

Cboe Europe's Response to the European Commission's Public Consultation on the MiFID II/MiFIR Review

By way of an introduction, Cboe Europe (Cboe) is one of the largest pan-European equities exchanges by market share and value traded. Cboe operates lit and dark books, a periodic auction and a large in scale service for European equities trading. Cboe Europe is the brand name of Cboe Europe Limited, a subsidiary of Cboe Global Markets Inc., which is a leading operator of equity, futures and options, and FX markets in the U.S. and Europe. Cboe Europe is a Recognised Investment Exchange regulated by the UK Financial Conduct Authority ("FCA"). Cboe Europe recently established a new entity in the Netherlands, Cboe Europe B.V., and is authorised there as a Market Operator and Approved Publication Arrangement.

Cboe supports open competition and strives to drive innovation in the European equities markets.

Full details about Cboe Europe, the services it offers and how it operates can be found on our website at: <http://markets.cboe.com/europe/equities/>

We welcomed the opportunity to respond to this European Commission consultation on the review of the MiFID II/MiFIR regulatory framework. **A version of our responses below were submitted to the European Commission, amended as required to meet the restrictions of the reply form.**

Question 1. To what extent are you satisfied with your overall experience with the implementation of the MiFID II/MiFIR framework?

1 - Very unsatisfied

2 - Unsatisfied

3 - Neutral

4 - Satisfied

5 - Very satisfied

Question 1.1 Please explain your answer to question 1 and specify in which areas you would consider the opportunity (or need) for improvements:

Our overall experience with the implementation of the MiFID II/MiFIR framework has been positive and we believe it has enhanced equity market transparency in many areas, to the benefit of end investors.

As a general point, we believe the ability to execute trades efficiently directly impacts investment strategies and, therefore, the performance of pensions and other savings plans. In our view, the promotion of choice and competition at all stages of the execution value chain is fundamental to an efficient trading ecosystem. That includes a range of execution options with levels of transparency that support different trading models and market conditions, with a competitive market for execution services by intermediaries, supported by a robust best execution regime to ensure that buyers and sellers are brought together efficiently. This ensures that investors receive the best possible outcome. We must remember that investors were poorly served by the monopolistic market structures that existed prior to MiFID I. The competition promoted under that rulebook, and

enhanced under MiFID II, has resulted in significant efficiencies and lower costs for banks, brokers and investors across Europe.

We must ensure the MiFID II review is not used to reverse the progress that has been made over the past decade to open up European capital markets and to prevent them from continuing to progress. To that end, we believe that it is important to place any amendments to MiFID II in the context of the ambitions for the Capital Markets Union (CMU). The hope for CMU is that, as MiFID I did, we can create an environment in which European firms can innovate, more capital can be provided to European enterprises, and European savings can be more efficiently allocated to provide a better return for savers. A diverse eco-system of pan-European trading, clearing and settlement solutions, along with a consolidated tape, are critical components to a healthy, vibrant and interconnected CMU that can move forward and be attractive to firms from around the world.

Turning to some specific areas of MiFID II's impact on equity markets, we believe the intention of the Share Trading Obligation (STO) to shift trading from unclassified OTC trading systems to mechanisms that are subject to pre-trade transparency, such as SIs, has been broadly successful. The STO and other elements of MiFID II have also encouraged innovation around execution venues, including periodic auctions, large-in-scale systems and request-for-quote platforms. Periodic auctions, in particular, have proven themselves as useful, price forming mechanisms helping firms to trade in a way that reduces market impact and delivers better execution outcomes.

While we understand the MiFID II review represents an opportunity to enshrine in legislation conclusions that the European Securities and Markets Authority (ESMA) reached last year with respect to periodic auctions, we believe no evidence of investor detriment exists to justify different conclusions or materially different regulatory action on the platforms at this time. ESMA conducted a thorough and extensive review, based on a wide range of feedback, and concluded that minor enhancements were required to the transparency regime for periodic auctions. Furthermore, Cboe strongly believes that the mid-point is a globally accepted price point for execution, and preventing periodic auctions and other venues from executing transactions at the mid-point could create an unnecessarily complex market structure.

Significantly altering or removing trading mechanisms that provide genuine utility to market users in an effort to boost trading on central limit order books and "protect" price formation may cause unnecessary volatility and higher costs to end investors. Furthermore, radical alterations to market structure only two years after the implementation of the current regime – and amid the current market stress - would have to be based on genuine evidence of detrimental outcomes to investors and damage to the price formation process. In our view, no such evidence exists and the reverse is the case. The recent stressed markets have served to highlight the strength and resiliency of the eco-system that exists and the benefit of having a range of execution mechanisms. There needs to be a commitment from European regulators to ensuring any proposed enhancements or changes to this market structure under the MiFID II review are justified in terms of better outcomes for the end users of markets – investors and issuers. In any case, there needs to be a recognition that pre-trade transparency is not a good in and of itself. It is widely agreed that for certain types of orders and market conditions, greater transparency often puts best execution at risk.

The areas where MiFID II can be improved are around some of its clumsier attempts to constrain market developments, such as the double volume caps (DVCs), which have introduced cost and complexity with no clear benefit to end investors. Removing the DVCs would considerably simplify the pre-trade transparency waiver regime.

While data quality and post-trade transparency for equities has improved significantly under MiFID II, there is also room for improvement here. We believe additional guidance and enforcement is required to ensure that OTC reporting obligations, including accurate flagging of transactions, are applied consistently.

The lack of emergence of a consolidated tape so far is a missed opportunity to increase pricing competition on national exchanges, and market participants' only option for receiving market data is the direct feeds or market data vendor feeds from the exchanges.

Given the benefits of a consolidated tape go well beyond making data accessible at a reasonable cost, regulatory intervention is required to implement one. The benefits of a consolidated tape include: providing a straightforward way to access pan-European consolidated liquidity allowing for better informed investors and supporting price formation; acting as a source for regulators to track cross-market activity; and providing a basis for the consistent calculation and dissemination of cross-market volatility halts, therefore materially improving the stability and safety of the European market. Critically, it would broaden access to data for all European companies – particularly SMEs – in a consistent and transparent format, helping to encourage further financing.

To summarise, our key priorities for the MiFID II/MiFIR REFIT process are as follows:

- Maintain a healthy eco-system of complementary execution mechanisms to support a diverse range of global trading strategies and different market conditions. Retention of choice for investors is key – including all waivers and the SI category
- Removal of DVC regime, which has introduced cost and complexity and delivered no clear benefit to end investors
- Implementation of an equities consolidated tape to allow for better informed investors, enhanced scrutiny of intermediaries and to support price formation by providing single reliable view of completed transactions
- Enhanced monitoring and enforcement of trade reporting, supplemented by more guidance to ensure that data is accurate and appropriately flagged

Question 2. Please specify to what extent you agree with the statements below regarding the overall experience with the implementation of the MiFID II/MiFIR framework?

The EU intervention has been successful in achieving or progressing towards its MiFID II/MiFIR objectives (fair, transparent, efficient and integrated markets). **(rather agree)**

The MiFID II/MiFIR costs and benefits are balanced (in particular regarding the regulatory burden). **(neutral)**

The different components of the framework operate well together to achieve the MiFID II/MiFIR objectives. **(neutral)**

The MiFID II/MiFIR objectives correspond with the needs and problems in EU financial markets. **(rather agree)**

The MiFID II/MiFIR has provided EU added value **(rather agree)**

Question 2.1 Please provide qualitative elements to explain your answers to question 2:

As explained in our answer to Question 1, our overall view of MiFID II is that it is enhanced transparency in equity markets, to the benefit of end investors. There are some areas where its provisions need to be better enforced, such as market data practices and post-trade transparency.

The main area where it does not add value is in the introduction of the DVCs.

Question 3. Do you see impediments to the effective implementation of MiFID II/MiFIR arising from national legislation or existing market practices?

