

## EU CONSOLIDATED TAPE : NEXT STEPS



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### Key features for an efficient tape: a post-trade real time equity tape

The last two years have seen several commissioned reports on the establishment of a tape, which all recommended moving forward with this project in order to make it a reality. In 2019, ESMA recommended proposing a post-trade real-time tape for equity instruments. The 2020 report undertaken by Market Structure Partners for the European Commission, “The Study on the Creation of an EU Consolidated Tape” also recommended inter alia to proceed with the current procurement power (embedded in the texts) and establish a Consolidated Tape (CT) for post-trade data as soon as possible. This study is calling for a CT, which would be “run as a utility and [which] brings data stakeholders together to resolve the current challenges in consolidation”.

In very fragmented markets, the principle of the need to establish a CT

seems to be largely supported by market participants. However, the question on whether the tape should cover equity instruments, non-equity instruments or both and whether the tape would need to publish pre-trade consolidated data or post-trade data still remain debated. These CT features would be key to ensure an efficient system that embraces most of the market needs and completes the European well-developed markets structure.

In that context, the AMF strongly supports the establishment of a CT, which could meet the following characteristics:

- **A post-trade real-time equity CT**

One could advocate that due to the low proportion of on-venue trading for bonds, a CT for fixed income is more needed than an equity CT. As a first step, a post-trade CT covering equity instruments appears nevertheless easier to develop; but preparatory work for non-equity instruments such as bonds should not be delayed

In terms of benefits, due to the breadth of geographical locations and latency considerations, we do not recommend the use of the consolidated tape as a way for firms to prove that they have effectively complied with their best execution obligations. However, the overall transparency of where and how trades take place will help market players to determine where liquidity lies. It will provide a useful tool of information for more accurate valuation of certain products and to appropriately monitor trade execution as well as to perform transaction cost analysis.

### A post-trade equity tape, with an appropriate governance framework, should be set up first.

As said, although the CT cannot allow market participants to prove they met their best execution requirements, it will nevertheless be instrumental for market participants in defining and applying their best execution policy, in particular for those financial instruments that are dealt on multiple execution venues. It will make it

possible for firms to determine the execution venue towards which a specific flow should be directed (based on the price and volumes executed).

The CTP should consolidate post-trade data from all actors except from those that have little market share (i.e. less than 0.5%). This will still allow having a comprehensive view of European markets while not creating an impediment to the entry of small trading venues or new entrants – due to the requirement to be plugged to the CT.

- **An appropriate governance framework would be one of the main feature**

Most of all, to ensure strong commitment to the project and a fit for purpose CTP, its governance framework should ensure representativeness of all providers and users of the consolidated data stream. This does not mean it should be euro-centered and set in stone: should a CTP consolidate data from third-country markets, an appropriately governed CTP could potentially welcome on board third-country entities joining the tape.

- **The success of a CTP finally lies on an appropriate remuneration structure**

First, remuneration of data providers for their data contribution to the tape should not jeopardize the economic interest of building a tape. Indeed, it would be economically non viable for the CTP to purchase data from all data providers. Data providers should nonetheless be entitled to a part of the CTP revenue. As such, though data should be submitted free of charge to the CTP, data contributors should also benefit from remuneration derived from the data consolidation under a pre-defined allocation key.

Second, only data of good quality or participating in the price formation process could entitle data providers to benefit from remuneration. Hence, data of poor quality could be penalized and, transactions which do not contribute to price formation, such as transactions benefiting from a pre-trade transparency waiver (e.g. technical trades), should not be covered by the tape.



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### Why a consolidated tape is an essential element of a real Capital Markets Union

Let's imagine you are an asset manager looking to do a transaction in European government bonds. Before seeking a quote in the market, you want to get a view of possible price bands on your screen. So, you look for information on the latest transactions in the EU. This currently requires you to gather information from a dozen different trading venues, authorised publication mechanism (APAs) and other data providers, only to discover that the data is of inadequate quality, highly fragmented and not competitively priced.

Moreover, much data is not available as the illiquid nature of the EU's bond market allows publication of transaction information to be deferred to up to four weeks. While the asset manager may have the means to compound all this information into something meaningful, less sophisticated investors and issuers looking for EU-wide price information for new investments or issuances are currently facing a highly fragmented and complex environment.

