Article Title: ARCHIVE | Criteria | Insurance | Specialty: Clarifying The Framework For Rating Natural Catastrophe Bonds Data: (Editor's note: This criteria article has been superseded by the article titled "Methodology And Assumptions For Rating Natural Catastrophe Bonds," published May 12, 2009.) It has been a rocky past few months for the natural catastrophe (nat cat) bond market, with the failure of Lehman Brothers shaking up investors. In September, Standard & Poor's Ratings Services downgraded four catastrophe bond issues as a result of the bankruptcy filing of Lehman Brothers Holdings Inc. (LBHI). LBHI was the guarantor of Lehman Brothers Special Financing (LBSF), the total return swap (TRS) counterparty for the four downgraded bonds (Ajax Re Ltd. Class A, Carillon Ltd. Class A-1, Newton Re Ltd. Class A 2008-1, and Willow Re Ltd. Class B 2007-1). As a follow-up to these rating actions, we are clarifying our rating methodology regarding the impact of downgraded counterparties in traditional catastrophe bond structures, such as either a TRS counterparty or a ceding insurer. (For the initial framework regarding our ratings methodology for nat cat bonds, see "Framework For Rating Natural Peril Catastrophe Bonds," published July 5, 2007, on RatingsDirect.) Frequently Asked Questions Who are the typical counterparties in a catastrophe bond? Catastrophe bonds typically include a ceding insurer and a TRS counterparty. The ceding insurer reinsures a risk with the bond issuer, and the issuer enters into a TRS with a counterparty. The issuer deposits the bond proceeds into an account to be invested subject to eligibility requirements, and the proceeds are held as collateral for event payments due to the cedent, then for interest and principal payments due to the noteholders. Standard & Poor's usually, but not always, rates these counterparties. Our analysis takes into consideration the underlying risk of either of these parties being downgraded or becoming insolvent and the impact that these events would have on the catastrophe bond ratings. What is the role of the total return swap in catastrophe bond transactions? In a typical catastrophe bond structure, the application of our catastrophe bond rating criteria has focused exclusively on the TRS counterparty rating and not on the underlying investments purchased with the net proceeds of the bond issuance. The purpose of the TRS is to essentially replace market risk associated with holding this collateral and to provide the transaction with cash flow that matches the bond payments and claims payments to the ceding insurer. What is the importance of rating dependency to catastrophe bond rating methodology? Standard & Poor's analysis of catastrophe bond transactions includes an examination of the impact that the downgrade or bankruptcy/regulator control of the counterparties would likely have on the bondholders. In a typical nat cat bond, our rating incorporates the implied rating on the catastrophe risk, the rating on the ceding insurer, and the rating on the TRS counterparty. Assuming the transaction structure is as described above, we typically base the rating on the bond on the lowest of the aforementioned three ratings--which is rarely, if ever, the rating on the TRS counterparty or the ceding insurer. So, for typical nat cat bonds, we usually base our ratings on the catastrophe risk. An example would be a nat cat bond that covers a peril with an implied rating of 'BB', with a ceding insurer rating of 'AA' and a TRS counterparty rating of 'A'. If it is a typical nat cat bond structure, the ceding insurer pays premiums equal to a portion of the interest on the bonds, while the TRS counterparty agrees to pay the remaining interest and to provide a hedge against issuer exposure to market value risk in the event of a shortfall in value of the collateral for the bonds. In this example, applying our rating-dependent methodology would result in a nat cat bond with a rating of 'BB', because we consider the peril as having the greatest likelihood of occurring. What if a counterparty is downgraded? Under this hypothetical scenario for a typical nat cat bond structure, in the event that we downgrade either the TRS counterparty or the ceding insurer, then the rating on the nat cat bond would still reflect the lowest of the three ratings--the implied rating on the natural catastrophe peril, the rating on the ceding insurer, or the rating on the TRS counterparty. In the case of the four nat cat bond ratings that we lowered in September, we initially put each rating on CreditWatch with negative implications. Subsequently, we lowered the ratings, to 'CCC' for Newton Re Ltd.'s Class A 2008-1 notes and to 'CC' for the remaining issues. The lower ratings reflect our view that an interest payment shortfall for each of the underlying transactions was imminent as LBHI filed for bankruptcy. The bonds have not defaulted, so we have not revised the ratings to 'D', although we expect that a payment default will occur in the near future. Are total return swap counterparty replacements incorporated into the ratings? Many swaps have a downgrade trigger, requiring that a downgraded TRS counterparty (usually below 'BBB-') be replaced. Typically, the swap agreement requires the replacement TRS counterparty to have a rating of at least

'A-'. In the case of the four bonds linked to LBSF, if a replacement had been found to assume all of LBSF's responsibilities under the swap, and if this had been done before any interest payments were missed, then we likely would have raised the ratings on the notes back to their pre-LBHI bankruptcy level. However, our rating methodology for nat cat bonds does not assume that such a replacement will be found. What if a ceding insurer is downgraded? As stated above, the rating assigned on a nat cat bond incorporates the rating on the cedent. In most nat cat issues, the ceding insurer makes a quarterly premium payment to the issuer, which is used to pay a portion of the interest on the bonds. The expectation is that if the ceding insurer fails to make a payment, the bonds would no longer be at risk to the covered peril, and the transaction would unwind as set forth in the transaction documents. As a result, the investors may lose the related interest portion on one to two payments. For example, in February 2007, we revised the ratings on Atlantic & Western Re II Ltd.'s Class A and B notes to 'D'. In this instance, the cedent chose not to make the payments, which triggered an early termination. Subsequently, the cedent made all of its required payments, and the noteholders were made whole. (For more details, see "Atlantic & Western Re Ltd.'s Class A And Class B Notes Ratings Revised To 'D'," published Feb. 12, 2007, on RatingsDirect.) What's next for the catastrophe bond market? The failure of Lehman Brothers has shaken the market, and this has contributed to the slowdown of issuance. Key market participants are seeking to identify revised TRS structures that are acceptable from both a commercial and risk perspective. We understand from market participants that issuers and underwriters, with input from investors, are exploring a variety of possible solutions. Key themes are emerging regarding tighter investment restrictions for the collateral, covering areas such as: Quality/type of permitted assets; Minimum liquidity requirements; Maximum permitted duration mismatch; and Overcollateralization. In addition, there is considerable discussion of the marking to market of collateral, with attention on the frequency of review and the ability of the TRS counterparty to post any shortfalls to the collateral account in a timely manner. We have yet to see a catastrophe bond structure that, in our view, has effectively removed counterparty and market value risk. However, we will examine any proposed structural features to determine whether we believe they sufficiently mitigate the counterparty risk in future transactions. When presented with these proposed solutions, we will assess the marginal risk, if any, these bring to the transactions, and we will determine the potential impact on our rating analysis. We will continue to review any proposed changes to the typical nat cat bond structure and, to the extent necessary, will determine whether applying our existing market value criteria is appropriate.