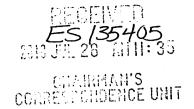


1401 H Street, NW, Washington, DC 20005-2148, USA 202/326-5800 www.ici.org



Paul Schott Stevens, PRESIDENT & CEO

202/326-5901 FAX: 202/326-5806 paul.stevens@ici.org

July 27, 2010

The Honorable Mary Schapiro
Chairman
U.S. Securities and Exchange Commission
Co-Chair, Joint CFTC-SEC Advisory
Committee on Emerging Regulatory Issues
100 F Street, N.E.
Washington, DC 20549

The Honorable Gary Gensler
Chairman
Commodity Futures Trading Commission
Co-Chair, Joint CFTC-SEC Advisory
Committee on Emerging Regulatory Issues
Three Lafayette Centre
1155 21street, N.W.
Washington, DC 20581

Re: Exchange-Traded Funds, the Market Events of May 6, and General Market Structure Comments

Dear Co-Chairs Schapiro and Gensler:

The Investment Company Institute is the national association of U.S. investment companies, including mutual funds, closed-end funds, exchange-traded funds (ETFs), and unit investment trusts (UITs). Members of ICI manage total assets of \$11.42 trillion and serve almost 90 million shareholders. Institute members held 28 percent of the value of publicly traded U.S. equity outstanding at the end of 2009. Institute members have a strong interest in ensuring that the securities markets are highly competitive, transparent, and efficient.

As the Joint CFTC-SEC Advisory Committee on Emerging Regulatory Issues continues to examine the market events of May 6, 2010, and evaluates recommendations relating to market structure issues, I hope you will consider the ICI's initial findings and recommendations, particularly as they relate to exchange-traded funds. We agree with Chairman Schapiro's recent testimony regarding May 6, including that the extreme volatility on that day revealed gaps and weaknesses in some aspects of current market structure, and that the pattern of events explains why ETFs were disproportionately affected. We strongly support the SEC's recent initiatives to address some of those gaps, and urge the Commission, the CFTC, and the Committee to continue examining ways to improve the current market structure for the benefit of all investors.

To provide additional information on the Institute's views on May 6, recent rulemaking initiatives to address those issues, and possible improvements to market structure more generally, I enclose the following submissions we have previously provided to the SEC:

1. ICI analysis on the effect of aberrant trading on May 6 on ETFs (originally submitted as an appendix to our first circuit breaker comment letter)

	•		•
	•	• •	
			• .
		•	
	_	•	
	i ·	•	
	. •		
			•
			•
			•
		•	-
			•
	1		A
			The second
		•	
	·		
		,	
•	1		
			• .
	İ		
		•	
		•	
		•	
			•
• • •	1	: :	
		•	•
			•
		, • ·	•
		<i>/</i> •	•
			•
	•		
			•
	1		
	·		
		•	
	<b>!</b>		
	<u> </u>		
	1.		
	1		
•		•	
		•	•
	•		
		S	•
			•
		•	
	•	•	
	<b>t</b> . Solitonia		
그러지는 그리고 하는 그는 항공속을 관계적이다.			
그렇게는 말이 가고 이 전경 말라갈 있었다.		가는 사람들이 되었다. 	

- 2. ICI comment letter on the SEC's Concept Release on Equity Market Structure, dated April 21, 2010
- 3. ICI submission to the SEC's June 2, 2010 Roundtable on Market Structure, dated June 1, 2010
- 4. ICI follow-up submission to the June 2, 2010 Roundtable on Market Structure, dated June 23, 2010
- 5. ICI comment letters on the SRO Single Stock Circuit Breaker proposals, dated June 3, 2010 and July 19, 2010
- 6. ICI comment letter on the SRO Clearly Erroneous Executions proposals, dated July 19, 2010

We encourage the Committee to meet with ETF sponsors as it continues its review of the events of May 6 and the impact on ETFs, and considers additional recommendations on improvements to the current market structure. We expect to provide you with additional analysis in the near future.

Thank you for your consideration of our views. If you have any questions, or if we can provide any additional information, please do not hesitate to contact me at (202) 326-5901.

With very best regards.

Sincerely,

Paul Schott Stevens President and CEO

#### **Enclosures**

cc: Brooksley E. Born
John J. Brennan
Robert F. Engle
Richard G. Ketchum
Maureen O'Hara
Susan M. Phillips
David S. Ruder

Joseph E. Stiglitz



ICI FINDINGS AND RECOMMENDATIONS ON ETFS,

THE MARKET EVENTS OF MAY 6, 2010,

AND MARKET STRUCTURE

•		•		·
			•	
		•		
			• • •	
		4		•
· ·				
		1		
	•			
	•		•	•
			•	
			• .	
				•
			•	
				· · · · · · · · · · · · · · · · · · ·
	•		• •	
			•	
	•		•	
			•	
		·		
			•	
			•	
		!		
		1		
			•	
		•		
				· · · · · · · · · · · · · · · · · · ·
•			•	•
			,	
•	-			
			•	
		•		
			•	
	.4 *			
살게 공격적을 가는 것이 나를 보는 것	erikan di Kabupatèn Balanda. Ngjaran di Kabupatèn Balanda			
교육의 역사 기업이 기업을 위하는 것이다. 교육의 기업을 가입하는 것이다.				
				튀지 그 사랑 회사, 회사는 어느 네트

### TABLE OF CONTENTS

- 1. ICI analysis on the effect of aberrant Trading on May 6 on ETFs (originally submitted as an appendix to the June 3, 2010 comment letter on the Circuit Breaker proposals)
- 2. ICI comment letter on the SEC's Concept Release on Equity Market Structure, dated April 21, 2010
- 3. ICI submission to the SEC's June 2, 2010 Roundtable on Market Structure, dated June 1, 2010
- 4. ICI follow-up submission to the June 2, 2010 Roundtable on Market Structure, dated June 23, 2010
- ICI comment letters on the SRO Single Stock Circuit Breaker proposals, dated June 3, 2010 and July 19, 2010
- 6. ICI comment letter on SRO Clearly Erroneous Executions proposals, dated July 19, 2010

	•	•	•
•	•	•	•
		•	•
			•
•	· ·		
		•	
	·		
•			
•			
	1.	•	
	•		
			•
		•	•
		•	•
	•		•
	;		
r	•.		
			• •
•			•
			•
			·
,	•		•
		•	
	Ì		•
		· ·	
	İ		• • • • • • • • • • • • • • • • • • • •
			•
	. }		
		. ,	
	• • • •		•
	•		•
			•
	; .	•	•
		•	
	•		
	•		

# Appendix Investment Company Institute Effect of Aberrant Trading on May 6 on ETFs

On Thursday, May 6, 2010, the U.S. securities markets experienced a brief but precipitous decline in securities traded on exchanges. This market event impacted both individual securities and exchange traded funds ("ETFs"). As a result of the decline, many trades were cancelled according to the securities markets "clearly erroneous rules," which provide the various securities exchanges with the ability to cancel trades effected at prices that were sharply divergent from prevailing market prices. For trades effected on May 6, the exchanges determined to cancel any trades effected from 2:40 p.m. to 3:00 p.m. at prices 60 percent away from the last trade at or before 2:40 p.m. ETF trades comprised a majority of the cancelled trades; approximately seventy percent according to the joint CFTC/SEC preliminary report on the May 6th events. Following are several hypotheses for the predominance of ETF trades being cancelled as compared to those of individual securities. It is unclear how many factors, or how the confluence of those factors, caused the aberrant trading or contributed to the large number of cancelled ETF trades. There is no indication, however, that ETFs themselves (i.e., the ETF product) were the cause of, or a contributing factor to, the market decline.

#### I. Background on ETFs

An ETF is an investment company whose shares are traded intraday on stock exchanges at market-determined prices. ETFs publish information about their portfolio holdings daily. Each business day, an ETF publishes a "creation basket," a specific list of names and quantities of securities and/or other assets designed to track the performance of the portfolio as a whole. ETF shares are created when an "authorized participant," typically a large institutional investor such as a market maker, provides the daily creation basket to the ETF in exchange for a "creation unit" that consists of a specified number of ETF shares. The authorized participant/market maker can either keep the ETF shares or sell them on the secondary market. ETF shares may be redeemed when an authorized participant/market maker returns the specified number of shares in the creation unit to the ETF, in exchange for the daily "redemption basket"—a set of specific securities and/or other assets contained within the ETF's portfolio.

