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Your ref.:
Our ref.:

Call for Evidence on the market structure of European equity markets

Norges Bank Investment Management (NBIM) is the investment management division of the Norges Bank and is responsible for investing the Norwegian Government Pension Fund Global. At the end of 2025, the Fund held approximately 170 billion Euros in equities issued by European Union corporates. As a long-term investor, NBIM has a strong interest in well-functioning capital markets that facilitate efficient capital allocation and promote long-term economic growth.

We welcome the opportunity to contribute to this Call for Evidence. NBIM trades European equities across all major venues and mechanisms daily and has engaged actively with European equity market structure for many years.

NBIM's mandate is to generate the best possible long-term return for the Fund. That mandate frames how we assess market structure. Well-designed markets drive intermediation costs down to the level justified by genuine services: liquidity provision, risk absorption, and price discovery. At our scale and investment horizon, unnecessary costs compound materially and reduce the returns available to our ultimate beneficiaries.

European equity market structure has evolved since MiFID II took effect. The changes documented in this Call for Evidence, the decline in lit continuous trading, the growth of frequent batch auctions and the expansion of Systematic Internaliser activity are significant. They deserve careful analysis. But they do not, in our assessment, point to a market failure requiring broad intervention. They point to a market adapting to diverse investor needs, in some cases efficiently, and in other cases distorted by regulatory asymmetries.

A well-functioning market is characterized by competition, transparency, and innovation. These features are not abstract. They reflect what we observe as a daily participant in European equity markets.

Competition requires a level regulatory playing field where venues compete on execution quality, not on regulatory advantage. When competition is fair, investors benefit from lower costs, better service, and choice among mechanisms suited to different order types. Where regulatory asymmetries tilt the playing field, the result is not competition but segmentation.

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Transparency means that market participants and regulators can observe where liquidity resides and at what price. This is essential for best execution, for regulatory monitoring, and for public confidence in market integrity. The consolidated tape is the key piece of infrastructure that delivers this.

Innovation means that new mechanisms serving genuine investor needs are accommodated, not suppressed. Frequent batch auctions, midpoint execution, and trajectory crossing protocols have emerged because they address real issues. They reduce market impact, eliminate the latency arms race, and lower implicit costs. Regulation should evaluate these innovations on their merits.

We offer three observations on what this means and how to respond.

No evidence that the decline in lit trading has degraded price discovery

The coexistence of competing venues under common transparency rules is not a market failure. Investors benefit from choice of mechanisms. Competition among venues drives quality improvements and diversity can support market resilience.

ESMA's analysis shows that addressable liquidity has remained at 85–90% of total turnover throughout the period covered and that central limit order books remain dominant by transaction count at approximately 78%. There is no evidence in the available data of a deterioration in price formation quality.

The shift in execution venue reflects legitimate demand. Large institutional orders benefit from mechanisms that reduce market impact and information leakage. This is rational behaviour, not a market deficiency. Where fragmentation becomes a concern is when regulatory asymmetry drives the venue choice. This leads to segmentation, and it is an appropriate target of regulatory attention.

The right response to competitive fragmentation is not to reverse it, but to connect the fragments. The consolidated tape serves as the common information layer connecting competing venues into an integrated market.

We regard an effective consolidated tape as the single most impactful transparency reform available to European policymakers. The consolidated tape should in the future include pre-trade data, attributed to venues, at low latency, with sufficient depth to provide a meaningful picture of available liquidity. A tape meeting these criteria would produce a consolidated European Best Bid and Offer that investors could use as a genuine execution benchmark. It would make venue quality observable and comparable, strengthening competition. It would reduce the information asymmetry between large firms with direct exchange feeds and smaller participants without them.

The Single Volume Cap illustrates the limits of prescriptive intervention. The regulator intended the SVC to protect lit price formation by capping dark trading. In practice, it redirects volume to other mechanisms, notably frequent batch auctions, without improving market quality. NBIM supports its removal.

Sound policy also requires sound data. We share the concern that current trade flag classifications do not reliably distinguish accessible liquidity from contingent, intragroup, or administrative activity. Improving trade flag granularity and consistency should be a prerequisite for structural reform.

Fair competition requires functional equivalence

The growth of midpoint and sub-tick execution reflects genuine investor demand. Frequent batch auctions and SI midpoint matching can reduce transaction costs for non-latency-sensitive institutional participants.

