Trade and information in the corporate bond market

Tavy Ronen\textsuperscript{a,}*\textsuperscript{,}, Xing Zhou\textsuperscript{b,1}

\textsuperscript{a}Rutgers University, Rutgers Business School, 111 Washington Park, Newark, NJ 07102, United States
\textsuperscript{b}Rutgers University, Rutgers Business School, 94 Rockafeller Road, Room 115, Piscataway, NJ 08854, United States

Received 26 January 2012; accepted 19 July 2012
Available online 27 September 2012

Abstract

This paper examines the impact of shifting liquidity and institutional trading in the corporate bond market on inferences regarding informational efficiency. We find that when institutional trade dominance and other bond trading features are accounted for, stock leads evidenced in earlier studies surprisingly disappear. Short windows after firm-specific news releases are examined, and bond trading advantages are shown to be pronounced particularly when equity market liquidity is low (during after-market hours). Cross-sectionally, the effect of credit risk and other firm/bond level characteristics are determined. Finally, ‘top bonds’ are identified, and their common ex ante identifiable characteristics are determined.

© 2013 Published by Elsevier B.V.

JEL classification: G100

Keywords: Bond market liquidity; Informational efficiency; Top bond; Vector auto-regression; Institutional trade; Cross market comparison

\* We wish to thank Alexandre Adam, Paul Bennett, Hank Bessembinder, Ivan Brick, Hazem Daouk, Amy Edwards, Andrew Ellul, Umit Gurun, Joel Hasbrouck, Edie Hotchkiss, Albert Menkveld, Pam Moulton, Oded Palmon, Marios Payanides, Frank Reilly, Joshua Ronen, Marco Rossi, Gideon Saar, Mike Stutzer, Marti Subrahmanyan, Heather Tookes, Kostas Tsatsaronis, Mitch Warachka, Dan Weaver, Jason Wei, and seminar participants at the University of Colorado at Boulder, Rutgers University, the 2008 China International Conference in Finance, the 2008 C.R.E.D.I.T. Conference, the 2008 Financial Management Association European Meetings, and the 2008 European Finance Association meetings for helpful comments and suggestions. We are grateful to Durga Panda and Christopher Rozendaal for valuable research assistance. Special thanks to an anonymous referee for invaluable suggestions. Rainer Jankowitsch, Amrut Nasshikar and Marti Subrahmanyan for providing JNS price dispersion estimates. We thank the Whitcomb Financial Center for data assistance. All errors are our own responsibility.

*Corresponding author. Tel.: +1 973 353 5272; fax: +1 212 202 4804.
\textit{E-mail addresses:} tronen@business.rutgers.edu (T. Ronen), xing.zhou@rbsmail.rutgers.edu (X. Zhou).

\textsuperscript{1}Tel.: +1 848 445 4446; fax: +1 732 445 2333.
1. Introduction

The market efficiency of corporate bonds has not been established in the literature without controversy. Indeed, there are seemingly conflicting results (and hence conclusions) regarding the market efficiency of corporate bonds. In this paper, we demonstrate that the lack of consensus regarding bond market efficiency can be reconciled when bond market liquidity patterns and other institutional features specific to the bond market are explicitly considered. Specifically, we examine the importance of incorporating these features when examining efficiency and the extent of price discovery of corporate bonds, as well as for the comparison of informational efficiency across markets in general. First, since for any given firm there typically is a multiplicity of bond issues, examining the efficiency of a firm’s bonds in pair-wise comparisons with the issuer’s stock can lead to misleading inferences, as liquidity and informed trading in different issues may differ cross-sectionally and over time. Second, the corporate bond market in the United States has been shown to have a dominant institutional presence, with potential trade disadvantages for retail traders. Since retail trades account for about 65% of transactions (but represent only 1.8% of volume), tests that do not differentiate between the two trading sectors may artificially magnify the effect of potentially noisier retail trades. Third, the around-the-clock corporate bond market may provide an important informational role when the equity market displays low liquidity and poor price discovery. The impact of these observations can be significant not only when examining the efficiency of the market in isolation (or relative to that of equity market), but can also contribute to recent advances in corporate bond liquidity research.

On a methodological note, this paper aims to address some of the difficulties inherent in the comparison of informational efficiency across markets. Analysis in early studies that has focused on the relative informational efficiency of the bond and equity markets using a Vector Autoregression (VAR) approach based on pair-wise comparisons of each bond with the issuer’s stock can be misleading. Resulting inferences are limited, in that they cannot reveal more than whether the firm’s bonds are on average slower in reflecting information than the firm’s stock. Further, inferences regarding this ‘average’ are predicated on the implicit assumption that liquidity and trading activity of the issuer’s bonds are immediately comparable both across bonds and uniformly with the equity. As the variation in both of these is known to be considerable, relying on an average may create a bias towards finding a stock lead. In fact, accounting for dynamic liquidity, trade size and timing effects can generate surprising reversals of previously documented results: Granger-causality tests indicate that stock leads disappear, and that bond efficiency can be deemed comparable to that of the equity.

More importantly, these tests cannot uncover the information most desired by traders (i.e., whether there are some bonds on an informational par with equity). Further, if these bonds switch off over time, such liquidity patterns cannot be captured by pair-wise comparisons within a time series framework. Indeed, we find that institutional trade in a firm’s bonds following earnings announcements is highly concentrated in certain issues. We define the bond with the highest institutional trade volume immediately following an earnings announcement (and before NYSE market open) as the ‘top bond’ for the firm. We show that the identity of these top bonds changes over time, and that they share common characteristics, such as age, maturity, credit quality, and bond complexity. Moreover, their identity can be predicted ex ante based on these common characteristics, and a logistic model yields a fairly high degree of out-of-sample predictive accuracy.
دریافت فوری متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات