



Moody's Long-term Ratings

Moody's Investors Service ("Moody's") provides a system of nine classes of gradation by which the relative investment qualities of long-term debt may be noted. Bonds carrying the same rating are not claimed to be of absolutely equal quality, but are in a broad sense alike in position of risk. The ratings involve judgments about the future, including an appraisal of long-term risks and the recognition of many statistical and non-statistical factors. The quality of a bond may change over its life and therefore a change from the initial rating designation may occur at any time. Moody's applies numerical modifiers (1, 2 and 3) in each rating classification from **Aa** to **B**. The modifier 1 indicates that the issue ranks in the higher end of its gradation; the modifier 2 indicates a mid-range ranking; and the modifier 3 indicates that the issue ranks in the lower end of its category. The classes of gradation are:

Aaa ratings, assigned for issues judged to be of the best quality, carry the smallest degree of investment risk and are generally referred to as "gilt edged". Interest payments are protected by a large or by an exceptionally stable margin and principal is secure. While the various protective elements are likely to change, such changes as can be visualized are most unlikely to impair the fundamentally strong position of such issues.

Aa ratings, assigned for issues judged to be of high quality by all standards and, together with **Aaa**, comprise what are generally known as "high grade" bonds. These are rated lower because margins of protection may not be as large as in **Aaa** issues, or fluctuation of protective elements may be of greater amplitude, or there may be other elements present which make the long-term risk appear somewhat larger than **Aaa** securities.

A ratings, assigned for issues judged to possess many favorable investment attributes, are considered upper-medium grade obligations. Factors giving security to principal and interest are considered adequate, but elements may be present which suggest a susceptibility to impairment sometime in the future.

Baa ratings, assigned for issues judged to be considered as medium-grade obligations, are neither highly protected nor poorly secured.

Interest payments and principal security appear adequate for the present but certain protective elements may be lacking or may be characteristically unreliable over any great length of time. Such bonds lack outstanding investment characteristics and in fact have speculative characteristics as well.

Ba ratings are assigned for issues which are judged to have speculative elements; their future cannot be considered as well-assured. Often the protection of interest and principal payments may be very moderate and thereby not well safeguarded during both good and bad times over the future. Uncertainty of position characterizes debt in this category.

B ratings are assigned for issues generally lacking characteristics of the desirable investment. Assurance of interest and principal payments or of maintenance of other terms of the contract over any long period of time may be small.

Caa ratings are assigned for issues of poor standing. Such issues may be in default, or there may be present elements of danger with respect to principal or interest.

Ca ratings are assigned for issues which are speculative in a high degree. Such issues are often in default or have other marked shortcomings.

C ratings are the lowest rated class of debt. Issues so rated can be regarded as having extremely poor prospects of ever attaining any real investment standing.

Absence of Rating occurs when no rating has been assigned or where a rating has been suspended or withdrawn for reasons such as: an application was not received or accepted; essential data pertaining to the issue is lacking; or the issue was privately placed. Suspension or withdrawal may occur if new or material circumstances arise; if no up-to-date data is available; or if a bond is called or redeemed.