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Proposed Bank Rating Methodology: Frequently Asked Questions

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Introduction

This report contains our responses to some of the more frequently asked questions we have received since we published our bank rating methodology request for comment on 9 September 2014 and is an effort to communicate analytically how the proposed methodology would treat some of the issues raised through outreach with investors. This report and other material are available on a dedicated website, with a link to submit formal feedback. Please note that we are still receiving comments and that our 7 November deadline for the request for comment period has not changed. As before, we intend to finalize our bank methodology in early 2015 after taking into consideration the comments we continue to receive.

Baseline Credit Assessment – Macro Profile

How are Macro Profiles likely to be updated and communicated under Moody's proposed bank methodology?

We expect to review and update the Macro Profiles for each banking system at least annually, and in some cases more frequently in response to changing dynamics. We expect to publish all of our Macro Profiles when we implement the final methodology, together with a brief explanation of our judgments and commentary on key metrics. Prospectively, we will likely disseminate the majority of Macro Profiles together with our banking system outlooks.

Would Macro Profile changes automatically trigger a bank rating change? Won't that make ratings more volatile?

There's nothing automatic in our rating process – rating changes are always determined by a rating committee, and the Macro Profile is a variable that affects a bank's standalone assessment. If the sovereign rating factors we use in our Macro Profiles were to result in a change in the Banking Country Risk indicator, we would review the overall impact of these changes on the Macro Profile, and if appropriate, modify the Macro Profile accordingly.

A Macro Profile could also change even without a change in the sovereign factors, for example, in the event of material developments in credit conditions or funding conditions or industry structure. In these cases, we would review the impact on the overall Macro Profile specific to each institution, which takes into account the exposures of the bank to different systems. We would then review the impact of any change on the initial Baseline Credit Assessment (BCA) scores, after which a rating committee might review and, when appropriate, modify the BCA for each bank with exposure to that banking system.

Under the proposed methodology, how will the Macro Profile for a bank with exposures in different countries be determined?

For a bank with exposures in more than one country, we take the average of the Macro Profiles of all of the countries in which the bank operates, weighted in proportion to the most relevant risk metric (see page 37 of the RFC). This will typically be by risk-weighted assets (RWAs) or exposure at default, but could also take into account other relevant metrics such as revenues if they are a better representation of risk.

How would you treat exposures spread across a broad region?

If exposure data is available by region (e.g., the EU or Asia Pacific), we would weigh the exposures to the region by the average of the Macro Profiles for the specific region, weighted by GDP.

Baseline Credit Assessment – Financial Factors

Why would the proposed methodology no longer capture franchise value in the scorecard? A strong franchise leads to stronger returns, which should improve creditworthiness.

Franchise value as measured by market share was a poor indicator of the probability of failure in the financial crisis. Although this may not always be the case, we decided not to emphasize this factor in our proposed new scorecard. Our proposed profitability metric generally reflects how the franchise value enhances returns. We could further adjust the profitability metric upwards when it doesn't fully convey the quality of returns because of a strong franchise.

How would the proposed methodology take into account the difference in how different banking systems calculate problem loans?

There is no known way of calculating problem loans in a fully consistent fashion, because legal practices, audit standards and impairment recognition vary considerably by system and by bank. Our standard adjustments[1] are an attempt to provide as much consistency as possible. Beyond this, we account for other differences through qualitative adjustments to the asset quality score, based on our experience and judgment (see page 42 of the RFC).

Why doesn't the proposed methodology take into account collateral and provisions in the problem loan ratio?

In our research, we've found the gross problem loan ratio to be predictive of failure. Although collateral and reserves are important, a problem loan ratio net of these items can be misleading because it will often be very low or even negative, masking the sensitivity of earnings to a slight deterioration in the stock of gross problem loans. In addition, collateral data is often unavailable, and reserve needs depend highly on the type of collateral, further complicating comparisons. As such, we believe the gross problem loan ratio to be a superior starting point for our asset quality score, which takes into account gross risk.

