



European Equities Market Microstructure Survey

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2022

Introduction

Welcome to our annual survey of European trading volumes and market fragmentation at the end of yet another highly eventful year of trading. We aim to provide a brief overview of the key trends and patterns in the market microstructure in 2022 by comparison with the previous five years and invite you to draw your own conclusions about the impact of these patterns on liquidity and trading behaviours.

The survey is based on a vast amount of data. Since the beginning of the new MiFID2 regime in Europe, we have collected over 2.5 trillion data points from the European equity markets. In the corresponding 60 months, there have been 1,230 trading days during which the equity markets have traded around €53.3B per day with a standard deviation of €14.7B and a record day of €123B in 2020. Value traded has grown at an annual compound rate of just 1.91%, less than inflation in share prices. All of the data here is taken from our **Liquidity Cockpit** security analytics solution which allows you to perform your own research and create your own reports.

We look forward to hearing your feedback and comments.

Highlights

**Record
Annual ADV
€58B/day**

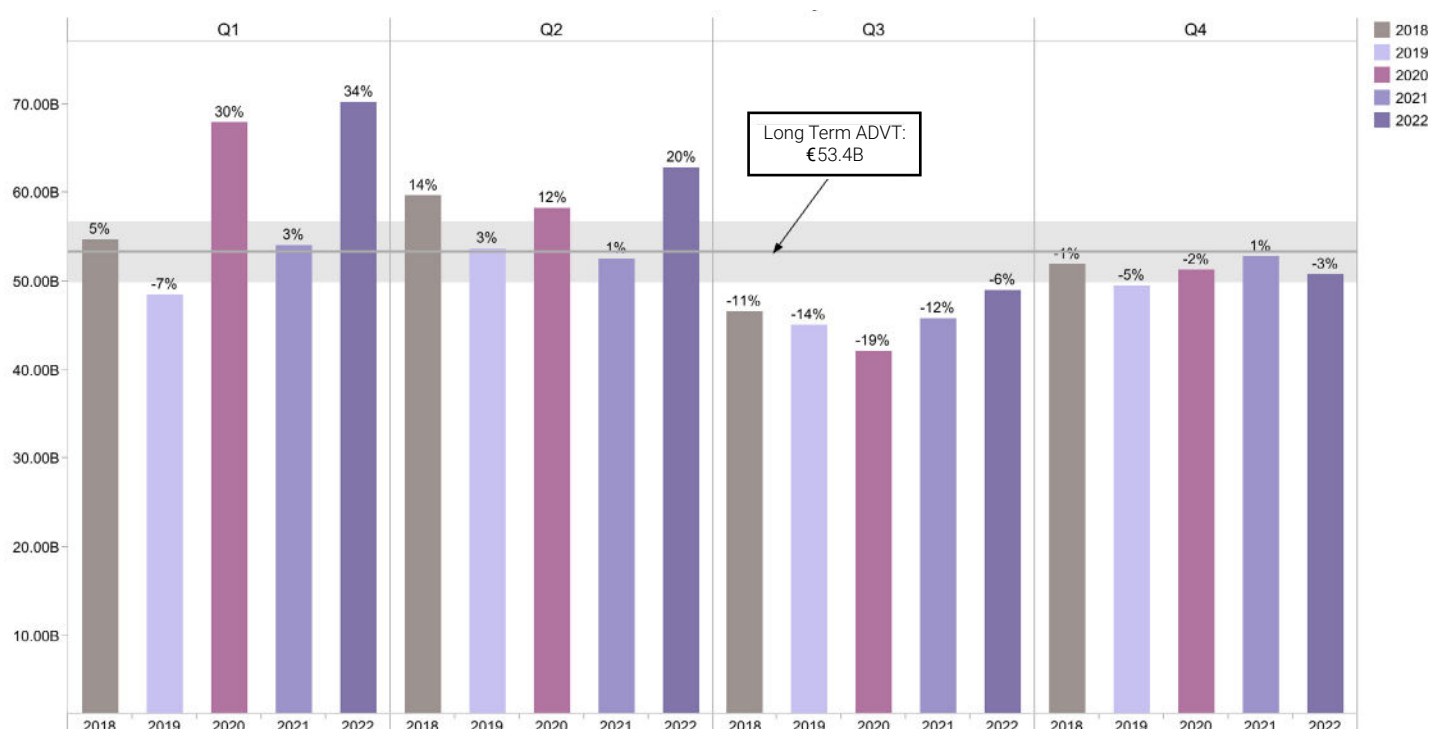
**Record
Q1, Q2, Q3**

**Biggest
Ever Close
€45.6B**

**UK100
Grows
35% ADV**

Record Volumes – AGAIN!

