

Update on an equity consolidated tape

In Chapter 8 of [CP23/15](#) we asked discussion questions about a potential CT covering UK equities trades. The responses highlighted differing views on the merits of a UK equity CT, particularly around the inclusion of pre-trade data (information about bids and offers). We have also had subsequent representations from and discussions with market participants, including trading venues, potential CT users and trade associations, and we have consulted with our Secondary Markets Advisory Committee and the Markets Practitioner Panel.

When commenting on responses to our discussion questions in CP23/15, we said in Chapter 8 of [CP23/33](#):

“Views on the inclusion of pre-trade data in an equities CT are polarised. Given the importance of the attractiveness of equity markets in the UK for the wider competitiveness of UK wholesale markets we think that it is important that we have a very firm evidence base before making a judgement on whether or what pre-trade data should be included in an equities CT...”

We will update in 2024 on next steps.”

Report by Europe Economics

We asked Europe Economics (EE) to compile its report based on desktop research, data analysis, academic input and interviews with market participants. The interviews were not intended to provide a comprehensive view from market participants because the time involved limited the number that could be conducted, and participation was voluntary. However, we worked with EE to seek to ensure that those interviewed came from across different parts of the industry and the meetings with trade associations allowed a wider range of firms than were interviewed individually to contribute views.

EE conducted 42 interviews with market participants from a range of sectors, as outlined in the introduction to its report. It also reviewed relevant literature, trading patterns in UK markets over time and the experience of the United States with a CT. Below we summarise the main points we have taken from the report.

- **Usefulness of post-trade data.** Post-trade data was generally seen by those interviewed as fulfilling many use cases for consolidated data, such as aiding in investment return benchmarking, broker performance evaluation, and ensuring market participants have a consolidated view of activity, particularly in non-lit venues. It was also suggested that a CT with post-trade data would be an important tool to demonstrate to investors, including prospective investors overseas, the full picture of

liquidity in UK equity markets, as fragmentation in the reporting of data can obscure this picture.

- **Institutional use of pre-trade data.** Major institutional market participants trading equities already have access to pre-trade data, either through low-latency data feeds directly from trading venues or indirectly through data vendors. It is generally accepted that an equities CT containing pre-trade data would not be a substitute for direct data feeds from venues for traders who rely on very low latency. This is because the latency introduced by the CTP aggregating the data would make it inferior for these users. EE found that whether less latency-sensitive firms might substitute a pre-trade CT for their existing data feeds would depend on the cost of the CT and how much these firms value the CT's consolidation of data relative to services they currently use. How market data vendors integrate CT data into their products would also be important in determining the impact of a pre-trade CT. The EE report notes a degree of underconsumption of equities data at present, for certain functions that are not latency-sensitive, linked to the costs of market data. For example, institutional investors might use a pre-trade equities CT for middle- and back-office functions such as compliance, market surveillance and valuation of instruments. The scale of likely increased consumption of market data, and the benefits this would bring to market participants and equity markets overall, will be an important consideration in assessing the overall net benefits of including pre-trade data in a UK equities CT.
- **Retail use of pre-trade data.** Most parties interviewed, including buy-side and sell-side firms and trade associations, emphasised the potential benefit of a pre-trade equities CT for retail investors by providing them with access to a broader and clearer picture of market activity. Currently, most UK retail trading of equities takes place via the "retail service provider" (RSP) system, where retail brokers source private quotes from market makers. Access to a pre-trade CT could lead to better price discovery and allow retail investors to assess the quotes obtained through brokers more effectively by comparing them to the price available on the central limit order book (CLOB). The resulting investor confidence could lead to increased participation in the market. EE highlights that a pre-trade CT's success would depend on how accessible and affordable the data are, and how it is presented for retail investors. Some respondents to EE's study suggested that a CT could help bring more retail activity to public markets. However, there is concern that only sophisticated retail investors might fully benefit from a pre-trade CT, whilst many retail investors could struggle to interpret significant depth of pre-trade data. In the US, the equities CT is widely used by retail investors, though the US market is different in several key respects, so caution should be used when drawing comparisons.

