Rating Methodology

Moody's Global Banking

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Moody's Guidelines for Rating Bank Hybrid Securities and Subordinated Debt

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In late 2008, Moody's initiated a dialog with the market on potential revisions to our rating practices for hybrid securities and subordinated debt[1]. This was followed by a Request for Comment in June 2009 where we put forward a proposal requesting formal market feedback[2]. After considering the market's comments, which we have responded to in a separate publication[3], this report describes Moody's revised methodology for rating bank hybrids and subordinated debt. It replaces our current methodology entitled, "*Guidelines for Rating Bank Junior Securities*" dated April 2007.

In the next several sections, we discuss the rationale for changes to our bank hybrid and subordinated debt rating methodology as well as the revised methodology itself. As we make changes to our existing ratings, our guiding principle will be the broad framework of the rating methodology described herein complemented by country-specific and case-specific credit judgment.

Moody's Revised Methodology: Analytical Underpinnings and Summary

The credit crisis, which had its origin in the summer of 2007, put a spotlight on the performance of hybrids at a time of severe financial distress for a number of banking systems globally. Our previous hybrid and subordinated debt rating methodology was based on the same default probability for all classes of debt, with notching driven by subordination to reflect relative loss severity in the event of a bank-wide default. For hybrid securities, Moody's assumed that optional coupon skip mechanisms, whether cumulative or non-cumulative, would only be used when a bank was close to liquidation. This view was supported by Moody's

1 Hybrid securities are defined as various types of subordinated debt, junior subordinated debt, and preferred securities with coupon skip mechanisms, which can be cumulative or non-cumulative. Unless otherwise indicated, when we refer to subordinated debt in this report, we mean "plain vanilla" subordinated debt where a missed coupon payment results in an event of default.

2 Refer to *"Moody's Assesses Bank Hybrid Securities in the Context of the Credit Crisis"* dated December 2008 and *"Request for Comment: Moody's Proposed Changes to Bank Subordinated Capital Ratings"* dated June 2009.

3 Refer to "*Frequently Asked Questions on Moody's Guidelines for Rating Bank Hybrid Securities and Subordinated Debt*" dated November 2009.

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research indicating that once a coupon payment is missed, default typically is imminent[4].

However, contrary to historical precedent, recent events have shown that hybrid "default"[5] probability now is clearly higher than for bank senior debt, and losses could occur in a restructuring outside liquidation through coupon suspension, principal write-downs, good bank/bad bank structures, and distressed exchanges. Actions taken by regulators and governments in response to the financial crisis continue to increase the loss probability for these securities. Consequently, in addition to capturing the risk of loss from subordination in liquidation, Moody's revised hybrid ratings will factor in the risk of loss from the suspension of coupon payments and the potential for a principal loss outside liquidation.

There is increasing evidence that hybrids and, in some cases, subordinated debt will not benefit from systemic support at a time of financial distress as they have in past crises. While this may vary from country to country depending on the regulator, the political system, the structure of the particular banking system, and the legal framework, regulators are clearly promoting the expectation that hybrids are loss absorbing. Contrary to past behavior, bank regulators in a given country as well as supranational regulators such as the European Commission have shown increasing willingness to allow all forms of regulatory capital to absorb losses even where it is necessary to pass laws that override contractual limitations[6]. This propensity rises when taxpayer money is used to support a weakening financial system in order to share the expense of recapitalizing a troubled bank.

To summarize the changes to our approach, in response to changing conditions affecting the credit risk of hybrids and subordinated debt, our revised methodology:

- **In most cases, removes systemic and regional support from bank hybrid ratings and, in some cases, from subordinated debt ratings.** Instead, these ratings will be linked to the stand-alone intrinsic strength of the bank as expressed through our Bank Financial Strength Rating. This is in contrast to our current practice of anchoring from the bank's senior unsecured rating or Bank Debt Rating[7], which incorporates systemic and other forms of external support.
- **Applies wider notching among different classes of bank hybrids based on the riskiness of specific features.** For example, due to their terms, non-cumulative preferred securities have proven to be more loss absorbing than junior subordinated debt with cumulative coupon skip features. Accordingly, our revised notching guidelines will capture these relative risks.
- **Provides the flexibility to position hybrid ratings based on case-specific and country-specific considerations.** While hybrids may be poised to absorb losses to varying degrees, the speed by which regulators make use of their loss absorbing features, if at all, is driven by jurisdictional considerations. This necessitates the use of a country-specific approach with a qualitative overlay.

We will remove systemic support from the ratings of preferred securities[8] in all jurisdictions, except in the case of certain government-owned banks. However, the removal of systemic support from junior subordinated debt ratings may occur at a slower pace, depending on the country and the circumstances. The ratings will reflect remaining support currently for banks in jurisdictions particularly affected by the credit crisis as they transition away from a period of extraordinary government support to one with more normal support levels. In addition, for Japanese or emerging market banks with high levels of government support embedded in their ratings for a number of years, the pace of support reduction will be slower, if it happens at all.

4 Refer to "*Preferred Stock Impairments and Recovery Rates, 1983-2008*" dated July 2009 and "*Recovery Rates on Defaulted Corporate Bonds and Preferred Stock, 1982 – 2003*" dated December 2003.

5 Under their terms, hybrids allow for missed coupon payments and/or principal write-downs, which do not result in an event of default. If these events occurred, there would not be a breach of contract, but a significant credit event that could potentially result in investor losses.

6 For example, under the UK Banking Act of 2009, regulators were given broader resolution powers than they had at the time to support troubled banks while imposing losses on selected creditors. Following the transfer of Bradford & Bingley's retail deposits and branch network to Abbey National plc, its subordinated debt and preferred shares were excluded from the government support provided to senior creditors and bank depositors. In February 2009, the UK Treasury announced changes to the terms and conditions of Bradford & Bingley's subordinated debt to make it possible to skip coupon payments and extend principal payments beyond the original maturity. Refer to "*Credit Differentiation Among Classes of Bank Debt: Evidence from Recent Government Interventions in the UK, Denmark, and the US*", dated April 2009.

