HE OFFICIAL NEWSPAPER OF TRADETECH 2021 HE TRADETECH 2021 Daily





KIRSTIE MACGILLIVRAY

MULTI-ASSET DEALING HEAD AT AEGON
ASSET MANAGEMENT ON EVOLVING THE
TRADING DESK WITH REMOTE WORKING

NEIL JOSEPH

EUROPEAN HEAD OF EQUITY TRADING AT JP MORGAN ASSET MANAGEMENT ON AUTOMATING TRADER WORKFLOW TO NAVIGATE INCREASED VOLUMES

EDEN SIMMER

HEAD OF GLOBAL EQUITY TRADING AT PIMCO
ON THE FUTURE OF THE BUY-SIDE TRADING
DESK AS TRADERS RETURN TO THE OFFICE

UK scraps MiFID II requirements in ambitious capital markets reform

hancellor Rishi Sunak has set out plans to scrap certain MiFID II requirements in an ambitious plan to reform the UK's capital markets regime following Brexit and the latest sign of regulatory divergence from the EU.

The sweeping changes proposed by the HM

Treasury on 19 April include the removal of several MiFID II restrictions inherited from Europe such as the share trading obligation (STO) and the double volume caps (DVCs) related to dark pool trading.

"The consultation process aims to deliver a

rulebook that is fair, outcomes-based and supports competitiveness, whilst ensuring the UK maintains the highest regulatory standards," said Sunak in his statement.

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Proposed reforms to the UK capital markets include the removal of the share trading obligation and the controversial double volume caps for dark trading.

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Global head of trading at Legal & General Investment Management, Ed Wicks, gives his thoughts on some of the hottest topics discussed at TradeTech Europe this year, including remote working, automation and outsourced trading.

24 Traders turn to tried and tested algo strategies in market volatility

As the percentage of funds trading via algos continued to rise, the long-only results of The TRADE's Algorithmic Trading Survey 2021 reveal that traders relied on tried and tested VWAP and TWAP strategies during the market uncertainty.

28 What to look out for at TradeTech 2021

The TRADETech Daily delves into some of the hottest panel discussions and keynote speeches that shouldn't miss at virtual TradeTech this year.

The official newspaper of TradeTech Europe

Editor's note:

his year marks the second fully virtual TradeTech Europe and I'm delighted to present this issue of the official TRADETech Daily newspaper as the ultimate companion to the conference. As we gear up and listen to market participants discuss the new liquidity landscape thanks to COVID-19 and Brexit, there's a sense of anticipation in the air.

With the full conference agenda on page 29, you'll see there are several key themes that big names in buy-side trading will discuss at TradeTech this year. From systematic and automated trading to post-Brexit market structure and driving diversity across the industry, explore some of the must-see panels on page 28.

From pages 12 through to 23, the TRADETech Daily caught up with multiple buy-side trading speakers and attendees at this year's event in exclusive interviews that preview some of the most highly anticipated panel sessions.

Despite this being another year that we are unable to meet and gather in Paris, the global vaccination programme promises light at the end of the tunnel. We hope to see you all again soon as the world returns to normal but in the meantime, enjoy the 2021 virtual TradeTech conference!



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Regulation

... continued from front page

Equivalence discussions between the UK and Europe have been largely fruitless and a stalemate relating specifically to the share trading obligation meant that the UK saw roughly €6 billion in daily trading volumes move away from the City to European capitals such as Paris and Amsterdam in the week following Brexit.

The STO has been hugely controversial with major UK-based stocks initially caught in a political crossfire as the EU confirmed plans to adopt a less holistic approach to the rules. Following widespread concerns across the industry, the EU revised its approach last year and then again just last month in a bid to minimise disruption once the Brexit transition period ended in early 2021. The proposed removal of STO could eradicate any possibility of an equivalence decision ever being reached.

Elsewhere, dark pool trading has been a key area of focus as the UK aims to attract more business to the City, with the removal of DVCs further underscoring this position. The UK's Financial Conduct Authority (FCA) has already lowered the large-in-scale (LIS) thresholds for dark pool trading to a blanket minimum threshold of €15,000.

The EU, however, maintained a minimum threshold of €650,000 and under the MiFID II regulation regulators have made it clear that they remain steadfast in their intention to restrict dark trading in Europe.

"Scrapping the DVCs has been on the cards pretty much since Brexit got done, however, only time will tell as to exactly what impact it will have on equity market structure," Varghese Thomas, president and COO of TradingScreen, commented on the development.

"The removal of the caps could be a boost to the trading of these stocks, which struggle to operate efficiently if a buy-side trader has to inform the wider market of their intentions to trade in what is typically an illiquid market."

The FCA published an in-depth study on the impact of dark trading on costs in February, stating that trading in dark pools and periodic auctions can reduce transaction costs while more transparent venues incur higher costs and implementation shortfall.

In one example, the FCA said that when dark trading is not subject to bans a 10% increase in the proportion of a parent order executed in a dark venue reduces implementation shortfall by 0.97 bps.

The findings contradict similar research from the EU which has made efforts to restrict trading in dark pools to increase activity that

UK scraps MiFID II requirements in ambitious capital markets reform

MAJOR REFORMS TO THE UK CAPITAL MARKETS PROPOSED BY THE UK TREASURY INCLUDE THE REMOVAL OF THE SHARE TRADING OBLIGATION AND THE CONTROVERSIAL DOUBLE VOLUME CAPS FOR DARK TRADING.

"There has been market failure in this area for some time and MiFID II has made this market failure worse."

UK TREASURY

occurs on pre-trade transparent or 'lit' venues. The EU introduced DVCs in 2018 under MiFID II that trigger bans on dark trading when a transaction reaches a certain size.

The European Securities and Markets Authority (ESMA) stated in its MiFID II review consultation in February 2020 that the DVCs have had a positive, but limited impact on market liquidity since they were implemented, and these benefits need to be balanced against the complexity of the DVC system.

Market participants and buy-side traders have been vocal with criticisms on the general move by regulators in Europe to curb dark trading, which they say allows for minimal market impact and often the best price for clients.

Upon acknowledging that MiFID II had failed in its overarching objective to increase transparency, ESMA put forward various proposed modifications to the DVCs in its MiFID II review consultation, including

extending the scope of the system, adjusting waivers or removing the DVCs completely in favour of another method to restrict dark trading.

Periodic auctions also came under intense regulatory scrutiny after ESMA expressed concerns that the venues were being used to circumvent the rules on dark trading. Amid fears the EU watchdog would ban periodic auctions, ESMA eventually opted to make minor changes to how the systems should operate.

In its listings review on 3 March, the UK Treasury also claimed MiFID II's unbundling requirements have had a detrimental impact on SME research. Like dark trading, the EU's rules on research have been controversial since they were implemented in 2018 under MiFID II.

Critics have claimed unbundling, which enforced the separation of payments for institutional research and execution, has reduced research coverage, quality and the number of analysts, and dented liquidity in certain stocks.

Regulators across Europe hold conflicting views on the impact unbundling has had on the institutional research marketplace. France's Autorité des Marchés Financiers (AMF) and the French Treasury strongly supported the changes to the research rules, but ESMA was less in favour of rolling back unbundling requirements.

"The funding of SME research is vital to ensuring enough information on which to base investment decisions is available to investors. There has been market failure in this area for some time and MiFID II has made this market failure worse," the UK Treasury said in its

"The removal of the caps could be a boost to the trading of stocks which struggle to operate efficiently if a buy-side trader has to inform the wider market of their intentions to trade."

VARGHESE THOMAS, PRESIDENT AND COO, TRADINGSCREEN



listing review.

More recently in March, the European Commission published amendments to MiFID II research rules and best execution reporting to offer relief to participants in the wake of the COVID-19 pandemic.

Under the changes, investors are permitted to bundle payments for research and execution provided that the research is on issuers with a market cap of less than €1 billion over 36 months. Best execution reporting requirements were also temporarily suspended after the Commission labelled them as rarely read and too burdensome for market participants.

The UK Treasury's consultation on scrapping

"If we can capture the extraordinary potential of technology, we'll cement the UK's position as the world's pre-eminent financial centre."

RISHI SUNAK, UK CHANCELLOR OF THE EXCHEQUER

the DVCs and the STO alongside other major capital market reforms are due to take this

"Our vision is for a more open, greener, and more technologically advanced financial services sector. The UK is already known for being at the forefront of innovation, but we need to go further," Sunak commented on the

sweeping proposals.

"The steps I've outlined today, to boost growing FinTechs, push the boundaries of digital finance and make our financial markets more efficient, will propel us forward. And if we can capture the extraordinary potential of technology, we'll cement the UK's position as the world's pre-eminent financial centre."

Buy-side

Amundi in talks to acquire Lyxor AM from Societe Generale for €825 million

THE SALE OF LYXOR ASSET MANAGEMENT WILL BOOST AMUNDI AS A LEADER IN EUROPEAN ETFS AND CONCLUDE THE MAJOR RESTRUCTURE PROGRAMME AT SOCIETE GENERALE.

rench investment bank Societe Generale has entered into exclusive talks with Amundi to sell its Lyxor Asset Management business for €825 million as part of an ongoing cost savings strategy.

The deal is expected to be completed by February 2022 and includes Lyxor Asset Management's passive and active management activities for institutional clients in France and globally, including exchange traded funds (ETFs) and alternative products.

Upon completion, Amundi will become a leading European ETFs group with a combined €142 billion in assets under management and 14% market share. It marks the final major deal for Amundi's outgoing chief executive officer, Yves Perrier, who is preparing to step down after 10 years.

For Societe Generale, the transaction will conclude the bank's refocusing programme, which was launched in 2018. The institution has made sweeping cuts to its investment banking division in a bid to reduce costs by roughly €500 million.

Societe Generale will create a wealth and investment solutions department to cover the

scope of the activities not part of the transaction that will be staffed by Lyxor teams also not included in the deal.

This new division includes structured asset management solutions for global clients and structure savings, asset management and investment solutions for its private and retail banking networks, said Societe Generale.



ETFs

State Street opens ETF trading platform to asset managers and broker-dealers

FIRMS THAT ARE NOT CUSTODY CLIENTS OF STATE STREET WILL NOW BE ABLE TO ACCESS THE FUND CONNECT ETF PLATFORM FOR TRADING.

State Street has opened its exchange traded fund (ETF) trading platform to all asset managers and broker-dealers, even those that are not a custody client of the organisation.

The bank said the Fund Connect ETF platform, which was previously only available to clients receiving securities services, will now be open to support all ETF issuers regardless of their service provider.

Fund Connect ETF currently serves 37 asset managers and 77 authorised participants – otherwise known as market makers such as broker-dealers.

