



October 3, 2011

**Via ESMA Website**

European Securities and Markets Authority  
103 rue de Grenelle  
75007 Paris  
France

Dear Sir/Madam:

**Response to Public Consultation: ESMA's draft guidelines on systems and controls in a highly automated trading environment for trading platforms, investment firms and competent authorities**

Managed Funds Association (“MFA”)<sup>1</sup> appreciates the opportunity to provide comments to the European Securities and Market Authority (“ESMA”) on its consultation paper dated 20 July 2011 on “Guidelines on systems and controls in a highly automated trading environment for trading platforms, investment firms and competent authorities” (the “Consultation Paper”).<sup>2</sup> MFA members are active users of electronic trading services and direct market access (“DMA”) and sponsored access (“SA”) are important trading tools for MFA members. MFA supports ESMA’s principles-based approach in the draft guidelines and applauds its review of HFT as it is important for regulators world-wide to remain current in their understanding of market trends, innovations and technological developments. With respect to ESMA’s draft guidelines regarding the provision of DMA/SA, MFA urges ESMA to include confidentiality safeguards and controls to protect trade information of DMA/SA clients and to confirm that such information will be used exclusively for regulatory purposes.

MFA represents the views of institutional investors, including registered or authorized managers and private investment funds, whose investors include pensions, endowments,

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<sup>1</sup> The Managed Funds Association (MFA) represents the global alternative investment industry and its investors by advocating for sound industry practices and public policies that foster efficient, transparent, and fair capital markets. MFA, based in Washington, DC, is an advocacy, education, and communications organization established to enable hedge fund and managed futures firms in the alternative investment industry to participate in public policy discourse, share best practices and learn from peers, and communicate the industry’s contributions to the global economy. MFA members help pension plans, university endowments, charitable organizations, qualified individuals and other institutional investors to diversify their investments, manage risk, and generate attractive returns. MFA has cultivated a global membership and actively engages with regulators and policy makers in Asia, Europe, North and South America, and all other regions where MFA members are market participants.

<sup>2</sup> Guidelines on systems and controls in a highly automated trading environment for trading platforms, investment firms and competent authorities, Consultation paper (ESMA/2011/224) by the European Securities and Markets Authority, 20 July 2011, available at: [http://www.esma.europa.eu/index.php?page=consultation\\_details&id=186](http://www.esma.europa.eu/index.php?page=consultation_details&id=186).

foundations and insurance companies. In our view, innovations in technology have revolutionized investing in equity markets, and promoted greater competition among marketplaces and market participants, to the benefit of investors. Most notably, the advancements in technology have empowered investors, both institutional and retail, by providing sophisticated and efficient methods to access the markets and execute their investment strategies globally. In the process, these equity market developments have led to greater market liquidity and depth, tighter bid-ask spreads and lower transaction costs. These changes lower the cost of capital and enhance economic growth.

Advancements in technology have vastly improved analytical, trading and execution tools; and led to significant strides in market efficiencies through competition, lower transaction costs and greater market depth and liquidity, all of which are desirable outcomes for all investors. HFT is a broad term which is sometimes used to describe the use of technology to implement established trading strategies. In considering issues regarding technological developments or the use of technology, it is important to distinguish between execution tools and HFT or other individual trading strategies. Overall, investors are in a much better position today than in the past with respect to market access, market information, the amount paid in transaction fees, and order execution, among other trading/investment aspects. Accordingly, we respectfully urge that ESMA's regulatory guidelines, specifically those guidelines regarding market manipulation, more consistently distinguish between technology and individual trading strategies. ESMA and other regulators should focus on defining manipulative activities or strategies rather than on firms that use HFT technology. Further, as a general rule, MFA believes there is bad behavior, but not bad technology.

## **I. General Comments**

### *A. High Frequency Trading*

We acknowledge that the fact-finding questionnaire that ESMA used to inform its draft guidelines in the Consultation Paper used a definition of HFT that links algorithmic technologies and related trading strategies and that determining a precise legal definition for HFT may not be practical for regulatory purposes.<sup>3</sup> However, in reviewing developments relating to market structure, market integrity and efficiency, we believe it is important for regulators to separate technology and technological developments from trading strategies.<sup>4</sup> As concluded in the research paper of Professors Gomber, Arndt, Lutat and Uhle ("Gomber"), HFT "describes the usage of sophisticated technology that implements traditional trading strategies"; and as such, it is the individual trading strategies that need to be assessed rather than the means of transaction delivery.<sup>5</sup> We believe it is important to differentiate technological developments from strategies,

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<sup>3</sup> *Id.* at p. 10, note 5.

<sup>4</sup> *See, e.g.*, Peter Gomber et. al., High Frequency Trading, Goethe Universitat, Frankfurt Am Main (hereinafter, "Gomber") available at: <http://ssrn.com/abstract=1858626>. The research paper concludes, among others, that HFT is a technical means to implement established trading strategies; it applies the latest technological advances in market access, market data access and order routing to maximize the returns of established trading strategies.