The current framework does not treat these mechanisms neutrally. Investment firms may offer midpoint execution under the SI regime. Multilateral trading venues seeking to offer economically equivalent mechanisms face constraints. This is a venue-category distinction, not a functional one. Order flow migrates to SIs because the regulatory framework provides certain advantages.

Regulation should follow economic function. Midpoint execution delivering genuine price improvement should be available to any venue. Sub-tick activity that does not deliver genuine price improvement should be restricted regardless of venue type. FBA mechanisms performing the same economic function as exchange auctions should face the same regulatory treatment.

The same principle applies to the negotiated transaction waiver. Multilateral venues should be permitted to offer trajectory crossing and percentage-of-volume protocols on the same terms available to SIs and broker networks. The current interpretation creates a structural asymmetry contrary to the objective of creating an integrated market with a 'level playing field.'

Fair competition must also apply within venues. Where exchanges benefit from regulatory frameworks that protect their price formation role, they should be held to a correspondingly high standard of non-discriminatory access. Member preferencing arrangements that systematically advantage affiliated intermediaries over independent participants are difficult to reconcile with this standard, particularly in the closing auction.

The closing auction should compete on merit as a natural focal point

The primary exchange closing auction is operationally important for NBIM. It determines reference prices for portfolio valuation, performance measurement, and index rebalancing.

The closing auction's strength is self-reinforcing as liquidity begets liquidity. We do not believe it requires regulatory protection. The primary exchange should compete for participation through attractive pricing and service quality.

Alternative closing mechanisms might serve participants with specific execution requirements. ESMA's role should be to ensure that alternative mechanisms are transparent about their pricing methodology.

We note the growing interest in extended and 24-hour trading. Extended sessions are acceptable for genuine out-of-hours needs. They must not be structured to compete with the primary closing auction as an end-of-day price formation event.

Our specific responses to the consultation questions are set out below.

NBIM appreciates the opportunity to contribute to this call for evidence. We remain at your disposal should ESMA wish to discuss any of our views and look forward to continued engagement as this work develops.



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Appendix: Responses to Individual Questions

SECTION 2: MARKET STRUCTURE OF EUROPEAN EQUITY MARKETS

Q4: 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?

The decline in lit CLOB trading has two distinct drivers. They warrant different responses.

The first is legitimate substitution. Institutional investors are migrating large orders to mechanisms that reduce market impact and information leakage. This is rational behaviour. It is not a market failure. The academic literature supports this: fragmentation under common disclosure rules improves welfare, provided pre-trade information is available (Madhavan 1995, Foucault and Menkveld 2008).

The second is regulatory arbitrage. Tick-size asymmetry permits SI midpoint matching and off-tick FBA execution at lower cost than continuous on-venue trading. This is a regulatory distortion. It should be corrected through functional equivalence, not by restricting the mechanisms themselves.

ESMA's data shows no evidence that the compositional shift has degraded price discovery to date. Addressable liquidity remains at 85-90%. The CLOB remains dominant by transaction count at approximately 78%. There is no indication in the available evidence that price formation quality has deteriorated.

The risk is prospective. Mechanisms that reference rather than generate price -- FBAs, SI midpoint, RP dark -- create circularity risk if the CLOB loses sufficient informational participation (O'Hara 2003). This risk is cumulative rather than sudden. ESMA's intention to monitor continuously is appropriate. The threshold at which lit market-making economics become unviable may not be identifiable until it is crossed.

ESMA should distinguish between these two drivers. The first calls for no intervention. The second calls for targeted correction of the specific asymmetries.

Q5: What are the drivers that you consider most relevant when choosing on which execution venue and with which execution method to trade?

Our primary drivers are:

- Likelihood of locating natural counterpart liquidity without material price impact or information leakage.
- Price certainty and access to the primary closing price for benchmark-linked and passive rebalancing activity.

- Minimising total execution cost, including both explicit fees and implicit market impact.

We use the full range of available mechanisms. Selection is driven by order characteristics -- size, urgency, benchmark sensitivity -- not by regulatory categories or venue preferences.