The development builds on State Street's recent expansion of its ETF servicing capabilities, with the platform now able to support all ETF trading jurisdictions across the globe including the US, Canada, Europe and Asia-Pacific.

It also becomes the latest product within State Street's electronic trading platform suite, GlobalLink, to adopt an open architecture model.

Trading venues

Cboe gets green light from SEC to launch US equities periodic auctions

THE US EQUITIES PERIODIC AUCTIONS ARE EXPECTED TO LAUNCH AT CBOE DURING THE THIRD QUARTER OF THIS YEAR.

boe Global Markets has received approval from the US Securities and Exchange Commission (SEC) to introduce periodic auctions onto its Cboe BYX Equities Exchange.

The exchange operator confirmed its plans to launch a periodic auction system in the US in July last year, after being the first to launch the alternative trading venue in Europe in 2015.

The periodic auctions allow market partici-

pants to access frequent, price-forming auctions throughout the trading day, helping them find liquidity with a reduced market impact.

Cboe said the launch was in response to increasing block-sized liquidity taking place off-exchange using conditional orders, adding that the auctions would provide traders with an on-exchange alternative to trade in size.

"Outside of the opening and closing auctions

each day, investors generally have fewer options to interact with natural liquidity, particularly when seeking to execute larger orders with minimum market impact," said Adam Inzirillo, senior vice president and head of North American equities at Cboe Global Markets.

Cboe was the first exchange to introduce the periodic auction in Europe prior to the implementation of MiFID II in 2018. Under the regulation, restrictions on dark trading and the banning of broker crossing networks, provided an alternative venue for traders to navigate liquidity and execute transactions in compliance with MiFID II.

The exchange claims that the periodic auction is now the largest in Europe, accounting for 80% of all periodic auction activity, with an average daily traded notional value of €1 billion last year.

Technology



Broadridge secures deal to acquire Itiviti for \$2.5 billion

ITIVITI SERVES 24 GLOBAL INVESTMENT BANKS AND OVER 2,000 BROKERS, TRADING FIRMS AND ASSET MANAGERS IN 50 COUNTRIES.

Broadridge Financial Solutions is set to acquire trading technology provider Itiviti in a \$2.5 billion deal that will expand its capital markets business and global footprint.

The FinTech firm has entered into a definitive agreement for the all-cash acquisition that is expected to close in the fourth quarter this year, subject to regulatory approval.

The move will expand Broadridge's front-office capabilities and increase its multi-asset offering with Itiviti's trade order and execution management systems, FIX connectivity and network services. It will also allow Broadridge to expand outside of the US, with a presence in both Asia-Pacific and Europe, the Middle East and Africa.

"Joining Broadridge represents an exciting next chapter for our business and team by creating a leading front-to-back capital markets technology and operations provider," said Rob Mackay, chief executive officer at Itiviti.

"The combination of our technology, solutions and people will unlock significant value for our clients and drive long-term growth for our combined business."

Itiviti has 16 offices globally, providing technology to 24 of the top 25 investment banks and more than 2,000 brokers, asset managers and trading firms. In December, the firm outlined plans for a rapid expansion, including the hiring of at least 200 new staff across its research and development, quality assurance and client servicing divisions.

Upon closure of the deal, Itiviti will become part of the global technology and operations segment at Broadridge. Itiviti's senior management, including Mackay, will remain at the company to drive future growth.

Sell-side

Goldman Sachs unveils plan to open tech hub in Birmingham

NEW OFFICE IN BIRMINGHAM AT GOLDMAN SACHS WILL HAVE HUNDREDS OF STAFF ACROSS SEVERAL TECHNOLOGY DIVISIONS, STARTING WITH ENGINEERING.

US investment bank Goldman Sachs has said it will establish a new office in Birmingham in the UK later this year focused on technology and engineering.

Goldman Sachs expects to have several hundred staff across several divisions based in the Birmingham office over time as part of its expansion in the UK, including a mix of new hires and existing employee transfers.

Engineering will be the first division in the new office, which the bank said it intends to open in the third quarter this year.

Coldman Sachs stated Birmingham will provide it with access to a new talent pool and STEM (science, technology, engineering, and mathematics) industries to build out its new hub. The city's proximity to London will also help the bank stay connected to clients and other divisions.

"Establishing a new office in Birmingham will diversify our UK footprint and give us access to a broad and deep talent pool in the local area," Richard Gnodde, CEO of Goldman Sachs International, commented. "We see tremendous opportunity to enhance our UK presence and continue delivering for our global clients."



PEOPLE MOVES

Inés de Trémiolles has been named global head of trading at BNP Paribas Asset Management within its global trading function after more than 20 years with BNP Paribas. Formerly global head of the credit trading desk, she will now oversee the asset manager's three trading hubs in Paris, Hong Kong and its US offices in New York and Boston.

Deutsche Bank has transferred responsibility for its investment and corporate bank business to its chief transformation officer, Fabrizio Campelli, amid sweeping leadership changes. From 1 May, the leadership reshuffle will also see the term of Deutsche Bank's current chief executive officer, Christian Sewing, extended until April 2026.

Natixis Investment Managers

has appointed a new CEO after confirming its current chief **Jean Raby** will depart this month to pursue an opportunity outside of the firm after three years in the role. **Tim Ryan** will join Natixis Investment Managers as chief executive officer from 12 April, replacing former **Goldman Sachs** investment banker Raby who has been CEO of the \$1.39 trillion investment manager since 2017.

Citi has appointed its global head of FinTech and innovation for the markets and securities services division to digitise services for its entire institutional client base. Sandeep Arora has been promoted to chief investment officer and head of digital for Citi's Institutional Client Group to drive the acceleration of the unit's digital offering.

NEWS UPDATE

Buy-side

AXA Investment Management rolls out outsourced trading services

A gap in the market created by the squeezing of margins and the need for significant investment in execution and middle-office activities led AXA to offer outsourced trading.

AXA Investment Managers has started offering outsourced trading services to smaller asset managers as it becomes the latest player to enter the space following a supposed increase in demand.

A spokesperson at AXA confirmed the move, citing ongoing pressures on margins that has



seen smaller and mid-size fund managers increasingly look to outsource execution and middle-office functionality.

"Due to the squeezing of margins and the need for significant investment in execution and middle-office activities, we see small or medium-sized players outsourcing these functions to larger players with this critical size," said a spokesperson from AXA Investment Managers.

"AXA IM is one of the important players, we have the critical size and have made the necessary technological investments to enable us to become an aggregator and to recover external mandates on execution and middle-office activities."

The team of around 70 traders at AXA, with 10 dedicated to derivatives trading, is led by Yannig Loyer, head of trading and securities financing and derivatives.

The investment manager currently executes orders for its own funds and mandates, and other AXA Group companies. Its new outsourcing mandate will offer execution, operations and liquidity management including financing and the optimisation of cash and inventories.

"Our critical size and our link with the AXA Group make us a first-rate player in most markets with traders present in several countries," added the AXA spokesperson.

Equities

Equities traders looked to high-touch trading in volatile market, JP Morgan survey shows

Recent survey by JP Morgan found that nearly a third of equities traders said their use of high-touch trading had increased during the pandemic.

Just under 30% of equities traders increased their use of high-touch trading during 2020, according to a recent equities survey by investment bank JP Morgan.

The poll of 200 equities traders globally revealed that 28.1% had changed their execution strategies to incorporate more high-touch trading while working from home between March and June last year.

At the same time, 29.5% of traders said their use of high touch blocks has increased since this time last year, while 47.5% said engagement with high touch blocks

remained the same as in previous years.

The volatile market environment during the period of March and June 2020, driven by the global pandemic as the industry shifted to working from home, saw many traders revert to high-touch trading strategies to source liquidity and gain more certainty in execution.

Of those surveyed by JP Morgan, almost half said they expected the pandemic to have the greatest impact on the market in 2021, and just under a third cited availability of liquidity as the greatest daily challenge.

Buy-side



Columbia Threadneedle agrees \$845 million deal to acquire BMO European asset management business

The acquisition of BMO EMEA asset management arm will add \$124 billion of AUM at Columbia Threadneedle, making it a top 35 global asset manager.

S asset management firm Columbia Threadneedle Investments has agreed to acquire the European investment business of Canada's BMO Financial Group for \$845 million in cash.

Columbia Threadneedle's parent company, Ameriprise Financial, confirmed that terms of for the deal had been agreed on 12 April and it is expected to close by the end of this year, subject to regulatory requirements.

It will add \$124 billion of assets under management (AUM) to Columbia Threadneedle's EMEA business, taking its total AUM to \$671 billion, making it one of the top 35 asset managers

globally and top 10 asset managers in the UK.

"Adding BMO's EMEA asset management business is an exceptional growth opportunity. The transaction advances our strategy and enhances our geographic and asset class diversification, enabling us to serve more clients and meet more of their needs," said Ted Truscott, CEO of Columbia Threadneedle.

The deal is the latest in several major mergers on the buy-side as consolidation continues across the industry. Earlier this month, Amundi agreed to acquire Lyxor Asset Management from investment bank Societe Generale for €825 million

Trading venues

Lit volumes on LSEG's Turquoise Europe venue surge post-Brexit

LSEG'S EUROPEAN TRADING VENUE SAW LIT AVERAGE DAILY VOLUMES INCREASE 30% FROM JANUARY TO MARCH 2021.

A verage daily volume (ADV) on the London Stock Exchange Group's (LSEG) European lit order book has increased 30% in the first three months following Brexit.

Lit ADV at Turquoise Europe – the LSEG's European-based trading venue which went live on 30 November before the end of the Brexit transition period – increased by 10.1% from January to February and then by a further 20.5% from February to March.

Turquoise Europe's lit growth in ADV per month outperformed its competitors, with statistics showing that rival exchange Cboe Europe's lit venue ADV increased 21% in the first three months of the year, while Aquis Europe's lit ADV grew 17.4%.

LSEG's Turquoise Europe trading venue, based in the Netherlands, went live at the end of last year as many exchanges established EU-based trading venues to ensure they could continue trading for clients given failures to reach an equivalence agreement.

"Since we saw that migration in January kick off, we have seen significant growth across Turquoise Europe, and what we have been really delighted to see was the growth on Turquoise Lit," head of Turquoise Europe, Adam Wood, told The TRADE.

Wood added that growth in Turquoise Europe's lit order book in the first three months of the year had been driven to its liquidity provision, retail participation, and new demand from market participants for securities from the central and eastern Europe (CEE) markets.



How to effectively trade at low participation rates while utilising dark block liquidity

Gareth Exton, head of EMEA execution and quantitative services distribution at Liquidnet, explains how combining low participation rate algo strategies such as VWAP and POV with Liquidnet Smart Blocks can help traders realise the benefits of dark block liquidity.