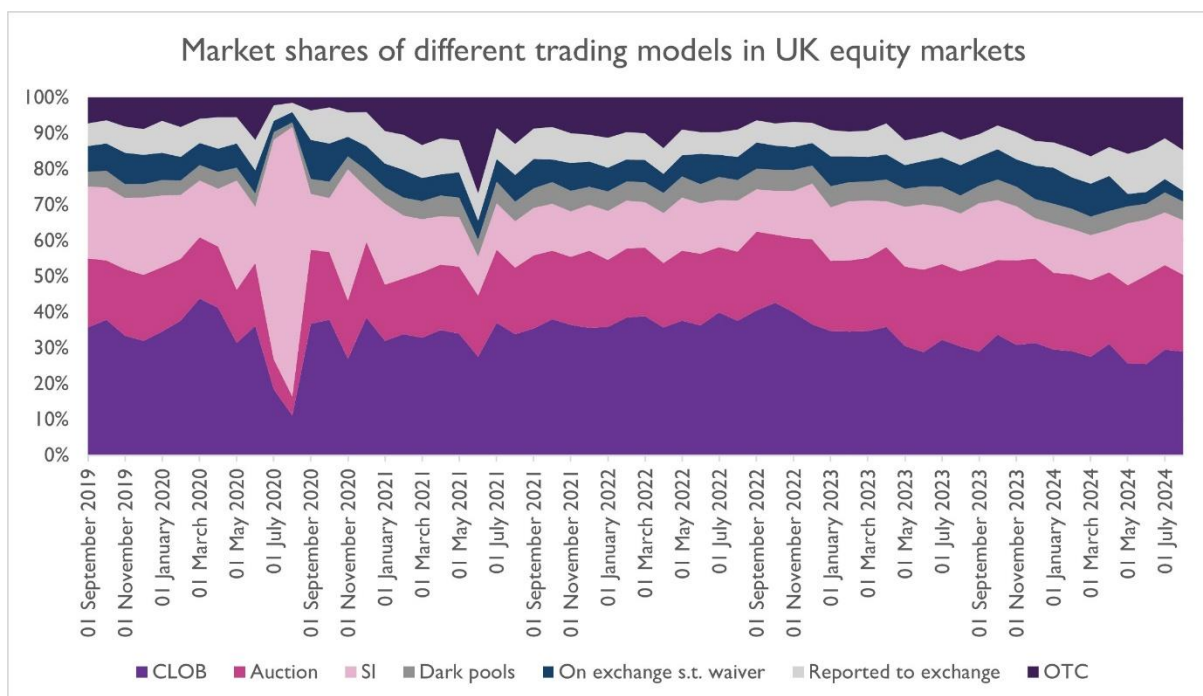
- **Market resilience.** In EE's interviews, most of those in favour of including pre-trade data said that a CT with pre-trade data would make markets more resilient by allowing trading to continue when there is an outage at the primary market. It was argued that a CT including pre-trade data would act as a unified source of prices and available liquidity, providing the market with sufficient confidence for trading to continue on alternative venues. However, other market participants told EE that they were sceptical of the claim. The major trading firms already have consolidated pre-trade data yet still do not switch trading to alternative venues when there is an outage at the primary market.
- **Costs.** Public estimates of the costs of establishing and operating an equities CT with pre-trade data (scaled down to the UK using various assumptions) vary significantly, where the high end (£26 million upfront and £21 million annual costs) is four times that of the lower estimate (£6 million upfront and £5 million annual costs). We will have to undertake further work to validate the costs of establishing and operating an equity CT as part of our cost-benefit analysis.
- **Anonymised top-of-book pre-trade data.** UK market participants were very sceptical that there would be any use case for anonymised pre-trade data (ie not attributed to a trading venue). They said it would be of no use from a trading perspective and of limited use for middle- and back-office functions.
- **Exchange Traded Funds (ETFs).** The firms EE spoke to who were interested in ETFs thought that pre-trade ETF data would significantly assist the development of the market, particularly for ETFs focused on mid- and small-cap companies, by giving greater prominence to available liquidity.
- **Licensing of market data.** There was uncertainty amongst those interviewed about how an equities CT in the UK would operate, particularly in relation to the licensing of data. Whilst decisions on many issues have still to be taken, it is our intention that an equity CTP would license the data it consolidates to those buying the consolidated data and would not, as was the case with the regime in MiFID II, pass through the licensing conditions of data contributors. We will be looking for the equity CTP to have a relatively simple approach to licensing to maximise the use that is made of its data.