Market Overview - Quarterly ADV€

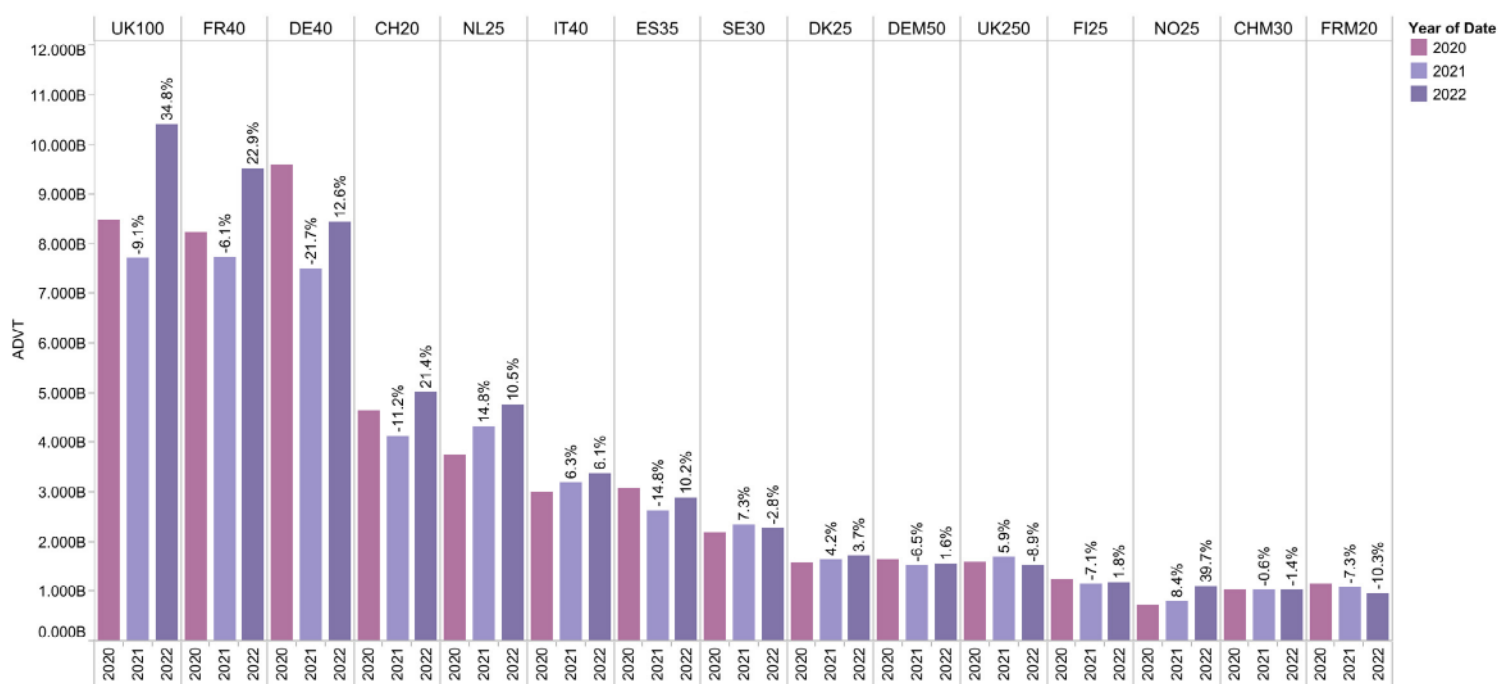


No surprises, 2022 was a record year. The European equities market reached €58B average daily value, a 13.4% increase over 2021 and 9% above the long-term average, albeit in response to sustained volatility rather than a sudden increase in the appetite for European equities. Record quarters (for the MiFID2 era) were logged in Q1, Q2 and Q3 reinforcing the sustained nature of the underlying macro economic malaise. This was in contrast to 2020, when trading broke all the records in the first quarter and then fell rapidly into the doldrums.

March was the second highest month on record, at €79.5B per day compared with the record set in March 2020 of €89B, while six new monthly records were set over the course of the year. In the first half of the year every month except for June traded above the €60B a day mark.