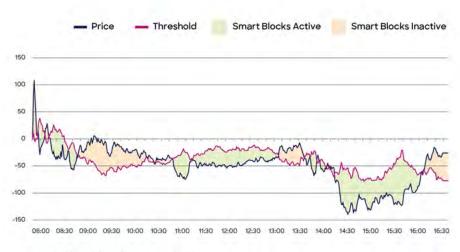
uropean buy-side traders are increasingly voicing frustration about feeling pushed to trade at low participation rates via strategies like volume weighted average price (VWAP) and percentage of volume (POV), whilst also keen to utilise dark block liquidity.

Traders and investment firms use these strategies for a variety of reasons including the lack of clarity on price direction, as well as fear of market impact and being adversely affected by the price of a dark block. On top of this, increased volatility seen since the start of the pandemic has led some to 'trade the average' in anticipation of being caught on the wrong side of price moves, which can increase the opportunity cost and timing risk through longer order durations. Increasing order durations might be ok when there is no alpha present in the order, such as for a CRB desk with a neutral alpha unwind, however, for most buy-side traders this is not the case and managing for momentum is crucial. Using low participation rate strategies while utilising dark block liquidity therefore is challenging but is there a way to do it effectively?

The use of low participation rate strategies such as VWAP and POV in the market is significant. The recent algorithmic survey compiled by The TRADE in spring 2021 showed 59% of respondents cited using VWAP and 57% using POV¹. Other industry reports have shown that approximately 50% of algo strategy usage in the market today is also through these strategies².

As well as contending with increased volatility, traders' ability to forecast appropriate price levels at which to potentially change trading strategy has been partly hindered by changes in market microstructure. Overall market volumes have reduced but, more importantly, where specific volumes are found

Extend Dynamic POV with Smart Blocks
Example: Buy TKWY NA on 15 March 2021



Source: Liquidnet TickDB data - 15 March 2021

Liquidnet ******

in the market has changed. For example, composite lit continuous volumes are down from 73% of total market volumes in July 2016 to 58% in April 2021³, a 20% reduction in the liquidity that VWAP and POV algos typically interact with when creating their trading schedule and reacting to being ahead or behind of that schedule. In addition, the closing auction has become an even larger part of any VWAP calculation, making the proportion of any order traded during the continuous session even lower. In contrast,

overall dark trading volumes have returned to pre-MiFID II levels⁴ and dark liquidity has become blockier in nature, with ~40% of dark principal now above LIS⁵.

Tapping into dark liquidity helps traders reduce their trading costs, as cited in a recent FCA paper looking at the effect of banning dark pools. The paper showed better performance vs. the arrival price (implementation shortfall) for orders with a larger proportion of executions in venues with lower pre-trade transparency levels such as in dark pools⁶. This is also evident in the savings Liquidnet clients have made through trading blocks, as seen in our 'Value of the Block' analysis. Clients saved on average 19.7bps of market impact and spread costs on executions in

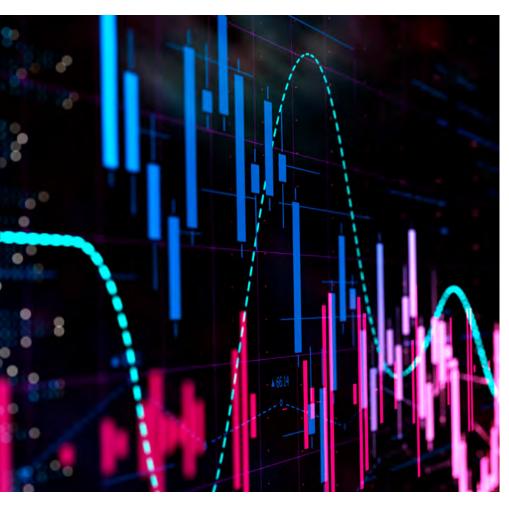
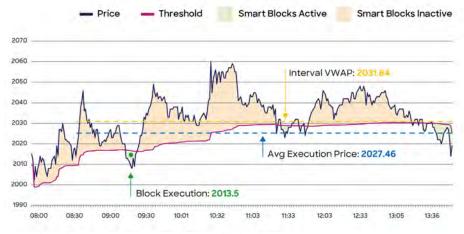


Image 2

Improving performance vs. VWAP using **Smart Blocks**

VWAP buy order in UK mid cap April 2021



Source: Liquidnet TickDB - Client order in UK mid cap on 1 April 2021

- The TRADE 2021 Algorithmic Trading Survey https://www.thetradenews.com/the-trade-magazine-spring-2021/
 Virtu European Market Landscape February 2021 https://www.virtu.com/uploads/documents/Virtu EuropeanMarketLandscape February 2021 https://www.thetradenews.com/the-trade-magazine-spring-2021/
 Virtu European Market Landscape February 2021 https://www.thetradenews.com/uploads/documents/Virtu EuropeanMarketLandscape February 2021 <a href="https://www.thetradenews.com/uploads/documents/Virtu EuropeanMarketLandscape February 2021 February2021.pdf

- Stage February 2011.001

 3. Big XYT Liquidity Trends since July 2016 Lit Exchange/MTF April 21 vs. July 16.

 4. Big XYT Liquidity Trends since July 2016 Dark MTF April 21 vs. July 16.

 5. Bloomberg, LIS % of Dark Market, 01 2021

 6. FCA Occasional Paper 60: Banning Dark Pools <a href="https://www.fca.org.uk/publication/occasional-papers/occasional-papers-occas

Stoxx 600 names during 2020. The timing risk saved through block executions in Stoxx 600 names was also significant, saving 1.4 days (743 minutes) of exposure in the market vs. trading at 10% POV7.

With the benefits of dark block liquidity evident, and the need to trade via low participation rate strategies also clear, traders have increasingly asked Liquidnet to develop solutions that help them to reconcile these two positions: trading over longer periods of time and at lower participation rates, whilst smartly accessing dark block liquidity. Liquidnet Smart Blocks is a global proprietary solution that aims to achieve this by dynamically stepping in and out of the block market, at opportunistic price levels that the algo has determined are appropriate levels to trade, while trading along a VWAP or POV strategy as chosen by the trader.

The opportunistic price levels determined by the algo are calculated using pre-defined rules related to choices made when deciding the benchmark and the degree of movement required, for example 10% of the stock volatility, on-side versus the stocks correlated basket. This negates the need to have a clear price-level in mind pre-trade or a clear view on price direction, something traders often are unclear on at the start of an order.

In the first example shown (Image 1), depicted as a buy order for Just Eat Takeaway (TKWY NA), the benchmark was chosen as the correlated basket signal (which is our proprietary signal from Parameta Solutions, designed to highlight when a stock has dislocated from its peers) and the required offset was 15% of the stock volatility, so in this instance 25bps of movement. As the stock price moves throughout the day, there are periods of time when the price is favourable compared to the threshold-adjusted correlated basket, activating the Smart Block signal and the search for block executions in dark venues for the order. As the stock rallies relative to the basket, the signal deactivates and the POV order continues as its pre-set rate of execution

The second chart (image 2) is a representation of a real VWAP order by a Liquidnet client using Smart Blocks, where the trader used a 10% volatility offset vs. the interval VWAP. As the price became favourable, Liquidnet Smart Blocks became active and the algo achieved a block execution using a conditional order type in an external MTF, at favourable price levels, outperforming the interval VWAP by 21.5bps.

If the challenges outlined here seem familiar to you as a buy-side trader, dynamic POV or VWAP combined with the functionality of Liquidnet Smart Blocks could help you to realise the benefits of dark block liquidity, while trading at low participation rates via a longer time horizon strategy. Smart Blocks is in the process of being made available globally, so please speak to your Liquidnet representative to explore the functionality in more detail.

GREGG DALLEY: navigating the new liquidity landscape

Global head of trading at Schroders, Gregg Dalley, tells the TRADETech Daily about the impact of market structure changes on liquidity and trading processes since Brexit, and provides his thoughts on other hot topics such as SPACs and the consolidated tape.

Ahead of your participation on a panel discussion at TradeTech's virtual conference on liquidity in a post-Brexit environment, tell us about the impact of market structure changes since Brexit.

We were quite fortunate and not massively impacted by the equivalence issue relating to trading venues because we don't have any EU share trading obligation (STO) clients, so that part has been relatively straightforward for us. But I think the situation with the Swiss Stock Exchange when they had 100% market share for a period after losing equivalence was a good experiment for the industry in many ways. It took away competition and it went back to a single venue. I'm keen to discuss that on the panel and whether we have gone too far in the debate about the benefits of competition between multiple trading venues, with all the issues that go with that around the availability and cost of market data, smart order routing, plus the impact on volumes, spreads, costs etc.

With the Brexit scenario, we had a lot of time to prepare, and it was well thought out internally. The execution mechanics might be slightly different, but we still get the same outcome. London has lost its market share as the number one place to trade shares in Europe and most of that share has gone to Amsterdam, but it is just that venue location

which has changed.

When you look at market share and where volumes have migrated to it appears to have had quite high impact, but from the day-to-day point of view it has been very low impact. Whether the smart order router goes to Amsterdam or London, you know you're getting the same price, at the same time from the same place.

What are the main challenges for traders sourcing liquidity in a post-Brexit landscape? Operationally the main challenges were around client reporting. There were lots of

"The consolidated tape should be much more insightful than just looking at the volume, it should go a step further and look at participants' market share."

new MIC codes that suddenly sprung up that nobody had seen before and they weren't set up in the systems, so there were some issues on the transaction and trade reporting side. It took a few weeks to resolve those challenges.

Structurally the liquidity hasn't necessarily changed and it hasn't suddenly created new participants. However, in terms of coverage, we've seen banks moving people to EU destinations and I think that has had quite a big impact. There have been some positive comments from the government about regulation and how they can make the UK more attractive while ensuring there is still a stringent code of ethics and protection. But for London as a trading hub, the impact is potentially much greater than on individual asset managers.

What are your thoughts on the UK's decision to loosen rules on dark trading? Is this a positive development for market participants?

I think the development could take away a complication that emerged from MiFID II. The double volume caps and dark trading rules, even the large in scale calculations, were not quite right. But the market is very good at providing a solution to work around such issues. The outcome will be the same for us, but the venue that we are trading with will potentially be different. It won't create new liquidity and it won't take liquidity away, it will just change the mechanics of how it works.

