

## Bond ratings, bond yields and financial information\*

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First published: Fall 1992

<https://doi.org/10.1111/j.1911-3846.1992.tb00879.x>

Citations: 144

\* Research support for this project was provided by the Investors in Business Education summer research grant program of the Bureau of Business and Economic Research and the Department of Accounting at the University of Illinois at Urbana-Champaign, and the KPMG Peat Marwick Foundation. The authors wish to thank participants of workshops at the University of Notre Dame, the State University of New York at Binghamton, and the Financial Colloquium at the University of Illinois, as well as Walter Teets and Tom Omer for helpful comments on early drafts of this paper. In addition, participants at the 1990 Conference on Financial Economics and Accounting and the 1990 Contemporary Accounting Research Conference provided beneficial comments on this paper. Finally, we wish to gratefully acknowledge the in-depth comments provided by Vic Bernard (reviewer), Yaw Mensah (discussant at the Conference on Financial Economics and Accounting), and Gordon Richardson and Ramesh Chandra (discussants at the CAR conference) (see pp. 283-289, 290-295) for comments, suggestions, and insights that have significantly contributed to this project. All errors and omissions remain ours.

## Abstract

**Abstract.** The role of accounting information in investment decision making and capital markets has been investigated by exploring fundamental connections between accounting numbers and market-based phenomena of interest. Studies of bond rating predictions have described how bond raters make their judgments as a function of accounting and other data. This study expands our knowledge of these fundamental connections by investigating whether bond ratings have a direct impact on bond yields and how accounting information impacts the bond yields—directly, or indirectly through the bond ratings. A simultaneous equation system is constructed using firm-specific financial information, bond ratings by two major rating agencies, and initial offering yields. The sample used in this study consists of 189 new issue industrial bonds rated by both Standard & Poor's and Moody's that were issued from 1981 through 1985. Tests of alternative structural model configurations provide evidence regarding the interrelations between bond ratings, financial information, and bond yields. The improvements in the statistical methodology lead to a better understanding and assessment of the relative roles of bond ratings and financial information in setting bond prices. The use of simultaneous equation modeling allows the interrelations among yields, ratings, and financial information to be assessed and allows the direct and indirect effect of financial information on yields to be estimated. This results in the ability to conclude that financial information affects bond ratings, that bond ratings directly affect bond yields, that financial information also directly affects bond yields, and that financial information indirectly affects bond yields through its effect on ratings. The role of accounting information in setting bond market prices is clarified using this approach.

**Résumé.** On a étudié le rôle de l'information comptable dans la prise de décisions d'investissement et sur les marchés financiers en explorant les liens fondamentaux entre les données comptables et les phénomènes d'intérêt fondés sur le marché. Les études portant sur les

prédictions relatives à la notation des obligations ont décrit de quelle façon les services d'information financière jugeaient de la valeur des obligations à partir de données, comptables et autres. Les auteurs de la présente étude élargissent la connaissance de ces liens fondamentaux en analysant la possibilité que la notation des obligations ait une incidence directe sur leur rendement et la façon dont l'information comptable agit sur le rendement des obligations, que ce soit directement, ou indirectement par l'intermédiaire de leur notation. Les auteurs constituent un système d'équations simultanées à l'aide de l'information financière propre à l'entreprise, des cotations accordées aux obligations par deux services majeurs d'informations financières et du rendement des émissions initiales. L'échantillon qui a servi à l'étude compte 189 nouvelles émissions d'obligations dans le secteur industriel, cotées à la fois par Standard & Poor's et Moody's, qui ont été émises entre 1981 et 1985. Les tests appliqués aux configurations de recharge du modèle structurel établissent clairement les relations entre la notation des obligations, l'information financière et le rendement des obligations. Les progrès de la méthodologie statistique ont mené à une meilleure compréhension et une meilleure évaluation des rôles relatifs de la notation des obligations et de l'information financière dans l'établissement du prix des obligations. La modélisation d'équations simultanées permet, d'une part, l'évaluation des relations entre rendement, notation et information financière et, d'autre part, l'estimation des conséquences directes et indirectes de l'information financière sur le rendement qui doit être estimé, ce qui amène à conclure que l'information financière a une incidence sur la notation des obligations, que la notation des obligations exerce une influence directe sur le rendement des obligations, que l'information financière touche également de manière directe le rendement des obligations et qu'elle a une incidence indirecte sur le rendement des obligations, par le truchement de son incidence sur la notation. Le rôle de l'information comptable dans l'établissement de la valeur marchande des obligations est éclairci grâce à cette méthode.

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