

COMMENT LETTER

August 12, 2011

ICI Letter on IOSCO Consultation on the Impact of Technological Changes on Market Integrity and Efficiency (pdf)

August 12, 2011 Mr. Werner Bijkerk International Organization of Securities Commissions Calle Oquendo 12 28006 Madrid Spain Re: Public Comment on Consultation Report: Regulatory Issues Raised by the Impact of Technological Changes on Market Integrity and Efficiency Dear Mr. Bijkerk: The Investment Company Institute ("ICI") strongly supports the International Organization of Securities Commissions' ("IOSCO") review of issues raised by the impact of technological changes on market integrity and efficiency.¹ The Consultation raises a number of issues of importance to ICI members. ICI is the national association of U.S. investment companies, including mutual funds, closed- end funds, exchange-traded funds ("ETFs"), and unit investment trusts ("UITs").² The structure of the global securities markets has a significant impact on ICI members, who are investors of over \$13 trillion of assets. We are institutional investors, but invest on behalf of over 90 million individual shareholders.³ According to ICI data, as of March 2011, U.S. based long-term mutual funds held \$2.4 trillion in non-U.S. securities, accounting for almost 25 percent of the assets of these funds. U.S. registered investment companies and their shareholders therefore have a strong interest in ensuring that the global financial markets are highly competitive, transparent and efficient, and that the regulatory

¹Regulatory Issues Raised by the Impact of Technological Changes on Market Integrity and Efficiency, Technical Committee of the International Organization of Securities Commissions (July 2011). The consultation report ("Consultation") can be found on IOSCO's website at <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD354.pdf>.

² ICI seeks to encourage adherence to high ethical standards, promote public understanding, and otherwise advance the interests of funds, their shareholders, directors, and advisers.

³ For more information on the U.S. registered investment company industry, see 2011 Investment Company Institute Fact Book at www.icifactbook.org.

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structure that governs the financial markets encourages, rather than impedes, liquidity, transparency, and price discovery.⁴ Consistent with these goals, we have strongly supported efforts to address issues that may impact the fair and orderly operation of the global financial markets and investor confidence in those markets and have long advocated for appropriate regulatory changes.⁵ The issues surrounding the trading of securities by funds and other institutional investors, including those raised by technological changes in the markets, are clearly no longer purely a domestic matter. Many U.S. funds execute trading strategies through intricately linked global trading desks and must be concerned about the regulation and structure of financial markets in all jurisdictions in which they trade, not just the United States. In addition, jurisdictions around the world are facing a

number of common issues. We therefore urge regulators around the globe to work together to create consistent and sensible regulations that work harmoniously across borders. Our increasingly global markets demand such cooperation among regulators to avoid negative consequences of incongruent regulatory requirements and to encourage regulatory efficiencies as funds increasingly pursue opportunities in a wide range of markets in the interest of their shareholders. While our response to the Consultation reflects the current views of ICI members on the issues discussed, it is clear that the debate will be lengthy and that the current consultation process is only the beginning of deliberations on the topics raised by technological advancements in the markets. ICI therefore offers its assistance to IOSCO as it continues to examine the issues raised by the Consultation and their impact on the financial markets. At this time, we are not providing detailed comments on each question posed by the Consultation. Given the breadth of the issues raised, we are limiting our comments to the most significant issues affecting funds. Some of the issues raised by the Consultation have already been dealt with, and consulted on, in previous IOSCO consultations. ICI provided comments on several of the consultations, including those relating to dark liquidity and direct electronic access.^{6 4} The issues discussed in the Consultation impact all U.S. registered investment companies, including mutual funds, closed- end funds, and ETFs. For purposes of this letter, we refer to U.S. registered investment companies as “funds.” ⁵ See, e.g., Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Directorate General, European Commission, dated February 2, 2011; available at <http://www.ici.org/pdf/24946.pdf> (European Commission Review of MiFID). For a comprehensive list of, and links to, ICI’s key comment letters and statements on trading and market structure issues, see Appendix A. ⁶ See Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Werner Bijkerk, Senior Policy Advisor, IOSCO, dated February 11, 2011; available at <http://www.ici.org/pdf/24968.pdf> (IOSCO Dark Liquidity Consultation) and Letter from Ari Burstein, Senior Counsel, Investment Company Institute, to Greg Tanzer, Secretary General, IOSCO, dated May 20, 2009; available at <http://www.ici.org/pdf/23474.pdf> (IOSCO Direct Electronic Access Consultation). Mr. Werner Bijkerk August 12, 2011 Page 3 of 19 Our comments and recommendations on the issues raised in the Consultation follow below.⁷

I. Summary of Comments and Recommendations Impact of Technological Developments on Fund Trading • We believe technological developments have had a significant impact on the manner in which funds trade; funds must take into account the impact of: the increase in volume of trading attributed to high frequency traders and the significant amount of automated trading in general; fragmentation in the markets and the number and types of alternative trading venues available; and new tools available to funds when trading. • We believe technological developments have contributed to driving more fund orders away from the lit markets and towards the use of dark liquidity; we strongly support efforts to provide incentives to use transparent orders but believe it is imperative that dark liquidity remains available to funds. Registration/Authorization of Proprietary Trading Firms • We believe requiring all proprietary trading firms that are not currently subject to registration/authorization by a regulator to obtain such registration/authorization could prove beneficial, at least for those firms over a specified minimum quantitative threshold. Pre- and Post-Trade Risk Controls • We believe the establishment of robust pre- and post-trade risk controls is critical given the prevalence of high frequency trading and algorithmic trading, significantly the implementation of controls designed to manage the risks associated with market access. Trading Control Mechanisms • We strongly support efforts to implement appropriate trading control mechanisms through: the establishment of a limit up-limit down system; the implementation of better procedures for resolving clearly erroneous trades; the elimination of inconsistent practices ⁷ Our comments and recommendations are focused on the impact of technological changes on the equity

markets. ICI members, however, also are active participants in the derivatives and fixed-income markets and changes to the structure of those markets will have an impact on the manner in which funds execute trades and interact with other market participants. ICI therefore strongly supports a robust examination of the current market structure and the impact of technological changes in the non-equity markets.

