MOODY'S
INVESTORS SERVICE

MARCH 2015

Bank Rating Methodology: Analytical Approach In Brief

How do we assess a bank's creditworthiness and assign ratings?

We combine the following points, stage-by-stage, to generate ratings for each debt/creditor class:

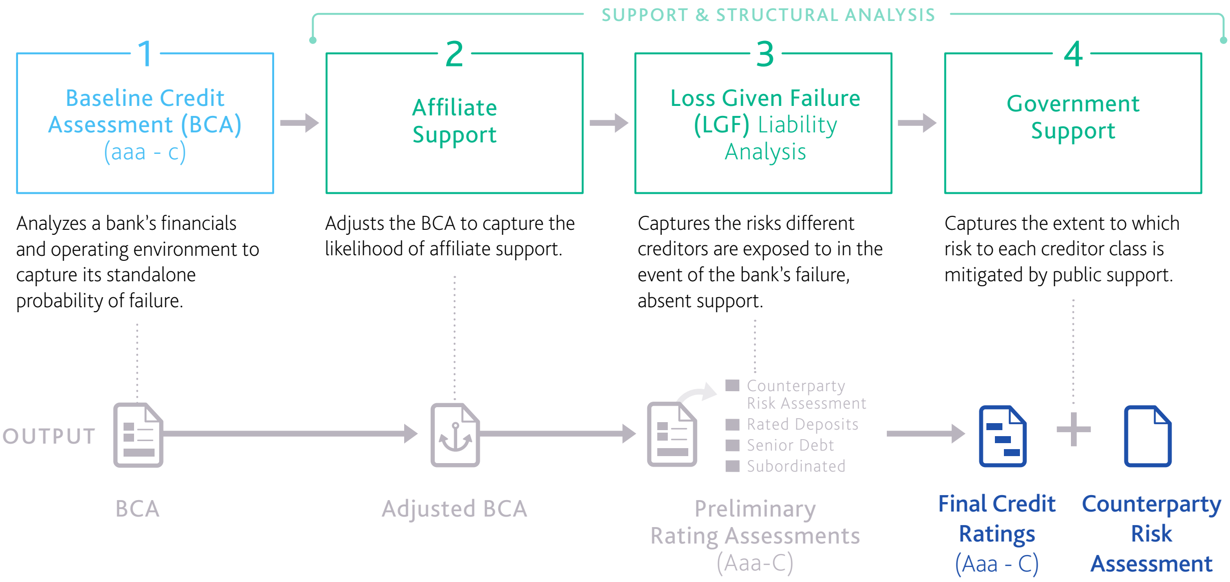
» Our assessment of a bank's standalone creditworthiness results in a **baseline credit assessment (BCA)**. The BCA represents our opinion regarding the bank's probability of standalone failure in the absence of external support

» We then incorporate an assessment of support from affiliates to determine our **Adjusted BCA**. At this stage in our analysis, "affiliates" refers to a parent, group or co-operative structure, for example

» A **"Loss Given Failure" (LGF) analysis** follows. This assesses the impact of the bank's failure on the expected loss of each creditor class in response to different forms of expected resolution, firm-wide loss rates and liability structure. We use this together with additional notching relating to other risks, to arrive at our **preliminary rating assessment (PRA)** for each rated instrument

» Finally, we conduct an appraisal of the potential for government support being provided if needed, specific to each instrument class, to determine the **final credit rating** for **each rated instrument** as well as our **Counterparty Risk Assessment**

ASSIGNING BANK CREDIT RATINGS - GRAPHICAL REPRESENTATION:



How do we arrive at the BCA?

Our BCA analysis involves three main components:

» Macro Profile

» Financial Factors (which combine with the Macro Profile to produce the Financial Profile)

» Qualitative Factors

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MACRO PROFILE

We begin our analysis with an assessment of the system-wide factors that we believe are predictive of the propensity of banks to fail. This is based upon the following six key elements:

- Economic strength
- Institutional strength
- Susceptibility to event risk
- Credit conditions
- Funding conditions
- Industry structure

FINANCIAL PROFILE

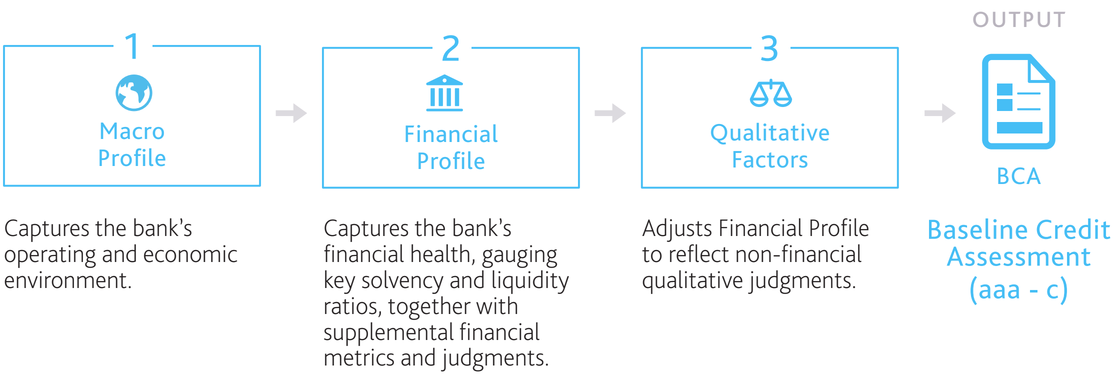
Financial institutions specialize in risk and maturity transformation, creating risk for the institution itself. The intrinsic strength of a bank, therefore, depends principally on the extent of the transformation undertaken and the risk mitigants. Consistent with this, our approach to determining a bank's absolute and relative financial strength centers on its solvency and its liquidity. Solvency can be seen as the combination of asset risk, capital and profitability, while liquidity is determined by a bank's funding profile together with its ability to access liquid resources.