The absence of an effective consolidated tape materially limits best execution evaluation across European venues. NBIM supports a pre-trade tape that is venue-attributed, low-latency, and includes sufficient orderbook depth to reflect genuinely available liquidity -- not merely a top-of-book snapshot. Such a tape would provide a consolidated European Best Bid and Offer usable as a real execution benchmark, enable comprehensive transaction cost analysis, and broker selection, and serve as the primary coordination mechanism for fragmented European liquidity. Attribution is critical: anonymous consolidation would limit the ability to assess venue quality and would remove the competitive pressure on venues to maintain tight quotes.

SECTION 3: DARK TRADING

Q9: 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?

Q10: What concerns/issues do you highlight at this stage? Do you see a need for specific regulatory interventions?

The Single Volume Cap lacks theoretical justification. We see no coherent market failure argument for capping natural liquidity matching between institutional investors at the primary market midpoint. Dark trading under the reference price waiver serves a legitimate execution purpose. There is no demonstrated causal link to market quality deterioration.

Zhu (2014) showed that dark pools attract predominantly uninformed traders, improving overall price discovery by concentrating information-rich flow in lit venues. Comerton-Forde and Putniņš (2015) confirmed this empirically.

The observed substitution from RP dark to FBA trading following SVC suspensions is instructive. The cap redirects trading. It does not improve market quality. NBIM supports removal of the SVC.

SECTION 4: CLOSING AUCTIONS

Q11: What is your view on the evolution and effects of trading in closing auctions on the EU markets?

The growth of closing auction trading from 18% to 19.3% of turnover reflects the structural increase in passive and index-linked investment strategies. This is a welcome development. Well-designed closing auctions concentrate multilateral liquidity at a predictable time and facilitate efficient price discovery.

We distinguish between the establishment of closing auctions -- where regulatory coordination may help overcome collective action problems -- and the maintenance of their primacy, which should depend on competitive merit.

Q12: What is your view on the effects of alternative closing mechanisms offered by MTFs and SIs?

We accept alternative closing mechanisms as a legitimate part of the market. The primary exchange closing auction is a natural focal point because it is the most useful mechanism for the widest range of participants. Its depth, transparency, and role as the definitive reference price create a self-reinforcing value proposition.

What sustains the primary close is competitive attractiveness, not regulation. If primary exchanges price auction participation at a premium, they risk eroding the liquidity concentration that makes their closing price valuable. That is a commercial judgement for exchanges.

ESMA should ensure alternative mechanisms are transparent about their pricing methodology and clearly reference the primary closing price where they use it as a benchmark.

Q13: What will be in your view the effects of 24h / extended trading hours on closing auctions?

Extended trading sessions are acceptable for genuine out-of-hours execution needs. They must not be structured to compete with the primary closing auction as an end-of-day price formation event. The predictability and concentration of the primary close must be preserved.

SECTION 5: FREQUENT BATCH AUCTIONS

Q15: What is your view on the evolution of trading in FBAs on EU markets? Why are those mechanisms gaining traction in your view?

Q16: Do you have any particular observations as regards the impact of SVC on FBAs?

Q17: Are there any emerging structural shifts which you believe would warrant closer monitoring?

FBA market share has grown from an average of 3.1% of turnover in 2022 to 7.9% in Q4 2025. This reflects genuine demand. FBAs offer non-latency-sensitive institutional investors an execution alternative that reduces interaction with speed-advantaged traders. NBIM is among those investors.

FBA volume increases following SVC suspensions. This confirms that the cap redirects trading rather than improving it and strengthens the independent case for FBAs as an execution mechanism.

Q18: What is your view regarding the contribution of FBAs to price formation and transparency?

FBA's contribute to price formation through the aggregation of non-time-sensitive order flow at discrete intervals. Budish, Cramton, and Shim (2015) identified this reduction of the latency arms race as the core benefit of discrete-time trading.

Classifying individual FBA designs as more or less price-forming is not productive. The mechanisms are varied. Their contribution is best assessed through ongoing monitoring of execution outcomes and interaction with continuous market quality.

Q19: Do you see a need for specific regulatory interventions, particularly regarding the tick size regime and its application to periodic auctions?

The tick-size question for FBAs is an auction equivalence question. FBA call auction processes performing the same economic function as exchange auctions should face the same regulatory treatment. ESMA's withdrawal of the Q&A requirement created regulatory ambiguity that should be resolved on functional grounds.

