

Bond Case Briefs

Municipal Finance Law Since 1971

S&P: What Should the Market Expect from the Rating Process for Catastrophe Bonds?

For the first five months of 2014, Standard & Poor's Ratings Services rated \$3.365 billion of catastrophe bonds (cat bonds). Included in this total is the largest cat bond issued to date, from Everglades Re (please see Everglades Re Ltd., published May 2, 2014, on RatingsDirect). Since 1999, we have rated more than \$53 billion of cat bonds. Cat bonds have and continue to attract capital from new investors. Risk spreads continue to decrease as capital inflows increase. U.S. hurricanes remain the dominant exposure as all but \$300 million of 2014's rated issuance covers losses from this peril. For the first time, we rated a cat bond providing indemnified coverage for losses from typhoons in Japan (see Aozora Re Ltd., published May 30, 2014).

Frequently Asked Questions

Which office will rate a transaction and how does that affect the rating?

We have seven analysts in the U.S and U.K. that can be the lead analyst on a cat bond issuance. Typically, the office that rates a transaction will be the same as the office of the insurance company analyst. For example, Swiss Reinsurance Co. has global exposure, but because Swiss Re's lead company analyst is located in the U.K., a cat bond it sponsored would be rated by a Standard & Poor's U.K. analyst. This is irrespective of the covered peril. A U.K. or U.S. analyst can rate a bond covering losses from hurricanes in the U.S., earthquakes in Japan, or windstorms in Europe. For bonds sponsored by companies where the company analyst is not located in the U.K. or U.S., the analyst of a cat bond could be in either the U.S. or U.K., depending on availability.

The applicable criteria for this asset class does not differ between offices. In almost all cases, analysts from the U.S. and U.K. will participate in a rating committee for a cat bond. Our goal is to apply the criteria consistently regardless of the office or analyst, achieving a similar outcome in every case.

How long does the rating process take?

The time it takes to rate a cat bond generally ranges from three to five weeks, and much of this time overlaps the marketing period of a transaction. The periods are general ranges but the time frame can be shortened if the issuing parties are familiar with the process. We have had a couple of transactions that needed to be completed in a limited period where the 17g5 website was set up in two or three days, the requisite information was promptly posted, and we were able to complete our review and assign a final rating within two weeks.

The ratings on cat bonds are subject to SEC regulation 17g5. Before we begin the analytical process, an engagement letter must be in place between Standard & Poor's and the arranger, following which a secure website must be set up to allow for controlled and confidential sharing of documentation between the deal counterparties and the designated rating agency. Only when a sufficient level of documentation is uploaded to the secure website can ratings analysis commence. This process to establish a secure website and have sufficient levels of documentation made

available typically takes between two and three weeks. As issuers have become familiarized with the process, the time it takes to establish the website has been decreasing.

The typical process is for the underwriters to announce and market a transaction with a preliminary rating and we will assign a final rating by the closing date.

Once we begin the analytical review, we can typically assign a preliminary rating within two to three weeks. The preliminary rating typically involves review of the insurance risk being transferred via the cat bond. If the cat bond has a unique feature (e.g., the attachment point is based on indemnified losses versus previous issues, has a parametric trigger, or the attachment point was based on industry losses or covers a new peril such as flood), it could take more time for us to assign a preliminary rating.

Because cat bonds are subject to 17g5, all information needs to be posted to the transaction's website. We will post any queries to the website as well. If there is a delay in posting information or a response, the time it takes to assign a rating could increase.

The review of the transaction documents takes a similar amount of time (two to three weeks), assuming receipt of blacklined (versus a transaction rated by Standard & Poor's) documents and opinions. The document review is completed with the assistance of Structured Finance analysts to determine if our criteria related to special-purpose vehicles has been met.

Much of the information posted to the 17g5 website for our review is the same as that posted to the investor website.

Please note that all timings are indicative and the actual timing could vary depending on the specific characteristics of each transaction.

What information do you require to rate a natural peril catastrophe bond?

We usually request the following information:

- The risk analysis results from the modeling company including the full aggregate exceedance probability or occurrence exceedance probability curves-whichever is applicable for a given transaction;
- The Offering Circular and the Offering Circular Supplement, if applicable;
- The Risk Analysis prepared by the risk modeling firm to the extent it is not included in the Offering Circular (or supplement);
- All underlying transaction documents (e.g., indenture, series supplement, deed of charge, trust agreement, servicer agreements);
- Legal opinions.

