CONSOLIDATED TAPE: PROSPECTS FOR DELIVERY

HANZO VAN BEUSEKOM
Member of the Executive Board - Dutch Authority for the Financial Markets (AFM)

Back to the future - From the bond cabinet to the consolidated tape

Few people active in the bond market today are familiar with terms like board boys, bond cabinets and telegraph operators. It is hard to imagine that these were at the heart of the bond trading universe at the New York Stock Exchange in the 1920s. While it may not be what you would expect given the current bond market structure, up until the late 1940s the majority of bond trading took place through a highly transparent open orderbook model. Transaction information was also widely available.

Back then, most bonds were traded through written orders filed in the "bond cabinet". (Yes, an actual cabinet) Since most bonds were - like today - only traded infrequently, clerks would record bid and ask quotes in the cabinet, as well as the sizes, brokers and dealers. Traders on the floor could thus easily obtain information on the market for any bond, simply by asking the clerk. This method was effectively a central limit-order book.

Trade information was also distributed broadly. Transactions concluded would be recorded by trade reporters, who would pass on the information to the board boys. The board boys would immediately post the prices on the board and notify the telegraph operator. Shortly afterwards the information appeared on bond tickers throughout the US. Apart from the manual technology, the workings of the bond cabinet and board boys are very similar to electronic order books and the consolidated tape that are now (re)emerging in the EU bond markets.

The open orderbook model disappeared in the 1940s when merchant banks became the dominant force in this market. The majority of trading shifted to over-the-counter relationship-based trading between dealer banks and institutional investors in large sizes; a situation that lasts to this very day. It remains difficult to grasp that bond markets had a higher level of pre- and post-trade transparency long before the invention of the computer.

Bond markets had higher levels of transparency long before the invention of the computer.

100 years later, we seem to be going back to the future. The EU bond markets are rapidly adopting (multilateral) electronic trading protocols, thereby overcoming a range of shortcoming in terms of liquidity, fungibility and transparency of bonds. And as part of the MiFIR Review published in November, the European Commission (EC) is addressing a range of fundamental post-trade transparency issues with the proposal for a post-trade consolidated tape (CT) as its centerpiece.

As a firm believer in the need for fair, open, transparent, and multilateral bond markets, the AFM has frequently underlined the need for a bond CT to fundamentally improve the market structure. Such a CT has a few preconditions. First, a mandate is needed under the revised MiFIR framework for trading venues and APAs to contribute the required data fields to the CT, as well as tools for managing and supervising the contributions and supporting commercial CT models. Second, there is a need to define common data standards, to set required data fields, and to agree on data access and governance models to ensure the efficient working of the CT. Third, significant regulatory changes are needed to simplify the current fixed income post-trade deferral regime which hampers the availability of sufficient transaction data.

We applaud the EC that several preconditions are being addressed in the MiFIR Review proposal, most notably on the contribution mandate for trading venues and APAs and the deferral regime. At the same time, questions remain around fair revenue redistribution for data contributors to the CT, as well as criteria on the tender and award process for CT providers.

More work is also needed to further define the CT product from a vendor, data contributor and user perspective, as well as clear data standards and improvement of current data quality/availability in order for a CT to be commercially attractive for providers and end-users. It is a joint responsibility with the industry to ensure that CTs emerge across asset classes and contribute to transparent and liquid EU markets working for investors and issuers alike. Now is the time to deliver. So why is the analogy with the 1920s so important? The orderbook-driven market was highly liquid, transparent, and attracted a broad investor base. With a CMU in mind, there may be a lot we can learn from past market structures. Although I doubt the bond cabinet, the telegraph, and the board boys will ever return.

RODRIGO BUENAVENTURA
Chair - Spanish Securities and Exchange Commission (CNMV)

A forward step to build the CMU: market data consolidation

MiFID II and MiFIR have set out a more transparent trading landscape in the Union since their entry into force in 2018. The application of transparency provisions to bonds and derivatives instruments and in general to OTC trading (including systematic internalisers), has enhanced the information available to investors. It has also increased competition, enabling the emergence of new types of venues (MTFs and OTFs), that have challenged the predominance of the incumbent regulated markets.

However, it seems that these reforms have not fully achieved their objectives of increasing liquidity and reducing costs for investors. According to many, a significant side effect of competition has been the fragmentation of EU markets. While it is expected that more competition should reduce costs for investors, fragmentation on the other hand has increased complexity and therefore costs; in order to identify buying and selling interests, executing firms need to navigate the complexity of execution venues, thereby adding costs to their clients. Worse still, trading at best possible terms might be missed out in the absence of a comprehensive picture of the available prices.

MiFID II has brought about a rather complex market structure and trade reporting regime. The ecosystem is composed of trading venues, systematic internalisers and investment firms trading purely OTC. It also includes an array of trading models, including new features such as frequent batch auctions (so-called periodics), and an intense usage of transparency waivers and deferrals that make market data difficult to consolidate.

The need for an aggregated view of the market is stronger the more fragmented and complex the trading activity is. OTC trading currently represents a significant market share and an important source of information. Also influenced by the fragmentation of liquidity, there has been an increase in the automation of trading and risk management processes.

CTP is too important to rush it. We should apply a staggered deployment, to make it a success.

The European Commission (EC) aims, as part of the objectives of the capital markets union initiative (CMU), to put in place a consolidated tape as part of the development of the single market. However, the fulfilment of this objective has met so far a number of entrepreneurial difficulties, operational complexities and technological challenges. How the CTP can get the data from the different types of execution venues and the lack of commercial incentives to apply for authorization as a CTP are two of the main obstacles that have been identified. Also, additional work in relation to the data to be reported may be needed.

In the last three years there has been an intense debate between public authorities and market participants to identify the main obstacles to the consolidation of data and the best possible solutions, which finally materialized in the form of the publication of a legislative proposal (2021).

Briefly, the EC's November 2021 proposal includes the set-up of four real-time post-trade information CTPs for shares, ETFs, fixed-income and cleared derivatives. It requires mandatory contribution from trading venues, APAs and investment firms (including systematic internalisers), defines what is considered core market data and mandates ESMA to prepare technical advice for data issues. Finally, ESMA will play a crucial role in the selection process and, in the event that no CTPs emerges as a result of the process, the EC envisages that ESMA itself may perform the consolidation function.

There are still certain issues that I hope will be addressed during the discussions by co-legislators. In particular, revenue sharing should provide a reasonable and balanced reward for all market data contributors.

The CTP is a tool worth pursuing and it is too important to rush it. Given the complexity of the task and the differences between asset classes and the way they are traded, it seems prudent to have a phase-in or staggered approach for the CTPs' implementation; priority should be assigned to the projects where the need of consolidation is more acute, such as the CTP for bonds (executions only).

Then, with the lessons learnt from that first phase, the equities tape could be addressed. My assessment is that it should also concentrate on post-trade transparency, latency issues being an impediment for a real pre-trade CTP for execution purposes.

There is less demand among market participants for ETFs and derivatives. A derivatives CTP seems to be a distant project, as the issue of identification of these instruments needs to be fixed first.

To sum up, improving liquidity and reducing trading risks are objectives we all share in Europe. Let us hope that a well-designed consolidation, taking into account the different types of markets and the needs of investors will be instrumental in achieving them.

NICHOLAS BEAN

Chief Executive Officer - Bloomberg Trading Facility BV

The commercial viability of operating a Consolidated Tape remains a concern

The technical challenges of providing a Consolidated Tape (CT) for bond markets has recently enjoyed outsized attention within the EU. However, Approved Publication Arrangements (APAs) which collect, collate and redistribute trade data already conduct a technical activity almost identical to that of a Consolidated Tape Provider (CTP). As such, the greatest challenge of bringing about a bond CTP has always been the matter of commercial viability to attract a potential vendor, and not matters related to technical implementation. This remains the case in light of the latest MiFIR proposal (henceforth 'Proposal').

There is no bond CTP today within the EU largely because 'the devil was in the detail' of the original text. To avoid a repeat of this, the content of the current Proposal should be considered with great care. The good news is that the Proposal removes the obligation of a bond CTP to give its product away for free after 15 minutes, and addresses disparate data structures across data providers – two of the key impediments to commercial viability. Unfortunately, the Proposal has also introduced new concepts that may impact the commercial viability of a bond CTP. A useful example for demonstration purposes is the concept of Market Data Contributors (MDCs).

MDCs may be a Systematic Internaliser (SI), Investment Firm (IF), APA or Trading Venue (TV). The Proposal would permit them to contribute directly to a bond CTP, which would mean the scope of contributors would be expanded from APA/TVs to also include SI/IFs. The objective of this change is unclear, but it is likely that vendors will see it as challenging with respect to the operation of a bond CTP. Under the current legislation, a bond CTP consumes trade data from APA/TVs. The trades of SI/IFs enter a bond CTP via APAs.