1 - Not at all

2 - Not really

3 - Neutral

4 - Partially

5 - Totally

Don't know / no opinion / not relevant

Question 3.1 Please explain your answer to question 3:

We have seen limited success so far for the reasonable commercial basis provisions for market data pricing. Market data costs in Europe remain high and we have seen no evidence of these costs being reduced. In part we feel this is down to the failure of a consolidated tape to emerge, to provide a source of price competition for market data feed provided by exchanges. This is also a result of the increasing size of closing auctions, and the associated pricing power this gives to the exchanges that operate them.

This particularly harms retail investors, and acts on drag on the potential growth of European capital markets.

Cboe Europe has long strived to ensure that market data costs in Europe are competitive and proportionate, but relatively high prices remain. While pan-European trading venues such as ours have successfully forced incumbent exchanges to reduce their trading fees, most still have a high enough market share in their respective markets which enables them to remain an un-substitutable source of data. We are required to take market data from the national exchanges to operate various aspects of our business, and have witnessed significant and unexplainable pricing increases since MiFID II's implementation.

Costs will need to be addressed if a consolidated tape is to emerge – there would be no business case for a tape that had to pay current rates to venues and other data sources for the data that it was consolidating. Regulatory intervention is needed to move the vision of a consolidated tape to a reality. If created appropriately, it will serve as a tool to put pressure on incumbent exchange pricing and potentially lower costs to the benefit of all market participants.

Question 4. Do you believe that MiFID II/MiFIR has increased pre- and post-trade transparency for financial instruments in the EU?

1 - Not at all

2 - Not really

3 - Neutral

4 - Partially

5 - Totally

Don't know / no opinion / not relevant

Question 4.1 Please explain your answer to question 4:

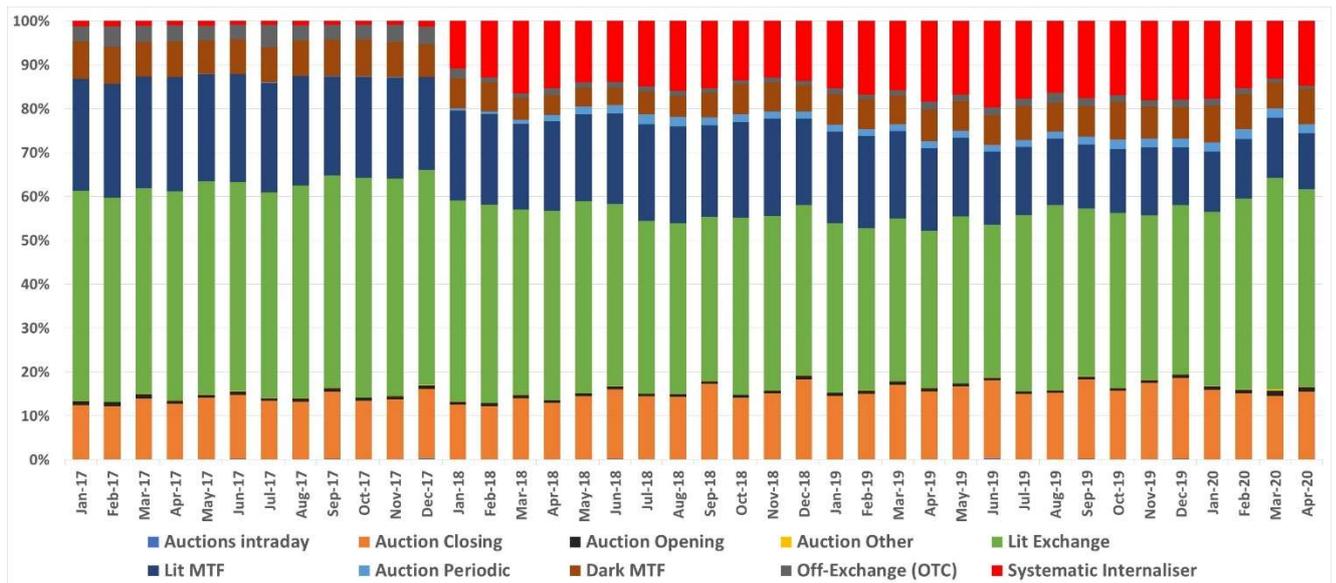
Our answer is limited to shares only. As explained above, our overall experience with the implementation of the MiFID II/MiFIR framework has been positive and we believe it has enhanced equity market transparency in many areas, to the benefit of end investors.

We believe the intention of the STO to shift trading from unclassified OTC markets to systems that are subject to pre-trade transparency, such as SIs, has been broadly successful. The STO has also encouraged innovation and growth in lit on-venue mechanisms, including periodic auctions and request-for-quote platforms. Periodic auctions, in particular, have proven themselves as useful, price forming mechanisms helping firms to trade in a way that reduces market impact and delivers better execution outcomes.

In any case, we believe there needs to be a recognition that pre-trade transparency for shares is not a good in and of itself. It is widely agreed that for certain types of orders and market conditions, greater transparency often puts best execution at risk. We believe there is no fundamental issue with the balance of trading between lit, dark and OTC mechanisms, and no evidence of damage to the price formation process to warrant further efforts to promote lit trading.

We believe the view held by some participants that MiFID II had failed in its efforts to promote pre-trade transparent trading is misleading. This view stems partly from the presentation of non-pre-trade transparent trading as including all SI and OTC activity, along with all business conducted under a waiver. A majority of OTC and negotiated trade waiver business is technical in nature and is not appropriate for execution on a multilateral venue. If these non-price forming trades are removed from the picture, we believe there is no fundamental issue with the balance of trading between the available mechanisms, as Chart 1 shows. This clearly demonstrates the ongoing dominance of lit mechanisms, particularly central limit order books but also closing auctions and systematic internalisers, which are subject to mandatory pre-trade transparency under MiFID II. If the suggestion is that these transparency requirements are not the right ones, then it is here that regulators should recommend amendments, rather than removing categories of trading that provide genuine utility to market users.

Chart 1: Breakdown of trading by execution mechanism – addressable



Source: Cboe Europe, big xyt

While post-trade transparency for equities has improved significantly under MiFID II, there is also room for improvement here. We believe additional guidance and enforcement is required to ensure that OTC reporting obligations, including accurate flagging of transactions, are applied consistently. As our Approved Publication Arrangement (APA) handles around 75% to 80% of all equity APA reports, we think particular consideration should be given to providing guidance on the required flags for: Give-Ups/Ins; exercising of derivatives contracts; riskless principal transactions; and equity capital markets (ECM) transactions.

Implementation of a pre and post-trade consolidated tape would significantly enhance transparency in European equities markets and broaden access to data for all European companies – particularly SMEs – in a consistent and transparent format, helping to encourage further financing.

Question 5. Do you believe that MiFID II/MiFIR has levelled the playing field between different categories of execution venues such as, in particular, trading venues and investment firms operating as systematic internalisers?

1 - Not at all

2 - Not really

3 - Neutral

4 - Partially

5 - Totally

Don't know / no opinion / not relevant

Question 5.1 Please explain your answer to question 5:

Yes, we believe MiFID II has been broadly successful at levelling the playing field between trading venues and SIs. We would note here amendments since MiFID II was introduced requiring SIs to adhere to MiFID II's tick size regime for orders below large-in-scale. We believe those changes were necessary to bring SIs more into line with regulated markets and MTFs, and prevent them from offering negligible price improvements to attract order flow.

We are not best placed to comment as to whether or not their levels of pre-trade transparency and quoting obligations are appropriate. This is an issue SI operators and their clients should provide feedback on.

Question 6. Have you identified barriers that would prevent investors from accessing the widest possible range of financial instruments meeting their investment needs?

1 - Not at all

2 - Not really

3 - Neutral

4 - Partially

5 - Totally

Don't know / no opinion / not relevant

Question 6.1 If you have identified such barriers, please explain what they would be:

We believe the biggest barrier preventing investors from accessing the widest range of instruments in Europe is the lack of a consolidated tape.

The high cost of market data from the national exchanges has been the prohibitive factor in the creation of a consolidated tape, and regulatory intervention is needed to bring it to reality.

A consolidated tape that provides pre- and post-trade data would radically increase transparency into Europe's capital markets and increase exposure to banks, brokers, fund managers and retail investors across Europe and around the globe. Critically, it would be straightforward to broaden access to data for all European companies to the rest of the world – including small and medium-sized enterprises (SMEs) – in a consistent and transparent format, helping to encourage further financing and growth.