7 For purposes of this piece, we have defined the Bank Debt Rating as the senior unsecured rating of the bank rather than the Bank Deposit Rating. In this way, we have allowed for the possibility that there may be differentiation between these two ratings in the future, depending on the potential for depositor preference relative to senior unsecured creditors in a given jurisdiction.

8 Preferred securities include preferred stock, preference shares, and all other securities, which are in the "first loss" position in liquidation only senior to common equity. It may also include certain forms of junior subordinated debt, which are pari passu with preferred stock in liquidation.

Possible Introduction of an Indicator to Capture the Potential Volatility in Hybrid Ratings

With the roll-out of this bank hybrid and subordinated debt rating methodology, Moody's is considering the introduction of an indicator to all outstanding hybrid ratings and the subordinated debt in certain jurisdictions. The indicator would apply to ratings for hybrid issues, which have a coupon skip mechanism as a defining characteristic[9]. This includes preferred securities and both subordinated and junior subordinated debt with similar features. In addition, even for subordinated debt that does not have a coupon skip mechanism, an indicator would be used in jurisdictions where selected losses have been imposed on this creditor class[10].

Together with the indicator, the hybrid rating would continue to be an expression of the expected loss associated with that particular hybrid. It would be based on our best information at the time regarding the various loss scenarios for the hybrid resulting from a structural analysis as well as an assessment of the bank's credit fundamentals. As such, the ratings approach would be the same as for other debt securities to ensure ratings comparability. This means that an A-rated hybrid with an indicator would have the same expected loss as an A-rated senior unsecured debt obligation. However, the indicator would signal the potential for volatility in the rating due to exogenous factors that are less predictable and not always credit-linked such as regulatory and/or government intervention.

In the context of hybrids, which may lend itself to providing loss absorption as a going concern, it is difficult to accurately predict what regulators and/or a government may do at a time when either an isolated bank is in financial distress versus when an entire banking system is under financial pressure. While the uncertainty of regulatory and/or government intervention may also pose the risk of loss to the senior obligations of a bank, which benefits from some degree of systemic support, the risk is heightened for hybrids. Because of their unique equity-like features, including coupon skip and/or principal write-down mechanisms, hybrid losses outside a bank-wide failure are a possibility. These features, which also result in regulatory capital treatment for the hybrid, increase the probability of government intervention that could result in greater losses relative to senior debt.

To cite various examples, a regulator may intervene and prevent a coupon payment sooner than financial measurements might suggest. Conversely, a bank may breach a coupon skip trigger, the probability of which can be measured, but a regulator may intervene and request payment anyway so that the market does not lose confidence in the bank and the banking system. Finally, a bank may receive government support but, under certain circumstances, regulators may advise or even require that the resulting taxpayer burden be shared with investors through skipping hybrid coupons and/or principal write-downs[11].

Moody's Hybrid and Subordinated Debt Ratings Do Not Capture Extension Risk

Consistent with firm-wide practices, Moody's rates securities to maturity and does not factor in extension risk, which is the risk that a security will not be called at the first call date. Prior to the financial crisis, there was a tacit agreement between an issuer and investors that hybrid and subordinated debt would be called at the first call date. During the crisis, this has not proven to be the case, resulting in significant negative implications for the market value of these instruments. If a bank is in financial distress and is unable to access the market at the call date or if regulators do not approve the call, hybrids and subordinated debt will remain outstanding. This may be consistent with the regulatory goal of having loss absorbing capital in place when needed, but may be inconsistent with investors' expectations. Moody's hybrid and subordinated debt ratings do not incorporate extension risk, but it is a risk that nonetheless exists and one that could heighten the risk of coupon skips and/or principal write-downs in perpetual or very long-dated hybrid securities[12].

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9 If skipped, the coupon can either be cumulative or non-cumulative.

10 In regulatory capital terms, the modifier applies generally to Tier 1 and Upper Tier 2 securities. It would also apply to other Tier 2 securities that have coupon skip mechanisms. In jurisdictions such as the UK where selected losses have been imposed on Lower Tier 2 securities without coupon skip mechanisms, the modifier would also apply.

11 In particular, the European Commission has, for a number of European banks, advised that hybrid coupons be skipped in conjunction with the approval of state aid packages.

12 Refer to "*Debt Redemption Extension Risk*" dated December 2008.

Moody's Guidelines for Rating Bank Hybrid Securities and Subordinated Debt

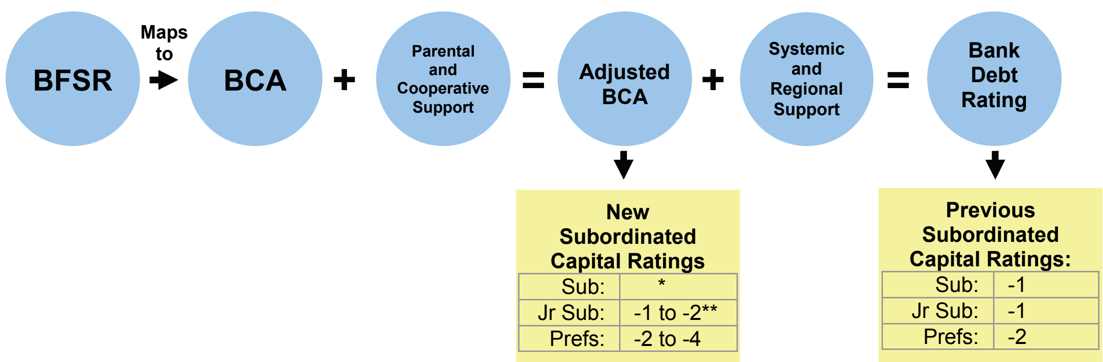
I. Moody's Bank Hybrid and Subordinated Debt Rating Guidelines

The best starting point for the discussion on bank hybrid and subordinated debt ratings is a short review explaining how bank ratings, of which external support is a factor, are determined based on Moody's bank rating methodology. This is described in detail in Appendix A.