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among trading venues to address major price movements in stocks; and the examination of the linkages and interdependency of the equity, options and futures markets.

Mandatory Minimum Criteria for Market Makers • We recommend that regulators examine whether more stringent obligations are necessary for traditional market makers in times of market stress, particularly given the critical role of liquidity, and liquidity providers, in the markets.

Regulators' Surveillance Capabilities • We strongly support regulators having access to accurate, timely and detailed information about market participants and trades that are executed to examine changes to the structure of the financial markets and to identify emerging issues in a timely fashion.

• We believe regulators should examine transaction reporting regimes similar to the consolidated audit trail and large trader reporting initiatives in the United States to facilitate monitoring of trends in trading and trading behavior.

Settlement Failures • We believe a robust settlement system is critical to the effective functioning of the financial markets and support efforts to address settlement failures.

Conflicts of Interest • We believe the incentives that currently exist for market participants to route orders to particular venues (e.g., liquidity rebates), and any related conflicts of interest that may arise due to these incentives, need to be examined; at the very least, there should be more transparency surrounding conflicts of interest.

Rules on Market Abuse and Disorderly Trading • We strongly support an examination by regulators whether any new regulations are necessary to address certain trading strategies that should be considered as improper or manipulative and urge regulators to address issues relating to abusive or disruptive trading on an expedited basis.

• We recommend that regulators clarify the nature of any conduct that will be prohibited as new rules that may be necessary to address market abuse and disorderly trading are examined.

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High Frequency Trading Strategies • We believe some trading practices utilized by high frequency trading firms (and other automated trading firms) may pose problems for long-term investors; we support action by regulators to clearly define practices that may constitute market abuse to ensure adequate regulatory consequences for these practices.

Charges or Fees on Cancellations • We recommend that regulators act to address the increasing number of order cancellations in the financial markets; at the very least, regulators should examine whether a fee should be imposed on cancelled orders (e.g., based on a market participant's ratio of orders to executed transactions, when that ratio exceeds a specified threshold).

• We are concerned about suggestions for a minimum "time in force" for orders; we recommend that regulators further study the impact of a minimum time in force requirement prior to putting forth a proposal for such a requirement.

Co-Location Services • We believe the terms of co-location services must not be unfairly discriminatory and should be subject to standards that ensure that fees are equitably allocated and reasonable.

Stress Testing Algorithms • We support subjecting algorithms to appropriate rules and controls, such as requirements for policies and procedures aimed at preventing algorithms from operating in an unintended manner; at the same time, regulators must be careful not to impede funds' use of new and innovative trading tools.

Need for Increased Information Regarding Order Routing and Execution Practices • We recommend that regulators examine the sufficiency of information provided by brokers and other trading venues to investors about trade execution, including whether brokers are providing adequate and accurate information about how orders are handled and routed.

II. General Comments We are pleased that IOSCO has determined to take a comprehensive look at technological changes in the

markets and their impact on long-term investors such as funds. We are hopeful that this comment process will be the start of a thoughtful and measured approach to the reform of the structure of the global financial markets to ensure that there are no unintended consequences to investors. Mr. Werner Bijkerk August 12, 2011 Page 6 of 19

As we discuss the topics raised by the Consultation, it is important to note that ICI believes that investors, both retail and institutional, are better off than they were just a few years ago and that overall, the markets are operating efficiently. Most significantly, trading costs have been reduced, more trading tools are available to investors with which to execute trades, and technology arguably has increased the overall efficiency of trading. Nevertheless, as discussed in further detail below, funds remain concerned about declines in posted liquidity and average execution size and the increased difficulty of trading large blocks of stock, as well as other challenges created by recent technological developments. ICI urges regulators to take a measured approach in any responses they feel appropriate and necessary to address the impact of technological developments on market efficiency and integrity. If regulations are too restrictive, they may unintentionally limit the use of evolving market practices and technological developments and thus impede funds' use of new and innovative trading tools and trading venues. In addition, if regulations are too onerous or costly for some market participants, those participants may decide not to offer certain products or services to investors. Similarly, the cost of trading may increase as market participants shift the burden of compliance with new requirements to investors. We therefore urge regulators to carefully balance these potential costs with the benefits any new regulations would provide to investors. Finally, it will be important for regulators to consider the varying business models and trading mechanisms that exist when examining new regulations.

III. Consultation Questions Q1: What impact have the technological developments in the markets in recent years had on your own trading? Has it encouraged, discouraged or had no impact on your willingness to participate on the lit markets, and how does this differ between asset classes and/or instruments?