This is advantageous because, i) there are only a limited number of APAs, thus a limited number of operational connections, ii) data is a core business for APAs, so when a CTP engages in operational matters it is doing so as a peer, iii) the key APAs and CTPs are both regulated by ESMA, so there is a common regulator to mediate on matters of implementation (admittedly a recent development).

If SI/IFs submit directly to a bond CTP, it would have i) a far higher number of operational connections, ii) the complexity of connecting to SI/IFs, and not the other way around - per the language of the Proposal, iii) to engage with non-data professionals in operational matters, and iv) to operate in a challenging conflict resolution environment, across ESMA and 27 National Competent Authorities (NCAs).

> As always, legislation remains exposed to 'the law of unintended consequences'.

Furthermore, under today's legislation the obligation for the implementation of deferrals rests with the source of the trade data, i.e. the SI/IF. According to the Proposal, a bond CTP would have a new obligation to ensure the correct application of deferrals. This would essentially extend a regulatory obligation from the SI/IF to the CTP. Clearly all of this would create significant commercial disincentive to operate a bond CTP. Yet the consequences of the MDC concept do not stop there.

It is likely that SI/IFs would not only find contributing to a bond CTP operationally attractive (connectivity obligations laying with the CTP) but also financially attractive, since the CTP would need to apply any revenue share uniformly. Essentially, if a bond CTP is rebating the SI/IF directly this would have a negative commercial impact for the APAs, as the value of their trade data would plummet.

However, SI/IFs would still have to use an APA to comply with transparency reporting rules, which notably require that trade data becomes free after 15 minutes (an obligation the CTP would no longer have). Thus, the APA would likely recover lost data revenue via the fees it charges SI/IFs - otherwise it may become commercially unviable.

The bond CTP for its part would thus be getting duplicate data, once from the APA and once from the SI/IF, which it would need to reconcile, adding yet another burden on its commercial viability.

Therefore, when considering the MDC alone (as a single example of challenging concepts within the Proposal) it may lead to a greater operational burden, thus operational cost, for vendors interested in operating a bond CTP, than what is the case under the current legislation (where the MDC concept does not exist).

In conclusion, there is a risk that the disincentives for a vendor to operate a bond CTP under the current legislation may have been replaced with new disincentives within the Proposal. As always, legislation remains exposed to 'the law of unintended consequences'.

QUENTIN VAN LIDTH
Regulatory Affairs Specialist - BNP Paribas Global Markets

Focusing on the CT key success factors and managing liquidity

BNP Paribas supports the ambition to build a Capital Market Union (CMU), improve MiFID II / MiFIR, develop fair, efficient and resilient markets and, to this end, build a Consolidated Tape (CT).

A phased approach for the scope of asset classes: first a CT for equity and bonds

We believe there are clear use cases for a CT for equity shares and for bonds, in terms of price formation, risk management and best execution. We see fewer use cases for OTC derivatives and ETFs.

One of the key aspects when assessing the use case of a CT is (i) whether the instruments are fungible versus bilateral/bespoke agreements, (ii) the nature of the instrument and its liquidity, whether based on the instrument itself or on its underlying, and (iii) the natural investor base. On this basis, we believe the prioritisation of a CT for equity shares and bonds is the most appropriate. Concentrating efforts and resources in these asset classes will give the best chance of success.

Focus on market data IP rights

One of the main reasons a CT has not yet materialised is the lack of access to data on reasonable commercial terms. This is due to intellectual property (IP) rights being asserted by Trading Venues (TV), and Approved Publishing Arrangements (APA).

Deferrals are enabling liquidity, rather than impeding the CT

Well-calibrated deferrals for prices and volumes are crucial ingredients of efficient markets, rather than an impediment to the CT. For illiquid instruments and trades of large sizes, deferrals are critical for liquidity providers to hedge their positions. Deferrals must adequately represent the time needed for dealers to recycle positions in order to retain the ability to offer liquidity to clients from their balance sheet, in all market conditions. Ultimately, BNP Paribas supports real-time transparency for liquid instruments and trades of small sizes, for which hedging and risk management are straightforward.

A phased approach for managing the delicate balance between transparency and liquidity

First, build a CT. Then analyse the data and understand the transparency, liquidity and market structure. Only then can deferrals be fine-tuned.

> First, build a CT. Then analyse the data... only then can deferrals be fine-tuned.

Yes to mandatory contribution

We welcome the mandatory contribution submitted free of charge by TV and APA to the CT provider. Separately, market participants will continue to subscribe to the direct and low-latency data feeds required for trading execution and market-making. Regarding these feeds, we encourage regulatory authorities to continue to monitor contracts and fee models from TV and data vendors.

