Journal of Financial Markets 21 (2014) 1-24



Contents lists available at ScienceDirect

journal homepage: www.elsevier.com/locate/finmar

Trading anonymity and order anticipation $\stackrel{ au}{\sim}$

Sylvain Friederich^a, Richard Payne^{b,*}

^a Department of Accounting and Finance, University of Bristol, United Kingdom ^b Cass Business School, City University London, United Kingdom



MARKETS

ARTICLE INFO

Article history: Received 1 February 2013 Received in revised form 17 July 2014 Accepted 17 July 2014 Available online 6 August 2014

JEL classification: G12 G14

Keywords: Trading anonymity Limit order trading Trading costs Institutional investors London Stock Exchange

ABSTRACT

Does it matter to market quality if broker identities are revealed after a trade and only to the two traders involved? We find that implementing full anonymity dramatically improves liquidity and reduces trader execution costs. To explain this, we compare theories based on asymmetric information to an order anticipation mechanism, where identity signals trader size, allowing strategic agents to predict the future order flow of large traders. Evidence supports the anticipation hypothesis: liquidity improves most in stocks where trading is heavily concentrated among a few brokers and in stocks susceptible to temporary price pressure. Also, only traders having large market shares benefit from anonymity.

© 2014 Elsevier B.V. All rights reserved.

In an electronic trading context, anonymity refers to whether the brokers that intermediate trading can be nominally identified by other participants. This can occur before the trade, if broker identities are shown alongside unexecuted orders on trading screens, or after the trade, if the IDs of the brokers are revealed. In this paper, we study the effects of introducing anonymity to trading on the London Stock Exchange (LSE). The anonymity change we look at is very different to that studied in previous

```
* Corresponding author.
```

^{*} Thanks to an anonymous referee, Tarun Chordia (the editor), Alessandro Beber, Thierry Foucault, Giovanni Cespa, Aneel Keswani, Ian Tonks, Mark Salmon, Luis Oliveira, Carol Osler, Michael Moore, Anthony Neuberger and seminar participants at the Cass, Manchester and Warwick Business Schools, Queen's University Belfast, University of Essex, Universidade do Porto and the annual conference of Inquire U.K. At financial firms and the London Exchange, thanks to Yves Bentz, Simon Howland, Matthew Leighton, Alan Line, Jamie Lebetkin, Ian Rowell, and Simon Savage.

E-mail addresses: s.friederich@bristol.ac.uk (S. Friederich), richard.payne@city.ac.uk (R. Payne).

^{1386-4181/} \odot 2014 Elsevier B.V. All rights reserved.

work, as ID disclosure was initially very restricted on the LSE. Prior to the change, the market was already pre-trade anonymous and only the two parties involved in a trade learned each other's identities. With the introduction of a central counterparty (CCP) to electronic equity trading in London in February 2001, post-trade counterparty identification ceased, rendering the trading process completely anonymous. Using data on 134 stocks from 6 months before the introduction of the CCP to 6 months after, we find that under full anonymity spreads decline by around 20%, the order book deepens significantly, and the price impacts of single trades and worked executions decrease substantially. A matched control sample of European and U.K. stocks that did not experience any anonymity change displays no such liquidity improvement.

Why did this seemingly small change in transparency cause such striking improvements in liquidity? Related work presents results from analysis of the introduction of *pre-trade* anonymity, studying markets around the times that exchanges stopped disclosing the identities of brokers alongside their unexecuted orders (Foucault, Moinas, and Theissen, 2007; Comerton-Forde and Tang, 2009). They find that market liquidity improved and explain this using an asymmetric information argument: revealing the identities of agents who are better informed before they trade broadcasts their information while, under anonymity, those agents can expose their orders to the market without fear that others will trade in front of them. Our results share some features with those in extant work, but they are hard to interpret along the same lines. Why would revealing identities only after a trade has been completed and only to the pair of traders involved lead to concerns about information leakage?

We proceed to shed light on the mechanism that generates our results. We compare the implications of two theories that relate anonymity to liquidity. The first relies on asymmetric information (AI) arguments – examples include Huddart, Hughes, and Levine (2001), Foucault, Moinas, and Theissen (2007), and Rindi (2008).¹ These models generate very different predictions. Huddart, Hughes, and Levine (2001) suggest that, with exogenous endowments of private information, post-trade anonymity degrades liquidity as it perpetuates information asymmetries. However, Rindi (2008) argues that if information acquisition is endogenous then anonymity may improve liquidity and efficiency as it strengthens agents' incentives to acquire information.

The second mechanism we consider is order anticipation (OA). Order anticipators use order flow data to predict the direction of future institutional trades and to profit from those predictions, perhaps by moving prices against the anticipated trader or trading in front of them. This style of opportunistic trading was described several years ago, most clearly by Harris (1997) and Harris (2002). Harris (2002) devotes a whole chapter to OA, describing it as "parasitic." Harris (1997) states that "To trade profitably, [anticipators] do not need to know why traders want to trade. They merely need to know that a large trader strongly intends to complete a trade." This statement makes it clear that OA is one of a family of strategies that profit from predictability in order flow direction. Those strategies include strategic trading around index rebalances or fire sales (Harris and Gurel, 1986; Beneish and Whaley, 1996; Coval and Stafford, 2007) and "predatory trading" (Attari, Mello, and Ruckes, 2005; Brunnermeier and Pedersen, 2005; Carlin, Lobo, and Viswanathan, 2007). In turn, they all rely on the ability of a trader to move prices and thus the existence of price pressure effects, a thread originating in Shleifer (1986).

OA has been much in the news recently, through its alleged use by high-frequency trading firms. In its 2010 "Concept Release on Equity Market Structure," the U.S. Securities and Exchange Commission (SEC) called for evidence on OA strategies, described as "any means to ascertain the existence of a large buyer (seller) that does not involve violation of a duty (...) or other misconduct" (pp. 54–56). The SEC explicitly asked the following question: "Do commenters believe that order anticipation significantly detracts from market quality and harms institutional investors (...)?"² We argue that

¹ Note, however, that the latter two papers focus on pre-trade anonymity.

² Appendix A gives details of earlier policy debates. The implications of transparency for OA were, for example, very clearly spelled out in the National Association of Securities Dealers' request to the SEC for a rule change to introduce post-trade anonymity to "SuperMontage." Our own discussions regarding the introduction of the CCP with block brokers on the LSE bear this out. They categorically described non-anonymity as generating OA in a concentrated market and welcomed the introduction of anonymity post-CCP.

Download English Version:

https://daneshyari.com/en/article/960979

Download Persian Version:

https://daneshyari.com/article/960979

Daneshyari.com