The Current Trading Landscape

In deciding our next steps, we have also considered current trends in UK equity market structure, as important context for both the costs and benefits of an equity CT.

As shown in EE’s report (a chart from Appendix 2 of the report is reproduced below) there has been a decline in trading on CLOBs since mid-2022. Lit trading venues have, however, benefited from a slight increase in the share of activity in auctions (which includes opening and closing auctions, as well as intra-day auctions). The share of trading of Systematic Internalisers (SIs) has also been trending downwards of late but there has been a significant increase in the share of OTC trading. EE also notes that the overall value of equity trading has marginally decreased. The report also discusses the role of regulatory changes via MiFID, that supported competition between venues, as well as the rise of high-frequency trading (HFT) in the decline in trading on CLOBs.

Figure A0.1: Market shares of different trading models in UK equity markets



Source: LSEG MSR, Europe Economics analysis.

Graph showing shares of overall trading of different trading models on the Y-axis and Sep-19 to July-24 on the X axis. Shares of 7 different trading models are shown.

The UK has a diverse range of execution venues. There are 3 Regulated Markets, 15 operators of Multilateral Trading Facilities and 29 SIs trading equities. There are also 5 Approved Publication Arrangements (APAs) reporting trades conducted OTC. However, based on data reported to us, 4 trading venue groups account for 97% of the trades conducted on trading venues (based on data from LSEG MSR) and two APAs account for the

publication of 96% of the equity trades conducted away from trading venues.

EE heard a concern, that had also been raised by a small number of respondents to CP23/15, that the inclusion of pre-trade data in a CT would exacerbate the existing trend for trading to move from CLOBs to alternative forms of trading, including those that reference the prices on CLOBs, potentially resulting in adverse effects on market quality. It was argued that a move away from CLOBs could degrade the quality of the price formation process on UK equity markets.

Based on its findings, EE judge that it is unlikely that a pre-trade CT will lead to a significant further move away from trading on CLOBs. It observes that the major institutions trading UK equities already have access to a wide range of price referencing execution venues and therefore the advent of a CT is only likely to affect the trading behaviour of firms who currently have more limited connections. EE also note that firms' choice of venues depends on a range of factors that are unlikely to be significantly affected by the inclusion of pre-trade data in an equities CT. Using an SI or dark pool offers a different trade-off in terms of cost, immediacy, and order implementation risk relative to trading on a CLOB. These relativities and preferences do not change due to a CT. However, we remain mindful of the potential adverse impact of further reductions in the current level of limit order book trading on price formation, given the trend we observe from the above data.

Policy options to explore

The EE report and the responses to CP23/15 have shown that, in the view of most market participants, there is a strong case for putting in place an equities CT (including ETFs) with post-trade data, covering traded prices and volumes, as soon as practicable. This could help to show the depth of liquidity available to potential investors in the UK equity market and help liquidity discovery and broker performance evaluation.

Many market participants also think that to reap the full benefits from a consolidated tape, and to ensure its commercial viability, that the inclusion of pre-trade as well as post-trade data is necessary. Pre-trade data would strengthen the potential for the CT to be used for trading purposes, help to achieve market resilience in the face of outages at the primary market, and enhance back- and middle-office use of the CT. The EE report has shown that the demand for a pre-trade tape is dependent on its design features.

However, the EE report and responses to CP23/15 also show that a small number of respondents have concerns about an equity CT with pre-trade data. These concerns are based on whether it would assist a significant range of market participants, the potential costs and the possibility that it could lead to a further diminution of lit trading.

Based on feedback to date, we see some policy options in relation to the scope of the data to be included in a potential UK equity CT that we would like to explore further.