Public good and run as a utility instead of maximising revenue

Instead of a revenue maximising approach, market data should be treated as a public good and made available as widely and cheaply as possible. Moreover, in the context of CMU, the CT should not be compromised to secure revenue for exchanges. Healthy, efficient and progressive capital markets need to be based on competitive business models rather than on subsidising existing infrastructure. Given the above, we believe the CT should be run as a utility, i.e. on a cost recovery basis, by providing data for a small fee reflecting the cost of aggregation and distribution. This improved access to data would increase participation and generate more executions for which TV can charge.

Pre-trade transparency for equity from day 1

For equity shares, the identified use cases are based on the availability of pre- and post-trade transparency. For bonds, they are based on the availability of post-trade transparency.

For bonds, the use cases are about getting more price information on liquid instruments and trades of small sizes from post-trade transparency. And investors are willing to pay a small fee for this. For equity shares, the use cases are primarily about making aggregated price information available to a wider investor base than those who can afford it at present.

Data quality needs everyone's involvement, beyond the CT

Data quality depends on instrument reference data, golden sources and standard definitions. These subjects are complex, and more so in bonds than equity given the range of instruments. For example, today, there is no worldwide industry golden source for the outstanding notional amount of all bonds, not even the most liquid sovereign bonds.

Continuous improvement in data quality is a matter that requires the contribution of all stakeholders of the financial markets ecosystem: market participants, operators, data vendors, technology firms and regulatory authorities. This active collaboration is already taking place now beyond the CT and must deepen.

JAMES MCKEONE

Vice President, Head of European Data & Regulatory Solutions - Nasdaq

A tape is no silver bullet for EU markets – it could do more harm than good

The EU is once again updating its financial markets regulatory framework, known as MiFID/MiFIR. This is an important endeavor that will have long-term effects on the functionality and competitiveness of European financial markets. One of the triggers for this revision is that despite the clear political will for increased market transparency, since the last reform, EU markets have in fact become darker.

Transparent markets are crucial in bringing end-investors and companies together, and in providing companies with access to capital. They also protect investors. By allowing all investors to trade listed financial instruments and ensuring a quality price formation process, exchanges and other transparent markets ensure a fair and verifiable outcome. This is key to well-functioning capital markets and justifies the need to promote and preserve an adequate price formation process.

The proportion of dark trading in the European market is disputed. This is primarily due to the lack of undisputable information about transactions that have happened on various venues active throughout the continent. By comparison, details about the price and execution of transactions happening on transparent markets are easily accessible. This is indeed not the case for trades executed by banks in their internal systems and OTC. A consolidated tape aimed at creating an overall picture of trading happening throughout the European continent would be an important step forward and would allow investors small and large to verify execution quality and to consistently identify venues where the best price can be found.

However, this is not what the European Commission is proposing.

In addition to advocating one post-trade consolidated tape per asset class (shares, ETFs, bonds & derivatives) able to give a full coverage of trading (this is good!), the European Commission proposes to establish a real-time post-trade tape of core market data for shares, leaving the door open to a pre-trade consolidated tape in the medium term. This constitutes a significant threat to European transparent markets and the financing of the economy.

A badly calibrated EU tape can seriously hurt transparent markets in favor of dark trading.

What would make more sense is an EU consolidated tape that creates a consolidated view of all transactions that have happened on the various venues and markets across the EU - a post-trade tape. Moreover, this tape should be delayed to allow for a proper sequencing of transaction data. Given the scattered geography of Europe and the multitude of execution mechanisms that will publish transaction data with a different time span, a real time post-trade tape would not show transactions in sequence and the publication of time stamps would not help in this respect, unless the tape is delayed.

What would be equally inappropriate is an EU tape that would want to show quoted prices in the markets i.e., a pre-trade tape. Because these prices would not be accessible to all viewers at the same time, the tape would become misleading. Some market participants will have faster access to prices and in reality, the liquidity shown on the tape will no longer be available – this is a problem that the U.S. tape is facing and that regulators there are currently looking to address.

A badly calibrated EU tape can seriously hurt transparent markets in favor of dark trading. Contrary to the US model, the revenue model proposed by the Commission is unlikely to adequately remunerate transparent markets for the data that they contribute. The model envisaged requires transparent marketplace operators to provide real-time data for the EU tape, free of charge, while the industry has no obligation to consume the same data. Consequently, it is likely that the revenues of the EU tape would only cover its functioning, leaving transparent markets with revenue losses and investment challenges – and all to support a tape with very little added value to the wider financial eco-system and that does nothing to improve the functioning or transparency of financial markets.