UK100 Leads the Way, Mid-Caps Muted

ADV by Index (> €1B)

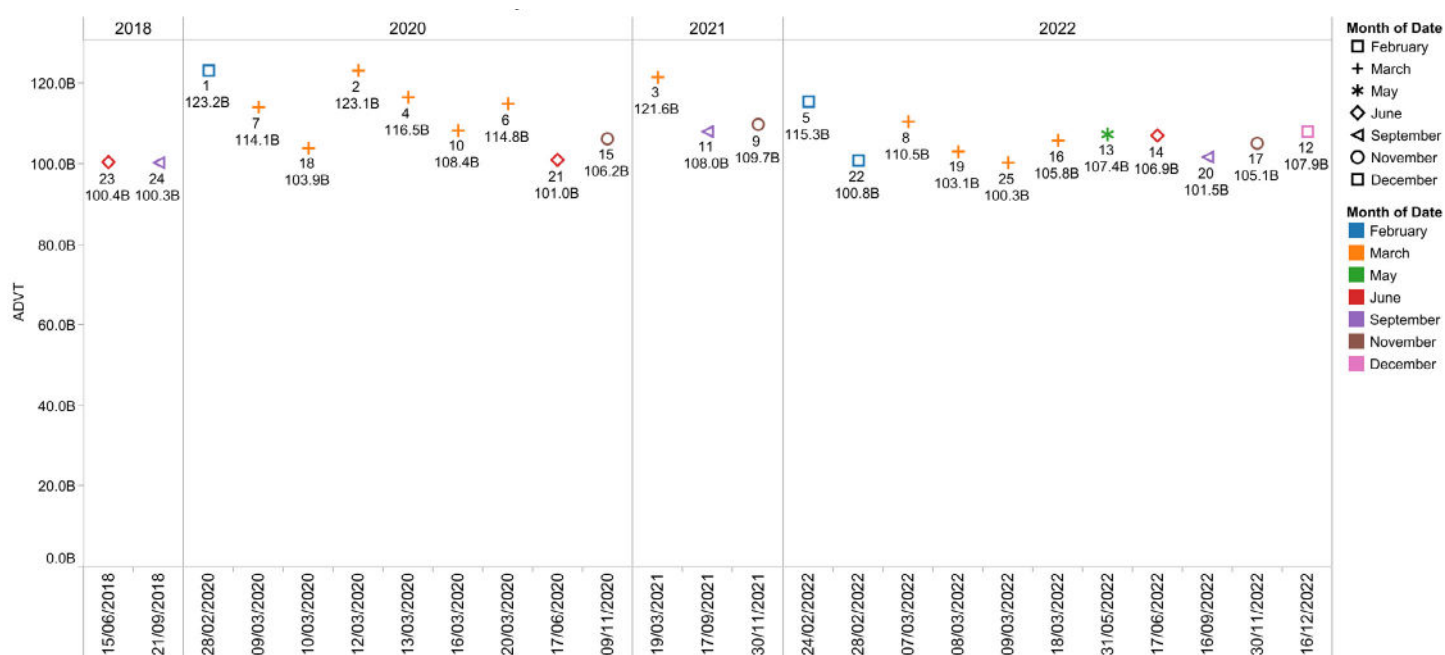


The UK100 index retook first place from the FR40 in 2022 as the most traded index and at a sustained €10.4B average daily value became the first to breach the €10B mark, overtaking the previous record of €9.6B set by the DE40 in 2020. This represented 35% more trading than in 2021 and 22% more than in 2020. The FR40 and CH20 were not far behind, expanding by 23% and 21% respectively over 2021. Perhaps the UK's volumes reflected the additional burst of volatility created by the political turbulence in Q3 at the end of the summer, trading 57% and 48% more in September and October respectively versus 2020.

Outside of the top seven indexes, it is notable that trading was more muted and either flat or even down on 2021 and especially in the midcaps, where for example volumes in the DEM50 were up only 2% and in the UK250 down by 9%. Only the NO25 bucked this trend, expanding by 40%, no doubt driven by energy name Equinor which doubled in volumes from €181M per day to €370M.