- (a) Prioritise a post-trade data only tape (with the possibility of reviewing the case for pre-trade data at a future date).
- (b) In addition to post-trade data for each instrument, also initially include pre-trade data for a limited set of instruments, enabling us to measure the impacts of a pre-trade CT ahead of any wider roll out.
- (c) Start with both pre- and post-trade data for each instrument, where pre-trade data consists of the best bid/offer.
- (d) As for (c), but with more information on market depth such as the top 5 bids and offers.

Before we determine a position for consultation, we consider that there is more work we need to do with industry to fully assess the likely demand for an equity tape with these permutations in data, considering the strength of the associated benefits and scale of the related costs. In particular, we wish to test further:

- a) At what price levels would a pre-trade CT be likely to lead to increased data consumption and how that may positively affect the behaviour of market participants, including both retail and institutional investors.

- b) How demand is likely to be affected by the following permutations.
- i) The inclusion of post-trade data only, particularly if that were to follow a model close to the one being implemented for the UK bond CT to minimise costs.
 - ii) The inclusion of top-of-book data, either on an anonymous basis or with venue attribution. We do not currently see evidence that a CT with pre-trade data on an anonymised basis would fulfil the use cases that have been identified but wish to confirm that.
 - iii) The inclusion of additional order book depth to pre-trade data. We wish to explore specifically how going beyond top-of-book data would add to the likely costs of providing the CT and the likely sensitivity of demand to such incremental cost.
- c) The likely impact of a pre-trade CT on use of CLOBs. Based on the research undertaken, we do not see compelling evidence that a pre-trade CT would affect routing behaviour in a way that would drive liquidity away from transparent markets (for example, CLOBs) and pose risks to price formation. However, given the decline in trading on CLOBs we wish to further test the basis of that concern.
- d) As set out in the second option above, we are also interested in exploring whether there is some way of testing the inclusion of pre-trade data. Based on the EE report, one possible way to do so may be to include pre-trade data for ETFs only. This might address some of the issues relating to the ETF market that were highlighted in the EE report, and we would need to consider what it could tell us about the potential inclusion of pre-trade data for shares. We are also open to considering other suggestions for testing the inclusion of pre-trade data, such as identifying an appropriate category of shares.

Next Steps

We will devote further time and resource to assess potential options for a UK equity CT as quickly as possible. Early in 2025 we will engage widely on potential design options and work towards publishing a consultation paper (CP) later in the year.

There are two main ways in which we intend to build on the information we already have (from responses to CP23/15, the EE report, our previous work on trade data and other information sources).

First, in January we will arrange a round of targeted discussion with industry. This will include a mixture of roundtables, bilateral meetings with

market participants and meetings with trade associations. In these discussions we will be seeking to refine our understanding of the costs of consolidating equity market data, gaining further information on the ways consolidated equity data might be used and gathering feedback on the policy options set out above.

Second, we will conduct a survey of equity market participants, to help inform the cost-benefit analysis associated with an equity CT. This will also ensure that we have reached beyond the sample of firms interviewed by EE and that the views of smaller firms are reflected in our analysis. In the survey we will be focused on identifying the potential demand for a CT based on the policy options, identifying the types of firms who will use the tape and the scope and impact of their use.

In the discussions with industry and through our survey, questions that we will be interested in covering are likely to include the following:

Post-trade business case

- If we prioritise a post-trade tape, what steps do we need to take to ensure it is commercially viable?
- Should we, as with the bonds CT, require that data is provided free of charge to the CTP and not impose a requirement on the CT to share revenues with data contributors?

Benefit of full pre-trade inclusion

- What is the likely scale of usage of a full pre-trade equities CT with sufficiently low latency to be used effectively for use cases other than those reliant on direct feeds from trading venues?
- How much of this impact is likely to be driven by expected price of the tape, or by more straightforward licensing of use?
- How much of the impact will be expanded use of pre-trade data, and what is the likely scale of increased trading where relevant?

Cost of different options

- Can we refine the likely costs of consolidation?
- For a post-trade only tape? For a full pre-trade tape?

Exploring the value of pre-trade data inclusion

- Would it make sense to include pre-trade data for a limited range of instruments during the initial tender period of the for the equity CTP to

learn about the possible value of the inclusion of full pre-trade data for equities?

