

### **Default, Transition, and Recovery:**

# In A Volatile Environment, Ratings Prove To Be A Strong Indicator Of Potential Default

**Global Fixed Income Research:**

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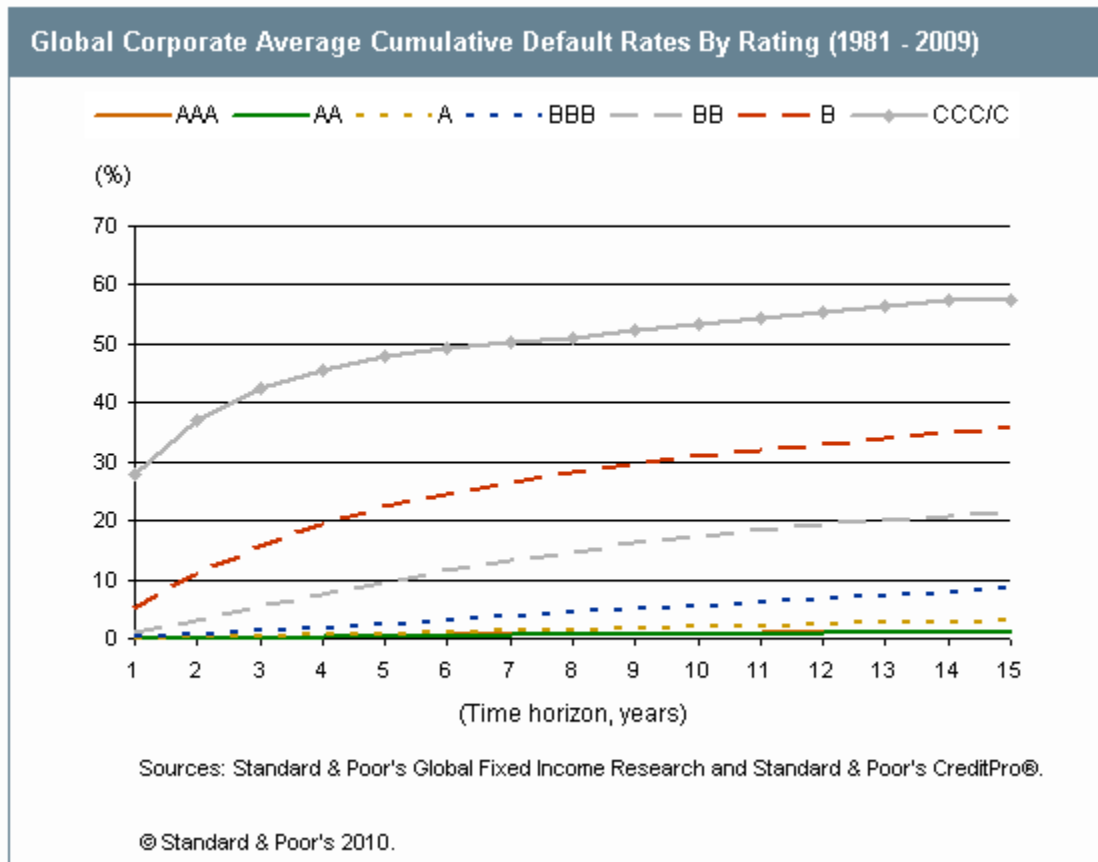
In the following series of questions and answers, Diane Vazza, managing director of Standard & Poor's Global Fixed Income Research Group, discusses ratings as indicators of default in 2009. The issue is of importance to investors because we've come through the year with the highest number and greatest volume of defaults since Standard & Poor's Ratings Services began keeping such records in 1981. Last year, 264 global issuers defaulted on \$627.7 billion in debt. Because ratings assess the likelihood of an issuer making timely repayment of principal and interest, we'd expect that speculative-grade debt would default more often and more quickly than investment-grade issues. Has that been the case? And aside from ratings, how strong an indicator of possible default are Standard & Poor's outlooks and CreditWatch listings? This article, which answers those questions, is part of a monthly series of Q&A sessions that Standard & Poor's conducts with Ms. Vazza, in which she comments on recent trends in, and near-term outlooks for, the global fixed-income markets.

## **Questions And Answers**

### **How strong of an indicator is the rating on an issue?**

All of Standard & Poor's default studies, including our latest on the subject—which covers defaulted issues from 1981 through 2009—have found a clear and consistent correlation between ratings and defaults: the higher the rating, the lower the observed frequency of default. This finding holds true whether we consider ratings as indicators of defaults for a specific issuer that migrates to a higher rating, for a group of issues in a given year, or over an expanded period of time (see Chart 1).

