

# STRUCTURE OF EUROPEAN EQUITY MARKETS

## ESMA'S CALL FOR EVIDENCE

### AMAFI's answer

---

*AMAFI is the trade association representing financial markets' participants of the sell-side industry located in France. It has a wide and diverse membership of more than 170 global and local institutions notably investment firms, credit institutions, broker-dealers, exchanges and private banks. They operate in all market segments, such as equities, bonds and derivatives including commodities derivatives. AMAFI represents and supports its members at national, European and international levels, from the drafting of the legislation to its implementation. Through our work, we seek to promote a regulatory framework that enables the development of sound, efficient and competitive capital markets for the benefit of investors, businesses and the economy in general.*

## I. GENERAL COMMENTS

ESMA's call for evidence is published in a context where the structure of equity trading in Europe has undergone profound transformation over the past two decades, driven by regulatory, technological and commercial developments:

- From a regulatory perspective, MiFID I introduced competition to the execution landscape by ending the concentration of trading on regulated markets, while MiFID II and the ongoing implementation of the latest MiFIR review continue to reshape market structure through enhanced transparency requirements, the introduction of consolidated tapes and adjustments to key mechanisms such as volume caps and tick-size rules. The diversity of trading models observed today is not an unintended outcome but rather the direct consequence of the policy choices made by European legislators since MiFID I to foster competition and innovation in trading services.
- Technological developments have also significantly modified trading dynamics, enabling the processing of large volumes of data at greater speed and investors' direct access to multiple trading mechanisms, which have the technical ability to offer innovative services.
- At the same time, investor needs have evolved, notably through the growth of passive investment strategies and increasing pressure on asset managers to demonstrate best execution outcomes.

Those changes have been undergone in a context of heightened competitive pressure between jurisdictions, particularly following Brexit, with non-EU trading venues executing European equities under regulatory conditions more favourable, especially in terms of price transparency.

Competition therefore lies at the heart of the current European equity market structure: competition between EU and non-EU trading venues, but also competition among the various execution mechanisms available within the Union. The question of the right market structure for equities is consequently intertwined with both commercial and strategic considerations.

Any regulatory choice should therefore remain firmly anchored in the public interest, notably the quality of prices available to investors, market integrity and its resilience. It should also take into account broader strategic considerations, including the need to preserve the ability of European authorities to effectively oversee and influence the functioning of EU equity markets, particularly in a context where the Share Trading Obligation applies only to EU-based entities.

AMAFI therefore encourages policymakers to assess any potential market structure reform against these objectives, irrespective of differing commercial interests. For instance, different policy options may be envisaged regarding off-tick execution, ranging from tighter restrictions to broader availability across trading mechanisms. But the relevant benchmark should remain its contribution to the efficiency, competitiveness and resilience of the EU equity market as a whole.

To distinguish, as far as possible, questions of public interest from competing commercial preferences, an objective approach to market structure, based on empirical evidence, is needed. This is the reason why the approach taken by ESMA to base its study on data is so useful and highly welcome.

But it is also the reason why further analytical work is required before firm conclusions can be drawn regarding the observed decline in the share of lit continuous trading and its potential implications for price formation and investor outcomes.

In particular, the analysis needs complemented with:

- An observation period longer than 4 years to improve comparability over time and ascertain trends, taking into account the impact of volatility on the relative use of trading mechanisms (*see Appendix 1, AMAFI's analysis*)
- More robust and higher-quality post-trade data, as transaction reporting shows numerous deficiencies, including duplicates, and inconsistencies in the use of transaction flags. These inconsistencies stem from differing interpretations and limitations in users' systems to produce the flags accurately. Any further policy work should therefore be preceded by a review of the flagging framework with the objective of improving the consistency and usability of the resulting data. Pending such improvement, at a minimum it should be explored whether proxies could be used to support the analysis.  
More robust data would make it possible to distinguish between the different phases of market activity (continuous, close, after-hours), and, within each phase, to assess the participation of orders to price formation and addressable liquidity.
- An assessment of the respective contribution of each execution channel to the price formation process, should it be lit continuous trading, SI, MTF and other trading mechanisms, as well as an assessment of investors' access to these sources of liquidity.

As a conclusion, from the current evidence, AMAFI considers that caution is warranted before drawing regulatory conclusions. This is particularly important given that the most recent MiFIR review has yet to produce its effects. Any intervention should be preceded by further analysis and should carefully consider the risk of unintended consequences, including the potential displacement of liquidity and trading activity outside the EU<sup>1</sup>.

## II. ANSWERS TO THE QUESTIONS

*Question 1: Do you agree with the description of the market structure summarised in Figure 1 for the purpose of the study in sections 3 and 4 based on transaction reporting data? If not, could you provide an alternative description that you consider more adapted to the reality of the European trading landscape for shares?*

AMAFI welcomes the work undertaken by ESMA, as a valuable contribution to presenting a data-based picture of the current equity market structure, as objective evidence is needed in an area where commercial considerations are at play. In this context, figure 1 provides a useful representation of the market structure, however, it could be further refined and presents some limits:

- Figure 1 provides a static view of the market structure and does not consider the dynamics observed throughout the trading day, whereas the different phases of the trading day determine the role of each category in terms of liquidity formation and price discovery. In particular, closing auctions cannot be meaningfully assimilated with other periodic auction forms, as it has a specific price formation function that distinguishes it from intraday auctions and frequent batch auctions. Treating closing auctions, intraday auctions and FBAs as one broad “periodic auction” category risks obscuring material differences between these mechanisms.
- The figure mixes up categories that should be distinguished:
  - Firstly, the “intraday auctions (both on RMs and MTFs)” category is too large as it mixes scheduled intraday auctions with volatility auctions and interruption auctions, both of which are triggered by exceptional price movements or market conditions. Grouping them together lead to an inaccurate representation of how liquidity is accessed during the trading day.
  - Secondly, the “NT3” category is too large and should be divided between: “genuinely technical” and “non-price-forming” NT3 transactions (such as certain clearing-related or operational transactions that are not addressable), and other NT3 transactions that

---

<sup>1</sup> Around 50% of EU equity order flow comes from non-EU participants, which are not subject to the share trading obligation (STO), with the UK accounting for around two thirds of the reported volumes executed by SIs (see Appendix 2).

reflect an economic transfer between two counterparties and are addressable by a substantial number of participants. Limited access is not the same as non-addressability. A market segment may be restricted to certain categories of participants while still providing addressable liquidity, as other “investment firm or client could have been a party to the transaction and provided liquidity to the market”. For example, a liquidity pool historically accessible only to buy-side firms, or a book designed for retail flow with liquidity providers on the other side, should not automatically be considered non-addressable merely because not all market participants can access it (refer to answer to question 36).

- Finally, SI intragroup transactions should be clearly separated from other off-book transactions. These are technical or internal trades and should not be placed in the same analytical category as OTC XOFF or NT3 transactions involving an actual transfer of risk between independent counterparties. Mixing these categories would overstate the share of non-addressable liquidity.
- A sub-category for “trading at close” is missing in the “SI-Systematic internalisers” category. This category would cover executions that reference the closing price after the closing auction.
- The “frequent batch auctions” category shall fall in the “Lit continuous category” given their closer resemblance to lit continuous trading than to other types of auctions. FBAs are auctions executed at milliseconds intervals and conducted one after another in such a way that they run continuously. They are operated on trading venues through a multilateral trading mechanism, where orders interact according to transparent and non-discretionary rules. Like continuous, their trading logic is intraday, recurrent, venue-based, and they compete directly with lit order-book execution for order flow.

*Question 2: Do you have any insights on the XOFF transactions reported by investment firms who also act as an SI (SI-OTC trades)?*

AMAFI has no insight about XOFF transactions reported by investment firms that act also as SI (SI-OTC). Such transaction seems to be technically impossible and may only be reporting errors.

RTS1 of MiFIR governing transaction reporting requires the population of the execution venue field. Depending on where the transaction is executed, this field must contain either the MIC code of a trading venue, or the code “SINT” when the transaction is executed by a Systematic Internaliser, or the code “XOFF” in any other cases.

Consequently, a transaction cannot be both executed by a Systematic Internaliser and reported with the XOFF execution venue code. Therefore, any apparent SI-OTC transactions identified in the dataset are likely to result from data quality issues rather than from an actual execution mechanism. It is possible that this bucket of transactions relates to activity which is being reported duplicatively across different jurisdictions. This could merit further analysis by ESMA.

*Question 3: Do you agree with the general trends identified regarding on-book vs. off-book trading, and addressable vs. non-addressable liquidity? What other trends do you consider relevant, also in terms of competitive pressures?*

AMAFI welcomes ESMA's work and considers that the analysis provides a useful basis to better understand the transformation of the European equity market structure.

Still, we consider that the general trends identified would need to be established more firmly to ascertain the extent of the structural shifts in market structure causing changes in the relative shares of on-book and off-book trading, or between addressable and non-addressable liquidity. In addition, it is also important to take into account external factors that may have an impact on the data considered in ESMA's analysis, as market participants continuously adapt their choice of execution channels according to perceived risks, liquidity conditions and volatility.

### **The impact of volatility**

AMAFI looked more closely at the impact of volatility on the market shares of the various trading mechanisms, in the study attached as an appendix. This study replicates ESMA's analysis using post-trade transparency data rather than transaction reporting data and compares market shares under different volatility levels.

- The effect of volatility

At the beginning of the period covered by ESMA's analysis, the volatility was materially higher, averaging 25.64% in 2022, compared with lower volatility conditions in 2025, where volatility averaged 18.92%. This matters because periods of heightened volatility are typically associated with a "flight to certainty and immediacy": market participants tend to rely more heavily on lit order books, where price formation, immediacy of execution and execution certainty are perceived as stronger.

AMAFI's analysis confirms this effect: when volatility rises, the relative market share of lit continuous trading increases, in particular on regulated markets. Conversely, closing and intraday auctions tend to represent a lower relative share of addressable liquidity in stress periods, while SIs, dark trading and frequent batch auctions do not show the same increase in relative market share as lit continuous trading.

- Structural trend after normalising volatility

When market shares are recalculated on an addressable liquidity perimeter, and when calm market conditions are isolated, the decline in the **relative share of lit continuous trading remains visible but appears less pronounced** than shown by ESMA data (see appendix 1).

This suggests that volatility explains part of the short-term reallocation of volumes, but that a structural trend remains: lit continuous trading continues to lose relative market share within the addressable liquidity perimeter.

- The trend in absolute turnover

This structural trend should nevertheless be interpreted with caution when looking at absolute turnover. First, as regards lit continuous trading, the decline in relative market share should not be equated to an equivalent decline in absolute volumes. **Rather, lit continuous trading turnover appears to retain a stable core, while capturing a smaller share of the marginal growth in addressable volumes** (+12.35% for lit continuous RM and +7.96% for lit continuous MTF)<sup>2</sup>. Other execution mechanisms, in particular frequent batch auctions, SIs and, to a lesser extent, dark trading, have grown more rapidly in absolute terms. This points to a relative loss of attractiveness of lit continuous trading in percentage, rather than a contraction of lit liquidity in amount.

Second, closing auctions should be considered separately. Their relative market share tends to decrease in stress periods, but their absolute turnover has grown materially over the period. This suggests that the growth of auctions is not merely a volatility-driven phenomenon. It may also reflect broader changes in execution behaviour. This point is closely linked to other external factors influencing the relative market shares of trading mechanisms, such as the impact of PRIIPs transaction cost disclosure requirements (see question 11).

These findings raise two questions that would deserve further analysis:

- First, it would be necessary to assess whether the quality of liquidity on lit continuous markets has changed irrespective of the persistence of this underlying volume base, for example through wider spreads, lower depth or higher market impact.
- Second, it would be useful to assess the interaction between executions in dark, frequent batch auction and SI mechanisms and subsequent price movements on lit continuous order books. Such analysis would help determine whether these mechanisms are mainly execution channels relying on prices formed elsewhere, or whether they also contribute meaningfully to the price formation process.