<sup>5</sup> *Id.* at p. 30.

and that it is over-simplistic to assert or blame advancements in technology for any perceived deteriorations in market integrity and efficiency.

Regulations to promote competition and reduce costs for investors, such as the U.S.'s Order Handling Rules and Regulation ATS<sup>6</sup> and the EU's Markets in Financial Instruments Directive ("MiFID"),<sup>7</sup> fostered the development of new electronic markets and enabled investors to use more sophisticated automated computer programs to trade. This environment presented increased competition for the major market centers—competition that fostered improvements in their technology and forced expansion of their capacity as market activity increased. As a result, the existing market structure monopolies were eliminated and the timely flow of trade data was made available to all investors.<sup>8</sup> These changes were significant factors that led to the reduction in trading costs.

These market structure advances effectively enabled the growth of HFT, a set of technological tools and trading methods based on low latency technology that were first developed in the early 1990s. Over time, HFT has found new applications that go beyond its early roots in proprietary trading. Investors of all types, regardless of their investment time horizons, broadly use HFT methods for efficient execution. Indeed, low latency execution methods have quickly become the standard execution platform offered by most broker-dealers. Today's traditional and newer liquidity providers also largely depend on HFT methods and either access the markets directly as broker-dealers (DMA) or through an agency broker via sponsored access.<sup>9</sup> Broker, exchange and investor trading technology all have become reliant on low latency technology.

As a result of market structure changes, many aspects of the EU and U.S. equity markets—spreads, fees, execution speed, market depth, efficiency, transparency and pricing reliability, for example—have steadily and drastically improved over the last several years to the benefit of the investing public. Investors have measurably benefitted from technological and regulatory changes, and financial intermediaries now offer better service and more low-cost

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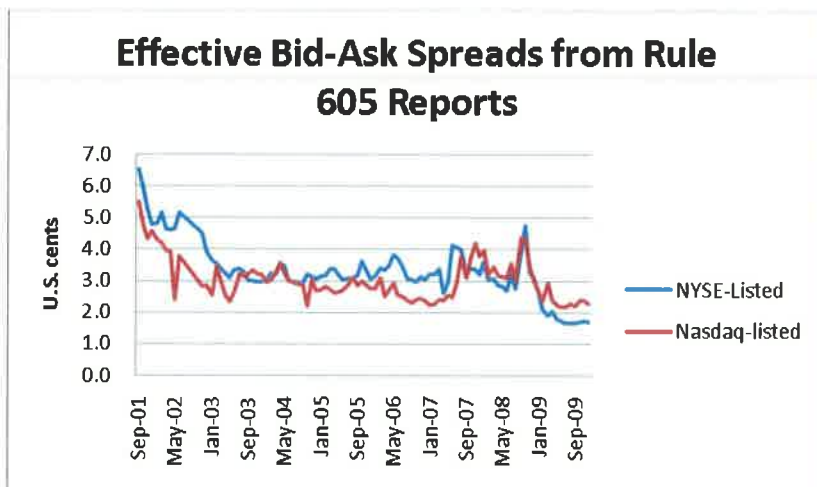
<sup>6</sup> Securities Exchange Act Release No. 37619A; 61 *FR* 48290 (Sept. 12, 1996); Securities Exchange Act Release No. 40760, 63 *FR* 70844 (Dec. 22, 1998).

<sup>7</sup> See also, TABB Group, *Effective Spreads in European Equities*, February 2010, available at: [http://static.capitalize-on-change.com/Global/pdfs/Contributors%27%20Content/V08-001\\_Effective\\_Spreads\\_in\\_European\\_Equities%5B1%5D.pdf](http://static.capitalize-on-change.com/Global/pdfs/Contributors%27%20Content/V08-001_Effective_Spreads_in_European_Equities%5B1%5D.pdf).

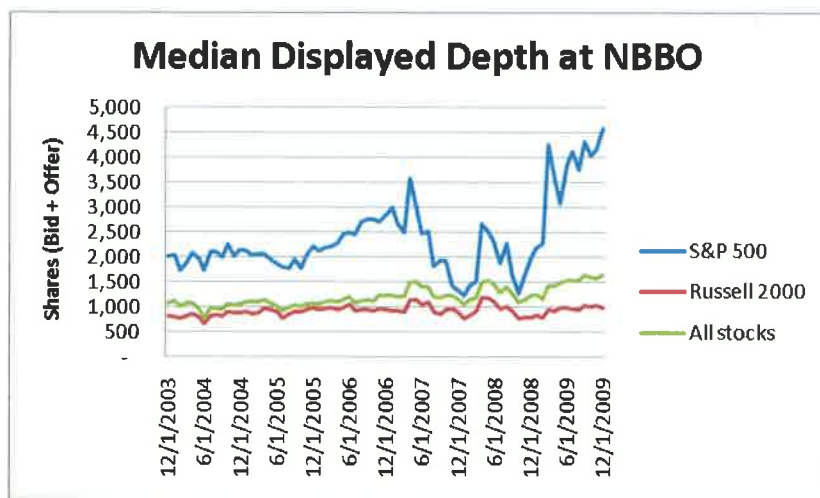
<sup>8</sup> See, e.g., Regulation NMS, Securities Exchange Act Release No. 51808, 70 *FR* 37496 (June 29, 2005).