Market fragmentation is not necessarily bad; it leads to a healthy competitive environment and created various centres of expertise evolving around different asset classes in the EU. Furthermore, availability of market data has become the engine that drives financial markets today. It enabled the rapid evolution in electronic trading that revolutionised the way financial instruments are traded. It also led to broader participation, lowered spreads and created better prices for investors. What is currently missing is a broadly available consolidated, standardised and reliable overview of the EU's financial markets.

The establishment of a post-trade consolidated tape (CT) for the European equity, bonds and derivative markets can help tackle this. It can even be considered a condition for the establishment of an actual Capital Markets Union (CMU). The overall aims of a CT within the CMU framework would be to:

- Reduce fragmentation;
- Facilitate price discovery;
- Create EU-wide reference prices across asset classes;
- Improve availability and quality of market data;
- Provide better means to analyse execution quality by banks and brokers;
- Ease access to essential market data for all market participants.

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**A consolidated tape  
is needed to provide  
accessible and reliable  
overview of EU financial  
markets.**

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At a minimum, a CT should provide continuous information streams on transaction prices, instrument types, execution venues and timestamps.

It is important to properly analyse the characteristics and objectives of a CT for different asset classes. It also means that there is no one-size-fits-all solution and that not all CTs have to be established at the same time. A bond CT could be prioritised in comparison to the equity and derivative segments, as these segments already benefit from significantly higher levels of transparency and liquidity.

The EU's secondary bond market remains underdeveloped given its strong primary market model with direct relationship-based interaction between issuers, dealers, agents and

investors. Given the high demand for fixed income instruments by buy-and-hold investors and central bank bond purchasing programs, the secondary market (particularly for corporate bonds) is largely limited to newly issued instruments or execution of pre-arranged bilateral OTC transactions. While electronic and multilateral trading models are now widely available, the bond market has generally been slower in adopting electronic trading protocols. It also remains largely closed to non-bank participants. This makes the market highly illiquid and fragmented, exempting it from many of the transparency requirements in the MiFIR framework.

It is important that CTs become part of a competitive setting. CTs should be based on clear industry standards on technology, costs/revenues and governance, ideally through multiple competing consolidators. The level of changes required to the current regulatory framework depend on scope, speed (real-time/delayed) and a mandatory/non-mandatory character of a CT.

There is a strong role for the regulatory community to ensure that the right conditions are in place for the successful establishment of a CT. Focus should be on making sure that necessary data is available through better enforcement of existing rules for trading venues and APAs. Furthermore, changes to MiFIDII/MiFIR are needed to rationalise coverage requirements and other barriers hampering the development of a solid-business case. At this stage, the AFM strongly supports initiatives to develop proof-of-concepts of CTs. This allows the industry to gain experience and establish best practices in order to work towards meaningful and easy to implement solutions.

In order to level the playing field between that large asset manager and small issuer, a CT for the European equities, bond and derivatives market should be an essential part of the European Commission's MiFIR review and CMU agenda.



## CARMINE DI NOIA

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### A Consolidated Tape to lead all the streams back to the river?

At the heart of financial markets there are financial data. In the last decade, financial markets have experienced significant changes in trading strategies, market models, technology advances and regulatory reforms which have considerably improved the value of data. Their relevance in the processes of financial intermediation has become over the years so paramount to impact on even the categorization of market participants. Forget the traditional classification between investors (institutional, professional, retail), issuers (companies, government) and - amid these, as facilitators to channelling financial resources - (stock) exchanges: in a modern financial economy, we can talk of data providers (exchanges, MTFs, systematic internalisers, APAs) and data users (asset managers, traders, and, more generally, investors). As intermediaries, data vendors and aggregators.

At the same time, consolidation of market and corporate data may help both investors and companies to make more effective investment and fund-raising choices, especially for the recovery post Covid-19. Data consolidation implies

comparability: i.e. standardization, simplification, digitalization, machine readability, data quality, legal analysis on data property, economic incentives and prohibitions. A rigorous cost benefit analysis is thus needed.

Given that, a Consolidated Tape (CT), though not being the silver bullet, may play an important role for the development of an effective EU Capital Markets Union (CMU). An operating CT stands out, in fact, as the missing piece of the revolution started with the first MiFID directive in late 2004, when Europe chose to pave the way for competition in trading services, removing the concentration rule in place since 1993. CMU needs a centripetal force to overcome the centrifugal trajectories prompted by the evolution and re-organisation of the trading industry. Hopes of a private solution for the setting-up of the CT, foreseen in MiFID II, remained frustrated in face of what can be defined as a typical market failure.

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#### CMU needs a centripetal force to overcome the centrifugal trajectories of the trading industry.

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A EU CT could be designed at least on the following pillars.

The scope of consolidation cannot be designed from scratch but should take into account the different market microstructure between equity and fixed income. Considering the compelling need to reduce fragmentation across the EU when it comes to price discovery and formation in this area, it is common sense that equity may come first, but bonds and other non-equity data consolidation is not necessarily less relevant. There, further actions must be implemented to enhance quality, timing, consistency and completeness of data.

If a single start is not politically and technically feasible, then a phase-in approach may be desirable with respect to the type of data to be made available and its timing. Policy makers may follow a two-step approach, initially focusing on post-trade data, given the greater simplicity in relative database aggregation, and only at a later time including pre-trade figures, which still require further considerations about latency, presentation and aggregation of data. In fact, it would be key to strive for a real time availability of the data, which is however still far with regard to

consolidation of pre-trade transparency information. Focusing on post-trade would therefore allow to test possible solutions in a first phase.

In addition, the market failure in the establishment of a single CT appears also due to the presence of entities - such as data vendors - which in many cases act as data aggregators, in the absence of a specific regulatory and supervisory framework. The rise of a CT and the sustainability of its business model may be influenced by the regulatory coverage of data vending activities. In this regard, it could be suggested an authorisation regime for data vendors/redistributors, or, at least, specific rules when it comes to transparency duties and data availability, similar to those applicable to APAs and CTPs. In this regard, further analysis is needed to understand the interplay of CT(s) and APA and ARM.

In case a CT framework is envisaged, a single CTP should emerge, at least for each asset class. An important issue is the governance of the CT. The failure of the private initiative so far is mainly attributable to the limited commercial rewards for operating an equity CT which should negotiate market data agreements with hundreds of trading venues and APAs across Europe. Reports issued by ESMA and Market Structure Partners for EC have identified as a possible option the creation of a single CT, supervised by ESMA, with the involvement of stakeholders in the governance. This could be a sensible direction. The desirable success or a new, fatal, failure of the model may depend on how far the legislator would like to address the key point of data licences with market data providers, and eventually propose a mandatory contribution regime, possibly coupled with a revenue-sharing model.





## NIELS BRAB

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### A Consolidated Tape for the recovery: start with data quality and transparency

Without doubt, the EU's answer to Covid-19 has been historic and transformational – signalling unity and the next wave of integration at a critical juncture. However, with strained public finances, a banking system at its limits and warning signs of an expansive monetary policy on the horizon, let's not forget about the critical importance of the Capital Markets Union as a key lever to boost the recovery path by tapping the unleashed growth potential of our capital markets.

This is also where the reignited debate around a consolidated tape (CT) comes in. Indeed, more than three years into the game with MiFID II/ MiFIR, a strong fragmentation of the trading landscape is observable with more than 670 trading and execution venues across asset classes, and the proliferation of this trend being particularly pronounced on the equities end. This does not only suggest a clear regulatory imbalance which requires re-adjustment to ensure the broader political objectives are in-sync with the MiFID II/ MiFIR framework (role of primary vs. secondary markets). But clearly, investors could also benefit from a consolidated overview of all

trading and execution venues in this complex jungle.

However, before we fall for the easy storyline around the CT again, let us maybe start by realising that the CT is currently already included in the MiFID II/ MiFIR framework. Yet, not a single private sector offer has gone live. Despite the attempts of many, the lack of data quality from the SI, dark pool and OTC segments makes it commercially unviable. By contrast, the data by exchanges stands out in terms of highest quality and availability – and one should not lose sight of the fact that only exchanges gift away their high-quality data to anyone on a 15 minutes post-trade basis. This is probably also one of the main reasons as to why private sector offers on consolidated exchange data already exist.

