



Microbites #2 - What and Who Are European Multilateral Trading Facilities (MTFs)?

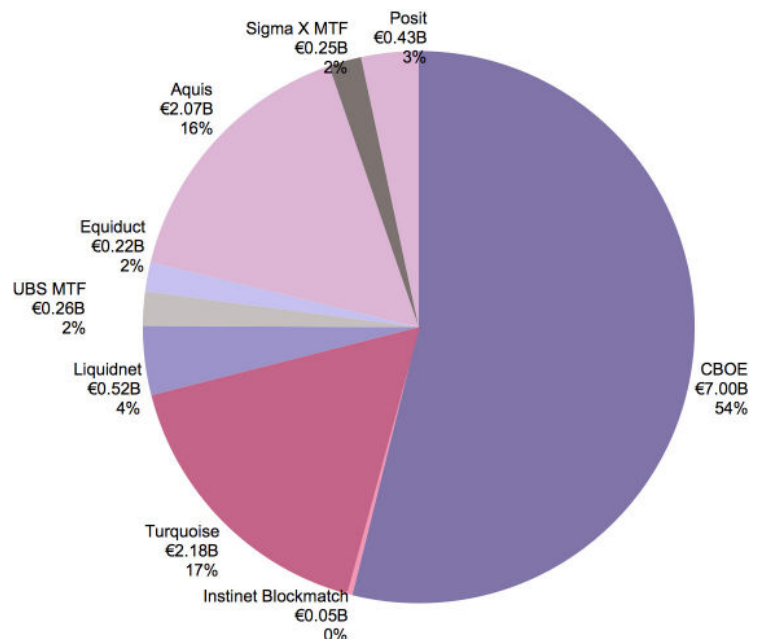
For those who are unfamiliar with the European market structure landscape, or want a refresher, we are running a series of briefings to help you get to grips with the trading terminology, and to help users of our analytics tools.

In this second episode, we will describe the grandly named “Multilateral Trading Facilities” (MTFs) and compare them to the better known national stock exchanges. Please note that in this series we are covering the equities markets.

MTFs can also be found in other asset classes in Europe.

Around 38B€ worth of shares were traded each day on the electronic order books of exchanges and MTFs in Europe last year. The MTFs account for about 34% of this value or 13B€ per day, making them essential pools of liquidity. There are dozens of MTFs registered in Europe, but only a handful have grown to any significant market share (they are shown in the pie chart below).

**ADV€ Traded
by MTFs**



The MTFs can be thought of like the US Alternative Trading Systems in that they are regulated, must publish a rule book, and ensure equal access to liquidity to any participant prepared to abide by those rules (hence 'multilateral'). Although legislation does not require them to operate electronic order books, in practice they all do.

MTFs came into being with the introduction of the original Markets in Financial Instruments Directive (MiFID) legislation in 2007 as a means to encourage competition to the national stock exchanges and make trading cheaper. The objective of the new rules was quickly realised as new electronic trading platforms with a pan-European flavour came into being offering price discounts and new market mechanisms.

The main difference between an MTF and a national stock exchange is that an MTF tends to be pan-European, offering trading in the most liquid shares of European companies, and some less liquid shares. Unlike a stock exchange they do not list shares and therefore the stock exchanges are often referred to as the 'Primary'. (Note that Euronext is a stock exchange system which has a Pan-European capability as it is formed of an amalgamation of several domestic stock exchanges including Amsterdam, Brussels, Dublin, Lisbon and Oslo, but it is not an MTF. As a Scandinavian specialist, Nasdaq OMX has the same characteristics.)

Each MTF has its own nuances in terms of trading mechanisms and charging structures, designed to encourage different participants and ways of trading.

We can categorise MTFs into two main types;

1. MTFs that offer **DARK TRADING** electronic platforms. These types of venues have the following key features;

- Continuous matching, non displayed order books;
- Matching takes place at the MID of the corresponding most liquid lit venue (a restriction imposed by the rules);
- Minimum acceptable quantities 'MAQ' can be used to restrict execution to counterparties which offer larger sizes;
- Some venues offer the 'Conditional' order type for orders above a defined size; these orders are sent in as indicative and must be confirmed if a match is found.

2. MTFs that offer **LIT TRADING** electronic platforms. These operate in an identical way to the exchange type of displayed order matching service and may include Hidden and Iceberg order types that are not considered to be Dark Trading under the rules. Several have some additional features such as;

- Frequent Batch Auctions (also called Periodic Auctions), which run at random but very short intervals (for example 100ms), that allow participants to avoid trading with high frequency counterparties;
- Alternative Closing Mechanisms, that offer a closing mechanism that guarantees the primary market Closing Price, with the main benefit being lower fees;
- Most offer a discounted fee for liquidity contribution.