The intrinsic credit risk of banks is communicated through the Bank Financial Strength Rating (BFSR), which reflects the likelihood that a bank will require exceptional assistance from third parties such as its owners, industry groups, or governments[13]. While excluding extraordinary levels of systemic support, the Bank Financial Strength Rating incorporates any system-wide and/or bank-specific measures that have already been provided by the government. The Bank Financial Strength Rating maps to the Baseline Credit Assessment (BCA), which is summarized in Appendix B. It is from this starting point that various forms of external support including systemic support are added to bring the Baseline Credit Assessment to the Bank Debt Rating.

Previous Guidelines

Under Moody's previous bank hybrid and subordinated debt rating guidelines, summarized in Appendix C, the starting point for the analysis was the Bank Debt Rating (BDR). By notching the ratings for hybrids and subordinated debt from this anchor rating, we incorporated systemic support. In general, subordinated debt and junior subordinated debt were rated one-notch below the Bank Debt Rating while preferred securities were rated two notches below.



* *For most countries, the subordinated debt rating will receive uplift for systemic support to a level equal to Bank Debt Rating − 1.*

** *Dated junior subordinated debt with principal write-down features could be positioned up to 4 notches below the Adjusted BCA.*

Notching for hybrid ratings widened as the Bank Financial Strength Rating dropped to the D range and below. In addition, the anchor rating switched from the supported Bank Debt Rating to the unsupported Baseline Credit Assessment for banks in the E range, which resulted in a high ratings transition, particularly for banks that benefited from high levels of systemic support. As a bank's intrinsic financial strength weakened and the risk of a coupon skip or a principal loss outside liquidation increased, Moody's used an expected loss analysis to position the rating. Neither the potential absence of systemic support nor the risk of loss outside liquidation from a coupon skip and/or principal write-down was factored into the hybrid rating from the outset.

13 Exceptional assistance is extraordinary bank-specific support for depositors and senior creditors through the restructuring or nationalization of a troubled bank outside liquidation. Refer to "*Calibrating Bank Ratings in the Context of the Global Financial Crisis*" dated February 2009.

Moody's Guidelines for Rating Bank Hybrid Securities and Subordinated Debt

Revised Guidelines

In contrast, under our revised guidelines, the starting point is the Adjusted Baseline Credit Assessment (Adjusted BCA). By using the Adjusted Baseline Credit Assessment as the starting point, we are linking the ratings of hybrids and subordinated debt to the intrinsic financial strength of the bank, which incorporates any system wide and/or bank-specific measures that have already been provided by the government. We arrive at the Adjusted Baseline Credit Assessment by adding some forms of external support including parental[14] and cooperative support to the Baseline Credit Assessment. However, it excludes systemic and regional support.

Treatment of Government-owned Banks

For government-owned banks, where the government is the parent, the Adjusted Baseline Credit Assessment will implicitly incorporate systemic support. As a result, hybrids issued by government-owned banks will be notched from the supported or Bank Debt Rating. Government banks are almost always supported when in financial distress through the issuance of common equity to their government parents, forbearance, or through other forms that do not force principal write-downs on creditors. Even the probability of a skipped coupon may be less than for a non-government-owned bank. For banks that meet this definition, notching will generally only capture the risk of subordination, i.e., the Bank Debt Rating minus one notch for subordinated and junior subordinated debt and two notches for preferred securities. However, for banks in weak financial condition, notching may widen depending on the riskiness of the hybrid's features.

For purposes of this methodology, government-owned banks are defined as those where: 1) the government has greater than 50% beneficial ownership with no intention to reduce ownership below that level for at least the medium-term and 2) the bank has a clear policy function. That is, it provides banking services to a disadvantaged segment of the population; or has been used by the government to bail out troubled industrial companies or financial institutions; or has been a key lender to important government projects; or, through normal commercial lending, is providing development funding. This definition will be supplemented by case- and country-specific judgments.

Treatment of Bank Holding Companies

For bank holding companies that issue hybrids, the Adjusted Baseline Credit Assessment of the bank is used as the starting point. Consistent with Moody's practices for rating bank holding companies, we then usually incorporate an additional notch for structural subordination from the bank's Adjusted Baseline Credit Assessment. If there is substantial holding company double leverage, two notches may be incorporated. For bank holding companies with substantial operations at the holding company and/or material subsidiaries other than a bank, there may not be a notching differential to reflect structural subordination. In these cases, the bank holding company could have a predictable cash flow stream available from other sources to support hybrid payments even if the bank itself gets into financial distress.

Summary Guidelines

Moody's revised rating guidelines for hybrids and subordinated debt are summarized in the chart on the next page.

Hybrids have also taken the form of preferred securities issued by a trust where proceeds are on-lent to the bank through either preferred securities or junior subordinated debt. For these structures, our analysis focuses on both the features of the obligation issued by the trust to investors and the features of the obligation between the bank or bank holding company and the trust. This helps us to accurately identify the ultimate claim in liquidation and the coupon skip mechanism, which can be cumulative, non-cash cumulative (with an Alternative Coupon Settlement Mechanism or ACSM[15]), or non-cumulative.

