

The Structure, Regulation, and Transparency of European Equity Markets under MiFID

This Issue Brief provides perspectives on the impact of MiFID on European equity markets, with particular focus on changes in structure, regulation, and transparency of those markets.

Implementation of the Markets in Financial Instruments Directive (MiFID) in November 2007 unleashed competitive forces in the provision of trading venues and execution facilities. In its January 2011 publication, [The Structure, Regulation, and Transparency of European Equity Markets under MiFID](#), CFA Institute examined both traditional European market structures and other newer trading venues, including consideration of differences in regulatory regimes that apply to each venue. The relation between indicators of transparency in different markets and bid-offer spreads was examined empirically, suggesting that lower bid-offer spreads are related to higher degrees of transparency.

Policy implications of this study include the desirability of encouraging trading on transparent organised trading venues, as well as the recommendation to impose similar regulatory requirements on all venues to level the playing field and mitigate regulatory arbitrage. The study also calls for improving both the quality and utility of post-trade data.

Summary Policy Considerations

Policy measures should support greater transparency and greater consistency in the application of transparency rules within the regulatory framework. To support these transparency goals, we recommend the following policy considerations:

1. Market structure: encourage more trading on transparent organised trading venues.

- a. *Prevent orders up to standard market sizes from being executed outside of MiFID organised trading venues (RM, MTF, or SI). OTC business is acceptable for ad-hoc, large, or non-standard transactions. However, there is little economic rationale for standard marketable order flow to be executed through OTC channels. Such a measure would also mitigate regulatory arbitrage between organised trading venues and OTC activity.*
- b. *Maintain the existing large-in-scale pre-trade transparency waiver thresholds. A reduction of the large-in-scale thresholds could have adverse unintended consequences on market transparency. The fall in average order and transaction sizes since the implementation of MiFID has increased the gap between large order sizes and average order sizes. However, a lowering of these thresholds would necessarily result in a greater proportion of dark transactions, which already account for between approximately 40 percent and 50 percent of all transactions.*

- 2. Regulatory framework: level the playing field so that venues conducting similar types of business, and orders of similar types and sizes, are subject to the same rules.**
- a. *Require Broker Crossing Networks that facilitate multilateral order execution, and which engage in a similar size of business as MTFs, to register as MTFs and be bound by the same regulatory framework that applies to MTFs.* This would ensure that all ‘marketplaces’ are subject to the same market-oriented rules. It also would uphold the proportion of trading being transacted through organised trading venues and mitigate regulatory arbitrage amongst venues.
 - b. *Establish a minimum size threshold for dark reference price systems (dark pool MTFs) that provide for executions at prices inside the quoted spread on the stock’s reference market.* Average transaction sizes on such systems are broadly equivalent to those on transparent order book markets. A minimum size threshold is necessary to provide consistency in the application of transparency rules for similarly sized orders. This upholds the principle that only large or non-standard orders should be exempt from pre-trade transparency requirements. Such a threshold would also help uphold the proportion of trading on transparent venues (Consideration 1).
 - c. *Require residual orders (‘stubs’) that fall below the large-in-scale thresholds to be pre-trade transparent.* This is appropriate to ensure fair treatment with other similarly sized orders.

Other considerations relevant to improving market transparency include:

- 3. Improve the quality and utility of post-trade data.**
- a. *Shorten the permissible trade-reporting delays under the MiFID deferred publication framework, as recommended by the Committee of European Securities Regulators (CESR).* The current maximum permissible time delay of three days undermines the timeliness and usefulness of post-trade data. In general, exceptions to real-time trade publication should not extend beyond the current trading day (or the start of the next trading day). Trades published with a delay should also be identified as such in trade reports.
 - b. *Implement CESR’s recommendations to introduce Approved Publication Arrangements to improve the accuracy, consistency, and reliability of post-trade data.* MiFID should require trade data to be published in a standardised format, utilising consistent symbology, with appropriate quality-control procedures to ensure data quality. Such measures are necessary to facilitate the consolidation of post-trade data.
 - c. *Implement a consolidated tape.* Investors need access to a complete and clear picture of market prices and trading interest to facilitate the investment decision-making process, and to assist the accomplishment and measurement of best execution. Accordingly, MiFID should mandate the requirement for a consolidated tape. Authorities should task industry to develop a consolidated tape according to clear standards and time frames that meet the needs of investors.