The price of an ETF share on the secondary market is influenced by the forces of supply and demand. While imbalances in supply and demand can cause the price of an ETF share to deviate from its net asset value ("NAV"), substantial deviations tend to be short-lived. Two primary features of an ETF's structure promote trading of an ETF's shares at a price that approximates the ETF's NAV: portfolio transparency and the ability for authorized participants/market makers to create or redeem ETF shares at NAV at the end of each trading day.

ETFs offer transparency by publishing their creation baskets daily. In addition, ETFs contract with third parties (typically market data vendors) to calculate a real-time estimate of an ETF's current value, often called the Intraday Indicative Value ("IIV"), using the portfolio information an ETF

publishes daily. IIVs are disseminated at regular intervals during the trading day (typically every 15 to 60 seconds). Investors can observe any discrepancies between the ETF's share price and its IIV during the trading day and when a gap exists between the ETF share price and its IIV (or other estimate of the ETF's underlying value), investors may decide to trade in either the ETF share or the underlying securities that the ETF holds in its portfolio in order to attempt to capture a profit. This trading can help to narrow that gap either by moving the price of the ETF share closer to its IIV or moving the prices of the underlying securities so that the IIV moves closer to the price of the ETF share.

The ability of authorized participants/market makers to create or redeem ETF shares at NAV at the end of each trading day also helps an ETF trade at market prices that approximate the underlying market value of the portfolio. When a deviation between an ETF's market price and its NAV occurs, authorized participants/market makers may buy or sell creation units at NAV to capture a profit. These actions help keep the market-determined price of an ETF's shares close to its NAV.

#### II. Importance of Properly Functioning Securities Markets and an Efficient Market Structure

The large and sudden price dislocations experienced on May 6 and the subsequent number of ETF trades that were cancelled were, at least in part, the result of flaws and inefficiencies in the current U.S. market structure. As discussed below, due to the nature and composition of ETFs, these securities may be more susceptible to sudden imbalances of supply and demand and sharp movements in prices than individual stocks. Changes to the structure of the markets already being discussed in response to the events of May 6 (such as circuit breakers) should address some of the issues that contributed to the large number of cancelled ETF trades if a similar event occurs again.

### A. Fragmented Trading Rules Led to Severely Limited Liquidity, Which Negatively Impacted ETFs

The securities markets are highly automated and have become increasingly complex and fragmented, particularly over the last few years. The rules governing the markets, however, are inconsistent and have not kept pace with the level of complexity and growth of trading venues. For example, while the trading of ETFs has shifted from the traditional specialist floor-based model to one driven solely by electronic market makers, controls, such as human intervention to override algorithms, have not kept pace with the speed of executions. These inconsistencies were a contributing factor to the May 6 trading and subsequently to the number of cancelled ETF trades.

Specifically, during the afternoon of May 6, the NYSE went into "slow mode" after speed bumps, i.e., "liquidity replenishment points" ("LRPs") were triggered due to the sharp decline in many securities. LRPs are designed to reduce volatility by temporarily converting the execution of orders from an automated market to a manual auction market when a price movement of a particular size in a stock is reached.

Many of the stocks comprising ETFs are NYSE-listed stocks. Despite some of these stocks being in slow mode, however, Regulation NMS permitted other securities markets to ignore quotes on the NYSE, effectively shutting off a large pool of liquidity. In addition, the ETFs themselves, which are predominantly listed on NYSE Arca and NASDAQ, were still being executed on a fast and automated basis.<sup>1</sup>

At the same time the NYSE was in slow mode, several exchanges declared "self help" against NYSE Arca, where ETF trading volume is highly concentrated. Declaring "self help" is permitted under Regulation NMS when one exchange believes that another exchange is experiencing systems problems. "Self help" allowed these exchanges to exclude the quotations of NYSE Arca from their determinations of whether any other exchange had a better price to which they must route orders for execution.

The combination of the NYSE going slow and other exchanges declaring self help against NYSE Arca severely limited liquidity on those exchanges that continued to execute orders in an automated fashion. For a group of 120 relatively large, liquid ETFs tracked by Investment Technology Group (ITG), time-weighted average bid depth and ask depth measured at 15 second intervals of the displayed limit order book for the first ten levels of the book dropped precipitously during the twenty minute period from 2:40 p.m. to 3:00 p.m. (Figures 1 and 2).² These measures indicate that liquidity for these ETFs essentially disappeared during this timeframe on May 6<sup>th</sup>. Bid depth declined rapidly from about 350,000 shares at 2:40 p.m. to a low of around 20,000 shares at 2:49:45 p.m. Bid depth slowly moved back up over the remainder of the day to around 200,000 shares before dropping off at the close.

Ask depth has a very similar pattern. Ask depth declined from around 300,000 shares to a low of about 20,000 shares at 2:49:45 p.m. Ask depth also slowly moved back up over the remainder of the day to around 200,000 shares before dropping off at the close. Despite the recoveries, bid/ask depths after 3:00 p.m. on May 6th still were well below the average for the same time period on May 3th through May 5th.

<sup>&</sup>lt;sup>1</sup> ETFs with lower liquidity have a disproportionate share of traded volume on Arca— 59 percent of the volume for ETFs with average daily volume of less than 100,000 shares have historically traded on Arca. Source: NYSE ARCA Vision.

<sup>&</sup>lt;sup>2</sup> Figures are included in Appendix A, which also shows information on time-weighted bid/ask depth for May 3<sup>rd</sup> through May 7<sup>rh</sup>.

Figure 1

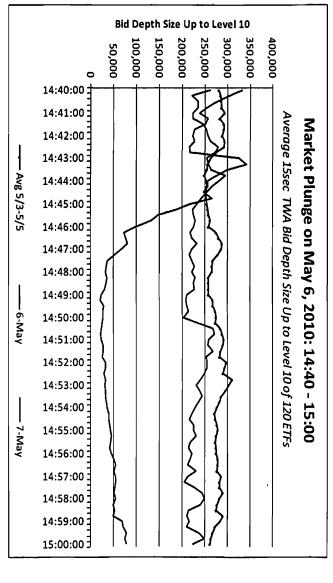
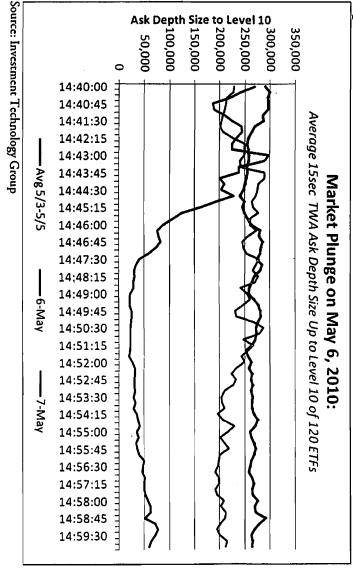
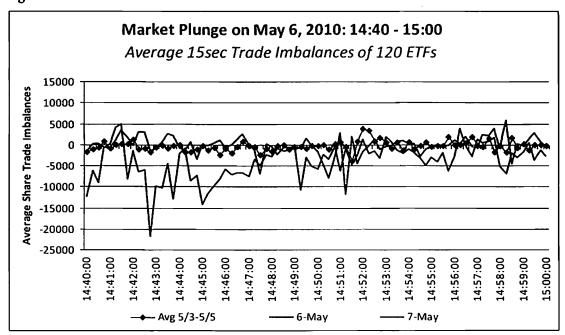


Figure 2



Prices of exchange-traded securities began to be negatively impacted due to the severe imbalance of sell orders to buy orders. For much of the twenty minutes between 2:40 p.m. to 3:00 p.m., the trade imbalance for these 120 ETFs, measured at 15 second intervals, was negative, indicating that sell orders exceeded buy orders (Figure 3).<sup>3</sup> The trade imbalance fell to a low of nearly negative 22,000 shares at 2:42:45 p.m.

Figure 3

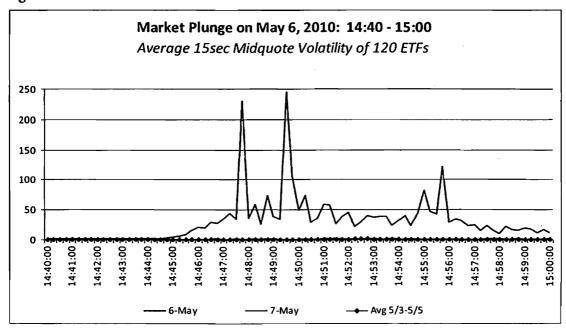


<sup>&</sup>lt;sup>3</sup> Figure is included in Appendix B, which also shows trade imbalance information for May 3<sup>rd</sup> through May 7<sup>th</sup> and the average number of trades. The average number of trades peaked at 2:45:30 p.m. which coincides with the peak in volume for these ETFs.

