

# MiFID Has Injected Fragmentation and Competition Into the Trading of Securities but has it Produced Market Efficiency?

Brian Taylor, Managing Director of BTA Consulting

## Introduction

The Markets in Financial Instruments Directive (MiFID) was introduced in November 2007. A key benefit of this Directive is legal competition among exchanges and Multi-lateral trading facilities (MTFs). Fourteen months on, there are at least a dozen new venues that are live, with a few more in the wings.

The introduction of competition by MiFID has led to some fragmentation of execution, the reduction of trading fees and - for liquid securities - the narrowing of spreads. However, many behavioural and operational barriers to true market efficiency remain, preventing real competition. The execution costs alone of this inefficiency to investors are between £400m to £600m per annum, which today are still drained away from the value of investment portfolios. Fragmentation should be a lot higher if investment firms truly implemented "best execution". Europe still lacks a level playing field and, put simply, the barriers are increasing the costs of the new platforms and reducing their profitability or in some cases viability. While these barriers continue to exist, they reinforce the dominance of the traditional natural monopoly markets (e.g. the London Stock Exchange, NYSE Euronext and Deutsche Börse) to the detriment of investors.

This article focuses on one of the most important behavioural and operational barriers to market efficiency in Europe – market data and market share statistics. There

are many other barriers to market efficiency that are affecting the pan-European marketplace, some of which can be resolved by co-operation within the industry. Other barriers may not be realised in our life-time – for instance, low-cost efficient clearing and settlement, probably one of the most systemic barriers to market efficiency. But these are outside the scope of this article.

## A standard methodology for a benchmark consolidated tape

When the US markets implemented similar legislation to MiFID, known as Reg NMS, the Securities Exchange Commission mandated the creation of a National Best Bid Offer (NBBO) that shows the best bid and offer (so called Level 1 data) from all venues in real time and provides a tape of all trades that have executed on all venues. The SEC's involvement even went as far as to mandate the methodology for revenue sharing for the operator of the NBBO, which is Nasdaq OMX.

By contrast, in Europe, the Commission for European Securities Regulators (CESR), believed that the industry would define a suitable methodology and market forces would attract a provider to fill the gap in the market infrastructure. Fifteen months on, the gap has not been filled yet, as it is not quite so simple.

Why is this so important? The short answer is best execution. If a pan-European best bid and offer and trade ticker was visible at all times, it would clearly show the location

and timing of best execution opportunities enforcing the need to include certain new trading venues in the best execution policy of investment firms. As explained later in this article, empirical evidence shows that investors and investment firms should be more accurate when directing liquidity to any venue to realise best execution at all times and in order to take advantage of the innovation and price improvement potential offered by the new venues.

Almost all of the new MTF venues have introduced innovative trading proposals, which have a value proposition to their target investor group, but the results of their endeavours are not as visible as they could be. Some of the new venues have introduced new innovative order types, trading methods and tariff models in their transparent or "light" order books, thereby improving the best execution possibilities. They have also introduced the concept of "dark" trading, where there is no pre-trade transparency. The innovation is intended to improve the quality of trade executions without market impact costs.

However, because the European market infrastructure lacks a benchmark European BBO, MTFs are not receiving all the liquidity they rightfully should.

- On the light side, there is no consolidated European tape that shows the location of liquidity based on pre-trade transparency information for electronically addressable business (i.e. hittable orders or quotes). A European BBO

would give the greatest visibility to the venues offering the greatest value proposition

- On the dark side, this embryonic trading methodology is starting to add liquidity or quantity discovery (as opposed to pure price discovery) and it is also offering the buy side improved direct market access opportunities. However, the post

trade transparency reporting venues today like BOAT are consolidating the reporting of many of these new venues not giving visibility to the individual platforms, and therefore denying them growth opportunities.

The nearest tool that is available today can be found through

Equiduct, the so-called OrangeVBBO – the European consolidated tape for liquid equities at Retail Market Size or Standard Market Size. This is based on a calculation of a virtual order book that consolidates the visible pre-trade information (Level II data) gathered from significant relevant markets. It is a real-time data feed that gives access to a single source of pan-European equity price data.

