When do listed firms pay for market making in their own stock?

Johannes Skjeltorp and Bernt Arne Ødegaard

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Abstract

A recent innovation in the equity markets is the introduction of market maker services procured by the listed companies themselves. Using data from the Oslo Stock Exchange, we investigate what motivates issuing firms to pay to improve the secondary market liquidity of their listed shares. By examining the timing of market maker hirings relative to corporate events, we find that the likelihood that a firm will interact with the capital markets in the near future is a determinant. A typical firm employing a designated market maker is more likely to raise capital, repurchase shares, or experience an exit by insiders.

Topic of paper

We study:

- Designated Market Makers (DMM) at Oslo Stock Exchange
- DMM (brokerage house/bank) hired by the firm against a fee.
- ensure a liquid secondary market in firm's stock

Main question in this paper:

- Why are firms willing to pay a cost to improve the secondary market liquidity of their issued shares?

Contribution:

- Earlier studies ⇒ DMMs have a significant effect on market quality
- We look at DMMs from the *firm's perspective*: what determines the hiring choice?

The issue from the financial markets perspective

Current equity markets: No longer a market participant with a positive obligation to provide liquidity.

- US: 2008: The NYSE specialist no longer obliged to stand on the other side of every trade
- Most other markets: Moved towards pure limit order markets, market participants provide liquidity.

Simultaneously:

- Fragmentation of trading across exchanges
- High Frequency Traders(HFT): Automated trading algorithms.

Possible argument: HFT are the New Market Makers [**?**]
However: In crisis like situations HFT's *consume* liquidity rather than provide it.
Spectacular example: The US Flash Crash. [**?**]

Problem: No "Liquidity Provision of Last Resort"

Is continuous trading the best trading mechanism?
If not, possible fixes:

- Politicians: Transaction taxes
- Economists: Frequent auctions

Staying with continuous trading:

- Reintroduce participants with positive obligations to provide liquidity: "Designated Market Makers"

DMM contracts on European Limit Order Market

- listed firms can hire a financial intermediary (DMM) to provide liquidity in its stock.
- *typical contract*:
  - practice market making at least 85% of the day
  - maximum bid/ask spread of 4%
  - ensure minimum number of shares available at best quotes

But:

- Why is it the listed firm that is paying?

The data

Oslo Stock Exchange (OSE) – Electronic limit order market, main market for trading Norwegian stocks

- DMMs allowed at the OSE from October 2004
- look at DMM hirings from 2004 through 2010
- the DMM is paid by the firm to "maintain an orderly market"
  - little info on actual costs
  - Anand et.al [2009], average fee ∼ USD 40k per year (Sweden)
  - Norway ∼ USD 30k per year
- OSE monitors stocks with DMM to ensure that the DMM fulfills obligations

What is the effect on the market of hiring a DMM?

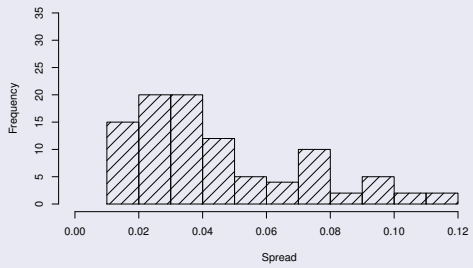
First, check that effect of DMM initiations is similar at the OSE as other markets

1. Does liquidity improve?
   - liquidity significantly improves (6 month/1 year)
   - turnover and #days traded increases
2. Does the market react?
   - about 1% excess 5 day event return around announcement

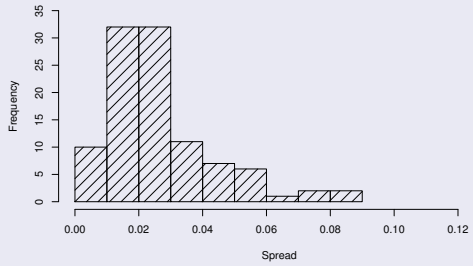
Similar results in our sample as other studies on DMMs for other markets.

Changes to average spread following DMM introduction

Year before



Year after



Analyzing decision to hire DMM

- Decision theoretic empirical analysis (Probit)
- Pr(Hire DMM)$=f$(likelihood of accessing market)

Determinants of the hiring decision:

- Likelihood of capital needs
  - ex-ante: growth potential (Tobin's Q)
  - ex post: actual stock issuance
- Likelihood of stock repurchase (cash distribution)
  - ex-ante: repurchase program announcements
  - ex-post: actual repurchases over next year
- Other variables
  - insider transactions (ex-post exit motivation)
  - <2 years since listing (ex-ante exit motivation)
  - Pre-DMM liquidity

Conclusion

Why pay for a DMM?

- Secondary market liquidity matters *to the firm* because of the market's role when *new* capital is raised or distributed
- Firms pay to improve liquidity when they plan on accessing the stock market in the near future