However, we would also consider mitigants to gross risks in our solvency analysis. Specifically, we may recognize loan loss reserves in our capital score, as we discuss on page 49 of the RFC.

[1] For more information on our standard adjustments, see Financial Statement Adjustments in the Analysis of Financial Institutions.

Why doesn't the proposed methodology use Common Equity Tier 1 instead of tangible common equity in your proposed measure of capital?

We think Common Equity Tier 1 (CET1) is a good measure of solvency; it has the advantage of being the key regulatory measure, which therefore tells us something about regulatory intervention. However, because of national discretion and regulatory filters, we do not yet believe that it's calculated in the same way globally, nor is it published by all banks or available from financial statements.

Our proposed measure of tangible common equity (TCE), which is universally available, is reasonably close to CET1 (common equity minus intangibles, etc.), and we believe it is broadly consistent. We could switch to using a CET1 measure if it becomes universally and consistently available.

How does the proposed methodology take into account differences in the calculation of risk-weighted assets (RWAs)?

We would continue to use regulatory RWAs (subject to standard adjustments) in our capital metric because we believe that these assets correlate broadly with risk and that regulatory intervention – and hence failure – will likely be triggered by regulatory capital measures (see page 46 of the RFC).

Beyond this, the proposed methodology would take into consideration in our assigned capital score our view of economic capitalisation through an assessment of nominal leverage. In this way, we could increase the capital score of institutions with prudently high risk-weightings and reduce the capital score of banks with excessively low risk-weightings. We may also consider, in our forward-looking assessment of the capital metric, the likely evolution of the capital metric, which corresponds to our own view of the economic risk on a bank's assets.

Why would the proposed methodology use a nominal measure (tangible assets) instead of RWAs in the profitability metric?

We propose to use this measure because we found it to be predictive of failure. Further, we do not wish to over-emphasize the role of RWAs in our scorecard – already captured in our capital metric – given the material differences that arise in risk-weighting, which we have already discussed. However, if an institution has low but very stable returns, we might adjust the profitability score upwards, as we discuss on page 50 of the RFC.

Loss Given Failure (LGF)

How does the proposed methodology approach equity credit?

We are specifically seeking feedback on the issue of equity credit (see page 7 of the RFC). In the meantime, the approach we have set out would indeed change our approach to equity credit from our current practice. We would classify non-common-equity capital instruments (i.e., hybrids) into two types – those that absorb losses before a failure (essentially, high-trigger contingent capital instruments) and those that absorb losses in the event of a failure (essentially, so-called point of non-viability instruments). Because the first type absorbs losses *before* a failure, it reduces the probability of failure and therefore should benefit the BCA. As such, we propose to include these instruments in our TCE measure in addition to common equity (see page 46 of the RFC). For banks subject to operational resolution regimes, we would consider the second type of instrument, which only provides material loss absorption in the actual event of failure, in our Loss Given Failure analysis, in accordance with the sequence in which losses are attributed to the instruments.

For banks not subject to operational resolution regimes, we would give no consideration to such point of non-viability instruments, since we don't conduct the more advanced LGF analysis. This reflects our view that these instruments don't materially reduce either the probability of failure or the risk to the more senior investors. For these systems, we would expect banks to be resolved either through bail-out; an ad-hoc resolution, for which the benefit of such securities is hard to predict because of the lack of legislation; or through liquidation, in which case, we could expect much higher losses – which would equally erode their benefit.

We welcome feedback on this question in particular.

Moody's appears to be encouraging banks to gear up their capital base. You appear to give more credit to a senior debt rating for an extra unit of capital under the LGF framework than in the TCE calculation in the BCA.

Our BCA and LGF frameworks would address two of the different elements that make up our bank credit ratings. The standalone BCA would address the probability of failure and would be adversely impacted by higher leverage levels. The new LGF component would assess the protection against, or the exposure to, loss of different creditors in the event of failure, for those banks subject to operational resolution regimes. Our proposed BCA framework has five fundamental factors, of which capital is the most important and which we weight 25% (versus 8% in the current scorecard). This means that the capital score has to decline four notches to affect the BCA by one notch, simply because we also accord the other factors (asset quality, profitability, liquidity and funding) their due.