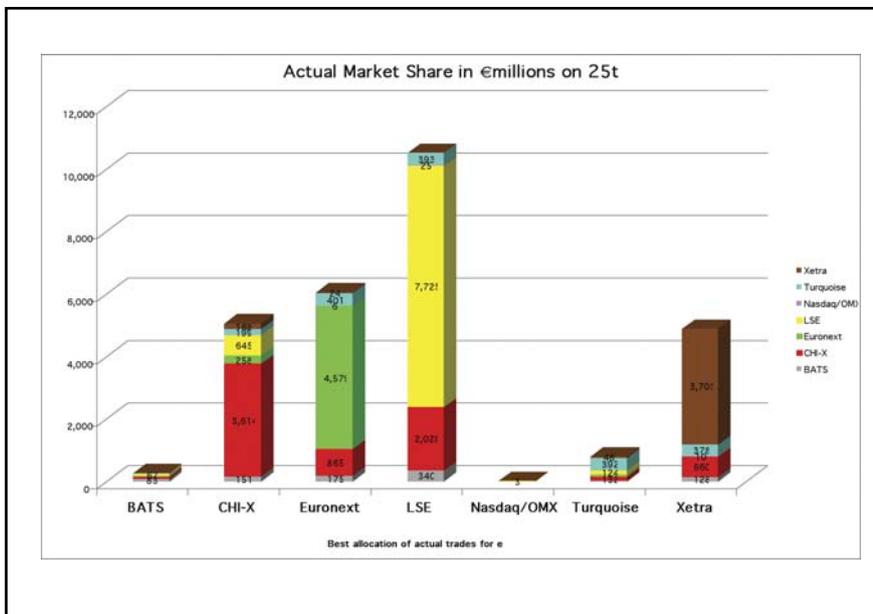


Figure 1: Actual Market Share in €millions - 25th Nov 2008 - Source Equiduct

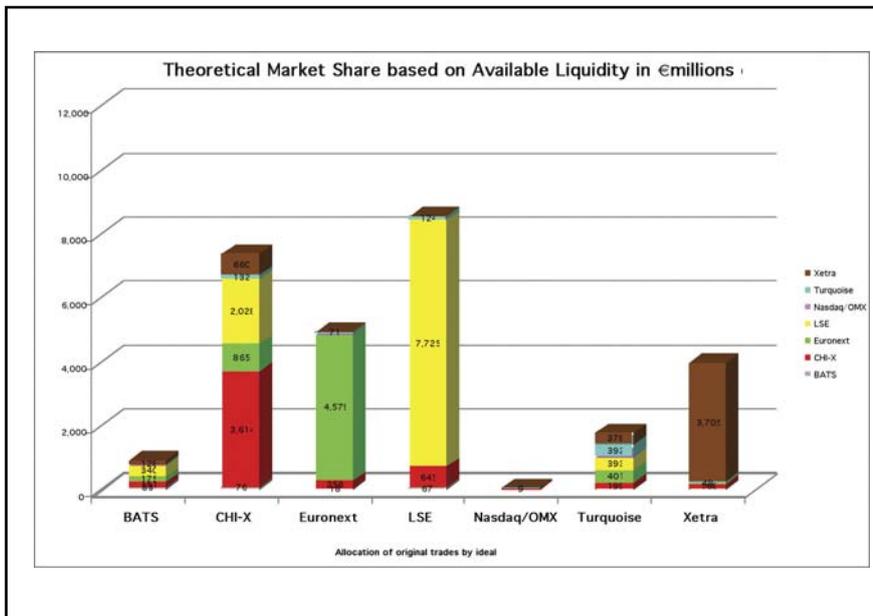


Figure 2: Theoretical Market Share based on Available Liquidity

**The empirical results**

The analysis below provided by Equiduct, demonstrates the importance of an objective pre- and post-trade reporting tool, a consolidated tape and market share statistics report. Figure 1 below shows the total volume executed in the 500 most liquid instruments (listed on Euronext, LSE or DBAG) across the most important execution venues on the most active trading day of last year (25 November 2008).

As Equiduct explains, the data confirms that fragmentation is a reality and that some of the new entrants, and especially Chi-X, have managed to capture significant market share. However, it also shows that trades are not always executed at the most appropriate venue. For example, a significant portion of trade executions on Xetra, LSE and Euronext should have been executed at Chi-X if the investment firm had opted to execute the trade at the best price at that moment in time (demonstrated by the red blocks in Figure 1). Likewise, a (smaller) portion of trades executed on Chi-X should actually have been executed at one of the incumbent exchanges or one of the competing MTFs.

