

## The Basel III Leverage Ratio Is A Raw Measure, But Could Supplement Risk-Based Capital Metrics

**Primary Credit Analyst:**

Sylvie Dalmaz, Paris (33) 1-4420-6682; [sylvie\\_dalmaz@standardandpoors.com](mailto:sylvie_dalmaz@standardandpoors.com)

**Secondary Credit Analysts:**

Bernard de Longevialle, Paris (33) 1-4420-7334; [bernard\\_delongevialle@standardandpoors.com](mailto:bernard_delongevialle@standardandpoors.com)

Sue Harding, London (44) 20-7176-3734; [sue\\_harding@standardandpoors.com](mailto:sue_harding@standardandpoors.com)

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# The Basel III Leverage Ratio Is A Raw Measure, But Could Supplement Risk-Based Capital Metrics

*(Editor's Note: This article is part of a series of comments by Standard & Poor's Ratings Services in response to the Basel Committee on Banking Supervision's proposals on bank capital and liquidity released for comment in December 2009. This article supplements our views outlined originally in the report: "Basel 3 For Global Banks: Third Time's The Charm," published on March 4, 2010. The Basel Committee's comment period ends on April 16, and it is planning to issue final rules by the end of 2010 with implementation scheduled for 2012.)*

## OVERVIEW

One of the BCBS' proposals regarding capital calls for the establishment of a leverage ratio as a regulatory measure, defined as a capital measure compared to an exposure measure, also called an assets measure. Standard & Poor's views about the proposal include the following:

- We believe that the introduction of a consistently defined assets measure could render a wide number of asset-based financial ratios globally comparable and prove valuable to the marketplace.
- To be usefully interpreted, we believe that the assets measure for the leverage ratio should be wide but not excessively so.
- The leverage ratio could supplement risk-adjusted capital metrics. It could help identify outliers.
- The leverage ratio would nevertheless remain a raw measure for the purpose of our analysis.
- We believe that assigning too much importance to this measure could potentially create unintended consequences for banks.
- Transparency and disclosure will be critical to the usefulness of the leverage ratio.

## Key Aspects Of The BCBS Proposal

As a key part of its Dec. 17, 2009, proposal "Strengthening the resilience of the banking sector," the BCBS is proposing to introduce a leverage ratio as a regulatory ratio. We understand that at first this would serve as a supplementary ratio under Pillar 2 of the Basel II capital accord. Later, after review and calibration, we understand that the ratio would migrate to a Pillar 1 treatment. The BCBS doesn't suggest any specific target level for the ratio but proposes a number of options for defining its numerator and denominator--the capital measure on the one hand and the total exposure measure or the assets measure on the other. The BCBS proposes that the numerator comprise high-quality capital and that the denominator not only capture on-balance-sheet assets, but also appropriately integrate off-balance-sheet assets. To make it comparative across countries and their varying regulatory regimes, the BCBS proposes adjustments to the leverage ratio to harmonize it internationally.

## A Leverage Ratio Could Disseminate New Information

Used as a supplement to risk-adjusted capital measures, both at the industry and at the specific bank level, we believe the leverage ratio could be valuable. We are of the opinion that the leverage ratio could help identify banks

that are outliers compared with their peers.

We believe that if the ratio's assets measure is defined relatively broadly, it could render attempts to arbitrage the ratio more difficult. This has been relevant in the U.S. where some bank holding companies structured around the regulatory nonrisk asset-based ratio through the use of off-balance-sheet transactions.

The proposal sets out that the leverage ratio is intended to be a simple and nonrisk-based measure. As we understand it, the BCBS has designed it to be independent from most modern and highly engineered risk-sensitive capital measures, which may not capture certain risks and trends that can lead to excessive leverage. For example, some banks' sophisticated internal models-based trading activities, in particular, led to relatively high concentrations in counterparty risk that value-at-risk models did not capture. Growing off-balance-sheet commitments to banks' unconsolidated vehicles was, for example, another form of unreported leverage in years preceding the crisis. For some sponsoring banks, liquidity facilities granted to special investment vehicles (SIVs) were as large as their own balance sheet commitments, resulting in large leverage multiples when these liquidity commitments were drawn.