The key question is therefore: If the European authorities deem public intervention desirable to create a CT that truly covers 100% of the EU's market, should this not lead to assume that the major market failure is being observed around the data quality and unavailability by alternative execution venues?

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**Quality data as basis for  
any investor decision  
should be the starting  
point for any CT  
discussion.**

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Proper data quality is the basis for any investor decision with integrity and should therefore be the starting point for a CT discussion which cannot be left ignored. Indeed, the financial crisis taught us to never compromise on transparency and data quality again. For the EU, this holds true even more so, if we are serious about pushing for a retail strategy and having our citizens endorse the capital markets. Best execution rules and the broader concept of transparency cannot be afforded to remain empty shelf principles.

Yes, creating a consolidated view across European markets can support a successful recovery financing and boost the overall attractiveness for investors. But: Be clear as to your objective and careful what you wish for. There is no need to set up a complicated pre- and post-trade CT in close to real time terms, which even ESMA anticipates to only be fully functional in 5-7 years – way too late for the recovery. But also, because the US case study shows us: Even SEC

Chair Gensler questions the national price reference NBBO, since too much trading is happening in the dark.

To put it differently: After almost 50 years of experience, the SEC questions whether the CT is an accurate instrument to determine if brokers are meeting their best execution requirements – given the increasing unreliability of reference prices determined by the public on lit exchanges. But while the US market sees about 60-65% of price formation in the lit – the comparative EU figure is only somewhere between 35-50%.

All we need to succeed is transparency based on reliable data and simplicity. Only if we manage to guarantee 100% coverage without getting yet again sidetracked into overly technical attempts to cushion the truth around the EU's failed MiFID II/ MiFIR market structure with an artificially injected hyper-competition based on a regulatory unlevel playing field, we will be able to establish a system where transparency, best execution policies and compliance checks play an actual role. If we look at the latest developments, such as around payment for order flow practices, this seems more important than ever.

Let us boost the recovery via an effective CMU that sees an efficient consolidate tape concept at its heart – not an overly complex set-up that increases costs of market data structurally while only seeing light once Brussels looks back at the Covid-19 period as it seems to look back these days at the lessons learnt, or not, around transparency and data quality during the global financial crisis.



## NICHOLAS BEAN

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### A fixed income CTP is important to the EU in more ways than may be obvious

When writing my first article about a Consolidated Tape (CT) for Eurofi, it was hard to find a relevant proverb that would be internationally familiar. However, a suitable proverb for this article was easier to identify: «necessity is the mother of invention». In essence, the urgency of 'need' has the effect of stimulating creative solutions.

It is natural to focus on the latter 'creativity' element of this proverb, yet it is the former 'need' element which is far more important, given that a failure to understand the real 'need' may result in wasted creativity. Let me explain the relevance of these musings as regards a CT and Consolidated Tape Provider (CTP).

In my previous articles for Eurofi in September 2020 and April 2021, I championed two key themes in respect of bringing about a Fixed Income (FI) CT. Firstly, the need to accommodate the explicit requirements of FI markets when considering regulatory changes. Secondly, an explanation as to why the current legislation prevented the emergence of a commercially viable FI

CT as a key lesson when considering future regulatory adjustments.

While many of the concerns I raised are openly shared by other members of the industry, the risk of a suboptimal outcome for a FI CT remains high as focus seems to be on the wrong 'need', hampering the 'creativity' necessary for an effective outcome.

The focus of the EU appears laser-like on solving for an Equities CT, and there seems to be limited appetite to tailor regulation to support the creation of a FI CT. Copy pasting an Equities CT solution onto the FI market would be suboptimal however, as discussed in my first Eurofi article.

What are the drivers behind this focus, i.e. the 'need'?

Equity price transparency benefits from three key elements that FI lacks. Firstly, a significant portion of activity occurs on Trading Venues (TVs). Secondly, the majority of TV activity occurs via an Order Book (OB) protocol. Thirdly, the sum of these two points affords a rapid equilibrium of pricing across access points that provide liquidity (notwithstanding the HFT community leveraging microsecond pricing imbalances).