There are other areas too like IPO listings. The UK is trying to make that more attractive, which is quite interesting. It has been a hot topic for years, but it seems things have really started in earnest with that. We, at Schroders, are very supportive of the proposed changes but I am conscious that there are differences of opinion. I'm also interested in other people's opinions around SPACs as they come into Europe



"The UK's decision on dark trading rules could take away a complication that emerged from MiFID II."

and as the SEC in the US has started to ask more questions regarding these vehicles. Listing can be costly and time-consuming, but safeguards are, of course, needed. If you take away the time-consuming part and some of the costs, do you remove those safeguards? Could it be a regulatory loophole in terms of listing quickly with less insight into the actual company? That's an interesting area in terms of market structure.

What other topics are you expecting will be discussed at this year's TradeTech event?

It's a very quiet period for regulation that we are going through. There was a lot of movement with Brexit, but that has come and gone quite successfully. The MiFID II review is interesting, particularly from a fixed income perspective, looking at the role of MTFs and OTFs. For equities, it is quite a stable platform and everybody is relatively content. I expect the consolidated tape will be a theme and we have been discussing that since the start of MiFID I. It is frustrating that we have been discussing it for so long and nothing has been done about it. The tape should be much more insightful than just looking at the volume, I think it should go a step further and look at participants' market share.

In my view, it should be broken down more so we can see HFT flow as direct members, and then for sponsored access we should be able to see broker access flow, broker client flow, broker proprietary flow - and this is easy to distinguish in terms of market share. That would be very useful, particularly on volatile days as we saw back at the height of the volatility in 2020. Some of the numbers from HFT firms show they were 70% of the volume, which I can believe because everyone went to the order book. But if you want to go back and analyse that period you need to know how much of a part the HFT firms played in that volatility, but you wouldn't be able to.

Which panel discussions are you most looking forward to attending at TradeTech this year?

I am looking forward to a number of the panels but the one regarding accelerating trading and automation will be interesting as we have been doing a lot of work in this area across multi asset over the last two to three years. It will also be interesting to hear views on crypto for institutions and the role that will play in the future.

KIRSTIE MACGILLIVRAY: adapting to the new normal

Head of multi-asset dealing at Aegon Asset
Management, Kirstie MacGillivray, tells the
TRADETech Daily about how her trading desk has
evolved with remote working and the challenges
in hiring new talent during the global pandemic.

How has your trading desk evolved with remote working conditions?

We have experienced a rapid evolution under remote working conditions. When we first went remote, I think universally we were all extremely nervous about the prospect. All our dealers sit close to the portfolio managers and they are used to maintaining communication throughout the day. A year on, everybody is now very settled in the remote environment. We have adapted to new ways of communicating and the new infrastructure works well. I have the same set up in my sitting room as I have in the office.

The communication was the hardest part for us and that was where we had to put the work in but now, we use a variety of different technologies and we have those communication lines open all day in the same way that we did in the office. The reality is that the days of having all the portfolio managers sitting nearby are gone and so we will have to continue to be more reliant on the virtual communication tools rather than our traditional voice.

Managing a hybrid desk with a mix of dealers and portfolio managers who are in and out of the office will present a new challenge. It could create a two-level team and we need to ensure everyone remains on a level footing. When working in the office it is easy to have a five-minute chat but the key is ensuring the right people are involved in those conversations. If it needs to be a conversation with all the equity dealers and one of them is working from home then that conversation needs to be had virtually.

"I am hoping that these new flexible working conditions will give us greater ability to select more diverse talent." Presentism is very prevalent in our industry and that is something I want to guard against in the hybrid model. It is not about who is sitting in the office, it is about who is doing the work and making sure that we are involving everybody.

What were the main challenges for your team in adapting to the changes?

The main challenge was communication. People were used to just shouting over to one another and that all had to become virtual. At the start, I insisted on over-communication to minimise the risk of things being authorised incorrectly or instructions not being fed through properly. The second challenge was the technology. For the first four to six weeks we were using a network that had never been set up to have that many members of staff online remotely. If there were connectivity issues then people were asking to stagger logging on in the morning. There was also a list of people who were critical users and took priority if access was limited.

Has it become more difficult to recruit new talent during the pandemic? If so, how have you overcome these difficulties?

The individuals that have been hired during this period have never physically met any of their team and indeed the people they are reporting into. It is the little conversations that you have during the day in the office that are important and these are being missed. As a manager, it is also harder to keep an eye on your team and make sure they are ok. For



these reasons, when offices reopen, I will insist on a certain number of days a month that the full team are in.

I am, however, hoping that these new flexible working conditions will give us greater ability to select more diverse talent. Things like no longer needing to travel into work will encourage different types of people to apply. Our organisation among others is talking about reducing the desk capacity in our offices globally. There is an acceptance there that remote working is an option for people that want it and I hope that that does help to recruit a more diverse group into the organisation.

How important is it to align cross-asset datasets on the trading desk and can this improve execution performance?

I think it is important to try but not to kill yourself trying because there are always going to be key differences across those

"Individuals hired during this period have never physically met any of their team and indeed the people they are reporting into."

assets. What is very important for me is to align the policies and the processes, meaning anybody looking at it would see common principles applied no matter the asset class. That helps to improve the execution performance because you can see not only the full audit trail but also the full thought process in terms of how you came to that conclusion to execute that deal with that broker. I am continuing to push very hard on the desk for the continued use of that information for future decisions. That is

years ago it is delivering a more consistent

something that is still evolving on the desk. When you look at now compared to three

"I want consistency across the asset classes, it is not about one dealer saying look how good I am in this asset class."

execution performance. It is very rare now to have those outliers because everything is following a similar workflow. I am still grappling at the other end with the on-desk post-trade monitoring. Aligning that is more difficult. Clients get a better outcome when looking at that from a common footing. I want consistency across the asset classes, it is not about one dealer saying look how good I am in this asset class.

Which panel sessions at TradeTech this year are you most looking forward to attending?

Data is a big headliner for me. Especially, when you look across the different asset classes. There are two panels on data and analytics which I have got my name down for. I am also looking forward to the diversity and inclusion and the ESG trading desk panels. I often look at our desk to see what we can do with ESG at the very core our investment process.

FRÉDÉRIC PONS: the second phase of systematic trading

Deputy equity head of dealing at Amundi, Frédéric Pons, tells the TRADETech Daily that as automated and systematic processes become a larger part of the trading landscape, adding alpha will be the second phase of this trend.

This year, you are scheduled to speak on an all-star panel about systematic trading. What are the key issues on this topic that you are hoping to address in the discussion?

Put very basically, the state-of-the-art technologies and best practices in systematic trading. It's important we address the issues around best practices that the industry and our peers are facing and ensure we are all heading down the same path. Taking that further, what is the road map going forward and what are the next steps? Which technologies are supposed to be involved in automation?

Automated workflows have clear benefits for participants as we have seen during the market volatility in 2020. But what risks do they hold?

The risks are held within the benefits and mirror them in many ways. As the workflow is automated, it's on a no-touch basis and there's no human intervention. The main element is to make sure that you have all the controls and checks in place to ensure risk

doesn't increase in more volatile periods. This includes hard and soft checks across automated workflows. For me, that's the most important thing.

Can automated workflows minimise trading costs and slippage?

When we implemented automation at Amundi, the main purpose was to avoid negatively impacting our execution performance before we thought about adding any value. There's scrutiny from clients to make sure we don't adjust execution performance to minimise trading costs and slippage. Adding value and alpha in general, however, will likely be a part of the second phase of the future of automation. We could also potentially onboard more analytics on a pre-trade basis and customise the algorithms we apply in the automation process.

What role do you see automation playing in the future and are there areas that it could expand into?

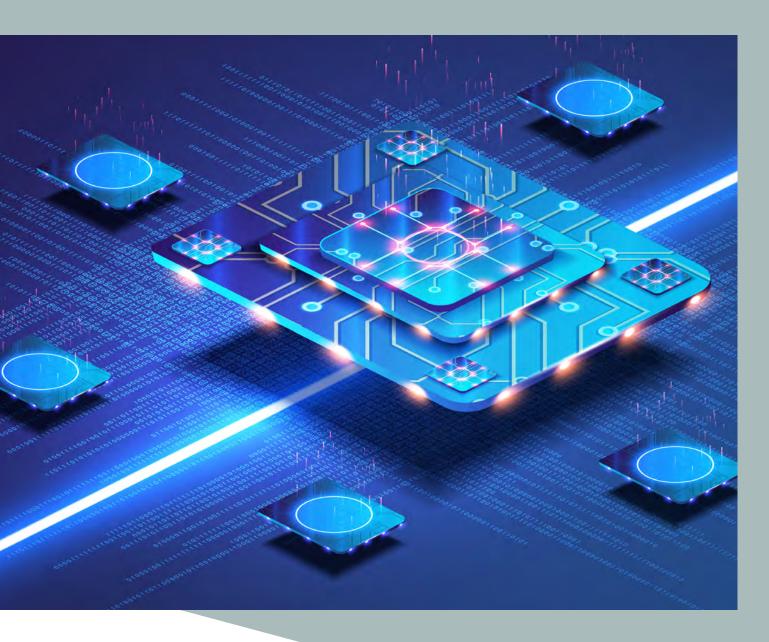
I think that it's going to be a big part of

"Sharing experiences through conferences like TradeTech is an amazing thing. Now more than ever, we need to share our experiences."



the whole landscape and automating more trading activity is a historical trend we are seeing. This doesn't mean that automation will replace human beings in the process. It will become part of the must-have tools for trading desks. On the panel at TradeTech, I hope to have a further discussion about how we can demystify automation and realise that it is accessible to many asset managers.

In the future, the main concern about automation is around the ability to bucket your order flows. Lots of order flows can be automated, but once that first level automation is done, you need more pretrade analytics and data to design your automation process, especially if you want to make changes, switch to another bucket, or automate more difficult buckets in terms of size and liquidity. With pre-trade analytics, you open the door to more sophisticated data processes like clustering for instance, which allows us to target the right strategies for execution. It's the huge improvements in



technology that allows us to improve the automation process.

Systematic trading and automation will likely be a hot topic at TradeTech. What other trends do you expect to hear about at the event this year?

There are many connected topics to automation, but that is going to be a central theme at TradeTech this year. The connected topics will be around all the data and the pretrade data as I mentioned earlier that needs to be automated.

There's also a huge focus on transaction cost analysis (TCA) on a post-trade basis because that becomes the justification for automation. Again, it's important to make sure that automation doesn't impact execution performance, but ultimately that TCA is feeding the decision process in automation.

The other topic is around regulation. To some extent regulation is pushing for a more quantitative approach in data and our processes. It's very likely that we'll see increasing scrutiny from the regulators about

taking a more quantitative approach to these processes.

Which panels are you most looking forward to attending at TradeTech this year?

