

Paper

# **INFORMED TRADING IN DARK POOLS**

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# ***What the paper is about ?***

- ◆ **Recent surge in volumes of CN generated interest across regulators, academics and practitioners to understand CN dynamics.**
  - ◆ **Relatively little is known about Cnetworks**
- ◆ **Central qn:**
  - ◆ **Examines the presence of informed trading in Crossing Networks and its impact on the price discovery on quoting exchanges.**
    - ◆ **Which type of trades (generated by algo / brokerage desks / negotiated deals)?**
    - ◆ **And for which type of stocks?**
- ◆ **Data**
  - ◆ **Uses proprietary high frequency trade data (100 stocks: Jun-Dec 2009) thro' which they can derive transaction data; broad class of trader identity, counter party and trade mechanism.**
    - ◆ **Most earlier studies aggregate data at daily level and data is a big plus point for this paper.**

# How the paper gathers evidence?

## ◆ Metric for Informed Trading

- ◆ Change in Spread from  $t-10$  to  $t+10$ ;  $t$  being the trade time on CN
- ◆ Price Impact: Amihud Illiquidity ratio per minute averaged over 10 minutes from  $t-10$  to  $t$  and from  $t$  to  $t+10$
- ◆ Short term return forecasting– Predictability of future returns (15 to 120mins) with the help of average deviation of CN traded price from the best bid n offer.

## ◆ Presence of Informed Trading

- ◆ Spread changes and price impacts on quoting exchanges following trades on Crossing Networks.
  - ◆ These are higher for trades involving CN members using algo strategies to trade in illiquid stocks as opposed to trades in more liquid stocks n trades thro' manually negotiated n brokers desk
- ◆ Predictability of Short term returns
  - ◆ Average deviation from best bid/ask of CN transactions (of algo strategies) is vimportant factor in predicting future returns of illiquid firms

# ***How the paper gathers evidence.....?***

- ◆ **Nature / Type of informed trading**
  - ◆ **Are returns predictable around fundamental information release days?**
    - ◆ **Return predictability on earnings announcement days**
  - ◆ **CN transactions using algo strategies are not useful in predicting future returns of illiquid firms.**
  - ◆ **Information on CN is short term in nature and more likely to be technical rather than fundamental**
- ◆ **Paper definitely adds to current literature and improves our understanding of dark pools literature.**
- ◆ **The paper conveys to**
  - ◆ **Practitioners: Liquidity seekers of illiquid firms looking for fills from CNs may get more losses when they trade against informed traders**
  - ◆ **Regulators: suggests that CNs help in faster information revelation on quoting exchanges and ease their concerns on impact of undisplayed liquidity**

# Concerns on way of gathering evidence

## ◆ On Informed Trading metric

- ◆ Change in spread is looked 10minutes before CN trade to 10minutes after CN trade
- ◆ Not sure why the authors narrowed to 10minutes before the trade?
- ◆ Usually, Informed trading is proxied by Adverse Selection Spreads
  - ◆ From trade time  $t$  to  $t+h$  minutes ( $h=5$  or any).
  - ◆ See Boehmer et al RFS 2007; Kaniel and Lu, JB 2006; Anand et al JFM2005

## ◆ On predictability of short term returns

- ◆ Use TradeImbalance (net buyer initiated) in terms of quantity or value instead or in addition to average deviation of CN price from mid quote

# ***How to make results robust....***

- ◆ **Other control factors in regressions that may influence level of informed trading**
  - ◆ **In addition to volume, volatility, mkap factors: Need to include several market conditions and structural characteristics of firm**
    - ◆ **Tick size, institutional ownership structure etc**
    - ◆ **Day and hour effects as spreads / price impacts have intra-day behaviors**
    - ◆ **Particularly because mkap is insignificant in their regression results**
    - ◆ **May be absence of firm specific factors are resulting in significance of intercept and hence the evidence.**
  - ◆ **Firm specific factors play significant role particularly for smaller / illiquid stocks while determining informed trading.**
- ◆ **Around (instead of ON) earnings announcement days**
  - ◆ **Informed traders act on their information atleast “some” days before scheduled earnings announcement day. So, looking just on announcement day may not enough.**
  - ◆ **Earnings announcement may be before, during and after the trading hours of the day. Paper won't talk about how they handled this.**

**Thanks**