Equiduct suggests that if the optimal routing decisions to the execution venue that displayed the best price at the time of the order had been taken at all times, then investors would have saved €1.33 on each trade, or €3.5m on that one day. This extrapolates to an annual saving of €400m-€600m – not an insignificant amount, even for buy-side investment funds. The

problem would be further compounded if the investment decisions are driven by tracking indices and VWAP (Volume Weighted Average Price), as today all of these metrics are based on incumbent trading platforms and not the liquidity and price/volume discovery in the new venues.

From a market share viewpoint, if the optimal routing decisions were taken at all times then Chi-X would receive much higher volume than it does today (46%) and the market share of BATS, Nasdaq/OMX and Turquoise would respectively increase by 240%, 390% and 124%. This is shown in Figure 2 below.

This empirical information contradicts some of the representations from the incumbent platforms that assert that the new venues are only realising new liquidity. If investment firms implemented best execution optimally, the new venues would be receiving more of the existing liquidity.

What are the barriers to accomplishing this shift in behaviour? There are many – interpretation of best execution policy by investment firms, enforcement of best execution by regulators and also market information. If a commercially available, objective and transparent real-time consolidated tape and market share reporting mechanism existed in Europe, the new platforms would receive more trading flow. A European BBO would be clearly visible, demonstrating the real best execution destination at any point in time. Without this important piece of infrastructure, institutional and retail investors are inevitably making expensive sub-optimal investment decisions and the compliance process for their executions is also not objective.

#### **A standard methodology for real time market share statistics**

There is also a need for a standard methodology for real-time market share statistics. This is evidenced by the fact that venues are often accused of inflating their market share, double counting and adding

apples and oranges together (adding off-market trade reports to electronically addressable order book volume). This causes confusion. It also causes the mis-direction of order flow - where investment decisions, particularly from the buy-side, direct liquidity on the basis of market share of incumbent venues.

The first step to resolve this problem is an agreement among all the exchanges and MTFs of a market share methodology. The methodology should single-count trades and report equity market trading data under two clear segments:

1. On-market electronic public price discovery (Electronic Order Book Transactions) split between Light Order Books and Dark Order Books ; and
2. Off-market private price discovery (Negotiated Deals or Trade Reports).

The new venues have co-operated with FESE (the Federation of European Stock Exchanges), in an attempt to define a methodology. Now the missing ingredient is the real-time solution in the marketplace that shows the volumes being achieved by number of trades, number of shares and total value, for each venue irrespective of size.

If all venues, exchanges and MTFs report the trading data to a single independent provider, then indices, VWAP calculations and other metrics that are derived from this data will be accurate. This will mean that the buy-side will direct its investments to a broader range of platforms.

Once this infrastructure is in place, it will truly be possible to see that size matters.

#### **Conclusion**

This is not just an academic article – it affects every individual that holds securities or has a pension. The lack of a consolidated BBO and market share statistics costs investors significant amounts each year.

It is debatable as to whether market forces will solve the issues

discussed in this article. It is even more debatable that the regulators will intervene, or indeed should intervene. It is possible that the buy-side may force change once it recognises the scale of poor executions.

However, the lack of neutrality and objectivity in each of these matters simply serves to reinforce the dominance of incumbent monopolies and serves to reduce the performance of all investments. Today, the incumbents still receive disproportionate volumes of total liquidity and at a disproportionately high cost. They do not always offer the optimal value propositions and investors must shop around.

The benefits of resolving these market inefficiencies and implementing a real time European BBO and market share statistics tool are significant:

- the cost of trading will be further reduced
  - the buy side and sell side will make more efficient allocations of capital, and improved investment decisions based on volume and continuous temporal information
  - the official price of a security will be determined based on a synthesis of total market volume, rather than so-called “reference market volume”
  - index providers will calculate indices based on a synthesis of total market volume resulting in improved returns on index tracking
  - at a macro level, European markets will become more efficient and it will lower the cost of capital
- Maybe CESR is right and market forces will resolve this issue. Only time will tell. ■

#### **References**

1. Within the dark order category there also needs to be a split between:
  - Transactions interacting under pre-trade transparency rules;
  - Transactions interacting under pre-trade transparency waiver rules.