[14] The parent's Adjusted Baseline Credit Assessment, absent systemic support, is used to determine the subsidiary's Adjusted Baseline Credit Assessment.
[15] Hybrids with an Alternative Coupon Settlement Mechanism (ACSM) feature require the issuer to subsequently settle any accumulated coupons through the issuance of common stock or certain types of preferred securities. As such, they are cumulative in nature.

Moody's Guidelines for Rating Bank Hybrid Securities and Subordinated Debt

Moody's Revised Bank Hybrid and Subordinated Debt Rating Guidelines

	Hybrid Subordination	Typical Regulatory Treatment	Coupon Skip Mechanism	Number of Notches below Adjusted BCA (Adj. BCA = BCA + Parental and/or Cooperative Support)
1	**"Plain Vanilla" Subordinated Debt**	Lower Tier 2	None	Generally, will receive uplift from Adjusted BCA to BDR – 1*
2	**Hybrid Subordinated Debt**	Tier 2** and Tier 3	Mandatory, weak triggers, cumulative, subject to maturity extension	Lower of BDR – 1 or Adjusted BCA + 2
3	**Junior Subordinated Debt**	Upper Tier 2	Optional, cumulative	Adjusted BCA - 1 or – 2***
4	**Dated Junior Subordinated Debt with Principal Write-down**	Upper Tier 2	Optional/mandatory, cumulative	Adjusted BCA - 2 to – 4
5	**Preferred Securities**	Tier 1	Optional/mandatory, cumulative, non-cumulative, or non-cash cumulative (ACSM) settlement	Adjusted BCA - 2 to – 4****

* *In countries where this class of subordinated debt has absorbed losses or if the probability of incurring losses has increased, the rating will be positioned at Adjusted BCA – 1 notch.*

** *For Tier 2 securities with a cumulative coupon skip mechanism, the rating would likely be positioned in line with an Upper Tier 2 security that has similar features.*

*** *For junior subordinated debt, depending on jurisdiction, ratings may incorporate some uplift for systemic support as banks transition from a period of extraordinary government support to a more normal operating environment. For junior subordinated debt with weak triggers, the rating could also incorporate some uplift for systemic support.*

**** *Capped at a maximum of Baa1 for non-cumulative Tier 1 securities with a net loss trigger.*

In the following sections, we explain our rationale for rating hybrids and each type of subordinated debt as well as how to position ratings within the notching ranges. For each of the ranges presented, there is a "standard" position, which we expect to be the rating outcome in most circumstances. However, rating committees have the flexibility to position hybrid ratings within these ranges based on specific hybrid features, including triggers, judgments on the bank's capital position, and the likelihood of coupon omission and/or principal write-downs. We will also assess past demonstrated regulatory intervention and non-intervention practices for insight into future regulatory behavior.

The notching ranges for hybrids issued by banks with Bank Financial Strength Ratings from A to E are fixed because the structural risks of hybrids remain the same, regardless of the bank's financial strength[16]. When the bank's financial condition weakens and the probability increases that a hybrid's loss absorbing features will be used, hybrid ratings will generally be downgraded because they are linked to the intrinsic strength of the bank. However, if a coupon skip and/or principal loss in a restructuring outside liquidation is imminent, Moody's will use an expected loss analysis, which is explained later in the report, that could result in a rating lower than what is suggested by the ranges, particularly if past government support has already been incorporated in the Bank Financial Strength Rating.

"Plain Vanilla" Subordinated Debt

Subordinated or "plain vanilla" subordinated debt has no coupon skip mechanism and generally absorbs losses only in liquidation. In most circumstances, the rating for "plain vanilla" subordinated debt will incorporate uplift for systemic support from the Adjusted Baseline Credit Assessment to a level that is one notch below the Bank Debt Rating, which captures subordination risk. However, in certain countries where the government has the legal authority to impose selective losses on this creditor class outside liquidation and has done so[17], the ratings will be positioned one notch below the Adjusted Baseline Credit Assessment.

[16] For banks with a Bank Financial Strength Rating in the E range, we may also consider using an expected loss analysis depending on the factors driving the bank's low intrinsic strength rating.
[17] The UK is an example of a country that has used its legal authority to impose losses on "plain vanilla" subordinated debt.

Moody's Guidelines for Rating Bank Hybrid Securities and Subordinated Debt

Hybrid Type	Range	Standard	Comments
"Plain Vanilla" Subordinated Debt	n/a	BDR - 1 notch	➢ If a country has the legal tools to impose selected losses on this creditor class and has used them, then Adjusted BCA – 1 notch.

The available legal tools to impose selected losses on "plain vanilla" subordinated debt varies from jurisdiction to jurisdiction, as does the need to do so and willingness should that need exist. There are countries where the government has not used its existing resolution authority to date[18]. In addition, other countries may not have the tools available today, but could legislate quickly to put them in place. In determining the appropriate anchor for "plain vanilla" subordinated debt — either the Bank Debt Rating or the Adjusted Baseline Credit Assessment — Moody's will use judgment on a country-by-country basis. If there is an increased probability that losses will be imposed on this creditor class, Moody's will likely shift the anchor from the Bank Debt Rating to the Adjusted Baseline Credit Assessment.

Hybrid Subordinated Debt with Coupon Skip Mechanisms

For the most part, subordinated debt does not have coupon skip mechanisms. However, in certain regions such as Latin America, Europe and Asia, it does in some cases. For example, in Latin America, hybrid subordinated debt is short-dated and, if minimum regulatory capital thresholds fail to be met, coupons must be skipped on a cumulative basis. In Europe, Tier 3 securities, which are short-dated and pari passu with Lower Tier 2 securities, have similar triggers which, if breached, result in coupon suspension and the extension of maturity.