### The impact of PRIIPS

Another example of external factors influencing the relative market shares of trading mechanisms is the introduction on January 1<sup>st</sup> 2025 of the requirements for asset managers to disclose the implicit costs associated with their transactions as defined by UCITS (*UCITS, Annex I, Schedule B*). This requirement has increased competitive pressure on market participants to minimise such costs. This appears to have contributed to the growing use of trading mechanisms that can reduce market impact, including closing auctions and execution arrangements whereby investment firms commit to delivering an agreed execution price, a service that may be facilitated through SI activity. This example illustrates that the evolution of trading mechanisms is often driven by changes in investor demand and regulatory

---

<sup>2</sup> Excluding 2022Q1 and 2022Q2, which were atypical due to elevated volatility and fewer calm trading days, the percentages reflect the change in average quarterly turnover between the first and second halves of the adjusted sample; over the same period, closing and intraday auctions increased by 29.7%, FBA by 104.6%, dark trading by 25.1%, and SINT by 59.7%.

incentives. The development of alternative execution mechanisms does not necessarily reflect shortcomings in existing market structures but rather the ability of market participants to respond to different investors' objectives, whether these relate to execution quality, market impact, immediacy or cost.

The supply of execution services adapts to investors' objectives, whether these relate to execution quality, market impact, immediacy or cost transparency.

In AMAFI's view, the regulatory framework should continue to allow market participants to innovate and develop competing execution solutions that respond to evolving investor needs, provided that the objectives of market integrity, transparency and investor protection remain safeguarded.

*PRIIPs' influence on the choice of execution venue:*

The regulatory framework outside MiFID II / MiFIR can also influence asset managers' choice of execution venue. In particular, changes to the PRIIPs Key Information Document (KID) transaction cost methodology appear to have created incentives for the use of execution mechanisms that minimise reported implicit costs, such as, closing auctions, SIs and FBAs.

The PRIIPS regulation has introduced the KID, a short, standardised disclosure document that provides retail investors with key information on a product, including its « implicit costs ». These costs are expressed on an annualised basis and calculated using the average transaction costs incurred over the three preceding years. The methodology for calculating transaction costs (*Delegated Regulation (EU) 2017/653*) has been amended by the *Delegated Regulation (EU) 2021/2268 of 6 September 2021, Annex VI* to specify that transaction costs include the difference between the arrival price, which is the market price at the time the order is given, and the execution price ultimately obtained. The regulation allows for a transitional period during which two calculation methodologies could be used:

- The highly simplified, so-called 'New PRIIPs' methodology, which relies primarily on standard half-spread tables (bid-ask spread).
- The arrival price methodology, which measures the actual difference between the prevailing mid-price at order time and the execution price achieved.

Since 1 January 2025, funds in scope with more than three years of history are no longer permitted to use the simplified methodology and must calculate transaction costs using the arrival price approach.

This change has increased the importance of controlling slippage between arrival and execution prices, as higher levels of slippage directly increase the transaction costs disclosed in the KID. It should be noted that institutional investors in their tenders, use implicit costs of their funds as a selection criterion. This contributed to a shift towards execution mechanisms that can limit the slippage, such as closing auctions, SIs and dark pools.

This regulatory change has contributed to the sharp increase in the volume traded by SIs, which rose from an average of 169.75 billion per quarter in 2024 to around EUR 271.5 billion per quarter in 2025, as the figure 18 of the *Call for Evidence* shows.

*Question 4: Do you have any concerns on the impact of the identified trends on the general functioning of the EEA markets for shares? In your view, what are the implications of the relative decreasing trend in trading on CLOB for the effective price formation in the EEA markets for shares? What are the implications on price formation should this trend persist or even accelerate?*

One important question is whether the identified trends had an impact on execution quality or price formation. During the discussions held at AMAFI, no issue in price formation has been raised so far.

While it is reasonable to assume that a certain level of transparent, addressable liquidity is necessary to support robust price discovery, there is currently no clear empirical basis for identifying the level at which a decline in lit activity would begin to impair the price formation process. It should be noted that while lit market share is declining as per ESMA's analysis, this decline appears less significant once adjusted for market volatility (see question 3).

In AMAFI's view, the central question is whether the market remains capable of generating reliable and efficient price formation for all investor types, whatever the place where this price formation takes place, should it be the lit or other trading mechanisms. It should also be noticed that price formation is not only determined by pre-trade transparency. In practice, investors and market participants use a variety of factors to determine where they see value, including post-trade transparency, news, market sentiment, technical analysis, among others.

While one may suspect the existence of a threshold of lit market share below which the market would face difficulties in ensuring effective price formation, such a threshold should be identified or approximated by further analysis. At this stage, even if the composition of liquidity has evolved during the period, it is tricky to assess whether the market is close to this threshold, or still far from it. Such analysis should seek to identify the relationship between the level of transparent order-book activity and measurable indicators of market quality, including spreads, price efficiency, execution quality and resilience under stressed market conditions.

*Question 5: As the choice of trading facility has increased, it is important for ESMA to understand why market participants are choosing the execution facilities that they do. What are the drivers that you consider most relevant when choosing on which execution venue and with which execution method to trade?*

Market participants use different trading facilities depending on their execution needs and on a trade-off between cost, execution risk and reliability.

For instance, institutional trades require specific execution mechanism: asset managers operate under a fiduciary duty to act in the best interests of their clients. While, main drivers are price, speed and certainty of execution, trading desks need flexibility in execution venue selection to achieve best execution. Institutional, have to deal with large orders which may have important market impact if executed in the single venue. The diversity of trading venue allows for a mitigation of this risk.

The diversity of execution venues also allows assets managers to adapt by taking into account market conditions. In less volatile market conditions, participants may be more willing to use alternative trading facilities, whereas in more stressed conditions they may prioritise execution certainty and

liquidity they can find on lit. The choice of venue and execution method is not driven by a single factor, but by the type of order, the liquidity of the instrument, market volatility and the expected quality of execution.

At the opposite, retail trades, due to their size are less market-impacting than institutional trades. Still, ESMA should not assume that trades that are small in size are necessarily retail trades, as institutional orders are often sliced in small shapes before being sent to a venue.

At the end, the attractiveness of a financial centre depends on a number of parameters. Diversity, competition and choice attract international investors as well as low-cost and efficient execution, let alone an easy access to markets.

*Question 6: What are your experiences with regard to gaining access to liquidity? To what extent are you, either directly or via a broker, able to access liquidity on relevant trading venues or relevant systematic internalisers? If not, please explain what stands in the way of gaining such access.*

This question is difficult to assess. It may be relevant to address this question specifically to sell-side, in order to obtain a clearer view of the practical conditions for accessing liquidity across trading venues and SIs.

*Question 7: If you are an issuer, how do you see these market developments? Do you consider this an attractive environment for listing? If not, why?*

AMAFI does not answer this question.

*Question 8: What conclusions would you draw from the distribution of liquidity across EEA ISINs? Do you identify any policy recommendations in this context, with a view to enhancing price formation while ensuring a level playing field across different types of venues? Do you have explanations for the high share of OTC trading observed in the ISIN's of some jurisdictions?*

The distribution of liquidity across EEA ISINs should be assessed with caution. The available evidence does not clearly establish that the current distribution of liquidity creates a material issue for price formation in EEA share markets. Market participants do not appear to face significant difficulties in accessing liquidity, nor is there clear evidence that price formation is disturbed (see question 4).

Lit trading remains an essential component for transparent price formation. However, lit is not the only model through which prices can be formed. Different trading models may be appropriate depending on the liquidity profile of the instrument, the size of the order and the execution needs of investors.

The policy objective should therefore not be to favour one type of venue over another, but to ensure that all trading models operate within a framework that preserves transparency, supports interaction between liquidity pools and offers an efficient price formation mechanism, while maintaining a level playing field. As such, adequate post-trade and pre-trade transparency remain cardinal to

ensure a good understanding of the liquidity and allow efficient price formation. Improving transparency is crucial to answer the question of the extent to which non lit activities contribute or not to the broader price formation process.

The higher share of OTC trading observed for ISINs in some jurisdictions may reflect differences in liquidity profiles, market practices, investor needs and execution strategies. For less liquid instruments in particular, bilateral or alternative execution methods may be better suited to the characteristics of the order or the instrument. This does not, in itself, indicate a failure of price formation, provided that sufficient transparency and competitive conditions are maintained.

***Question 9:** What is your view on the evolution of dark trading on EU trading venues? Are there any structural shifts that you noticed, which you believe should be further monitored?*

Volumes executed in dark trading have remained broadly stable as a share of total trading volumes: 4% in Q1 2022, 5% in Q1 2024 and 4% in Q4 2025. These figures reflect a persistent market demand for execution without pre-trade transparency, and no structural shifts is noticed.

Dark trading could be favour by market participants as it helps limit information leakage and market impact for certain execution. Stakeholders find value in having a diverse range of trading models, which respond to specific client needs depending on the instrument, order size, market conditions and execution strategy.

While lit trading remains central to transparent price formation and should be preserved, dark trading and lit should not be seen as being in competition, as they serve different purposes and are designed to meet different execution needs.

We notice that in jurisdictions where no dark volume cap is in place, dark trading has not increased to levels deemed unacceptable to local regulators. For example, in the UK or Switzerland, the absence of a volume cap has not led to a dramatic increase in dark trading, rather a balance exists where dark trading represents a small proportion of overall liquidity.

***Question 10:** What concerns/issues do you highlight at this stage? Do you see a need for specific regulatory interventions also in consideration of evidence available regarding practices related to dark trading functionalities (please provide details)?*

AMAFI does not answer this question.

***Question 11:** What is your view on the evolution and effects of trading in closing auctions on the EU markets? Do you agree with the presented rationale for trading in closing auctions or do you consider other drivers more important for explaining the growth and increasing significance of closing auctions trading?*

As underline by the Call for Evidence, “closing auctions play a pivotal role in the functioning of equity markets” (§59), they are contributing to price formation (§61), and they are constituting one of the main liquidity pools (§30). The increasing importance of closing auctions in Europe appears to be driven by structural factors, in particular the growth of passive investment, ETFs (§60) and PRIIPS.

In European market ETF creations and redemptions are cash-settled. This creates a need for asset managers to execute the corresponding underlying transactions at the closing price, in order to limit any difference between the value of the ETF and the cash amount to be delivered to investors.

Other jurisdiction, such as the USA perform creation and redemption of ETF in “kind” which make the close less pregnant, as they would be done during the trading day.

Therefore, the increase in closing auction volumes should not be regarded as a concerning development in market structure, while there is no evidence of market deterioration, as it reflects genuine market needs and a trend that can largely be explained by the growth of ETFs the development of passive investment and as a consequence of PRIIPs enforcement (see further development in the answer to the question 3).

**Question 12: What is your view on the effects of alternative closing mechanisms offered by MTFs and SIs?**

MTFs and SIs propose alternative closing mechanisms that operate in various ways and do not aim to achieve the same objectives. Both alternative closing mechanisms bring significant value for market participants, as they propose a better execution price.

- Some mechanisms rely on the official closing price determined by the primary market. Their main value offering is to provide lower execution and post trade fees. These mechanisms can be seen as beneficial, as they foster competition by offering alternative solutions while still benefiting from the official closing price.
- Other mechanisms operate as alternative auctions determining their own closing price, potentially different from the price formed on the primary market. These mechanisms aim to compete both in terms of closing price and executions fees.

To fully understand the alternative closing mechanisms a dedicated study on this topic would be useful, although it would require a more consistent identification of orders executed at the close across all execution venues (for instance, for the time being, such orders are not identified by SIs). Such analysis would also help test whether, like for lit closing auctions, executions volumes at the close on SIs are also increasing and would provide a more granular view of the evolution of the market structure.

That being said, we remain sceptical of proposals to introduce a volume-weighted closing benchmarks for closing prices, such as the envisaged in the Commission’s MISP proposal. Such a development would weaken the value of the closing price as a common and reliable reference price for position valuation and risk management.