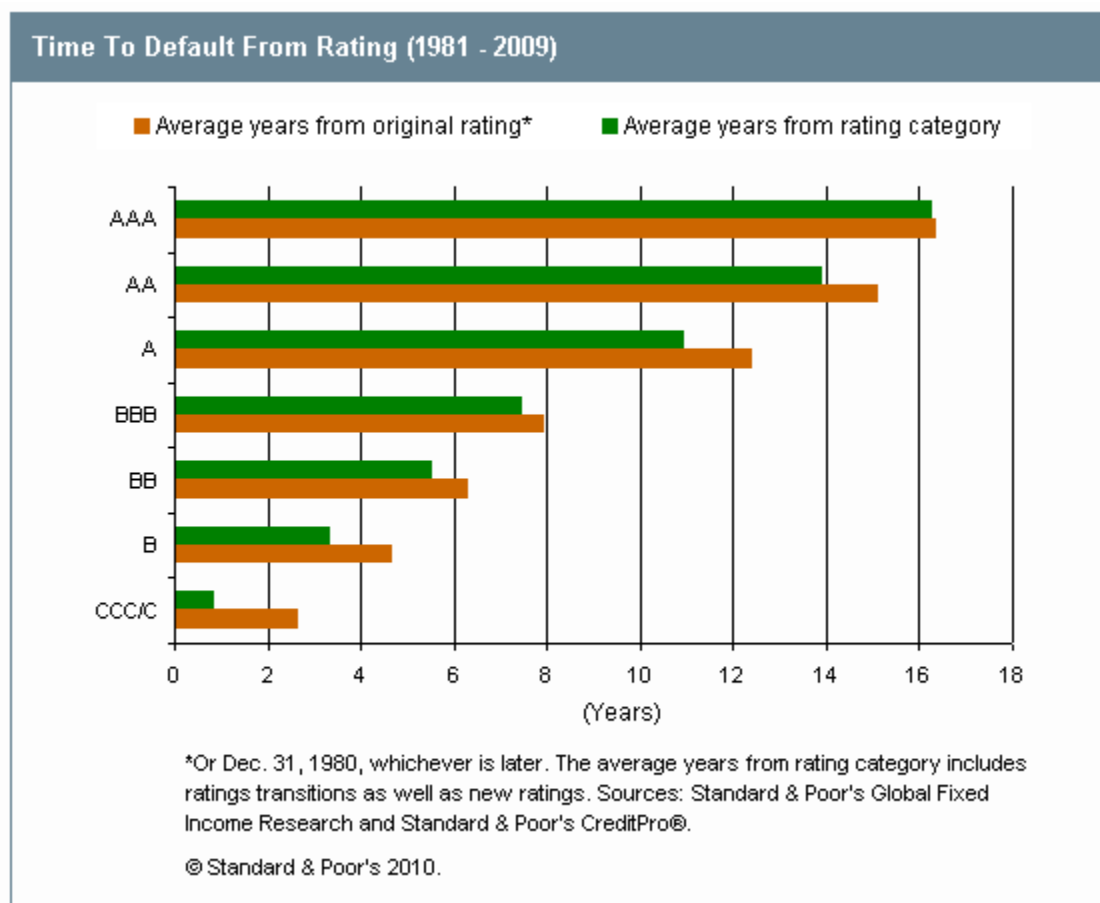
Chart 1



**If speculative-grade issues are more likely to default than investment-grade ones, does that mean that they will also likely default more quickly than investment-grade issues?**

Yes. We found that speculative-grade ratings are usually associated with shorter times to default. For all issues that have defaulted in the years we have examined, it has taken an average of 3.8 years from being assigned a rating until the time of default. That average, however, masks wide differences in various rating categories. Although it took a decade or more for 'A' rated issues that defaulted to fail to meet their obligations, issues rated 'BB' took only 5.5 years to do so, while those in the 'C' category defaulted in less than a year. Moreover, this pattern of lower-rated issuers defaulting more quickly holds whether we look at the number of years from the original rating or the number of years for each specific rating category (see Chart 2).

