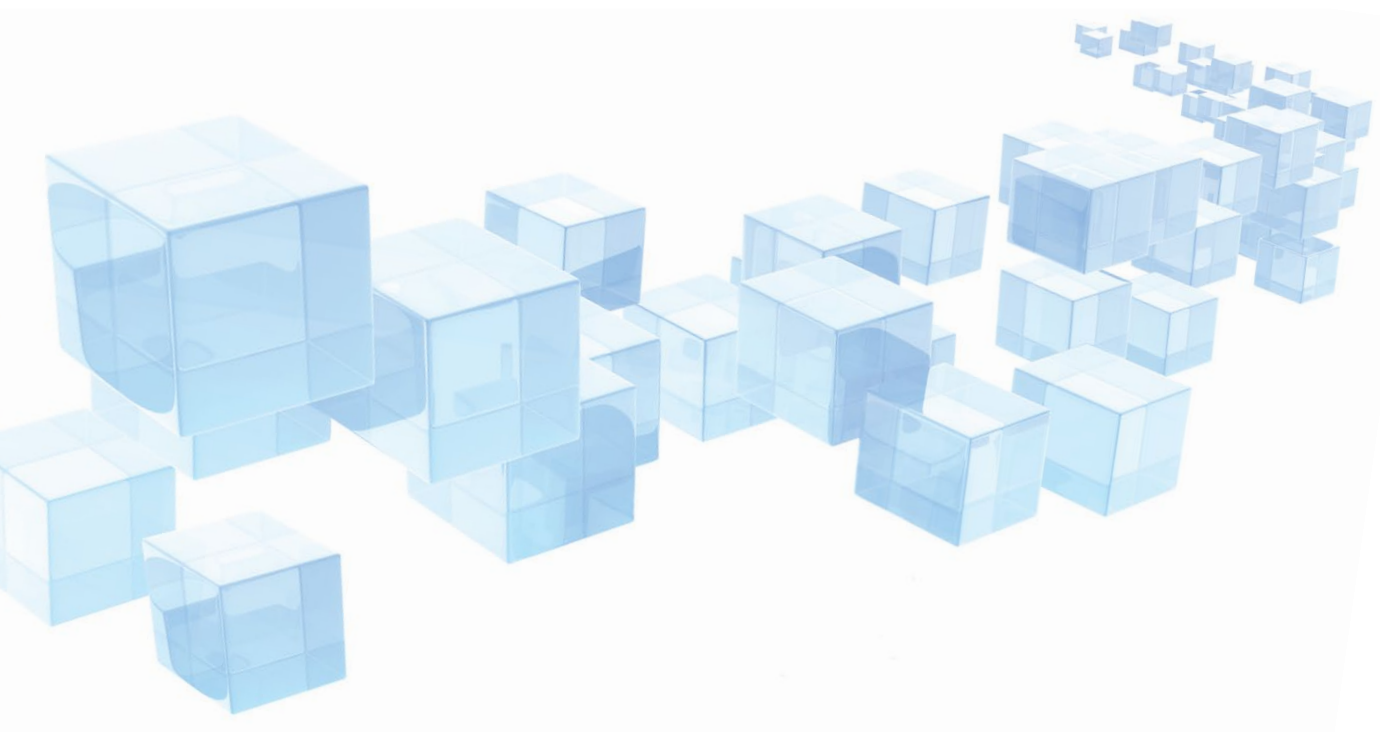


Measuring Transfer & Convertibility Risk

October 13, 2017



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Outline

- A. Transfer and Convertibility Risk (T&C Risk)
- B. The Evaluation Process
- C. Special Cases
- D. Monitoring
- E. Applying T&C Ceilings

The following criteria procedure should be read in conjunction with *Best's Credit Rating Methodology (BCRM)* and all other BCRM-associated criteria procedures. The BCRM provides a comprehensive explanation of AM Best's rating process.

A. Transfer and Convertibility Risk (T&C Risk)

AM Best defines Transfer and Convertibility risk (T&C risk) as the risk that government-imposed capital and exchange controls by a sovereign entity would prevent or materially impede the ability to convert local currency into foreign currency and/or transfer funds to nonresident creditors. T&C ceilings are always equal to or higher than a country's sovereign rating. All else being equal, a country with a lower sovereign rating (i.e. a higher probability of default) will have higher T&C risk. However, the likelihood of a country implementing capital and exchange controls in a default scenario depends on the disposition of the government and the political situation.

AM Best determines the T&C risk for each country in which an AM Best-rated entity is present. The final result of this risk analysis is a T&C ceiling on the credit rating scale; this ceiling is applied to holding company ratings and Issue Credit Ratings (debt ratings). Furthermore, the application of T&C risk ceilings is separate and distinct from the application of country risk in the rating process.