<sup>9</sup> In the U.S., the Securities and Exchange Commission ("SEC") has adopted regulations on market access and direct electronic access. The SEC's "Risk Management Controls for Brokers or Dealers with Market Access" regulation requires broker-dealers with access to trading securities directly on an exchange or alternative trading system, including those providing direct access to customers, to: establish, document, and maintain a system of risk management controls and supervisory procedures that, among other things, is reasonably designed to systematically limit the financial exposure of the broker-dealer that could arise as a result of market access; and ensure compliance with all regulatory requirements that are applicable in connection with market access. See *Risk Management Controls for Brokers or Dealers with Market Access*, Exchange Act Release No. 63241, 75 *FR* 69792 (Nov. 15, 2010) available at: <http://www.sec.gov/rules/final/2010/34-63241fr.pdf>; see also Exchange Act Release No. 64748, 76 *FR* 38293 (June 30, 2011) available at: <http://www.sec.gov/rules/final/2011/34-64748fr.pdf>.

options for accessing markets and executing orders. In fact, many assert that those benefiting most from these changes (*i.e.*, increased liquidity, lower transaction costs, better technology, etc.) are long-term investors. Data below from the U.S. and EU markets highlight the benefits investors have experienced in recent years.



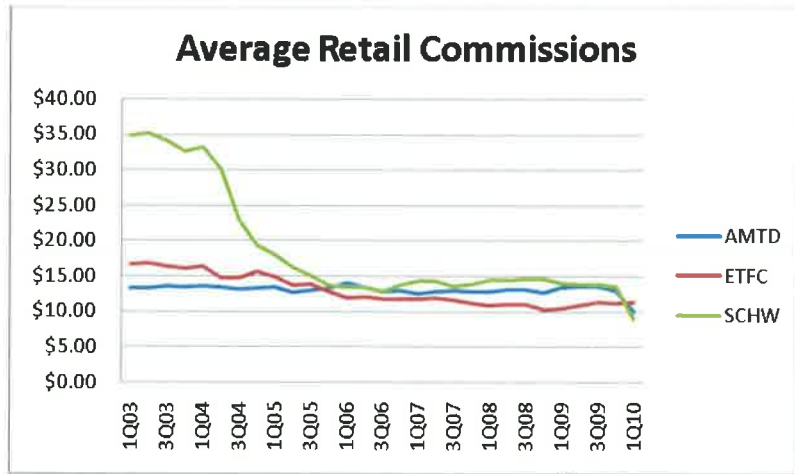
Source: Public Rule 605 Reports from Thomson, Market orders 100-9999 shares<sup>10</sup>  
 (SEC Rule 605 requires market centers to make available standardized, monthly reports of statistical information concerning their order executions.)



Source: Knight Capital Group<sup>11</sup>

<sup>10</sup> As cited by Angel et al. at 10.

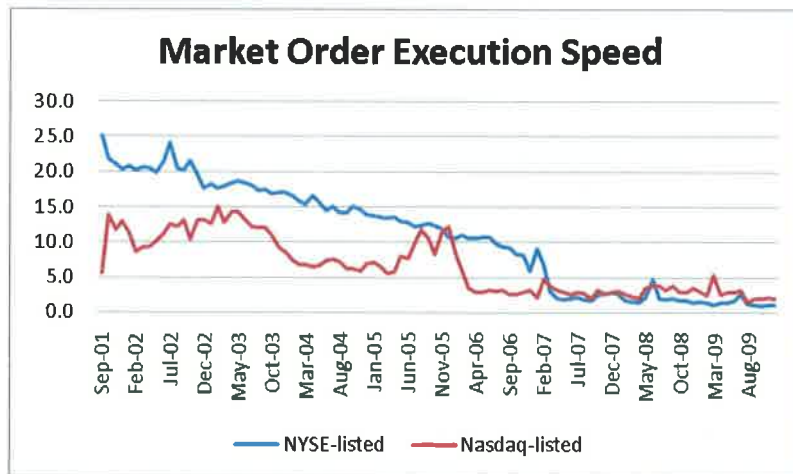
<sup>11</sup> As cited by Angel et al. at 14.