PART ONE: PRIORITY AREAS FOR REVIEW

I. The establishment of an EU consolidated tape

Question 7. What are in your view the reasons why an EU consolidated tape has not yet emerged?

-Lack of financial incentives for the running a CT. (fully agree)

-Overly strict regulatory requirements for providing a CT. (disagree)

-Competition by non-regulated entities such as data vendors. (rather agree)

-Lack of sufficient data quality, in particular for OTC transactions and transactions on systematic internalisers. (disagree)

-Other

Please specify what are the other reasons why an EU consolidated tape has not yet emerged?

The biggest barrier to the development of a CT has been input costs, and specifically the fees charged by primary exchanges for their market data. This has made it uneconomic to produce and distribute a CT. Once this is resolved, CT providers will be able to establish a reasonable price for end

users, and determine the amount they pay to venues and APAs as a proportion of this. They will then be able to compete effectively with non-regulated entities.

Question 7.1 Please explain your answers to question 7:

As above, the biggest barrier to development of a CT has been the high fees charged by national exchanges for their market data. This prevents potential CT providers from establishing a reasonable price for end users, and being able to compete effectively with non-regulated entities. While pan-European exchanges such as Cboe Europe have become useful, low-cost data providers, they cannot replace the national exchanges' market data.

The regulatory requirements for a CT are something of a moot point, given the lack of a detailed technical and commercial framework under which a CT would work. That said, there should be an acceptance that some technical compromises will be necessary to make progress on this issue (e.g. latency of data delivery will be different from exchanges/MTFs). The many benefits of a CT will start to be delivered with an initially imperfect offering, which can be refined over time. Technical competition will also improve a CT solution.

In our view, poor data quality is not a barrier to the emergence of a CT. The quality of data is generally improving and is already of a sufficiently high quality to allow for consolidation. Non-regulated data vendors do already consolidate data to the extent that it is commercially attractive to do so. The Market Model Typology (MMT) is generally being used by venues, APAs and investment firms to aid data standardisation. There are issues around how to flag certain trades but these can be addressed by further ESMA guidance. Those that raise data quality and standardisation as a barrier are generally seeking to delay the development of CTs for commercial reasons.

Question 9. Do you agree with the above targeted amendments recommended by ESMA to address market data concerns?

We agree with the targeted amendments mentioned. Cboe Europe does currently make available the required information under the RCB provisions. That said, RCB is vaguely defined and lacks case law or regulatory guidance to support its application. Requiring ESMA to specify the format, content and terminology of the RCB information would help exchanges and venues to produce this in a consistent manner.

We welcome the addition of a requirement in Level 1 for venues, APAs and SIs to share information on the cost of producing market data and margins to CAs and ESMA. We also believe it is imperative to ensure this information easily accessible by end users.

The amendments could go further, with the RCB information assessed against some externally verifiable factor such as market share. Cboe Europe has data to compare its cost of data to its market share. On this basis, several venues stand out as charging well above this level for their data and also have penal market data contracts. Such venues are not perceived to be providing data on a RCB.

We would also encourage ESMA to require standardisation of data policies, and terms, including the rights that are attached to them, to ensure a common understanding of what is being charged for. This would also support the RCB provisions by allowing easy comparability of the prices being charged by various venues. The FISD has a typology that has been developed by industry and is used by Cboe Europe amongst others. Using Level 3 to clarify that use of such an industry standard is an implicit requirement to meet RCB would be a very positive step forward.

Question 10. What do you consider to be the use cases for an EU consolidated tape?

Transaction cost analysis (TCA) (fully agree)

Ensuring best execution (rather agree)

Documenting best execution (fully agree)

Better control of order & execution management (rather agree)

Regulatory reporting requirements (rather agree)

Market surveillance (fully agree)

Liquidity risk management (rather agree)

Making market data accessible at a reasonable cost (fully agree)

Identify available liquidity (rather agree)

Portfolio valuation (fully agree)

Please specify what are the other use cases for an EU consolidated tape that you identified?

We identify other use cases as follows:

-Encouraging Venue Competition. We believe a CT would help boost competition among trading venues, as it would provide new and smaller platforms with the ability to earn revenues from market data as soon as they gain market share and produce data. Cboe's own experience of breaking into new markets has shown that even when, through good design and appropriate fees, a venue has good tradeable prices available, the trading does not immediately follow as traders and investors are simply not aware of the prices available. A CT will provide the new and innovative venues of the future with a shop window in which to demonstrate their competitiveness to investors and traders across Europe.

-Regulatory Threshold Calculations. Data from a CT should be mandated for any provisions that require market size determinations to enhance their transparency e.g. the determination as to whether a firm is an SI in a given instrument, determinations of the 'most relevant market' and the liquidity measure in the tick size regime.

-Driving the CMU. We believe the CT has the potential to kick-start the CMU and advance European capital markets. By making market data accessible to all types of investors it can encourage bigger and more open capital markets in Europe.

Indirectly, a baseline CT consisting of top five price level pre trade data and post trade data would introduce an important new market data offering with tremendous utility for investors, and would allow – indeed would encourage - venues to continue to innovate and develop added value supplemental market data products for their customers and set fees in relation to the value add.

Question 10.1 Please explain your answers to question 10 and also indicate to what extent the use cases would benefit from a CT:

In our view, the potential use cases and market-wide benefits of a CT cannot be underestimated. It would provide a straightforward way to view pan-European consolidated liquidity and act as a source for regulators to track cross-market activity, therefore materially improving the liquidity and stability of the European market.

If created appropriately, a CT will help to put pressure on national exchange data pricing and potentially lower costs to the benefit of all market participants, particularly retail investors. Given there is no consolidated tape in Europe, market participants' only option for receiving market data is the direct feeds from exchanges or market data vendors, putting them at the mercy of high pricing.

A consolidated tape would be a better alternative than more intrusive regulation of market data pricing by venues. There is considerable disagreement about whether market data is currently provided on a reasonable commercial basis, indeed there is considerable disagreement on how to even define that term.

Additionally, a CT would create a common reference point for best execution monitoring and transaction cost analysis, providing a commercially reasonable market data feed for retail brokers and customers, encouraging broader and better execution. Critically, it would be straightforward to broaden access to market data for all European companies to the rest of the world – including small and medium-sized enterprises (SMEs) – in a consistent and transparent format, helping to encourage further financing and growth. The way people are saving and investing is constantly developing, and Europe needs to ensure that data is made available in way that enables and encourages investment in all its direct and indirect forms from CFDs, Spread betting to more traditional channels. For example, the investor apps being produced by new challenger entrants thrive on near-time data.

In this regard, we believe a CT may help to kick start the true potential of the EU's plans for a CMU. We have long advocated that a CT is more than a market data distribution mechanism, but also a critical component to a healthy, vibrant and interconnected CMU. A CT that provides pre- and post-trade data would radically increase transparency into Europe's capital markets and increase exposure to banks, brokers, fund managers and retail investors across Europe and around the globe. Exposure to this data would help facilitate the need to trade, clear and settle equities on a pan-European basis. This in turn would drive increased pan-European trading.

MiFID II should mandate use of the CT for provisions requiring market size calculations. For example, determinations requiring the use of the 'most relevant market' should instead use a CT to help promote competition versus reinforcing exchange monopolies, which would benefit market participants. The tick size regime uses number of transactions on the 'most relevant market' as the liquidity measure, but the existence of a CT would make it more practical to base it on transactions on all venues. The same is true for determinations as to whether a firm is an SI in a given instrument.

If a pre-trade CT is ultimately created, the reference price waiver should be amended to require use of the best bid and offer on the CT, as this would be a standardised European Best Bid and Offer ("EBBO").

2. General features of the consolidated tape

Question 11. Which of the following features, as described above, do you consider important for the creation of an EU consolidated tape?