### B. Increased Demand for ETFs During Volatile Times Intensified the Market Impact on ETFs

With the prices of individual securities and ETFs declining and the securities markets executing orders in markedly different manners, the markets became increasingly volatile. Midquote (the midpoint between the bid and ask) volatility, measured at 15 second intervals for these 120 ETFs, soared between 2:45 p.m. and 3:00 p.m., reaching nearly 250 basis points at 2:49:30 p.m. (Figure 4).4

Figure 4

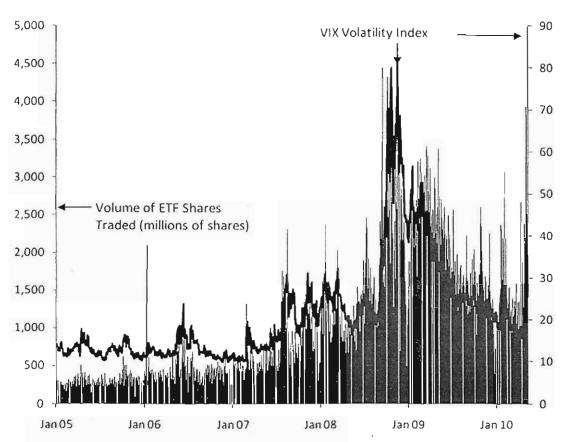


<sup>&</sup>lt;sup>4</sup> Figure is included in Appendix C, which also shows midquote volatility information for May 3<sup>rd</sup> through May 7<sup>th</sup>.

When markets are volatile, trading volume in ETFs generally increases (Figure 5).<sup>5</sup> The daily volatility index (VIX) and aggregate ETF volume are highly positively related, with a correlation coefficient between them of 0.83 (the highest possible is 1.0).

Figure 5

Daily ETF Volume and the VIX Volatility Index January 3, 2005 – May 14, 2010

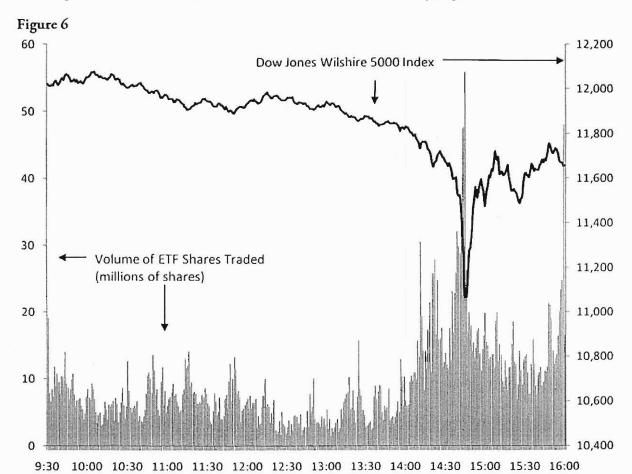


Notes: VIX volatility index and volume of ETF shares traded shown at a business day frequency. The volume of ETF shares traded represents 842 ETFs.

Sources: Investment Company Institute and Bloomberg

<sup>&</sup>lt;sup>5</sup> The VIX is the ticker symbol for the Chicago Board Options Exchange Volatility Index, a popular measure of the implied volatility of S&P 500 index options. A high value corresponds to a more volatile market. Often referred to as the "fear index," it represents one measure of the market's expectation of volatility over the next 30-day period.

ETFs provide an efficient way to gain exposure to a broad segment of the markets, as opposed to buying and selling all of the individual stocks comprising the basket of an ETF. They are therefore a useful tool for hedging or otherwise quickly gaining market exposure, which is particularly important in a volatile market. On May 6, as the markets began to decline significantly, investors increasingly turned to ETFs; this increased demand put pressure on their prices as liquidity declined. Aggregate ETF volume spiked when the Dow Jones Wilshire 5000 Index was declining (Figure 6).



Note: Volume of ETF shares traded and the Dow Jones Wilshire 5000 Index are shown on a one-minute frequency.

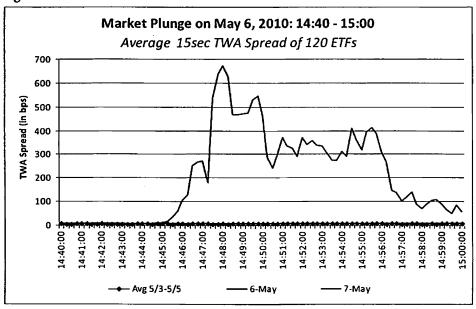
Volume of ETF shares traded represents 842 ETFs.

Sources: Investment Company Institute and Bloomberg

## C. Severe Lack of Liquidity Caused Spreads to Widen and Trades to be Executed at Untenable ("Clearly Erroneous") Prices

On May 6, the demand for ETF liquidity increased at a time when supply dramatically decreased. The extreme price volatility of the underlying stocks comprising the baskets of many ETFs and uncertainty over whether and when trades could be cancelled caused market makers, who normally would be making two-sided markets in ETFs, to pull out of the market, significantly decreasing the supply of liquidity for ETFs. One way that traders can "step away" away from the market is to widen the bid/ask spread. The average time-weighted spread for 120 ETFs widened enormously between 2:45 p.m. to 3:00 p.m., reaching a peak of 670 basis points at 2:48 p.m. (Figure 7).6 The "normal" average spread for these ETFs is in the range of 4 to 5 basis points.

Figure 7



<sup>&</sup>lt;sup>6</sup> Figure is included in Appendix D, which also shows average time-weighted spread information for May 3<sup>rd</sup> through May 7<sup>th</sup>.

In addition to market makers, other professional traders, namely high frequency traders, did not participate in the market on the buy side in many stocks that suffered extreme price declines.<sup>7</sup> At least one of our members can confirm that quotes that would normally refresh every second went several minutes without refreshing. These developments likely contributed to the disparity between the prices of ETFs and the prices of individual securities comprising the ETF basket.

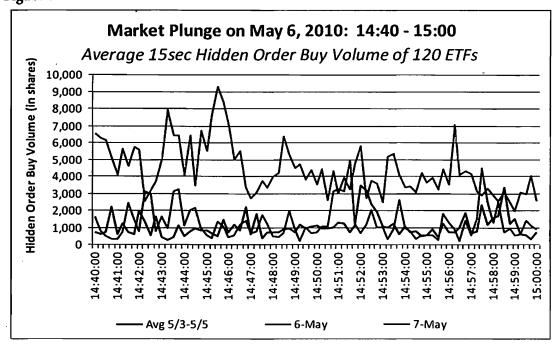
As market makers stepped away the influx of orders quickly swept through available liquidity on the exchanges' order books resulting in orders, particularly market orders, breaking through many price levels in an effort to obtain an execution at any price. For 120 ETFs, hidden order (i.e., reserve order) buy and sell volume was significantly higher than normal during the twenty minute period on May 6<sup>th</sup> likely reflecting that the limit order book was being run through as reserve orders were hit at each level before executions moved down to the next level of the book (Figures 8 and 9).8

Contributing further to the execution of ETF orders at prices that were ultimately cancelled was the practice of "stub quoting." Stub quotes, which are entered by market makers as essentially place holder quotes, and can be as low as a penny, are never intended to be the prices of actual trades. Nevertheless, on May 6, many of these stub quotes were executed as the only bids left in some stocks.

<sup>&</sup>lt;sup>7</sup> High frequency traders function as liquidity providers in ETFs, but have no obligation or incentive to trade the securities during times of market stress.

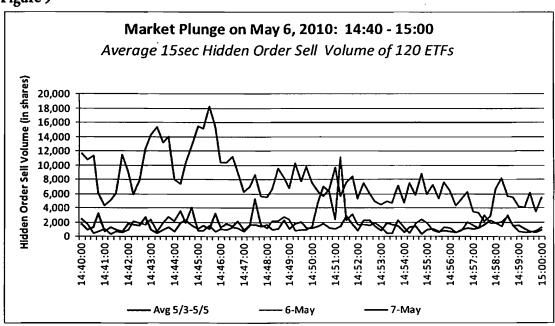
<sup>&</sup>lt;sup>8</sup> Figures are included in Appendix E, which also shows hidden order information for May 3<sup>rd</sup> through May 7<sup>th</sup>.