LGF, on the other hand, is a *post*-failure framework – by this stage in the analysis, we would assume that the bank has failed and the only considerations are the amount of both the capital shortfall and the liability "waterfall," i.e., the amounts of the different instrument classes and thus the expected loss incurred on them.

However, we do not believe that senior debt ratings would benefit from a more geared capital structure. As an institution reduces equity capital in favour of an equivalent amount of subordinated debt, the BCA would decline at approximately the same rate as the gain under LGF in response to the higher post-failure cushion. Moreover, our BCA capital metric is *risk-weighted*, while the benefit of hybrids under our LGF framework would be based on their contribution to *nominal* liabilities. This means that, in general, the BCA would decline faster than the positive benefit under LGF, because a reduction of 1 percentage point of TCE/RWAs in favour of an equivalent amount of hybrids in general creates a smaller increase as a percentage of liabilities, since most banks' RWAs are lower than their total assets. Finally, our RFC notes that we would seek to lower our capital score in response to its proximity to regulatory minima, and hence the risk of resolution and failure. This means that we could reduce the capital score at a faster rate than the metric itself implies, which could result in a net negative impact on senior debt ratings from higher capital gearing.

Why does the proposed methodology use loss rates of 8% and 13% as well as 5% and 10%?

We outline our reasoning for this in Appendix 7 of the RFC. We take a broad view that, at the point of failure, a bank has regulatory capital broadly in line with minimum requirements. We assume that this is equivalent to tangible common equity of about 3% of liabilities, which is consistent with a CET1 / RWA ratio of 5.125% (the minimum trigger level for loss absorbency at the point of non-viability under Basel III) and a risk-weighting of total assets of about 60%.

Given the 3% residual equity at failure, a loss equivalent to 5% of total liabilities is equal to a total loss of 8% of assets, assuming that equity is written down before liabilities. Similarly, the loss rate of 10% of total liabilities is equivalent to a loss of 13% of total assets.

Why does the proposed methodology assume the same equity at failure for all institutions?

Obviously, residual capital is likely to differ by bank. However, our BCA takes into account the different starting capital ratios of different banks, because it seems reasonable to assume that banks with higher capital ratios are less likely to fail than banks with lower capital ratios. Assuming that two banks with a 2 percentage point difference in their capital ratios today would have the same 2 percentage point difference at failure would imply that the difference in capitalisation would not affect the probability of failure of each bank, only its loss given failure. So, even though failure might be remote in this case, we believe it's reasonable to assume a failure equity ratio common to all banks. If, however, a bank close to failure or already failing had a capital ratio higher than this, we may modify our loss assumptions accordingly.

But why doesn't the proposed methodology have different loss rates for different institutions?

We describe two main loss rates in the RFC, 5% and 10% of liabilities, which reflect our view that banks with "weak" or "very weak" Macro Profiles would have higher loss rates in failure than those with moderate or better Macro Profiles. We also believe that liquidation-style resolution, for example, under Title I of the Dodd-Frank Act, will result in higher losses than under a "going concern" resolution.

Other factors could also influence the loss rate at failure. For instance, a bank that fails and enters resolution because of a lack of liquidity might do so with a large amount of capital, and therefore low or no resulting losses for creditors, just as a bank with certain high-risk assets could incur higher losses than other banks. But we believe that these considerations are already adequately reflected in our BCA and should not necessarily be repeated in our LGF analysis.

It is also important to note, as Appendix 7 of the RFC describes, that these loss rates are *means*, with a distribution of possible loss rates, all the way from 0% to 100% of assets, of these means. So a loss of less than 3% of assets (or 2%, 1% or even 0%) is possible. When we express this as a percentage of liabilities, we incorporate the possibility of a negative LGF, i.e., the possibility that losses will be fully absorbed within equity, which Exhibit 43 on page 113 of the RFC shows.

