A consolidated tape for EU bond markets

By Elizabeth Callaghan

I. Introduction:

The concept of a consolidated tape originates from equity markets in the US and dates back to the late 1970s. The purpose of the consolidated tape was to provide an aggregate view of trade and quote information of equities in real-time across stock exchanges.¹ In US fixed income markets, a consolidated tape was set up in 2002 in the form of the Trade Reporting and Compliance Engine (TRACE) which is operated by FINRA, disseminating transaction data for a diverse range of debt instruments in real-time.

In Europe, the Capital Markets Union (CMU) recognised the importance of a consolidated tape for financial markets under MiFID II, which “should increase the attractiveness of the EU capital markets as investment destinations.”² In its Report of October 2019,³ the CMU High-Level Group recommended the establishment of a single Consolidated Tape facility:

“Achieving a Consolidated Tape would make all European market data easily accessible both for professional and retail investors and increase trust for cross-border investments. The European Commission should specify criteria for a single Consolidated Tape covering all execution venues in a delegated act based on MiFID II. Enhancing the quality of market data is needed to make such a tape useful. Such a facility should be non-profit, fall under the responsibility of ESMA” ...

Greater transparency in OTC bond markets and other non-equity asset classes is also stated as one of the key objectives of MiFID II and MiFIR.

Drivers for consolidated tape - Bond/Equity markets

While bond markets and equity markets share a few challenges – such as fragmentation of infrastructure, and an unlevel playing field, that benefits those who can afford to pay for data – it is widely understood

that their ecosystems are profoundly different. One only has to view the asset classes’ market structure and protocols to see the differences: Request-for-Quote (RFQ) protocols in fixed income versus order books for equities; OTC trading (more OTC trading than on-venue trading in bonds) versus local equity exchanges; and the fact that there are approximately thirty-three times more listed bonds than listed equities in Europe.

These differences suggest that the drivers for a CT in these markets are also different. For bonds, the rationale is principally the need for a true consolidated overview picture of the market that is reliable, accessible and trustworthy. While in equities, cost and speed are the issues; assisting with arbitrage prevention and market data costs.

**What are the benefits of an EU bond consolidated tape?**

The goal of the bond consolidated tape (CT) is to improve transparency, assist decision-making and provide market insights to end-investors, large or small. Adoption of the appropriate structure would benefit the whole market, by providing a centralised, high quality, affordable, trustworthy data source, offering a comprehensive market view. This would bring immediate benefits to the professional bond market but could also benefit the retail sector more widely as the service develops.

- **Potential benefits, in detail:**

  **Facilitating more accurate assessments of execution quality.** A post-trade CT can be used for transaction cost analysis and best execution assessments, as it provides a neutral and reliable source of current market trading activity against which to reference execution quality. Evidencing best execution is also generally a compliance requirement, where again the existence of a CT could support observance.

  **Levelling the playing field with respect to access to information.** A post-trade CT removes existing information asymmetries, where certain market participants may have greater visibility regarding ongoing trading activity than other investors. This enables investors to assess more accurately current market dynamics, increasing overall investor confidence, particularly during times of market volatility.

  **Promoting competition.** By enabling investors to compare the prices they receive from liquidity providers with concurrent trading activity across the market, a post-trade CT promotes price competition as investors are able to demand more accountability from their liquidity providers. In addition, new liquidity providers are more likely to enter the market, as they are able to access information regarding current market dynamics, including trading volumes and pricing, on an equal basis as existing liquidity providers.

  **Promoting market resiliency.** The removal of existing information asymmetries contributes to market resiliency by ensuring that changes in supply and demand are more efficiently reflected in current price levels. In addition, without a neutral and reliable source of current market trading activity, investors may be more likely to pull back during times of volatility.

  **More accurate pricing of derivatives.** Prices in derivatives, such as futures, options, and credit default swaps, should reflect the value of the *underlying cash instruments*. Where it is difficult to find accurate market valuations of the underlying security, derivatives pricing can diverge from fair value, creating additional risks and costs for investors looking to hedge their exposures. Improved transparency in bond markets will therefore help to facilitate more accurate pricing, and potentially greater liquidity, in related derivatives.
**Improved fund valuations.** The accuracy and immediacy of fund valuations is directly contingent on the ability to value accurately the underlying securities. Improved transparency in bond markets will help managers to maintain accurate valuations of their fixed income funds. This equally applies to fixed income exchange traded funds (ETFs) and would help to maintain a closer relationship between the net asset value (NAV) of the underlying fund and the price of the related ETF through better facilitation of the creation and redemption process.

**Facilitating automation.** Greater efficiencies in bond markets can be achieved through the automation of many processes, including the pricing and execution of orders. The ability to automate such processes successfully is contingent on comprehensive, accurate, and timely market data, which a CT would go far in providing.

**Supporting the CMU.** A post-trade CT for bonds strengthens EU capital markets by linking together the disparate trading venues and APAs across the EU, enhancing investor confidence due to increased transparency in the market. Stronger and more liquid EU capital markets promote capital formation, job creation, and economic growth.

*Why has an EU bond consolidated tape not emerged?*

Efforts to develop a consolidated tape have been unsuccessful in the past due to concerns around the high costs for its development in a restrictive regulatory environment with a lack of clear commercial benefits for the consolidated tape provider (CTP), despite widespread demand from market participants. MiFID II laid out requirements for the ‘voluntary’ establishment of CTPs, thereby paving the way for multiple rather than a single CTP. Furthermore, the fact that MiFID II does not mandate the submission of transaction data to CTPs, as is the case in the US, is considered to be a key hindrance for the emergence of a consolidated tape. In other words, there is no commercial incentive for potential CTPs to acquire the post-trade data, nor for APAs to provide the post-trade data to a CTP.