Figure 8



Source: Investment Technology Group

Figure 9



As has been reported, there appear to have been a large number of stop loss orders on brokers' books without limits that turned into market orders, increasing demand for individual stocks and ETFs and exacerbating price declines. Anecdotal evidence from a few retail-oriented brokerages indicates that this was the case. One large broker found that 60 percent of its broken ETF trades were stop loss orders, 36 percent were market orders, and 4 percent were limit orders. Data from two other brokers show that even higher percentages of broken ETF trades were stop loss orders: 86 percent and 70 percent, respectively.

#### III. Precipitous Drop in Individual Stock Prices Caused Subsequent Drop in ETF Prices

ETFs are generally comprised of a basket of individual stocks. Naturally, due to the nature of the composition of ETFs, a significant and abrupt move in the price of an individual stock will impact the price of an ETF. When the markets are functioning normally, ETFs adjust well to significant changes in prices of individual stocks.

During the trading events of May 6, we believe that as individual stocks suffered significant declines in their prices, the prices of ETFs with those stocks in their baskets experienced declines similar to the individual securities. As the prices of individual stocks declined, computers monitoring the share prices of ETFs and comparing them to the fair value of their underlying components began to try to arbitrage the difference away, e.g., selling an ETF and attempting to buy its underlying securities, as is the natural arbitrage mechanism of an ETF. During the afternoon of May 6, however, as the prices of individual securities dropped precipitously, ETFs appeared overvalued, causing computers to sell, which in turn drove prices even lower as automated systems routed market orders that overwhelmed the markets.

#### IV. Impact of Movements in Futures Markets

Many trading systems benchmark ETFs against the S&P 500 "e-mini" futures contract. These systems monitor the futures contract as a proxy for market movements, and watch for a divergence between futures and ETFs. If, as has been reported, there was a significant trade in the futures contract, trading algorithms may have determined that it should sell ETFs.

#### V. Impact on Events in International Arena

The events in Greece and the economic uncertainty throughout Europe must be examined to determine whether they exacerbated the market drop on May 6<sup>th</sup>. With memories fresh from the fall 2008, traders struggling to understand the precipitous decline in the U.S. market may well have feared that a wide-spread financial collapse in Europe had triggered the decline. Against the well-publicized backdrop of a standoff between police and Greek citizens, and uncertainty whether the European Union would act to stabilize the region's finances, fear may well have contributed to the events of May 6.

#### VI. Additional Data

In addition to the data discussed above, we also have information on cancellations/modifications to displayed limit orders and short sales for a large sample of ETFs with broken trades. For 120 ETFs, the average number of cancellations and modifications of both buy and sell limit orders were abnormally high during the period 2:40 p.m. to 3:00 p.m. on May 6<sup>th</sup> (Figures 10 and 11).9

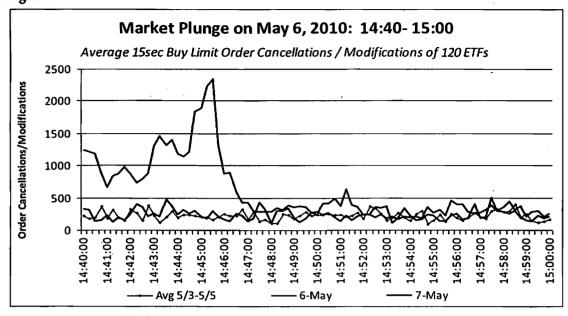
The average daily short sales ratio for 219 ETFs with broken trades does not appear to be excessively high when compared with a recent history back to August 2009 (Figure 12). On May 6<sup>th</sup>, the average short sales ratio for these ETFs was 45 percent compared with an average of 41 percent from August 2009 through April 2010 (Figure 13). Nevertheless, the short sale ratio for any given ETF can be quite volatile from day-to-day. Only 4 ETFs had a short sales ratio on May 6<sup>th</sup> that was more than two standard deviations above its average (Figure 14). Twenty-nine ETFs had a short sales ratio on May 6<sup>th</sup> that was within 1 to 2 standard deviations above its average.

#### VII. Conclusion

The large and sudden price dislocations experienced on May 6 were the result of market structure flaws that affected ETFs more – but not differently – than individual securities. Changes to our market structure to allow pauses on an individual stock basis that would allow supply and demand to meet each other, and clarity around order cancellations, should largely address the trading disruptions experienced by ETFs and individual securities on May 6.

<sup>&</sup>lt;sup>9</sup> Figures are included in Appendix F, which also shows cancellation/modification information for May 3<sup>rd</sup> through May 7<sup>th</sup>. On May 6<sup>th</sup> cancellations of limit orders started moving up around 2 p.m.

Figure 10



Source: Investment Technology Group

Figure 11

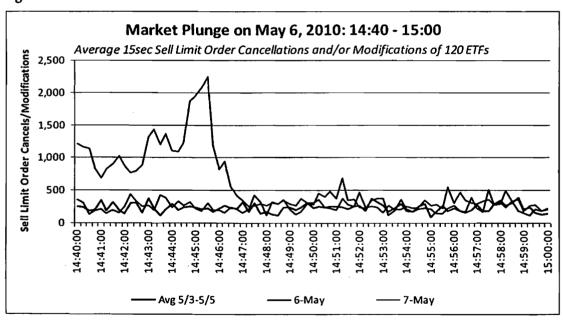
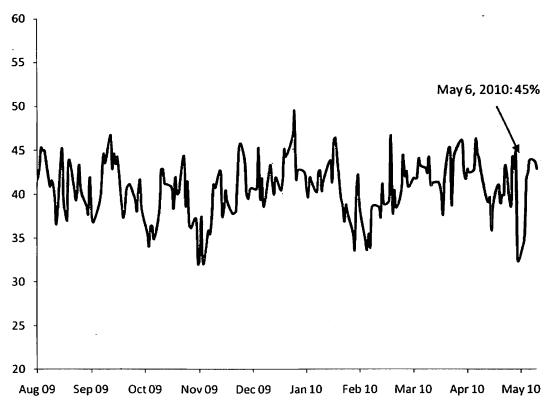


Figure 12

Average Daily Short Sales Ratios for 219 ETFs with Broken Trades\*

Percent, August 3, 2010 - May 18, 2010



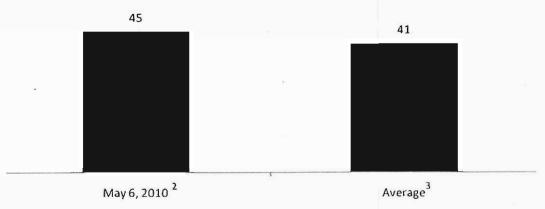
\*Note: The short sales ratio is calculated as the volume of short selling divided by total volume. Calculations reflect volume on NYSE Arca only. The average is calculated as the simple average of the short sales ratios for 219 ETFs that had broken trades on May 6, 2010.

Sources: Investment Company Institute and NYSE Arca.

Figure 13

Average Short Sales Ratios for 219 ETFs with Broken Trades<sup>1</sup>

Percent



<sup>1</sup>The short sales ratio is calculated as the volume of short selling divided by total volume. Calculations reflect volume on NYSE Arca only.

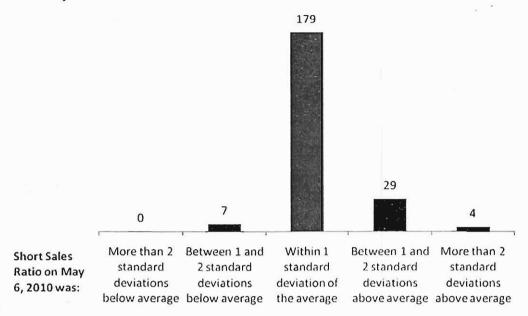
Sources: Investment Company Institute and NYSE Arca.

<sup>&</sup>lt;sup>2</sup>The short sales ratio on May 6, 2010 is calculated as the simple average of the short sales ratios for 219 ETFs with broken trades on the day.

<sup>&</sup>lt;sup>3</sup>"Average" represents the simple average of the average daily short sales ratios for 219 ETFs from August 2009 through April 2010.

Figure 14

### Distribution of 219 ETFs by Deviation From Their Average Short Sales Ratio\* Number of ETFs



<sup>\*</sup>Note: The short sales ratio is calculated as the volume of short selling divided by total volume. Calculations reflect volume on NYSE Arca only. Sample includes 219 ETFs with with broken trades on May 6, 2010. Averages and standard deviations were calculated for each invididual ETF over the period August 2009 - April 2010.