*Question 13: What will be in your view the effects of 24h/ extended trading hours on closing auctions?*

The impact of 24h or extended trading hours on closing auctions would require a dedicated analysis. Such a development could have significant implications for liquidity distribution, but also for market stability and even on the sociology of the front office.

Whatever happens, trading hours would not remove the need for a closing auction. Even in a 24h/7 or extended trading environment, the market still needs a stable and commonly recognised daily reference price. The closing price remains essential for portfolio valuation, index calculation, ETF management, benchmark execution and performance measurement. The market would struggle to determine a daily reference point in a continuous trading environment. The closing period also allows for reconcentration of liquidity that may have been fragmented across venues during the trading day and as such appears to be an efficient price formation process.

At this stage, the market lacks sufficiently granular indicators to identify and quantify out-of-hours trading. While MiFID already refers to trading periods by reference to normal trading hours, there is currently no dedicated flag

giving framework allowing market participants and regulators to measure precisely the volumes executed outside those hours. A dedicated indicator may therefore be helpful for a better understanding of the dynamics of the closing and of extended-hours trading.

*Question 14: Are there any structural shifts that you noticed, which you believe the competent authorities should monitor? Would you like to highlight any concerns/issues at this stage? Do you see a need for specific regulatory interventions (please provide details relating them possibly to the data and observations available)?*

The impact of 24h or extended trading hours on closing auctions would require a dedicated analysis. Such a development could have significant implications for liquidity distribution, but also for market stability and even on the sociology of the front office.

Whatever happens, trading hours would not remove the need for a closing auction. Even in a 24h/7 or extended trading environment, the market still needs a stable and commonly recognised daily reference price. The closing price remains essential for portfolio valuation, index calculation, ETF management, benchmark execution and performance measurement. The market would struggle to determine a daily reference point in a continuous trading environment. The closing period also allows for reconcentration of liquidity that may have been fragmented across venues during the trading day and as such appears to be an efficient price formation process.

At this stage, the market lacks sufficiently granular indicators to identify and quantify out-of-hours trading. While MiFID already refers to trading periods by reference to normal trading hours, there is currently no dedicated flag

giving framework allowing market participants and regulators to measure precisely the volumes executed outside those hours. A dedicated indicator may therefore be helpful for a better understanding of the dynamics of the closing and of extended-hours trading.

*Question 15: What is your view on the evolution of trading in FBAs on EU markets? Why are those mechanisms gaining traction in your view? Which are the benefits and shortcomings they offer? (please elaborate)*

Trading on FBAs seems to have grown in response to investors' demand for execution market impact (see box below), minimising information leakage, mitigating the effects of latency-driven trading and achieving price improvement by allowing to trade within the spread.

These benefits appear particularly valuable for institutional investors seeking to optimise execution quality. The growth of FBAs should suggest that market participants value the execution outcomes these mechanisms can provide.

The growth of FBAs, similarly to the growth of SIs (see question 20), may also be explained by changes in the regulatory framework. In particular, the modification of the KID transaction cost methodology in PRIIPs appear to have directed some flows from Lit to SIs (see question 9).

*Question 16: Do you have any particular observations as regards the impact of SVC on FBAs?*

The impact of the single volume cap (SVC) on FBAs should be assessed with caution. ESMA notes an increase in FBA activity in instruments suspended under the SVC in October 2025, primarily driven by the activity of Cboe Europe DXE Periodic, and suggests that this may constitute preliminary evidence of a shift in order flow from dark trading under the Reference Price waiver (RPW) towards FBAs (§72).

However, ESMA also acknowledges that the observation period is very short and that it remains to be seen whether this trend will persist over time. At this stage, it would therefore be premature to conclude that FBAs are systematically replacing dark trading mechanisms or that such a substitution raises market structure concerns.

FBAs are multilateral trading mechanisms operated by regulated trading venues and are subject to a more structured pre-trade and post-trade transparency framework than other execution venues.

From a policy perspective, if market participants choose to redirect order flow from dark trading venues towards FBAs, this could be viewed as a positive development. Such a shift would allow investors to access execution mechanisms designed to reduce market impact and information leakage while preserving a higher degree of transparency for the market as a whole.

*Question 17: Are there any emerging structural shifts which you believe would warrant closer monitoring? (please elaborate)*

Certain developments would merit continued monitoring, with close consultation with the industry, such as:

- the evolution of FBA activity following SVC suspensions;
- the execution quality delivered by FBAs compared with continuous order books (lit), dark trading mechanisms and SIs;
- the contribution of FBA to the price forming mechanism;
- a more comprehensive assessment on the topic of price formation and on the respective contributions of the different execution mechanisms to price formation;
- investor behaviour and venue selection during periods of market stress or heightened volatility;
- any potential migration of liquidity to non-EU mechanisms in response to further regulatory constraints in the Union.

*Question 18: What is your view regarding the contribution of FBAs to price formation and transparency? Should those mechanisms be generally considered as price forming/ non price forming or this assessment should be done on a case-by-case basis depending on the specific design of the auction? (please elaborate, supplementing your views with data evidence when available)*

As mentioned in our answer to Question 15, FBAs respond to investor needs and provide a complement to continuous order book trading.

With regard to tick sizes and price formation, it is important to distinguish between quoting requirements and the price formation itself. Tick sizes are primarily designed to structure the display of quotes and orders and to support orderly trading. They are not, in themselves, a measure of whether a transaction contributes to price formation.

The fact that a transaction is executed at a price that does not correspond to a tick increment of the continuous market (i.e. off-tick) does not mean that it is not price-forming. The relevant question is whether the execution price results from the interaction of buying and selling interests within the auction process. Where an FBA auction algorithm determines an execution price as the equilibrium price of multiple contributing orders, the resulting price reflects market participants' willingness to trade and therefore contributes to price formation, irrespective of whether the execution price coincides with a tick increment of the continuous market. For this reason, it appears difficult to

infer from the fact that approximately 40% of FBA transactions are executed off tick (as shown in Figure 21) that FBAs contribute to price formation in only 60% of cases. Such a conclusion would conflate compliance with tick-size conventions and participation in the price discovery process, which are distinct concepts.

FBAs are accepting diverse type of orders that do not equally contribute to the price formation process. For example, midpoint pegged orders<sup>3</sup> do not have the same contribution to price formation compared to other order types such as limit orders. As such, a statement on the role of FBAs orders to the price formation process is currently hard to assess.

AMAFI's view is that a better identification of the portion of orders contributing to the price formation process is required for all trading venues, including FBA. This is required for a better understanding of the market structure and dynamics.

*Tick-size regime:*

The tick-size regime is primarily designed to rationalise the order book process. The tick size is defined as the minimum interval between two directly consecutive quoted prices.

In the 2000s, MiFID I introduced competition between trading venues. New entrants then developed tick-size strategies aimed at attracting liquidity providers, offering smaller tick sizes than those traditionally applied by incumbent markets. These strategies led to the so-called “tick war”, with each participant racing towards ever smaller price increments, with detrimental effects for the market:

- the quantities available at each price level were very limited, increasing the number of executions needed to trade a given quantity;
- order books became much more volatile and easier to manipulate, in particular through high-frequency trading techniques.

Against this background, the Commission introduced a harmonised framework through MiFID II that widened tick sizes, Article 49, putting an end to the “tick war”. Recital 1 of MiFID DR 2017/588 specifies that a tick size should be set out to prevent “the risk of an ever-decreasing tick size for shares” and to control “the orderliness of the market”.

The tick-size regime was initially applied to executions, with specific adjustments through waivers. However, the recent MiFIR review has allowing SIs to execute off tick, without adverse effect reported. This has reduced the relevance of applying the tick-size regime to executions themselves and ESMA decided to repeal its Q&A stating that periodic auctions were subject to the tick-size regime for execution in order to ensure a level playing field (§69).

---

<sup>3</sup> Orders with a price derived from an external reference price

*Question 19: Please highlight any concerns/issues you may have at this stage. Do you see a need for specific regulatory interventions, particularly regarding the tick size regime and its application to transactions and periodic auctions (please provide details)?*

At this stage, we do not see a need for specific regulatory intervention targeting FBAs. Such intervention would be premature given the still limited evidence available and the risk of unintended consequences for the attractiveness and competitiveness of European markets.

A general prohibition on off-tick or midpoint executions could have the following adverse consequences:

- reducing opportunities for price improvement available to investors;
- encouraging technical workarounds and circumvention strategies;
- driving order flow towards less transparent mechanisms or venues outside the EU;
- undermining the competitiveness of European trading venues.

A prerequisite for regulatory intervention is a better understanding of the price formation process and the contribution of FBAs.

The tick-size regime should primarily remain a rule governing order displayed in the order book, rather than a constraint on the execution price of transactions. Since the execution itself does not affect the orderliness of the order book, executions outside the tick size do not raise the issues that the tick-size regime is intended to address. There should therefore be no obstacle to allowing all market facilities to execute outside the tick size, provided that the tick size is respected for orders displayed in the order book.

To be noted that there is not a unanimous consensus on this point amongst AMAFI members, as one member considers that the tick size regime was specifically designed to ensure greater consistency in price formation in increasingly fragmented equity markets. From this perspective, the development of off-tick executions may raise level playing field concerns between different types of execution mechanisms. As such, further analysis should be carried out by ESMA before any evolution of the current framework is contemplated.

*Question 20: What is your view on the evolution of trading of SIs on the EEA markets? What are the main drivers of their growth?*

The figure 26 of the Call for Evidence shows an increase in both the volume and the market share of SIs by 5 percentage points over the period.

The growth of SI trading appears to be driven by some features they offer, including that they reduce information leakage and market impact, provide liquidity from their own balance sheet on a bilateral basis and offer price improvement opportunities or midpoint execution. These features are particularly valued by institutional investors seeking to minimise slippage and optimise execution outcomes. Additionally, like for FBAs, the modification of the KID transaction cost methodology in PRIIPs

appear to have directed some flows from Lit to SIs (see Question 9). The growth in SI trading seems thus to reflect evolving investor preferences for a broader range of execution mechanisms and liquidity provision models and the ability of SI models to meet specific execution needs.

*Question 21: Does this picture reflect the trends you observe in SI trading? Do SI offer trading for both large and small sizes? Do these different trade size reflect different types of clients / SI businesses?*

This picture reflects the diversity of SI business models. SI activity spans both small and large transactions, not only because of different client segments being served but also due to different trading needs, including those resulting from order allocation systems that “breaks” orders in smaller sizes.

Therefore, while transaction size may sometimes provide some indication of the nature of an SI's activity, it is not necessarily a sufficient basis for drawing conclusions about the role performed by an SI or the type of flow being executed.

Indeed:

- An SI serving retail flow is expected to execute all orders sent to it that are tradable pricewise, meaning that it will not be the one deciding for the universe of shares and for the sizes of execution.
- For institutional orders, an SI can either execute large or small orders.  
In some cases, it provides block liquidity by taking on sizeable positions and facilitating the execution of large orders. Sometimes, the large order will only come after it has been “started” through an order of a smaller size to ascertain the execution conditions.  
In other cases, the SI participates in the execution of institutional orders that have been broken down into smaller child orders and routed across multiple execution venues by algorithmic trading strategies. In such circumstances, an SI may execute numerous small transactions that are part of a broader institutional execution strategy.

As a conclusion, an SI may execute large and small sizes, without the small sizes reflecting a business model focused on retail clients. However, an SI executing only small sizes are likely to be specialised in retail flow.

For this reason, transaction size should be considered alongside other relevant factors, such as the nature of the client base, the execution services provided, and the role played by the SI in the execution process, when assessing SI activity.

