Hybrid Securities Analysis

New Criteria for Adjustment of Financial Ratios to Reflect the Issuance of Hybrid Securities

Product of the New Instruments Committee

Summary Opinion

Moody’s published its Tool Kit for Assessing Hybrid Securities in December 1999, at which time a comparative framework using different baskets on the debt-equity continuum was introduced. Subsequently, the demand and usage of hybrids has multiplied, with a barrage of new products introduced to meet the evolving needs of issuers and investors. Markets outside of the US, primarily Europe and Asia-Pacific, have developed such that participants are now well versed in hybrids.

Moody’s exposure to, and experience with, the increased universe of products continues to develop, resulting in a high degree of consistency in hybrid assessment. At the same time, market participants continue to seek guidance on the interpretation of Moody’s baskets, the degree of equity benefit that may be attributed to any particular hybrid, and, ultimately, whether these products may have any positive effect on credit quality when substituted for more traditional long-term debt.

Against this backdrop, Moody’s is introducing specific criteria for the adjustment of financial ratios to reflect the growing presence of hybrid securities in the capital structure. Each basket on the debt-equity continuum will translate into the following percentages of equity and debt for the purpose of financial ratio calculations:

<table>
<thead>
<tr>
<th>Basket A</th>
<th>Basket B</th>
<th>Basket C</th>
<th>Basket D</th>
<th>Basket E</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% debt</td>
<td>75% debt, 25% equity</td>
<td>50% debt, 50% equity</td>
<td>25% debt, 75% equity</td>
<td>100% equity</td>
</tr>
</tbody>
</table>

To illustrate, a $100 million hybrid placed in Basket D will result in a $75 million increase in equity and a $25 million increase in debt. All relevant ratios, which include either debt or equity, will be adjusted accordingly (examples of ratios to be adjusted can be found in the attached appendix).

Fixed charge coverage ratios will generally not be adjusted for high-grade issuers. Rather, the full amount of the hybrid coupon or dividend will be treated as a fixed charge similar to interest on debt. For lower-rated issuers, coverage ratios will be calculated both with and without hybrid coupons and dividends that are deferrable, payable-in-kind, or payable in common stock.
The new criteria apply to the ratio analysis of both corporate issuers and financial institutions. Consistent with past practices, the traditional NIC distinction between high-grade and lower-rated issuers will continue. As a result, there may be some differentiation in the application of the criteria since many products inherently benefit lower-rated issuers more than high-grade issuers. The new criteria do not apply to deeply speculative issuers or to those for which consideration of recovery is a significant rating factor. For these types of issuers, the analytical focus is more heavily oriented to treatment or claim of a hybrid in bankruptcy proceedings or in insolvency rather than on the basket applicable to hybrids issued by higher-rated issuers.

The intent of the criteria is to better respond to the increasing prevalence and interest in hybrids by improving consistency in the interpretation of the baskets and streamlining the process of ratio calculation. Notwithstanding this move towards greater consistency in ratio calculations, individual rating committees will continue to determine the relative importance of financial ratios in the overall credit analysis of an issuer and how they are applied in determining a specific rating.

In addition, a hybrid that is considered debt for ratio purposes may still be viewed as providing qualitative benefit in terms of the financial flexibility that certain features offer. For example, trust preferreds issued by highly rated companies are placed in Basket A and included as 100% debt for ratio calculation purposes. Nonetheless, trust preferreds provide financial flexibility relative to straight debt with their deep subordination and ability to defer dividends. These are minor considerations for highly rated issuers, but are given more weight for lower-rated issuers.

It is also important to keep in mind that rating committees may not be indifferent to extensive use of hybrids in the capital structure, even if they are included in more equity-like baskets. Consideration is given to the degree of reliance on financial engineering as well as the potential market impact of certain hybrids that behave differently than anticipated in a stress scenario.

### Background on Moody’s Approach to Hybrids

The application of Moody’s Tool Kit provides a benchmark for assessing new hybrid securities, given that they are generally neither pure debt nor pure equity. The original thinking behind the baskets was to provide a rough relative ranking of hybrids, utilizing an A to E scale. The baskets have helped stimulate dialog with intermediaries and facilitated a more efficient feedback process during the development phase of a product. In addition, the baskets have saved time for issuers and analysts, bringing some order to the analysis of competing products.

The introduction of the baskets may have suggested that Moody’s was increasing its focus on capital ratios, which was not the intended consequence. Rather, we have tried to respond to market demand for a comparative framework to assess new hybrid instruments.

Moody’s uses the Tool Kit to place instruments on its debt-equity continuum, ranging from basket A (more debt-like) to basket E (more equity-like). This entails an instrument being broken down into its basic features including maturity, call options, conversion features, deferral features, and priority of claim in liquidation. These basic attributes are then compared to the characteristics of pure equity to see how closely equity is replicated. The features of equity are:

- No maturity.
- No ongoing payments that could trigger a default if unpaid.
- Loss absorption for all creditors.