I'm most interested in best practices around automation and the use of TCA alone and for automation. It seems like regulation has been forgotten over the past few months because MiFID II is far behind us. Now though, we are starting to hear about the new versions of the regulations, like MiFID III. Any new layer of regulations will have an impact on the processes we put in place including automation, so I am keen to attend panels related to that.

You have attended TradeTech in the past, including virtual versions of the event. Why are events like TradeTech so important for the industry?

It's important to raise questions with peers.

I won't pretend to have all the answers to the questions, but it's a good occasion to make sure that we all share the same concerns and challenges.

Hopefully, we can get some insights and inputs from the industry and gain an understanding of the state of play to make sure we are not alone in dealing with these concerns. Given the challenges we have faced and the changing market landscape, not only in market structure and regulation but also tools and technology, it's clearly improving tremendously. Sharing experiences through conferences like TradeTech or through articles, videos or a podcast is an amazing thing. Now more than ever, we need to share our experiences.

NEIL JOSEPH: automating trader workflows

Neil Joseph, European head of equity trading at JP Morgan Asset Management, tells the TRADETech Daily about how automation of workflows helped his trading desk navigate a 40% increase in volumes in 2020.

At TradeTech this year, you are scheduled to speak on an all-star panel about systematic trading. Why do you think automating trading workflows is such a hot topic now?

Broadly speaking, automation can be categorised as either execution or workflow automation, and both types of automation can help to drive trading cost reduction, risk reduction and minimise manual effort. Hence, it's paramount in delivering for clients. Automation also helps to free up traders' time so they can implement tailored trading styles in volatile market conditions, thus the heightened industry focus and conversation on automation over the past year.

What role has automated trading workflows played during the pandemic and recent market volatility?

Thanks to the automation of workflows and talented traders, we successfully navigated a material increase in last year's volume of orders, which increased 40% compared to 2019 in EMEA. This was achieved with the same level of resourcing, whilst minimising trading costs and without any errors.

What are the inherent benefits and risks of systematic and automated trading?
Consistency of outcome, reduced trading



costs, reduced manual effort, and reduced risk are all end goals when automating execution and other workflows. A consistent approach should also result in more comparable data and improved analytics. From here, quantitative and machine learning generated recommendations can be leveraged by both traders and automation systems. But it's important to note that whilst automation is a powerful tool, it's not an end in itself. To reduce the likelihood of any automation-related pitfalls, it's good practice to keep your end goal(s) front of mind.

What role will automation play in the future for trading desks?

The industry is evolving as fast as ever and there will be periods of elevated volatility due to market cycles and exogenous events. Trading desks need to utilise agile methodologies and have a strong foundation of talent and platform, including automation, to be nimble and flexible enough to pivot in this environment. Automation will remain a key part of this story, offering flexibility and continuous improvement of trading performance

"Thanks to the automation of workflows and talented traders, we successfully navigated a material increase in last year's volume of orders, which increased 40% compared to 2019 in EMEA."

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EDEN SIMMER: the future of the buy-side trading desk

Head of global equity trading at PIMCO, Eden Simmer, tells the TRADETech daily that as traders return to offices hybrid trading desks composed of traders with remote and physical office presence can offer a number of advantages.

What will be the main challenges for buy-side traders as they begin to return to office?

The biggest challenge for everyone returning to the office will be re-prioritising their lives as we return to 'normal'. That can mean budgeting time for commuting that for more than a year had been used to spend more time with families or other activities. On the other hand, the work from home environment for some also blurred or obliterated the boundary between work and home, making it very difficult to allocate enough time to recharge. While remote trading isn't perfect as it makes collaboration and training of new hires more difficult, it has been more successful than we could have ever anticipated pre-pandemic.

What does your transition back to the office at PIMCO look like?

At PIMCO, we're prioritising employee safety and health, while also seeking to protect our clients' assets by prioritising and supporting safe trading activity. As a global firm with over 3,000 employees, we'll be conducting return to the office in phases as the pandemic and vaccine rollout can look very different depending on the region.

Where we have welcomed some employees back to the office after government and local authorities have relaxed restrictions, we have adopted a gradual, phased approach to ensure the safety of our employees and because we recognise that this a fluid and evolving situation and that each location has unique challenges. In addition, PIMCO has put in place tools and resources that are designed to promote connectivity, across and within teams, and support employee wellbeing as we adapt to the new working environment, whether in the office or working remotely.

Can hybrid buy-side trading desks be as successful as centralised dealing desks?

This is going to be an area of debate throughout the industry as firms look at the experience of the last year and assess the trade-offs of flexibility versus a deeply imbedded culture of collaboration on a physical trade floor.

Hybrid trading desks that are composed of traders with both remote and physical office presence can offer a number of advantages

"A hybrid trading desk model could lead to higher morale, more motivated and efficient trading teams and increased productivity."

particularly in terms of recruiting and retaining high performers who need or want more flexibility. For these traders, a hybrid model could lead to higher morale, more motivated and efficient trading teams and increased productivity. However, it would be essential for managers and companies to be fair and balanced to the entire team in a hybrid trading desk model for it to be successful.

It is also worth mentioning that the true stars of the pandemic have been technology, human resources, compliance and operations teams in supporting the shift of trading floors and workflows from physical to remote locations. I expect innovations in these areas to continue to advance efficient collaboration of a hybrid buy-side trading desk framework.

What are the benefits of having a diverse workforce on the buy-side trading desk?

Bringing together a team with different perspectives, skills and insights promotes creativity, innovation and strategic problemsolving. We believe traders from diverse teams make better decisions by sourcing from a wider range of industry experiences, which can result in more efficient processes and improved execution outcomes that help to drive an increase in overall performance.

We have all seen studies performed where diverse and inclusive teams often outperform teams made up of workers from similar backgrounds. In addition, future generations are prioritising diversity, inclusion, mental health, happiness, and work life balance in their employment decisions. To attract and retain top talent, companies and managers need to be cognizant that what was important to candidate pools a decade or two ago has fundamentally shifted. Now, employees often feel more comfortable and happier in inclusive work environments that recognise unique contributions.



How can asset managers adapt recruitment programmes to increase diversity across the trading desk?

Asset managers and firms need to be intentional and thoughtful in implementing programmes aimed at diversifying the candidate pools and interview slates during the recruitment process. At PIMCO, our recruiting process is continuously innovating so that each part of the pipeline enhances our ability to attract, develop and interview top, diverse prospects.

In 2018, PIMCO launched Diversity Now and Always (DNA), a multi-year recruiting strategy that incorporates inclusion and diversity best practices. Specifically for more senior positions, we continue to brainstorm and incubate ideas to drive greater diversity in the candidate pool such as market mapping and talent database initiatives, in partnership with our candidate developers.

It is also important for us to mitigate unconscious bias. At PIMCO, we seek to assemble diverse interview panels by developing 'assessment teams', we build recruiter checkpoints at each stage of the search and interview process, we leverage our employee resource group leaders to partner on referrals of diverse talent as well as to engage diverse talent throughout the interview process by broadening the interviewer slate.

Finally, in order to build diversity in candidate pools we need to focus on building the industry pipeline of future talent in underrepresented areas. We recognise that newer generations have a wide selection of industries to choose from to start their professional careers. At PIMCO we undertake deliberate efforts to influence the choice of asset management as an industry with a rich diversity of potential career paths and experiences through PIMCO's Career Exploration Program (CEP) and partnerships with Girls Who Invest and UpReach aimed at providing mentorship and learning opportunities to women and minorities.

What themes do you expect will be most talked about at this year's TradeTech conference?

The paradigm shift that we have witnessed in our industry and the global workforce overall due to the pandemic has drastically changed the way we work, live and learn. The technology innovations to support remote working conditions for trading floors have opened many doors in terms of exciting recruitment and retention possibilities, especially in the face of fierce competition for top talent.

I expect many of the topics of TradeTech 2020 to expand and focus on the future composition of trading desks now that those doors are open and how diverse teams along with innovative technology and data utilisation can further support better execution frameworks and investment decisions.

ED WICKS: change on the horizon

Ed Wicks, global head of trading at Legal & General Investment Management, gives his thoughts on some of the hottest topics discussed at TradeTech Europe this year, including remote working, automation and outsourced trading.

How has Legal & General Investment Management (LGIM) adapted itself to remote trading and do you expect to implement a working from home hybrid form of desk?

We coped very well throughout 2020. If I look back on the full year across all asset classes, we were able to support an increase in volume across our global trading desks of 20%. The ability to support that level of growth of activity with remote working conditions was a real testament to the strength of the processes we put in place.

It is pretty clear that some level of flexibility for our traders will remain. We are currently going through the process of surveying our staff and trying to build a picture of how they want to work in the future. Once we have collected that information we will make a plan of action. We have proven that we can trade safely, efficiently and effectively from

home. There are different jobs on trading desks. For example, at LGIM the team comprises both traders and quantitative analysts, and clearly the role will to some extent dictate how flexible the working pattern might be.

One of the things we are looking at is how we continue to fit out our offices with the appropriate technology, it sounds obvious, but you can't go into a meeting room if you've got half of the staff working remotely and half working in the office. You need to have appropriate technology and AV equipment in place to make that experience as seamless as possible.

What new technologies do you expect could disrupt institutional equities trading in the next few years?

Improvements are long overdue in the

"I don't think we can just talk about diversity and inclusion in general terms. It is helpful to frame the debate in a more granular fashion." initial public offering (IPO) and secondary workflows. This topic is gaining traction on the buy-side at the moment and I'm confident in the next few years we will have better solutions in place to enable us to have a much more STP environment for new issues across both equities and bonds.

The area is ripe for further development and any technology in that space would be welcomed by the buy-side. My own trading desk, and also those of my peers at other large buy-side firms, are managing more automated workflows through order management systems (OMS) and execution management systems (EMS), and subsequently more analytics and advanced data sets will be required for enhanced decision support and for monitoring purposes.

What market structure changes have most impacted trader workflows in the past year?

Changes to trading obligations that came into force post-Brexit at the beginning of this year were significant. Both the share trading obligation and the derivatives trading obligation. The derivative trading obligation had a meaningful impact on trading workflows, even taking into account the FCA's use of temporary transitional power.

You could say quite logically that the bigger changes to market structure are actually ahead of us. We have heard recently the initial proposals from the Chancellor in the UK on the removal of the share trading obligation, and we are looking forward to the upcoming consultations over the summer. The more interesting changes are on the horizon.



Do automation and better execution performance always go hand in hand on the buy-side trading desk?

It depends on what you are automating and why are you are automating it. From my experience, the automated workflows that we support at LGIM are aimed at improving both efficiency, as well as, trading outcomes. We support various automated workflows across rates, FX and equities.