High level of data quality **(rather agree)**

Mandatory contributions **(fully agree)**

Mandatory consumption **(rather agree)**

Full coverage **(neutral)**

Very high coverage (not lower than 90% of the market) **(fully agree)**

Real-time (minimum standards on latency) **(fully agree)**

The existence of an order protection rule **(disagree)**

Single provider per asset class **(disagree)**

Strong governance framework **(fully agree)**

Other

Please specify what other feature(s) you consider important for the creation of an EU consolidated tape?

A further necessary condition for the creation of a viable CT is **a revenue share model** for contributing trading venues and APAs. All venues and APAs must be obliged to provide data to the CT providers, which should then distribute a share of revenues back to those contributors based on the market share represented by the data provided.

Question 11.1 Please explain your answers to question 11 and provide if possible detailed suggestions on how the above success factors should be implemented.

Any sensible CT solution should cater to the needs of European market participants, which include clean, consistent real-time data from Regulated Markets, MTFs and APAs, a reasonable price for data from all trading sessions during the day (open, continuous, close/post close), and accurate reference data.

Keeping these points in mind, we believe that an optimal structure for a CT should take into account the following:

Scope: All Regulated Markets, MTFs and APAs should be required to provide data to chosen CT provider(s) to ensure it represents the full market. The aim should be to create a pre-trade and post-trade CT. While we realise the inclusion of both pre- and post-trade data is a heavier lift, we believe the end product will be significantly more valuable to the market and including pre-trade data should be an objective from the outset of the creation of a CT. Pre-trade data is particularly useful for instruments (Equities and ETFs) that trade infrequently as a key source of price discovery.

Real-time: The CT must be a real-time product if it is to act as an effective constraint on market data prices. Latency should not be a significant issue as the end use case for a consolidated tape should be primarily for informational purposes rather than to facilitate low latency trading. Such a tape would give a complete view of European markets, not only the trades done, but also the liquidity that is available on those venues.

That said, there should be no scope for latency to be used as an impediment to the creation of a credible display product. Accordingly, venues and APAs should be placed under a requirement to transmit data to CTs in a way that minimises latency, and CTs should be subject to performance standards. As long as there are clear services levels provided by CT providers, the market will adopt product that are suitable to their requirements.

Multiple CT Providers: It is evident in the US that single-providers of a consolidated tape has created problems with technical innovation and investment, as well as no price competition for data provision. We believe the European market would be better served by awarding CT contracts to up to four different providers. This would minimise fragmentation and associated duplication of costs

while also ensuring some competition to ensure that service standards are high. Each contract would last a minimum of four years and be awarded by a regulatory/exchange/market participant vote. These providers would have to adhere to regulatory, commercial and technical standards.

The CT operators should be free to consume data from one another at no charge, which would lower the costs of entry for new providers and allow for a seamless transmission if contracts pass from one organisation to another. CTPs should be free to develop other products (e.g. TCA, full book depth, trade data and market impact analysis) beyond the tape product itself. These additional products would not be subject to the same revenue sharing obligations, but would instead be subject to preferential licensing arrangements with data contributors e.g. non-display license fees could be waived for a defined set of use cases. Furthermore, these preferential arrangements could persist for a defined period after the loss of a CTP license to avoid potential cliff edge economics for entities willing to step forward as CTPs. This would add to the commercial attractiveness of the proposition for potential providers and would allow them to differentiate themselves from other CTPs.

Revenue Model: We believe CTs should operate on the basis of a revenue sharing model, where 50-75% of revenues are awarded to contributing exchanges/venues and APAs based on their market share. Venues receive revenue share based on CT providers' revenues not profit. The CT operators would then receive the remaining balance as their operating income.

Data Quality: Data is already of a sufficiently high quality to allow for consolidation, with non-regulated vendors consolidating data to the extent that it is commercially attractive to do so. The Market Model Typology standard is generally being used by venues, APAs and investment firms. Any residual data standardisation issues will be addressed over time once the CTs are functioning. It should be required that only addressable OTC activity is provided to CT operators, and regulators should provide guidance as to what is appropriate here. The only other enhancement required would be consistent timestamping. APAs do not have to timestamp with the same granularity as venues. Given that OTC trading is just as likely as on-venue trading to be conducted electronically, the same standard should apply to ensure that the sequencing of events on the CT is accurate.

Question 12. If you support mandatory consumption of the tape, how would you recommend to structure such mandatory consumption?

While we believe an appropriately priced CT would be viable without this, we believe Europe should follow elements of the US model here, where regulation supports and mandates use of the consolidated tapes for certain functions. This helps create a level playing field for market operators and makes demand for a CT greater.

MiFID could be adapted to mandate the use of consolidated tape data for use of the reference price waiver. This would also correct the competitive distortion created by the current requirement to use listing market data and provide a more comprehensive BBO reference. MiFID could also mandate its use for market controls such as price banding, and regulators could use it to trigger market wide suspensions. Finally, access to the consolidated tape should be a prerequisite for assessing best execution.

Question 13. In your view, what link should there be between the CT and best execution obligations?

Please explain your answer and provide if possible detailed suggestions (e.g. simplifying the best execution reporting through the use of an EBBO reference price benchmark):

As a trading venue operator, we are not best placed to answer this question. However, as stated previously, a CT would create a common reference point for best execution monitoring and transaction cost analysis, providing a commercially reasonable market data feed for retail brokers and customers, encouraging broader and better execution. As stated above, access to the consolidated tape should be a prerequisite for assessing best execution.

Question 14. Do you agree with the following features in relation to the provision, governance and funding of the consolidated tape?

The CT should be funded on the basis of user fees **(fully agree)**

Fees should be differentiated according to type of use **(fully agree)**

Revenue should be redistributed among contributing venues **(fully agree)**

In redistributing revenue, price-forming trades should be compensated at a higher rate than other trades **(disagree)**

The position of CTP should be put up for tender every 5-7 years **(fully agree)**

Other

Please specify what other important feature(s) for the funding and governance of the CT you did identify?

We believe other important features for the funding and governance are as follows:

Multiple CT Providers: As stated above, we believe the European market would be best served by having multiple CT providers, potentially as many as four. This would minimise fragmentation and associated duplication of costs while also ensuring some competition to ensure that service standards are high.

Governance: Financial market direct and indirect participants or users of the CT cannot own more than 20% of a CT provider and cannot control pricing.

Question 14.1 Please explain your answers to question 14 and provide if possible detailed suggestions on how the above features should be implemented (e.g. according to which methodology the CT revenues should be redistributed; how price forming trades should be rewarded, alternative funding models):

We believe CTs should operate on the basis of a revenue sharing model, where 50-75% of revenues are awarded to contributing exchanges/venues and APAs based on their market share. The revenue share should be based on CT provider revenues, not profits. The CT operators would then receive the remaining balance as their operating income. We believe that this is the fairest arrangement, and also the arrangement that is most likely to allow for a viable business model for CTs. Such a model also ensure that smaller and new venues and APAs can hope to achieve some revenue for their market data immediately, which is not currently possible.

Revenues should not be redistributed back to contributing venues on the basis of price formation. There is currently no definition in Europe of what is and isn't price forming activity and views vary widely on this.

Competing providers should have the ability to set their own prices should establish a reasonable price. We believe regulators should consider requiring CTs to offer differential pricing for different

types of user to democratise access to data and help grow European capital markets e.g. a much lower cost for retail users. Cboe Europe does not currently charge retail investors for real time data.

3. The scope of the consolidated tape

Question 15. For which asset classes do you consider that an EU consolidated tape should be created?

Shares pre-trade **(fully agree)**

Shares post-trade **(fully agree)**

ETFs pre-trade **(fully agree)**

ETFs post-trade **(fully agree)**

Corporate bonds pretrade **(neutral)**

Corporate bonds posttrade **(neutral)**

Government bonds pretrade **(neutral)**

Government bonds posttrade **(neutral)**

Interest rate swaps pretrade **(neutral)**

Interest rate swaps posttrade **(neutral)**

Credit default swaps pretrade **(neutral)**

Credit default swaps posttrade **(neutral)**

Other

Please specify for which other asset classes you consider that an EU consolidated tape should be created?