Summary of Findings

Market Structure

- Market structures can be classified as being either multilateral or bilateral, according to the manner in which trades are executed.
- Multilateral trading venues include Regulated Markets (RMs – the exchanges) and Multilateral Trading Facilities (MTFs). These venues predominantly operate limit order book markets, which match orders from multiple third parties on a non-discretionary basis according to pre-defined rules that establish price and time priority. In general, RMs and ‘lit’ MTFs are highly transparent trading venues, providing pre-trade visibility of the limit order book as well as details of executed trades. In contrast, ‘dark’ MTFs (or ‘dark pool’ MTFs) do not display any orders, offering no pre-trade transparency. However, post-trade data is published in an analogous fashion to lit MTFs. Indeed, all transactions, irrespective of the execution venue, must be published as close to real time as possible unless the transaction is ‘large’ relative to normal market sizes.
- Bilateral structures include Systematic Internalisers (SIs). SIs are investment firms that internalise order flow to deal on their own account, acting as the counterparty to all buy and sell orders. Systematic internalisation, by its bilateral nature, is a subset of over-the-counter (OTC) execution. Pre-trade transparency requirements for SIs are limited in scope compared to RMs and MTFs, only applying to dealings up to standard market sizes in liquid markets. Overall, systematic internalisation is less transparent than trading on RMs and MTFs.
- All transactions executed outside of the MiFID trading venue classifications (RM, MTF, and SI) are generically classed as OTC. Such transactions include non-systematic bilateral trades executed on an ad-hoc basis by an investment firm acting in a principal or agency capacity. Another type of activity classified as OTC includes trading transacted through internal crossing networks operated by banks and brokerages (dark pool crossing systems). These systems operate on a discretionary basis, and facilitate transactions by crossing client orders or by executing such orders against the broker’s own account. Broker-operated internal networks provide anonymity and reveal very little about an order prior to execution, providing no pre-trade transparency.

Regulatory Framework

- Pre-trade transparency obligations under MiFID require RMs and MTFs to publicly post current bid and offer prices and depth of trading interests at those prices, and to make such data available on a continuous basis. These requirements ensure visibility of the order books operated by RMs and MTFs, making them the most transparent types of trading venues. The equal application of the transparency requirements to RMs and MTFs ensures that these venues compete for liquidity against each other on an even regulatory footing.
- MiFID allows regulatory authorities to grant exemptions to RMs and MTFs from pre-trade transparency for orders and trading systems satisfying one of the following criteria: a) orders that are ‘large-in-scale’; b) ‘reference price’ systems; c) systems which formalise ‘negotiated transactions’; and d) orders held in an order management facility pending disclosure to the market (i.e. reserve orders). Dark pool MTFs most commonly benefit from the reference price system waiver, providing passive order matching at prices pegged to a reference market.
- For SIs, pre-trade transparency is restricted to specific classes of shares and sizes of business. SIs that only deal in sizes above standard market size are exempt from pre-trade transparency requirements. As such, the requirements are limited in comparison to RMs and MTFs.
- Pre-trade transparency requirements do not apply to OTC transactions that fall outside of the MiFID ‘trading venue’ definitions.

- Post-trade transparency requirements apply equally to RMs, MTFs, and investment firms, irrespective of whether the investment firm is acting as an SI or engaging in other OTC transactions.
- The price, volume, and time of execution for all transactions, irrespective of where they take place, must be published as close to real time as possible. However, transactions that are large relative to normal market sizes are exempt from immediate trade reporting.
- Trades reported with a delay are the least transparent types of transactions. This is because, in addition to their reduced timeliness, such large trades are also not pre-trade transparent, either being executed OTC, or benefitting from the large-in-scale waiver if the trade is executed through an RM or MTF.
- Whilst the post-trade transparency requirements and associated deferred publication arrangements apply equally to trading venues and to OTC transactions, the publication mechanisms may differ, which means that the quality, consistency, and reliability of reported data may differ. Moreover, the provisions for delayed trade publication mean that transparency varies amongst different classes and sizes of orders.

Trade Transparency Stylised Facts

- European equity trading is split roughly in half between those trades executed through transparent order book markets operated by RMs and MTFs, and those executed in a less transparent OTC capacity. There is no significant upward or downward trend in either half over the period from January 2008 to October 2010.
- Dark trading (representing all trades in which both sides of an order are not pre-trade transparent) constitutes a significant proportion of European equity trading, averaging 46.4 percent over the period from January 2008 to October 2010. Dark trading comprises OTC transactions (of which broker crossing network dark pools are a subset), non-order book trades reported to exchanges (including large and negotiated transactions), and dark MTF trades. For comparability, as of October 2010, OTC trading in Europe amounted to 37.6 percent of total turnover (of which broker crossing networks comprised 3.2 percent of OTC turnover and 1.2 percent of total turnover); non-order-book on-exchange reported transactions amounted to 9.6 percent; and dark MTF trades amounted to 1.3 percent. In total, therefore, dark trading amounted to 48.5 percent of total turnover. Combining broker crossing network activity with dark MTFs, total dark pool trading amounted to 2.5 percent of total turnover for the same month.
- Trades reported with a delay under the MiFID deferred publication framework represent approximately one-fifth of all trades on average.
- The data also suggest that transaction sizes, on average, are getting smaller. This trend is most pronounced for dark MTFs.

Empirical Analysis

- We assign a transparency ranking to the different classifications of trades. Based on these rankings and the respective market shares of each trade type, a transparency index is constructed which reflects the weighted average transparency score (or rank) for the market concerned.
- Analysis of transparency measures for select European markets — France, Germany, Spain, the United Kingdom, and the Netherlands — suggests that (i) high average transparency scores broadly correlate with low average bid-offer spreads and (ii) stable levels of transparency correlate with stable spreads.



- Changes in market transparency metrics are negatively associated with changes in bid-offer spreads in most months — such that spreads typically narrow when transparency metrics increase. There is evidence to support this assertion in four out of the five markets examined.
- Review of the academic literature related to transparency and market quality is broadly consistent with these findings. Although somewhat mixed, the literature reviewed is balanced in favour of greater transparency.
- In aggregate, we conclude that greater market transparency is beneficial for investors.