For indemnity deals, we request:

- Information about the underwriting process, the loss-estimation procedures, and the claims settlement processes;
- Information about the data used to generate the modeled results (both in terms of quality and completeness).
- Depending on the specific characteristic of the transaction we might request further information.

What criteria do you use to rate catastrophe bonds?

The applicable criteria is Rating Natural Peril Catastrophe Bonds: Methodology And Assumptions,

which was published Dec. 18, 2013, on RatingsDirect. The article sets forth the analytical process of rating cat bonds. The following is a brief synopsis of the process.

For bonds that have a robust legal structure, our rating is the weak-link (lowest) of three factors (see Assessing Credit Quality By The Weakest Link, published Feb. 13, 2012) subject to ratings caps.

These factors are:

- Our estimate, expressed in symbols from 'aaa' to 'cc', of the likelihood of either a reduction in the bond's principal amount or a reduction in the bond's coupon due to the occurrence of a covered event or events;
- Our rating on the ceding company;
- The collateral risk, based on how the proceeds from the issuance are invested.

Will Standard & Poor's rate a deal in which a company uses its own model?

As set forth in our criteria, we would likely not rate a natural catastrophe bond that used a model generated by a ceding company. However, it is possible for us to rate a transaction where the ceding company did its own modeling using a model from either Risk Management Solutions Inc., EQECAT Inc., or AIR Worldwide Corp. However, this would increase the length of our review because we would have to review each adjustment and assumption made by the ceding company that differed from those that would have been used by the modeling firm, and be comfortable that they have the requisite experience to run the model and complete tasks typically performed by the modeling firm.

How does Standard & Poor's incorporate property catastrophe risk and cat bonds quantitatively in its credit analysis?

Our capital model uses a company's catastrophe-modeled exposures-the exceedance probability curve. We incorporate a tax-adjusted aggregate one-in-250-year property-line-only probable maximum loss (PML) catastrophe capital charge, net of reinsurance and other forms of mitigants (e.g., catastrophe bonds), and net of reinstatement premiums. The PML should also capture the impact of investments in catastrophe bonds. Unless a rating committee believes there is basis risk inherent in the cat bond, the company will typically receive full credit for reinsurance when determining its one-in-250-year property-line-only PML.

There are two premium adjustments. First, we remove risk charges related to catastrophe premiums (or the catastrophe load) to prevent double-counting catastrophe risk. In the absence of catastrophe loading provided by the (re)insurer, we assume a reduction in premium risk charges based on the company's risk profile. The second adjustment is to reduce the net aggregate one-in-250-year modeled loss by 70% of the associated net property catastrophe premiums written (to account for a 30% expense ratio). We make this adjustment because the catastrophe losses would typically relate to current premium writings that reduce the impact of the loss.

This charge is also net of any applicable tax relief because tax-paying (re)insurers receive an income tax benefit from catastrophe losses that mitigates the potential capital impact. To tax-adjust the output, we use the company's effective tax rate. We use the one-in-250-year charge across all rating levels in our capital analysis. In other words, the charge is not scaled for various rating levels. Furthermore, we apply the net aggregate PML property catastrophe charge-based one-in-250-year return period to all rated insurers and reinsurers globally.

Does Standard & Poor's have to maintain an interactive rating on a cedant?

No. Paragraphs 64-68 of the criteria address this question. Examples of cat bonds we've rated but do

not have an interactive rating on the cedant are Metrocat Re (Metropolitan Transportation Authority), Embarcadero Re (California Earthquake Authority), and Tar Heel Re (North Carolina Joint Underwriting Association & North Carolina Insurance Underwriting Association).

When does Standard & Poor's publish its ratings?

We publish a presale article for the preliminary rating and a closing article for the final rating. We publish a presale after a transaction is announced, and publish a closing article after the transaction closes. A rating letter is issued only for a final rating.

Under Standard & Poor's policies, only a Rating Committee can determine a Credit Rating Action (including a Credit Rating change, affirmation or withdrawal, Rating Outlook change, or CreditWatch action). This commentary and its subject matter have not been the subject of Rating Committee action and should not be interpreted as a change to, or affirmation of, a Credit Rating or Rating Outlook.

Primary Credit Analyst: Gary Martucci, New York (1) 212-438-7217;
gary.martucci@standardandpoors.com

Secondary Contact: Maren Josefs, London (44) 20-7176-7050;
maren.josefs@standardandpoors.com

Copyright © 2026 Bond Case Briefs | bondcasebriefs.com