*Question 22: What is your perception of the application of price improvement by SIs? Does the data analysis reflect the reality, or do you believe that there are some data quality issues in the flagging of transactions subject to price improvement?*

AMAFI considers that SIs generally provide price improvement. Still, the transaction reporting data on which ESMA’s analysis relies are likely not fully capturing the extent of this practice: for instance, figure 27, showing that SIs execute a significant share of their transactions off-tick, suggests that some price improvement is being offered in practice, through midpoint or other within-spread executions (for instance Od111 executes 60% of its transaction, that appears to be retail orders given the high volume of transaction executed, off tick)<sup>4</sup>.

The same SI (Od111) in figure 33 does not show any significant price improvement in its flagging (even if the figure 33 is based on turnover and not % of trades as in figure 27, making the comparison between the 2 not completely like for like).

AMAFI’s interpretation is that the issues may stem either from the definition of the flags themselves or from an inconsistent application by reporting firms and thus do not allow a robust assessment of whether there is indeed price improvement or not. As such, it would not be appropriate to draw conclusions from the low usage of certain flags, as shown by transaction reporting. ESMA should engage directly with market participants to better understand how the relevant flags are interpreted and applied in practice and whether such front-office type information flows properly from trading systems to back-office systems generating the transaction reporting.

---

<sup>4</sup> Off-tick execution remains an indication of some price improvement, even if some transactions (such as benchmark trades) may indeed be off-tick simply because their price is derived from a “price that is calculated over multiple time instances” according to a predefined formula, rather than from the current order book midpoint.

### *Flagging issue*

Several feedback indicates multiple difficulties in the use of reporting flags:

- Firstly, the assessment of flagging leaves room for subjectivity in the absence of clear and operational definitions. In some cases, two desks within the same firm may report the same transaction under different flags.
- Secondly, the purpose of the flags is not properly identified, and the lack of consistency between RTS 1 and RTS 22 creates uncertainty.

These difficulties are cumulative and call for a general review of the flagging regime, starting from market needs and the way the market operates. This work has to be carried out in close cooperation with market participants.

A reform of the flagging regime should be guided by the following principles:

- flags reported under RTS 1 should make the market more transparent and understandable. By contrast, flags reported under RTS 22 should serve the purpose of preventing market abuse. Where information is of public interest, it should be reported under RTS 1, rather than only under RTS 22, which is accessible only to regulators.
- duplicative reporting under RTS 1 and RTS 22 should be prohibited, as it is a source of errors and unnecessarily potential reconciliation.
- information should be reported by those who have the knowledge of the relevant information, either the front-office, or the back-office.
- the flagging rules should be clear and supported by guidance, while remaining operationally usable for market participants.

### *Question 23: Which flags do you consider important to identify certain trades related to SI trading?*

Flags are important to improve regulators' and market participants' understanding of liquidity formation and price formation. Only once a clear picture can be drawn, and potential issues in liquidity and price formation identified, new market segmentation requirements should be designed.

As such, the following flags are particularly important:

- **RPRI**, to identify transactions executed with price improvement;
- **A dedicated SI intragroup flag**, to clearly identify and exclude such transactions from the assessment of addressable liquidity;
- **Flags identifying specific market phases**, including closing sessions, trading-at-last period out-of-hours trading, or equivalent mechanisms, in order to better assess liquidity for each phase (refer to our answer to question 1)

More generally, a more granular identification of market phases would be beneficial not only for SI transactions, but also for off-book, on-exchange and OTC trading, thereby providing regulators and market participants with a more complete picture of market activity.

*Question 24: What is your view on the evolution of SI trading on the EU markets? Are there any structural shifts that you noticed, or envisage, which you believe should be further monitored?*

Please refer to our answers to questions 20, 22 and 23.

*Question 25: Please highlight any concerns/issues you may have at this stage? Do you see a need for specific for regulatory interventions (please provide details possibly relating to the information and data available or observed)?*

AMAFI considers that two main issues prevent at this stage a comprehensive assessment of the market structure:

▪ **Lack of a clearly identified market failure warranting regulatory intervention**

Decisions with a potential to impact European equity market structure should be taken with full consideration of objective elements and only after a careful assessment of what it is that adjustments would seek to address. Referring to the recent E6 letter “*requir(ing) Systematic Internalisers to provide a meaningful price improvement for retail orders*” and the ECON Rapporteur’s report fixing the price improvement by 1 tick, it is unclear what these significant changes to market structure are meant to address in regards to the efficiency of EU equity markets .

▪ **Importance of a data-based approach**

The question of whether sufficient liquidity remains available in lit markets to support an efficient price formation is undoubtedly fundamental, as it serves as the reference price. However, it should be examined with the greatest objectivity, as the debate is heavily influenced by competition considerations between execution mechanisms, let alone Member States. These factors make it particularly important that any policy conclusions be supported by robust empirical evidence.

In this context, ESMA has a critical role to play in deepening its analysis of the market structure and ensuring that future policy discussions are grounded in comprehensive, reliable and properly interpreted data. The objective is to obtain a better understanding of market structure and of the main trends over time, in order to take the most appropriate regulatory decisions. The first stage should therefore be to review the flagging regime, so as to ensure reliable, stable and consistent information (see question Q22).

- data quality and completeness
- consistency between transaction reporting and post-trade transparency
- the correct use and interpretation of transparency flags

- ensuring that regulators and market participants can understand liquidity dynamics
- the risk that excessive regulatory intervention could reduce available liquidity or drive order flow outside the EU

■ **Risk of unintended adverse effects on the competitiveness of EU market participants and EU capital markets.**

AMAFI also has concerns with regards to measures affecting European based SIs to the extent that they could weaken the competitiveness of European market participants with no assurance that trading flows would be redirected to other European based trading mechanisms. This is because a significant portion of the orders executed on EEA shares originates from non-EU investors, who can decide freely to execute their orders on non-EU venues or with non-EU based SIs. In addition, the share trading obligation applies to EEA investment firms that must ensure that trades they undertake in EEA shares take place on a regulated market, MTF, systematic internaliser or equivalent third country venue. It does not apply to non-EEA investment firms who do not receive the orders from an EEA investment firms. As such, around 60% of SI turnover on EEA shares are executed by UK-based SIs<sup>5</sup>, which are not subject to the Share Trading Obligation.

As a result, there is ground to believe that constraints on European-based SIs would benefit UK based SIs not bound by the same constraints and able to answer investors' needs in a manner EU-based trading mechanisms, alternatives to an SI, cannot. In other terms, market structure reforms should not assume that trading activity will necessarily remain within the Union: there is no such thing as a zero-sum game at the boundaries of the Union.

The measures being discussed that are of particular concern are the following:

- The real-time identification of the SI in post-trade transparency reports: this could reveal the individual positioning and risk-taking activity of the SI, thereby facilitating reverse engineering of liquidity provision strategies and reducing their ability to commit capital.  
This would also create an asymmetry with trading venue execution. In a lit environment, post-trade transparency does not reveal the identity or resulting position of the liquidity provider or allow market participants to reconstruct its resulting position. There appears to be no compelling reason why SI executions should be subject to a higher degree of participant identification than executions occurring on trading venues.

To be noted that there is not a unanimous consensus on this point amongst AMAFI members, as one member, an exchange, considers that the growth of SIs leads to a fragmentation of liquidity, decreases transparency and the quality of price formation. From the perspective of this member, ESMA should adjust the current framework to ensure a level playing field.

*Question 26: Have you witnessed an increase in the use of benchmark trades? If so, what are the drivers of such increase on venue and on SI?*

---

<sup>5</sup> See in Appendix 2

See question 30.

*Question 27: Should the use of transactions from multiple trading venues be allowed when calculating the benchmark?*

See question 30.

*Question 28: When performing benchmark trades, on how many transactions is the calculation of the benchmark trade based (on average, min, max, liquid vs. illiquid instruments)?*

See question 30.

*Question 29: To what extent SI take advantage of the provision in Article 15(3) of MiFIR? Please share any data you may be informative in this context to understand the extent to which SIs use this provision.*

See question 30.

*Question 30: Would you be supportive of ESMA issuing guidance on benchmark trades? If yes, should it encompass quantifying the minimum requirements (e.g. minimum number of transactions to be included when calculating a benchmark price, minimum time period to cover).*

An increase in the use of benchmark trades can be observed, although the drivers of this increase are not entirely clear.

A benchmark trade should not be based on only two transaction prices. To be meaningful, a benchmark should reflect an aggregated value based on several trades. However, AMAFI does not consider it problematic that the transactions contributing to the benchmark price may be executed across different trading venues. On the contrary, in a fragmented market structure, the use of prices formed across multiple venues may contribute to the representativeness and robustness of the benchmark.

Any guidance in this area should remain proportionate and should not turn benchmark trading into an overly prescriptive framework. While certain minimum criteria may help ensure that benchmark prices are sufficiently robust and representative, imposing overly prescriptive requirements on a time period between trades, the number of trades or the venue of execution could reduce the flexibility of a useful execution mechanism. If guidance is deemed necessary, we also suggest that ESMA refer to the number of transactions or the time period to calculate the benchmark, not both.

The issuance of guidance on benchmark trades should be subject to public consultation, in order to properly assess the issues at stake and the potential consequences of the envisaged changes.

*Question 31: Does member preferencing lead to unfair outcomes for end-investors, other members or the markets? Please explain, if possible on the basis of data.*

AMAFI does not consider that member preferencing necessarily leads to unfair outcomes for end-investors or other members or the market, provided that it is implemented within a transparent, non-discretionary and non-discriminatory framework.

Member preferencing is a long-standing market practice which emerged in the early 2000s and that serves legitimate operational purposes, in particular by reducing post-trade processing, clearing and settlement costs. Where the rules governing the matching logic are clearly disclosed in the rulebook or relevant market documentation, are applied consistently to all eligible participants, and do not override price priority, such mechanisms should not be regarded as inherently detrimental to market fairness or investor outcomes. By not overriding price priority, we mean that that the practice does not allow an order to obtain execution ahead of a better-priced order. It only affects the allocation between orders that are otherwise eligible for execution at the same price.

From a market structure perspective, the important safeguard is transparency of the rulebook. In a multilateral execution mechanism, participants should be able to understand ex ante how the book operates. Member preferencing is not discriminatory by nature where it is applied according to predefined transparent and objective rules. It can be made available to all relevant participants, allowing each user to decide, based on its execution strategy, whether to benefit from the preference mechanism or to route its flow to another execution venue

AMAFI acknowledge that member preferencing may create a priority effect for certain members and may therefore be perceived as favouring larger or more active participants. However, this effect should not be assessed in isolation. Broader developments in market structure, including increased fixed costs linked to technology, connectivity, smart order routing and algorithmic execution, are likely to have a more significant impact on concentration among intermediaries than member preferencing itself

A related topic is when a platform, formally presented as multilateral, would restrict members' access on a way that is not based on objective, transparent and proportionate criteria. This practice could raise discrimination concerns. The relevant policy focus should therefore not be on member preferencing as such, but on whether multilateral venues remain genuinely open, transparent and non-discriminatory, and whether participants can understand ex ante how orders will be matched.

*Question 32: To what extent do you see evidence that member preferencing extends in practice beyond jumping the queue and may also violate price priority principles?*

Evidence of the negative effects of member preferencing has yet to be provided for multilateral venue and member preferencing should not be presumed to create unfair outcomes.

*Question 33: Should member preferencing be (a) prohibited, (b) should there be rules restricting the practice, or (c) should nothing be done? If you suggest there should be rules (b), which rules would you suggest? Please explain.*

AMAFI does not support prohibiting member preferencing and does not currently see a need for additional regulatory restrictions on the practice.

In the absence of proven negative effect “(c) Nothing should be done”.

*Question 34: What would be the consequence of prohibiting certain forms of member preferencing? Please explain, if possible on the basis of data.*

Please refer to questions 31 and 32.

*Question 35: Are you aware of other similar and common practices, for example on RFQs, where on venue competition is limited to the detriment of other investors or members? Please explain, if possible with data.*

AMAFI does not respond to the question.