The global equity market structure has undergone significant changes over the past several years. Clearly, a primary driver and enabler of these changes has been the continual evolution of technologies for generating, routing and executing orders and related improvements to the speed, capacity and sophistication of the trading functions available to investors. Funds rely heavily on technology for the efficient execution of their trades. Technological developments have had a significant impact on the manner in which funds trade. When determining the most efficient approach to executing a trade, funds must take into account: (1) the impact of the increase in volume of trading attributed to certain market participants such as high frequency traders and the significant amount of automated trading in general; (2) fragmentation in the markets and the number and types of alternative trading venues available; and (3) the new technology and tools available to funds when trading. All of these developments together have undoubtedly discouraged funds and other institutional investors from participating in the lit markets.

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Impact of High Frequency Trading and Automated Trading

While the Consultation discusses several issues relevant to the latest technological developments and their impact on market integrity and efficiency, it focuses on high frequency trading ("HFT") as the key issue with respect to technology's impact on the markets. We discuss the impact of several issues related to HFT in more detail throughout our comments below; in general, however, there is no consensus on the impact of HFT on the markets. On the one hand, HFT arguably brings several benefits to the markets and to investors, including providing liquidity and tightening spreads. At the same time, ICI members have expressed concerns about several practices that have become associated with high frequency trading. These include, among other things, the creation of unnecessary market traffic and misleading market "noise" through certain high frequency trades, particularly the submission of numerous orders that

are cancelled shortly after submission, and certain practices to detect the trading of large blocks of securities by funds and to trade with or ahead of those blocks. These practices have forced funds and other institutional investors to modify their own trading strategies. Funds have become more diligent in choosing their counterparties and the venues to which they route their orders to protect the confidentiality of information regarding their trades. As we have stated in several letters to the U.S. Securities and Exchange Commission ("SEC"),⁸ any premature or improper disclosure of this information can lead to frontrunning of a fund's trades, adversely impacting the price of the stock that the fund is buying or selling.

Development of Alternative Trading Venues While technological developments have resulted in improvements for investors, these changes also have shifted the dynamics of trading for funds. Most significantly, posted liquidity and average execution size have been reduced while the difficulty of trading large blocks of stock has increased, driving more fund orders away from the lit markets towards the use of dark liquidity. As discussed in detail in our letter on IOSCO's dark liquidity consultation, undisplayed liquidity provides an important mechanism for transactions to interact without displaying the full scale of a fund's trading interest. For ICI members that frequently execute large orders, dark liquidity, and the venues that provide such liquidity (i.e., dark pools), allow funds to avoid sharing trade information.

⁸ See, e.g., Letters from Paul Schott Stevens, President, Investment Company Institute, to Christopher Cox, Chairman, Securities and Exchange Commission, dated September 14, 2005 (available at http://www.ici.org/pdf/comment_leakage_05.pdf); August 29, 2006 (available at http://www.ici.org/pdf/comment_leakage_06.pdf); and September 19, 2008 (available at http://www.ici.org/pdf/comment_leakage_08.pdf). Mr. Werner Bijkerk August 12, 2011 Page 8 of 19 with market participants who would use that information to inappropriately profit to the detriment of funds and their shareholders. In effect, dark pools are used by funds to address concerns resulting from technological developments. ICI recognizes that while the use of undisplayed liquidity brings certain benefits to funds, there are concerns about its impact on the price discovery process, the potential for fragmentation of information and liquidity searches, and implications for market integrity due to possible differences in access to markets and information. Ideally, funds would like as many orders as possible to be executed in the lit markets. We therefore strongly support efforts to provide incentives for market participants to use transparent orders. We have for many years recommended changes that would facilitate greater order interaction and, in turn, more efficient trading. Nevertheless, ICI believes it is imperative that venues providing dark liquidity remain available to funds and that the regulations overseeing these venues facilitate their continued use. We would be concerned if any regulatory reforms impeded funds as they trade securities in venues providing undisplayed liquidity.

Increase in Automated Trading Tools One of the benefits of technological developments for funds and other institutional investors has been improvements in the sophistication of the trading functions available to investors. As noted above, funds rely heavily on technology for the efficient execution of their trades. The increased number and variety of trading tools available to funds has resulted in less dependence on "high touch" trading and has contributed to lower overall trading costs and higher overall efficiency of trading.

Q2: What are your views on the suggestion that proprietary trading firms (including HFT firms) that are not currently subject to registration/authorization by a regulator should be required to obtain such a registration/authorization? Are there specific regulatory requirements you believe such firms should face? To what extent do your answers differ if the proprietary trading firm accesses the market as the customer of an intermediary firm through DEA (i.e., under that intermediary's trading rules/codes) rather than as a direct member of the market itself? In the United States, the role of proprietary trading firms, including HFT firms, has taken on more significance since the "flash crash" on May 6, 2010, as the sudden absence of liquidity in the markets played a critical role in the severe decline