The SI tick-size issue is analytically distinct and should not be conflated with the FBA question. What both share is that the relevant test is economic function: where genuine price improvement is delivered, the mechanism should be permitted. Where sub-tick execution provides only marginal improvement, the distinction should apply uniformly regardless of venue category.

SECTION 6: SYSTEMATIC INTERNALISERS

Q20: What is your view on the evolution of trading of SIs on the EEA markets? What are the main drivers of their growth?

Q21: Does this picture reflect the trends you observe in SI trading?

Q22: What is your perception of the application of price improvement by SIs?

Q23: Which flags do you consider important to identify certain trades related to SI trading?

NBIM uses SIs extensively for large-block execution where minimising market impact is paramount. SI capacity to commit capital, execute at midpoint, and hold information confidentially addresses a genuine institutional need. We support the SI regime as a structural component of European equity markets.

The data environment for SI activity is materially weaker than for on-venue trading and must be improved. The RPRI (price improvement) flag is almost never used, despite SIs regularly asserting price improvement in commercial communications. This makes it impossible to verify best execution claims from public data. ESMA should mandate consistent use of all applicable RTS 1 flag and consider periodic audits.

Data presented at ESMA's recent stakeholder engagement suggests that a small number of dominant SIs account for a major share of SI turnover and transactions, with a significant proportion of those transactions being small and lacking recorded price improvement. This points to significant heterogeneity within the regime. Block facilitation at midpoint for institutional clients is a fundamentally different activity from high-frequency small-lot execution without price improvement. Regulatory responses should be calibrated to the specific behaviour, not applied regime wide.

Q25: Do you see a need for specific regulatory interventions for the SI regime?

The SI regime is valuable and should be preserved. Its growth should reflect genuine execution quality, not regulatory arbitrage.

We observe two asymmetries driving SI volume growth since 2022 beyond what competitive merit would justify. The first is the tick-size regime, which permits SIs to offer midpoint execution under conditions not available to multilateral venues. The second is lighter pre- and post-trade transparency relative to equivalent on-venue transactions.

We would support three reforms:

- First, functional equivalence in tick sizes. Both investment firms and multilateral venues should be permitted to offer midpoint execution on the same terms, where the mechanism delivers genuine price improvement.
- Second, consistent use of RTS 1 post-trade flags, with priority on the RPRI flag.
- Third, separate identification of intragroup SI transactions in post-trade reporting, so they can be excluded from measures of addressable liquidity.

We would not support restricting SIs through volume caps, mandatory quote obligations, or requirements to connect SIs to multilateral venues. These would reduce the availability of block liquidity without addressing the underlying asymmetries.

SECTION 7: BENCHMARK TRANSACTIONS

Q26: Have you witnessed an increase in the use of benchmark trades?

Q27: Should the use of transactions from multiple trading venues be allowed when calculating the benchmark?

Q30: Would you be supportive of ESMA issuing guidance on benchmark trades?

NBIM executes substantial benchmark-linked program business, including VWAP, TWAP, and index-close strategies. The benchmark transaction waiver serves a legitimate purpose, and we support its continued availability.

We note the increase in benchmark transactions migrating to SIs since 2024. Where this reflects genuine benchmark execution, the migration is unremarkable. Where benchmark designation is used primarily to access more favourable SI execution conditions, questions arise about the waiver's intended purpose.

We would support guidance from ESMA on the following: minimum calculation standards, including at least two hours of market data and a minimum number of reference transactions; permitting multi-venue benchmark calculation; and clear criteria distinguishing benchmark transactions from portfolio and contingent transactions.

SECTION 8: MEMBER PREFERENCING

Q31: Does member preferencing lead to unfair outcomes for end-investors, other members or the markets?

Q32: To what extent do you see evidence that member preferencing extends in practice beyond jumping the queue and may also violate price priority principles?

Q33: Should member preferencing be (a) prohibited, (b) should there be rules restricting the practice, or (c) should nothing be done?

Member preferencing may serve legitimate operational purposes: connectivity agreements, sponsored access, or designated liquidity provision. We do not characterise all preferencing as harmful.

Where preferencing systematically advantages affiliated order flow over independent participants without price improvement justification, it raises market quality concerns. The closing auction context is particularly sensitive. It is a single-price mechanism where all participants contribute visible order flow. Any priority advantage not grounded in price improvement benefits affiliated parties at the expense of independent ones.