11 Seems to Be a Magic Number

Days Over €100B Value Traded

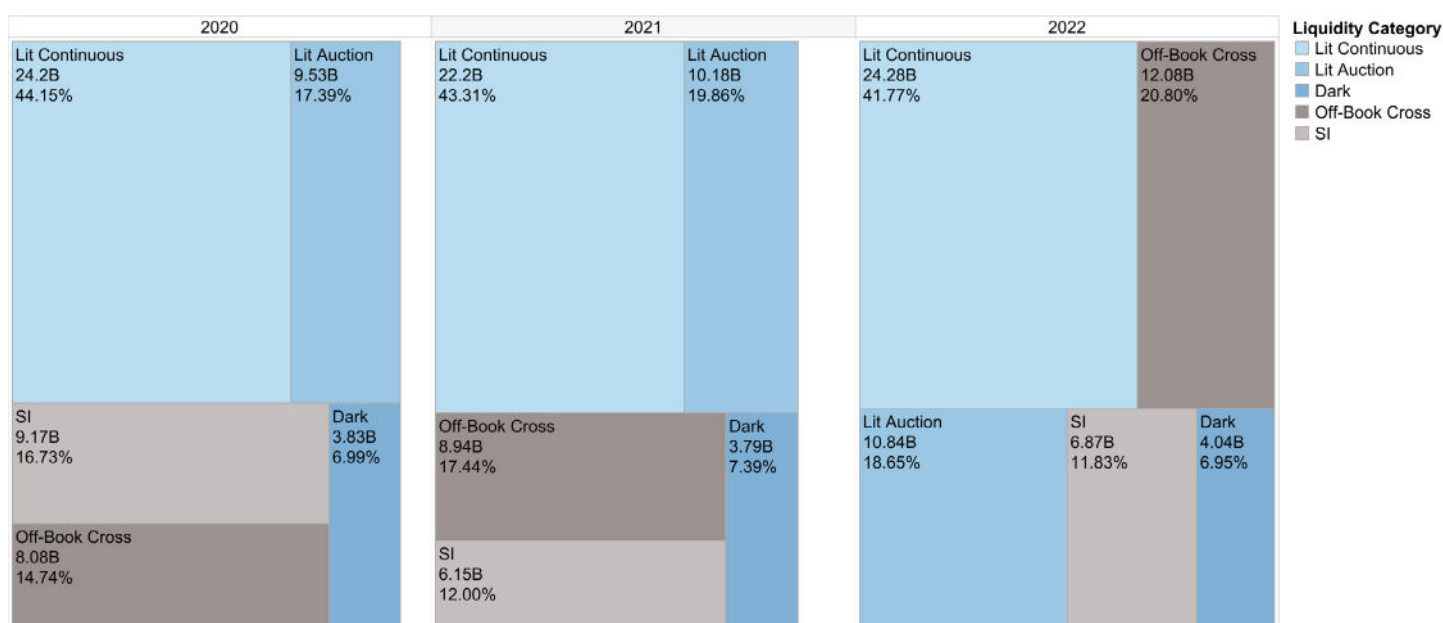


There have been 25 trading days over the last five years where volumes have exceeded €100B (nearly double the average). 11 such days occurred during the month of March, 11 on a Friday and 11 in 2022 (44% of these beasts). Excessive volumes are driven by extreme volatility, index expiries and large index re-constitutions, or a combination.

There is a relationship; index changes have involved more names for additions and deletions recently as economic conditions trigger changes in company performance and the fortunes of different sectors. This was notable in the record rebalance on May 31st of this year, when €46B traded in the closing auction.