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#### Is the concern of creating a single provider CTP greater than the fear of delivering none at all?

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Conversely FI price transparency is much more limited. FI is often traded off TV, when it is traded on TV it utilises non-OB protocols (with good reason), and the number of instruments is an order of magnitude greater than Equities. Yet the asset class is of equal (I'd argue greater) importance to Equities when looking at the long-term fiscal health of the EU's population - particularly in relation to pensions!

So what 'need' is this focus on Equity markets meant to fulfil? It seems to be less the need to improve transparency but rather the need to address, by proxy, concerns around Equity market data pricing - although the two issues cannot be conflated. The question for the broader community is: «how confident are you that an Equity CT will reduce Equity market data pricing»? My own observation would be 'caveat emptor'.

While such considerations for Equities are ongoing, FI markets, where very real transparency issues for transaction data

persist, are seemingly being overlooked. How do we solve for this 'need'? Fortunately, we do not need to look too far as a proven solution has existed since the turn of the century in the form of TRACE - itself an extension of FIPS from 1991.

The lessons we can learn from TRACE were largely identified in my second Eurofi article. That being, i) ensure regulation is tailored for FI markets (no 'cut and paste' of Equities), ii) a single CT provider with appropriate scrutiny by ESMA, iii) mandated contribution and appropriate 'profit share' with data providers, iv) a weaker deferrals regime (work underway), and v) remove the requirement for a CTP to give its product away for free after 15 minutes.

However, the EU does not seem comfortable with designating a single provider solution. But as the multiple provider CTP model of MiFID II has failed, it is not clear why a modified version of the same failed model would succeed. Therefore, the obvious solution to guarantee the successful emergence of a CTP would be to set up a regulated single provider, operating under conditions set by policymakers. It would not be the first time the EU has adopted such an approach to address a key 'need', ANNA DSB being a relevant example. Moreover, any CTP would be subject to effective ESMA oversight.

For anybody tempted to reference SEC Rule 614 (Equities-based tape) it is important to note it is a long way off from being a proven solution, and significant legal challenges still need to be overcome.

In closing, we need to ensure that concerns around mandating a single provider solution for a FI CT do not result in a failure to deliver a functioning FI CT at all. Furthermore, if the EU does not solve for a FI CTP there is a real possibility that the UK could promptly create a solution which could become the de-facto provider within the Union, as there are no limitations preventing EU data sources (TV, APAs) from selling data to UK entities.



## ERIC BOESS

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### Efficient capital allocation doesn't happen in milliseconds

The focus of any consolidated tape (CT) should be on maximising added value for the overall financial system, not an artificial goal of providing the most complete coverage which will inevitably be very difficult to achieve and questionable in its benefit for the EU capital market union. Ultimately a CT's objective is to maximise price transparency for the largest group of market participants at a reasonable cost without hurting efficient execution for any group of investors. Only when all these factors are met sufficiently can a CT serve a more efficient capital allocation in the EU and make its market more attractive in the global competition for capital which, to a large extent, is driven by regulation.

Efficient capital allocation in an economy is not a matter of milliseconds. What a good market needs is timely information about what traded at what price and, depending on the asset class, how current supply and demand is structured. Additional information about transactions can be helpful (like e.g. venue, packaged deals, off market transactions), but execution price, volume and time remain the essentials.

Price distribution should happen without discrimination and not be

dependent on budget. The current reality is that transparency is mainly a function of how much one is willing to spend and invest in systems – in other words, with the right technology and funds available one can have an almost real time view of markets. This puts smaller and retail investors at a disadvantage, so the maximum benefit of a well-designed CT would be to level the playing field, at least for the key asset classes of bonds and equities.

While price transparency seems less of a problem in equities, volume is a major issue for institutional investors. The dispersion of trades between primary exchanges, MTFs, OTFs and SI makes real time monitoring of traded volume almost impossible, a major obstacle for any market impact analysis and best execution efforts.

Fixed income investors face a different challenge, since the absence of a Central Limit Order Book makes price transparency the bigger issue. The majority of bonds are traded infrequently and with reporting requirements left to national regulators, resulting in a patchwork of different deferrals across the EU. A harmonised price emission mechanism with well-balanced deferrals would be a major benefit of a CT and an improvement over the current situation.