in stock prices. In recent years, many HFT firms have replaced more traditional types of liquidity providers in the equity markets. While these firms may provide liquidity to the markets, they are under no obligation to do so and may choose to provide liquidity and capture spreads, or not, when it is in their interest. HFT firms can therefore act as de facto market makers at times of their choosing without being subject to any quoting obligations. ICI believes that requiring all proprietary trading firms that are not currently subject to registration/authorization by a regulator to obtain such registration/authorization could prove beneficial. Subjecting these firms, or at least those over a specified minimum quantitative threshold, to Mr. Werner Bijkerk August 12, 2011 Page 9 of 19 further regulation in this manner, would ensure that they are subject to systems and risk management requirements and critical regulatory oversight, as well as provide regulators with better access to information about proprietary trading firms. With that said, as we noted in response to several suggestions in the United States for further obligations on proprietary trading firms and HFT firms following the flash crash, we are unsure whether requirements seeking to ensure that high frequency traders continue to provide liquidity in times of market stress in fact would keep them in markets in adverse market conditions. We recommend that regulators gather additional data and examine the trading activity of proprietary trading firms and HFT firms and the liquidity they provide and then consider whether these firms should be subjected to regulatory requirements similar to those of other market participants. Q3: What recommendations, if any, would you propose to strengthen the regulatory requirements around pre- and post-trade risk controls? In particular, what measures, if any, do you think regulators should introduce that relate specifically to the use of and risks posed by algorithmic trading and/or HFT? ICI believes the establishment of robust pre- and post-trade risk controls is critical given the prevalence of algorithmic trading and high frequency trading. Much of the focus in the United States around pre- and post-trade risk controls has been on the establishment of requirements relating to so-called "sponsored access" and other types of market access arrangements. As regulators have noted, risks related to automated trading can arise when an automated trader uses the facilities of another firm to access the market. ICI strongly supported the adoption by the SEC of rules to require broker-dealers to implement risk management controls and supervisory procedures reasonably designed to manage the risks associated with market access.⁹ Similarly, we supported efforts by IOSCO in its consultation report on direct electronic access to provide a framework for crafting regulations on these arrangements.¹⁰ At the same time, we have urged regulators to ensure that the scope of any regulations in this area does not unnecessarily affect the various methods that funds use to trade securities through broker-dealers or lead to unintended consequences for funds and other institutional investors using market access arrangements, particularly regarding the confidentiality of trading information.¹¹ 9 See Letter from Ari Burstein, Senior Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated March 29, 2010; available at <http://www.ici.org/pdf/24210.pdf>. Specifically, the controls and procedures adopted by the SEC will, among other things, prevent the entry of orders unless there has been compliance with regulatory requirements that must be satisfied on a pre-order entry basis. 10 See ICI Letter on IOSCO DEA Consultation, *supra* note 6. 11 To address these concerns in the United States, ICI recommended that, at the very least: (1) unless expressly authorized to the contrary by a customer, access to information regarding a market access customer's orders and trades be limited to broker-dealer compliance personnel directly associated with overseeing market access controls and procedures; (2) that information required to be disclosed must be relevant to specific risk concerns created by market access; and (3) that the Mr. Werner Bijkerk August 12, 2011 Page 10 of 19 As discussed below, ICI also supports the establishment of other pre- and post-trade risk controls that address concerns relating

to algorithmic trading and HFT including trading control mechanisms such as circuit breakers and limit up-limit down systems, as well as some form of algorithm testing. Q4: To what extent do you believe the use of trading control mechanisms such as circuit breakers and limit-up/limit-down systems by trading venues should be mandated? If you believe they should be mandated, should venue operators be permitted to design their own controls or should they be harmonized/coordinated across venues (including between interrelated instruments such as a derivative and its underlying)? The market events of May 6, 2010 highlighted the need to examine several areas surrounding trading control mechanisms. These included the need for: (1) updated market-wide and stock-by-stock circuit breakers; (2) better procedures for resolving clearly erroneous trades; (3) an examination of the inconsistent practices of exchanges regarding addressing major price movements in stocks; and (4) better coordination across all types of markets.

Circuit Breakers and Limit Up-Limit Down Systems The flash crash in the United States highlighted the need to implement circuit breakers or limit up-limit down systems to mitigate instances of sudden market volatility or the risk of errors generated by automated trading. ICI strongly supported efforts to initially address market volatility through the establishment of single-stock circuit breakers. While the single-stock circuit breaker pilot program in the United States was a significant step in addressing concerns about volatility, ICI has supported the further action by regulators to establish a limit up-limit down system that would replace the single-stock circuit breaker pilot and provide a more flexible approach to addressing extreme price movements in stocks. We believe similar trading control mechanisms can be useful in other jurisdictions.

Clearly Erroneous Trades On May 6, 2010, many trades were cancelled according to the securities markets' "clearly erroneous rules," which provide the securities exchanges with the ability to cancel trades effected at prices that were sharply divergent from prevailing market prices. The SEC has since approved rules to reform the process of breaking "clearly erroneous" trades. The previous arbitrary process by which the threshold level for correcting trades was set clearly did not work effectively and did not operate in the best interests of investors. We support the implementation of similar rules by other jurisdictions. SEC make clear that broker-dealers who obtain information also have adequate confidentiality safeguards and controls in place to protect such information and that the information be used exclusively for regulatory purposes. Mr. Werner Bijkerk August 12, 2011 Page 11 of 19

Inconsistent Trading Venue Practices The flash crash in the United States also made clear the need to address the inconsistent practices employed by individual exchanges to supplement existing circuit breakers. On May 6, 2010, the inconsistent trading protocols at the exchanges contributed to the severe excess of sell orders over buy orders and the resulting decline in stock prices. We strongly encourage trading venues to work together to eliminate inconsistencies in trading protocols and to harmonize, to the extent possible, policies and procedures in this area. Consistency and reliability in the application of trading pauses is critical for investors.

Better Coordination Among Trading Venues In addition to the specific issues regarding trading control mechanisms that need to be examined, ICI urges a more robust discussion and examination of the linkages and interdependency of the equity, options and futures markets. The flash crash in the United States illustrated how the connection between price discovery for the broader stock market and activity in the futures markets can affect market events. It will be critical for the development of effective regulation that the equity and non-equity markets work together as new regulations are developed and that there is harmonization and coordination across all types of venues.