Source: Barclays Capital Equity Research<sup>12</sup>

U.S. Retail Brokers:

AMTD = TD Ameritrade, Inc.  
 ETFC = E-Trade Financial Corporation  
 SCHW = Charles Schwab Corporation



Source: Rule 605 data from Thomson for all eligible market orders (100-9999 shares)<sup>13</sup>

**Please see Appendix A for data from the EU.**

Further, HFT execution techniques have enabled investors and traders to supply markets with liquidity and have in large part replaced the need for or role of traditional market makers. Indeed, despite the severe Financial Crisis of 2008 and the steep decline in equity prices in the equity markets, market participants using HFT methods and low latency technology remained in the markets to trade with other market participants and were responsible for providing the equity

<sup>12</sup> As cited by Angel et al. at 18.

<sup>13</sup> As cited by Angel et al. at 22.

markets with liquidity during times of market stress, including the failure of Lehman Brothers, the bailouts of AIG, Fannie Mae and Freddie Mac, the failure of Washington Mutual, and the rescue of Merrill Lynch.<sup>14</sup> The equity markets did not freeze because liquidity in these markets is provided by a broad and diverse group of market participants, who are separately capitalized and less interconnected to the broader financial system than traditional dealers. This proved to be extremely important when the major dealers, who are highly interconnected in markets of a variety of asset classes, experienced firm-wide liquidity issues, which impaired their ability to provide liquidity to these markets. Accordingly, the proliferation of trading venues and market participants prevented the equity markets from suffering from a lack of dealer participation that impaired, or effectively froze, the markets of other asset classes, such as the credit, fixed income and over-the-counter derivatives markets.

### *B. The Fairness and Integrity of Markets*

The Consultation Paper raises concerns with respect to the use of HFT and the fairness and integrity of markets.<sup>15</sup> An equity market structure is fair when it treats similarly situated market participants in a consistent manner and provides all market participants with reasonable opportunities to compete and access markets. The success of individual participants should become a matter of competition. For example, the current U.S. market structure is fairer than it has ever been as it no longer gives preference to particular market intermediaries over other market participants in terms of providing and accessing liquidity (*e.g.*, specialists in specific stocks).

Significantly, users of HFT technologies have replaced manual market-making, making trading much more efficient and lowering profit margins as evidenced by the lower total market-making spread that exists to provide liquidity to investors. These market participants' use of scalable technology has driven net revenue per share to a very small fraction of a penny; thus, even at today's higher trading volumes, the total spread captured is less than the amount captured by human market makers a decade ago. Gross revenue for an electronic market maker using HFT is estimated at \$0.001 and \$0.002 per share, or \$100,000 in gross revenue per day (100 million shares a day at \$0.001), while net revenue would be less after costs such as clearing, regulatory fees, technology, and related transactions used to hedge risk.<sup>16</sup> Simply sitting in a privileged position and collecting wide spreads is no longer a viable business strategy for market makers in the U.S. equity markets.

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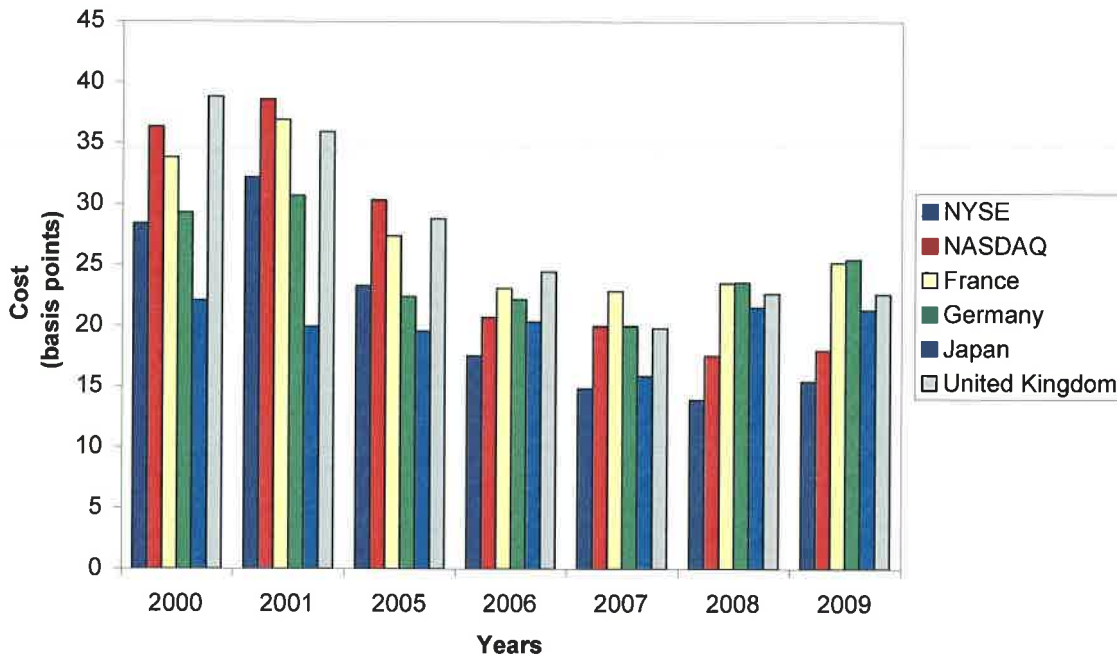
<sup>14</sup> Rosenblatt Securities Inc., *Market Structure Analysis & Trading Strategy: An In-Depth Look at High Frequency Trading*, September 30, 2009 (hereinafter "Rosenblatt Securities") at 29.