Fragmentation: Negotiated Trades Become the Second Largest Source of Liquidity

Overall Market Fragmentation - ADVT & % Market Share Evolution



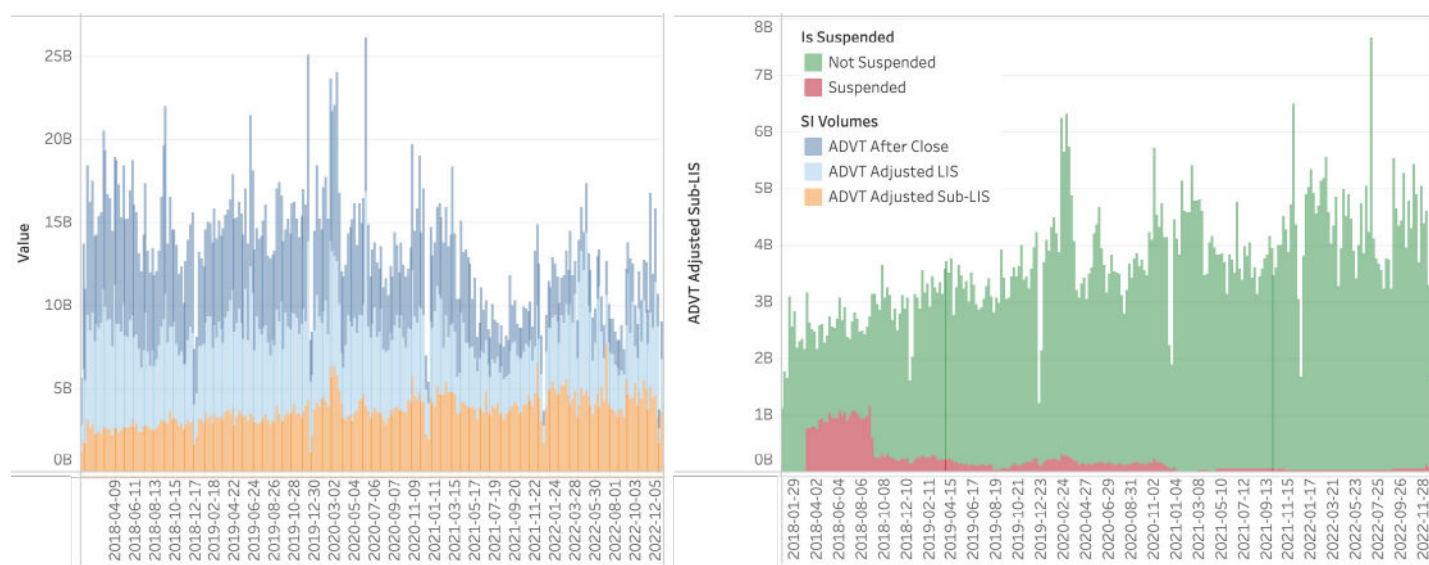
Off-book trading in Negotiated Trades took over from the Auctions as the second largest liquidity pool in 2022, taking nearly 3.5% market share away from the Order Book and reaching 20.8% overall, while growing by €3B per day (roughly the size of Spanish large cap volumes). This is the main fragmentation trend of the year – with Negotiated Trades absorbing 1.54% of Lit Continuous trading, 1.2% of Auction trading and 0.44% of Dark trading.

That's not to say the Auctions have reversed their multi-year growth trend; both the Auctions and Lit Continuous categories traded over €2B a day more than in 2021. Curiously, the Dark Pools lost market share to 6.95% overall, despite the loosening of the DVC rules in the UK.

Systematic Internationalisation continues to be in the regulators' reform headlights. Following a fall of nearly 5% of market share from 16.7% in 2020 to 12% 2021, the category held steady at 11.83% in 2022. This trend towards Negotiated Trades at the expense of SI is a little surprising. It could be due to a range of factors such as reduction in risk appetite or more activity among active managers in the block market. The last point is tantalising; the negotiated trades category reached a record of 26.4% of all traded value during earnings season in Q2 2022.

Systematic Internalisation – Smaller Trade Flows Growing

Volume Trend in SI - All Flows and Small Flows



While SI trading as a whole has fallen substantially in the last 24 months, this is not true of the trend in smaller SI trades. It has been a consistent pattern for several years. The left hand chart above shows overall value reported by SIs and the right hand chart shows the value of those trades that are below the LIS threshold. We categorise off order book trades to enable analysis by excluding those that are not relevant or are not 'accessible' to the market and which are not normally price forming, to leave a clearer view of what we believe to be 'electronically' executed trades in SI platforms.

Also note that the red bars show trades in names that are subject to a dark trading ban under the DVC mechanism. In the last few years at least, it seems there is no relationship between a ban and an increase in trading with SIs electronically.

