



Contents lists available at ScienceDirect

Journal of Financial Economics

journal homepage: www.elsevier.com/locate/jfecThe execution quality of corporate bonds[☆]Maureen O' Hara^{a,*}, Yihui Wang^b, Xing (Alex) Zhou^c^aJohnson Graduate School of Management, Cornell University, 447 Sage Hall, Cornell University, Ithaca, NY 14853, USA; UTS Australia^bGabelli School of Business, Fordham University, 45 Columbus Ave Room 627, New York, NY 10023, USA^cFederal Reserve Board of Governors, Federal Reserve Board, 20th & Constitution Ave NW, Washington, DC 20551, USA

ARTICLE INFO

Article history:

Received 11 April 2017

Revised 18 October 2017

Accepted 22 October 2017

Available online xxx

JEL classification:

G10

G18

G23

G24

Keywords:

Execution quality

Corporate bonds

Market microstructure

Dealer market

Trading network

Transparency

ABSTRACT

This paper investigates execution quality issues in corporate bond trading. Using an extensive sample of bond trades by insurance companies, we find that an insurance company entering a trade of similar size and on the same side for the same bond on the same day with the same dealer will receive a better price if the insurance company is a more active trader than if it is a less active trader. Trading with the dominant dealer or underwriter worsens these differentials, while greater transparency and smaller trading networks lessens these effects. Our results provide strong evidence that execution quality differences remain pervasive in corporate bond trading.

© 2018 Published by Elsevier B.V.

[☆] An earlier version of this paper was entitled "The Best Execution of Corporate Bonds." The authors would like to thank Bill Schwert (the editor), an anonymous referee, Jack Bao, Pab Jotikasthira, Rick Ketchum, Mary John Miller, Pam Moulton, Jonathan Sokobin, Scott Yonker, Haoxiang Zhu, and seminar participants at Cornell University, University of Maryland, University of Technology Sydney, the 2016 UBC Winter Finance Conference, the 2016 FIRS conference, the 2016 WFA meetings, the 2016 NFA meetings, the 2016 CIBC conference, the 2016 Triple Crown conference, and the Federal Reserve Board of Governors for helpful comments. Maureen O'Hara is a trustee of TIAA, an insurance company, but she has no role in bond execution decisions. The views expressed herein are the authors and do not necessarily reflect those of the Federal Reserve Board or its staff.

* Corresponding author.

E-mail addresses: mo19@cornell.edu (M. O' Hara), ywang151@fordham.edu (Y. Wang), xing.zhou@frb.gov (X. (Alex) Zhou).

<https://doi.org/10.1016/j.jfineco.2018.06.009>

0304-405X/© 2018 Published by Elsevier B.V.

1. Introduction

The US corporate bond market is massive, with more than 40,000 corporate bond issues outstanding and a principal amount of more than \$8.3 trillion. It is also growing, with issuance of US corporate bonds in 2016 totaling just over \$1.5 trillion.¹ Despite this enormous scale, the trading of corporate bonds remains largely confined to highly decentralized dealer markets where the "costs of intermediation are much more difficult to measure than in other, more transparent venues."² There is also the problem that

¹ Based on data from the Securities Industry and Financial Markets Association (SIFMA). See <http://sifma.org/research/statistics.aspx>.

² Mary Jo White, 2014. "Intermediation in the Modern Securities Markets: Putting Technology and Competition to work for Investors." Speech to the Economic Club of New York. Available at www.sec.gov/speeches.

many bonds rarely trade, making it difficult to discern how well trade prices reflect “true” values or instead are artifacts of dealer power or other market characteristics. These difficulties have led to concerns by both regulators and industry as to what execution quality is achieved for investors in fixed income securities.³ As Rick Ketchum, former CEO of bond market regulator Financial Industry Regulatory Authority (FINRA), noted “It strikes me as odd that we’ve spent enormous energy in equity markets to measure and save pennies or just basis points on execution quality, while in the fixed income market it’s more a question of nickels, quarters, and dollars.”⁴

This paper investigates execution quality issues in corporate bond trading. Prior research has found that dispersion of prices for trades of the same security is common, with corporate bond execution quality differing between small and large trade sizes, between frequently and infrequently traded issues, between new and seasoned issues, and between different customer groups.⁵ What has been harder to address, and what is the focus of our enquiry here, is a simple question: do essentially the same customers executing like trades in the same securities at the same time get the same execution? Our analysis clearly demonstrates that the answer is no, giving credence to regulatory concerns regarding execution quality in corporate bond trading. Equally important, we show how large the problem is, investigate why this is happening, and suggest ways to alleviate these execution differences.