*Question 36: Do you agree with the above three approaches?*

i. The statement that “addressable liquidity trades” are “those relate to transactions where another investment firm or client could have been a party to the transaction and provided liquidity to the market;” does not raise any particular concern.

iii. The statement that “transactions subject to conditions other than the current market price” are those “that are executed at a price which is determined by factors other than the current market valuation. Those transactions are negotiated transactions of third type (NT3), and they may constitute addressable liquidity in the case of portfolio trades or certain benchmark trades” does not raise any particular concern.

ii. The statement that “non-price forming transactions” are “transactions that do not reflect a price determined through the genuine interaction of buying and selling trading interests” but “may constitute addressable liquidity;” partly raises concerns.

The fact that non-price forming transactions may constitute addressable liquidity is not disputed. However, define “non-price forming liquidity” by reference to transactions that “do not reflect a price determined through the genuine interaction of buying and selling trading interests” is questionable.

Price formation is not the only result of “the genuine interaction of buying and selling trading interests”: for example, transactions executed at an imported price, influence other orders

and therefore the market price through two mechanisms: *in media res* interaction and *ex post transparency*.

### ***In media res* influence**

Some orders whose prices do not result from the interaction of buyers and sellers may nevertheless influence prices that do result from such interaction, where those orders are processed together within the same execution mechanism.

For example, when a midpoint-pegged order is executed, it may displace other less competitive orders for as long as sufficient quantity on the pegged order is available. In that sense, a midpoint-pegged order may affect the execution outcome and may influence the price through a draining effect of orders priced above. In that sense, this kind of interaction, make such transactions *in media res* price forming by draining effect.

However, this price-forming effect exists only in relation to the interaction between supply and demand within the same trading venue. An interaction entirely made of midpoint-pegged orders would not be price forming in media res.

### ***Ex post* influence**

The market is not only informed by pre-trade transparency, through the number and depth of buying and selling interests visible in the order book at a given point in time, but also by post-trade transparency, once an executed transaction is made public.

When a transaction is executed and published, the price information it conveys is acknowledged by the market. In that sense, transactions that are not executed through the direct interaction of buying and selling interests may still contribute to price formation through post-trade transparency, once the execution price becomes available to other market participants, by letting or refraining them imputing orders in the order book.

**Question 37:** *Do you agree with this first part of the table on addressable liquidity and price forming?*

The first part of table on the addressable liquidity does not raise any particular concern.

**Question 38:** *Do you agree with this second part of the table on addressable liquidity and price forming?*

The second part of table on the addressable liquidity does not raise any particular concern.

*Question 39: Would you consider that some benchmark transactions should be classified as non-addressable and non-price forming? If so, provide a clear description of the case and rationale.*

Benchmark transactions are non-price forming, as their price is imported, i.e. calculated by reference to a price that is calculated over multiple times instances according to a predefined benchmark.

However, benchmark transactions should not be considered as non-addressable liquidity. Addressability refers to liquidity that a market participant can effectively reach or consume, such as liquidity available on a lit order book, or in a periodic auction, through an executable SI quote, or through a genuinely accessible RFQ mechanism. A benchmark trade (such as a guaranteed vwap) corresponds to liquidity for which the price is imported at the time of execution. The fact that the price is imported does not prevent this liquidity from being accessible to other members.

*Question 40: Do you agree with this third part of the table on addressable liquidity and price forming?*

The third part of table on the addressable liquidity does not raise any particular concern.

*Question 41: Do you agree that all transactions without a flag should be considered addressable liquidity and price forming?*

Transactions without a flag should not automatically be considered addressable liquidity and price forming.

Market participants are facing difficulties in applying flags correctly, as shown by inconsistencies between post-trade transparency data and transaction reporting data. Flags do not, by themselves, always provide fully reliable information. Conversely, the absence of a flag does not guarantee that the transaction has been correctly reported or that no flag should have been applied.

Treating all unflagged transactions as addressable and price forming could therefore lead to misleading results. It may classify transactions as addressable and price forming simply because no flag was applied, rather than because the transaction are actually addressable and price forming.

For this reason, the absence of a flag should not be used as a conclusive criterion. ESMA should instead consider whether additional checks, clearer guidance or improved flagging rules are needed to ensure a more reliable classification.

The market needs reliable flagging. An important review of RTS 1 and RTS 22 is needed to ensure that both regimes achieve their respective objectives.

Post-trade transparency indicators should provide clear information on whether a transaction is price forming or non-price forming, and whether it is addressable or non-addressable. This information is essential for the market and for asset managers. It is also a competitiveness issue for EU capital markets.

By contrast, transaction reporting has a different objective. Its primary purpose is to allow competent authorities to detect and investigate market abuse. The information required under RTS 22 should therefore be reviewed in light of that objective, focusing in particular on elements such as size, origin, issuer, and the identity of the buyer and seller. A dedicated working group should be established to carry out this review and assess how RTS 1 and RTS 22 could be better aligned with their respective purposes, while simplifying the transparency regime as a whole.

*Question 42: Do you agree with this fourth and last part of the table on addressable liquidity and price forming?*

The last part of table on the addressable liquidity does not raise any particular concern.

*Question 43: Do you agree with the approach on the combination of flags in the case of addressable liquidity?*

AMAFI agrees with the proposed approach.

Where a transaction is flagged with both an addressable and a non-addressable indicator, the non-addressable flag should prevail. The presence of a non-addressable flag indicates that at least part of the transaction's characteristics does not correspond to addressable liquidity.

*Question 44: Do you agree that intragroup transactions executed by SIs should not constitute addressable liquidity and therefore, could be flagged (i.e. a new flag in RTS 1 could be added to disentangle those transactions)? Do you agree that intragroup transactions executed by SIs should be classified as non-price forming?*

Creating flag to identified intragroup transactions would be useful, as it would provide a more granular view of the addressability of transactions executed by SIs. However, this issue is not limited to SIs. It may arise for all intragroup transactions, irrespective of the execution channel. Intragroup transactions do not contribute to addressable liquidity by definition, since no other stakeholder can substitute itself for the buyer or the seller, see question 36.

As mentioned, a dedicated working group should be established to carry out this review and assess how RTS 1 and RTS 22 could be refit to simply the transparency regime and better align with their aims.

*Question 45: Do you believe that other transactions should be flagged and excluded from the calculation of addressable liquidity (i.e. a new flag in RTS 1 should be added to disentangle those transactions)?*

Please see our answer to question 44.

### **APPENDIX 1: Volatility and addressable liquidity analysis**

Empirical analysis, produced by AMAFI, of the evolution of market shares across the main categories of addressable liquidity in European equities, based on BMLL post-trade transparency data.

The objective is to assess the extent to which the relative evolution of continuous lit trading can be explained by volatility regimes, and whether a more structural trend remains observable after controlling for these market effects.

The analysis notably distinguishes between:

- Cyclical effects linked to volatility episodes;
- Market share trends recalculated on the addressable perimeter;
- The evolution of absolute turnover amounts by category.

#### **Data used and addressable perimeter**

The analysis is based on BMLL post-trade transparency data covering the period from 2022Q1 to 2025Q4.

The following categories are included in the addressable perimeter:

- Continuous lit trading on regulated markets;
- Continuous lit trading on MTFs;
- Closing and intraday auctions;
- Dark trading;
- Frequent batch auctions;
- Addressable SINT.

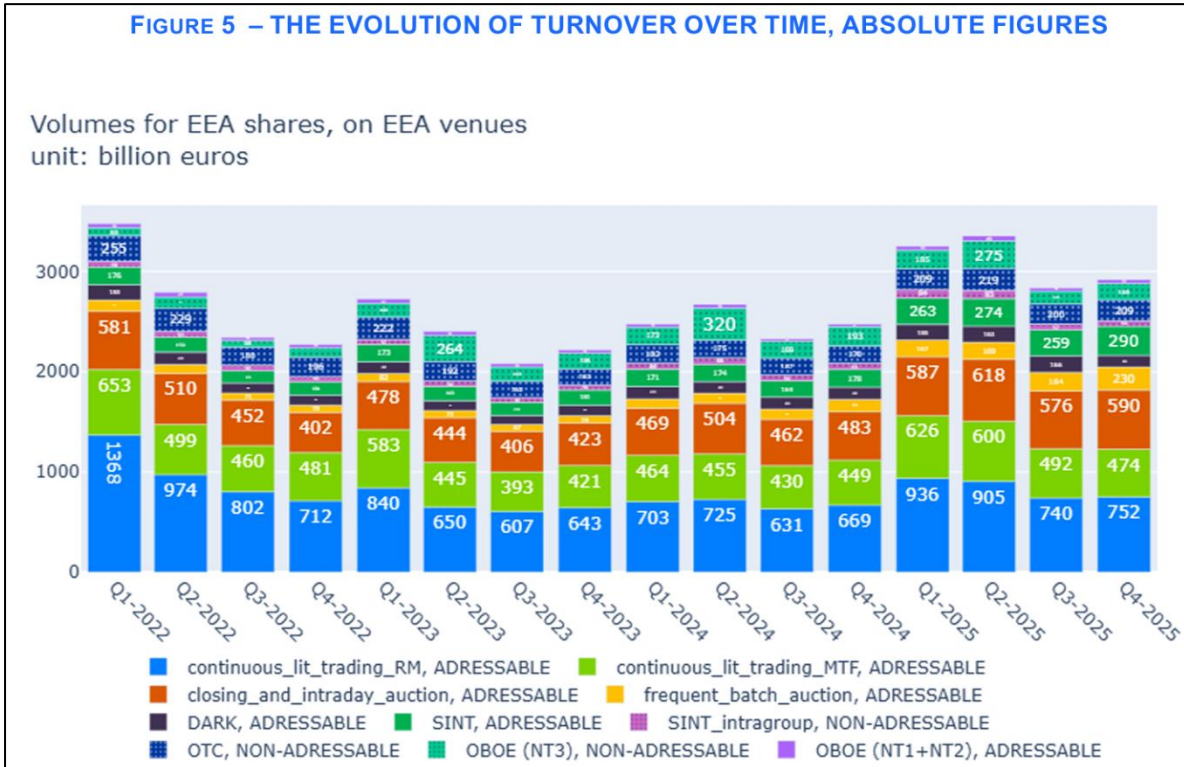
Market shares are recalculated directly from the daily turnover amounts observed in these categories.

**For a given quarter (t):  $Market\ share\ of\ category\ (t) = turnover\ of\ category\ (t) / total\ addressable\ turnover\ (t)$**

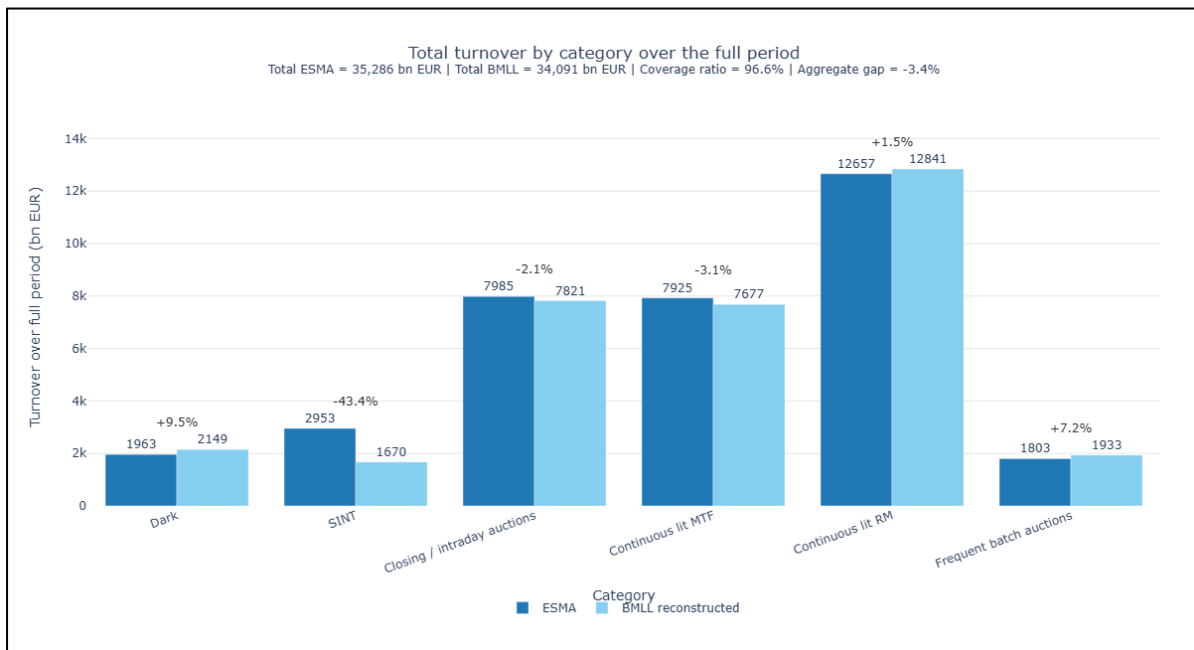
Total addressable turnover corresponds to the sum of the categories included in the addressable perimeter.