Order Book – The Auctions Take a Breather

Market Fragmentation

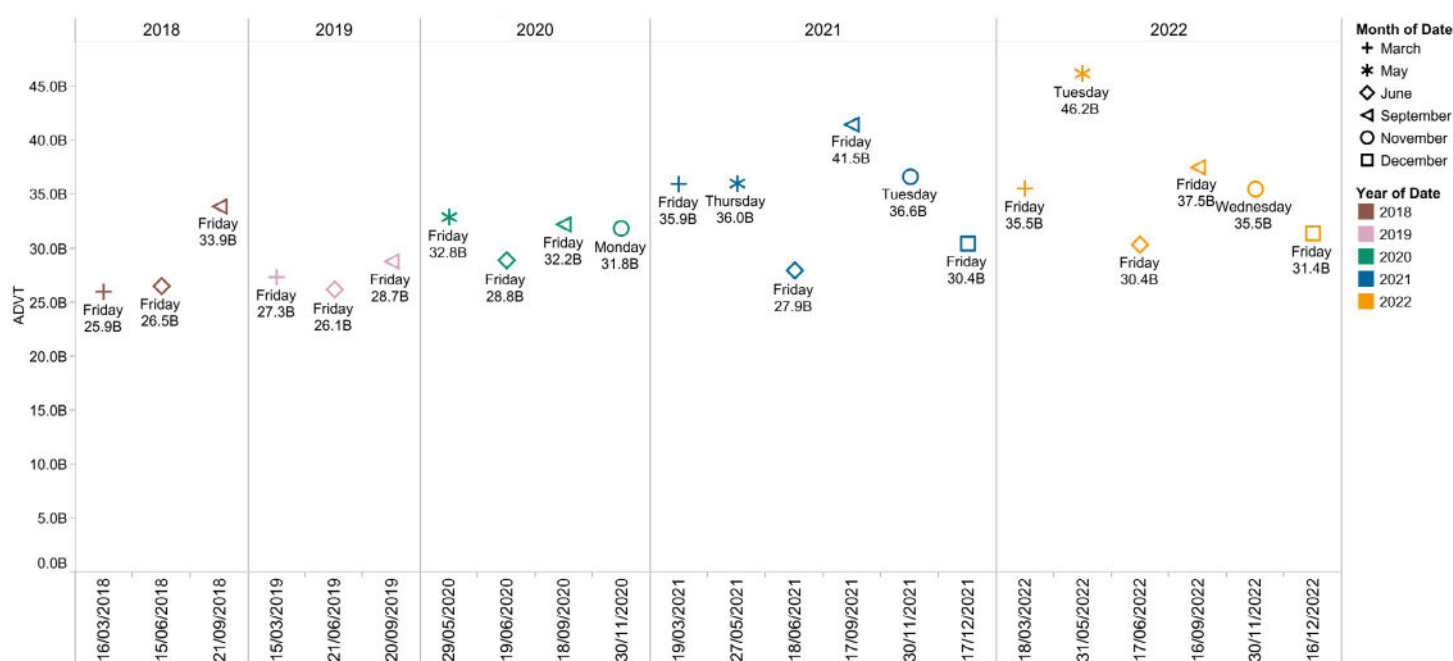


Our chart shows a comparison between the distribution of liquidity in the order books between the EU and UK regulatory regimes. With the spotlight on potential increases to the DVC 8% volume threshold, the UK gives us an indicator of whether the market may use the extra capacity. We see that when the UK effectively ended the regime in 2020, dark trading jumped from 13.8% to 15.6% of the order book, and from 9.3% to 10.7% of overall trading, before settling back to previous levels in 2022.

The driver behind this in the UK is the mid cap market, with the UK250 steadily climbing from 15.7% to 17.5% of order book trading in dark pools over the year. As noted, volumes in the UK mid caps fell nearly 10% in 2022, while the large cap volume increased by a third. It is tempting to suggest that the trailed increase in the EU's 8% limit may be more likely to affect mid cap names and have limited impact on the bigger names.

