Market Quality Program Proposal NASDAQ (SR-NASDAQ-2012-043): A Comment

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In this short note, I comment on the NASDAQ Market Quality Program (MQP) proposal as a scholar in the field of market microstructure. As such, I have studied the 'designated market maker' (DMM) contracts that exist at Euronext. These contracts enable an issuer to essentially guarantee liquidity in its stock as brokers commit to quoting a maximum spread X and a minimum depth Y at all times (the parameters (X, Y) are set in the contract). Only small- and mid-cap stocks qualify for the program.

1 Some evidence

In summary, my co-author Ting Wang and I find in an event study based on 74 DMM stocks, that a DMM contract on average improves the liquidity level, reduces liquidity risk, and generates an average abnormal return of 3.5% upon initiation. We further find that DMMs participate in more trades and incur a trading loss on high quoted-spread days, i.e., days when their constraint is likely

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to bind. Finally, DMMs reduce the size of pricing errors (Menkveld and Wang (2011)). The study complements evidence from other European markets which, by and large, is favorable on DMM contracts (Nimalendran and Petrella (2003), Venkataraman and Waisburd (2007), Anand, Tanggaard, and Weaver (2009)).[1]

One likely channel through which net value is created for the issuer (despite the lump sum cash outflows to pay a DMM) is liquidity 'insurance'. Ex-ante, shareholders agree to pay for a liquidity guarantee as anyone among them could experience a liquidity shock in the future and benefit from the minimum liquidity guarantee. This channel is consistent with all empirical evidence on DMM contracts thus far.

2 My view

By this argument (liquidity insurance), it seems that the MQP program could create value for an issuer. If, at launch, a particular security's liquidity supply is uncertain, investors might be trapped in a 'bad equilibrium'; if all are in doubt about future participation in this market, future liquidity is uncertain, and investors refrain from participating. If, however, all believe that many participate in this market in the future, future liquidity is less uncertain, and investors participate; the 'good equilibrium' is reached. This participation externality is well-understood in the finance literature (e.g., Pagano (1989)) and an MQP program could be a way to jump-start trading and, if there is intrinsic interest in participating in this market, the product launch will be successful.

[1] All studies were cited in the NASDAQ Notice of filing.

In summary, MQP is a way to reach a good equilibrium (if it exists).

An important concern about these type of contracts is that 'insider information' available at the issuer should not reach a designated market maker. This risk, however, is low as the contract is specified in terms of liquidity support and, after the contract is in place, there is no need for communication between an issuer and the broker. The exchange can monitor performance of the broker and report back to the issuer. Additionally, the securities the NASDAQ proposed for the MQP program launch (exchange-traded derivative securities products) are less likely to be affected by such insider information risk as ETFs are baskets of securities and security-specific information is therefore less relevant.

3 Some responses to the SEC questions

Given my view, I like to comment on some of the questions the SEC raised. The numbers correspond to the SEC questions.

1) Yes, the reported effects are expected to be similar. The MQP liquidity 'guarantee' (softened version of what is implemented in the European DMM programs) could avoid the 'bad equilibrium'.

3) I do agree with NASDAQ's assertion that membership of an index enlarges the 'visibility' of a company. The SEC questions what the additional effect is of being part of an actively-traded ETF over and above inclusion in an index. I believe there such additional effect as substantial ex-post trade activity will create ex-ante investor interest in holding the portfolio

(the 'index') and therefore holding the company (the liquidity insurance argument).

6) Yes, I agree that MQP securities' liquidity is likely to benefit. More important, however, is whether, *net* of the cash outflow for the issuer, such arrangement creates value. Does the benefit of better liquidity outweigh the cost of the cash outflow? This, however, the issuer can decide for herself as she internalizes both the cost and the benefit; the program is voluntary.

9) The MQP program keeps the broker at a distance as there is no need for (regular) direct issuer-broker contact.

16) A discontinuance threshold is reasonable if the target is to reach the "good equilibrium."

18-19) A one-year period (as of the first introduction) is reasonable. More important is:

1. A staggered introduction of MQP securities (both in terms of announcement and implementation).
2. A randomized sequence.
3. A long enough pre- and post-event period for each introduction to identify an effect (three months?).

Such implementation, along with detailed reporting of all trades and quotes in all securities for a pre-event period and a post-event period

would allow for identification of an MQP effect (the sample should be balanced, i.e., the start and end date of each series should be the same; this enables one to use the non-migrated securities to serve as a benchmark for the migrated securities). MQP brokers' trades and quotes should be flagged (MQP broker IDs can be anonymized). An example of how such staggered introduction is helpful for statistical identification is provided by an earlier study on whether algorithmic trading is beneficial for liquidity (see Hendershott, Jones, and Menkveld (2011)).

In summary, I am supportive of an MQP pilot study.

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