Summary & Conclusions
Junk bonds have attracted public attention because of the rapid growth in their use, because of their association with mergers and takeovers, and because some observers have felt that the Federal Reserve System is using the margin requirements of Regulation G to restrict their use.

In spite of their recent notoriety, however, low-rated bonds do have a legitimate role in the marketplace and in the financial structure of firms that make use of them. Many of the performance characteristics of junk bonds are well-understood by those who participate in the market. However, since many low-rated bonds are so new, their future performance cannot be accurately predicted, so there is need for caution in their use.

At this point, it is too difficult to determine whether or not the growing use of low-rated bonds in debt-based financing is harmful to our economy. The optimal capital structure of the non-financial corporation depends on so many variables that simple rules about capitalization that have served reasonably well to date may no longer be valid.

In the absence of a serious downturn in the performance of junk bonds, however, it is reasonable to assume that the use of these instruments will increase and that the subsequent growth in debt-based financing will cause a further shift in the quality of corporate debt.

Economic Commentary

Junk Bonds and Public Policy
by Jerome S. Fons

Over the past few years, the financial public has developed a fascination with the growth in the market for so-called junk bonds. In this Economic Commentary, we would like to shed some light on the role of these instruments by providing a working definition of the term "junk bonds," by discussing their place in the financial world, and by examining a few of the issues surrounding concern over the growth of corporate debt.

The public's interest in junk bonds was recently fueled by the controversy surrounding the Federal Reserve Board's reinterpretation of Regulation G, by which the debt securities of a shell corporation, constructed solely as a thinly capitalized vehicle to facilitate takeover of the stock of another firm, would now be subject to existing margin requirements.

The Federal Reserve Board requires that loans collateralized by margin stock, used to purchase and carry securities, not exceed 50 percent of the market value of the securities held. Many have interpreted the Board's decision as a step to limit the use of low-grade debt instruments. The Federal Reserve Board of Governors has countered this charge, however, by stating that the intention was only to clarify the enforcement of existing regulations.

The phrase "junk bonds" was first coined to describe outstanding bonds issued by so-called "fallen angels." These were firms with initially strong financial histories that were facing severe financial problems and suffering from poor credit ratings. Today, the term "junk bonds" is applied to all speculative-grade debt, regardless of the issuing firm's financial condition.

Speculative-grade bonds are issues with ratings below BBB (from Standard & Poor's) or Baa3 (from Moody's). Over the past few years, these ratings have frequently been assigned to the debt of new firms that do not have an established performance record. Previously, these firms may have been denied access to capital markets because of the market's distaste for speculative-grade debt. The emergence of markets for these bonds has provided a viable financing alternative for small or new firms that traditionally had to rely on commercial bank loans.

Since the average investor has neither the access to information not the expertise necessary to effectively evaluate an issuing firm, the bond-rating agencies provide an important service. Ideally, the assigned rating gives the investor a single measure of the default probability of the rated bond. However, the value of the assigned rating may decline as financial conditions change with the passage of time. It has been observed, for example, that knowledgeable investors often incorporate new information about the issuing firm into the price of the bond well before its rating is actually adjusted by companies such as Moody's and Standard & Poor's.

Since much emphasis is placed on ratings, however, business and financial economists have closely examined the factors that determine the rating, as well as the subsequent performance of the bonds.

By and large, agencies that rate bonds admit that there is no precise formula for determining which a bond receives, although studies have shown that certain patterns can be established between the different ratings and various aspects of the rated firms.

Factors that appear to figure prominently in the rating process are accounting ratios, including debt to equity; measures of past performance, including variability of earnings; and many so-called qualitative features, such as the evaluator's disposition towards management, and the general outlook for a particular industry.

Although they may vary from issue to issue, the chosen provisions under which bonds are issued (such as call terms, dividend restrictions, or subordination) seek to enhance an issuer's attractiveness by providing protection against abuses that could endanger the bondholder. Management, for example, may be restricted from entering into a merger that might dilute the bondholder's claim, or from using the proceeds from a bond sale to pay off shareholders in a liquidation move.

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Companies usually pay to have their bonds rated. This indicates that being rated is generally beneficial, although some companies choose not to undergo the process. Their bonds, being non-rated, are usually considered speculative-grade. A high bond rating may be important to the issuing firm because it can reduce financing costs due to the lower likelihood of default and an issue's rating. Low-rated (or junk) bonds are considered to increase the benefits of obtaining a rating.