Several MTFs offer platforms for both Dark Trading and Lit Trading, but there is no interaction between these platforms. We will not go into the special rules of Dark Trading in Europe here and we will leave it for another episode, but for now, note that the amount of dark trading in Europe is restricted by the regulations to under 8%.

Who owns and operates the MTFs?

The MTFs are owned by exchanges or brokers. This is shown in the table at the end of the episode for any MTF with over 0.5% of the MTF market. As a general rule, most of the market share in MTFs is held by Cboe Europe, LSE's Turquoise platforms, and the Aquis exchange. The brokers mostly offer dark pool trading.

Just to make things more complicated, the larger MTF operators run several separate platforms. For example, Cboe Europe runs four different MTF platforms termed CXE, BXE, DXE and LIS, all of which have subtly different functions, participants and charging structures, while Turquoise offers four flavors. Every MTF has slightly different characteristics as they constantly vie for new angles to attract flows. Aquis confines their liquidity providers to passive trading.

Here, we find the intricacies of European market fragmentation. Using these special features and accessing the unique liquidity of all these platforms is essential to optimizing execution performance and requires deep expertise among those who build algorithms and smart order routers. big xyt provides the most comprehensive daily updates on the liquidity found in each type of mechanism, not just in terms of value traded, but also in key quality metrics such as price movements and average trade sizes to help with this effort.

Our final table gives a high level summary of the major MTFs, their owners and the split between dark and lit trading in each one. Some, like Aquis and Equiduct, are lit only, whereas others such as Liquidnet are dark only. It may be surprising that some of the broker-based platforms provide lit trading functionality and this is because they run 'Frequent Batch Auctions' which are considered lit venue functionality.

ADV€ Traded by MTFs 2021

| Venue Operator | Venue Owner | Dark | | Lit | | Grand Total | |
|---------------------|-----------------------|--------------|---------------|--------------|---------------|---------------|---------------|
| | | ADVT | % MTF Share | ADVT | % MTF Share | ADVT | % MTF Share |
| Grand Total | | 3.71B | 100.0% | 9.27B | 100.0% | 12.98B | 100.0% |
| CBOE | CBOE Europe | 1.44B | 38.8% | 5.55B | 59.9% | 7.00B | 53.9% |
| Turquoise | London Stock Exchange | 1.01B | 27.3% | 1.17B | 12.6% | 2.18B | 16.8% |
| Liquidnet | Liquidnet | 0.52B | 14.1% | | | 0.52B | 4.0% |
| Posit | Virtu Financial | 0.41B | 11.1% | 0.02B | 0.2% | 0.43B | 3.3% |
| UBS MTF | UBS | 0.24B | 6.5% | 0.02B | 0.2% | 0.26B | 2.0% |
| Instinet Blockmatch | Instinet | 0.05B | 1.3% | | | 0.05B | 0.4% |
| Sigma X MTF | Goldman Sachs | 0.04B | 0.9% | 0.21B | 2.3% | 0.25B | 1.9% |
| Equiduct | Borse Berlin | | | 0.22B | 2.4% | 0.22B | 1.7% |
| Aquis | Aquis Exchange | | | 2.07B | 22.4% | 2.07B | 16.0% |



Just one thing - in case you thought this was too simple. A handful of exchanges such as the Swiss Stock Exchange (SIX) operates a dark pool on its exchange-based platform. This is called Swiss at Mid, and it processes around 500M€ per day. Dark trading is not unique to MTFs.

Following feedback from our readers and now that we know the basics of MTFs, our next episode will explore Dark trading mechanisms in Europe, the unique 'capping' mechanism and the nuances of the different types of dark trading venues.

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About big xyt

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Our clients include major global investment banks, buy-side firms (asset managers, hedge funds, pensions, indexers), leading exchanges, trading venues, and regulatory bodies.

Navigating fragmented markets remains a challenge for participants needing easily digestible information on trading analysis. The big xyt analytics platform responds to these market challenges, and provides clients access to transparent, accurate and normalised data.

big xyt has created a global ecosystem for tick data analytics covering more than 120 trading venues, across Equities, ETFs, Futures, FX and Options. Our unique technology normalises trade conditions of venues allowing consistent aggregations of trading volumes, comprehensive analysis, and delivery of results in a flexible and customisable format.

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About the Author

Richard Hills is Head of Client Engagement at big xyt. Richard has over 30 years' experience in capital markets, and before joining big xyt, he established and ran the electronic trading business at a major European investment bank before becoming managing director of the global equities execution team.

Richard is a market leader in market microstructure and is the author of big xyt's [European Market Microstructure Survey](#).

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