<sup>15</sup> Consultation Paper at pp. 10-13.

<sup>16</sup> Rosenblatt Securities coins the term "electronic market-making" to reference HFT market participants that are making markets electronically.

Rosenblatt Securities also compares the annual revenue for GETCO, likely the world's biggest HFT firm, at \$400 million in 2008 to an estimated \$1.63 billion in gross Nasdaq dealer revenues for the month of June in 1997. Rosenblatt Securities at 28.

### Average Cost of Executing Trades



Source: *Elkins/McSherry, Institutional Investor*

Though HFT tools are often described as being used by institutional investors, low latency tools and techniques are available to all market participants, including retail investors. In fact, brokers' investment in technology and competition enables retail investors to benefit from greater market access and (online) trade executions for as little as \$7 a trade in the U.S. (as compared to around \$45 per 100 shares ten years ago)<sup>17</sup> or the fixed commission rates (in the U.S.) that existed prior to May 1, 1975. Retail investors are able to access or benefit from sophisticated trading tools in a number of ways. First, through technological developments, market intermediaries such as broker-dealers (for example, Schwab, E-Trade, Fidelity and TD Ameritrade in the U.S.) are able to offer retail investors advanced analytical and research trading tools, real-time market data, lower trading costs and greater market access than ever before. Second, retail investors may invest in mutual funds or through retirement funds that will deploy sophisticated technology to execute trading strategies. Even investors generally considered "passive" or "long-only," such as mutual funds, rely on sophisticated trading tools, such as algorithms, to actively buy and sell securities on a daily basis at the best price. Accordingly, through these structures retail investors benefit from improvements in technology.

With respect to institutional investors, many choose not to invest and build proprietary trading tools from a cost-benefit perspective, but instead hire service providers (*e.g.*, executing brokers or third-party vendors) with the best technology, and resources to trade at high speed and

<sup>17</sup> James J. Angel et al., *Equity Trading in the 21<sup>st</sup> Century*, February 23, 2010, at p. 19, available at: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1584026](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1584026) (hereinafter "Angel et al.").

with the highest degrees of sophistication. Many investors, including MFA members, access the markets through a broker-dealer via direct market access or sponsored access and use algorithms supplied by buy-side brokers.

Sophisticated trading tools are available to all investors. Nevertheless, we recognize that understanding modern trading methods and technologies may be confusing for investors, including some professional investors. Technology continues to revolutionize financial markets and enhance market efficiency, just as it has for nearly every other industry or field in the modern world. Improved efficiency makes it more difficult for some market participants to earn greater proprietary profits and may lead some to identify trading technology as a problem (for them) even while it is benefitting investors and the markets as a whole. Nevertheless, investors should seek to fully benefit from the range of new technological advancements by staying abreast of developments and adapting to the times, especially when they have a fiduciary obligation. MFA members take this obligation extremely seriously. To best serve the interest of their investors, fiduciaries need to ensure that they are aware of and are making best use of the available resources, including the latest technological tools. To bridge this informational gap and to better educate market participants and regulators, we recommend that market centers and market intermediaries regularly engage in educational campaigns and offer informational sessions to investors on electronic trading, algorithmic trading, low latency technology and other technological tools commonly used or available to investors.

The Consultation Paper also raises HFT concerns with respect to market quality, abusive practices and oversight by market authorities.<sup>18</sup> MFA strongly believes that HFT technology, in itself, is not manipulative and in fact, brings numerous benefits to the financial markets.<sup>19</sup> From our experience, as supported by empirical data and further discussed below, many factors that comprise market quality have steadily improved over the past few years. Also, the majority of research on HFT finds evidence that HFT increases market quality.<sup>20</sup> We believe in discussing market quality and abusive practices, it is imperative that ESMA and other regulators consider empirical evidence before reaching regulatory conclusions. Nevertheless, MFA fully supports ESMA's and other market authorities' objectives to eradicate illegal and improper trading and investment activities from our markets. Illegal market behavior reduces investor confidence in the markets and threatens liquidity to the detriment of all.