## Standard & Poor's Analysis Of Capitalization

In our own credit analysis, we assess a bank's capitalization primarily by examining the size and quality of capital backing specific categories of risk-adjusted assets. Our risk-adjusted capital ratio (RAC ratio) is the starting point of our capital adequacy analysis of financial institutions. We complement this analysis by looking at other ratios, such as Tier 1 ratios, our own ratio of adjusted total equity (ATE) to adjusted assets, and if reported, regulatory leverage ratios. Nevertheless, so far, differences in accounting regimes and disclosure standards to adjust for them have made it difficult to consistently compare assets measures and, consequently, leverage ratios across countries and individual banks. We have also found that regulatory leverage ratios can have limitations for the purpose of our analysis. For example, these ratios do not distinguish between a relatively high credit quality, short-term government loan from equity tranches of collateralized debt obligations.

## There Is A Risk Of Unintended Consequences

In our view, there is a risk that the effectiveness of the Basel III proposal could be jeopardized by the implementation of a leverage ratio that is poorly calibrated. If so, we believe that this ratio could weaken the value of enhanced Basel III risk-adjusted capital ratios. There may also be unintended consequences if banks manage down their low-risk low-yielding exposures to the economy and on the interbank market, to comply with any minimum leverage ratio. Such actions we believe could potentially be damaging in the current fragile economic environment, particularly in Europe where financial intermediation remains dominant. Moreover, we believe that assigning too much importance to this measure could potentially create unintended incentives for banks. They could, for example, be incentivized to move away from low-risk, low-yielding businesses to concentrate on higher-risk, higher-return assets.

## The Challenge Is To Find The Right Balance For The Definition Of The Denominator

BCBS' proposal for the definition of the denominator of the ratio has been the subject of more discussion by market participants than the numerator. The scope of the denominator or assets measure includes on- and off-balance-sheet items, even if the likelihood of risk is presumed to be low for some assets. It acknowledges that some adjustments

may be necessary to promote better comparability and accounting uniformity. (See appendix 2 for a summary of the proposed Basel III assets measure.)

The BCBS' baseline proposal to include in the denominator high-quality liquid assets and gross repurchase agreement and securities finance transactions--disallowing netting--we believe concurs with the ratio's aim of being a simple and consistently calculated measure. Securities lending transactions can be sources of significant increases in leverage in our view. Likewise, the nonrecognition of the potential credit risk mitigating effects of unfunded securitizations and collateral, we believe, would generally better reflect trends in absolute underlying leverage. Because collateral netting accounting rules vary across jurisdictions, this could also help enhance the international comparability of the measure.

There is a potential risk, in our opinion, that an excessively broad definition of the assets measure could defeat its purpose, result in undue overstatement of potential risks, discriminate weakly among banks, and render the identification of outliers more difficult.

For derivatives, because of the sizable amounts in play, we believe the approach that regulators decide to take to measure their exposures will be key to the value of the leverage ratio. We believe that the application of netting rules to derivatives under the Basel II framework could be a consistent way to promote comparability of the leverage ratio. It could also help reduce the risk that its meaning might be distorted by an overly wide measure for the denominator of the ratio. More particularly, if these netting rules were to be applied, we understand that the current exposure method to measure derivatives exposures would replace the accounting fair-value approach. We view that the former method, relying on a marking to market of the derivatives with standardized regulatory add-ons, could be a better indication of banks' potential counterparty risk and economic leverage than the accounting approach.

Given the financial crisis, Standard & Poor's believes that off-balance-sheet (OBS) commitments can be a source of high leverage. The BCBS proposes to include OBS items using a 100% credit conversion factor (CCF) but also to assess the impact of applying standardized Basel II CCFs. We are of the opinion that including OBS items at their gross value could have a sizable impact on some banks' measure of assets, possibly resulting in a substantial overstatement, consequently making the leverage ratio potentially less meaningful. The application of Basel II standardized CCFs to off-balance-sheet commitments could potentially be more relevant as long as the CCFs capture risks appropriately.

Finally, Standard & Poor's is of the view that new accounting guidance on securitizations effective January 2010 brings reporting under U.S. standards closer to International Financial Reporting Standards (IFRS). We see well-founded arguments that the denominator should include securitization exposures, relying on the accounting treatment. However, in our view this approach would not fully exclude the possibility of new forms of accounting arbitrage.

