DRAFT 5/8/2015

Trade reporting and settlement of trades by mutual funds

**Trade execution by mutual funds in Finland.**

Mutual funds in Finland almost exclusively execute their trades off-market and hence due to the way the trades are reported directly to the clearinghouse without public dissemination, the trades are not known to the public until day T+3 after the transaction. We define off-market trades as trades not executed in the public limit order book (LOB), either executed on non-lit markets or over the counter. On day T+3 the mutual fund holdings would be updated in the clearing system, available for public view, and ultimately reported to databases such as Bloomberg, Capital IQ and Factset. We interpret this practice as a result of the funds either benchmarking to or tracking an index, and hence being exceptionally concerned with receiving lowest possible transaction costs. Brokers may be able to achieve lower market impact trades using off-lit market venues such as dark pools and internalised trading with other institutional counterparties.

The performance of the fund is ultimately in the best interest of the brokerage firm in which name it is marketed. This may not stop individual brokers within the firm managing the fund from taking advantage of the window between when the portfolio managers of a mutual fund has decided to make a new investment or a rebalancing trade, and the date when it is reported. We proxy this period of availability of inside information to 3 trading days before and 3 trading days after a day with above average mutual fund flow into or out of the market.

**Regulation, reporting rules and statistics for off-market trading on Nasdaq OMX Helsinki.**

NASDAQ OMX 4/8/2015:

For the reporting of LOB and off market trade the following trade reporting guidelines apply:

<http://www.nasdaqomx.com/digitalAssets/98/98362_reporting-guidelines-versio>n-1\_8-may-4--2015.pdf

The trading rules that apply are:

<http://www.nasdaqomx.com/listing/europe/rulesregulations>

Comments on the practice and reporting of off-lit LOB and OTC trades:

Prior to MiFID (in force since November 2007) all trades in listed stocks had to be made either in the lit order book or reported to the stock exchange.

Since MiFID, investors have had the option to conclude OTC transactions as well as trade in the lit or dark books of alternative venues (called MTFs, multilateral trading facilities).

Currently many "off-lit order book trades" in Finland are reported to Nasdaq Helsinki, and as they are done in line with our rules, they are regarded as on-exchange transactions. They need to be reported within 3 minutes from the time of the agreement.

But in line with MiFID there is also the OTC option, and the publication requirements for OTC trades are fairly relaxed currently (MiFID II, expected to be in force January 2017 is aiming to change this). OTC trades need to be published, but its sufficient for a broker to publish these trades on their own web site, for example. And if the trades are large enough, the publication can be delayed.

The exact amount of OTC trading currently in Europe is somewhat unclear, but roughly speaking the split is something like:

20% OTC (some claim this to be much higher) 5% reported on-Exchange 8% done in regulated dark pools (either ours or firms like BATS or Turquoise)

67% done in regulated lit books (roughly 65% of this is done in Nasdaq Helsinki order books, rest in MTF order books (like BATS and Turquoise)

There clearly is a difference in how investors can access the post trade information of lit order book trades and on exchange reported trades vs OTC. Getting access to the latter is very difficult, if not impossible, whereas the transactions done on regulated venues are widely available via the media.

**Clearing of Trades and Trade Data Analysis**

In the Euroclear data the purpose of all transactions are defined by a reference code, where the most important for our purpose are reference code 1, trade in the LOB, with the trade date reported as a reference, or 2, off-market or daily net transaction (after 2009), and the trade has no trade date only settlement date implying that the trade has occurred 3 banking days before the settlement date.

EUROCLEAR: Generally the above is correct, but there were exceptions, particularly for trades outside of the exchange OTC.

2. Such outside of the order book / broker internal trades are typically reported to Euroclear the same day they are executed, and they are cleared three banking days later?

EUROCLEAR: Generally OTC transactions were sent to Euroclear for clearing TD +1 (one day after the trade was executed. Clearing typically occurred TD+3, but there were exceptions to this daily.

3. How and when does a broker deliver their transactions to Euroclear and are there differences between reference code 1 and 2?

EUROCLEAR: Before CCP netting Limit Order Book trades were flowing directly from the exchange to the Euroclear system, while off-market trades the broker directed these trades to the system manually. Exchange trades flowed to the Euroclear clearing system almost in real time or instantly after the trade had occurred.

These practices concern the period up to end 2009 when "CCP" net clearing was introduced and after which most trades are reported as net trades per day, stock, client in the same manner as off-market trades were treated. Euroclear now receive electronic CCP-net-clearing instructions from brokers into their system on T+1, and the trades are cleared and settled on T+2 (on 6.10.2014 settlement changed from T+3 to T+2).

**Conclusion**

It is increasingly clear that for OTC trades brokers have a lead of 3 days before the rest of the market knows anything about these trades. Also for the LOB trades and the off-lit-order-book trades reported just as LOB trades (see above for details - some 80% of all trades (a lower proportion of fund trades) other parties than the broker can NOT know who the end customers is, at least not until 3 days later when the trade is cleared and reflected in the holdings at the clearing house Euroclear.

Footnote:

We expect that the fund trades are more likely to be off-lit-market trades, which are reported within 3 minutes of the trade, rather than OTC which would be used for really large blocks of institutional trades. We are however not able to detect which trades are off-lit-order-book-trades and which are OTC and hence define all trades not executed in the public LOB as off-market trades.