Question 15.1 Please explain your answers to question 15:

As long as all venues and APAs are mandated to provide data, a CT should cover all equity and equity-like instruments. Even if it is necessary to develop the CT's scope in phases, the end goal should be 100% coverage of the market. In our view, the CT must be a real-time product (albeit not suitable for non-display use) if it is to act as an effective constraint on market data prices provided by national exchanges. To be clear, for this constraint to be effective the CT should be pre-trade and post-trade. While we realise the inclusion of both pre- and post-trade data is a heavier lift, we believe the end product will be significantly more valuable to the market and including pre-trade data should be an objective from the outset of the creation of a CT.

From a European equities perspective, it is clear that inclusion of pre trade data is vital for the tape to be useful to provide reference prices for use under reference price waivers and to facilitate delivery of best execution. It is often argued that the experience of the US has shown that it is a waste of time incorporating pre trade data. This is not the case. Pre trade data in the US is successfully incorporated into a national best bid and offer (NBBO), and combined with post trade data, the US tapes are a single, low-cost, reliable source of real-time quote and trade data that serves as the backbone for the US equities market and benefits market participants globally. Moreover, the US consolidated tape eliminates the technological complexity of dealing with multiple feeds for broker dealers and other market participants to integrate with their own systems.

Additionally, US market regulation supports and mandates use of consolidated market data for certain functions, which creates a level playing field for market operators and increases the commercial demand for the consolidated tape.

While a European CT and the CMU may benefit from a deviation from the U.S. model in some respects, it is clear that the US model has many benefits, especially for the small, retail investor. If the US model were replicated in the EU, here too there would be significant benefits.

Question 16. In your view, what information published under the MiFID II/MiFIR pre- and post-trade transparency should be consolidated in the tape (all information or a subset, any additional information)?

The European Consolidated tape should include pre trade top five price level data from all central limit order books with “like” transparency and post trade data from all European venues, including SIs and OTC data. If SI pre trade data is also deemed to be required this should be added as a separate channel in a second phase, as the SI regime is not an equivalent transparency regime to central limit order books.

The information to be published by an equity and equity-like CT is as follows:

Pre-trade: financial instrument identifier; top five best bids; top five best offers; trading venue code; pre-trade transparency waiver, if relevant.

Post-trade: financial instrument identifier; price; volume; time; time transaction reported, price notation of transaction; trading venue code; whether algorithm responsible for the investment decision; if applicable, specific conditions attached to transaction; pre-trade transparency waiver, if relevant.

Question 17. What shares should in your view be included in the Official List of shares defining the scope of the EU consolidated tape?

Shares admitted to trading on a RM (fully agree)

Shares admitted to trading on an MTF with a prospectus approved in an EU Member State (fully agree)

Question 17.1 Please explain your answers to question 17:

As long as all venues and APAs are mandated to provide data, a CT should cover all equity and equity-like instruments.

Question 18. In your view, should the Official List take into account any additional criteria (e.g. liquidity filter to capture only sufficiently liquid shares) to capture the relevant subset of shares traded in the EU for inclusion in the consolidated tape?

No, we do not think an Official List should take into account any additional criteria. A filter to capture only sufficiently liquid shares would limit the effectiveness of a CT, particularly with respect to lesser-traded stocks including SMEs. In our view, one of the key aims of a CT is to broaden access to data for all European companies to the rest of the world – including SMEs – in a consistent and transparent format, helping to encourage further financing and growth.

Question 19. What flexibility should be provided to permit the inclusion in the EU consolidated tape of shares not (or not only) admitted to an EU regulated market or EU MTF?

This should be viewed on a case by case basis. If there is sufficient liquidity in these stocks on EU regulated markets or MTFs, then they should be considered for inclusion in a European CT.

Equity trading and price formation

Question 21. What is your appraisal of the impact of the share trading obligation on the transparency of share trading and the competitiveness of EU exchanges and market participants?

As previously stated, we believe MiFID II and the STO have enhanced equity market transparency in many areas, to the benefit of end investors. The shift in trading from unclassified OTC trading mechanisms to mechanisms that are subject to pre-trade transparency, such as SIs, has been broadly successful.

The STO has also encouraged innovation in both lit and dark on-venue execution mechanisms, including periodic auctions, large-in-scale systems and request-for-quote platforms. Periodic auctions, in particular, have proven themselves as useful, price forming mechanisms helping firms to trade in a way that reduces market impact and delivers better execution outcomes.

Question 22. Do you believe there is sufficient clarity on the scope of the trades included or exempted from the STO, in particular having regards to shares not (or not only) admitted to an EU regulated market or EU MTF?

1 - Not at all

2 - Not really

3 – Neutral

4 – Partially

5 – Totally

Don't know / no opinion / not relevant

Question 22.1 Please explain your answer to question 22:

We believe the scope of the STO should be reduced to exclude third-country shares. We believe that the starting point for the STO should be ISIN, such that non-EU/EEA ISINs are not subject to the STO. However, if an EU/EEA ISIN is admitted for trading solely outside of the EU/EEA, the STO should also not apply. Dual listed shares should be treated on a case by case basis. If data is required to decide upon individual cases we believe that the number is low enough that it could consult on the appropriate treatment of individual shares.

We also think it may be beneficial to clarify the scope of the first STO exemption under Article 23 of MiFIR, which exempts transactions deemed to be “non-systematic, ad-hoc, irregular and infrequent”. It would be helpful to detail the types of transactions to which this applies.

We would also support simplifying the second exemption of the STO under Article 23 of MiFIR and not limiting it to transactions “carried out between eligible and/or professional counterparties”. Our view is that the overriding factor is the nature of the transaction (i.e. is it price forming), and not the classification of the transacting parties.

Question 23. What is your evaluation of the general policy options listed below as regards the future of the STO?

Maintain the STO (status quo) (rather agree)

Maintain the STO with adjustments (please specify) (fully agree)

Repeal the STO altogether (disagree)

Question 23.1 Please explain your answers to question 23:

Overall, we are supportive of the STO and the eligible execution venues included.

Question 24. Do you consider that the status of systematic internalisers, which are eligible venues for compliance with the STO, should be revisited and how?

SIs should keep the same current status under the STO (fully agree)

SIs should no longer be eligible execution venues under the STO (disagree)

Other

Question 24.1 Please explain your answers to question 24:

We do not believe the removal of SIs from the STO to be either in the interest of competition in the marketplace, or to the benefit of end investors. As we have already stated, an efficient and effective trading ecosystem is one that allows for competition and choice at all levels of the execution value chain. This includes a range of execution options to support all types of trading strategies and market conditions. Banks and electronic liquidity providers use the SI regime to provide risk capital to their clients.

The industry has completely remodelled at great cost, and the focus should be on ensuring that SIs provide meaningful competition to the marketplace on a level playing field, including transparency requirements, to the benefit of end investors.

Question 25. Do you consider that other aspects of the regulatory framework applying to systematic internalisers should be revisited and how? Please explain your answer:

While data quality has improved significantly under MiFID II, we believe specific issues continue to be identified around the rules for how to flag certain trades under the SI regime. Additional NCA supervision and enforcement action, backed up by ESMA guidance, is required to ensure that reporting obligations, including accurate flagging of transactions, are applied consistently.

As our APA handles around 75% to 80% of all equity APA reports, we think particular consideration should be given to providing guidance on the required flags for: Give-Ups/Ins; Exercising of derivatives contracts; Riskless principal transactions; and ECM transactions.

Any amendment to the pre-trade transparency regime applicable to SIs should be based on evidence, and feedback from SI operators and clients as to what level of transparency would be useful.

Question 26. What would you consider to be appropriate steps to ensure a level-playing field between trading venues and systematic internalisers? Please explain your answer:

We strongly support the need for a level playing field between trading venues and SIs. To this end we believe a review of SI transparency obligations would be worthwhile.

Question 27. In your view, what would merit attention to further promote the price discovery process in equity trading?

In our view, there is no evidence of any problem with the quality of price discovery in European equity markets. As we have already stated, an efficient and effective trading ecosystem is one that allows for competition and choice at all levels of the execution value chain. This includes a range of execution options to support all types of trading strategies and market conditions. Constraining all activity on to lit venues to promote price discovery threatens to cause unnecessary volatility which is detrimental to end investors, and prevents them from achieving lower market impact and price improvement offered by alternative mechanisms.