## **Consistency And Transparency Are Critical**

The implementation of a consistent leverage ratio across countries will require coordinated efforts from regulators globally. In OECD countries, regulators in three countries currently rely on the leverage ratio (U.S., Canada, and most recently Switzerland) and we note variations in the calculation of their leverage ratios. Any absence of uniform application of the leverage ratio in its final form we believe could diminish the value of the measure.

Transparency and disclosure around the leverage ratio will in our view be critical. Rigorous Pillar 3 disclosure, in particular the implementation of a specific template setting out the components required in the calculation of the leverage ratio, we believe would make the proposed measure more valuable. If banks were to disclose consistent assets measures, a wide number of asset-based ratios that not only focus on assessment of capital strength but also on profitability, asset quality, and liquidity, would likely become more comparable across regions. This new Basel III assets measure could be used instead of the total assets that banks report on their balance sheets when computing financial ratios. Such a measure may provide additional value to market participants and commentators on credit risk, including Standard & Poor's.

Standard & Poor's believes that improved disclosure by all banks could provide the market with more accurate information about counterparty risk.

## Appendix 1: Differences In Accounting Regimes Can Cause Large Discrepancies

One of the main challenges for the BCBS that we see is to introduce a leverage ratio that promotes comparability across banks where the accounting treatment of their assets varies. In our opinion, in some cases, adjustments to the accounting measure of assets will likely be desirable for the purposes of calculating the leverage ratio to support better consistency and comparability (see table 1 for examples for different accounting measures of assets).

**Table 1**

Examples Of Differences In The Accounting Treatment Of Assets		
	International Financial Reporting Standards	U.S. generally accepted accounting principles
On- or off-balance-sheet securitizations	Generally special-purpose vehicles (SPVs) are consolidated and securitized assets and associated funding are shown as assets and liabilities, respectively. The requirements call for consolidation when an SPV is, in substance, controlled by the reporting entity. Additionally, the threshold for derecognition of financial assets looks to whether the risks and rewards of ownership are retained or transferred.	New accounting guidance effective January 2010 brings the reporting under U.S. standards closer to IFRS. The previous automatic exemption from consolidation for entities designated as qualified special purpose entities (QSPEs), based on bankruptcy remoteness and strictly limited activity, has been removed. Consolidation is primarily based on a qualitative assessment of control. As a result, activities such as credit card securitizations, asset-backed commercial paper programs, and private label mortgage securitizations now will generally be reported on balance sheet, while government guaranteed mortgage securitizations generally continue to remain off balance sheet.
	Offsetting of any financial asset and financial liability requires there to be a legally enforceable right to set off the amounts, and that the entity intends either to settle on a net basis, or to realize the asset and settle the liability simultaneously. This generally results in relatively little netting of derivatives. However, cash collateral is typically effectively netted as it results in derecognition of the related asset.	Similar to IFRS, netting of derivative positions requires a legally enforceable right of setoff by contract or otherwise, to discharge all or a portion of the debt owed to another party by applying against it an amount that the other party owes to the debtor. However, there is no requirement with respect to intentions to settle net because FASB believes the net presentation reflects the amount of credit risk exposure under a master netting arrangement. As a result, it is common practice to net positions, including cash collateral positions, which are subject to enforceable master netting arrangements.
Repurchase agreements and securities finance	Generally, assets subject to repo and securities finance transactions remain on balance sheet. They do not typically qualify for derecognition as the risks and rewards of ownership are considered to be retained. Amounts are not typically netted, under the same netting requirements that apply to derivatives.	Generally, resale and repurchase agreements are treated as collateralized financing transactions on balance sheet. Netting is typically permissible based on the "right of setoff" requirement applicable to netting of derivatives. However, further requirements apply, for example requirements to have the same settlement dates and use the same account for cash inflows and outflows at the clearing institution. The significance of netting is not transparent, as disclosure is generally not required. However, repurchase agreements and securities lending transactions may qualify for sales accounting treatment and accounted for as off-balance sheet transactions.

Source: Standard & Poor's.

Generally speaking, we are of the view that reporting under IFRS results in significantly higher total balance sheet

exposures and therefore a lower apparent leverage ratio for similar types of exposures than U.S. generally accepted accounting principles (GAAP) (see section below). One of the main reasons for our view are accounting rules related to netting, which we understand are generally less demanding under U.S. GAAP than IFRS. We understand that netting is recognized under very demanding rules under IFRS and only if an institution has the right and intent to settle on a net basis. Under U.S. GAAP, we understand that netting of derivatives and repurchase transactions are possible when they are subject to enforceable master netting agreements.