Again, in reviewing HFT, we believe technology should be separated from strategy; and that ESMA and other market authorities should continue to police markets for abusive practices. While market authorities may not have sufficient resources to compete with the private sector in

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<sup>18</sup> Consultation Paper at pp. 26-30.

<sup>19</sup> See, e.g., James J. Angel and Douglas McCabe, *Fairness in Financial Markets: The Case of High Frequency Trading*, McDonough School of Business, December 21, 2010 (concluding that it is "the use of the technology, rather than the technology itself, that determines fairness or unfairness; and providing the example of traders using high-speed technology to engage in traditional manipulative strategies, such as front-running, bear raids and wash sales.).

<sup>20</sup> Gomber at p. 34. Gomber provides a list of available research papers on HFT and algorithmic trading, along with a short description of the research question, the applied methodology and the results of the papers.



technological capabilities, we do not believe they need to in order to conduct effective market surveillance. Sponsoring agents that provide low latency technology or access, such as market intermediaries, should have the means to provide market authorities with detailed reports from which surveillance can be conducted.

Lastly, with respect to the imposition of limits per participant on order entry capacity, as proposed in detailed guideline 2 for the implementation of general guideline 3 to promote fair and orderly trading, MFA supports the premise that regulated markets and multilateral trading facilities should have arrangements, such as throttling mechanisms, to prevent excessive flooding of the order book. However, we strongly disagree with any regulatory mandate for imposing limits on order entry capacity. We believe that regulated markets and multilateral trading facilities should be permitted to make the choice, based on competitive concerns, between building out their systems or imposing their own limits on order entry capacity.

### *C. DMA/SA Controls*

As a general matter, MFA believes that exchanges and alternative trading venues should have responsibility for conducting oversight and surveillance of their markets. Investment firms and other intermediaries providing direct electronic access should have an obligation to exchanges and alternative trading venues to provide any necessary trading information for oversight purposes. Market authorities should oversee the surveillance conducted by exchanges and alternative trading venues, and, to the extent feasible, may consider conducting their own surveillance searches on trading reports received from such entities. We believe such a framework provides a practical and equitable allocation of responsibility and costs.

In the context of DMA/SA arrangements, we are concerned that ESMA's draft guidelines in the Consultation Paper lack confidentiality safeguards and controls for trading platforms and investment firms to observe in order to adequately protect information concerning the trading activities of DMA/SA clients. This concern is heightened by the proposal for DMA/SA providers to receive real-time trading information from their DMA/SA clients. The draft guidelines tend to focus entirely on the risks to investment firms and to trading platforms arising from DMA/SA arrangements without sufficient regulatory attention to the risks of potential misuse of client information and trading data by investment firms providing DMA/SA arrangements. A DMA/SA client's trading data constitute highly proprietary information that employees of a DMA/SA provider firm's proprietary trading division could access and misuse to front-run a client's trades or to reverse engineer its trading strategy. Such risks should be addressed to ensure that more comprehensive and appropriate risk controls are in place for compliance and oversight purposes. Therefore, we respectfully request that ESMA supplement draft guidelines 7 and 8 to require both the investment firms who receive such proprietary trade data and client information, as well as all regulated markets and multilateral trading facilities receiving such information, to maintain the confidentiality of such information and to use it exclusively for regulatory compliance purposes and not in any commercial way. Such obligations should be meaningful and enforceable by DMA/SA clients. Accordingly, we recommend that a DMA/SA provider firm should be required to certify that it implements and

enforces policies and procedures and maintains information barriers to protect client information. We also recommend that exchanges and other trading platforms also should certify that if they disclose client trading data to the public, such data would be disclosed only if aggregated with the information of many other market participants. Further, we recommend that ESMA limit the scope of access that a DMA/SA provider firm may have with respect to trading data to information directly related to trading conducted by the DMA/SA client through DMA/SA arrangements; and likewise, to limit the scope of client due diligence to an assessment of the specific credit and risk exposures created by DMA/SA.

Moreover, to the extent that a DMA/SA provider firm or third-party vendor providing connectivity in relation to DMA/SA arrangements uses, packages, redistributes, or sells information based on the flow of a client's investment activity—such as information on market color, trends, volumes, sector change or other market commentary or metrics—we believe the firm should provide written disclosure to current and prospective DMA/SA clients. These clients should be aware of how and under what terms their information is being used. Disclosures with respect to execution connectivity and client order flow information would assist investors in assessing execution quality and possible conflicts of interest.

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As investors, MFA's members have a strong interest in liquid and deep markets that are honest and operate efficiently. We respectfully urge ESMA in considering final guidelines regarding HFT to proceed cautiously as we are concerned that unintended consequences could negatively impact investors by decreasing market liquidity, depth and efficiency while raising transaction costs. We also respectfully request that ESMA adopt confidentiality safeguards and controls to address the risks of potential misuse of DMA/SA client information and trading data.

