is not necessary.

Standard Adjustments That Apply Only to Insurers

Operating Debt

The Reporting Problem

We consider operating debt to be significantly more leverageable than financial debt, and we distinguish between financial debt (included in the numerator of our financial leverage and total leverage metrics) and operating debt (included in the numerator of the total leverage metric). An example of operating debt is the issuance of debt that is used to fund investments that are closely matched as a spread management business, or to fund collateral to support redundant statutory reserves.

Operating debt is not considered part of a company's capital structure; operating debt is expected to be self-supporting (with its own dedicated assets) and self-liquidating (with assets and liabilities reasonably matched), and repayments should not depend on the enterprise's other resources. Accounting standards do not distinguish between financial or operating debt, and generally all debt is aggregated into one or two (long- and short-term debt) line items in reported financials.

Our Analytical Response

We believe that operating debt does not leverage an insurer's capital base and is self-supporting; we adjust financial statements to exclude operating debt from the numerator of our financial leverage metric. An adjustment will likewise exclude equity associated with supporting the operating debt from the denominator of the financial leverage ratio. The exclusion of operating debt from the ratio is capped at 10 percentage points of the total leverage ratio on an unadjusted basis – e.g., the company's financial leverage metric (which excludes operating debt and associated equity) cannot be greater than 10 percentage points lower than its total leverage metric (which includes operating debt and financial debt), exclusive of any other adjustments. In such cases, the operating debt adjustment is limited to the maximum amount that will not result in a breach of the cap.

How We Adjust the Financial Statements

Balance Sheet

Recourse Operating Debt: Our adjustment reclassifies those instruments we consider operating debt from financial debt (where it is generally included on an as-reported basis) to a distinct operating debt account that is not considered in financial leverage but is included in total leverage.

Further, for instances in which the analyst believes a portion of the issuer's equity specifically supports operating debt, the analyst will record an adjustment to reclassify such equity to a restricted equity account that is likewise not included in the denominator of financial leverage, but is included in total leverage.

Non-Recourse Operating Debt: We reclassify non-recourse debt to an account that is not included in either our financial leverage or total leverage metrics. In instances where we identify a portion of reported equity that specifically supports non-recourse debt, we reclassify that amount to a restricted equity account that is not included in the denominator of financial or total leverage.

Income Statement Adjustment

To the extent interest related to operating debt is identifiable, we reclassify such interest expense to a specific operating debt interest account that is excluded from our earnings and cash flow coverage metrics.

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 peers. 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 appropriate for credit analysis. We may also make non-standard adjustments where local GAAP or the interpretation of GAAP or IFRS for an issuer differs from the norm in an area that would affect our analysis.

We calculate our adjustments based on public or private information. We are limited to publishing only publically available information, although private information may be considered in our ratings.

The following are the examples of non-standard adjustments provided in this report:

» Unusual and non-recurring items (banks and insurers)

» Unrecognized dividend liabilities (banks)

» Banks with insurance activities (banks)

- Problem loans and the allowance for loan losses (banks)
- Off-balance sheet structures (banks)
- Risk Weighted Assets (RWAs) (banks)
- Fair value of liabilities other than debt (insurers)
- Accounting regime specific reserve adjustments (insurers)
- Statutory accounting adjustments (insurers)
- Reclassification adjustments (insurers)

Banks and Insurers: Unusual and Non-recurring Items

The effects of unusual or non-recurring items can foster misleading impressions about key trends in financial data. For example, an unusually large one-time transaction, if not considered separately, could create a misleading impression about a bank's trends in market share, net income and tangible common equity.

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. Our key financial ratios will generally exclude the effects of unusual and non-recurring transactions we identify.

We adjust the income statement to reclassify the effects of unusual and non-recurring income, expenses, gains or losses, net of the related tax effect where applicable, to a special income statement caption that is below net income. Our calculation of key ratios excludes amounts in the special income statement caption.

We adjust the balance sheet only when it would be material to our analysis and the impact of the unusual and non-recurring item on the balance sheet is temporary (for example to remove significant discontinued assets from total assets).

Banks: Unrecognized Dividend Liabilities

In certain jurisdictions, dividends to shareholders are recognized only when they are paid, rather than on the date the bank incurred an obligation to make payment. Such an obligation is generally incurred when the dividends have been declared or approved. In these circumstances, our adjustment recognizes dividends when the bank has incurred an obligation to make payment.

Banks: Banks with Insurance Activities

Banks with insurance activities report the results of these in one of two ways on their income statements. Some banks present gross insurance revenue under operating income and present the related insurance expense as a component of operating expenses. Other banks present the net of these two amounts in a single line item under operating income. These different presentation practices can result in significant differences in efficiency (i.e. cost/income) ratio inputs. When banks report significant insurance activities on the former "gross" basis, we adjust to net the insurance expense against the insurance revenue. This adjustment improves the comparability of efficiency ratios.

Banks: Problem Loans and the Allowance for Loan Losses

Problem loans is one of our key measures of a bank's asset quality.