One thing that often gets lost, perhaps, because it is not so interesting, but nonetheless is an important point to make, is automating post-trade activities. This is also a viable activity for trading desks to engage in, booking out executions and partial executions at the end of the day for example can be really time-consuming and inefficient if done manually.

Where do you see the future of outsourced trading?

With any outsourced arrangements, firms need to assess both the scale and complexity of their business in order to determine whether it is appropriate for them. The global

"It is pretty clear that some level of flexibility for our traders will remain."

trading function at LGIM is a fundamental part of the investment process. Our traders play a key role in the investment performance of the firm. We have desks in Hong Kong, London and Chicago and we execute millions of orders on an annual basis across all asset classes.

We believe that that scale brings a huge number of benefits to our firm and naturally therefore to our clients. If you are operating at scale in a large firm with resources and adding value to the investment process and crucially if you're an integral part of that investment process then you are a fundamental part of that investment proposition. It might suit some but not all by any stretch.

Which panels are you most looking forward to tuning into at TradeTech?

I'm interested in all the data and analytics and FinTech sessions that are being run. I joined the diversity and inclusion virtual boardroom earlier this month which was open to buy-side heads of trading. Cognitive diversity achieved through a diverse team is very important. People look at problem solving in different ways.

Trading desks have done a reasonable job in promoting and encouraging cultural diversity. It's no surprise to hear me say that trading desks have been less successful in trying to meet the challenges of gender diversity. I am interested to see how the debate plays out at TradeTech. However, I don't think we can just talk about diversity and inclusion in general terms. It is helpful to be clearer about what it is we're talking about and trying to frame the debate in a more granular fashion. There are some aspects that we have done very well at and others where we have done less well.

Traders turn to tried and tested algo strategies in market volatility

As the percentage of funds trading via algos continued to rise, the long-only results of The TRADE's Algorithmic Trading Survey 2021 reveal that traders relied on tried and tested VWAP and TWAP strategies during the market uncertainty.

2020 was a wild year for global equity markets and that is putting it mildly. After investors watched on in horror last March as the dramatic sell-off in markets seemed to spell financial Armageddon, it did not take too long for central banks and governments to realise the seriousness of the situation. An enormous program of bondbuying and rate cuts set the stage for a series of record-breaking rallies and heightened equity market activity as companies looked for financing and restructuring solutions.

Despite an unprecedented year-long restriction in economic activity, markets are now poised for a global recovery with investors bullish on the prospect of strong growth in business confidence and corporate earnings globally. The investments in technology and software that the financial services sector has made largely paid off through the relative seamlessness with which the industry has handled the turmoil of the past year. Just as the pandemic has underscored the centrality of large technology companies in the modern economy, it has been a reminder of the importance of sophisticated digital solutions for successful investment management strategies. In particular, the volatility, best execution requirements and the working from home environment of the past 12 months has created a fertile environment for algorithmic trading.

In this year's survey of long-only funds the average score of respondents is 5.81 – an increase from both the 2020 score (5.71) and the 2019 score (5.74). In 2021, the most impactful features of algorithms are ease of use, customer support and services, dark pool access, execution consistency and increased trader productivity (Figure 1). Following from high scores of 5.96 and 5.92 respectively in

the 2020 survey, support services and ease of use both scored 6.01 in this year's survey. It is interesting to see ease of use increase its score year-on-year over the past four years, underlining the importance of usable and streamlined technology in the modern trading environment.

Two categories in this year's survey recorded the joint highest year-on-year increase in their score, anonymity and algo monitoring. Both categories received an increase of 0.17, putting anonymity at 5.89 and algo monitoring at 5.72.

Increase in trader productivity marks the second highest jump in score, having increased by 0.17 from 5.80 to 5.97. This jump shows the growing role that algos play in boosting the performance of traders. While all scores in 2021 were up from 2020, dark pool access recorded the smallest increase at only 0.02. While dark pool access remains a highly rated feature of algos, the push from European regulators to shift trading onto lit venues means that long-only firms are increasingly looking for other features in addition to dark pool access.

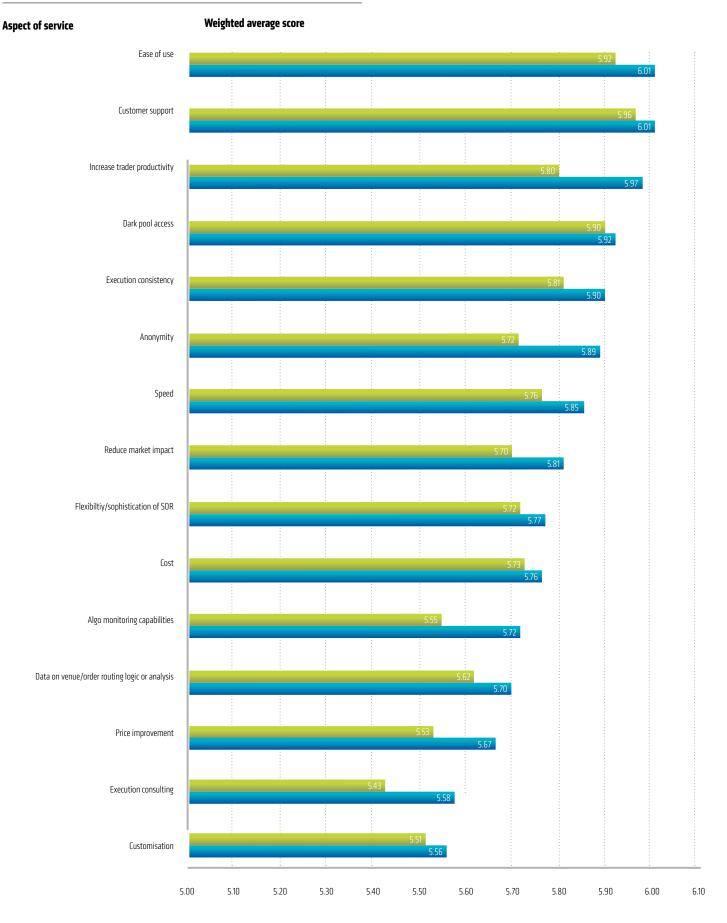
Respondents' reasons for using algos, presented in Figure 2 as a percentage of responses, differ between 2021 and 2020. Overall, increases can be seen in seven areas of algo trading versus last year: ease-of-use, reduce market impact, lower commission rates, better prices, higher speed, customisation and pre-trade estimates. At the same time, decreases are seen in six areas: consistency of execution, trader productivity, greater anonymity, smart order routing, algo monitoring, routing logic. The emphasis seems to be on working orders at speed and with ease, and in a way that is cost effective. There is less interest on information leakage, execution consistency and trader productivity.

It is clear that long-only funds of varying sizes are looking to at least two algo providers, with all AUM categories of long-only respondents reporting an average number of providers greater than two in the 2021 survey (Figure 3). From a diversification and business-continuity perspective, managers are seemingly unwilling to place all of their eggs in a single basket and risk a provider outage. The smallest firms managing US\$1 billion or less seem to be most comfortable with using approximately two providers, although the average number of providers is up in 2021 compared to 2020 for these smaller managers. Larger firms managing upward of US\$1 billion are more likely to rely on three providers, though the average number of providers is down in 2021 compared to 2020 for the largest managers in this year's survey.

Going further, long-only managers with US\$0.25 billion to US\$0.5 billion in AUM show a year-on-year increase in the number of algo providers, rising to an average of 2.5 in 2021 which is up from 1.83 in 2020. One explanation for this is that the unprecedented market volatility of the past 12 months compelled smaller managers with fewer resources to expand their range of partnerships. By contrast, larger managers in all categories above US\$1 billion have reported declines in the average number of providers compared to 2020. Cost pressures have accelerated the move to consolidate relationships, with managers representing over US\$50 billion reporting using 3.89 providers (down from 4.02), managers representing between US\$10 billion and US\$50 billion reporting using 3.47 providers (down from 4.25), and managers representing between US\$1 billion and US\$10 billion reporting 2.94 providers (down from 3.33). While having a handful of







providers continue to represent an important diversification strategy for the largest long-only managers, downward pressure on research budgets across the industry have tapered enthusiasm over the past 12 months to add more and more providers.

Nonetheless, despite the year-on-year direction of travel, larger managers are still associated with a higher number of providers than smaller managers. This is still down to the requirements associated with managing a larger multi-asset class portfolio. Looking beyond equity algorithms, the rise of algo use in the foreign exchange (FX) asset class has grown over the years for spot trading and, recently, has begun to extend to FX derivatives such as non-deliverable forwards. New regulations, such as the uncleared margin rules, are driving FX derivatives into the clearinghouse and fostering more electronic trading. The development of new algos is a natural extension of this phenomenon. Thus, it may be that these managers are holding the number of algo providers somewhat consistent while diversifying the types of algos used by asset class and strategy.

Analysing the number of providers chosen by long-only managers without segmenting results into AUM categories reveals some curious findings (Figure 4). Like last year, 2021's survey suggests that long-only managers either go hard or go home when it comes to committing resources to providers. The proportion of participants indicating that one provider is sufficient has grown from around 19.86% in 2020 to just shy of 28.66% in 2021. This is in part driven by the growing familiarity and relationships between long-only managers and their providers.

The proportion of firms relying on five or more algo providers has fallen from 41.13% in 2020 to 32.54% in this year's survey. The reason for this phenomenon is that cost pressures have pushed managers to consolidate and streamline their relationships, even though clearly a significant number of providers still see the diversification benefits of leveraging a handful of different algo providers.

The distribution of algo usage by value traded has changed considerably over the past year (Figure 5). The proportion of participants trading 80% or more of their portfolio via algo trading almost doubled from 10.98% in 2020 to 20.75% in 2021. At over a fifth of all long-only respondents to this year's survey, this group of managers trading 80% + of their portfolio algorithmically now represents the largest proportion of survey participants. Additionally, the year-on-year increase for this group is the largest of any bracket. Long-only funds allocating 20% to 30% of their portfolio value into algos grew to 12.19%, up from 7.65% in 2020 in the second largest increase of any bracket. At the lower end of the spectrum, 6.82% of participants trade between 5% and 10% of their portfolio's value using an algorithm (versus 8.43% a year ago). The most significant year-on-year decrease was seen in

Figure 2: Reasons for using algos (% of respondents)				
Feature	2021		2020	
Ease of use		12.04	11.08	
Consistency of execution performance	•	10.19	10.51	
Increase trader productivity	V	10.32	10.45	
Reduce market impact		10.45	10.29	
Greater anonymity	_	8.96	9.93	
Flexibility and sophistication of SOR	_	7.24	8.02	
Algo monitoring capabilities	▼	5.30	7.20	
Lower commission rates	A	8.69	6.83	
Better prices (price improvement)	A	6.68	6.65	
Higher speed lower latency	A	7.64	6.56	
Customisation capabilities	A	6.21	5.74	
Data on venue/order routing logic or analysis	_	3.84	5.07	
Results match pre-trade estimates	A	2.45	1.67	

Figure 3: Average number of providers used by AUM (USD billions)				
	2021	2020		
Up to 0.25	2.13	2.14		
0.25-0.5	2.50	1.83		
0.5-1	▲ 2.64	2.00		
1 to 10	2.94	3.33		
10 to 50	▼ 3.47	4.25		
More than 50	▼ 3.89	4.02		

the 50% to 60% segment, which declined from 22.16% of long-only funds trading via algos last year to 9.65% in this year's survey.