### **Examples of how accounting inconsistencies can cause large discrepancies**

The following are examples that in our view illustrate the effect of certain differences in accounting treatments.

Deutsche Bank's total assets under U.S. GAAP stood at €891 billion as of year-end 2009, compared with €1,501 billion under IFRS. The main reason for this significant difference was in our view a disparity in accounting standards for the netting of derivatives.

Likewise, UBS' positive derivative replacement values at year-end 2009 were Swiss franc (CHF) 313 billion less under Swiss GAAP than under IFRS. Swiss GAAP is similar to U.S. GAAP in its treatment of counterparty netting. Recognition of cash collateral netting would we understand have resulted in a further CHF37 billion reduction. We have observed that netting by counterparty can reduce the size of derivatives exposures by large multiples while collateral netting can reduce them by less sizable amounts.

## **Appendix 2: A Summary Of The Proposed Basel III Assets Measure**

Standard & Poor's has prepared this summary of some elements of the proposed Basel III assets measure as we understand them. Please refer to the full text of the proposal for further details.

### **Netting**

The netting of financial or physical collateral is not allowed to reduce exposures. Netting of exposures between counterparties (including derivatives, repurchase agreements (repos), and loans against deposits) follows two potential approaches: The first approach is to disallow both accounting and regulatory netting. The second approach is to apply a common set of regulatory netting rules as set out in the Basel II framework. The committee will collect data applying the regulatory netting approach as part of its impact assessment.

### **On-balance-sheet items**

The general approach is to include items using the accounting balance sheet.

**High-quality liquid assets.** The proposal is to include all assets, including high-quality assets, in the assets measure. However, BCBS will assess the impact of excluding certain high-quality assets, based on the liquidity framework definition.

**Repurchase agreements and securities financing transactions.** The committee proposes to include repurchase agreements (repos) and repo-style transactions following the accounting rule, but disallowing netting. However, the committee will assess the impact of regulatory netting rules as an alternative to the non-netting approach.

**Securitizations.** The proposal is to follow the accounting treatment. The committee will collect data to assess the impact of expected accounting changes in Financial Accounting Standard 140. If accounting allows derecognition of securitized assets, the retained positions and liquidity facilities provided by the originator to the special-purpose vehicle (SPV) are included in the assets measure. If regulatory treatments result in a deduction from regulatory

capital, then the amount might be added back for the purpose of the leverage ratio calculation. If accounting does not allow derecognition of assets, the underlying securitized assets are included in the calculation of leverage. Synthetic deals do not reduce the amount of the exposures of the underlying portfolios. The BCBS notes that derecognition rules vary across jurisdictions and therefore could consider, as an alternative approach, including the total of all underlying securitized portfolios in its assets measure.

### **Derivatives**

The BCBS proposes two options: 1. Follow the accounting balance sheet fair-value approach of derivative contracts with no netting. 2. Use the current exposure method to measure potential exposures, without netting. Both options will be assessed by the committee using regulatory netting rules.

**Credit derivatives.** The sale of credit protection is regarded as providing a guarantee. Therefore, the notional value of the credit protection sold (written credit derivative) is to be included in the assets measure. Netting off of protection bought against protection sold is not allowed.

### **Off-balance-sheet items (excluding derivatives)**

The BCBS proposes to include off-balance-sheet commitments (liquidity facilities and unconditionally cancellable commitments) at their notional amounts in the measure. However, it proposes to assess the impact of applying standardized Basel II credit conversion factors. It considers the internal models approach as inappropriate. It will also assess separately the treatment of unconditionally cancellable commitments.

Source: Basel Committee on Banking Supervision, Consultative Document "Strengthening the resilience on the banking sector," December 2009.

## **Related Research**

Standard & Poor's Response To The Basel Committee's Proposals On Bank Capital And Liquidity, April 15, 2010

Basel III Proposal To Increase Capital Requirements For Counterparty Credit Risk May Significantly Affect Derivatives Trading, April 15, 2010

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FI Criteria: Bank Rating Analysis Methodology Profile, March 18, 2004

### **Additional Contact:**

Financial Institutions Ratings Europe; FIG\_Europe@standardandpoors.com



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