There is a tension here that ESMA should acknowledge. Venues that serve the public price formation function -- and that benefit from regulatory frameworks designed to protect that function -- should be held to a high standard of non-discriminatory access. The same exchanges that argue for regulatory protection of lit trading and closing auctions should not simultaneously operate arrangements within those mechanisms that favour affiliated intermediaries over independent participants. Transparency and competition should apply inside venues, not only between them.

ESMA is well placed to investigate the nature and prevalence of these arrangements. We would encourage ESMA to develop clear criteria distinguishing legitimate operational arrangements from those that systematically bypass price priority, and to require venues to disclose arrangements that affect order priority.

Q34: What would be the consequence of prohibiting certain forms of member preferencing?

Q35: Are you aware of other similar practices where on-venue competition is limited to the detriment of other investors?

The impact of preferencing depends on the nature of arrangements in practice. ESMA's planned review is the right approach. The evidence base should determine the scope and scale of any intervention.

SECTION 9: ADDRESSABLE LIQUIDITY AND RTS 1 CLASSIFICATION

Q36: Do you agree with the above three approaches?

We are not aware of compelling evidence that current levels of trading under pre-trade transparency waivers have a detrimental effect on orderly markets or price discovery. As stated in our response to Q9-Q10, the SVC lacks theoretical justification.

Q37-Q39: Do you agree with the table on addressable liquidity and price forming?

We support a classification framework grounded in economic function. The key question is whether a transaction represents genuine competitive interaction between independent buyers and sellers, or administrative, contingent, or intragroup activity.

When a pre-trade consolidated tape with venue attribution is operational, the consolidated EBBO should become the reference price for regulatory purposes. This would produce a more representative and integrated European reference than individual venue prices and would strengthen the tape's role as the coordination mechanism for fragmented liquidity.

Q40: Do you agree with the third part of the table on addressable liquidity and price forming?

Q41: Do you agree that all transactions without a flag should be considered addressable liquidity and price forming?

Trading venues should be permitted to use the negotiated transaction waiver for percentage-of-volume and trajectory crossing mechanisms. We addressed this directly in our letter to the European Commission Directorate-General for Financial Stability dated 28 February 2025, published on NBIM's website.

NBIM has direct operational experience with these mechanisms in the US and UK. They materially reduce trading costs for large institutional orders by allowing participation in market volume without committing to a visible limit order.

The current interpretation prevents multilateral venues from offering these mechanisms while leaving them available through SIs and broker networks. This asymmetry is contrary to the CMU objective and the principle of functional equivalence.

When developing eligibility criteria, ESMA should consider: the degree of participant concentration distinguishing targeted crossing from broad dark pool operation; conditions for genuine market-determined benchmark pricing; appropriate post-trade transparency obligations; and whether access should be differentiated by counterparty type.

Q44: Do you agree that intragroup transactions executed by SIs should not constitute addressable liquidity?

Yes. Intragroup SI transactions are accounting movements, not competitive market interactions. Including them in measures of SI market share overstates the regime's external market contribution and distorts the picture on which regulatory assessments are based.

We support a new RTS 1 flag to disentangle these transactions. They should be classified as non-addressable and non-price forming.

Key Academic References

Budish, E., Cramton, P., & Shim, J. (2015). The High-Frequency Trading Arms Race: Frequent Batch Auctions as a Market Design Response. *Quarterly Journal of Economics*, 130(4), 1547-1621.

Comerton-Forde, C., & Putniņš, T.J. (2015). Dark Trading and Price Discovery. *Journal of Financial Economics*, 118(1), 70-92.

Foucault, T., & Menkveld, A.J. (2008). Competition for Order Flow and Smart Order Routing Systems. *Journal of Finance*, 63(1), 119-158.

Madhavan, A. (1995). Consolidation, Fragmentation, and the Disclosure of Trading Information. *Review of Financial Studies*, 8(3), 579-603.

O'Hara, M. (2003). Presidential Address: Liquidity and Price Discovery. *Journal of Finance*, 58(4), 1335-1354.

Zhu, H. (2014). Do Dark Pools Harm Price Discovery? *Review of Financial Studies*, 27(3), 747-789.