One phenomenon that is worth of attention is the relative growth of closing auctions. If market participants are waiting for closing auctions to execute, they may be forgoing better execution opportunities during the trading day. Furthermore, as closing auctions increasingly attract technical activity driven by the liquidity available there, the prices generated may not always reflect the most accurate view of the inherent value of the instrument.

While we broadly support regulators' aim of a less complex market structure, this should not be achieved by removing mechanisms that offer genuine utility to market participants and end investors.

We do believe the creation of a consolidated tape for equities would improve price discovery, by providing a commercially reasonable market data feed for retail brokers and their customers.

Question 28. Do you believe that the scope of the STO should be aligned with the scope of the consolidated tape?

1 – Disagree

2 - Rather not agree

3 – Neutral

4 - Rather agree

5 - Fully agree

Don't know / no opinion / not relevant

Question 28.1 Please explain your answer to question 28.

We believe the STO and the consolidated tape should apply to all European equity and equity-linked instruments. The widest possible scope for the CT is particularly important given the potential benefits we believe the tape would bring. To re-iterate, it would broaden access to data for all European companies to the rest of the world – including small and medium-sized enterprises (SMEs) – in a consistent and transparent format, helping to encourage further financing and growth.

Question 29. Do you consider, for asset classes where a consolidated tape would be mandated, that the scope of financial instruments subject to pre and post-trade requirements should be aligned with the list of instruments in scope of the consolidated tape?

1 – Disagree

2 - Rather not agree

3 – Neutral

4 - Rather agree

5 - Fully agree

Don't know / no opinion / not relevant

Question 29.1 Please explain your answer to question 29

Yes, it is crucial that the scope of the STO and pre and post-trade requirements are aligned. There are two main issues here:

- It is important that the CT adheres to the MiFID II deferred publication regime, so that trades subject to deferred publication are not published on the CT until after the deferral period has expired
- If a pre-trade tape is created, quotes should not be disclosed for venues subject to pre-trade transparency waivers.

6. Reporting on best execution

Question 55. Do you believe that the best execution reports are of sufficiently good quality to provide investors with useful information on the quality of execution of their transactions?

1 – Disagree

2 - Rather not agree

3 – Neutral

4 - Rather agree

5 - Fully agree

Don't know / no opinion / not relevant

Question 55.1 Please explain your answer to question 55

As a trading venue operator, we are required to produce RTS27 reports on a quarterly basis. We believe these reports are on the whole of limited use to investors. Much of the information that we disclose is unlikely to be of value to most investors. Furthermore, the information is provided on a three-month delay, so even if it is useful it is not something that can be acted upon. Where the information is valuable, we are able to provide it on a relatively real-time basis. The reports are also produced in different file formats, which can make it difficult for them to be accessed and analysed in a consistent manner by investors.

VI. Multilateral systems

Question 81. Do you consider that the concept of multilateral system under MiFID II/MiFIR is uniformly understood (at EU or at national level) and ensures a level playing field between the different categories of market players?

1 – Disagree

2 - Rather not agree

3 – Neutral

4 - Rather agree

5 - Fully agree

Don't know / no opinion / not relevant

Question 81.1 If your response to question 81 is rather positive, please also indicate if, in your opinion, the current definition of multilateral system is adequately reflecting the actual functioning of the market:

In our view, the current definition of multilateral system adequately reflects the actual functioning of the market in equities. We are not in a position to comment on whether there are alternative systems offering very similar functionality to a multilateral system for matching buying and selling interests, or the state of play in non-equities markets.

Question 81.1 If your response to question 81 is rather negative, please indicate which amendments you would suggest and why:

Question 81.1 Please explain your answer to question 81:

VII. Double Volume Cap

Question 82. Please specify to what extent you agree with the statements below regarding the experience with the implementation of the Double Volume Cap?

The EU intervention been successful in achieving or progressing towards the objective of more transparency in share trading **(neutral)**

The MiFID II/MiFIR costs and benefits are balanced (in particular regarding the regulatory burden) **(disagree)**

The different components of the framework operate well together to achieve more transparency in share trading **(disagree)**

More transparency in share trading correspond with the needs and problems in EU financial markets. **(disagree)**

The DVC has provided EU added value **(disagree)**

Question 82.1 Please provide both quantitative and qualitative elements to explain your answer and provide to the extent possible an estimation of the benefits and costs. Where possible, please provide figures broken down by categories such as IT, organisational arrangements, HR etc.

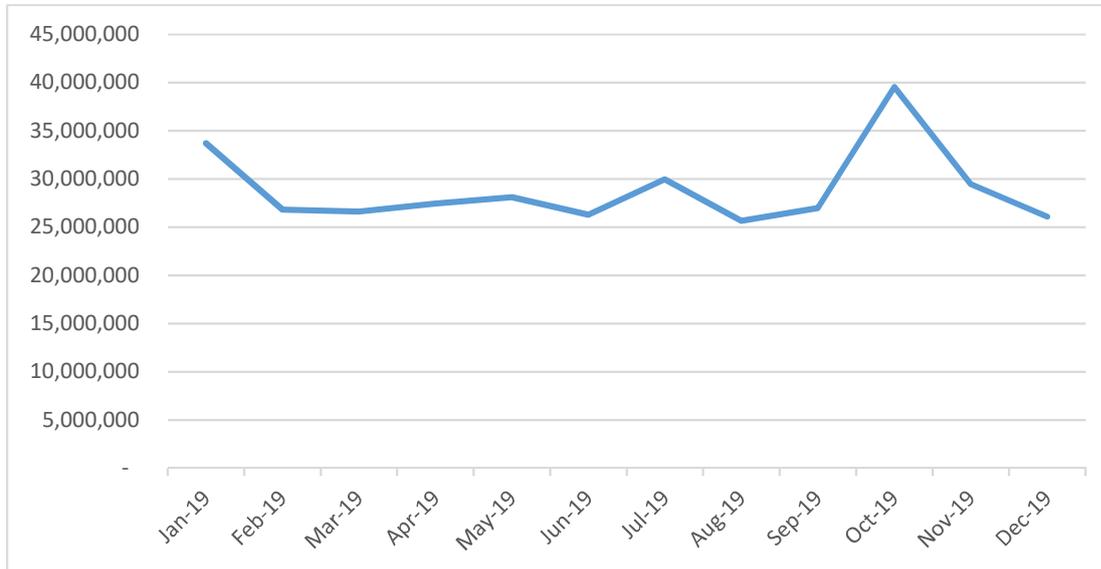
Quantitative elements for question 82.1: Estimate (in €)

What we present here is an estimate of the costs to investors had not been able to access reference price waiver trading systems during 2019 (i.e. it gives a taste of what might happen if the DVCs were set with a more restrictive threshold, or if the reference price waiver was removed entirely).