B. The Evaluation Process

Evaluating a Sovereign

The first step in estimating T&C risk is measuring the creditworthiness of a sovereign. AM Best does not assign credit ratings to sovereign entities. As such, for purposes of developing T&C ceilings, AM Best evaluates the sovereign using publicly available information, including third-party assessments and ratings.

If a country's sovereign debt is rated by other major credit rating agencies, AM Best relies on an equal-weighted average of these ratings. If only one agency rates the country, then that one agency's rating is used.

If other major credit rating agencies do not rate a country's sovereign debt, AM Best evaluates a country's creditworthiness and develops an internal sovereign rating estimation, that encompasses an in depth look at a country's debt and deficit positions.



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If there is insufficient information available to determine the creditworthiness of a sovereign, then AM Best will not make a T&C determination and, therefore, will not assign a rating to a holding company or debt issuance in that country.

Components of the T&C Score

Once a country's sovereign rating is established, AM Best evaluates the likelihood of the country implementing currency controls if it were faced with default. To estimate this risk, AM Best applies a quantitative assessment to provide a baseline score of the T&C risk and then conducts qualitative analysis to determine the final T&C risk evaluation.

The quantitative assessment is a weighted average of four factors that comprise the level of T&C risk in a country. **Exhibit B.1** details the quantitative assessment equation used to estimate the probability of a country implementing T&C controls.

Exhibit B.1: T&C Assessment Equation

$$\sqrt{((\omega_1(CONT^2)) + (\omega_2(GLOB^2)) + (\omega_3(RL^2)) + (\omega_4(INF^2)))}$$

Where:

CONT = Degree of capital and trade controls

GLOB = Integration in world economy

RL = Rule of law

INF = Price controls and stability

ω = Weight applied to each component

For clarity the ω symbols sum to one

The four components of the calculation in **Exhibit B.1** are described in the following sections.

Degree of Capital and Trade Controls

The first category measures the degree to which the government currently uses capital, exchange, and/or trade controls in its economy. This measure indicates the government's tendency to intervene in the economy. If a country already uses capital controls, it is likely that if faced with a default, it would increase restrictive controls. The indicators used in this category include the freedom to invest in financial assets, short- and long-term financial transaction risk, and the extent of current trade barriers and exchange controls.

Integration in World Economy

The second category measures the degree to which a country is integrated into the global economy. A sovereign more integrated into the global economy—for instance, through membership in international organizations and reliance on trade—would experience higher costs in implementing capital and exchange controls. For an integrated sovereign, the increased cost of these policies reduce the probability that the government would use such controls. The indicators used in this category

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include number of memberships in world organizations, the government's attitude toward globalization, and the relative importance of import markets in the country's economy.

Rule of Law

The third category measures the strength and soundness of the rule of law in a country. Fundamental respect for property rights and investor rights abates the likelihood that a sovereign would impede its currency from being transferred or converted. Indicators used in this category include investors' rights, property rights, and the degree of corruption.

Price Controls and Stability

The fourth category measures both the degree to which a sovereign uses price controls and how susceptible a country is to bouts of high inflation. Price controls and high inflationary periods indicate a government's willingness to use the price level to generate desired political outcomes. Indicators used in this category include historical perspective on periods of high consumer price inflation and the degree to which the sovereign uses price controls.

Arriving at the Final T&C Score

Each category of risk is scored, squared, and summed using a weighted average (see **Exhibit B.1**). The result of this calculation is a score between 1 and 5. A score of 5 denotes the highest likelihood that a country would institute these restrictive capital controls in the event of default. At the other end of the spectrum, a score of 1 denotes the least likelihood that a country would institute these controls.

The score of 1 through 5 provides a baseline for the adjustment to the sovereign rating. After running the quantitative assessment, the results are evaluated and a final determination is made. The final result reflects an adjustment to the sovereign rating of between 0 notches and 3 notches.

- 0-notch increase implies: A very high likelihood that, given default, a sovereign will implement restrictive controls.
- 1-notch increase implies: A high likelihood that, given default, a sovereign will implement restrictive controls.
- 2-notch increase implies: A moderate likelihood that, given default, a sovereign will implement restrictive controls.
- 3-notch increase implies: The least likelihood that, given default, a sovereign will implement restrictive controls.

C. Special Cases

Certain countries, such as those in monetary unions or those that exclusively adopt another sovereign's currency, do not lend themselves to this standard analysis. These countries are considered special cases and are analyzed separately.

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Monetary Unions

All countries in a monetary union are analyzed collectively and assigned the same T&C ceiling, even if the sovereign ratings and country risk may differ among the member countries. This T&C determination is based on an analysis of the strength and stability of the monetary union and the associated currency. An example of this type of monetary union is the Eurozone.