**II. Current-state/End-state**

In order to get a clear view of an EU bond consolidated tape, it is necessary to compare and contrast the current-state of aggregation and consolidation of post-trade data in the EU with the desired end-state for EU post-trade data consolidation. This includes observations of TRACE bond consolidated tape in the US.

**Current state**

*How usable is the post-trade data?*

Post-trade data is currently scattered across more than seven (bond) authorised publication arrangements (APAs), which makes aggregating the data extremely challenging due to difficulties accessing the ‘public’ websites, a lack of consistency in formatting, and data errors.

Due to high level of data cleansing, costly and inefficient process of acquiring the data, post-trade data is not useable – yet, according to the buy-side. In time, buy-sides see potential for TCA when data quality improves. Additionally, the sell-side believes that because of delays, exacerbated by the extra aggregation and cleansing layers (cleansing: format differences, data errors, extreme values, data spikes etc), price discovery benefits are currently limited. However, today there is some degree of price discovery.
What is the view from across the pond?

While participants observe both pros and cons of US bond consolidated tape TRACE, the overall impacts are largely perceived to have been positive for market efficiency and liquidity. In particular, the gradual and phased-in approach, with the ability to review and adjust adaptation, is viewed as being an identifiable advantage of the implementation process.

Below are specific examples of what EU bond markets should borrow from US TRACE:

- Communication and consultation with stakeholders to validate changes on a technical level.
- Gradual roll-out of CT by (sub)asset class.
- Uniformity of reporting requirements and publication of technical specifications.
- Analysis of data to maintain robust data quality standards, prior to public dissemination of data.
- Testing and phase-in procedures for introduction of changes (such as new reporting fields).

**Desired End-State**

- The post-trade CT should aim to provide a comprehensive, detailed, accurate and meaningful view of where, when and how all trades occurred. Furthermore, the scope of the bond CT should cover 100% of all bond instrument transactions and volumes across all trading venues and APAs.

- **Scope and level of information per/instrument to be reported:** Raw post trade data - date, time of execution, reported date & time [taking into account current publication and deferral obligations under MiFID II], ISIN, price, venue, cancel or correction. While the CT should have execution prices (taking into account MiFID II’s deferrals) as a mandatory data item in the CT, additional data items such as yields, will in all likelihood be required by market participants. Therefore, once there is a consolidated view of prices in the CT, the CT provider (CTP) could then derive yields which are fundamental data points in the relative valuation of bonds and comparative analysis of best execution.

- **Mandatory submission:** It is essential that the responsibility for data feed provision should be changed from the CTP’s obligation to obtain data, to stating that all trading and execution venues and APAs have an obligation to provide data to the CTP (incentives possibly considered). This would require amendments to the Level 1 text of MiFID II.

- The timing of dissemination should be in line with the existing MiFID II/R post-trade transparency regime. However, harmonisation of MiFID II deferral regimes (including the optimisation of aggregation and omission rules) across the EU should be considered in order to avoid fragmentation and ensure a level playing field for all EU market participants.

- The day-to-day operation of a consolidated tape should be conducted by an entity other than ESMA or the Commission. Under this approach, the CT provider contract should be awarded to a third-party provider with a high level of data management experience as
well as related knowledge of the asset class (bonds). The contract should be awarded for no less than five years, the firm awarded the contract should have robust conflict-of-interest rules, and costs to industry participants should be kept to a minimum.

- ESMA or the Commission should have oversight of the CTP contract and monitor for any breach of contract e.g. data quality, access, pricing etc. Industry participants (buy-side, sell-side and retail) should advise with market functioning expertise.

- The CTP will own the raw data and will make it available to all market participants, through a minimum-cost utility model. The CTP will not be prevented for charging market participants for optional enriched data services. There will be robust conflict of interest rules for the CTP and any CTP additional data service offerings, outside the low-cost utility raw data CT offering to market participants.

- Alternatively, ESMA could consider creating a single consolidated bond tape which they govern and operate as a minimum cost ‘utility’ for users.

III. Next steps and setting the stage for an EU bond consolidated tape

In early December 2019, ESMA recommended “real-time consolidated tape for Equity markets. ESMA published first review on the development of prices for market data and on the consolidated tape for equity, following the application of the Markets in Financial Instruments Directive (MiFID II) for nearly two years.

‘ESMA sees need for real-time consolidated tape’

For ESMA, the main reasons why a market-led equity consolidated tape failed to develop are the limited commercial rewards to potential providers within the current regulatory framework, as well as possible competition by non-regulated entities such as data vendors.

In order to establish a real-time consolidated tape [for equity markets], the following key factors are necessary:

- A high level of data quality...
- The mandatory contribution of data by trading venues and APAs to the consolidated tape;
- The consolidated tape sharing revenues with contributing entities; and
- A strong governance framework.

The establishment of an EU-wide real-time consolidated tape is a technically demanding task which will require a substantial investment of both time and resources by all parties involved, including the need to change the legal framework.” ESMA, 5 December 2019.

This ESMA announcement may be in relation to an equity consolidated tape, however the same reasoning as to why a bond consolidated tape hasn’t yet emerged and the key factors necessary for an equity consolidated tape, apply also to EU bond markets.

Moreover, and of note, ICMA is currently in dialog with the EU Commission regarding the potential establishment of a bond consolidated tape in the EU.
Taking everything into account, it appears the way is open for the creation of a single consolidated tape for EU bond markets.

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