The definition of problem loans presents a challenge because of inconsistent measurement and disclosure practices in financial statements and regulatory reports. We try to replicate the US measure of problem loans when sufficient information is available, because we believe it best informs our credit metrics. In the US, we measure problem loans as the sum of all of the following:

» Nonaccrual loans[26]

» Loans past due 90 days or more but still accruing interest

» Restructured loans and leases

Generally, for IFRS reporters, we consider "impaired loans" to be the best measure of problem loans. Per IFRS, a loan is deemed to be impaired if:

» there is objective evidence of impairment (i.e. a "loss event"), and

» that loss event (or events) has an impact on the estimated future cash flows from the loan

Loss events include the following:

» significant financial difficulty of the issuer or obligor

» a breach of contract, such as a default or delinquency in interest or principal payments

» the lender granting economic concession to a borrower with financial difficulties

» the growing likelihood that a borrower will enter bankruptcy or other financial reorganization

» observable data indicating a measurable decrease in the estimated future cash flows from the loan.

There are some comparability issues under IFRS reporting that are driven by diversity in the application of these IFRS principles, which are often based on assumptions that may not be fully disclosed. This matter can be compounded by differing regulatory requirements. In such cases, the regulatory disclosures may provide information that is more directly comparable to the US definition of problem loans than what is reported as "impaired loans" in the IFRS financial statements. If this is the case, we normally favor using these regulatory measures rather than the IFRS measurement.

Specific practices in certain countries also have to be considered. For example, banks in France and some other countries tend to retain loans on their books for an extended period, since if they were to be written-off, a bank would lose its legal claim to collect the debt. Banks operating outside the US and IFRS reporting environment add yet another layer of potential non-comparability to the reported amount of problems loans. We may consider adjusting the reported amount of problem loans for those banks that are not under the US regulatory definition or that are not applying the IFRS definition in a manner we believe is wholly consistent with the principle.

We may also make optional adjustments to the Allowance for Loan Losses that appears on banks' balance sheets, as well as the related Loan Loss Provision charge in the income statement. We may also reverse the recognition of interest received in cases where we view the underlying loans as being impaired; in these cases, the amounts received by the bank would be more appropriately regarded as a return of principal. For example, construction industry loans sometimes include a specific cash reserve for the builder, which can then be used as a last resort to "pay" the bank's interest if the builder is running out of funds. In such cases,

[26] Under US regulatory reporting guidelines, nonaccrual loans are defined as loans in which payment in full of principal or interest is not expected; income is recognized on a cash basis because of deterioration in the financial condition of the borrower; or principal or interest has been in default for a period of 90 days or more, unless the loan is both well-secured and is in the process of collection (in which case the loan would be classified as "past due 90 days or more but still accruing").

the loan is usually impaired and the bank may not ultimately receive a full return on the principal amount loaned, let alone any interest.

Banks: Off-Balance-Sheet Structures

There are inherent analytical complexities in assessing the potential consequences and significance of securitization vehicles and other off-balance sheet structures that have not been consolidated. This issue is compounded by the limitations of published financial reporting disclosures, which often have different levels of aggregation and analysis, and can be unclear and difficult to interpret.

We may choose to consolidate or partially consolidate off-balance-sheet activities if we consider it appropriate. This decision is based on the specific circumstances of each bank and involves a high degree of analytical judgment, and is therefore done on a case-by-case basis. Considerations in this analysis may include the nature of the bank's contractual relationships with the off-balance sheet vehicle, whether the vehicle finances core operations of the bank, the likelihood that the bank will support the vehicle, and the impact of a default by the vehicle on the bank's access to markets or its reputation.

There is often a high level of complexity and judgment involved in preparing accounting entries that would consolidate off-balance-sheet exposures..

Banks: Risk Weighted Assets (RWAs)[27]

As explained in the standard adjustment on Risk Weighting of Sovereign Debt Securities, diverse regulatory and bank-specific measurement practices for RWAs can reduce comparability among banks. Disclosure limitations and inherent complexities in the underlying calculations generally prohibit making standard adjustments, so we may make non-standard adjustments in some cases, particularly where a local regulatory concession or a particular bank's practices result in a significant known difference in reported RWAs compared to peers globally. For these issuers, we adjust RWAs by reversing the bank-reported RWAs and replacing it with RWAs calculated in accordance with practices used by global standards (e.g. the Basel regulatory framework).

Insurers: Fair Value of Liabilities Other than Debt

Certain insurance liabilities reported by insurers, including certain guarantees embedded in variable annuity contracts, are carried at fair value, with changes in fair value affecting net income. The effect of a deterioration in an insurer's own creditworthiness affects fair value but does not affect the contractual amount of its liabilities. Therefore, when sufficient information is disclosed, we adjust insurer financials to remove the impact of a change in an insurer's creditworthiness from the fair value of its liabilities, and to remove the impact of the change in an insurer's creditworthiness from its net income.