Q5: To what extent do you believe market maker schemes offered by trading venues should be subject to mandatory minimum criteria? Should the criteria be determined by the trading venue alone? To what extent do you agree with the suggestion that the use of stub quotes should be prohibited? While the role of liquidity providers and traditional market makers under the current market structure has

garnered the attention of regulators and market participants in general, much of this focus has been on the increased presence of high frequency traders in the marketplace and their role in market making. As discussed above, ICI believes that subjecting proprietary trading firms, including HFT firms, which are acting as de facto market makers to registration/authorization, could prove beneficial. Given the critical role of liquidity, and liquidity providers, in the markets, we also recommend that regulators examine whether more stringent obligations are necessary for traditional market makers in times of market stress. In the United States, the SEC has taken several steps to strengthen the minimum quoting standards for market makers and has effectively prohibited stub quotes in the U.S. equity markets.¹² 12 Market makers will be required to maintain continuous two-sided quotations in exchange-listed equities that are within a certain percentage band of the national best bid and offer during regular market hours. Mr. Werner Bijkerk August 12, 2011 Page 12 of 19 ICI supported these efforts because executions against stub quotes represented a significant proportion of the trades that were executed at extreme prices and subsequently broken on May 6, 2010. ICI supports other jurisdictions examining similar requirements as well as whether other potential obligations are necessary for market makers. Q6: Do you have suggestions for improvements to regulators' surveillance capabilities with respect to the markets and modern trading techniques? Please elaborate. Who should bear the cost of investing in such capabilities and the cost of operating and supervising the markets in order to ensure fairness among market participants? Please elaborate. ICI strongly supports regulators having adequate arrangements in place to examine the changes to the structure of the financial markets and to identify emerging issues in a timely fashion. Most significantly, ICI believes that regulators should have access to accurate, timely and detailed information about market participants and the trades that are executed. To this end, we believe that a robust transaction reporting regime is necessary to enable regulators to monitor the activities of firms and ensure compliance with regulations and to monitor for market abuses. In the United States, ICI has supported efforts to create a reporting regime for regulators with respect to the SEC's proposal to develop, implement, and maintain a consolidated audit trail ("CAT").¹³ The SEC also recently adopted a large trader reporting system that would enhance the SEC's ability to identify the effects of certain large trader activity on the markets, reconstruct trading activity following periods of unusual market activity, and analyze market events and trading activity for regulatory purposes. ICI strongly supports an examination by other regulators of similar transaction reporting regimes. The fragmentation of the financial markets and the submission of large numbers of orders and trades across multiple venues also create difficulties for regulators' surveillance capabilities. We believe it is critical that regulators' market surveillance capabilities keep pace with HFT, in terms of both technological infrastructure and market knowledge. Specifically, there is an immediate need for transparency about the incentives for order flow received by HFT firms and other potential conflicts of interest in their trading and routing practices. It would be extremely helpful for regulators to have access to this information to better understand the impact of HFT on the markets and to ensure a robust surveillance scheme. As discussed above, we believe there is currently a paucity of information about high frequency trading. 13 See Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated August 9, 2010; available at <http://www.ici.org/pdf/24477.pdf>. Mr. Werner Bijkerk August 12, 2011 Page 13 of 19 Q7: What do you perceive as the major causes of settlement indiscipline and settlement failures? What steps, if any, do you believe regulators should take to address these causes? ICI believes that a robust settlement system is critical to the effective functioning of the financial markets.¹⁴ One of the issues examined in the United States related to settlement failures has been the issue of short selling. ICI has supported several

efforts by the SEC in this area. Most significantly, the SEC took steps to inhibit abusive “naked” short selling through a requirement that securities be purchased or borrowed to close out any fail to deliver position. We believe these actions have made great strides towards addressing abusive short selling, particularly in efforts to reduce fails to deliver.

Q8: Have the appropriate steps been taken to limit or manage conflicts of interest that arise where an investment firm simultaneously conducts client-serving activities and proprietary trading or a trading participant is also a shareholder in a venue on which it trades? If you believe conflicts management is inadequate, please explain how this manifests itself and any recommendation you have for how conflicts management could be improved. ICI believes that market structure developments over the past several years have created a number of conflicts of interest that should be addressed. For example, ICI believes that the incentives that currently exist for market participants to route orders to particular venues, and any related conflicts of interest that may arise due to these incentives, need to be examined. Significantly, the benefits and drawbacks of liquidity rebates in light of their use by brokers and HFT firms need to be addressed. We are concerned that brokers may refrain from posting limit orders on a particular exchange because it offers lower liquidity rebates than other markets, even though that exchange offers the best possibility of an execution for those limit orders. At the same time, the significance of benefits liquidity rebates may provide to investors is unclear. ICI does not recommend that liquidity rebates be prohibited at this time but we suggest that regulators, at the very least, require more transparency surrounding rebates and the revenue to market participants generated by rebates, as well as other incentives provided to route orders.¹⁵ ¹⁴ ICI supports the examination by IOSCO’s Technical Committee and the Committee on Payment and Settlement Systems (“CPSS”) of issues relating to settlement failures in the financial markets through its consultative report on the Principles for Financial Market Infrastructures. The consultative report can be found at <http://www.bis.org/publ/cpss94.pdf>. ¹⁵ ICI also recommends that regulators examine the various order types that exchanges offer that can be tailored to benefit certain market participants. We are concerned that several of these order types can benefit market participants, such as HFT firms, at the expense of long-term investors such as funds. We therefore recommend that regulators examine the specific order types that exchanges offer, the types of firms which utilize each order type, the average number of order submissions versus the average “fill rate” for each order type, and any conflicts of interest raised by the use of these order types. Mr. Werner Bijkerk August 12, 2011 Page 14 of 19