#### **Comparison with ESMA data**

As a first step, the reconstructed BMLL data are compared with the categories presented by ESMA in Figure 5.



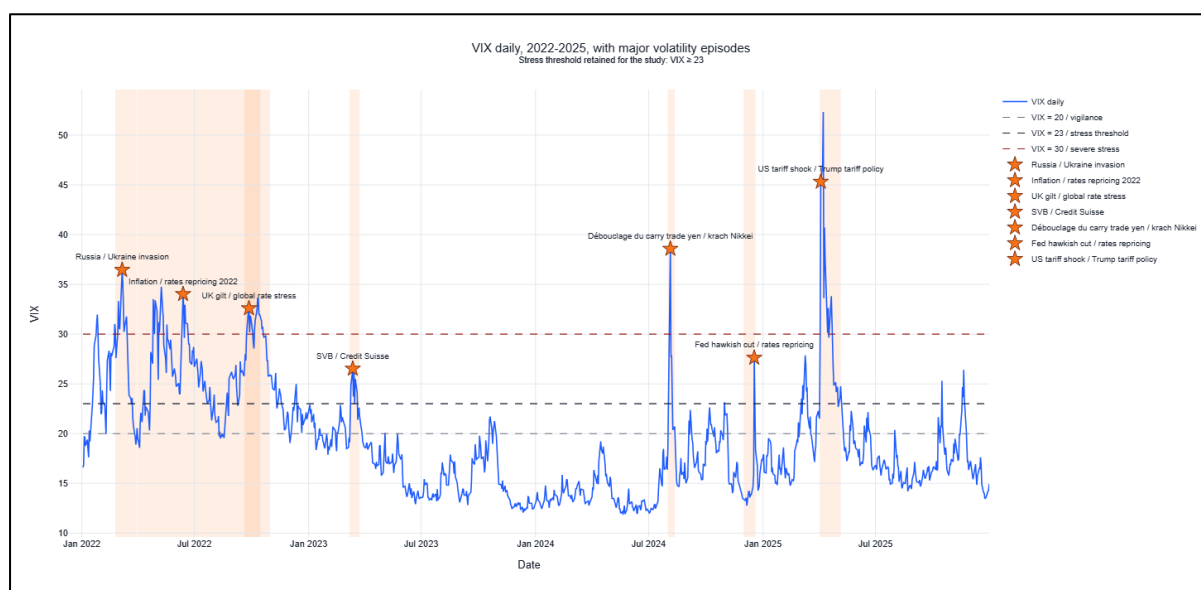
This comparison shows that the BMLL data satisfactorily reproduce the overall orders of magnitude on the addressable perimeter, with a limited aggregate difference of approximately 3% over the full period.



Larger differences nevertheless appear for certain categories, in particular SINT. This discrepancy can notably be explained by differences in source and methodology: the BMLL analysis is based on post-trade transparency data and on flows available through identified APAs and reporting venues, whereas ESMA relies on its own MiFIR regulatory data.

### Determination of the volatility regime

Volatility is measured using the daily VIX over the 2022-2025 period.



The main threshold retained to identify stress days is: **VIX ≥ 23**

This threshold is not presented as a universal market standard. It is retained as an intermediate empirical threshold, calibrated on the sample under review.

The rationale is as follows:

- **VIX ≥ 20** captures a large number of trading days, including periods of vigilance or moderate volatility;
- **VIX ≥ 25** is more selective but may exclude certain episodes of moderate stress.

**VIX ≥ 23** provides a compromise between these two thresholds, being more selective than 20 without being as restrictive as 25.

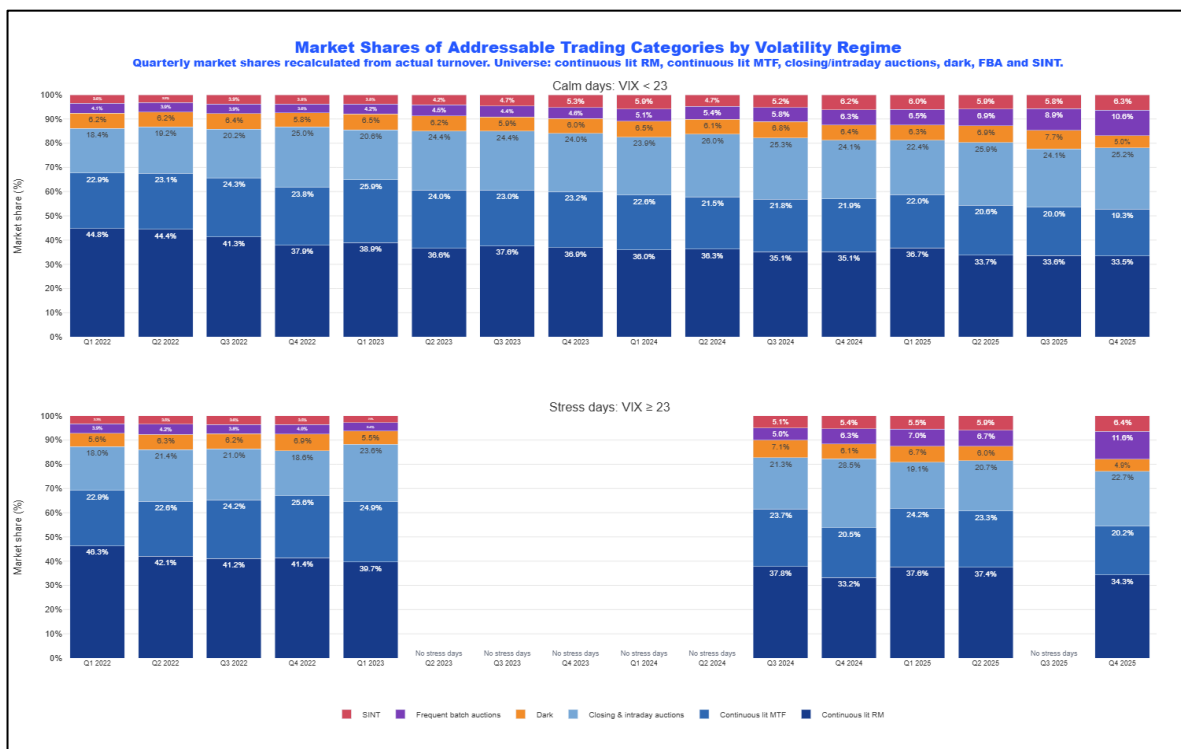
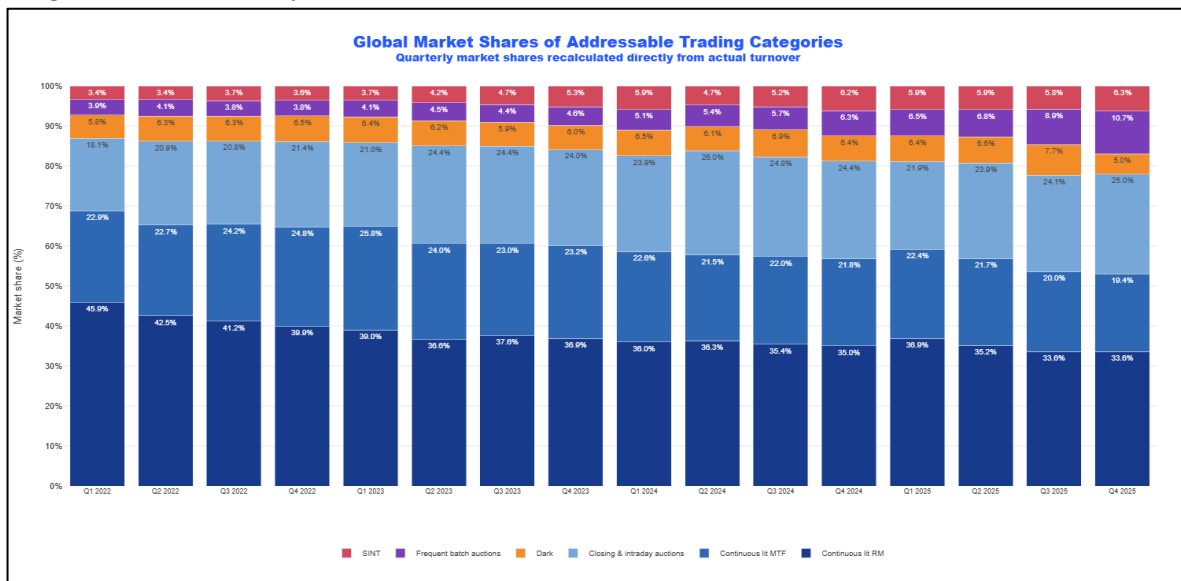
This approach is consistent with the classification commonly used in the financial literature<sup>6</sup>.

<sup>6</sup> The  $VIX \geq 23$  threshold is used as an intermediate stress threshold, between the commonly used  $VIX < 20$  level, generally associated with calmer market conditions, and  $VIX > 30$ , generally associated with heightened market uncertainty. See, in particular, Investopedia, *Cboe Volatility Index (VIX)*; Hsu & Murray, *On the Volatility of Volatility*.

## Recalculation of market shares by volatility regime using BMLL data

The market shares of the addressable categories are recalculated quarter by quarter, and then broken down by volatility regime, distinguishing between calm and stress days using the  $VIX < 23$  /  $VIX \geq 23$  threshold.

This methodology makes it possible to observe how addressable flows are redistributed across categories when volatility increases.



The analysis by volatility regime suggests that periods of elevated volatility are associated with a relative reallocation of flows towards continuous lit trading. This interpretation should, however, remain cautious, as volatility episodes are not homogeneous: they differ in terms of duration, intensity, origin and broader market context, which may lead to different allocation patterns across quarters. Despite this heterogeneity, a directional trend emerges: in several quarters including stress days, the combined share of lit RM and lit MTF appears higher on stress days than on calm days. Conversely, closing / intraday auctions and dark / FBA / SINT mechanisms do not appear to benefit from the same relative increase during periods of stress.

This initial observation remains descriptive, notably because the number of stress days varies significantly across quarters and some quarters do not include any day with  $VIX \geq 23$ . It nevertheless provides a working hypothesis: when volatility increases, addressable flows appear to shift more towards continuous lit mechanisms. This hypothesis is tested more directly in the daily VIX / market share analysis and in the category-level correlation table.