New Record Closing Auction in 2022

Closing Auctions Over €25B Value Traded

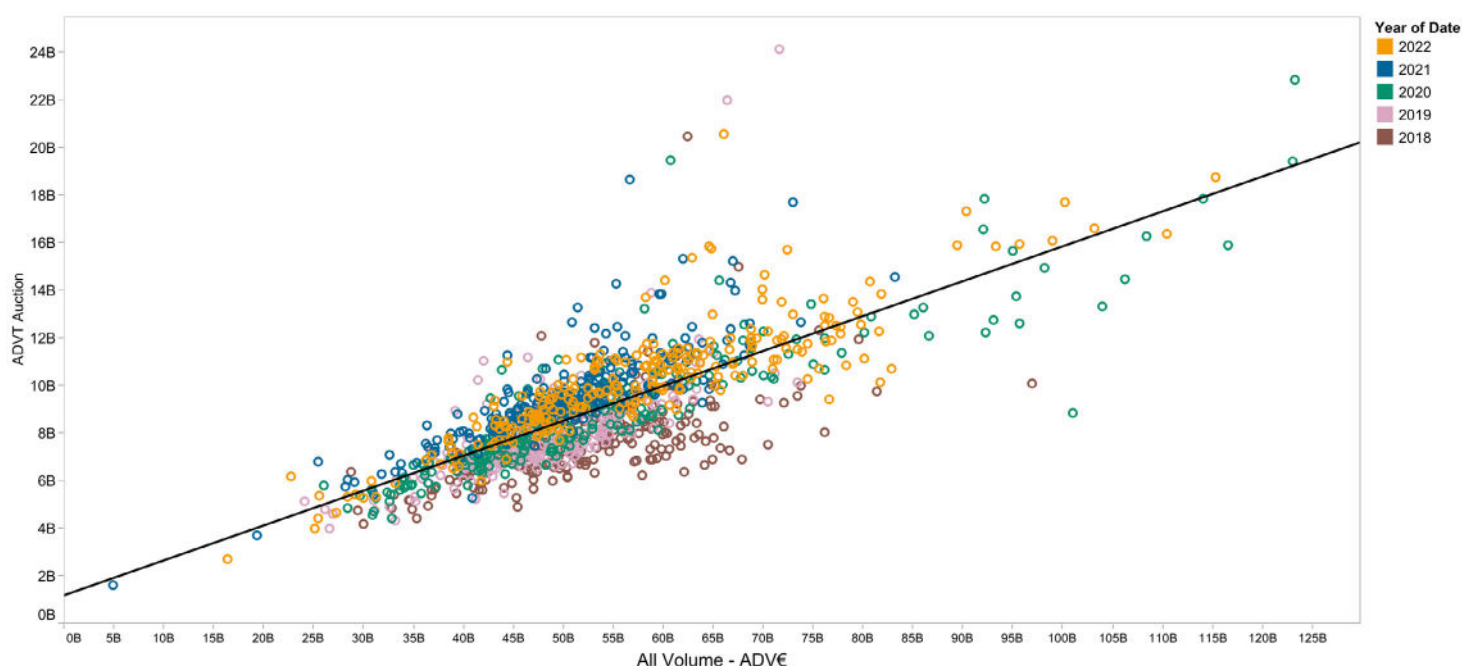


A quick look at the biggest auction days in the last five years also reveals the steady underlying pattern of increasing Closing Auction activity. Auction value traded swelled by 33% in five years, from €8B per day to €10.8B last year, at a compound growth rate of 5.89% versus 1.84% for the whole market.

The MiFID2 era record Closing Auction took place on 31st May 2022, generating over €46B, and 45% of overall market share – over 4x an average day. Our chart shows the 22 largest closing auctions of the last five years, with over half occurring in the last two years, steadily increasing in size and often related to changes in the indexes. The shapes indicate the timing (month) of each one and we can clearly see how each event is steadily growing in size. We've included the day of the week as a friendly reminder of why they tend to get in the way of a long weekend.

