Position paper

The case for including pre-trade data on the UK equities consolidated tape

June 2024

Introduction

Since HM Treasury, by announcing the Edinburgh Reforms, committed to establishing a regime for a consolidated tape ("CT") in the UK by 2024, the question of whether the CT for equities should include pre-trade data has been debated by market participants. Chapter 8 of the FCA's own *Consultation Paper CP23/15: The Framework for a UK Consolidated Tape* discusses this question and compares opposing views in some detail. This position paper outlines AFME's views that the benefits of including pre-trade data on the CT would significantly outweigh any costs, technical or otherwise, associated with its inclusion. AFME believes that an equities CT with pre-trade data would attract more potential market participants. With more accessible prices on UK markets, investors will be more likely to trade on UK markets. Similarly, having a consolidated view of executed volumes and open interests in UK-traded securities will provide a complete view of the depth of liquidity in the market to issuers and investors.

Industry views

Having consulted market participants on the buy and sell sides, AFME would encourage the FCA to take account of the significant level of support for the inclusion of pre-trade data on the UK equities CT. On the buy side, the Investment Association notes in its recently published position paper that "there are robust use cases for pre-trade data in an equities and ETF tape to investors of all types" and that only a tape with both pre- and post-trade data will ensure that it is best configured for the needs of the market. In the words of the Investment Association:

> *The IA and its members have long been supportive of the inclusion of pre-trade data in a consolidated tape … The IA believes an equities and ETF tape with real-time pre-and post-trade data is the only model that is commercially viable and properly serves the purpose of enhancing the competitiveness and attractiveness of the UK capital markets, helping to ensure the UK remains a global trading centre.*

On the sell side, an AFME member firm made these remarks:

> *It is a consistent juxtaposition of the primary markets to, on the one hand, argue the importance of lit markets, price formation and transparency, whilst on the other leveraging their position to charge high tariffs for core value and critical pre-trade data. More freely available and accessible pre-trade data would only improve price formation. Price formation does not happen on a single order book or venue; it happens across the execution ecosystem, and a consolidated view of that system is required for anyone who intends to understand fair value. Making market data easier and cheaper to access will reduce frictional costs and enable markets to attract a greater range of willing participants. The FCA's recent review of wholesale market data also cited the creation of a consolidated tape as a critical step in improving competition in market data. Fundamentally, without pre-trade data we are not confident that a consolidated tape will ever be viable for the UK market.*

The alignment of views of the buy and sell sides serves to underscore that an equities CT with pre-trade data would be significantly superior to one without. The benefits to the full range of market participants are detailed further below.

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Defining pre-trade data

The term "pre-trade data" should be understood to mean continuous real-time data for all equity and equity-like instruments across all trading mechanisms (except for those that are quote-driven) and all trading sessions (the open auction, continuous trading and the close) to five levels of book depth with full attribution (that is, identifying the trading venue). The data should also include both prices (best bids and best offers) and sizes. All pre-trade data to be fed into the equities CT should conform to standardised flagging requirements to minimise inconsistencies and errors.

The purpose and benefits of the equities CT

The creation of an equities CT will improve access to information on how financial instruments are traded, provide a comprehensive view of liquidity in UK markets, and make investment decision-making easier and more efficient. A well-designed equities CT will meaningfully improve UK capital markets in the following ways:

- The CT will increase capital flows in the UK. A real-time CT will become a valued source of information for investors, making them aware of investment opportunities as they arise.
- The CT will make UK equity markets more competitive and attractive to investors – irrespective of these investors' domicile, resources or sophistication – by providing a clear, comprehensive and current picture of UK liquidity. It bears repeating that strengthening the UK's position in wholesale markets is a component of Focus 3: Promoting Competition and Positive Change of the FCA's strategy for 2022 to 2025 – the opportunity exists to make the equities CT a critical component of this mission.
- The CT will provide investment firms with a tool for deployment in risk management, regulatory compliance, middle- and back-office processes, transaction cost analysis and post-trade analysis. To serve these purposes most effectively, the equities CT should leverage standardised flagging to reflect improvements that were introduced by *Policy Statement PS23/4: Improving Equity Secondary Markets* and enhanced by the industry's work through the FIX Trading Community's updated Market Model Typology ("MMT") trade scenario guidance. This would help to avoid duplication and remove non-price-forming trades that would give a false picture of liquidity if they were included.
- The CT will provide market data users with an alternative source of display data, thereby reducing their operating costs. The number of data users is likely to increase on the condition that data becomes more competitively priced. However, it should be noted that the CT will not address the broader issue of market data costs for firms consuming direct feeds from exchanges, a matter that the FCA discusses in *Market Study MS23/1.5: Wholesale Data Market Study – Report*. In order to best address this issue, the FCA should consider reviewing the reasonable commercial basis framework at the earliest opportunity. It would be inadvisable for any market participant to assume that the establishment of the equities CT would address market data costs.
- The CT, if it is designed to include pre-trade data, will improve the resilience of UK wholesale markets by establishing a universally trusted source of bids and offers. In the event of a market outage, the CT will become an essential element in a network of systems and controls that will enable trading to move to alternative trading venues with minimal disruption. This will be possible because the provision of pre-trade data would enable secondary market trading to continue as smoothly as possible if an outage were to occur on a primary market (pre-trade data would show market participants which venue would be the best alternative at any point in time).
- The CT will help facilitate best execution, thereby improving outcomes for investors.
- The CT will provide the FCA and other regulators with a reliable source of market data, which will improve the quality of supervision and regulatory decision-making.