Using Another Sovereign's Currency

Another special case is a country that uses another sovereign's currency as legal tender in lieu of issuing its own. A country that uses another sovereign's currency is not subject to T&C risk in the traditional sense and therefore the adjustment from the sovereign rating may exceed the standard maximum increase of 3 notches. However, the risk of a disruption to this currency system remains, which will be reflected in the country's T&C ceiling.

D. Monitoring

The T&C risk evaluations are monitored on a regular basis. Changes in a sovereign rating could affect the T&C ceiling assigned, and changes in the political and economic situation could change the number of notches increased. These changes, under normal conditions, are expected to be relatively slow-moving. However, in a period of economic stress, the changes may happen quickly.

E. Applying T&C Ceilings

Insurance Operating Companies

AM Best does not apply T&C ceilings to its Financial Strength Ratings (FSRs), which provide an opinion of an insurance company's ability to meet its ongoing insurance policy and contract obligations. For this, it is assumed that, typically, an insurance company's policyholder claims are denominated in the country's local currency. Thus, there is no transfer or convertibility risk.

T&C ceilings are also not applied to an insurance operating company's Issuer Credit Rating (ICR), which provides an opinion of the rated entity's ability to meet its ongoing financial obligations. Assuming that the senior-most creditors for insurance operating companies are policyholders, the ICR for that entity would remain an evaluation of the insurer's ability to pay local currency obligations. Therefore, it would not be appropriate to use a T&C ceiling on an operating company's ICR.

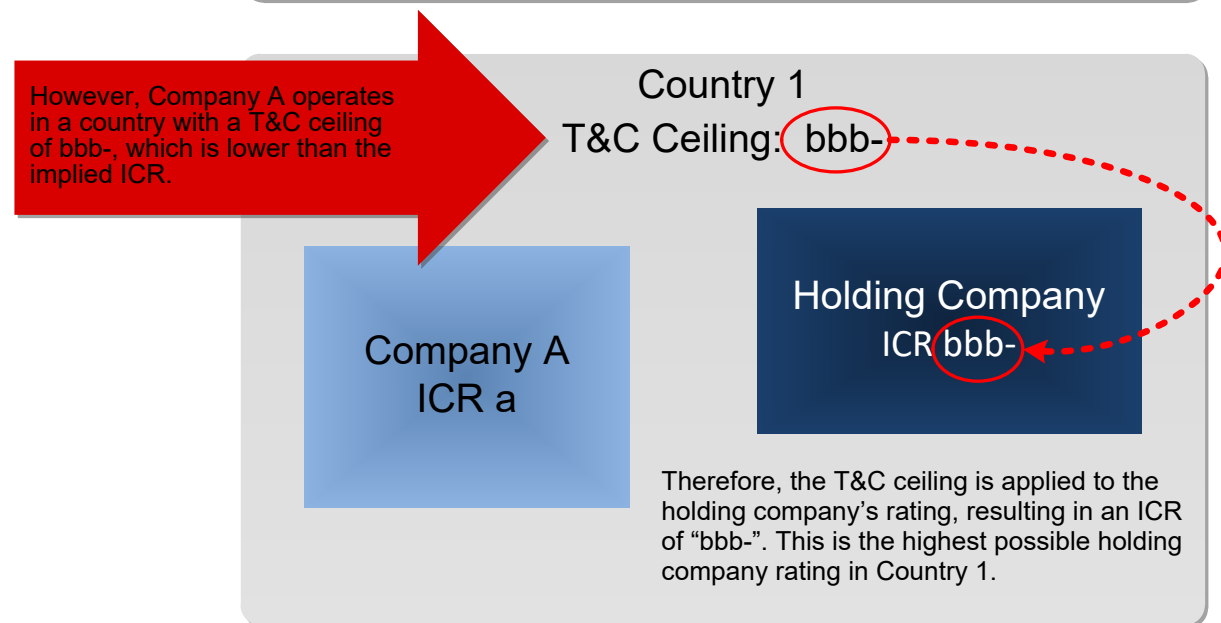
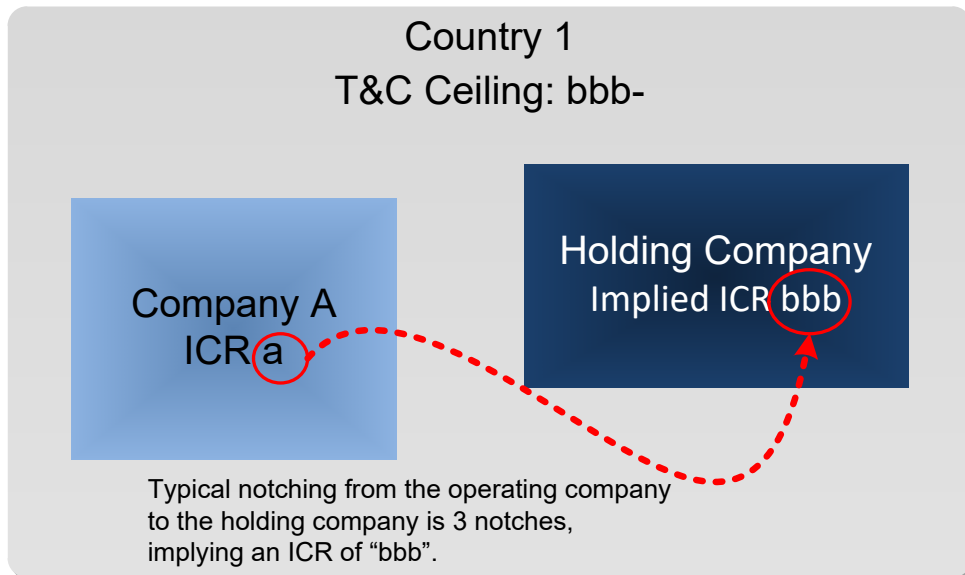
The T&C ceiling does not affect the translation between an insurance operating company's ICR and its FSR.