Chart 2

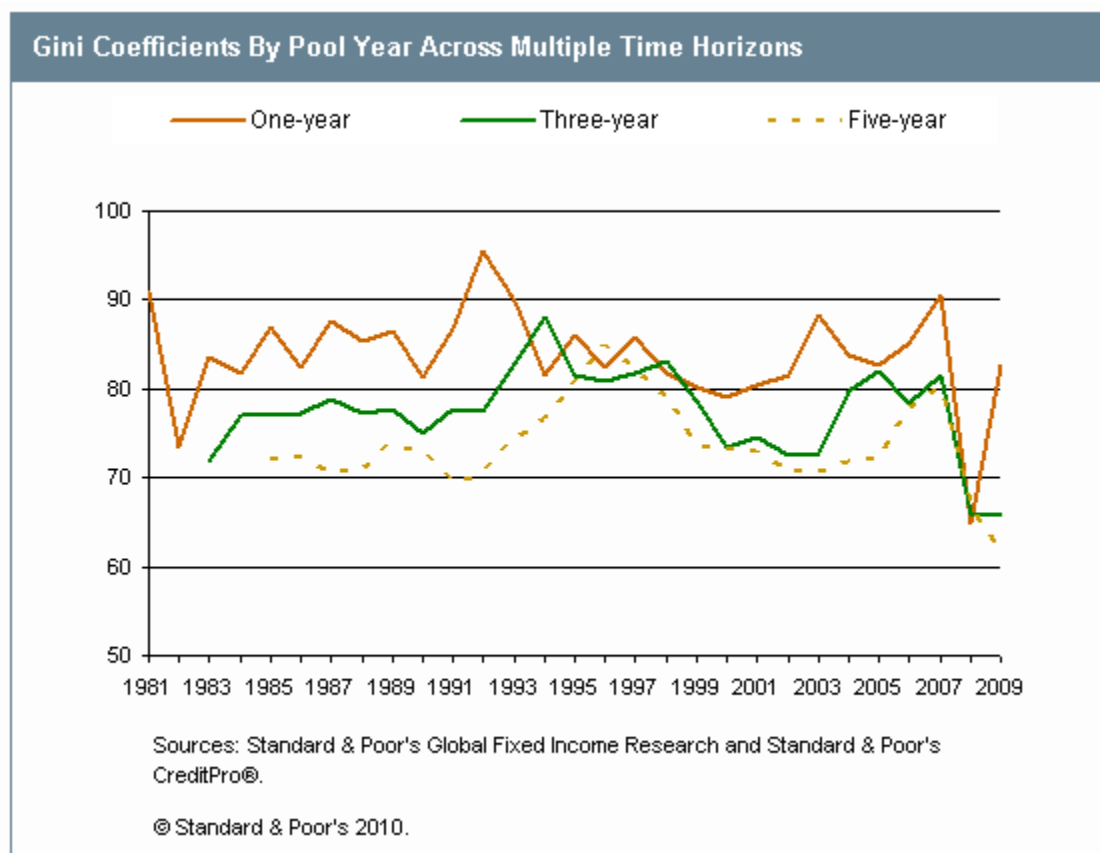


**Does Standard & Poor's conduct any other statistical analysis that confirms the relationship between credit quality and default rates?**

One of the most effective means of measuring ratings' ability to rank order creditworthiness is the Gini coefficient, which is a summary statistic of the Lorenz curve. The Gini ratio ranges from 0 to 100. A value closer to 100 indicates perfect rank ordering of defaults, whereas a value closer to 0 indicates no rank ordering, or random occurrence of defaults. In 2009, a Gini ratio of 82.7% was recorded, indicating that ratings ably differentiated between defaulters and non-defaulters, even in a year of very high default rates.

Gini ratios show a high degree of cyclical variation, with troughs during recessions and peaks during recovery periods (see Chart 3). This pro-cyclicality is best reflected in the one-year Gini ratio, which is more sensitive to sudden shocks and short-term gyrations. We can, however, see similar patterns in the longer three- and five-year Gini ratios that ended in 2009. Those two indicators are now at their all-time lows as a product of the financial crisis and the investment-grade defaults posted in 2008. We expect that these two series will also rebound along the same path as the one-year Gini ratio did between 2008 and 2009.

**Chart 3**



**Are Standard & Poor's outlooks and CreditWatch listings also reliable indicators of the possibility of default?**

We believe that they are. Our outlooks and CreditWatch listings have served as effective signposts of rating changes and credit quality over the years, as shown by their accuracy in foreshadowing 2009 defaults. Of the issuers that defaulted last year, 79% had either a negative outlook or ratings on CreditWatch with negative implications at the beginning of 2009. Of the remainder, 16% were had stable outlooks and 4% had developing outlook or ratings on CreditWatch developing. Only 1% of the issues that defaulted in 2009 had a positive outlook or ratings on CreditWatch positive. Not all issues with negative outlooks or ratings on CreditWatch negative ratings will default—but among all defaults, issues with these tags are overrepresented.

**Are the defaults we have seen in each category of rated debt in line with the benchmarks set by the Basel II Accords?**

The three-year cumulative default rates by rating category offer a way to evaluate ratings performance in line with the key measures proposed in the standardized approach of the Basel II accord. In spite of record volatility in the two most recent three-year periods (2005-2008 and 2006-2009), default rates for nearly all rating categories remain well within the monitoring and trigger levels prescribed by the Basel Committee for Banking Supervision. The only breach observed is in the 'AAA' rating category, which exceeded the monitoring level in the latest three-year period though not the trigger level. (For a more comprehensive treatment on the relationship between ratings and default rates, see "Standard & Poor's Corporate Ratings Continued To Measure Relative Risk Effectively In A Year of

Record Defaults" April 29, 2001, RatingsDirect.)

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