MFA appreciates the opportunity to respond to the Consultation Paper and would be pleased to meet with ESMA to discuss our comments or any issues or concerns raised in the Consultation Paper. If ESMA has questions or comments, please do not hesitate to contact Benjamin Allensworth, Laura Harper or the undersigned at +1 (202) 730-2600.

Respectfully submitted,

/s/ Stuart J. Kaswell

Stuart J. Kaswell  
Executive Vice President and Managing Director,  
General Counsel

## Appendix A

The following graphs are excerpts from a TABB Group Pinpoint:

Miranda Mizen, TABB Group, Effective Spreads in European Equities, February 2010,  
*available at:*

[http://static.capitalize-on-change.com/Global/pdfs/Contributors%27%20Content/V08-001\\_Effective\\_Spreads\\_in\\_European\\_Equities%5B1%5D.pdf](http://static.capitalize-on-change.com/Global/pdfs/Contributors%27%20Content/V08-001_Effective_Spreads_in_European_Equities%5B1%5D.pdf).

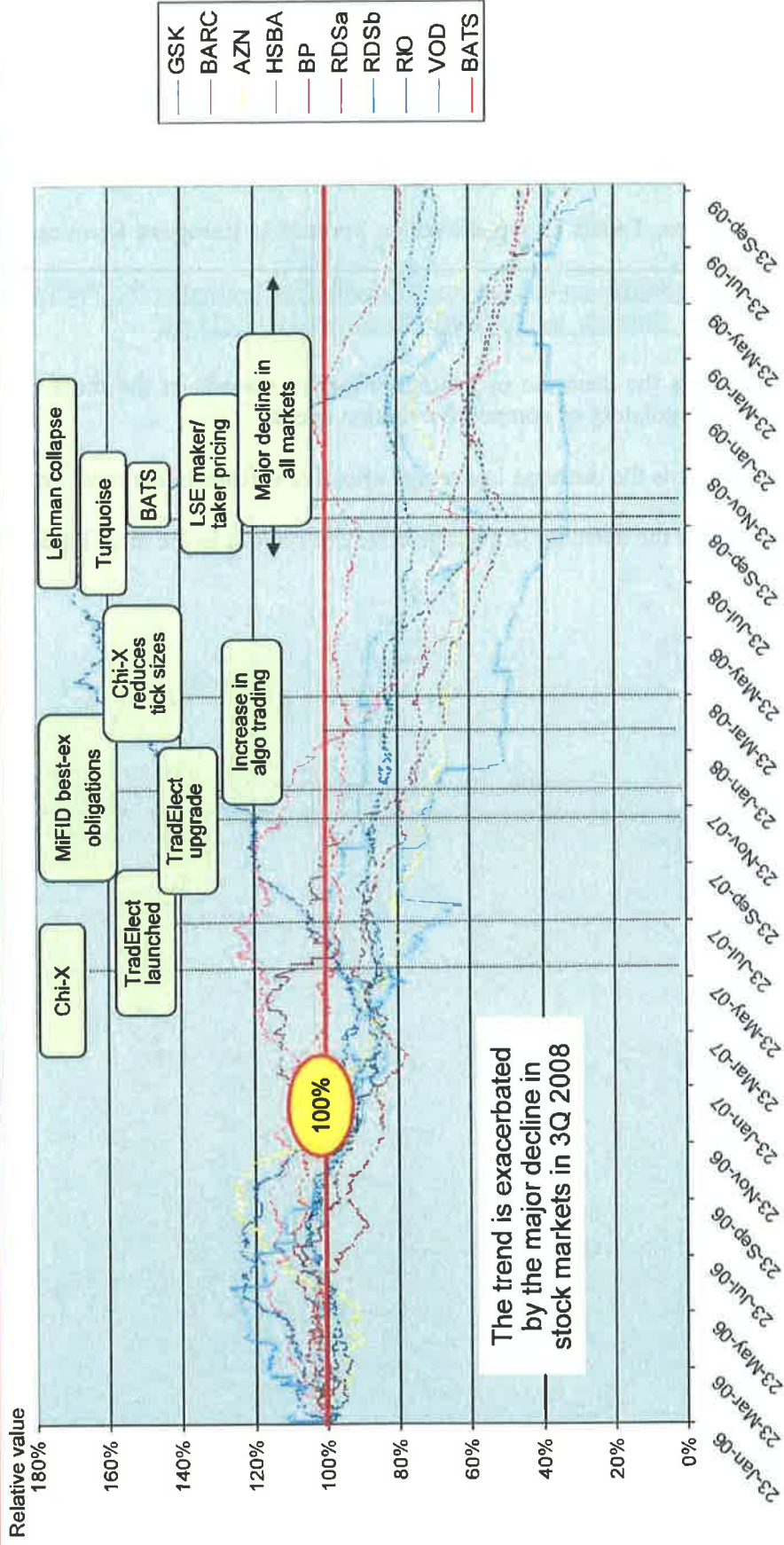
The first graph charts the decrease in average effective spreads in the most liquid FTSE 100 stocks with various regulatory or competitive market events.

