

Article Title: Guidance | Criteria | Insurance | General: Methodology For Calculating The Convexity Risk In U.S. Insurance Risk-Based Capital Model Data: (EDITOR'S NOTE: —On March 24, 2023, we republished this guidance document to update our interest rate scenarios. See the "Revisions And Updates" section for details. ) Overview And Scope Here, S&P; Global Ratings provides additional guidance and transparency for our criteria article, "Methodology For Calculating The Convexity Risk In U.S. Insurance Risk-Based Capital Model," published April 27, 2011. This is intended to be read in conjunction with that criteria. For a further explanation of guidance documents, please see the description at the end of this article. We will use the updated interest rate scenarios to derive convexity risk charges related to options embedded in mortgage-backed securities (MBS), callable corporate bonds, and asset-backed securities collateralized by home equity loans. The methodology for determining our scenarios is described in "Methodology For Calculating The Convexity Risk In U.S. Insurance Risk-Based Capital Model," published April 27, 2011. Key Publication Information Original publication date: March 2, 2018. We expect to update these interest rate shift scenarios periodically. We most recently updated this article on April 14, 2022. The revisions apply only to our assessment of convexity risk for U.S. insurance companies. Guidance Interest rate scenarios These updated interest rate shifts are modeled as of year-end 2022. We use these interest rate scenarios in our risk-based capital model, which is our primary measure of insurer capital adequacy. The model applies different basis-point shifts based on the confidence levels associated with the empirically observed probability of default at the 'BBB', 'A', 'AA', and 'AAA' rating levels (see table). Interest Rate Shift Scenarios SHIFT (BPS) RATING STRESS EQUIVALENT 476 AAA 424 AA 388 A 299 BBB 0 (245) BBB (330) A (364) AA (414) AAA Our interest rate shift scenarios are based on historical movements of the 10-year U.S. Treasury note, which we consider a driver of mortgage rates and the expected prepayments on MBS. Based on the remaining term to maturity of callable bonds across the insurance industry, we also consider it a significant driver of call features. Revisions And Updates On Feb. 6, 2019, we republished this guidance document with updated interest rate shift scenarios. On Sept. 18, 2019, we made nonmaterial changes to the article headline, to align it with the associated criteria. On Feb. 14, 2020, we republished this guidance document to update our interest rate shift scenarios. On Feb. 24, 2021, we republished this guidance document to update our interest rate shift scenarios. On April 14, 2022, we republished this guidance document to update our interest rate shift scenarios. On Feb. 23, 2023, we republished this guidance document to correct the as of date for the interest rate shift scenarios. In addition, we updated contact names. On March 24, 2023, we republished this guidance document to update our interest rate shift scenarios. This article is a guidance document for Criteria (Guidance Document). Guidance Documents are not Criteria, as they do not establish a methodological framework for determining Credit Ratings. Guidance Documents provide guidance on various matters, including: articulating how we may apply specific aspects of Criteria; describing variables or considerations related to Criteria that may change over time; providing additional information on non-fundamental factors that our analysts may consider in the application of Criteria; and/or providing additional guidance on the exercise of analytical judgment under our Criteria. Our analysts consider Guidance Documents as they apply Criteria and exercise analytical judgment in the analysis and determination of Credit Ratings. However, in applying Criteria and the exercise of analytic judgment to a specific issuer or issue, analysts may determine that it is suitable to follow an approach that differs from one described in the Guidance Document. Where appropriate, the rating rationale will highlight that a different approach was taken.