### Daily VIX / market share analysis

A daily analysis is also conducted to assess more directly the relationship between the level of the VIX and the market share of three aggregated blocks:

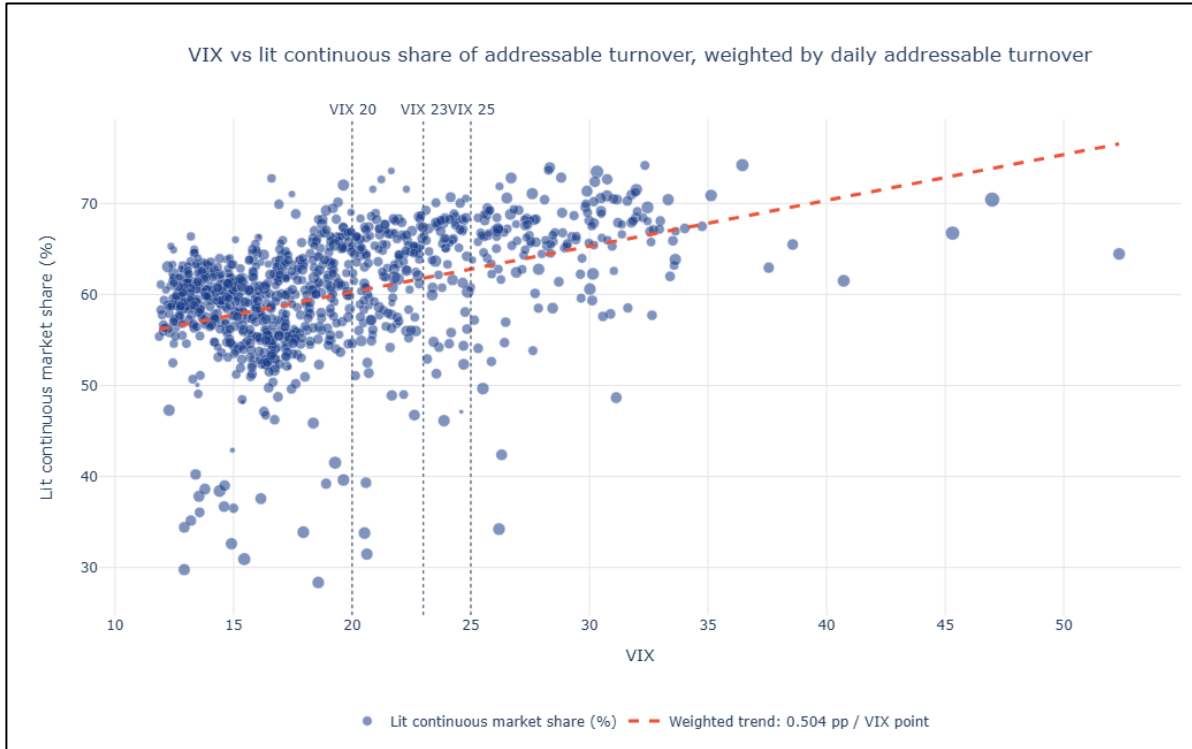
- Continuous lit trading: lit RM + lit MTF;
- Closing / intraday auctions;
- Dark + FBA + SINT.

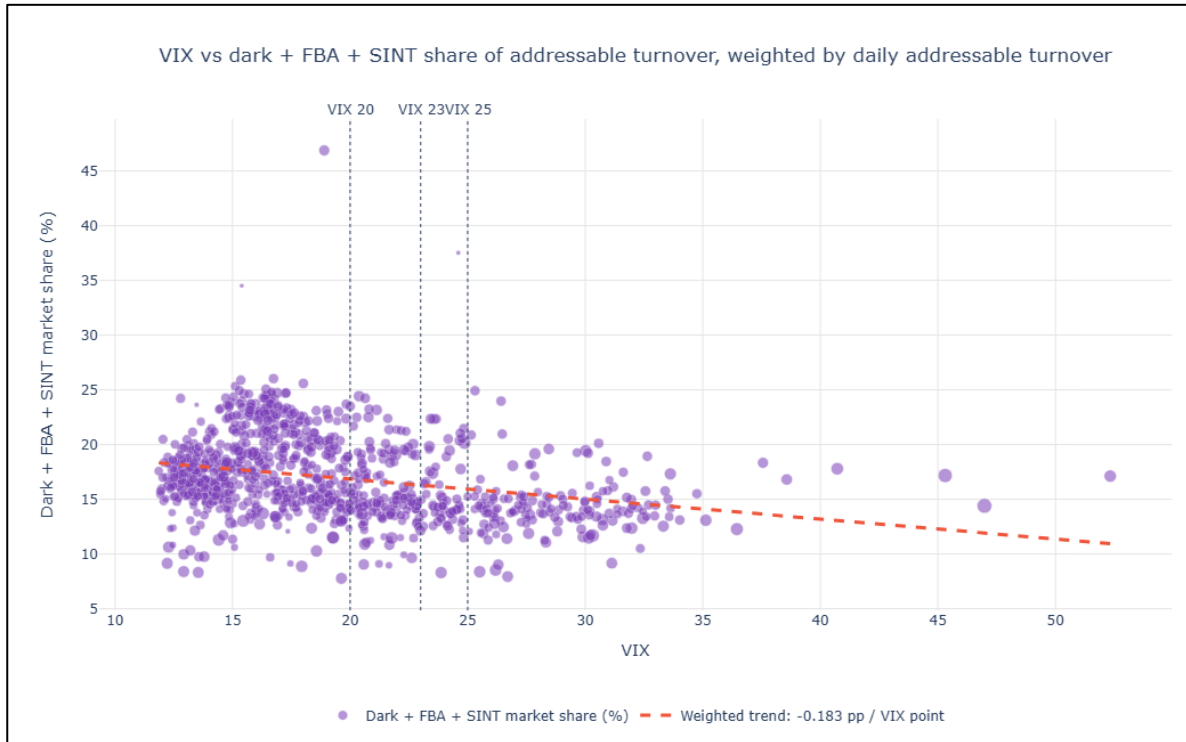
For each trading day ( $t$ ), the market share of a block is calculated as follows: **Market share of block ( $t$ ) = turnover of block ( $t$ ) / total addressable turnover ( $t$ )**

This daily market share is then compared with the level of the VIX observed on the same day.

In the scatter plots, each point represents one trading day, with the VIX on the x-axis and the block's share of total addressable turnover on the y-axis. The size of each point reflects the total addressable turnover of the day, and the dotted trend line is weighted by the same turnover measure.

The size of the points therefore reflects the overall economic weight of the trading day within the addressable perimeter.





The scatter plots highlight the sensitivity of market shares to the level of the VIX through a trend slope weighted by total addressable turnover. For continuous lit trading, the positive slope of +0.504 percentage point of market share per one-point increase in the VIX indicates that higher volatility is associated with an increase in its relative share. Conversely, the negative slopes for closing / intraday auctions (-0.321) and for the dark + FBA + SINT block (-0.183) indicate that these mechanisms tend to lose relative market share as volatility increases.

The p-values below 0.01 indicate that these relationships are statistically significant with a confidence level above 99%. The R<sup>2</sup> values nevertheless remain moderate, showing that the VIX captures a significant directional relationship, without explaining on its own all daily variations in market shares.

The category-level correlation table complements the aggregate reading of the scatter plots.

Category	Pearson <sup>7</sup>	Spearman <sup>8</sup>
Continuous_Lit_RM	0.4703	0.4613
Continuous_Lit_MTF	0.262	0.306
Closing_&_Intraday_Auction	-0.2851	-0.4938
Dark	-0.0272	-0.0056
Frequent_Batch_Auction	-0.2471	-0.3576
SINT_addressable	-0.2802	-0.4123

<sup>7</sup> Pearson measures the linear relationship between two variables

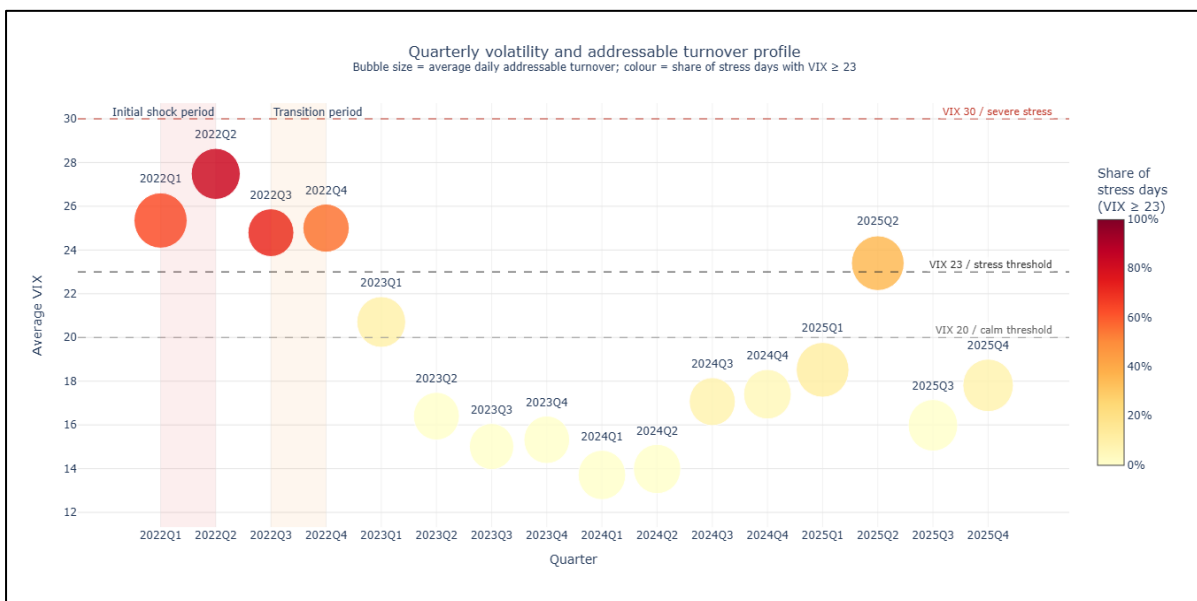
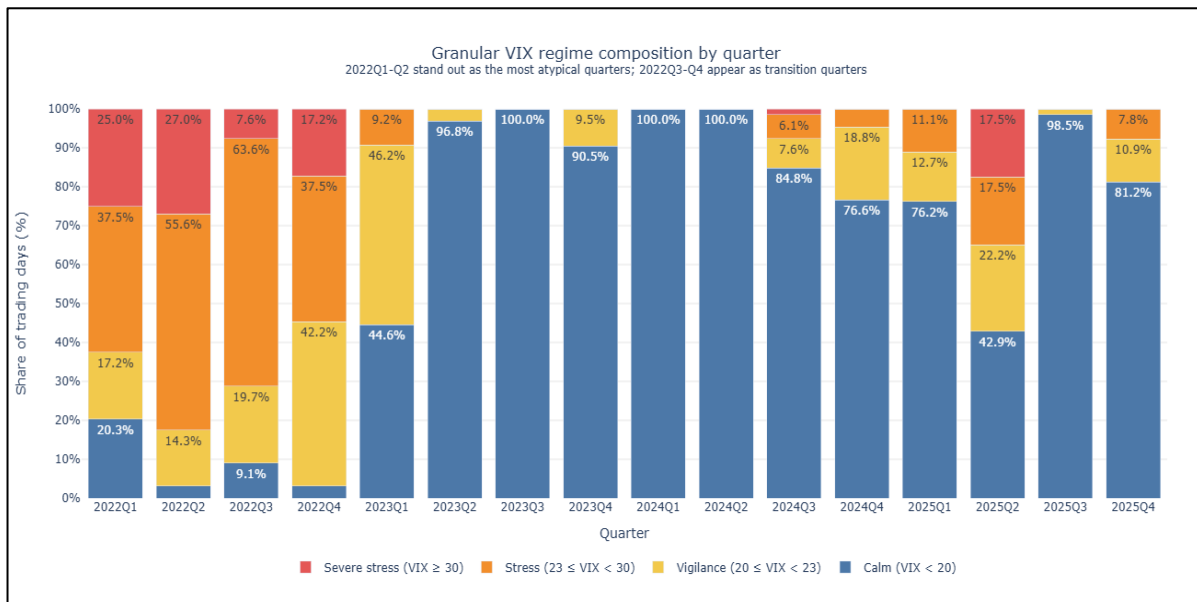
<sup>8</sup> Spearman measures their rank relationship, i.e. whether they tend to move in the same direction.

Correlation coefficients range from -1 to +1. In absolute terms: < 0.20 = weak; 0.20-0.40 = moderate; 0.40-0.60 = relatively marked; > 0.60 = strong.