Hybrid Type	Range	Standard	Comments
Hybrid Subordinated Debt	n/a	Lower of BDR - 1 notch or Adjusted BCA + 2 notches	➢ Tied to the breach of to weak regulatory capital triggers, a cumulative coupon skip is a low probability, low severity event. As the bank's intrinsic financial strength weakens, the rating will be positioned closer to the Adjusted BCA.

In all these cases, the probability of a trigger breach is low. In addition, if the trigger is breached, the incremental loss associated with a coupon skip is also low because the bank will either be close to liquidation or included in a restructuring outside liquidation and skipped coupons will likely not have accumulated over a long period of time. As a result, the loss potential is not much greater than the risk of subordination. The ratings for these securities are positioned at the lower of the Bank Debt Rating minus one notch or the Adjusted Baseline Credit Assessment plus two notches. In this way, the rating reflects that as the intrinsic strength of the bank weakens and the Adjusted Baseline Credit Assessment drops, the likelihood of a bank falling below regulatory capital requirements and the probability of a restructuring outside liquidation increases.

Junior Subordinated Debt

Junior subordinated debt has a more junior claim in liquidation than other types of subordinated debt and is typically structured to allow the bank to skip coupon payments at its option on a cumulative basis. This capital layer, therefore, may be at risk for loss if a bank's capital deterioration continues and more junior capital does not provide sufficient cushion. An additional concern is a missed coupon payment and the timeliness of payments, even if accumulated coupons are repaid. Consequently, most junior subordinated debt ratings will eventually be positioned one to two notches below the Adjusted Baseline Credit Assessment[19].

[18] Canada has the legal authority to impose selective losses on all forms of subordinated debt and hybrids outside liquidation, but it has not been used to date. The Federal Deposit Insurance Corporation (FDIC) in the US has similar legal authority to impose selective losses on both senior and subordinated debt issued by banks. However, this resolution power does not currently extend to bank holding companies, although the House Financial Services Committee and the US Treasury Department has proposed legislation giving such tools to the US government.

[19] As the Bank Financial Strength Rating weakens, junior subordinated debt ratings may not necessarily move in tandem. Experience in some jurisdictions has shown that junior subordinated debt benefits from government support provided to a troubled bank, thereby lowering the probability of a cumulative coupon skip and limiting the loss severity to the risk of subordination in liquidation.

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Hybrid Type	Range	Standard	Comments
Junior Subordinated Debt	Adjusted BCA - 1 to - 2 notches	Adjusted BCA - 1 notch	➢ If coupon suspension is non-cumulative, then Adjusted BCA – 2 notches. ➢ If no systemic support is given to the "plain vanilla" subordinated debt rating, then Adjusted BCA – 2 notches. ➢ Junior subordinated debt with restricted deferral options[20] may be rated at or above the Adjusted BCA. ➢ For a given country, migration to the Adjusted BCA anchor rating will depend on the pace of reduction in government support, should it exist.

The migration of most junior subordinated debt ratings to be notched below the Adjusted Baseline Credit Assessment will be phased in over time. The pace of transition will depend on the support provided — either directly or indirectly — to junior subordinated debt as well as the treatment of subordinated debt in a given country's existing legal and regulatory framework. Another important consideration is whether or not there is increasing political pressure for banks' investors to share the expense of recapitalizing banks with taxpayers should government monies be necessary to support a faltering bank.

In most emerging markets, we expect that junior subordinated debt ratings will incorporate some systemic support for now. Emerging market banks are key to the economic development of their countries and access to global capital markets is an important consideration. As a result, we expect that governments will do everything they can to avoid defaults — including hybrid "defaults" — and support their financial systems. In addition, despite low Bank Financial Strength Ratings, emerging market banks tend to have large, high quality capital levels.

Another example currently is Japan. Having gone through its own banking crisis, Japan has in place a well-developed resolution framework for distressed banks. The only time that losses can be imposed on junior subordinated debt is when certain Subordination Events such as bankruptcy, corporate reorganization, civil rehabilitation, and similar events outside Japan are triggered. Excluded from this definition are nationalization or recapitalization events, which would be used in the context of banks[21]. While Japanese banks may eventually see the level of current systemic support reduced, we do not expect this to happen over the near term.

Finally, banks in the countries or regions particularly hard hit by the recent financial crisis including the US and Europe have benefited from extraordinary levels of government support to prevent their financial systems from collapsing. Governments have invested in the preferred capital of banks and, at the same time, preferred securities held by third parties have shared in the expense of bank recapitalizations through principal write-downs or exchanges into common equity. These actions have indirectly reduced the risk of loss for the layer of junior subordinated debt above preferred capital. However, Moody's believes that this degree of government support will gradually diminish as more normal market conditions return.

The ratings for the banks in all these examples, which are not intended to be fully inclusive, will capture the support that junior subordinated debt enjoys. Consequently, as appropriate, some uplift for systemic support will be incorporated in the ratings, not to exceed two notches below the Bank Debt Rating to capture the potential for a coupon skip and lower recovery relative to supported senior debt. Over time, as banks are weaned from government support at different rates, junior subordinated debt ratings will be positioned close to or below the Adjusted Baseline Credit Assessment. In determining the amount of support uplift to be given, rating committees will use judgment after considering the size of the bank's potential capital deficit under

[20] Restricted deferral options are those where a coupon skip is tied to the breach of a weak trigger such as a minimum regulatory capital ratio. The probability of such a trigger breach is remote unless a bank is close to liquidation or a restructuring outside liquidation. In these cases, it is likely that a government would provide support before the trigger is breached, which reduces the probability of a trigger breach. Consequently, positioning the rating above the Adjusted Baseline Credit Assessment implicitly suggests some degree of systemic support.

[21] Even when the majority of Japanese banks had Bank Financial Strength Ratings in the D to E range, coupon skips on junior subordinated debt did not take place despite the breach of triggers, which then provided the bank with the option to skip coupons.

stress scenarios and the means available to address it, including ongoing earnings, asset sales, access to the equity markets, and any available cushion from more junior capital[22].