Once the characteristics of the hybrid are assessed and it is placed in a basket on the debt-equity continuum, the instrument is viewed and monitored within the context of each issuer’s overall credit fundamentals. Moody’s always considers a company’s capital structure in assessing its credit fundamentals, although it may not be the most important factor. However, in cases where it is acknowledged that the addition of common equity would be beneficial to an issuer’s credit profile, Moody’s will generally treat a similar amount of hybrid equity (based on the basket assigned) as having a similar benefit for the issuer. This is from the perspective of the balance sheet only; hybrids tend to be treated less favorably than common equity when it comes to fixed charges.

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1. For the implications of hybrids issued by banks, see "Rating and Analysing European Banks’ Hybrid Capital Securities — Rating Methodology" written by Samuel S. Theodore in December 2000. Note that Moody’s does not automatically view hybrids included in Tier 1 bank regulatory capital as a true source of economic capital, but assesses them in terms of their relative debt and equity characteristics within the context of Moody’s debt-equity continuum.

2. For the purpose of this rating methodology, lower-rated issuers are defined as issuers with a senior unsecured rating of Baa3 or below. Issuers rated Baa2 with a negative outlook may also be included due to the inherent transition risk observed at these rating levels.

3. Deeply speculative issuers are those with a senior implied rating of B3 or below.

4. For lower-rated issuers, trust preferreds are placed in Basket B.
Evolution of the New Criteria

Until now, Moody’s analysts have been required to respect the relative basket rankings of a hybrid as determined by the New Instruments Committee (NIC), but have had flexibility in interpreting the baskets for purposes of issuer analysis. For example, there has been no specific guidance on how to adjust ratios. There has also been no specific policy on the level of equity benefit associated with each basket, although Moody’s recognizes that many market participants assign numeric benefits and some Moody’s analysts also use equity percentages. It has become apparent that the market demands better guidance due to a perceived lack of consistency among Moody’s analysts and a desire for greater specificity.

In response to these findings, Moody’s formed an internal group of corporate and financial institution analysts, drawn from different countries, that worked with the NIC to research the issue and provide recommendations for ratio adjustments. Their recommendations form the core of the new criteria, which is designed to improve consistency in the interpretation of the baskets. Moody’s is introducing the application of fixed percentages so that less time is spent debating the “mechanics” of ratio calculations, both internally and externally. In addition, intermediaries and issuers will be able to more easily digest the equity benefit component of each product.

However, it is important to stress that these changes do not detract from the important role that individual rating committees play in determining credit rating outcomes. The rating committee continues to be the sole arbiter of assessing credit and assigning ratings to any issuer. Consequently, the rating committee determines the relative importance of ratios as prescribed in this rating methodology and will not be locked into any particular rating outcome.

Rating Considerations: Complexity and Materiality

Each basket on the continuum captures, in a relatively simple manner, the most likely way that a hybrid will behave over its life. However, the reality is that the majority of hybrids are complex instruments. There could also be a number of possible outcomes driven by the credit quality of the issuer and the evolution of the hybrid over time, which leads to uncertainty. As a result, it is important to monitor the evolution of hybrids in an issuer’s capital structure over time and adjust the basket, if appropriate.

Moody’s analysts and rating committees increasingly need to make careful qualitative judgements as to the relative importance of financial ratios and capital structure in the ratings analysis. Fixed percentages of debt and equity potentially suggest an “indifference point” between hybrid equity and traditional common equity that may not always be appropriate. Although ratios will now be adjusted on this basis, it is important to consider the narrow role that such ratios may play in the assessment of credit risk.

The materiality of hybrids in an issuer’s capital structure is another consideration in the assessment of credit risk. From a qualitative perspective, there could be “diminishing returns” with the extensive use of hybrids. Rating committees may also not be indifferent to the level of hybrids in an issuer’s capital structure. For issuers that use a disproportionate amount of hybrids, the rating implications, if any, will be reviewed on a case-by-case basis. Overall, Moody’s remains cautious about capital structures that appear to be overly “engineered” because financial engineering may be a way to obscure the economic reality of the company. In addition, a company with a heavy concentration of hybrids could potentially face unexpected market pressure if the hybrid fails to behave as initially anticipated.

Accounting Treatment Continues to Develop

Both the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) continue to refine the recommended treatment of various financial instruments, including those with both debt and equity characteristics. For example, IASB standards now provide for the bifurcation of convertible bonds into separate debt and equity components on an issuer’s balance sheet, with the equity component representing the percentage of issue proceeds that is ascribed to the value of the investor’s conversion option.

In the near term, the FASB is expected to address the accounting for compound financial instruments, which may result in the separation of those instruments into liability and equity classifications, possibly as early as 2004. The intention of both boards is to better match accounting treatment with economic reality, which is a positive trend. However, Moody’s may take different views than the accountants on certain hybrids, particularly since the range of outcomes and risks that need to be considered may not be easily captured by the accounting classifications.
Conclusion

With the proliferation of hybrids, market participants continue to seek guidance on the interpretation of Moody’s baskets and the degree of equity credit implicit in any particular product. In response, a specific percentage of equity and debt will now be applied to each basket and used in balance-sheet-related ratio analysis. This will improve consistency in the assessment and treatment of hybrids as well as reduce the amount of time spent debating the "mechanics" of ratio analysis.