Firms trading on reference books have already made a decision – for that order at least – to give up some of the spread as they would otherwise have rested at the BBO and waited to be executed against. Immediacy of execution has become more important than the half spread that they are giving up. Accordingly, we believe that it is reasonable to assume that, in the absence of reference price books, the submitting firm would instead be required to trade on the CLOB or with an SI at the EBBO, crossing the spread to get immediate execution. Any attempt to mitigate that cost by taking a blended passive and aggressive approach would reintroduce the risk of an adverse market movement for the passive element. Looking at 2019, if investors who traded on the dark reference price books at the midpoint were forced instead to trade at the European Best Bid or Offer (EBBO), it

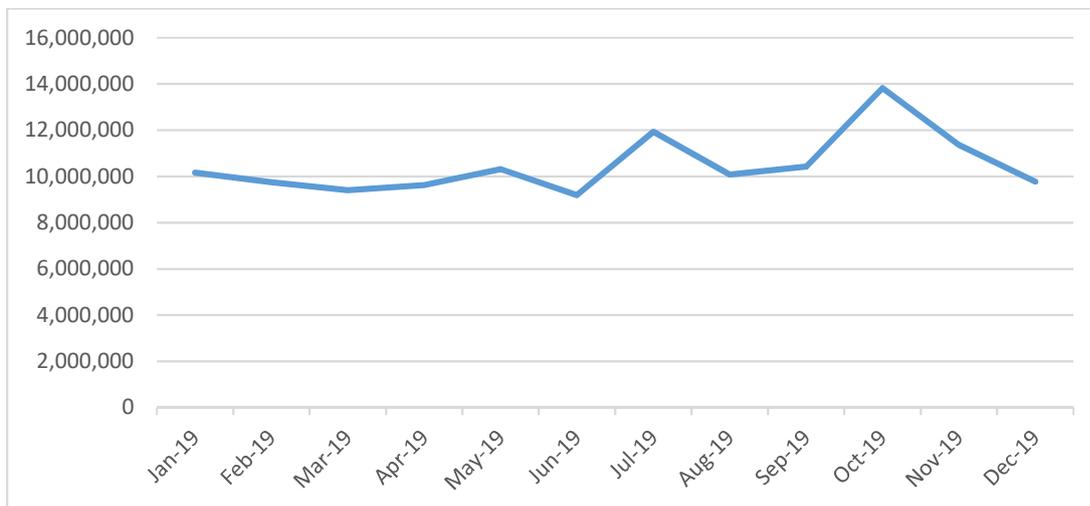
would have cost them in excess of €346 million in explicit spread cost, and an additional €126.5 million in market impact calculated as the difference in price movement between lit order book and reference price books, 5 ms after a trade has taken place), as demonstrated in the charts below.

Chart 2: Spread cost (€) of RPW trading at EBBO instead of mid



Source: big xyt

Chart 3: Market impact cost (€) of RPW trading at EBBO instead of mid



Source: big xyt

Collectively this would have represented a cost of nearly €500 million to European investors, and it is worth remembering that this was in 2019, a time of low market volume and volatility. If this option was taken away now that markets have become volatile, these costs would be much higher as investors have choice removed.

Qualitative elements for question 82.1:

While we recognise the effort and associated cost of implementing the DVC regime, we believe the caps should be removed in their entirety rather than arbitrary alterations made to the current

thresholds. The DVCs have introduced cost and complexity and delivered no clear benefit to execution performance and end investors. We believe there was no damage to price formation demonstrated to support their introduction and they already impose additional costs on investors seeking to achieve midpoint execution, as discussed above. Removing them would go a long way to simplifying the currently complex pre-trade transparency waiver regime for equities in Europe.

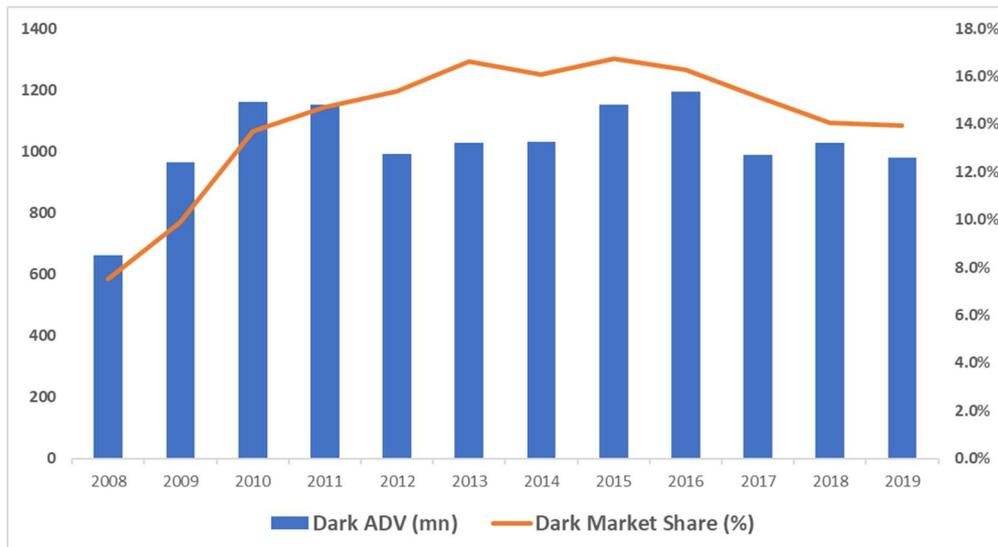
The importance of reference price waiver trading systems, which are restricted by the DVC, cannot be overstated. They are used to satisfy investor demand for urgent, low-impact midpoint executions, which are often the result of larger orders being broken up into smaller pieces and spread throughout the day so as not to adversely move prices. They are a highly valued execution mechanism which enable participants to achieve lower market impact and price improvement.

Opponents of choice and competition in execution services often argue that a limit or even outright ban on reference price systems is desirable because, if left unchecked, volumes on reference price systems will continue to grow at the expense of lit venues until there is no more lit trading and therefore no price formation. In our view, this argument is flawed for three key reasons. First, it assumes that activity unable to take place under the reference price waiver would simply revert to lit markets, which is unlikely to be the case. Indeed, since the imposition of the DVCs, this has demonstrably not been the case. Lit venues are often regarded as venues of last resort given their high levels of market impact, so block venues, periodic auctions, closing auctions and OTC markets have been the beneficiary of flow diverted from reference price systems. Second, it implies reference price trading itself has weak price-forming characteristics. Cboe's view is that price formation occurs whenever buyers and sellers agree a price, irrespective of the execution channel used. Use of a reference price system is just as valid an expression of a view on price as the use of any other multilateral system. Market participants know the inputs and take a positive decision to trade there.

Third, as evidenced in the US, there is a natural ceiling to activity on reference price systems which prevents them from reaching levels that would be damaging to price formation on primary markets. It should be noted here that the FCA found in a 2017 study¹ that dark trading is only damaging to price formation at a market share of over 15% - a level never reached under MiFID I nor possible under MiFID II. Reference price systems are only used to the extent that users positively agree with the quality of the input pricing. If lit books became so enfeebled that they were no longer useful sources of pricing data, then the reference price books would also be useless. Use of reference price systems is a healthy indicator of confidence in the price formation that takes place on the referenced books. Chart 4 shows that dark volumes in the US, having initially grown upon the introduction of these platforms, reached a natural upper limit and have fallen back since reaching that point. We have seen no evidence to suggest that European dark volumes would behave in a different way if left unchecked.

Chart 4: US dark ADV and market share

¹ <https://www.fca.org.uk/publication/occasional-papers/op17-29.pdf>



Source: Rosenblatt Securities

Note: US Dark ADV comprises Dark ATS and SDP systems

We believe the price formation in Europe is robust and have seen no evidence to suggest the existence of alternative mechanisms such as reference price systems damage this process. As already stated above, an efficient and effective trading ecosystem is one that allows for competition and choice at all levels of the execution value chain. This includes a range of execution options to support all types of trading strategies and market conditions. Constraining all activity on to lit venues threatens to cause unnecessary volatility which is detrimental to end investors.

It could be argued that there is a problem with liquidity for smaller companies and markets in particular. However we believe that the appropriate way to address this is through the CMU initiative, which should push for a removal of national barriers and meaningful consolidation of European markets. Initiatives such as the European Consolidated Tape would also promote cross-border investment in SMEs by providing enhanced visibility and transparency to these instruments.

VIII. Non-discriminatory access

Question 83. Do you see any particular operational or technical issues in applying open access requirements which should be addressed?

Yes

No

Don't know / no opinion / not relevant

Question 83.1 If you do see any particular operational or technical issues in applying open access requirements which should be addressed, please specify for which financial instrument(s) this would apply and explain your reasoning:

While we are overwhelmingly in favour of non-discriminatory access and open, competitive financial market infrastructures, we are supportive of amendments to the Capital Requirements Regulation to help mitigate contagion risk by interoperating clearing houses.

We support efforts to ensure CCP Recovery Plans and/or Resolution Tools do not contain tools or actions that would force interoperable CCPs to enter automatically into recovery or resolution. It will

be very important that Supervisors who approve CCP Recovery Plans apply this principle consistently and uniformly to avoid multiple interpretations and divergent practices. As such, level 2 or 3 guidance, as well as a review clause, may be appropriate to more explicitly set out what CCPs can and cannot apply to interoperating CCPs in their recovery plans.