Everyday Auctions Are Growing Too

Auction Correlation to Overall Volumes

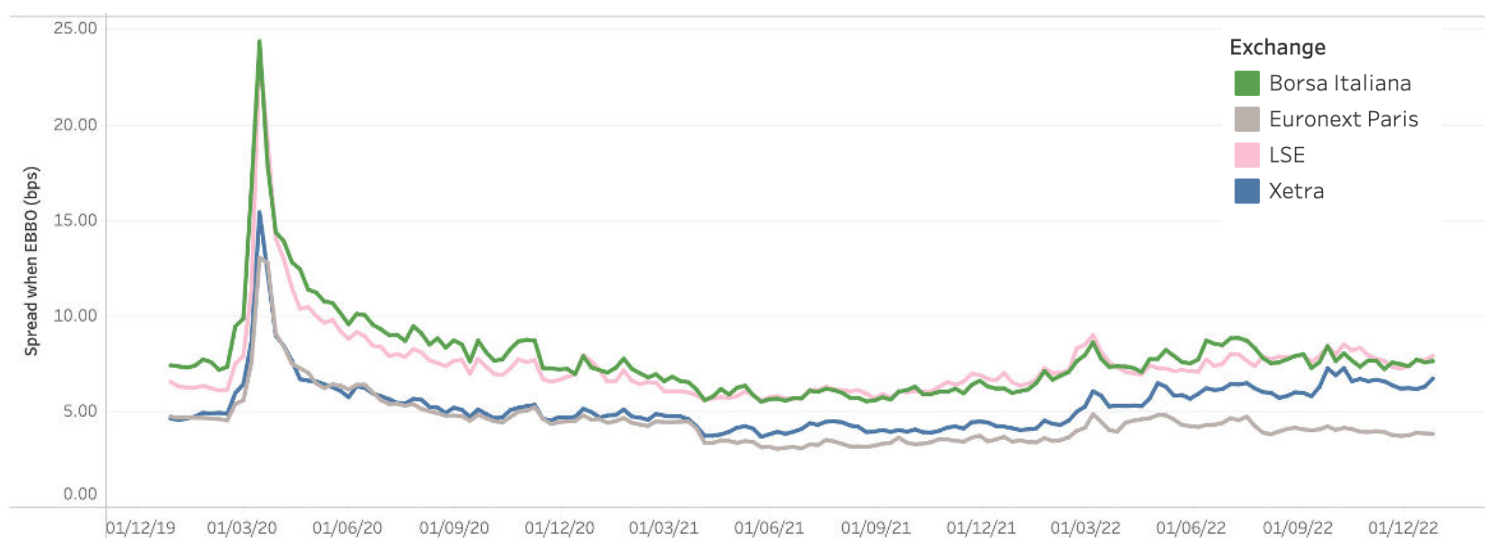


Our cluster chart shows that it's not only monster index changes that are pushing Auction growth but the steady progression of trading towards the end of the day. In this chart, we show a regression of every day's Auction value versus all trading volume but we have excluded the biggest index changes (above €25B traded in the Close) to demonstrate the increased Auction value traded on 'non-index days'. Value traded moved from 15.3% of the total market to 18.7% between 2018 (brown) and 2022 (orange). As well as the increase we also show the strong correlation between Auction value and all types of trading, with an R2 value of 61.4% (if you are into that sort of thing), symptomatic of how nearly 30% of order book traded value is now in the closing print.

The outliers on this chart, mostly shown in green and orange, represent the highly volatile periods at the start of the Covid and Ukraine crises in February and March of their corresponding years, where we noticed less predictability in the auctions.

Postscript

Evolution of At Touch Spreads Since 2020



In this version of the Survey, we have looked at volumes and market fragmentation. Last year broke all the records, most of them set as recently as 2020, with 13% year on year growth in volumes. It's tempting to draw parallels between 2022 and 2020 to try to make out patterns of market behaviour during times of crisis, but the dis-similarities are more striking. In 2022, we saw much lower levels of risk taking (the SI category) than in 2020, and remarkable growth in trades reported away from the order book as 'negotiated'. It seems that this is not down to technical changes in the way off order book trades are reported because market share appears to have been drawn away from the order books.

The high volumes were much more sustained (reaching well into the second half), and as shown in our chart, spreads remained relatively stable compared with the period of the 2020 Covid outbreak before government intervention kicked in, despite similar average levels of volatility over the year. Our graph, which is based on a selection of Primary market At Touch spreads when quoting EBB0, demonstrates how some indexes seem to be more resilient than others, which is likely to be a reflection of their sector bias.

Our Liquidity Cockpit solution covers much more than Volumes and Market Fragmentation. Please explore the topics covered here [on the website](#) and we welcome your feedback or thoughts on other areas you would like us to cover.

Appendix: European Microstructure 101



About big xyt

big xyt provides independent smart data and analytics solutions to the global trading and investment community, enabling firms to process and normalise large data sets on demand and in real time, to analyse execution performance, comply with regulatory standards, and reduce the complexity and costs of technology and operational requirements.

Our clients include major global investment banks, buy-side firms (asset managers, hedge funds, pension fund and 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, FX, Futures 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.

big xyt's innovative analytics solutions are relevant for a broad range of use cases including strategy development, performance trends and analysis, back testing, quantitative research, and regulatory changes. The platform delivers information through a convenient and interactive user interface, and can be easily connected to our cloud-based platform via APIs.

big xyt is wholly owned by its founders and employees, which means there is no conflict of interest when evaluating your execution needs or analysing broker performance.

**Outstanding Market Data Provider at
The TRADE's Leaders in Trading Awards 2022**

Best TCA Tool at A-Team's TradingTech Insight Awards 2021 and 2022

Shortlisted in The TRADE's FinTech of the Year Awards 2020

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