At first glance it seems that more firms are pushing a larger proportion of their book into algorithms and this is partly a consequence of the developments in technology and software that has enabled algo trading in equities as well as other asset classes. The percentages of funds trading via algos have risen since last year in the three largest categories: 60% to 70%, 70% to 80% and above 80%. All the same, the fact remains that the percentage of respondents trading 50% or more of their portfolio algorithmically has remained essentially the same: 49.41% versus 49.22% last year. This is a reminder that for all the benefits of algorithmic trading, the industry still values the role of human discretion and it remains the case that many instruments and asset classes do not lend themselves easily to algo trading.

Long-only managers were asked to select the types of algorithms they used from providers (Figure 6). Like last year, in 2021 the highest proportion of surveyed long-only funds chose dark liquidity seeking algos (59.78%). Further proposals by European regulators to further

clamp-down on dark venue trading have led to resistance from many asset managers who have responded to public consultations to remind policymakers of the value that dark venue trading provides large buy-side managers. This is partly behind the continued high adoption of these kind of algos in recent years, though it is noticeable that the percentage choosing dark liquidity seeking algos has fallen by 13.16% from 72.94% in 2020. Clearly over the past year long-only firms have become mindful of a broader range of considerations when it comes to their choice of algo.

The percentage-of-participation algos rose to 56.96% from 49.02% last year, indicating strong preference for the ability to participate in volume at a user-defined rate. Two algos that have been in existence for years, volume weighted average price (VWAP) and time weighted average price (TWAP), both saw year-on-year increases in its adoption in this year's survey coming in at 59.51% and 25.75% respectively. At a time of extreme market uncertainty and unpredictability, it is expected that participants turn to tried and tested methods of algo trading to navigate execution venues.

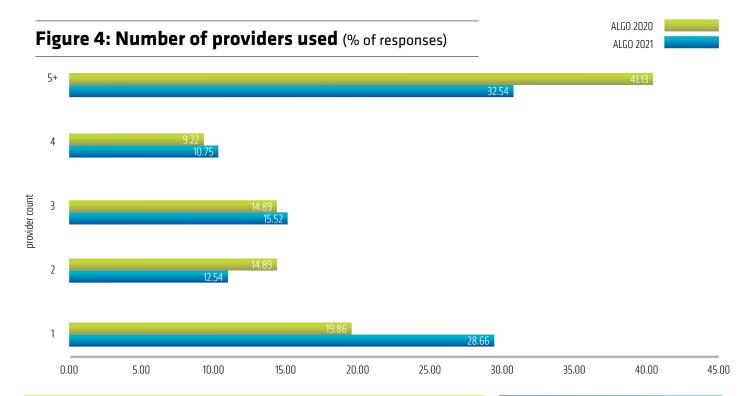


Figure 5: Algo usage by value trader (% of responses)		
% of respondents	2021	2020
Not Answered	▲ 3.46	1.96
0-5%	5.19	4.71
5-10%	6.82	8.43
10-20%	4.55	6.08
20-30%	12.19	7.65
30-40%	6.64	9.22
40-50%	11.74	12.75
50-60%	9.65	22.16
60-70%	12.37	9.61
70-80%	▲ 6.64	6.47
80% and over	▲ 20.75	10.98

Figure 6: Types of algos used (% of responses)				
Algo type	2021		2020	2019
% Volume (Participation)	A	56.96	49.02	60.92
Dark Liquidity Seeking	_	59.78	72.94	59.11
Implementation Shortfall (Basket)	A	15.56	13.92	16.42
Implementation Shortfall (Single Stock)	•	46.22	53.14	45.32
Other		4.91	5.10	3.45
TWAP	A	25.75	24.71	21.51
VWAP	A	59.51	54.71	63.87

Methodology

Buy-side survey respondents were asked to give a rating for each algorithm provider on a numerical scale from 1.0 (very weak) to 7.0 (excellent), covering 15 functional received across 36 algo providers, yielding thousands of data points for analysis. Only the evaluations were engaged in managing long-only firms have been used to compile the provider profiles and overall market was weighted according to three characteristics of each respondent: the value of assets under management; the proportion of business done using algorithms; and the number of different providers being used. In this way the evaluations of the largest and broadest users of algorithms were weighted at up to three times the weight of the smallest and least experienced respondent. Finally, it should be noted that responses provided by affiliated entities are ignored. A few other responses where verified were also excluded. We hope that readers find this approach both informative and useful as they assess different capabilities in the future. As the long-only results was carried out by Aite Group.

What to **look out for** at **TradeTech 2021**

THE TRADETECH DAILY DELVES INTO SOME OF THE HOTTEST PANEL DISCUSSIONS AND KEYNOTE SPEECHES THAT YOU SHOULDN'T MISS AT VIRTUAL TRADETECH THIS YEAR.

MUST-SEE PANELS

DAY ONE

9.00

Opening keynote buy-side panel

Navigating equity markets post Brexit and COVID-19: What are the implications on market structure, access to liquidity and your trading

As heads of trading at BlackRock, State Street Global Advisors and T. Rowe Price gather to discuss the new equity landscape post-Brexit and COVID-19, this panel is not to miss. The senior buy-siders will explore changes in market structure and the impact on accessing liquidity in the first major panel session of TradeTech this year.

9.30

Regulatory keynote 'in conversation'

How are financial markets recovering following a turbulent year and what are the upcoming priorities in the regulatory programme?

Stay tuned immediately after the keynote buy-side panel as senior policy makers from the European Securities and Markets Authority and the European Commission join executives from the French and Dutch financial regulators to discuss some of the biggest events that have swept markets recently, including the GameStop saga.

12.10

Cross-asset trading panel

Building a high performing cross-asset trading desk: How can you align your datasets and trading tools to better streamline your workflows and achieve a holistic view across asset classes and boost execution performance?

Aegon Asset Management's multi-asset dealing head joins president at Symphony and head of strategy at FIS to explore how trading desks can better align data and systems across asset classes for better execution performance in this cross-asset focused discussion.

14.50

ETF panel discussion

What are the lessons learned for the ETF industry in 2020 and what are the future trends in ETF execution and investing?

As exchange traded funds (ETFs) continue to become an important part of the institutional trading landscape, don't miss this dedicated ETF discussion with Lyxor Asset Management's head of the trading desk as they explore possible future trends in this space.

DAY TWO

9.30

Innovation panel discussion

How can you adopt ML techniques to access greater liquidity, reduce market impact and gain a competitive edge?

As traders increasingly look to new technologies such machine learning and artificial intelligence, don't miss one of the first panel discussions on main day two of the conference where heads of trading and market structure at GAM, Voya Investment Management and Swedbank Rabour explore how certain techniques can improve access to liquidity.

11.55

Diversity and inclusion panel discussion

How can the Buy-side and sell-side embed diversity & inclusion into their

Considered one of the most important topics for the industry, don't miss this panel discussion with traders from JP Morgan Asset Management, Capital Group and UBS as they talk about how the buy- and sell-side can bring diversity and inclusion to the forefront of their operations.

12.50

Innovation spotlight: crypto for institutions

What are the latest developments in cryptoassets and transactional systems and how is institutional participation evolving in 2021?

As digital assets continue to take the market by storm, head of US at Bitcoin exchange Bitstamp takes the stage to explain what the latest developments are in the cryptocurrency space and how institutional investors are engaging with these assets.

13,40

O/EMS panel discussion

How can you leverage the latest developments in O/EMS tools to navigate complex order flows and achieve greater efficiencies in your multi-asset trading?

Join buy-side trading experts from GAM and Man Group as they delve into how order and execution management systems can help traders navigate complicated multi-asset order flows alongside product specialists at Charles River Development and Glue 42.

14.10

Technology panel discussion

Which disruptive technologies are set to transform the equity-trading ecosystem and how can you structure your trading desk to reap the benefits?

In the penultimate panel discussion at TradeTech this year, the head of trading at HSBC Global Asset Management is joined by technology head at Numis Securities and senior executives from Iress and Sentieo to explore which disruptive technologies could potentially transform the equity trading landscape.