As discussed further below, ICI believes that there should be more transparency in general surrounding conflicts of interest. For example, we have recommended in the United States that there be increased information regarding payments and other incentives provided or received to direct order flow to particular trading venues, external venues to which a broker routes orders, and any ownership and other affiliations between a broker and any venues to which that broker routes orders.¹⁶ Increased transparency of these types of information may assist in better understanding potential conflicts.¹⁷

Q9: Do you think existing laws and rules on market abuse and disorderly trading cover computer generated orders and are relevant in today’s market environment? As discussed above, it is clear that regulations governing the financial markets have not kept pace with the significant changes in market participants’ trading practices. This includes regulations on market abuse and disorderly trading related to computer generated orders. We are concerned that recent technological advances in trading have allowed practices that should be considered as improper or manipulative to be employed more easily and cheaply, thereby lowering the risk to users of these practices. This, in turn, has made trading more challenging for funds that are interested in buying and selling large positions and that can be disadvantaged by market participants that trade in front of their orders. In the United States, regulators are currently examining necessary changes to existing rules and regulations to better address issues

relating to market abuse and disorderly trading. For example, the CFTC has examined the need to prohibit certain trading practices deemed disruptive of fair and equitable trading.¹⁸ ICI strongly supports such an examination by regulators and urges regulators in other jurisdictions to address issues relating to abusive or disruptive trading on an expedited basis. As regulators examine new laws or rules that may be necessary to address market abuse and disorderly trading, we stress the need for clarity as to the nature of any conduct that will be prohibited. Because of the varied trading practices used by market participants, it often is difficult to distinguish

16 For a more detailed discussion of ICI's recommendations for increased transparency in the financial markets, see our response to Consultation Question 14.

17 We note that in the United States, Section 619 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (i.e., the "Volcker Rule") addressed conflicts of interest that arise where an investment firm simultaneously conducts client-serving activities and proprietary trading. The Volcker Rule prohibits banking entities, which benefit from federal insurance on customer deposits or access to the discount window, from engaging in proprietary trading and from investing in or sponsoring hedge funds and private equity funds, subject to certain exceptions.

18 CFTC requested comment on a number of trading practices, including the practice of "spoofing." CFTC asked whether it should separately specify and prohibit certain practices as distinct from "spoofing" or whether these practices should be considered a form of "spoofing" prohibited under the statute including: (1) submitting or cancelling bids or offers to overload the quotation system of a registered entity, or delay another person's execution of trades; (2) submitting or cancelling multiple bids or offers to cause a material price movement; and (3) submitting or cancelling multiple bids or offers to create an appearance of market depth that is false.

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between legitimate and disruptive trading practices in a number of situations. For example, as the use of algorithms and automated trading systems have become important for funds in the normal course of the routing and execution of their orders, rulemaking surrounding trading should be carefully drafted so as not to chill legitimate behavior.

Q10: Are there any strategies employed by HFT firms that raise particular concerns? If so, how would you recommend that regulators address them? As the Consultation notes, HFT is not a single strategy but rather a set of technological arrangements and tools employed in a wide number of strategies, each one having a different market impact and therefore raising different regulatory issues. However the trading practices of high frequency traders may be characterized, our members report that some of the practices utilized by HFT firms (and other automated trading firms) may pose problems for long-term investors.¹⁹ For example, an automated trading firm may seek to ascertain the existence of one or more large buyers (sellers) in the market and to buy (sell) ahead of the large orders with the goal of capturing a price movement in the direction of the large trading interest. After a profitable price movement, the firm then may attempt to sell to (buy from) the large buyer (seller) or be the counterparty to the large buyer's (seller's) trading. In addition, the HFT firm may view the trading interest of the large buyer (seller) as a free option to trade against if the price moves contrary to the HFT firm's position. Similarly, an automated trading firm may utilize a strategy where it may initiate a series of orders and trades in an attempt to ignite a rapid price move either up or down. For example, the trader may intend that the rapid submission and cancellation of many orders, along with the execution of some trades, will "spoofer," or fool, the algorithms of other traders into action and cause them to buy (sell) more aggressively. To be clear, there is nothing illegal per se about many of these practices. Many market participants utilize sophisticated pattern recognition software to ascertain from available information the existence of a large buyer or seller or use orders to probe the markets in an attempt to locate and trade ahead of large buyers and sellers. Merely because this behavior is not per se illegal, however, does not mean that these practices are beneficial to the markets or to