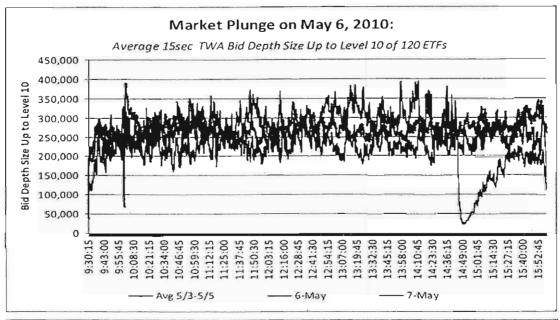
Sources: Investment Company Institute and NYSE Arca.

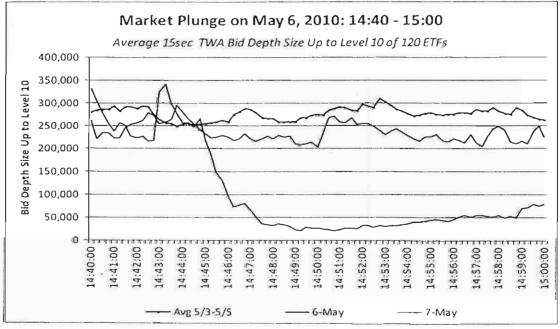
#### Appendix A: Average Bid and Ask Depth Sizes

The charts in this appendix show average bid and ask depth sizes for 120 ETFs tracked by ITG. These sizes represent displayed limit orders on the first 10 levels of the limit order book, and were calculated using Level II data from the following exchanges: BATS, NYSE, NYSE Arca, and NASDAQ.

#### Average 15 Second TWA Bid Depth Size up to Level 10

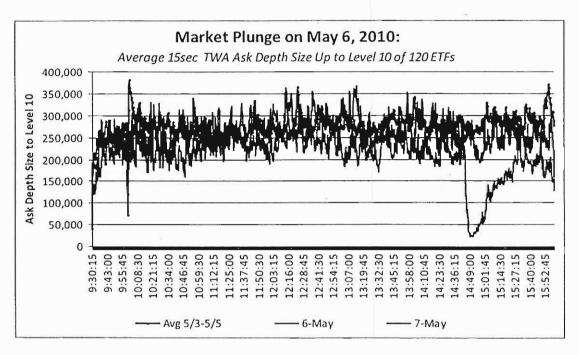
The following two charts show the time weighted average (TWA) bid depth size up to level 10. The lines represent the TWA bid depth size up to level 10 from May 3 – 5, May 6 and May 7. The first chart shows the entire day, the second chart the 20 minute period from 14:40 to 15:00 on May 6.

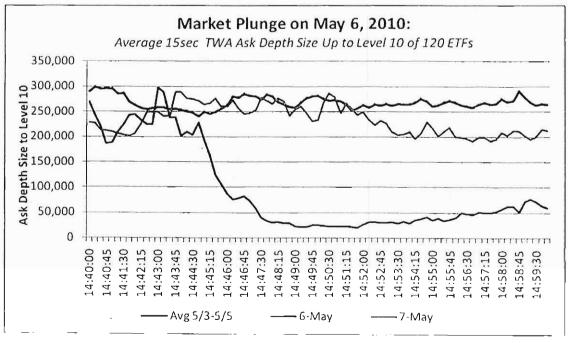




#### Average 15 Second TWA Ask Depth Size up to Level 10

The following two charts show the average time weighted average (TWA) ask depth size up to level 10 for 120 ETFs tracked by ITG. The lines represent the TWA ask depth size up to level 10 from May 3 – 5, May 6 and May 7. The first chart shows the entire day, the second chart the 20 minute period from 14:40 to 15:00 on May 6.

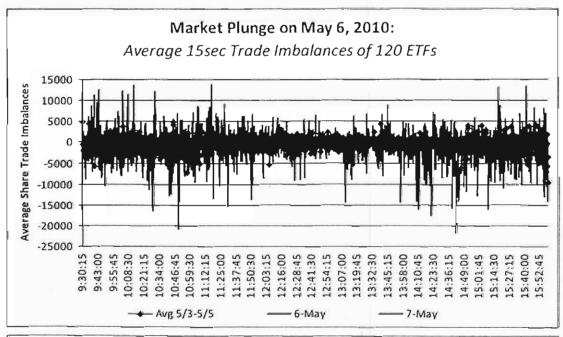


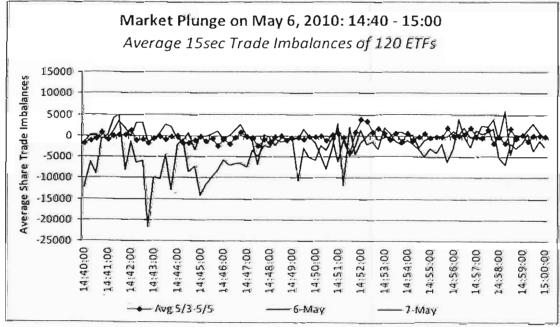


#### Appendix B: Trade Imbalances and Number of Trades

#### Average 15 Second Trade Imbalances

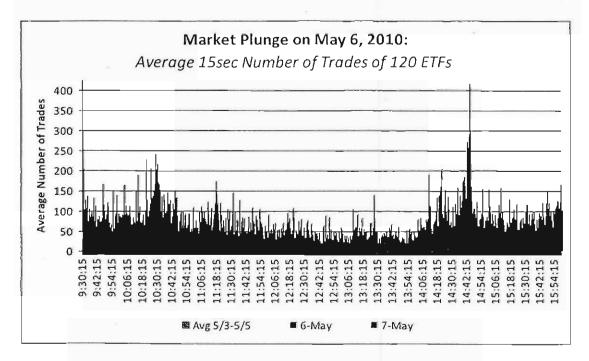
The following two charts show the average trade imbalances (buys minus sells) for 120 ETFs tracked by ITG. The lines represent the average trade imbalances from May 3 – 5, May 6 and May 7. The first chart shows the entire day, the second chart the 20 minute period from 14:40 to 15:00.

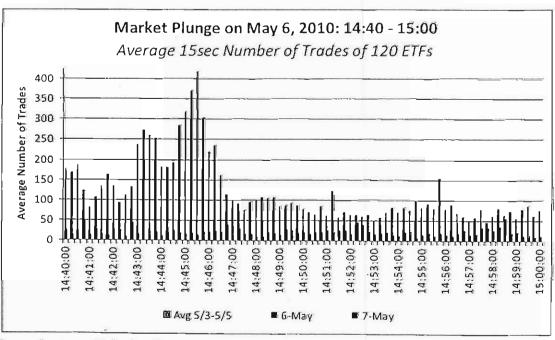




#### Average 15 Second Number of Trades

The following two charts show the average number of trades for 120 ETFs tracked by ITG. The lines represent the average number of trades from May 3 - 5, May 6 and May 7. The first chart shows the entire day, the second chart the 20 minute period from 14:40 to 15:00.