Based on extensive analysis, we are firmly of the view that the equities CT will be better able to deliver these outcomes if it is designed to incorporate pre-trade data.

Considering the pros and cons

Arguments in favour of including pre-trade data on the CT

In Paragraph 8.20 of CP23/15, the FCA outlines three arguments in favour of including pre-trade data on the equities CT. We explain our reasons for agreeing with these arguments below.

(i) *The use cases for post-trade equities data are mainly confined to middle and back-office functions rather than front-office uses, so there is a question as to whether a post-trade CT would be commercially viable.*

The commercial viability of the equities CT will be essential to its ultimate success. A CT that includes pre-trade data will be more attractive to users and more likely to become economically self-sustaining. It should be noted that if a purely post-trade equities CT had ever been commercially viable, it likely would have come into existence already, given that the technological capability to consolidate post-trade data into a single stream already exists. Similarly, a pre-trade CT is technically feasible today as most sophisticated market participants already generate their own CTs from the execution venues that they access.

AFME would argue that the FCA should consider all possible use cases for pre-trade data. A pre-trade CT will bring transparency to potentially available liquidity, in particular in less liquid equity instruments. Certain less liquid instruments are not traded for weeks at a time, meaning that there is little data on them. This disincentivises investment in these issuers, which tend to be smaller cap firms. However, with pre-trade data, investors will be better enabled to take advantage of opportunities in less liquid instruments that may have gone overlooked in the past.

In another likely use case, a pre-trade CT would enable investors to make fully informed decisions about which brokers to engage. Investors select brokers based on the transaction cost analysis of their execution performance. By giving investors a full and consistent view of the pre- and post-trade environment, the CT will become a useful source of information on the opportunities available to execute trades on the best terms. This will help investors to select the brokers most likely to deliver best execution and will further incentivise brokers to produce the best results for investors.

(ii) *The inclusion of pre-trade data will make markets more resilient by providing a trusted source of pricing that will enable continuity of trading when there is an outage at a venue, particularly the venue of primary listing for shares.*

AFME agrees with this conclusion. As we said above, under the heading “The purpose and benefits of the equities CT”, an equities CT with pre-trade data would help to facilitate the smooth transfer of trading to alternative venues if a primary market outage occurred. By giving market participants a true and comprehensive view of prices on each venue, a pre-trade CT would allow participants to maintain sight of the best available venues in outage conditions.

(iii) *Only a comprehensive CT will drive the growth of equity markets in the UK by providing a single investable universe.*

Market participants on the buy and sell sides have expressed the view that the more comprehensive the CT becomes, the more effective it will be in driving market growth. This would certainly be a positive change in keeping with the intentions of Focus 3 of the FCA's strategy.

In addition, we would like to address the following argument, which did not appear in CP23/15 but is commonly discussed by market participants:

(iv) *Arguments that the inclusion of real-time data on the equities CT would create arbitrage opportunities for institutional investors, distort reference prices and leave retail investors worse off do not stand up to scrutiny.*

Latency will become a non-issue owing to the CT's provision of display data. The majority of CT users will also use data display terminals such as those provided by Bloomberg or another market data vendor. Such market data terminals already introduce latency of approximately 10 milliseconds. These terminals provide display data at sufficient speeds for tens of thousands of investment professionals who, in any case, add a further human eye latency of up to 200 milliseconds according to research.[1] Essentially, this means that a human user will not be able to read, understand and act on the data as quickly as it comes through. Evidence from Cboe suggests that prices are stable for over 99 per cent of the trading day when measured to the hundredth of a second. Therefore, marginal latency will not detract from the reliability or utility of consolidated data 99 per cent of the time when it is viewed on a terminal by a human user.[2]

The claim that the introduction of a real-time pre-trade CT would disadvantage retail investors – for example, by distorting reference prices or allowing institutional investors to exploit opportunities for arbitrage – is mistaken. Risks stemming from latency arbitrage already exist in an environment where 15-minute delayed data is the current reality for retail investors. Instead, providing a nearly real-time view of the market pre- and post-trade is likelier to improve the general understanding of financial markets and ultimately boost confidence for retail investors.