Dated Junior Subordinated Debt with Principal Write-down

European banks have issued short-dated junior subordinated debt with coupon skip and principal write-down features tied to the breach of triggers[23]. Although generally cumulative, any skipped payments and subsequent principal write-ups following a write-down must occur prior to maturity[24]. Consequently, depending on the time relative to maturity when a principal write-down occurs, these securities could be at risk for both principal and coupon losses. These securities will be anchored from the Adjusted Baseline Credit Assessment and generally notched within a range of two to four notches depending on the trigger type and whether the hybrid is cumulative or non-cumulative.

Hybrid Type	Range	Standard	Comments
Dated Junior Subordinated Debt with Principal Write-down	Adjusted BCA - 2 to - 4 notches	Adjusted BCA - 2 notches	➢ Will be positioned within the range depending on the trigger type and whether the hybrid is cumulative or non-cumulative.

Preferred Securities

Preferred securities or, in some jurisdictions such as the European Union, junior subordinated debt with a priority of claim only senior to common equity, is loss absorbing by its terms. Preferred securities can be subject to principal write-downs resulting from the breach of certain financial triggers, be excluded from the restructuring of a bank outside liquidation, or subject to an exchange into common equity at a deep discount when a bank is in financial distress. Typically perpetual in nature, preferred securities do not have to be repaid and a skipped coupon will never result in an event of default[25].

Skipped coupons are generally non-cumulative and an extended period of non-payment could result in the risk of significant loss. As such, non-cumulative preferred securities provide loss absorption as a going concern and the rating will generally be positioned three notches below the Adjusted Baseline Credit Assessment. Cumulative preferred securities, which are less frequently issued, are rated two notches below the Adjusted Baseline Credit Assessment.

Hybrid Type	Range	Standard	Comments
Preferred Securities	Adjusted BCA - 2 to - 4 notches	BCA - 3 notches	➢ If coupon skip is cumulative, then Adjusted BCA - 2 notches. ➢ If coupon skip is non-cumulative with a net loss trigger, then Adjusted BCA - 4 notches, not to exceed Baa1.

[22] Refer to "*Moody's Approach to Estimating Bank Credit Losses and their Impact on Bank Financial Strength Ratings*", dated May 2009.

[23] There can be net loss or balance sheet loss triggers. In contrast to a net loss trigger, which is income-based, a balance sheet loss trigger typically includes retained earnings, reserves, and the latest fiscal year's earnings. We consider a balance sheet loss trigger to be weaker than an income-based trigger because a bank will likely experience several years of losses and substantial capital depletion before a balance sheet loss is reported. However, if a bank has experienced several years of net losses, the probability of a balance sheet loss trigger breach increases.

[24] Genussscheine issued by German banks and Ergänzungskapital issued by Austrian banks are examples of this type of security. Most Genussscheine are cumulative junior subordinated debt with a balance sheet loss trigger. If the trigger breach results in coupon suspension and a principal write-down, the written down amount is due at maturity. However, some types of Genussscheine require the bank, if subsequently profitable, to repay any accumulated coupons and written down amounts for up to four years after the original maturity. Ergänzungskapital has net loss triggers, but the securities are typically non-cumulative.

[25] In contrast, even if a coupon on junior subordinated debt is deferred until a later date, non-payment of the accumulated amount will result in an event of default.

Ratings four notches below the Adjusted Baseline Credit Assessment are reserved for non-cumulative preferred securities with net loss triggers to reflect the possibility of greater transition risk associated with a missed coupon payment. The ratings are subject to a ceiling of Baa1, which will impact banks with Bank Financial Strength Ratings of A to B+, because all banks, regardless of their financial strength and how well they are capitalized, may experience profit volatility potentially resulting in the breach of a net loss trigger.

Jurisdictional Considerations

In Europe, banks issue non-cumulative trust preferred securities with a preferred claim in liquidation. These hybrids typically only have a mandatory coupon skip mechanism tied to the breach of weak triggers such as minimum regulatory capital requirements. The probability of a trigger breach is less likely, particularly for a systemically important bank that has received government support to bolster its capital position and avoid insolvency. As a result, the rating will be positioned at the Adjusted Baseline Credit Assessment minus two notches or less.

A common hybrid issued by Australian banks is non-cumulative preferred securities with net loss triggers. The bank has the option, which may or may not be explicit, to override a trigger breach and pay the coupon anyway, subject to regulatory approval. Given the dependence of Australian banks on foreign wholesale funding, there is a high probability that the breach of a net loss trigger would be overridden by the bank or regulators despite the absence of explicit language. As a result, the ratings for these securities, in certain cases, may be positioned at the Adjusted Baseline Credit Assessment minus three instead of four notches and be excluded from the Baa1 cap.

For banks in jurisdictions with senior unsecured ratings that benefit from a significant amount of uplift for systemic support, the rating on non-cumulative preferred securities could be positioned at the Adjusted Baseline Credit Assessment minus two notches or less depending on the factors that drive the bank's weak intrinsic financial strength rating. For example, an emerging market bank with a strong capital position that is managing its franchise in a weak operating environment may be very unlikely to skip a coupon payment.

Positioning the Ratings for Contingent Capital Securities

Contingent capital securities are those designed to provide loss absorbing capital at a time of financial distress. At issuance, the "host" security could take any form of capital from senior debt to non-cumulative preferred securities. At the bank's option or if a pre-specified trigger --- typically, a regulatory capital trigger --- is breached, the security converts into a more loss absorbing form of capital relative to the "host" such as non-cumulative preferred stock or common equity. Depending on the structure of the hybrid, an investor may face the potential for significant losses.