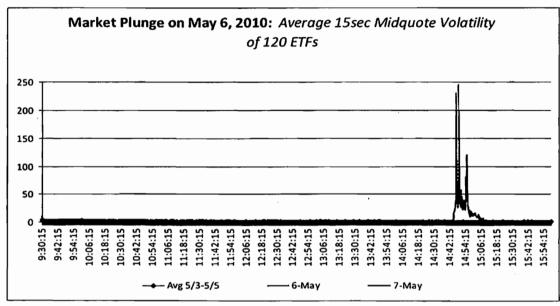


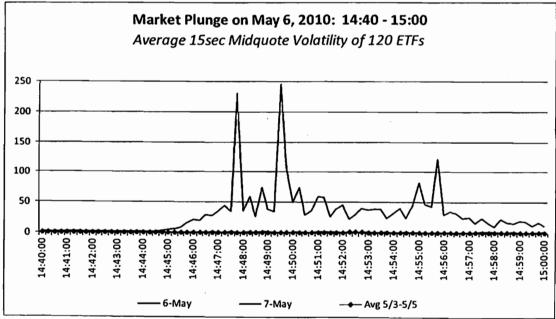


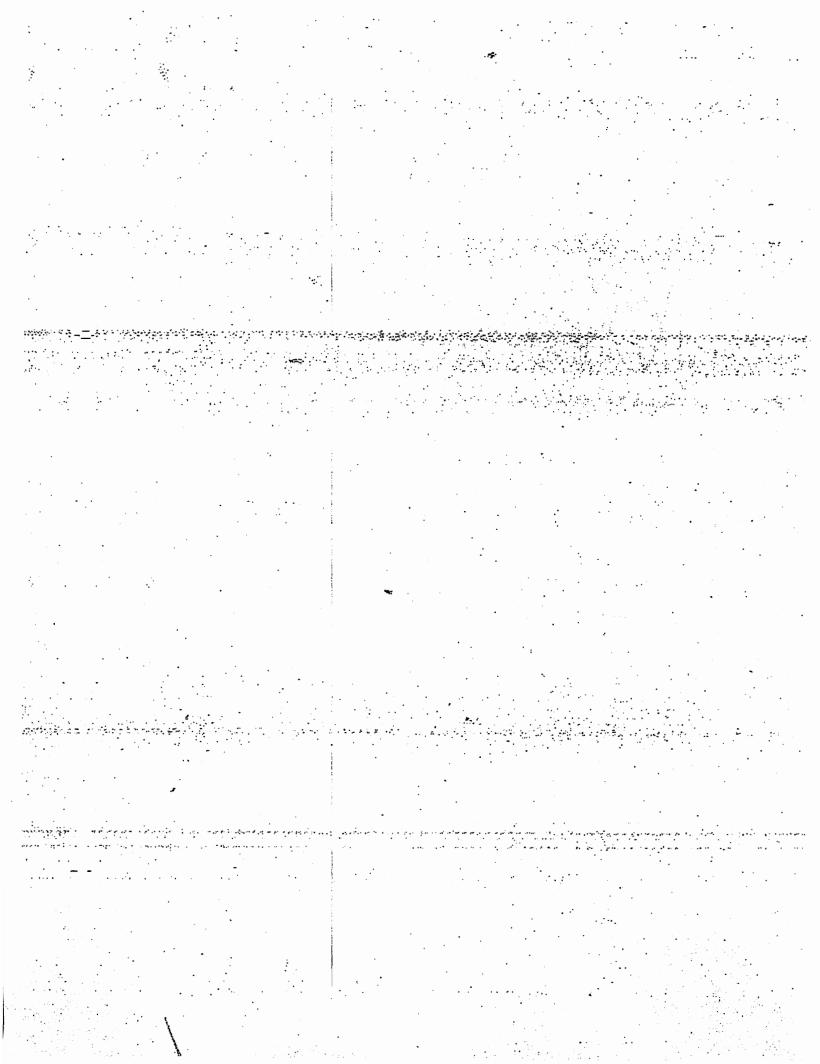
#### Appendix C: Midquote Volatility

#### Average 15 Second Midquote Volatility

The following two charts show the average midquote volatility for 120 ETFs tracked by ITG. The lines represent the average midquote volatility from May 3 – 5, May 6 and May 7. The first chart shows the entire day, the second chart the 20 minute period from 14:40 to 15:00.



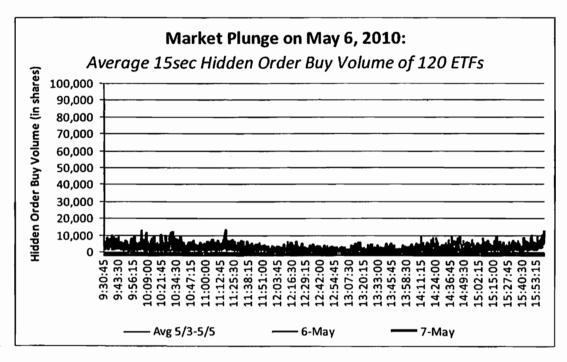


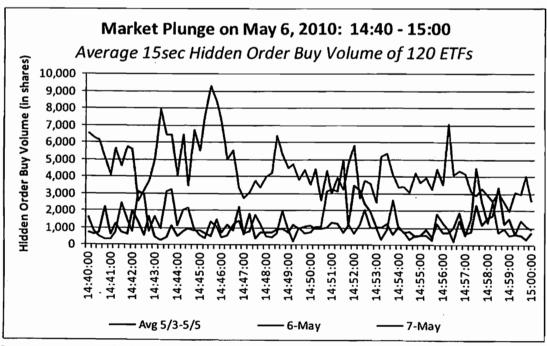


#### Appendix E: Hidden Order Volume

#### Average 15 Second Hidden Order Buy Volume

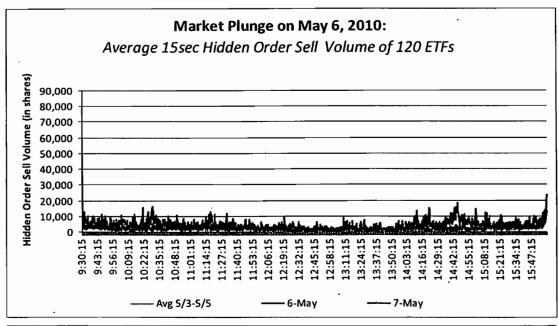
The following two charts show the average hidden order buy volume for 120 ETFs tracked by ITG. The lines represent the average hidden order buy volume from May 3 – 5, May 6 and May 7. The first chart shows the entire day, the second chart the 20 minute period from 14:40 to 15:00.

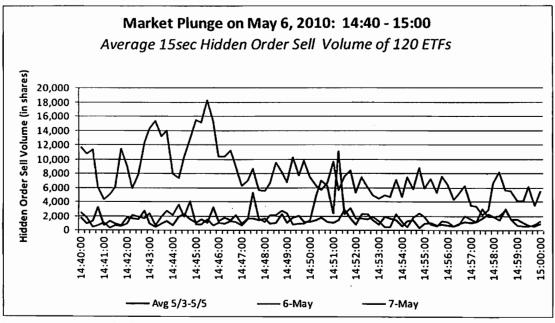




#### Average 15 Second Hidden Order Sell Volume

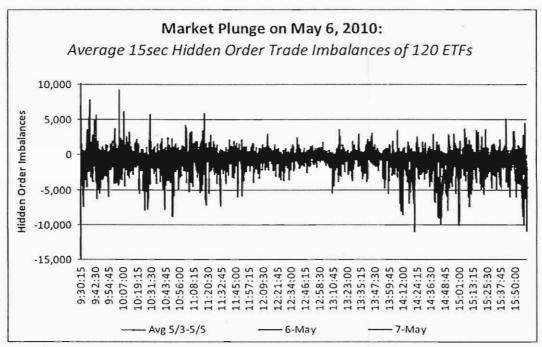
The following two charts show the average hidden order sell volume for 120 ETFs tracked by ITG. The lines represent the average hidden order sell volume from May 3 – 5, May 6 and May 7. The first chart shows the entire day, the second chart the 20 minute period from 14:40 to 15:00.

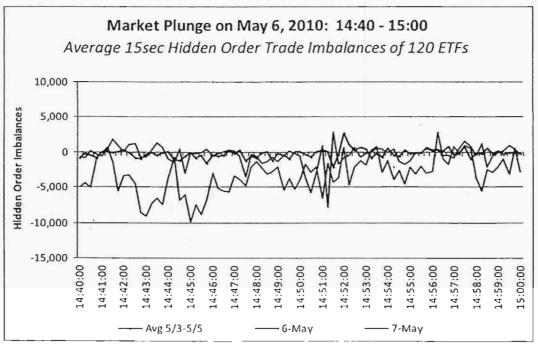




#### Average 15 Second Hidden Order Trade Imbalances

The following two charts show the average hidden order trade imbalances for 120 ETFs tracked by ITG. The lines represent the average hidden order trade imbalances from May 3-5, May 6 and May 7. The first chart shows the entire day, the second chart the 20 minute period from 14:40 to 15:00.

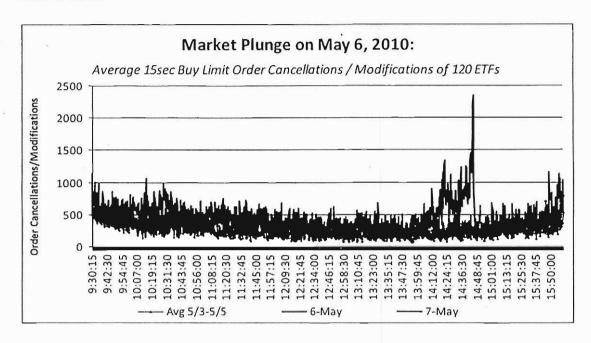


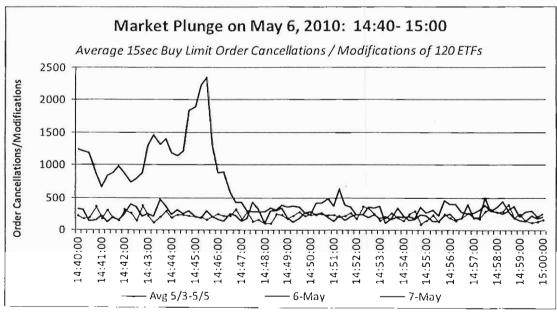


#### Appendix F: Limit Order Cancellations and Modifications

#### Average 15 Second Buy Limit Order Cancellations/Modifications

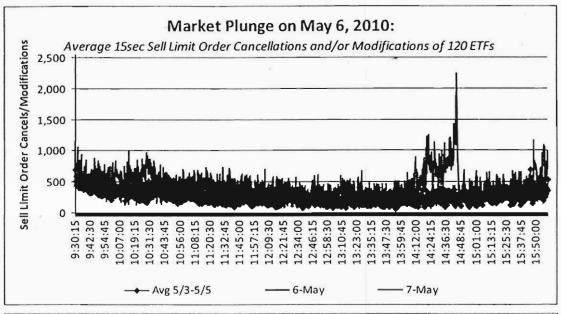
The following two charts show the average buy limit order cancellations/modifications for 120 ETFs tracked by ITG. The lines represent the average buy limit order cancellations/modifications from May 3 – 5, May 6 and May 7. The first chart shows the entire day, the second chart the 20 minute period from 14:40 to 15:00.