It confirms that the positive relationship between the VIX and the market share of continuous lit trading is mainly driven by lit RM, while lit MTF shows a more moderate relationship. Conversely, closing / intraday auctions, FBA and SINT display negative correlations, confirming that they do not gain relative market share when volatility increases.

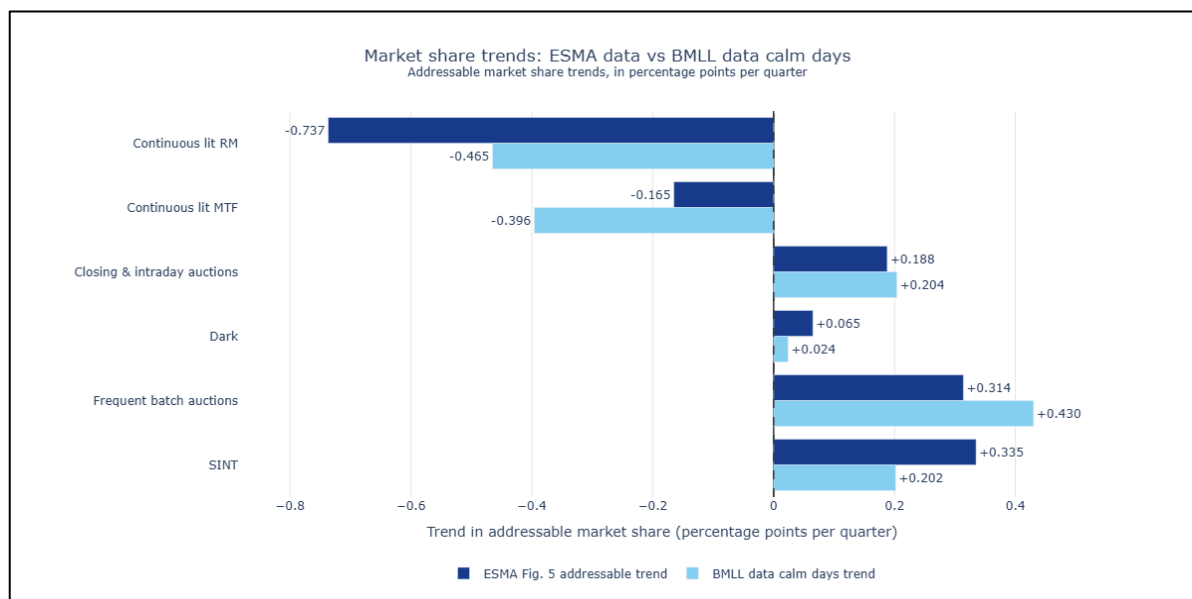
### Trend analysis after excluding the atypical quarters of early 2022

The first two quarters of 2022 are treated with caution. They correspond to a period of elevated volatility, with a limited number of calm trading days and exceptionally high volumes. They may therefore distort the analysis of medium-term trends.



A robustness analysis is therefore conducted from 2022Q3 onwards.

After excluding 2022Q1 and 2022Q2, the relative decline in continuous lit trading remains visible, even when calm market conditions are isolated. However, it appears less pronounced than in the aggregate trend observed over the full period.



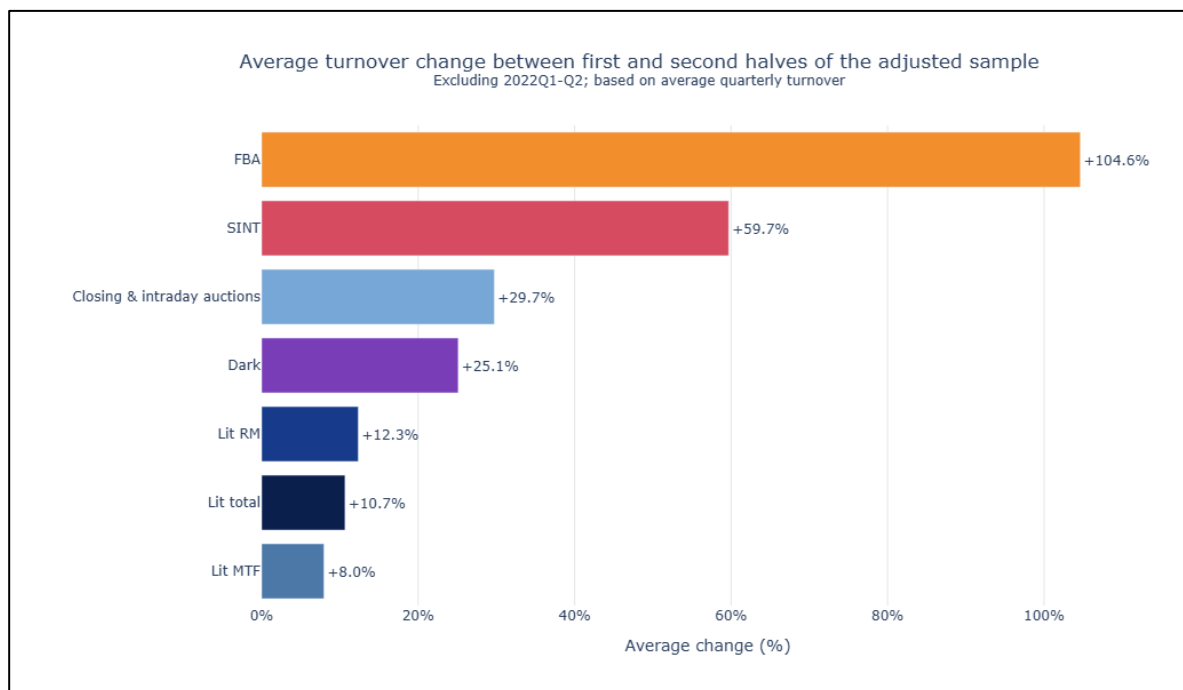
The chart compares two measures of addressable market share trends by execution mechanism, expressed in percentage points per quarter.

The first bar corresponds to the trend recalculated from ESMA Figure 5 data, restricted to the addressable perimeter. The second bar corresponds to the BMLL trend calculated only on calm trading days, in order to isolate, as far as possible, the effect of volatility episodes.

This comparison shows that the relative decline in continuous lit trading remains visible in the BMLL data, including when only calm trading days are retained. However, the decline appears less pronounced, in particular for lit RM. Conversely, FBA, SINT and, to a lesser extent, closing / intraday auctions display positive trends.

### Analysis in absolute amounts

The market share analysis should be complemented by an analysis in absolute amounts. A decline in market share does not necessarily imply a decline in traded volumes: it may also reflect faster growth in other categories.



The variation is measured between the average quarterly turnover of the first half and that of the second half of the adjusted sample, rather than between the first and last quarters, in order to limit sensitivity to isolated quarterly observations.

The analysis in absolute amounts shows that continuous lit trading retains a significant activity base. Excluding early 2022, lit RM does not decline in absolute terms and increases by 12.35%, while lit MTF also increases, albeit more moderately, by 7.96%. Continuous lit trading therefore remains material in absolute terms and does not disappear.

By contrast, other mechanisms grow more rapidly: closing / intraday auctions increase by 29.7%, FBA by 104.6%, dark trading by 25.1% and SINT by 59.7%. This faster growth indicates that new flows or marginal growth in addressable volumes are captured to a greater extent by these mechanisms, in particular FBA and SIs.

This reading therefore qualifies the market share analysis: the relative decline in continuous lit trading reflects less a contraction of lit liquidity in absolute terms than a relative loss of attractiveness in the distribution of addressable volumes. Lit trading retains a significant base but captures a smaller share of marginal growth.

These findings call for two complementary analyses:

- **Quality of lit liquidity:** assessing whether the quality of liquidity on continuous lit markets has evolved despite the persistence of this volume base, for example through spreads, available depth or market impact.

**Interaction with other mechanisms:** analysing whether executions carried out in dark trading, FBA or SI mechanisms have an observable impact on continuous lit order books, notably through subsequent price movements. This analysis would help determine whether these mechanisms

primarily rely on prices formed elsewhere or whether they themselves contribute meaningfully to the price formation process.

### **Conclusion**

The analysis highlights three main findings.

First, volatility has an important cyclical effect on the distribution of addressable flows. When VIX increases, the relative share of continuous lit trading tends to rise.

Second, once volatility is considered, the relative decline in continuous lit trading remains visible, although it appears less pronounced. This trend also persists after excluding the atypical quarters of early 2022.

Third, the analysis in absolute amounts shows that continuous lit trading retains a significant activity base. The observed decline therefore mainly concerns its relative share in the growth of addressable volumes, rather than a net contraction in its absolute volumes.

### Appendix 2 - SI turnover in EEA shares by jurisdiction

The analysis below examines turnover executed by systematic internalisers in EEA equities, distinguishing between flows falling under a UK jurisdiction and those falling under an EU jurisdiction.

The objective is to measure the distribution of SI volumes in EEA ISINs between UK SIs and EU SIs over the 2022-2025 period.

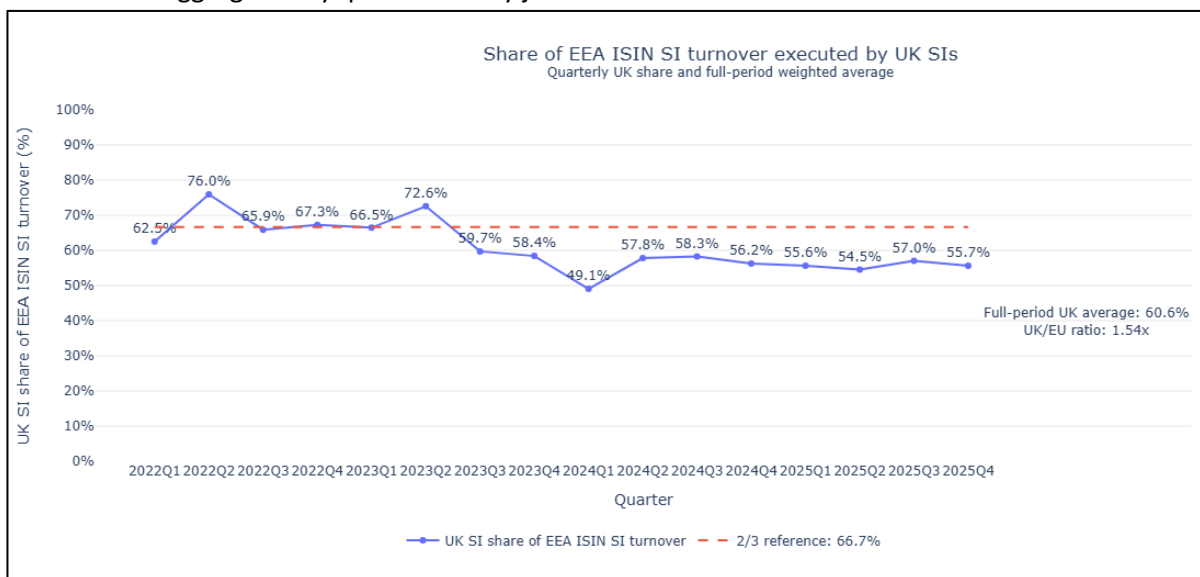
The analysis is based on BMLL data available for SI transactions in EEA equities.

The retained perimeter includes:

- Instruments identified as EEA ISINs;
- Transactions classified as SINT, based on post-trade reports from APAs and reporting venues;
- Flows distinguished according to the reporting or publication jurisdiction.

To the extent that the SINT category reconstructed from BMLL does not perfectly reconcile with ESMA’s addressable SINT category, the results should be read on the retained BMLL perimeter.

Volumes are aggregated by quarter and by jurisdiction.



The chart shows that the majority of SI turnover in EEA equities is executed by UK SIs.

Over the 2022-2025 period, this share averages around 61%. It therefore remains close to the order of magnitude of two thirds, although it is closer to 56% at the end of the period.

These results indicate that UK SIs remain an important execution channel for EEA equities.