Main day one - 27 April

	Main day one - 27 April
08.40 CET	Pre-recorded Opening Remarks: Market Outlook: Covid, Brexit & GameStop: How will the events of 2020 influence and shape the equity trading landscape in the years to come? Mark Beeston, Managing Partner and Founder, Illuminate Financial Management
	Navigating the New Market Structure and Regulatory Landscape
09.00	Opening Keynote Buy Side Panel: Navigating equity markets post Brexit and COVID-19: What are the implications on market structure, access to liquidity and your trading desk? Paul Battams, Head of Equity Trading, EMEA, BlackRock Graham Sorrell, Head of Equity, Currency & Derivatives Trading, EMEA, State Street Global Advisors Jeremy Ellis, Head of Equity, Trading, Europe, T. Rowe Price Moderator: Dan Monckton, Head of Program & Electronic Trading, EMEA, Credit Suisse
09.30	Regulatory Keynote 'In Conversation': How are financial markets recovering following a turbulent year and what are the upcoming priorities in the regulatory programme? How can equity markets support the Covid-19 economic recovery? How will the Capital Markets Union and Brexit impact the evolution of the European market landscape? GarmeStop lessons learnt: How are regulators responding to the rise in retail participation and concerns around financial turbulence? MiFID II review 6 the consolidated tape: what are the priorities to support well-functioning markets? Carsten Ostermann, Head of Unit, ESMA Tilman Lueder, Head, Unit, Securities Markets, European Commission Natasha Cazenave, Managing Director, AFMF Hans Wolters, Senior Policy Advisor, AFM Moderator: Pablo Portugal, Managing Director, AFME
10.00	Buy-side Interview: Evaluating equity market structure post Brexit: What impact will the new market reforms have on platforms and dark pools, and how will this affect your order flow and access to liquidity? Interviewe: Lynn Challenger, Global Head of Trading and Order Generation, UBS Asset Management
10.30	Market Structure Panel: The future of the execution landscape: What role will exchanges play in 2021 and how will continued market structure evolution and consolidation impact market resiliency and the buy side-dealing desk? Dermot Dunphy, Deputy Head of Equities Dealing Desk, MGG Dr Hans Reinhardt, Managing Director, Head of Business Development EMEA, Citadel Securities Scott Bradley, Head of Sales and Business Development, London Stock Exchange Group Simon Gallagher, Head of Cash & Derivatives, Europext David Howson, EVP, President, Europe & Asia Pacific, Cboe Global Markets Moderator: Duncan Higgins, Independent Consultant
	11.10: Refreshment Break & Interactive Roundtable: Streaming data and latency as a factor for more effective pre and post trading analytics Bruce Zulu, Director of Technical Support Services, Business Intelligence, Altair
	Accelerating Automation to Drive Smarter Trading
11.30	Pre-recorded All-star Panel Discussion: Accelerating systematic trading: How can you automate your trading workflows to minimise slippage, reduce trading costs and free up trader time to focus on complex orders? Neil Joseph, Head of Equity Trading, Europe, J.P. Morgan Asset Management Frédéric Pons, Deputy Equity Head of Dealing, AMUNDI INTERMEDIATION Joseph Collery, Head of Fading, COMGEST Robert Watts, Head of Equity Business Development, Trading Solutions, FactSet Matthew Cousens, Managing Director, Citi Moderator: Ari Burstein, President, Capital Markets Strategies **CHATHAM HOUSE RULES**
12.10	Cross-Asset Trading Panel: Building a high performing cross-asset trading desk: How can you align your datasets and trading tools to better streamline your workflows and achieve a holistic view across asset classes and boost execution performance? Kirstie MacGillivray, Head of Multi-asset Dealing, Aegon Asset Management Brad Levy, President & Chief Commercial Officer, Symphony Pontus Eriksson, Head of Strategy, FIS Moderator: Spencer Mindlin, Capital Markets Analyst, Aite Group
	Navigating the Latest Liquidity Trends
12.40	Fire-side chat: What are the latest offerings from full-service brokers and non-bank market makers and how can you interact and source different types of liquidity in volatile market regimes? Jigar Patel, Global Head of Business Development, XTX Markets Ralston Roberts, CEO, Instinet
13.05	Panel Discussion: Accessing liquidity in a post Brexit world: How can you navigate the new equities market structure post Brexit and what are the opportunities and challenges in sourcing liquidity in this new environment? Gregg Dalley, Clobal Head of Trading, Schroders Tom Stevenson, Head of Equity Trading, EMEA, Fidelity International Rob Boardman CEO Virtu Execution Services, EMEA, Virtu Financial Tony Shaw, Executive Director London Office, The Swiss Stock Exchange Moderator: Michael Mollemans, Research Principal, Chartis Research
	13.35: Lunch & Virtual Networking
13.35-14.35	Buy-Side Workshop: Outsourced dealing: Evaluating the latest opportunities and challenges of outsourcing your trading and execution services Join this interactive buy-side only workshop led by Amundi and a buy side client, to explore the latest research and trends in the outsourced trading phenomenon. Covid-19 has accelerated the outsourcing trend, with more asset managers assessing whether this solution will help to reduce cost and deliver better results for end investors, but there are many considerations to take into account.
	This one hour workshop will provide you with the latest thinking behind outsourced trading, key takeaways include: How to determine whether outsourcing your trading activity is the right decision for your firm? What advantages can outsourcing deliver? How can you overcome concerns around the loss of data collection and understanding of market dynamics? Host: Gianluca Minieri, Deputy Global Head, Trading & CEO, UK & Ireland, Amundi Feargal Deery, Fixed Income Portfolio Manager, Fineco Asset Management *Open to 20 buy side Head of Trading*

agenda

Main day one - 27 April

	Building Diversified Trading Strategies				
14.20	Emerging Markets Panel Discussion: Accelerating electronic trading in emerging markets: What are the latest market structure developments and how are the sell side adapting their emerging market algo suites to help you access deeper liquidity? Marie Geekle, Director-Equity EM Trading, BlackRock Robert Beddow, Senior Equities & Derivatives Trader, State Street Global Advisors Valdene Reddy, Director Capital Markets, JSE Pete Whitaker, Head of Market Structure, EMEA cash, UBS Moderator: Terry Flanagan, Editor, GlobalTrading and Markets Media				
14.50	Pre-recorded ETF Panel Discussion: What are the lessons learned for the ETF industry in 2020 and what are the future trends in ETF execution and investing? Cyrille Combes, Head of Trading Desk, Lyxor Asset Management Brieuc Louchard, Head of ETFs, Euronext Moderator: Deborah Fuhr, Managing Partner & Founder, ETFGI				
	The Future of the Dealing Desk				
15.20	Innovation Presentation: The Future of Work: Transitioning to the New Normal Adam Toms, CEO, Europe, OpenFin				
15.40	TradeTech Advisory Board Panel: Defining the future trading desk: How are buy side firms re-transitioning back to the office and will hybrid desks replace centralised dealing desks? Paul Battams, Head of Equity Trading, EMEA, BlackRock Eden Simmer, Global Head of Trading, PIMCO Simon Steward, Head of European Trading, Capital Group David Miller, Head Trader, EMEA Equities, Invesco Alison Hollingshead, Chief Of Staff, Trading Platform & Core Technology, Man Group Moderator: Julia Streets, CEO, Streets Consulting				
16.20	End of Main Content				

Main day two - 28 April

	Maii uay two - 20 April
	The Economic & Investment Outlook 2021
08.50	Pre-recorded Opening Panel Discussion: The global economic outlook for the year ahead: How will geopolitical events affect global economies and financial markets, and which investment trends will dominate in 2021 and beyond Lori Heinel, Global Chief Investment Officer, State Street Global Advisors Shamik Dhar, Chief Economist, BNY Mellon Investment Management Philippe Waechter, Chief Economist, Ostrum Asset Management Moderator: Kevin Daly, Managing Director, Senior Economist, Goldman Sachs
	Leveraging Data to Drive Smarter Trading Strategies
09.30	Pre-recorded Innovation Panel Discussion: How can you adopt ML techniques to access greater liquidity, reduce market impact and gain a competitive edge? Enrico Cacciatore, Head of Market Structure & Trading Analytics, Voya Investment Management Hasan Amjad, Head of Algorithmic Trading, GAM Custaf Aspenberg, Head of Trading, Swedbank Robur Moderator: Sharad Shandilya, Former Head, A.I. & Big Data, Fidelity Investment
10.00	Panel Discussion: Gaining an information edge: How can you combine traditional market data with alternative data sources to support your trading teams and enable smarter decision-making? Chafic Merhy, Head of Quantitative Research, Ostrum Asset Management Sam Livingstone, Head of Data Science, Jupiter Asset Management Matt Smith, Chief Executive Officer, Steeleye Peter Ho-Spoida, Data & Analytics Lead, Market Data & Services, Deutsche Börse Moderator: Saeed Amen, Founder, Cuemacro
	10.30: Refreshment Break
10.50	Pre-recorded TCA fire-side chat: How can you best leverage advanced TCA to increase pre, intra and post trade transparency and ensure high quality reporting to meet your best execution mandates? Meredith Shifman, Head of Trading Governance, Morgan Stanley Investment Management Saeed Amen, Founder, Cuemacro Moderator: Audrey Costabile Blater, Research Director, Aite Group **CHATHAM HOUSE RULES**
11.10	Data Analytics Fire-side chat: How can you embrace pre and intra- trade analytics to enable your traders to make smarter decisions and build tailored execution strategies? Alastair Clarke, Equity Trader, Europe Capital Group Anthony Townsend, Sales Director, Altair Moderator: Saeed Amen, Founder, Cuemacro
11.35	Trading Compliance Interview: Which technologies will enable you to monitor trading activities in a remote setting to ensure compliant working practices Paul Liesching, Global Head of Financial Markets, Truphone
	Driving Greater Diversity in Trading
11.55	DGI Panel Discussion: How can the Buy-side and sell-side embed diversity & inclusion into their DNA? Bojan Petrovich, Executive Director, Quantitative Equity Trader, JP Morgan Asset Management Simon Steward, Head of European Trading, Capital Group Kisha Burden, UBS Moderator: Nav Khinda, Managing Director, UBS
12.25	Lunch & Virtual Networking
	Deploying the Latest Trading Technology
12.50	Innovation Spotlight: Crypto for institutions: What are the latest developments in cryptoassets and transactional systems and how is institutional participation evolving in 2021? Hunter Merghart, Head of US, Bitstamp
13.10	Outsourcing Panel Debate: Assessing the pros and cons of outsourcing your trading desk: How can you build robust processes to reduce risks and ensure compliant reporting processes that deliver for your end investors? Darrin Sokol, Managing Director, Global Head of Equity Trading, Lazard Asset Management Alastair Clarke, Equity Trader, Europe Capital Group Fabian Gomez, Chief Operating Officer, Westwood Moderator: Spencer Mindlin, Capital Markets Analyst, Aite Group

Main day two - 28 April

13.40	O/EMS Panel Discussion: How can you leverage the latest developments in O/EMS tools to navigate complex order flows and achieve greater efficiencies in your multi-asset trading? Juan Landazabal, Global Head of Trading, GAM Alison Hollingshead, Chief Of Staff, Trading Platform & Core Technology, Man Group Reena Raichura, Head of Product Solutions & Customer Success, Glue42 Jay Hinton, Director, Product Management, Charles River Development Moderator: Spencer Mindlin, Capital Markets Analyst, Aite Group			
14.10	Technology Panel Discussion: Which disruptive technologies are set to transform the equity-trading ecosystem and how can you structure your trading desk to reap the benefits? Daniel Leon, Global Head of Trading, Treasury Management and Global Solutions, HSBC Global Asset Management Tim Valmas, Head of Technology and Operations, Numis Securities Russell Thornton, Head of Trading Strategy, Iress Mark Coriaty, Chief Revenue Officer, Sentieo Moderator: Carrie Osman, CEO, Cruxy & Co.			
	UK Financial Markets in a Post-Brexit Environment			
14.40	Brexit Fire-side chat: The future of The City of London: What impact will brexit and geopolitical events have on UK-EU regulation and London's influence as a global financial powerhouse? Sir Mark Boleat, Political Leader, City of London Corporation, 2012-17 Moderator: Emma Reynolds, Managing Director of Public Affairs, Policy and Research, TheCityUK			
	15.10: End of Main Content			