### Pragmatic consolidated tape implementation is paramount to increase transparency in markets.

On the flipside, too much or poorly designed transparency is potentially harmful, as it makes risk transfer for institutional investors, which usually represent aggregated retail investor savings, more difficult. For bonds, as an inventory-based asset class, a too fast or too detailed publishing of price and volume would most likely lead to pricing for larger trades to deteriorate, which one would consider a negative side effect. Wholesale markets play a vital role in price formation and even in markets like the US where retail participation is much higher than in Europe there are rules that protect larger investors and their trades.

Derivatives, a mainly institutional market, play a vital role in risk transfer for the whole financial system. However, the benefits of tighter regulation around transparency on derivatives trades could be challenged, especially since the broad acceptance of CCP clearing already generates a level of data quality and

visibility, which is clearly a huge step forward. Price publication of clearable derivatives with room for the protection of larger trades, seems a practical and balanced solution.

Another open debate is the economic viability of a CT for the provider, as is its governance. Slightly simplified there are two options: (1) an industry owned utility or (2) a private market solution with price controls for the core CT and an option for profit via more elaborated and upscaled data that can be distributed to interested parties. With mandatory contribution to the CT such added value services should be profitable enough to run the CT on a cost recovery basis.

While the utility model works in the US (DTCC clearing system), competition and innovation could very well allow for a private market solution to be efficient too.

A phased roll out of a CT is certainly possible and appears to be the fastest way to improve transparency in market segments where currently desired standards are lacking. CT roll out should ideally start with fixed income. As stated in the beginning, tangible, near term benefits in key asset classes trump potentially hard to achieve goals of super holistic cross market transparency.





## KAY SWINBURNE

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### Taking small and simple steps towards a European consolidated tape

MiFID II was one of the key legislative proposals that I was involved in as a member of the European Parliament. I have always believed that a well-constructed consolidated tape (CT) would support fair and efficient capital markets in Europe.

At the time of negotiating the legislation, data costs in the EU were of a different order of magnitude to those in the US. European small asset management funds and pension fund managers could not, in many cases, justify paying for all the data they needed to manage their entire portfolio.

Seven years later the situation is little changed, and a commercial CT has not emerged.

The principal reasons for this, numerous reviews have found, are that: the current structure of the market and legislative framework means that there are no strong commercial incentives for a consolidated tape provider (CTP); data is inconsistent in format and/or quality and therefore hard to consolidate; and there is no effective framework to enforce data standards.

If the EU's goal is to develop integrated capital markets with growing retail participation, a CT will be key. Democratising the data would have broader implications for innovation and research too.

With the UK Wholesale Markets review in train and the European Commission's MiFID II review expected imminently, I have been discussing with market participants what they would like to see addressed. The need for a CT is one of the common responses. Market participants suggest regulators to start small and simple, preferably in fixed income markets. Recent analysis from the Dutch Authority for Financial Markets found the prevailing market sentiment is that MiFID II transparency obligations raised the costs of doing business in fixed income markets while in reality doing little to add meaningful transparency.

Many point to the US Transaction Reporting and Compliance Engine (TRACE) system as a useful model for reporting fixed income transactions. Under this system, all broker-dealers who are FINRA member firms have an obligation to report transactions in TRACE-eligible fixed income securities under a Securities & Exchange Commission approved set of rules, with FINRA being the self-regulatory organisation of the securities industry in the US. It is interesting to note that TRACE was gradually rolled out by sub-asset class.

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**If the EU wants integrated capital markets with growing retail participation, a CT will be key.**

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In its report commissioned by the European Commission, the International Capital Market Association (ICMA) also recommended modelling on the TRACE system when developing a CT for bond markets.

It is clear though, that for a CT to work in fixed income markets, and specifically for bonds, the waivers and deferrals regime would need to be simplified and harmonised. The European Securities and Markets Authority's (ESMA) proposals to do this are welcome, more so as ESMA's recent bond liquidity data continues to show that most bonds trading is shielded away from transparency by using waivers and deferrals.