While this change results in greater specificity than before, it does not detract from the important role that individual rating committees play in determining ratings. The improvement in balance sheet ratios themselves may not be viewed as an important credit improvement by rating committees, particularly in cases where the issuer’s relative competitive position or its industry outlook is poor.

Moody’s analysts and rating committees increasingly need to make careful qualitative judgments as to the relative importance of financial ratios and capital structure in the ratings analysis. In addition, fixed equity credit percentages suggest an "indifference point" between hybrid equity and common equity that may not always be appropriate. Moody’s remains cautious about capital structures that appear to be overly "engineered" because financial engineering may be a way to obscure the economic reality of the company.

Related Research

Special Comment
Aussie Hybrids: The Search For Equity-Like Instruments Continues, March 2001 (64504)

Rating Methodology
MOODY’S TOOL KIT: A Framework for Assessing Hybrid Securities, December 1999 (49802)
Rating and Analysing European Banks' Hybrid Capital Securities, December 2000, (62220)

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

**Financial Ratios:**

**Banks and Bank Holding Companies**
- Tangible Common Equity/Weighted Risk Assets
- Equity Investments in Subsidiaries/Equity

**Broker/Dealers**
- Net Assets/Total Equity

**Corporates**
- Total Debt/Total Capital
- Cash Flow\(^7\) to Total Debt

**Consumer and Commercial Finance Companies**
- Total Debt/Tangible Common Equity
- Effective Total Debt/Effective Tangible Common Equity\(^8\)

**Life Insurance Companies**
- Total Debt/Total Capital
- Equity/General Account Assets
- Deferred Policy Acquisition Costs + Other Intangibles/Equity
- Equity Investment in Subsidiaries/Equity

**Property Casualty Insurance Companies**
- Total Debt/Total Capital
- Equity Investment in Subsidiaries/Equity

**Real Estate Investment Trusts**
- Total Debt/Gross Assets
- Unencumbered Assets/Total Unsecured Debt

In all the ratios, Total Debt is defined as total debt plus the portion of preferred stock and other hybrids that is considered debt, based on the NIC basket, while Total Equity is defined as total equity plus the portion of preferred stock and other hybrids that is considered equity based on the NIC basket.

**Coverage Ratios:**
The treatment of hybrid coupons and dividends for the calculation of coverage ratios is not based on baskets. For all high-grade corporate issuers and financial institutions, the entire fixed charge is included in coverage ratios. However, for lower-rated issuers, coverage ratios will be calculated both with and without hybrid coupons and dividends that are deferrable, payable-in-kind, or payable in common stock.

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6. These are examples of ratios that may be adjusted, but are not all inclusive. Based on the equity credit percentages required by the baskets, debt and equity will be adjusted on the balance sheet. As a result, any ratios that include debt and/or equity will be adjusted and included in the text of publications.

7. Depending on the industry, cash flow may be defined as gross cash flow, retained cash flow, funds from operations, or free cash flow.

8. Effective Total Debt and Effective Tangible Common Equity are both adjusted for the effect of securitizations.
The Role of The New Instruments Committee

Through the use of Moody's Tool Kit, the New Instruments Committee assesses the relative debt and equity characteristics of hybrid securities. In addition, work is underway to refine Moody's analytical approach to monetization structures that seek to unlock the value of specific balance sheet assets or investment holdings. Recently, liquidity instruments were added to the committee's responsibilities. Given the proliferation of hybrids, liquidity instruments, and monetization structures worldwide, this committee is primarily focused on achieving global consistency.

Author
Charles Macgregor, Moody's Australia

Contributors

New Instruments Committee:
Tim Blake, Sarbani Banerjee-Rothe, Niel Bisset, Rosemarie Conforte, Glenn Eckert, Lynn Exton, Mark Gray, Barbara Havelcek, Sombat Jiwariyavej, Nicolas Weill, and Farisa Zarin

U.S. Hybrid Users Group (Corporate Finance):
Helen Calvelli, Joshua Drucker, Glenn Eckert, Bob Jankowitz, Tom Marshella, and Kevin Rose

U.S. Hybrid Users Group (Financial Institutions):
James Bartle, Robert Blanchard, Rosemarie Conforte, Blaine Frantz, Sean Jones, and Philip Kibel

European Hybrid Users Group (Financial Institutions):
Andrew Cunningham, Lynn Exton, Simon Hams, Mark Hewlett, Jean-Luc Lepreux, Henry MacNevin, Alexandra Sleator, and Sam Theodore

Accounting Specialist
Kevin Stoklosa

Production Associate
Erika M. Solis

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