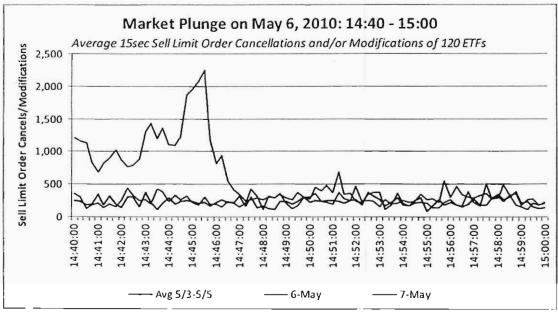




#### Average 15 Second Sell Limit Order Cancellations/Modifications

The following two charts show the average sell limit order cancellations/modifications for 120 ETFs tracked by ITG. The lines represent the average sell limit order cancellations/modifications from May 3 – 5, May 6 and May 7. The first chart shows the entire day, the second chart the 20 minute period from 14:40 to 15:00.







1401 H Street, NW, Washington, DC 20005-2148, USA 202/326-5800 www.ici.org

April 21, 2010

Ms. Elizabeth M. Murphy
Secretary
Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549

Re: Concept Release on Equity Market Structure (File No. S7-02-10)

Dear Ms. Murphy:

The Investment Company Institute<sup>1</sup> supports the Commission's examination of the current structure of the U.S. equity markets and whether the rules governing the markets have kept pace with the significant changes in technology and trading practices.<sup>2</sup>

The structure of the securities markets has a significant impact on Institute members, who are investors of over \$11 trillion of assets and who held 28 percent of the value of publicly traded U.S. equity outstanding at the end of 2009. We are institutional investors, but invest on behalf of almost 90 million individual shareholders.<sup>3</sup> Registered investment companies ("funds") and their shareholders therefore have a strong interest in ensuring that the securities markets are highly competitive, transparent and efficient, and that the regulatory structure that governs the securities markets encourages, rather than impedes, liquidity, transparency, and price discovery.<sup>4</sup> Consistent with these

¹ The Investment Company Institute is the national association of U.S. investment companies, including mutual funds, closed-end funds, exchange-traded funds (ETFs), and unit investment trusts (UITs). ICI seeks to encourage adherence to high ethical standards, promote public understanding, and otherwise advance the interests of funds, their shareholders, directors, and advisers. Members of ICI manage total assets of \$11.66 trillion and serve almost 90 million shareholders.

<sup>&</sup>lt;sup>2</sup> Securities Exchange Act Release No. 61358 (January 14, 2010), 75 FR 3594 (January 21, 2010) ("Release").

<sup>&</sup>lt;sup>3</sup> Households are the largest group of investors in mutual funds. Altogether, 50.4 million households, or 43 percent of all U.S. households, owned mutual funds as of May 2009. Mutual funds also managed 51 percent of the assets in 401(k) and other DC retirement plans and 46 percent of the assets in IRAs at the end of 2009. For more information on the U.S. fund industry, see 2009 Investment Company Institute Fact Book at <a href="https://www.icifactbook.org">www.icifactbook.org</a>.

<sup>&</sup>lt;sup>4</sup> The issues discussed in the Release impact all registered investment companies, including mutual funds, closed-end funds, and ETFs.

Ms. Elizabeth M. Murphy April 21, 2010 Page 2 of 29

goals, we have strongly supported Commission efforts to address issues that may impact the fair and orderly operation of the securities markets and investor confidence in those markets and we have long advocated for regulatory changes that would result in more efficient markets for investors.<sup>5</sup>

Funds' sole interest in the current debate is to ensure that any market structure changes promote efficiencies and transparency for the benefit of all market participants and not for a particular market center, exchange or trading venue business model. All trading venues and market participants should compete on the basis of innovation, differentiation of services and ultimately, on the value their model of trading presents to investors. It will be critical for the Commission to be cognizant of this as it examines the reform of the current market structure and to focus on the interests of the markets' ultimate end-user – the investor.

Developing a market structure that promotes the fundamental principles of a national market system while considering the competing interests of all market participants is no easy task. The Commission must weigh the delicate balance between encouraging innovation and competition and ensuring that innovation and competition are in the interest of, and do not harm, investors. The Commission will undoubtedly hear a wide variety of views on the state of the current market structure in the comment letters submitted on the Release, many of which will claim to be representing the interests of long-term investors such as funds. We urge the Commission to examine all comments carefully and to consider where the interests of the commenters truly lie.

<sup>5</sup> See, e.g., Letter from Craig S. Tyle, Senior Counsel, Investment Company Institute, to Jonathan G. Katz, Secretary, Securities and Exchange Commission, dated January 16, 1996 (Order Execution Obligations); Letter from Craig S. Tyle, General Counsel, Investment Company Institute, to Jonathan G. Katz, Secretary, Securities and Exchange Commission, dated July 28, 1998 (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 May 12, 2000 (Market Fragmentation 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 (Subpenny Concept Release); Letter from Ari Burstein, Associate Counsel, Investment Company Institute, to Jonathan G. Katz, Secretary, Securities and Exchange Commission, dated June 30, 2004 ("ICI Regulation NMS Letter"); Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated November 23, 2009 ("ICI Flash Order Letter"); Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated February 22, 2010 ("ICI Non-Public Trading Interest Letter"); and Letter from Ari Burstein, Senior Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated March 29, 2010 ("ICI Market Access Letter"). See also, 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.

<sup>&</sup>lt;sup>6</sup> See Consolidation and competition in the US equity markets, Robert L.D. Colby; Erik R. Sirri, Capital Markets Law Journal 2010, at p. 173 ("Colby/Sirri Article") ("Markets can differentiate themselves on the basis of service quality, including faster executions, more informative reports and more reliable systems.").

<sup>&</sup>lt;sup>7</sup> See Colby/Sirri Article, supra note 6, at p.195. ("[R]egulators' desires to consolidate trading interest while simultaneously promoting competition between market venues are in tension, and deciding how to balance the two necessarily involves trade-offs.").

Ms. Elizabeth M. Murphy April 21, 2010 Page 3 of 29

While our comment letter reflects the initial views of Institute members on the issues discussed in the Release, it is clear that the debate over these issues will be lengthy and that the current comment letter process is only the beginning of deliberations on the topics raised by the Release. We therefore offer our assistance to the Commission as it continues to examine the issues raised by the Release and their impact on the securities markets.

Our recommendations on the issues raised in the Release follow below.

## I. Summary of Recommendations

Market Structure Performance and Evaluation of Execution Quality

- Need for Increased Information Regarding Order Routing and Execution Practices:
  - Sufficiency of Information Provided by Brokers and Other Trading Venues: We recommend that the Commission 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 and better trade reporting by all types of execution venues regarding order execution.
  - PRECOMMENDE Disclosures by Broker-Dealers and Other Trading Venues: We recommend that the Commission consider means to require new disclosure or to improve existing disclosure regarding: payments and other incentives to direct order flow to particular trading venues; information regarding the routing and execution of orders; external venues to which a broker routes orders and any ownership and other affiliations between the broker and these venues; policies and procedures regarding the dissemination of information about a customer's order and trade information to facilitate a trade and to control leakage of information regarding a customer's order; information regarding the internalization of orders; and cancellation rates of orders and policies regarding the use of "immediate or cancel" ("IQC") orders.
  - Current Regulatory Tools for Measuring Market Performance and Market Quality: We support the Commission either updating or expanding Rules 605 and 606 of Regulation NMS to provide additional information to investors.