Insurers: Accounting Regime Specific Reserve Adjustments

The lack of a single comprehensive insurance accounting standard results in insurers determining reserves for insurance contracts under disparate rules in various jurisdictions. Disclosure is inadequate to fully adjust insurance contract liabilities to a uniform standard, although in many instances certain reserves or liabilities are explicitly disclosed on insurer balance sheets. If we believe these liabilities are non-economic, we will adjust to remove the effect of the liabilities from insurer financial statements, net of tax, as applicable.

[27] This adjustment applies only to banks and not to securities firms and finance companies.

Examples include the following:

Adjustment	Country/Region	Description
Unallocated Divisible Surplus (UDS)	United Kingdom	Liability reported by British life insurers (formerly referred to as the Fund for Future Appropriations. We consider a portion of this liability (UDS Realistic Surplus) to be equity-like, as the liability can absorb investment losses. We reclassify such amounts to equity.
Provision for Premium Refunds (RfB)	Germany	Similar to UDS above, we consider a portion of this liability as equity due to its ability to absorb investment volatility, and therefore reclassify it to equity.
Catastrophe, Equalization, Contingency, Safety Reserves, etc.	Japan, European Countries, Latin American Countries	Under certain accounting regimes, reserves are recorded as a buffer against future large-scale losses. In US GAAP and IFRS, reserves on short duration contracts for events that have not yet occurred are generally not permitted; as such, no reserve is held for losses that may result in the future (other than unearned premium reserve). We consider such buffer reserves a component of capital, and thus adjust financial statements to reduce reserves and increase equity.
Price Fluctuation Reserve/Market Value Adjustment Reserve	Japan, Norway	Under certain accounting regimes, insurers are permitted to record reserves against potential losses arising from investment portfolios. We consider such reserves a component of capital and adjust accordingly.
Shareholders Profit Margins	Australia	Australian life insurers are entitled to 20% of investment gains on policyholder funds for certain business. Under Australian IFRS, these gains are recorded as income over the life of the applicable policies, with the remainder being recorded as a liability. We consider this liability to be equity-like and adjust to reduce the liability, increasing equity.
Reserve Discount	Australia	Australian property and casualty insurers report insurance liabilities on a discounted basis. Under IFRS and US GAAP, as well as under other global reporting regimes, P&C reserves are generally reported on an undiscounted basis. As the total reserve discount is disclosed by Australian insurers, we record an adjustment to remove this discount to improve comparability with insurers in other jurisdictions.

Insurers: Statutory Accounting Adjustments

Many insurers in the United States that we rate do not prepare financial statements under US GAAP. In these instances, we use financials prepared under US SAP to conduct our analysis. SAP is more conservative in many respects than US GAAP. Although limited disclosure precludes our ability to fully adjust statutory data, we do make certain explicit adjustments when statutory reporting provides sufficient data.

We acknowledge that we are unable to fully adjust statutory financials to US GAAP, as there are material differences for which sufficient data is not available to calculate adjustments. Examples of differences for which we do not adjust include deferred acquisition costs, which are included as a US GAAP asset, but are not capitalized under statutory reporting, and SAP/US GAAP differences in reserving. Adjustments are performed for items disclosed in statutory financials, including the following:

Item	Description
Asset Valuation Reserve (AVR)	The AVR is a statutory liability recorded as a provision for future potential losses on invested assets that an insurer currently holds. We adjust to remove the effect of this liability from statutory financial statements.
Interest Maintenance Reserve (IMR)	The IMR is a deferred income account for interest-related gains or losses arising on the sale of fixed income assets before maturity. We adjust to remove the effect of IMR from statutory financial statements.

Insurers: Reclassification Adjustments

For insurers, we also make certain reclassification adjustments to address differences in presentation among global reporting regimes, including the following:

Adjustment	Country/Region	Description
Reinsurance Gross-Up	US SAP, Latin America	Under US GAAP and IFRS, insurance reserves are reported gross of reinsurance; e.g., gross liabilities to claimants or policyholders are reported as liabilities, with an asset recorded for reserves ceded to reinsurers. Under certain accounting regimes, reserves are reported on a net basis, with ceded reserves netted against gross reserves within the liability section of the balance sheet. We undo this netting, grossing up the balance sheet for ceded reserves.
Takaful Intercompany Elimination	Middle East	A key structural consideration for Takaful (Islamic compliant) insurers is the maintenance of separate funds for the policyholders and the shareholders, designed to ensure that the policyholders are within a mutual risk-sharing body. We consolidate the separate policyholder and shareholders balance sheets and income statements, and eliminate intercompany transactions.
Tax on Realized Gains	US SAP	Under US SAP reporting, realized gains on investments are reported net of applicable tax. Under US GAAP and IFRS reporting, realized gains are reported on a gross basis, with any applicable taxes being recorded within income tax expense. For US SAP filers, we adjust to reclassify capital gains taxes from realized gains to income tax expense.

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. An index 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.

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