The EU tape needs to strike the right balance between being useful & valuable to market participants, whilst not undermining transparent markets. An End of Day tape, or a 15 minute delayed tape, can achieve such a balance. The voices arguing that anything but a real-time tape would not deliver an improvement to transparent markets need to consider that a real-time tape will never be truly real time. Market players that have the technical capabilities to overcome latency issues will benefit- to the cost of small firms that do not. The use cases that have been highlighted favor a delayed post trade tape if we are to deliver a tape that is truly useful to all market participants.

The consolidated tape is no silver bullet to promoting transparency in EU financial markets. What is needed is an appropriate reform of the EU market structure and we trust the legislative process will refocus the text and create a market structure that allows European capital markets to thrive and support economic growth and job creation.

GERBEN EVERTS
Executive Director -
European Investors' Association

To deliver on best execution, more optimal price discovery is key

The current generation policy makers will have to deliver on important projects. Most urgent is obviously the transition towards a sustainable economy. Risk-bearing capital is required to finance this transition. A Green Deal without the CMU is just an ambition. Delivering on the CMU in full is a prerequisite for turning this ambition into a success.

Europe needs a 'Schengen' for financial markets. More effective allocation of capital is required to enlarge the EU capital markets, to finance the most innovative businesses and to grab its full economic dividend. Institutional investors already deliver on impact and engagement. We want young people and the self-employed to invest in their real future as well, in real assets listed on EU stockmarkets, instead of something crypto and illusionary.

To gain trust and prevent disappointment, we have to adjust current revenue models. As individual companies might have no incentive, policy makers need to step in. In the most ideal CMU reality, (retail) investors no longer have to worry about the pricing of transactions, settlement and clearing offered by a chain of intermediaries. The consolidated tape project will assist investors in finding the most optimal allocation of their savings more automatically.

In principle, we are in favor of conducting as many transactions as possible on the most suitable, lit and transparent multilateral platforms. As regards the revision of the MiFID II/MiFIR regime, we advocate more targeted and meaningful transparency for investors and other stakeholders. Consideration must be given to the specific characteristics of the various market segments, market participants and the type of instrument.

Although MiFID II has certainly brought improvements, the overall sentiment among investors is that MiFID II has not yet delivered on all of its goals. Electronic trading system grow in market share. However, OTC-Request for Quote- and voice trading systems are a remaining hurdle for new entrants and their price discovery in the bond markets.

Furthermore, while MiFIR can be credited for providing a more solid regulatory framework for pre- and post-trade transparency, European Investors - VEB has genuine concerns regarding the way market participants are increasingly seeking to diverge from transparent central limit order book models through internalization, as well as through alternative types of trading and execution venues. A more level playing field between those alternative liquidity pools and multilateral trading venues is key.

We strongly advocate implementation of a real-time consolidated tape for equity and bonds.

Transparency and comparability are important in ensuring that markets are fair, sound and efficient. European Investors - VEB strongly advocates the implementation of a real-time consolidated tape for equity and bonds. A consolidated tape will result in less fragmented price information, as well as other information, in the European markets.

The goal is to achieve more efficient pricing and capital allocation, early identification of risks to financial stability, and greater market integrity. The quality of public data is currently quite poor. Data quality and transparency on cost of market data need to be improved, in which supervisory action and convergence are necessary.

The post-trade Consolidated Tape Provider (CTP) is considered a most essential part of the CMU. A CTP has the potential to significantly improve transparency by aggregating information from increasingly fragmented markets across trading venues The availability of common reference price information is improved. However, the jury is still out on the benefits of pre-trade transparency. This requires significant investments in data collection, distribution and analysis - as order data is extremely volatile and less-trustworthy. Data quality, the amount of data sources, the achievability of real-time, and the time- to-completion are precisely the practical constraints, which should temper expectations.

Hence, some important concerns remain. For equity markets, more transparency is called for. The opt-outs could be simplified and further restricted. For bonds, the current waiver and deferral regime should be simplified, and the liquid instrument scope increased. For derivatives, the scope of the DTO should be adjusted and better aligned to reduce complexity and to increase flexibility.

Delivering the consolidated tape project in the most ambitious, though practical way is key. It will help in creating a real European Capital Markets Union and will improve opportunities for monitoring execution quality (best execution) for market participants and investors. With the infrastructure being more stable, this MiFID promise to investors is now urgently required.