The argument that publishing a real-time pre-trade CT will create arbitrage opportunities for more sophisticated traders does not stand up to scrutiny. The view that particular traders have of the market depends on several factors: where they are located, when they consult the data and whether they decide to trade. Even the most sophisticated traders do not know where every other market participant is located or the effects that latency will have on the consumption of data by those participants.

Arguments against including pre-trade data on the CT

In Paragraph 8.15 of CP23/15, the FCA outlines four arguments against including pre-trade data on the equities CT. We explain our reasons for disagreeing with these arguments below.

(i) *Greater availability of consolidated pre-trade data could encourage trading to move away from Central Limit Order Books (CLOBs) as participants use the prices provided as a reference price but execute away from the CLOB. There has already been a trend away from using CLOBs (see here) and whilst this might be beneficial for individual orders, when viewed in the round it can drive up the costs of sourcing liquidity, widen spreads and increase the overall costs of trading.*

[1] Hauk, O. et al (2006) "The time course of visual word recognition as revealed by linear regression analysis of ERP data", *NeuroImage*, 30(4). Available at: https://www.sciencedirect.com/science/article/abs/pii/S1053811905024663?dgcid=api_sd_search-api-endpoint
[2] Chicago Board Options Exchange (Cboe) (2023) *Mission Possible*. Available at: https://www.cboe.com/insights/posts/mission-possible/

It is critical to note at the outset that introducing pre-trade data into the CT, even to five levels of price depth, will not become a substitute for the purpose of algorithmic trading. Venue selection will be driven by a set of principles which will aim to identify the most suitable venue for a particular trading strategy. Most brokers already consume direct data feeds with the information that will eventually populate the tape. In order to execute orders in the best interests of the client, broker algorithms need full-depth data feeds (in excess of 20 levels) and a full historical tick database. The routing of orders is not expected to change. Therefore, the suggestion that a CT will fundamentally change market composition is not supported by hard evidence.

(ii) *Trading on CLOBs often increases at moments of wider economic stress and uncertainty such as at the start of the pandemic. The role of CLOBs in concentrating liquidity at such times could be undermined if a pre-trade CT increases market fragmentation, leading to greater financial instability.*

The function of the CT will be to consolidate and publish data that is currently only accessible to sophisticated firms engaging or providing trading services. As we noted in point (i), the CT will not drive algorithmic trading decisions, so it does not follow that the creation of a CT with pre-trade data will lead to greater fragmentation or market instability.

In any case, AFME's view is that any concerns related to financial stability would be better addressed under the existing transparency regime, as this regime determines the rules that govern the type and quality of data that data providers must produce.

(iii) *Market data is an important source of revenue for operators of CLOBs. The revenue is used in part for investment in efforts to achieve resiliency and improve the quality of the CLOB and, if CLOB operators' revenues from market data are significantly diminished, this would threaten the ability to support the resilience and quality of secondary trading.*

While AFME acknowledges that market data revenues are an important component of trading venues' overall revenues, we have long held the position that market data is a separate product from other services and, as such, should be priced in relation to the cost associated with its production. We note that trading venues are obligated under Article 13 of the Markets in Financial Instruments Regulation and Article 17 of Commission Delegated Regulation 2017/567 to ensure that the prices charged for market data reflect the cost of producing and disseminating the data. Under these obligations, it would be inadvisable to use revenues from data sales to subsidise the cost of resilience initiatives and secondary trading operations.

(iv) *To the extent that a CT leads to increased fragmentation of trading in equities this might diminish the attractiveness to issuers of those trading venues in the UK offering a primary market. Issuers might have concerns about listing on a venue which cannot itself offer a significant depth of trading.*

There is no robust evidence that the introduction of an equities CT inclusive of pre-trade data in the UK will lead to fragmentation. Fears that fragmentation will increase as a result of introducing an equities CT with pre-trade data become even less well founded when we bear in mind that the CT will not drive algorithmic trading decisions.

AFME believes that an equities CT with pre-trade data would attract more potential market participants. With more accessible prices on UK markets, investors will be more likely to trade on UK markets. Similarly, having a consolidated view of executed volumes and open interests in UK-traded securities will provide a complete view of the depth of liquidity in the market to issuers and investors.

Conclusion

The development of the equities CT presents the FCA with an opportunity to meet its strategic objective of promoting competition and positive change as outlined in its publication *Our Strategy: 2022 to 2025.* A well-functioning, commercially viable CT will prepare UK financial services for the future and will strengthen the UK's position in global wholesale markets. To ensure that the CT can contribute to these aims, we encourage the FCA to ensure that the CT has the right features from the beginning – pre-trade data is one of these. The CT would be further improved if the data were real-time and continuous and available to five levels of book depth in total with full attribution (identifying the venue). The data should also include both price (best bids and best offers) and size. The equities CT should implement the current system of standardised flagging for both pre- and post-trade reporting. An equities CT with these features would be highly valuable to market participants and would perform well in comparison to equivalent mechanisms in other jurisdictions.

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