Hence, our estimates incorporate the possibility of positive equity, which is positive for bondholders, because our modelling assumes that in some scenarios they will achieve full recoveries (for example, by receiving equity of equivalent value to the capital forfeited). At the same time, they also incorporate the possibility of much higher than average losses.

As such, we believe that our initial loss estimates of 5% and 10% of total liabilities convey a reasonable range of expectations.

However, when a bank is close to resolution and there is greater clarity over the actual likely loss rate, we may deviate from these estimates. Similarly, as more countries move to operational resolution regimes, as we expect will happen over time, and we apply this analysis to more banks, we could apply different loss rates. For more details, please see page 74 of the RFC.

Why would the proposed methodology use a de facto scenario in LGF that doesn't follow the legal hierarchy?

The de facto scenario recognizes that the EU's Bank Recovery and Resolution Directive allows for certain instruments to be excluded from bail-in, subject to certain conditions. We believe that the most likely interpretation of this is the exclusion of junior deposits, which would in effect render them preferred to senior unsecured debt. We are seeking feedback on this approach in particular; see page 7 of the RFC.

Why under LGF does the proposed methodology notch an instrument up to three notches above the BCA but only one notch below the BCA?

The Adjusted BCA conveys our view of the *probability* of failure and resolution (after "affiliate support"). By contrast, our ratings convey our view of *expected loss* (EL). A rating at the same level as the Adjusted BCA means that, statistically speaking, the EL is about half the probability of failure (between 44% and 69% to be exact, and on average 55%), which represents a "normal" loss given failure rate.

Meanwhile, the assumed statistical difference between notches on our rating scale is 1.61, a relationship based on our long-term historical experience. In other words, the EL increases by 61% for every notch decrease in rating, 159% (1.61 times 1.61) for two notches, and so on. Similarly, the EL decreases by 39% (1 minus 61%) for a notch increase in rating, 63% for two notches, and so on.

We assume that the worst case for an investor is that, in resolution, an instrument is fully written down, i.e., incurs a 100% loss, which is just under twice the "normal" loss rate of 55%. In rating terms, this is equivalent to a notch below the Adjusted BCA. It can't be notched more than one notch below the Adjusted BCA, because that would imply a loss rate of over 100%. We therefore only notch below Adjusted BCA-1 when the specific instrument's probability of default is higher than the bank's probability of failure – which is the case for certain hybrid instruments (see pp 78-85 of the RFC).

However, the same isn't true in the upward direction, since the expected loss on an individual instrument can halve, and then halve again and again, conceivably forever, as losses decline towards zero. In rating terms, this means that an instrument could be rated far higher than the Adjusted BCA, given adequate protection and a given amount of loss. We limit the uplift to three notches because we believe that extremely low expected loss-given-failure rates are unrealistic owing to potential violations of priority of claim and uncertainty about how regulators will treat such claims during the resolution period.

Together, these assumptions result in a range under our LGF analysis of Adjusted BCA -1 to Adjusted BCA +3.

Government Support

How would the potential change in systemic support assumptions for European banks affect ratings? Would the two proposals cause volatility in ratings?

The timing and outcome of our reassessment of systemic support is uncertain – this is an evolving credit issue, *not* a methodological one. We will therefore continue to assess the implications of the Bank Recovery and Resolution Directive and the Single Resolution Mechanism on systemic support under our existing methodology, as the new frameworks develop and we arrive at a better understanding of how they might be applied in practice.

Meanwhile, although we intend to finalize our bank methodology in early 2015, we don't at this stage know how long this process will take, since the request for comment period remains open until 7 November. As such, we can't know if the methodology will be finalized contemporaneously with the potential change in government support assumptions for the European banks. That being said, we understand that the users of our ratings appreciate ratings stability and don't appreciate rating volatility or rating reversals.

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