Article Title: ARCHIVE | General Criteria: Revised Minimum Reinvestment Rate Assumptions For Fixed-Rate U.S. Structured Finance And Municipal Housing Bonds Data: (EDITOR'S NOTE: — This criteria article is no longer current. It has been superseded by "Methodology For Revisions To Standard & Poor's Stressed Reinvestment Rate Assumptions For Fixed-Rate U.S. Debt Obligations," published May 20, 2013. We originally published this criteria article on June 7, 2010. We're republishing this article following our periodic review completed on Sept. 5, 2012. This article fully supersedes "S&P; Cuts Minimum Reinvestment Rate Assumptions For U.S. Structured And Muni Housing Bonds," published Oct. 31, 2008.) 1. Standard & Poor's Ratings Services is revising its assumptions for minimum reinvestment interest rates in fixed-rate U.S. structured finance and municipal housing bonds. We are publishing this article to help market participants better understand our approach to reviewing these securities. This article is related to our criteria articles "Principles Of Corporate And Government Ratings," published June 26, 2007, and "Principles-Based Rating Methodology For Global Structured Finance Securities," published May 29, 2007. SCOPE OF THE CRITERIA 2. Standard & Poor's is updating its criteria to reflect our view of continued low market interest rates in the U.S., which prompted us to reevaluate our minimum reinvestment rate assumptions for structured finance and municipal housing bonds. The revisions to our assumptions for these fixed-rate securities resulted from our analysis of three-month U.S. Treasury Bill yields from January 1960 through April 2010. SUMMARY OF CRITERIA UPDATE 3. This article fully supersedes "S&P; Cuts Minimum Reinvestment Rate Assumptions For U.S. Structured And Muni Housing Bonds," published Oct. 31, 2008. 4. We lowered our minimum reinvestment rate assumptions for fixed-rate U.S. structured finance and municipal housing bonds, as shown in table 1. Table 1 Revised Minimum Reinvestment Rate Assumptions (%) YEAR REVISED RATES (%) PREVIOUS RATES (%) 1 0.03 0.50 2 0.25 0.50 3 0.40 0.75 4 0.50 1.00 5 0.65 1.50 6 and beyond 0.75 2.00 IMPACT ON OUTSTANDING RATINGS 5. Standard & Poor's currently has public ratings on 85 housing bonds that rely on market-rate investment earnings to cover debt service payments for the term of the bonds. Because of certain offsetting factors, we do not expect to take rating actions on these outstanding ratings as a result of this criteria change. This criteria change does not affect any outstanding ratings on structured finance securities. EFFECTIVE DATE AND TRANSITION 6. These criteria are effective immediately for all new and outstanding fixed-rate U.S. structured finance and municipal housing bonds. ASSUMPTIONS 7. Standard & Poor's will apply a 0.03% minimum reinvestment rate in its cash flow analysis for the first year, 0.25% in the second year, 0.40% in the third year, 0.50% in the fourth year, 0.65% in the fifth year, and 0.75% thereafter. We will ask for confirmation of actual reinvestment rates at the time the transaction closes. If those rates are lower than our minimum reinvestment rate assumptions, we will base our analysis on the actual rates; we would expect the cash flows we receive from the arranger or issuer to reflect these rates for an initial six-month period and would apply them in our own cash flow runs. 8. We analyzed three-month U.S. T-Bill yield data from January 1960 through April 2010 to arrive at our revised reinvestment rates. We fit (i.e., estimated the parameters of) an autoregressive (AR) model using the monthly change in the T-Bill data series, and subtracting the mean. 9. Using the fitted AR model, we forecast 72 months of reinvestment rates and averaged these according to the year of life of the issue. (Our prior criteria had annual reinvestment rate assumptions that stepped up over the first six years and then remained at a constant level for years six and beyond.) Table 2 shows the results of this analysis and our revised reinvestment rates. Through the first week of May 2010, the average yield on the three-month T-Bill was about 0.15%. We included Standard & Poor's most recent projections for the overnight Federal Funds rate and the three-month T-Bill rate in table 2 (see "Economic Research: U.S. Economic Forecast: A Faster Recovery," published May 13, 2010). Table 2 Analytical Results And Revised Reinvestment Rate Assumptions, With Standard & Poor's Projections YEAR AVERAGE MODEL RESULTS (INTEREST RATES) (%) REVISED REINVESTMENT RATE (%) PRIOR REINVESTMENT RATE (%) PROJECTED O/N FED FUNDS RATE (%) PROJECTED 3-MO. T-BILL (%) 1 0.19 0.03 0.50 0.20 0.30 2 0.32 0.25 0.50 1.60 2.00 3 0.45 0.40 0.75 3.30 3.40 4 0.58 0.50 1.00 3.60 3.70 5 0.70 0.65 1.50 N.A. N.A. 6+ 0.81 0.75 2.00 N.A. N.A. O/N-Overnight. 10. The monthly model results indicated that rates started at about 0.15% during the first monthly period and grew most sharply in the first year; the average rate for the first 12 months was 19 basis points (bps). However, because we apply these results to all rating categories, we believe a conservative set of assumptions that are more stressful than Standard & Poor's three-month T-Bill and overnight Federal Funds rate projections are appropriate. We believe that our revised rate assumptions are consistent with current market conditions and the persistent Federal Funds target rate range of 0.0% to 0.25%. 11. Our minimum reinvestment rate assumptions provide the rate at which we will estimate income from the investment of periodic cash flows if there is no investment contract in place. These funds are invested until they are due to be paid to bondholders. Most transactions we rate have excess funds available to cover variations in investment income; however, we will continue to monitor the impact on of our lower reinvestment rate assumptions on the transactions we rate. RELATED CRITERIA AND RESEARCH "Economic Research: U.S. Economic Forecast: A Faster Recovery," published May 13, 2010. "S&P; Cuts Minimum Reinvestment Rate Assumptions For U.S. Structured And Muni Housing Bonds," published Oct. 31, 2008. 12. These criteria represent the specific application of fundamental principles that define credit risk and ratings opinions. Their use is determined by issuer- or issue-specific attributes as well as Standard & Poor's Ratings Services' assessment of the credit and, if applicable, structural risks for a given issuer or issue rating. Methodology and assumptions may change from time to time as a result of market and economic conditions, issuer- or issue-specific factors, or new empirical evidence that would affect our credit judgment.