Question 83.1 Please explain your answer to question 83:

Beyond the issue mentioned in question 83.1, we do not see any particular operational or technical issues that need to be addressed with regard to open access. In general, we are highly supportive of open and competitive financial market infrastructures and would refer to our answer to question 85, which highlights our involvement and positive experience in developing interoperable clearing for European equities.

There are clearly a number of policy considerations which appear to be driving a further extension of the current opt-out period for exchange-traded derivatives (ETDs), which ends on 2 July 2020. We do not believe that the potential impact of adding ETD interoperable links on CCP Recovery and Resolution plans would be material. If an extension is warranted on other grounds relating to Covid-19, operational capacity and Brexit planning during 2020 then we believe a one year extension would be sufficient to allow those issues to be addressed or mitigated to a point where CCPs and trade venues would be able to implement additional open access requests.

Question 84. Do you think that the open access regime will effectively introduce cost efficiencies or other benefits in the trading and clearing areas?

1 – Disagree

2 - Rather not agree

3 – Neutral

4 - Rather agree

5 - Fully agree

Don't know / no opinion / not relevant

Question 84.1 If you do think that the open access regime will effectively introduce cost efficiencies or other benefits in the trading and clearing areas, please indicate the specific areas (such as type of specific financial instruments) where, in your opinion, open access could afford most cost efficiencies or other benefits when compared to the current situation:

Open access has been widely adopted in European equities trading and clearing in recent years, driving significant cost efficiencies for all market participants. This model could be further extended to equities settlement, which remains entrenched in national silos resulting in unnecessary and duplicative costs for market participants.

An open access model across the trading, clearing and settlement lifecycle in ETDs would potentially extend significant cost efficiencies compared to the current situation. The vast majority of European derivative exchanges operate a vertical model, combining exchange and clearing services in a single group, which makes it difficult for competitive venues to emerge and can result in inefficiencies at the post-trade layer.

Question 84.1 Please explain your answer to question 84

As stated above, open access has already been widely adopted in European cash equities trading and clearing in recent years, driving significant cost efficiencies for all market participants.

We believe that for the future of European capital markets, an open architecture should remain a fundamental building block. The current crisis related to Covid-19, despite its uncertainties, should not divert us from the fundamental choices made by the EU over the past decade (i.e. to move towards an opened clearing & trading model where investors have genuine choice).

We also believe an open, competitive financial market infrastructures are important to CMU. Efficient and effective capital market relies on deep, liquid markets that are appealing to investors across the globe.

This requires the need to trade, clear and settle equities on a pan-European basis. This in turn drives increased pan-European trading, which promotes access to existing pan-European market infrastructure and encourages existing mono-country market infrastructure to open up access to the pan-European market. In turn, this duplication of such infrastructure then creates a commercial need for rationalisation and consolidation in the industry, which then will drive the creation of large-scale pan-European infrastructures that are efficient, integrated and yet offer competition in services for customers. This is the basis for realising the vision of the CMU for both the UK and EU.

Question 85. Are you aware of any market trends or developments (at EU level or at national level) which are a good or bad example of open access among financial market infrastructures?

In our view the best example of open access among financial market infrastructures in Europe has been the development of interoperable clearing in equities.

As the largest pan-European stock exchange, we have been a strong advocate of choice and a competitive, open financial market infrastructure since we launched our business in 2008. We have been at the forefront of many positive developments in European equity markets, including the development of interoperable clearing. This open access model allowed market participants choice over their clearing provider, irrespective of which venue they use to trade. Prior to this, national European exchanges operated vertical silos for cash equity trading and clearing services, forcing users to hold separate collateral pools with each exchange/clearing house across the region. Interoperability injected competition amongst equity clearing houses and created significant efficiencies and lower post-trade costs for banks, brokers and investors across Europe. Most major European exchanges, as well as all pan-European venues, now offer participants choice over their clearing provider.

In many ways, the US probably serves as the best example of the open access model. The DTCC serves as the single, user-owned cash equity CCP, centralising all activity and leaving the exchanges to compete at their own level. Interoperability has helped an element of this US model to be brought to the European equities landscape, while also allowing for effective competition at the CCP level and the benefits that that brings.

IX. Digitalisation and new technologies

Question 86. Where do you see the main developments in your sector:

Blockchain could decentralise central securities depository across counterparties. Cloud based platforms that allow access to large datasets and compute for pre and post trade analysis as well as non-latency sensitive trading services, could also develop.

Question 87. Do you think there are particular elements in the existing framework which are not in accordance with the principle of technology neutrality and which should be addressed?

We are not aware of any.

Question 88. Where do you think digitalisation and new technologies would bring most benefits in the trading lifecycle (ranging from the issuance to secondary trading)?

See answer to 86.

Question 89. Do you consider that digitalisation and new technologies will significantly impact the role of EU trading venues in the future (5/10 years' time)?

1 – Disagree

2 - Rather not agree

3 – Neutral

4 - Rather agree

5 - Fully agree

Don't know / no opinion / not relevant

Question 90. Do you believe that certain product governance and distribution provisions of the MiFID II/MiFIR framework should be adapted to better suit digital and online offers of investment services and products?

1 – Disagree

2 - Rather not agree

3 – Neutral

4 - Rather agree

5 - Fully agree

Don't know / no opinion / not relevant

Question 90.1 Please explain your answer to question 90:

Cboe Europe provides a business service rather than a retail service.

Question 91. Do you believe that certain provisions on investment services (such as investment advice) should be adapted to better suit delivering of services through robo-advice or other digital technologies?

Question 91.1 Please explain your answer to question 91:

Cboe Europe provides a business service rather than a retail service.

X. Foreign exchange (FX)

Question 92. Do you believe that the current regulatory framework is adequately calibrated to prevent misbehaviours in the area of spot foreign exchange (FX) transactions?

1 – Disagree

2 - Rather not agree

3 – Neutral

4 - Rather agree

5 - Fully agree

Don't know / no opinion / not relevant

Question 92.1 If you do not believe that the current regulatory framework is adequately calibrated to prevent misbehaviours in the area of spot foreign exchange (FX) transactions, which recommendations would you make to improve the robustness of the regulatory framework?

Question 92.1 Please explain your answer to question 92:

The question of whether the regulatory framework is “adequately calibrated to prevent misbehaviours in the area of spot foreign exchange (FX)” is tough to respond to on an agree/don't agree basis. There is no regulatory framework that governs this market today. However, there are two main considerations to counter the idea that, for example, spot FX should be included as a financial instrument under MiFID II/MiFIR (or that, otherwise, another supervisory regulator should bring it under its umbrella). Firstly, the FX Global Code was introduced as a response, by global regulators and central banks themselves, to a perceived inadequacy of regulation in this space. The Code was the result of a global effort over several years, instigated by the central banks, to achieve global agreement on standards of conduct appropriate for this market. Although the Code is voluntary, several regulators and central banks have required market participants under their jurisdiction to adhere to its principles. The participation from market participants in all of the primary jurisdictions globally in the effort to agree on these standards of conduct demonstrated a rare consensus on those standards.

The second consideration is that the principal participants in this global market, consisting primarily of the major dealers, are themselves covered under the regulatory regimes of their own prudential regulators. Those regimes govern constituents' conduct, meaning that those participants are already subject to regulation requiring certain standards of conduct and prohibitions against improper trading practices.

Question 93. Which supervisory powers do you think national competent authorities should be granted in the area of spot FX trading to address improper business and trading conduct on that market? Please explain your answer:

The way the FX spot market operates today is very healthy. The Global Code could be improved to make it clearer. It is very much open to interpretation which means misbehaving counterparties can take advantage of it.

Given the fragmented nature of FX markets, if any regulatory body were to bring spot FX under its regime without their being global coordination, in the manner in which the Code is a reflection of global consensus, the market may be further fragmented as market participants will be subject to regulatory conflict. Such an effort may undermine any movement towards harmonization.