Edward Altman and Scott Nammacher found that defaulting bonds continue to trade, on average, at 41 percent of par value. Since low-rated bonds have traded at yields more than five percentage points per year above comparable-maturity Treasury issues, many feel that holders of well-diversified portfolios of junk bonds are more than compensated for losses that result from defaults.

Studies of the performance of portfolios of low-rated bonds indicate that their returns are far in excess of the returns on some of its operations, thereby allowing it to keep its debt burden. Of course, mutual funds that specialize in low-grade bonds provide an even greater potential for diversification. The changing political environment in the United States may have fostered a belief that, if the loans on the balance sheets of commercial banks were rated by one of the rating agencies, the average commercial bank portfolio would be downgraded 267 issues in 1985 while consistently led upgradings. Standard & Poor's downgraded 767 issues while upgrading only 125. Chart 1 presents a summary of the par value of straight corporate bonds outstanding, by rating, from 1982 through 1985. In 1982, 8.8 percent of outstanding corporate bonds had speculative-grade ratings; by 1985, this figure had risen to 13.4 percent. The shift in the quality of the nation's corporate debt can generally be attributed to the accumulation of large amounts of debt by the nation's corporations, as well as to increased merger activity in recent years.

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Corporate Debt Growth

The growth of all forms of debt is of great concern to the nation's legislators and financial regulators. Many feel that the rapid growth of debt may eventually restrict the ability of households, government, and businesses to pay what they owe in the event of an economic downturn. The notion that there is a single idealized ratio of debt to earnings (debt-service expense to income) is largely based on these concerns. In order to understand the implications of this perspective, economists have developed theories to help explain why household and businesses might want to accumulate debt. In particular, econo
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A high bond rating may be important to the issuing firm because it can reduce financing costs due to the lower yield required by bondholders. The expected gains from obtaining a rating are weighed against the cost of the rating process. In general, the more potential holders there are, the greater the benefits of obtaining a rating.

Low-Rated Bond Characteristics

Low-rated (or junk) bonds are commonly described as speculative because the financial characteristics of the issuer, including the likelihood of default and the issuer's rating, are not seen as sufficient by a majority of potential bondholders.

As the bond rating decreases, the yield required by bondholders increases, reflecting the higher default risk. These bonds are usually considered speculative-grade.

Treasury issues, many hold that holders of well-diversified portfolios of junk bonds are more than compensated for losses that result from defaults.

Bonds issued to facilitate or prevent downgrading can be of a speculative grade. The additional debt tends to cause a deterioration in the firm's debt-to-equity ratio, at times to a point where it can reduce its ability to service the additional debt. Even the newly capitalized firm will diverge from one of its operating ratios, thereby allowing it to hold up its debt burden.

Studies of the performance of portfolios of low-rated bonds indicate that the returns to investors are in fact higher than some of its operations, thereby allowing it to hold up its debt burden.

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In the context of the Modigliani/Miller viewpoint, there are a number of factors that could be linked to a shift in the preference of managers for higher debt levels which, in turn, has contributed to growth in the use of speculative-grade bonds. The changing political and economic environment in the United States may have fostered a belief that the costs of bankruptcy have been reduced. This belief may have been fostered in the development of our nation's financial system. Today, the corporate manager has at his disposal many instruments to reduce the firm's exposure to various economic environments.

The development of markets for risk management could involve the creation of new rules of proper financial conduct.

Other factors, such as a growing economy, may contribute to the feeling that the expected costs of bankruptcy should be revised downwards. If this is the case, then the substitution of debt for equity by the nation's corporations could constitute the most logical behavior.

Until events arise to change the present trend of the use of low-rated bonds may continue until one new balance of debt-to-equity is reached.

Finally, the notion of agency costs illustrates the complexity of determining the optimal capital structure of the firm. Managers must know the profitable opportunities that could be linked to a shift in the preference of managers for higher debt levels which, in turn, has contributed to growth in the use of speculative-grade bonds. The changing political and economic environment in the United States may have fostered a belief that the costs of bankruptcy have been reduced. This belief may have been fostered in the development of our nation's financial system. Today, the corporate manager has at his disposal many instruments to reduce the firm's exposure to various economic environments.

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