investors, or that it does not interfere with efficient price discovery. 19 ICI recognizes that defining HFT for regulatory purposes is difficult, particularly given the many ways that HFT firms can be organized. While there is no formal definition of HFT in the United States, the SEC's concept release on the structure of the U.S. equity markets delineated several characteristics that are often attributed to HFT firms. These include: (1) the use of extraordinarily high-speed and sophisticated computer programs for generating, routing, and executing orders; (2) the use of co-location services and individual data feeds offered by exchanges and others to minimize network and other types of latencies; (3) very short time-frames for establishing and liquidating positions; (4) the submission of numerous orders that are cancelled shortly after submission; and (5) ending the trading day in as close to a flat position as possible. We believe this is a good starting point for discussing high frequency trading. Mr. Werner Bijkerk August 12, 2011 Page 16 of 19 Funds have been concerned about these types of market practices for years. Many market participants in the United States, including floor brokers and market makers, utilized these techniques in the past to obtain an advantage over funds. What has changed, however, is the technology available to HFT firms and automated trading firms that allows them to better identify and execute these trading strategies. Technology has made these practices much easier and cheaper to employ, thereby lowering the risk to their users. This, in turn, has made trading more difficult for funds that are hurt by market participants that trade in front of their orders. As discussed above, ICI supports action by regulators to clearly define practices involving HFT and algorithmic trading that may constitute market abuse to ensure adequate regulatory consequences for these practices. Combined with robust enforcement of rules, such actions will go far to address concerns relating to particular HFT and other automated practices. Q11: Should charges or fees be imposed on messages, cancellations or high order-to-trade ratios? If so, how should the fees or charges be determined and on what basis? ICI believes that regulators should address the increasing number of order cancellations in the financial markets, particularly when numerous orders are cancelled shortly after submission. While we recognize that there may be a number of legitimate reasons to cancel a large number of orders, our members report that certain of the practices and strategies surrounding cancellations often are designed to detect the trading of large blocks of securities by funds and to trade with or ahead of those blocks. At the very least, regulators should examine whether a fee should be imposed on cancelled orders (e.g., based on a market participant's ratio of orders to executed transactions, when that ratio exceeds a specified threshold). While we believe the imposition of a fee could prove beneficial, we are concerned about suggestions for a minimum "time in force" for orders. Given the speed of the markets and the differing trading tools utilized by investors, we believe a minimum time in force requirement could impede the manner in which funds currently trade. We recommend that regulators further study the impact of a minimum time in force requirement prior to putting forth a proposal for such a requirement. Q12: Should market operators be required to make their co-location services available on a fair and non-discriminatory basis? There are a number of tools that automated traders and high frequency traders use to obtain the fastest market access possible to satisfy the manner in which they need to trade. One of these tools is the use of "co-location." Co-location helps minimize network and other types of latencies between the matching engine of a trading center and the servers of market participants. Co-location also assists automated traders and high frequency traders in that it reduces the time to access trading venues to submit orders, as well as to receive execution reports and other messages from the trading venue. Mr. Werner Bijkerk August 12, 2011 Page 17 of 19 Co-location has raised concerns whether some market participants who are not able to make a similar investment in technology are at a disadvantage to automated traders and high frequency traders, and has raised questions whether operators of trading venues should give market participants equal and

fair access to co-location services. In the United States, the SEC has taken the position that co-location services offered by exchanges are subject to the requirements in the Securities Exchange Act of 1934, meaning that the terms of co-location services must not be unfairly discriminatory and the fees must be equitably allocated and reasonable. ICI believes that these represent standards by which regulators can judge co-location services offered by trading venues. Q13: Should market operators be required to provide testing environments to enable participants to stress test their algorithms? If so, what kind of minimum requirements are reasonable? The increased use of algorithms has raised several regulatory concerns. These include algorithms that may act in an unexpected or unintended manner leading to sudden liquidity imbalances that quickly drive prices up or down. ICI supports subjecting algorithms to appropriate rules and controls, such as requirements for policies and procedures aimed at preventing algorithms from operating in an unintended manner. At the same time, we believe regulators must be careful not to impede funds' use of new and innovative trading tools. Q14: To what extent do you have other comments related to the risks to market integrity and efficiency raised by the issues in this report? There is a need for more transparency in the financial markets regarding how orders are executed and routed. Improved information in this area would allow investors to make better informed investment decisions and, in turn, facilitate best execution, as well as assist regulators in assessing current market performance. Specifically, ICI recommends that regulators examine the sufficiency of the information provided by brokers and other trading venues to investors about trade execution, including whether brokers are providing adequate and accurate information directly to investors about how orders are handled and routed. They likewise should examine the need for more public disclosure about how orders are handled, and how to achieve better trade reporting by all types of execution venues regarding order execution.²⁰ Specifically, we recommend increasing information regarding: payments and other incentives provided or received to direct order flow to particular trading venues; specific information regarding the routing and execution of orders, for example, the trading venues to which an order was routed and did not get filled prior to being executed; external venues to which a broker routes orders, the percentage of shares executed at each external venue, and any ownership and other affiliations between the broker and any venues to which the broker routes orders; policies and procedures regarding the dissemination of information about a customer's order and trade information to facilitate a trade; and policies and procedures to control leakage of information regarding a customer's order and other confidential information. Mr. Werner Bijkerk August 12, 2011 Page 18 of 19 As investors, transparency of such information is vital to making informed investment decisions; robust transparency provides investors with access to information about current trading opportunities, facilitates price discovery and assists firms in providing best execution to their clients. At the same time, we believe there are limits to the benefits of increased transparency, such as in situations where transparency can result in the premature disclosure of critical information about fund orders. We therefore urge regulators to closely examine the potential unintended consequences of increasing transparency of certain trade information, e.g., information about funds' block orders. As discussed above, we also recommend that regulators increase transparency surrounding HFT including the manner in which HFT firms trade, liquidity rebates and other incentives for order flow received by HFT firms, and other potential conflicts of interest that may exist concerning their trading and routing practices. Finally, as discussed above, much of the current debate over pre- and post-trade transparency in the United States has centered on the proliferation of dark liquidity and the venues that provide such liquidity. While ICI has generally supported the pre- and post-trade transparency proposals put forth in the United States regarding dark liquidity, we have urged regulators to examine any unintended consequences that may arise as a result of new transparency requirements in this area,