It is difficult to consolidate data if it is in different formats. The legislation needs to be amended so that there is full consistency in the data submitted by trading venues and systematic internalisers. ESMA, in its recent consultation, proposed amendments to MiFID II regulatory technical standards to improve the quality of transparency data which will aid the journey towards consolidation of data.

The market participants I have spoken to have a preference for a public utility CTP model. This is not necessarily a consensus view across the whole market and some regulators back a competitive model. However, given that a CTP has not emerged under the current legislation that envisages multiple competing commercial entities, it could be sensible to pursue other models. The European Commission could exercise its power to request ESMA to use its public procurement process to establish a CTP. Careful consideration of the governance structure would be needed to ensure the interests of all the different market participants were balanced.

The UK Treasury, as part of its Wholesale Markets Review, is supporting the formation of a CT. It would be surprising if the European Commission's review of MiFID, in its third iteration, did not include the consolidated tape. From data users' and providers' points of view – many of whom operate in both jurisdictions – it would make sense to have a common specification across the UK and the EU, although this is politically unlikely.

Away from the politics, I hope that policy makers and regulators will at least be able to start sharing good practice in this area as they develop CTs that better serve customers' needs.



## STEPHEN BERGER

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### illuminating the path forward to more robust and resilient EU equity, bond and derivative markets

Consolidated tapes for equities, bonds and derivatives are critical to strengthening EU financial markets. The real-time publication of comprehensive transaction price and volume data will empower investors, advance the Capital Markets Union, enhance the efficiency and resiliency of EU capital markets, and optimize the allocation of capital to both the private and public sector in both calm and challenging economic conditions.

EU consolidated tapes can and should be tailored and phased-in by asset class, but in all cases, must be comprehensive, require mandatory contribution, disseminate information immediately upon receipt (both freely to the public via websites and via real-time data feeds at a reasonable cost), and – if warranted – feature targeted and limited deferral regimes for larger size block trades. There is no reason to prioritize or delay the development of a consolidated tape

for one asset class versus another – rather, each can proceed independently and in parallel.

Empirical evidence from North America provides overwhelming evidence of the value and viability of consolidated tapes for both equities and non-equities asset classes. The US capital markets benefit from pre- and post-trade consolidated tapes for each of the equities and options markets, as well as from post-trade consolidated tapes for each of the corporate bond, municipal bond, mortgage-backed security, and OTC derivative markets. In every iteration, models for governance, revenue-sharing, and public versus private ownership have been developed and are continuously fine-tuned. And across the board, market participants' firsthand experience and in-depth academic research have overwhelmingly demonstrated that these consolidated tapes have improved markets, including by driving down transaction costs and enhancing liquidity.

How does the transparency delivered by consolidated tapes benefit markets? First, transparency into the price and size of trades empowers investors to accurately assess execution quality, demand accountability from liquidity providers, and obtain best execution.

accessibility of post-trade transparency data, particularly for bonds and OTC derivatives. In addition to ensuring that all on-venue and off-venue transactions are covered, rationalizing the current inconsistent and excessive deferral regimes must be a priority. Again, experience in the US across a range of non-equities instruments illustrates both the efficacy of, and widespread market support for, transparency regimes that mask the full notional of large size trades but nevertheless limit their deferred publication to no more than 15 minutes.

To conclude, the myriad benefits of EU consolidated tapes for each of the equity, bond, and derivative markets will far outweigh their implementation costs. Further, the diverse array of beneficiaries will far outnumber any incumbent trading venues, intermediaries or data providers who may cast doubt on the value of consolidated tapes, but nevertheless remain well equipped to compete in a more transparent marketplace.

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**Market participants' firsthand experience and in-depth academic research both overwhelmingly demonstrate that consolidated tapes improve markets.**

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Second, transparency removes information asymmetries and allows all liquidity providers to better manage risk, and in turn, more confidently quote prices, commit capital, and warehouse risk across all market conditions. Finally, transparency makes markets more resilient, especially in times of stress, by ensuring that new information is efficiently assimilated and reflected in current price levels.

Consolidated tapes are of course only as valuable as the quality of the data they collect and disseminate. Therefore, in parallel, it is essential to address the current deficiencies that the European Commission and ESMA have wisely identified with respect to the scarcity, quality, timeliness, and