Note: In some regions, groups are structured with an ultimate parent that is both a holding company and insurance operating company. T&C ceilings are not applied to the ICRs or FSRs of these operating-holding companies.

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Holding Companies

T&C ceilings are applied to ICRs of holding companies. Exhibit E.1 demonstrates the application of a T&C ceiling for a hypothetical holding company domiciled in a country with a T&C ceiling of “bbb-“. Exhibit E.1: Holding Company Rating with a T&C Ceiling

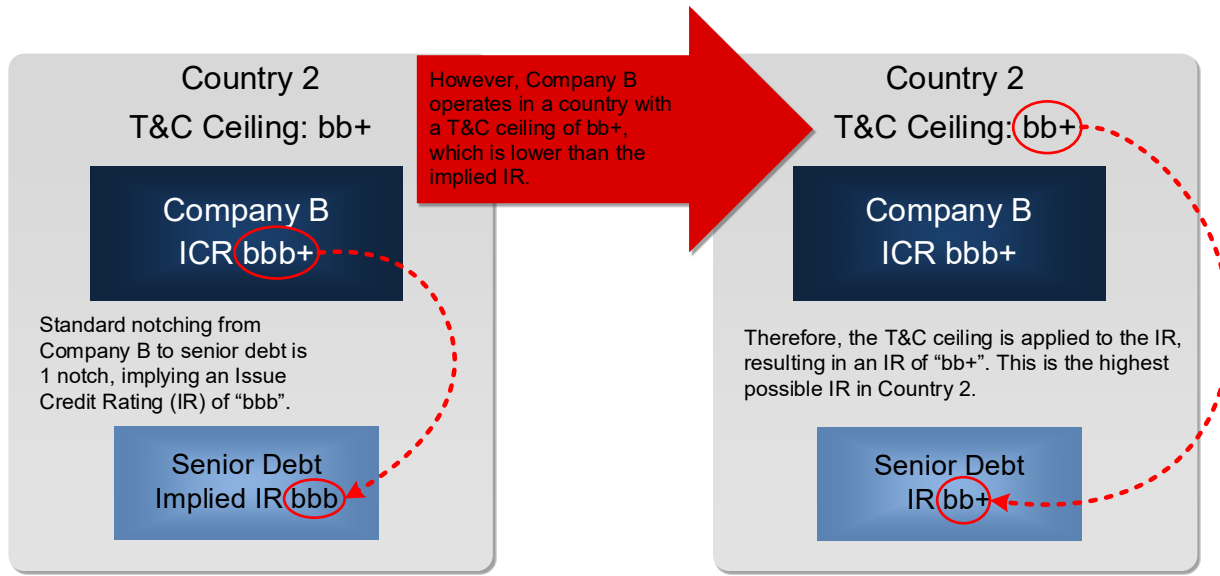


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Issue Credit Ratings (IRs)

T&C ceilings are also applied to AM Best's ratings of debt. **Exhibit E.2** contains an example in which a hypothetical T&C ceiling of “bb+” is applied to the Issue Credit Rating (IR) of an operating company’s senior debt.

Exhibit E.2: Issuer Credit Rating (IR) with a T&C Ceiling



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Best's Financial Strength Rating (FSR): an independent opinion of an insurer's financial strength and ability to meet its ongoing insurance policy and contract obligations. An FSR is not assigned to specific insurance policies or contracts.

Best's Issuer Credit Rating (ICR): an independent opinion of an entity's ability to meet its ongoing financial obligations and can be issued on either a long- or short-term basis.

Best's Issue Credit Rating (IR): an independent opinion of credit quality assigned to issues that gauges the ability to meet the terms of the obligation and can be issued on a long- or short-term basis (obligations with original maturities generally less than one year).

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