Our analysis draws on an extensive sample of bond trades by US insurance companies over the period 2002 to 2011. These data provide information on all trades identified by issue, trade type, size, date, and the specific counterparties in each trade (i.e., the insurance company and the dealer). Focusing on insurance companies has a number of advantages: all trading is institutional; insurance companies are the largest domestic investors in corporate bonds⁶; insurance company accounting regulations preclude trading based on speculative purposes; and all trading over this time period is done with a dealer counterparty. We use these data to address a variety of hypotheses suggested by the theoretical literature on search and on dealer behavior in over-the-counter (OTC) markets (e.g., Duffie et al., 2005; Feldhutter, 2012; Bernhardt et al., 2004), as well as to establish some basic facts about current institutional trading in corporate bond markets.

Given sparse trading in the bond market, it is challenging to obtain a reliable estimate of trading costs. A novel feature of our research is that we do not directly estimate total trading costs but rather focus on the differential execution costs incurred by insurance companies with smaller bond holdings (denoted less active investors) relative to insurance companies with larger bond holdings (denoted more active investors). This design obviates the need to know the base dealer-customer markup, which is generally unavailable. It also allows us to focus on execution quality differentials while subsuming the myriad effects that could affect bond trading in general.⁷ Controlling for trade type, bond issue, day, and trade size, we find strong evidence that less active investors receive significantly worse execution, paying on average 0.17% more for buys and receiving 0.36% less for sales than do more active investors. Controlling for dealer identity, we find essentially the same results, refuting the hypothesis that more active investors are simply transacting with more skilled dealers.

What causes these execution quality differences? We draw on insights from the theoretical literature on OTC markets (discussed in the next section) to guide our analysis. We show how individual bond liquidity characteristics that might be expected to affect search costs or dealer operating costs also affect this differential between more active and less active investor execution quality. These liquidity characteristics, however, are not sufficient to remove the execution quality differences between more active and less active traders. We do find a strong effect played by trade size, with execution quality differences greatest for smaller-sized trades and not statistically different for block trades. These latter trades, however, are only a tiny fraction (0.1%) of insurance company bond trades during our sample period.

The competitiveness of the dealer market would be expected to affect a dealer’s ability to extract rents, suggesting an important role for market structure in affecting execution quality. We show that market making for corporate bonds is very concentrated, with the top dealer doing on average 69% of the volume and the top three dealers having a 92% market share for the average sample bond. We find that more concentrated trading worsens execution quality differentials between trades for more active and less active investors. Interestingly, trading with the top dealer worsens execution quality for less active investors, as does dealing with the bond issue’s underwriting dealer, who serve as the main liquidity providers in secondary market trading (Dick-Nielsen et al., 2012). We also find that dealers increase price discrimination for issues held by more passive traders (pension and insurance companies) and decrease it for issues held by more aggressive traders (mutual funds). Overall, these data strongly support that dealers use market power to give some traders worse executions than others.

³ For an industry perspective, see SIFMA, 2008. “Best Execution Guidelines for Fixed Income Securities.” White paper. Available at www.sifma.org.

⁴ Richard G. Ketchum, 2014. “Remarks from the Financial Policy Joint Conference on Market Fragmentation, Fragility, and Fees.” Available at www.finra.org.

⁵ These studies include but are not limited to Schultz (2001), Bessembinder, Maxwell, and Venkataramen (2006), Edwards, Harris, and Piwowar (2007), Goldstein and Hotchkiss (2007), Feldhutter (2012), Bias and DeClerck (2013), and Hendershott and Madhavan (2015). Execution quality differences have also been found in research investigating municipal bonds. See Green, Holifield, and Schurhoff (2007a, 2007b), Harris and Piwowar (2006), and Hong and Warga (2000).

⁶ See http://www.naic.org/capital_markets_archive/140307.htm for data on bond issuance and insurance company holdings.

⁷ Various approaches to estimate bond transaction costs have been proposed in the literature. Schultz (2001) uses trade prices and month-end bid quotes of a sample of investment-grade bonds in Lehman Brother’s bond index between January 1995 and March 1997 to estimate transaction costs. He finds that, on average, costs were lower for the 20 institutions with the largest volume in his sample.

Download English Version:

<https://daneshyari.com/en/article/11020474>

Download Persian Version:

<https://daneshyari.com/article/11020474>

[Daneshyari.com](https://daneshyari.com)