- Would including pre-trade data for ETFs make sense as a starting point or are there other approaches we could take to gain a more informed view of the likely costs and benefits of having consolidated pre-trade data with market depth?

We are also issuing today an invitation for potential consolidators to express their interest in providing an equity CT. Any firms that wish to do so should contact us by emailing equitiesCT@fca.org.uk. Potential consolidators that wish to take part in the dialogue we will be conducting with market participants starting in January should respond to our call for interest by 10 January 2025.

Annex: Break-down of potential use cases for an equities CT including pre-trade data based on EE findings

Type of market participant	Summary of current pre trade data access and use	Potential use cases for a pre trade equities CT
Proprietary Traders	<p>Low-latency direct feeds from all relevant trading venues which feed into electronic trading infrastructure. Critical to business models.</p> <p>In-house consolidation of data.</p> <p>Some vendor (displayed) or in-house consolidated data for non-trade execution functions.</p>	<p>Cheaper alternative to display data for some larger and more integrated firms.</p>
Sell-Side (investment banks and other brokers)	<p>Low-latency direct feeds or non-display vendor data from all relevant trading venues which feed into electronic trading infrastructure.</p> <p>Some slower data usage (e.g., terminal based) for manual trading.</p> <p>Wide use of vendor display data for back-office and analytical functions.</p> <p>Varying levels of depth and speed.</p> <p>Some in-house consolidation of raw data.</p>	<p>Replaces current display data used by functions that do not rely on latency-sensitive market data, generating cost savings.</p> <p>Better-informed routing decisions, considering price and liquidity to achieve best execution for clients.</p> <p>Greater pre-trade data visibility, enabling larger market participants' compliance, risk, and operations teams to undertake new and enhanced tasks.</p> <p>Buy- and sell-side participants make informed pre-trade decisions using a shared data source, supporting risk management and transaction cost analysis, and improving communication and transparency between firms.</p> <p>Ongoing access to market data across all lit venues could help with analytics e.g., assessing whether the broker ought to connect to additional venues for the trading of particular stocks.</p>

Retail Service Providers (RSPs)	Low-latency direct feeds or non-display vendor data, mainly from primary venue, which feed into electronic trading infrastructure. Some in-house consolidation of raw data.	N/A – RSP market makers have little appetite to adopt a CT. RSPs currently obtain all the pre-trade data they need through direct feeds.
Retail Investors	Top-of-book data from primary market via their retail broker platforms. Mid-market data from external suppliers like Google Finance.	Provides a broader and clearer picture of market activity, leading to better price discovery and allows investors to more effectively challenge quotes obtained through brokers and brokers' fees.
		Visibility of real-time RSP market maker quotes help retail investors access tighter spreads, giving them greater leverage to challenge brokers on pricing and encourages RSP liquidity providers to offer competitive rates.
		Fosters retail engagement by enabling access to real-time consolidated price and liquidity data, empowering investors to make more active trading decisions throughout the day.
Retail Brokers	Live data from primary venues for internal use.	Aids post-trade analysis and improves execution monitoring by considering both price and liquidity. It also helps benchmark trades against the best available prices across multiple venues (especially when dealing with RSPs), driving better price transparency and ensuring competitive execution for retail clients.
Buy-Side (asset managers and other institutional investors)	Vendor data that feeds into order and execution management systems functions (often 'real-time'). Higher-latency data via vendor terminals for back-	Greater pre-trade data visibility, enabling larger market participants' compliance, risk, and operations teams to undertake new and enhanced tasks.
		Replaces vendor services used by large participants' sales teams for non-time-sensitive tasks which do

	office and analytical functions.	<p>not require low-latency data, generating cost savings.</p> <p>Provides participants (particularly those managing large orders), with insights into market liquidity and available quantities across exchanges.</p> <p>Provides access to more comprehensive pre-trade data as a shared reference, enabling more informed and transparent discussions with brokers about best execution.</p> <p>Buy- and sell-side participants make informed pre-trade decisions using a shared data source, supporting risk management and transaction cost analysis, and improving communication and transparency between firms.</p> <p>Maintains market confidence and operational continuity during exchange outages/disruptions.</p>
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