The second graph charts the decrease in average effective spreads in the most liquid DAX stocks.

The third graph charts the decrease in average effective spreads in the most liquid CAC stocks.

# Average effective spreads have come down over a four year period in 100% of these ten most liquid FTSE 100 stocks measured

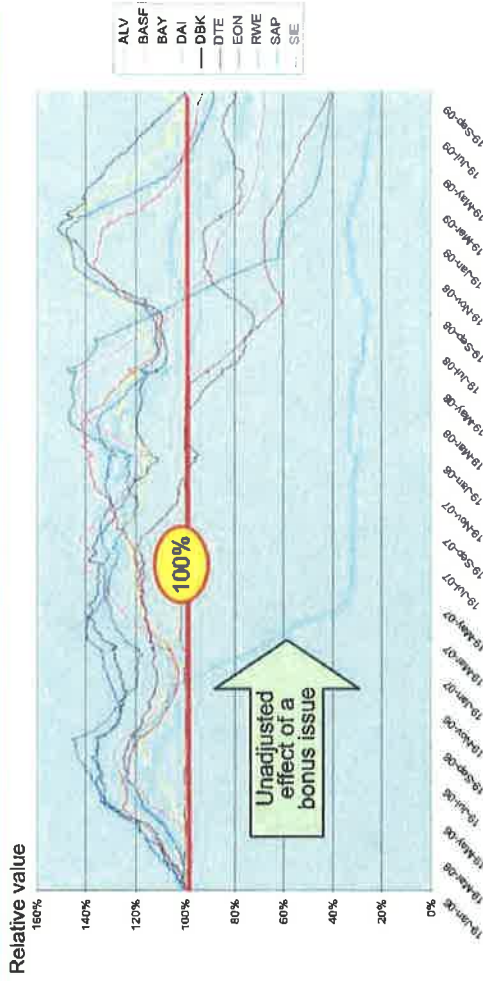
## Relative 100-day Average Effective Spreads: Most Liquid FTSE 100 stocks



Effective spread measures the distance from the midpoint of the market to the execution price at the time of the trade. This value is then doubled to capture the whole bid/offer spread. The spread at each trade is divided by the number of shares traded, which is the effective spread per share traded. This measure is then averaged over the trading day per venue to make the average effective spread.

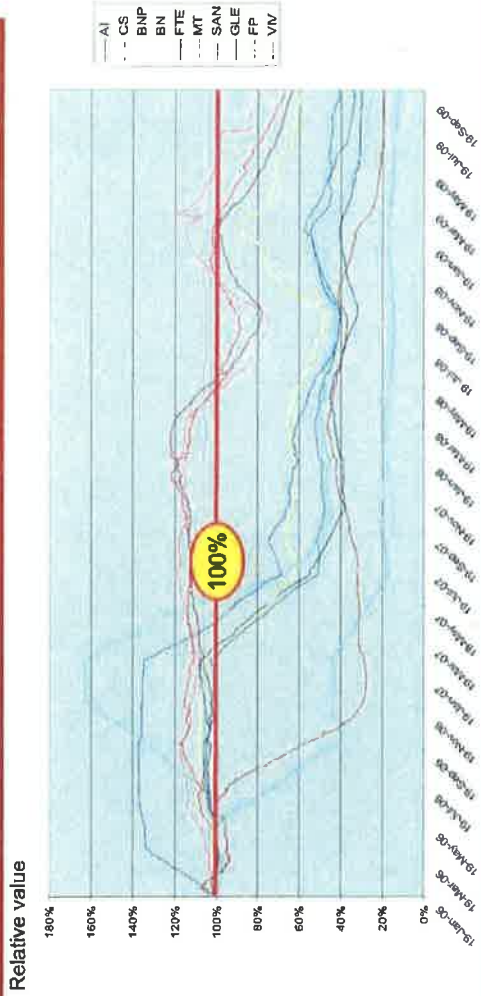
# The downward pressure on effective spreads in the most liquid stocks is very similar in the most liquid DAX 30 and CAC 40 stocks

Relative 100-day Average Effective Spreads: Most Liquid DAX



Effective spreads are most likely to decline in the more liquid stocks, but 95% of CAC 40 stocks and 85% of DAX stocks we measured also show lower effective spreads over four years.

Relative 100-day Average Effective Spreads: Most Liquid CAC



Stocks trading on markets with traditionally higher concentration on the order books show similar trends to FTSE 100 stocks.

The downward trend is observed despite the fact that the CAC declined 14% and the DAX rose by 15% over the total period measured.