After reviewing the features of contingent capital securities, we may decide that they cannot be rated. The securities most likely to fall into this category are those that contractually give the issuer and/or the regulator the discretion to convert the "host" security into common equity. To the extent that there are triggers, our focus will be on whether or not they provide an objective threshold for conversion enabling an investor to reasonably measure the risk associated with conversion.

If we decide that certain types of contingent capital securities can be rated, the analysis will focus on the ability of the "host" to absorb losses as a going concern, the type of loss absorbing capital that the investor may ultimately hold, the probability of conversion, and the loss severity given conversion based on the conversion ratio[26]. Consistent with all hybrid and subordinated debt ratings, the risk of potential loss is factored into the rating from the outset. An expected loss analysis will be used to position the rating if the probability of a trigger breach resulting in conversion to the underlying loss absorbing capital significantly increases.

[26] The "host" security could convert into a fixed or variable number of shares, which may or may not be capped.

Rating (or not Rating) the Next Generation Hybrids

Moody's expects that new types of hybrid securities will continue to be developed in the future. As before, we will assess our ability to assign ratings to new products based on the preponderance of their fixed income characteristics. For example, it is less likely that ratings will be assigned to hybrids where it is difficult to assess the potential loss to investors such as if the bank has the option to convert a hybrid into common equity. In addition, we will not rate securities for which the amount of promised principal repayment is dependent on the occurrence of a non-credit event[27]. We may also consider adding an indicator to next generation hybrids should it become clear that there is volatility in the rating that goes beyond our expected loss analysis.

Generic Examples to Illustrate the Ratings Impact

The chart in Appendix D summarizes the range of rating outcomes for subordinated debt, junior subordinated debt, and non-cumulative preferred securities for a range of Bank Debt Ratings and Adjusted Baseline Credit Assessments. For junior subordinated debt, we assume that the ratings are notched from the Adjusted Baseline Credit Assessment with no uplift incorporated for systemic support. We compare the hypothetical rating outcomes that result from the implementation of Moody's revised hybrid and subordinated debt rating methodology against those using our previous hybrid and subordinated debt rating methodology.

II. The Use of Expected Loss Analysis for Hybrid Ratings

There may be circumstances under which a skipped coupon and/or principal write-down for hybrid capital is either imminent or highly likely. For example, a coupon skip and/or principal write-down trigger is close to being breached, a bank opts to skip a non-cumulative coupon payment for an extended period of time to build capital, or a regulator steps in to prevent a coupon payment or require a principal write-down. We may also consider using an expected loss analysis for banks with a Bank Financial Strength Rating of E depending on the hybrid's features and the factors driving such a weak Bank Financial Strength Rating[28].

In these cases, the rating will be positioned using an expected loss analysis, which factors in the anticipated period of coupon non-payment, the potential for a principal write-down outside liquidation, and the severity of loss, if these events happen. The rating will be adjusted downward, if necessary, beyond what is suggested by the revised methodology. In the event that a hybrid skips coupon payments and subsequently resumes them, Moody's will consider an upgrade and the use of normal notching guidelines only when the bank's financial condition stabilizes and there is a high likelihood that the bank is able to make coupon payments for an extended period of time.

In certain cases, outstanding hybrids have been subject to exchanges into other forms of debt or equity at a substantial discount to par. If the exchange is viewed as avoiding a bankruptcy filing or payment default, it is tantamount to a restructuring outside liquidation and considered a distressed exchange for rating purposes. Moody's will also use an expected loss approach to position the rating and determine the potential for loss relative to par value, which is the bank's original promise to pay[29].

[27] Refer to *"Moody's Update on Rating Debt Obligations with Variable Promises"* dated June 2009.

[28] If an expected loss analysis is used to position hybrids issued by banks with a Bank Financial Strength Rating of E, the rating may be higher than the suggested guidelines.

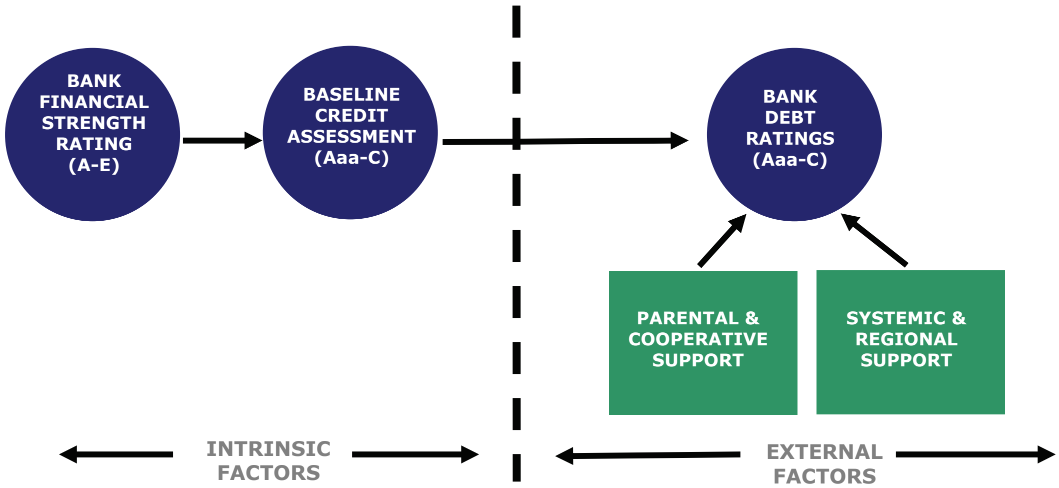
[29] Refer to "*Moody's Approach to Evaluating Distressed Exchanges*", dated March 2009.

Moody's Guidelines for Rating Bank Hybrid Securities and Subordinated Debt

Appendix A

Bank Rating Methodology

The schematic below summarizes the broad analytical concepts underpinning the bank rating process by highlighting the relationship between the Bank Financial Strength Rating and the Baseline Credit Assessment.