particularly the impact on large orders. We therefore strongly support the exceptions provided in various jurisdictions to pre- and post- trade transparency for large orders. These exceptions are critical to funds and other institutional investors. We believe, however, that regulators should ensure that the exceptions are applied consistently and coherently, that their use is not being abused, and that there is legal certainty regarding the interpretation of the rules applying to the exceptions.²¹ For more detailed information on ICI's recommendations for increased transparency, see, e.g., Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated April 21, 2010; available at <http://www.ici.org/pdf/24266.pdf> (ICI Letter on SEC Concept Release on Equity Market Structure) and ICI Letter on IOSCO Dark Liquidity Consultation, *supra* note 6. Mr. Werner Bijkerk August 12, 2011 Page 19 of 19 * * * * * If you have any questions on our comment letter, please feel free to contact me directly at (202) 326-5815, or Ari Burstein at (202) 371-5408. Sincerely, /s/ Karrie McMillan Karrie McMillan General Counsel Appendix A Key ICI Comment Letters and Statements on Market Structure Issues Order Execution Obligations: Letter from Craig S. Tyle, Senior Counsel, Investment Company Institute, to Jonathan G. Katz, Secretary, Securities and Exchange Commission, dated January 16, 1996; available at <http://www.ici.org/pdf/7561.pdf> Regulation of Exchanges and Alternative Trading Systems: Letter from Craig S. Tyle, General Counsel, Investment Company Institute, to Jonathan G. Katz, Secretary, Securities and Exchange Commission, dated July 28, 1998; available at http://www.ici.org/pdf/comment98_reg_exch_atr.pdf Market Fragmentation Concept Release: Letter from Craig S. Tyle, General Counsel, Investment Company Institute, to Jonathan G. Katz, Secretary, Securities and Exchange Commission, dated May 12, 2000; available at <http://www.ici.org/pdf/11894.pdf> Subpenny Concept Release: Letter from Craig S. Tyle, General Counsel, Investment Company Institute, to Jonathan G. Katz, Secretary, Securities and Exchange Commission, dated November 20, 2001; available at http://www.ici.org/policy/comments/01_SEC_SUBPENNY_COM Regulation NMS: Letter from Ari Burstein, Associate Counsel, Investment Company Institute, to Jonathan G. Katz, Secretary, Securities and Exchange Commission, dated June 30, 2004; available at http://www.ici.org/policy/markets/domestic/04_sec_nms_com Disclosure of Short Sales and Short Positions: Letter from Ari Burstein, Senior Counsel, Investment Company Institute, to Florence Harmon, Acting Secretary, Securities and Exchange Commission, dated December 16, 2008; available at <http://www.ici.org/pdf/23128.pdf> IOSCO Consultation on Regulation of Short Selling: Letter from Ari Burstein, Senior Counsel, Investment Company Institute, to Greg Tanzer, Secretary General, IOSCO, dated May 18, 2009; available at http://www.ici.org/pdf/comment_051809_iosco_consult.pdf IOSCO Consultation on Direct Electronic Access: Letter from Ari Burstein, Senior Counsel, Investment Company Institute, to Greg Tanzer, Secretary General, IOSCO, dated May 20, 2009; available at <http://www.ici.org/pdf/23474.pdf> Amendments to Regulation SHO (Short Selling): Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated June 19, 2009; available at http://www.ici.org/policy/comments/cov_comment/09_sec_short_sale_com U.S. Senate Market Structure Hearing: Statement of the Investment Company Institute, Hearing on "Dark Pools, Flash Orders, High Frequency Trading, and Other Market Structure Issues," Securities, Insurance, and Investment Subcommittee, Committee on Banking, Housing & Urban Affairs, U.S. Senate, October 28, 2009; available at <http://www.ici.org/pdf/23925.pdf> Flash Orders: Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated November 23, 2009; available at <http://www.ici.org/pdf/23973.pdf> Non-Public Trading Interest: Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated February 22, 2010;

available at <http://www.ici.org/pdf/24142.pdf> Market Access: Letter from Ari Burstein, Senior Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated March 29, 2010; available at <http://www.ici.org/pdf/24210.pdf> SEC Concept Release on Equity Market Structure: Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated April 21, 2010; available at <http://www.ici.org/pdf/24266.pdf> SEC Market Structure Roundtables: Letters from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated June 1, 2010 and June 23, 2010; available at <http://www.ici.org/pdf/24361.pdf> and <http://www.ici.org/pdf/24384.pdf> Circuit Breakers: Letters from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated June 3, 2010 and July 19, 2010; available at <http://www.ici.org/pdf/24364.pdf> and <http://www.ici.org/pdf/24438.pdf> Large Trader Reporting System: Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated June 22, 2010; available at <http://www.ici.org/pdf/24381.pdf> Clearly Erroneous Executions: Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated July 19, 2010; available at <http://www.ici.org/pdf/24437.pdf> Consolidated Audit Trail: Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated August 9, 2010; available at <http://www.ici.org/pdf/24477.pdf> European Commission Review of MiFID: Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Directorate General, European Commission, dated February 2, 2011; available at <http://www.ici.org/pdf/24946.pdf> IOSCO Consultation on Dark Liquidity: Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Werner Bijkerk, Senior Policy Advisor, IOSCO, dated February 11, 2011; available at <http://www.ici.org/pdf/24968.pdf> Limit Up-Limit Down System: Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated June 22, 2011; available at <http://www.ici.org/pdf/25295.pdf> Dodd-Frank Act Short Sale Reporting Study: Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated June 23, 2011; available at <http://www.ici.org/pdf/25297.pdf>