QUALITATIVE FACTORS

We have identified three additional factors beyond those considered in the Financial Profile that are important qualitative contributors to the BCA:

- Business diversification: the breadth of a bank's business activities
- Opacity and complexity: the extent to which a bank's inherent complexity may heighten management challenges and the risk of strategic errors
- Corporate behaviour: whether a bank's strategy/management/corporate policies may reduce or increase its overall risk profile

ARRIVING AT THE BCA - GRAPHICAL REPRESENTATION:



LGF analysis

LGF considers the impact of the failure of the bank – any affiliate support having been either denied or exhausted – on its various debt classes, in the absence of any government support. This assessment relates to loss severity that we term "Loss Given Failure" – an approach conceptually very similar to a classic loss given default analysis that we use to rate certain corporate debt, but triggered by the failure of a bank, and not necessarily its default. This approach allows us to recognize the different implications of likely resolution scenarios for particular banks, for each class of debt as well as deposits.

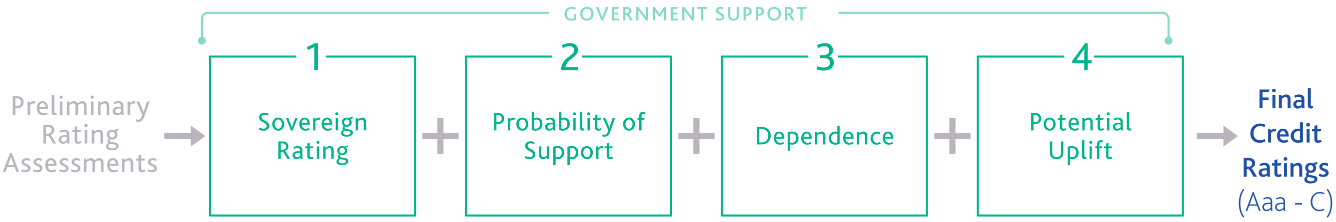
THERE ARE TWO TYPES OF LGF ANALYSIS – BASIC LGF AND ADVANCED LGF:

The **basic LGF analysis** applies to banks that are not subject to operational resolution regimes. Senior unsecured debt and deposits are positioned at the level of the adjusted BCA, before government support and additional coupon-related notching considerations. Subordinated instruments are positioned at one notch below the adjusted BCA, excluding support and additional notching, reflecting increased loss severity.

The **advanced LGF analysis** applies to banks that are subject to operational resolution regimes. In these cases Moody's bases its notching on (1) the likely bank-wide loss rate in failure; (2) the amount of subordination below a given instrument class; and (3) the volume of a given instrument class itself. Together, these allow a more refined and predictive view of expected loss of each instrument class under new resolution regimes.

Assigning Government Support

The final stage in our bank analysis is determining Government Support. Through this process we are determining the extent to which risks to creditors are mitigated by public support.



OUR APPROACH

Our approach to Government Support is similar to that for determining support from an Affiliate in that we use the same approach, employing Joint Default Analysis, based on the following inputs:

- » The unsupported creditworthiness of each debt class
- » The probability of public sector support being provided to a given debt class
- » Its capacity to provide support
- » The dependence, or correlation, between support provider and bank

WHAT DO WE ASSESS?

We assess the probability that a public body will support an institution according to one of five categories, "Government Backed", "Very High", "High", "Moderate", and "Low" through analyzing:

- » Public policy and presence of developed operational resolution regimes
- » Market share of deposits
- » Market impact
- » Nature of the activity
- » Public involvement

These factors inform our judgment about the level of support willingness for each major debt class, not just for the bank as a whole. The Rating Committee may then employ its judgment of the specific circumstances in question to assign a given number of notches of support or deviate in either direction from this guidance to reflect idiosyncratic situations.

Counterparty Risk Assessment

WHAT IS THE COUNTERPARTY RISK ASSESSMENT?

- » It represents our opinion of the relative likelihood of default of various senior operating obligations and other contractual commitments that are less likely to be subject to bail-in, or the application of other resolution tools, to ensure the continuity of operations
- » It is distinct from debt, deposit or issuer ratings in that:
  - » It measures default probability rather than expected loss
  - » It applies to counterparty obligations and contractual commitments, which may be preserved even when a bank has entered a resolution process, rather than debt or deposit instruments
- » It is positioned relative to the adjusted BCA, which is also a measure of default probability and our opinion of issuers' standalone intrinsic strength, absent any extraordinary support from a government

SYMBOL AND SCOPE

Counterparty risk assessments are expressed with a (cr) indicator using an alpha-numeric scale, which corresponds to the alpha-numeric ratings of the global long-term rating scale. Example: Baa2 (cr).

The Counterparty Risk Assessments can be assigned to any entity rated under the bank methodology and potentially holding companies, or those rated under other financial institutions group methodologies, including securities firms or finance companies if we believe the regulator will have the ability and motivation to preserve operations in the event of failure.

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