In analyzing the creditworthiness of banks, Moody's separates the intrinsic risk factors from external risk factors. The starting point for bank ratings is the assessment of a bank's intrinsic financial strength as captured by the Bank Financial Strength Rating, which measures the risk that a bank will require external support. It is measured on a scale from A to E, with A for the strongest banks and E for the weakest. The Bank Financial Strength Rating is then translated into a Baseline Credit Assessment, ranging from Aaa to C.

The Bank Financial Strength Rating and Baseline Credit Assessment rating form the basis for the Bank Debt Rating, which further incorporates both external support and risk elements. Anticipated external support may lift debt ratings while sovereign-related risk may cap them. External support could come from four different sources:

1. Support from a parent (operating company or family group);
2. Support from a cooperative or mutualist group;
3. Support from a regional or local government; and
4. Systemic (i.e. national government and/or central bank) support.

Unless capped by the local or foreign currency debt ceiling, the Bank Debt Rating can be derived by adding total external support to the Baseline Credit Assessment rating.

Appendix B

Bank Financial Strength Ratings and Baseline Credit Assessment Mapping

Bank Financial Strength Rating	Baseline Credit Assessment
A	Aaa
A-	Aa1
B+	Aa2
B	Aa3
B-	A1
C+	A2
C	A3
C-	Baa1
C-	Baa2
D+	Baa3
D+	Ba1
D	Ba2
D-	Ba3
E+	B1
E+	B2
E+	B3
E	Caa1
E	Caa2
E	Caa3

Moody's Guidelines for Rating Bank Hybrid Securities and Subordinated Debt

Appendix C

Moody's Previous Bank Hybrid and Subordinated Debt Notching Guidelines

	Most Common Characteristics			Number of Notches below Bank Debt Rating (BDR)		
				BFSR (BCA)		
	Hybrid Subordination	**Typical Regulatory Treatment**	**Coupon Skip Mechanism**	**A / B / C (Aaa - Baa2)**	**D (Baa3 - Ba3)**	**E (B1 - Caa3)**
1	**"Plain Vanilla" Subordinated Debt**	Lower Tier 2	None	BDR - 1	BDR - 1	BDR - 1
2	**Hybrid Subordinated Debt**	Tier 2 and Tier 3	Mandatory, weak triggers, cumulative, subject to maturity extension	BDR - 1	BDR - 1	BDR - 1
3	**Junior Subordinated Debt**	Upper Tier 2	Optional, Cumulative	BDR - 1	BDR - 1	BDR - 2
4	**Dated Junior Subordinated Debt with Principal Write-down**	Upper Tier 2	Optional/Mandatory, Cumulative	BDR - 1	BDR - 2	Closer to BCA
5	**Preferred Securities**	Tier 1	Optional/Mandatory, Non-cumulative or non-cash cumulative (ACSM)	BDR - 2	BDR - 3	Closer to BCA

Appendix D

Generic Examples*

					Subordinated Debt		Junior Subordinated Debt		Preferred Securities	
	Bank Debt Rating	Bank Financial Strength Rating	Adj. Baseline Credit Assessment (Adj. BCA)	Notching Uplift from Adj. BCA	Previous Methodology	Revised Methodology**	Previous Methodology	Revised Methodology***	Previous Methodology	Revised Methodology
Bank 1	Aa3	B	Aa3	0	A1	A1	A1	A1/A2	A2	A2/Baa1****
Bank 2	Aa3	C+	A2	2	A1	A1	A1	A3/Baa1	A2	Baa1/Baa3
Bank 3	Aa3	C	A3	3	A1	A1	A1	Baa1/Baa2	A2	Baa2/Ba1
Bank 4	A2	C-	Baa2	3	A3	A3	A3	Baa3/Ba1	Baa1	Ba1/Ba3
Bank 5	A2	D+	Baa3	4	A3	A3	A3	Ba1/Ba2	Baa2	Ba2/B1
Bank 6	A2	D	Ba2	6	A3	A3	A3	Ba3/B1	Baa2	B1/B3

* *For a bank holding company, assume the generic examples are already adjusted for the risk of structural subordination.*

** *Incorporates uplift for systemic support from the Adj. BCA to BDR - 1. However, if the government has the legal authority to impose selective losses on this creditor class and there is a high probability that it will do so, the rating will be positioned one notch below the Adj. BCA. In addition, if subordinated debt has a coupon skip mechanism, the rating will be positioned one notch lower.*

*** *Assumes junior subordinated debt rating is notched down from the Adj. BCA. However, depending on the jurisdiction, as banks transition to lower levels of systemic support, junior subordinated debt ratings for certain banks will receive some uplift from the Adj. BCA.*

**** *Non-cumulative preferred securities with a net loss trigger will be capped at Baa1. The A2 rating applies to cumulative preferred securities.*

Moody's Related Research

Special Comments

- Frequently Asked Questions on Moody's Guidelines for Rating Bank Hybrid Securities and Subordinated Debt, November 2009 (120614)
- Moody's Proposed Changes to Bank Subordinated Capital Ratings, June 2009 (117894)
- Moody's Assesses Bank Hybrid Securities in the Context of the Credit Crisis, December 2008 (112358)
- Calibrating Bank Ratings in the Context of the Global Financial Crisis, February 2009 (114705)
- Credit Differentiation Among Classes of Bank Debt: Evidence from Recent Government Interventions in the UK, Denmark, and the US, April 2009 (116002)
- Moody's Update on Rating Debt Obligations with Variable Promises, June 2009 (117577)

To access this report, click on the entry above. Note that this reference is 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.

Moody's Guidelines for Rating Bank Hybrid Securities and Subordinated Debt

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