<sup>&</sup>lt;sup>8</sup> Our letter represents the views of both large and small funds. While several of the issues addressed in the Release may impact large and small funds differently given the varying trading needs of funds of different sizes, Institute members believe the views expressed in the letter will benefit the fund industry, and investors in general, as a whole.

### • Long-Term Investors:

- Defining a Long-Term Investor: We believe the Commission should not explicitly define a "long-term investor" for purposes of trading and market structure issues or determine a time frame that would distinguish a "long-term investor" from other types of investors as this would be extremely difficult and potentially problematic.
- Measuring Institutional Investor Transaction Costs: We do not believe that the Commission should mandate a single or static approach to analyzing transaction costs.

## **Undisplayed Liquidity**

- Public Price Discovery and Undisplayed Liquidity: We believe the Commission should examine the impact of certain undisplayed liquidity on price discovery, as well as potential ways to encourage the further public display of orders to improve price discovery.
  - Undisplayed Liquidity Handled by OTC Market Makers Internalization: We recommend that the Commission should take action to ensure that internalized orders receive best execution by requiring that any order executed through internalization be provided with "significant" price improvement.
  - Trade-At Rule and Trade-Through Rule with Depth of Book Protection: We do not support the adoption of a trade-at rule for the securities markets or the expansion of the trade-through rule to cover depth of book protection. A trade-at rule would be difficult to implement and operate under the current market environment, and a trade-through rule with depth of book protection could, to some extent, turn the market into a consolidated limit order book, which some Institute members believe could negatively impact the execution of large orders.
  - > Subpennies: We oppose any reduction in the minimum pricing increment for Regulation NMS stocks. Permitting the entry of orders and the quoting of securities in subpennies would exacerbate many of the unintended consequences that have arisen in the securities markets since decimalization, most significantly, the potential increase in instances of stepping-ahead of investor orders and the effect on market transparency and depth.

### High Frequency Trading

Need for Increased Transparency of High Frequency Traders and HFT Practices: We
recommend that the Commission increase transparency surrounding high frequency
trading ("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.

### • High Frequency Trading Strategies:

- ➤ Liquidity Rebates and Passive Market Making Strategies: We do not recommend that liquidity rebates be prohibited. We suggest that the Commission, at the very least, require more transparency surrounding rebates as well as other incentives provided to route orders. We further recommend that the Commission examine the data generated about liquidity rebate practices and determine whether further rulemaking is necessary to address concerns in this area.
- Directional Strategies: We recommend that the Commission examine whether any new regulations are necessary to address firms that are conducting an "order anticipation strategy" and whether certain order anticipation strategies should be considered as improper or manipulative activity.
- > IOC Orders and the Practice of "Pinging": We believe that the Commission should act to address the increasing number of order cancellations in the equities markets. At the very least, this is an area worthy of further Commission examination including considering whether requirements should be put in place to restrict certain types of IOC orders or "pinging" in specific contexts, or whether a fee or "penalty" should be imposed on cancelled orders.

#### Tools Utilized by HFT to Obtain Market Access:

- > Co-Location: We believe that co-location services should be subject to standards that ensure fairness and equity in their allocation.
- Trading Center Data Feeds and Market Data Distribution: We believe the Commission should consider eliminating the two-tiered distribution of consolidated quote and tape information to address concerns about the latency for investors receiving market data.
- Regulatory Obligations on HFT Firms: We recommend that the Commission examine
  the trading activity of HFT firms versus the liquidity they provide and consider whether
  HFT firms should be subjected to quoting obligations similar to that of OTC market
  makers or any other regulations similar to the affirmative and negative obligations of
  specialists and market makers.

### Impact of Market Structure on Other Areas

- Review of Fixed Income Markets Needed: We recommend that the Commission issue a comprehensive concept release examining the fixed income markets to assist in determining what regulatory changes are needed to best serve investors.
- Globalization: We urge the Commission to work closely with foreign regulators to create consistent and sensible cross-border regulations as it examines its current, and considers further, initiatives relating to the reform of the regulation of the U.S. securities markets.

#### II. Introduction

The current debate over reform of the U.S. securities markets is very similar to that which occurred during the last major review of the structure of our markets, specifically during the adoption of Regulation NMS. Regulation NMS was designed to address a variety of problems facing the U.S. securities markets that generally fell within three categories: (1) the need for uniform rules that promote the equal regulation of, and free competition among, all types of market centers; (2) the need to update antiquated rules that no longer reflect current market conditions; and (3) the need to promote greater order interaction and displayed depth, particularly for the very large orders of institutional investors.

In the intervening years since Regulation NMS' adoption, the securities markets have changed dramatically. The third category above, promoting greater order interaction and displayed depth, continues to be of great importance to funds. The market structure in the United States today is an aggregation of exchanges, broker-sponsored execution venues and alternative trading systems. Trading is fragmented with no single destination executing a significant percentage of the total U.S. equity market. With that said, we believe that the U.S. equity markets are generally functioning well and have made significant strides on behalf of funds as compared to non-U.S. equity markets.

We are pleased that the Commission has determined to take a broad look at the current U.S. equity market structure and its impact on long-term investors, such as funds, through the Release. 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 U.S. markets to ensure that there are no unintended consequences to investors. It is important that any specific market structure issue not be viewed in a vacuum. The issues raised in the Release and in other recent Commission trading and market structure proposals are closely linked and the decisions made by the Commission on each will impact, in one way or another, many of the other issues. For example, any changes to the regulation and operation of venues providing undisplayed liquidity will undoubtedly impact high frequency trading. Similarly, decisions made regarding current disclosure requirements for broker-dealers and other trading venues' routing and

<sup>&</sup>lt;sup>9</sup> Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496 (June 29, 2005).

Ms. Elizabeth M. Murphy April 21, 2010 Page 7 of 29

execution practices could influence the venues where investors send their orders. When appropriate, we will discuss the impact of the issues raised in the Release on one another.

### III. Market Structure Performance and Evaluation of Execution Quality

The Release first discusses and requests comment on issues relating to the performance of the current equity market structure, particularly for long-term investors, and related issues of how investors measure their execution quality. We agree that this is the appropriate starting point for such a comprehensive market structure analysis, and commend the Commission for its focus on ensuring that reform adequately addresses the needs of long-term investors.

Make no doubt about it, investors, both retail and institutional, are better off than they were just a few years ago. <sup>10</sup> Trading costs have been reduced, more trading tools are available to investors with which to execute trades, and technology has increased the overall efficiency of trading. Nevertheless, long-time challenges for funds remain – posted liquidity and average execution size is lower while the difficulty of trading large blocks of stock has increased. In addition, new challenges have been created due to some of the recent market structure developments discussed below. <sup>11</sup>

### A. Need for Increased Information Regarding Order Routing and Execution Practices

Given the complexities of the current market structure and the associated difficulties in assessing market performance for investors (discussed below), one of the areas in which Commission action will be critical is the need for increased information to investors about the order routing and execution practices of broker-dealers and other trading venues. Improved information would allow investors to make better informed investment decisions, as well as assisting regulators and public commentators in assessing current market performance. We therefore recommend that the Commission 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; the need for more public disclosure about how orders provided to brokers are handled; and better trade reporting by all types of execution venues regarding order execution.

<sup>&</sup>lt;sup>10</sup> See, e.g., Equity Trading in the 21" Century, James J. Angel, Lawrence E. Harris, and Chester S. Spatt, February 23, 2010 ("Angel/Harris/Spatt Paper") ("The winners first and foremost [from market structure changes] have been the investors who now obtain better service at a lower cost from financial intermediaries than previously.")

<sup>&</sup>lt;sup>11</sup> For a description of the difficulties facing large traders in the current market environment, see, e.g., Angel/Harris/Spatt Paper, supra note 10.

## 1. Recommended Disclosures by Broker-Dealers and Other Trading Venues

Currently, institutional investors do not have ready access to complete information about the orders provided to brokers and other trading venues.<sup>12</sup> We therefore recommend that, at a minimum, the Commission consider means to require new disclosure or to improve the existing disclosure of certain information, either to the customer involved or to the public, as is most appropriate, regarding the order routing and execution practices of brokers and other trading venues including:

- Payments and other incentives provided or received (such as rebates) to direct order flow to particular trading venues<sup>13</sup>
- 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<sup>14</sup>
- External venues to which a broker routes orders (including affiliated alternative trading systems ("ATS"), dark pools, and other trading venues), 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<sup>15</sup>
- Policies and procedures regarding the dissemination of information about a customer's order and trade information to facilitate a trade, including the use of "indications of interest" or "IOIs"<sup>16</sup>

<sup>&</sup>lt;sup>12</sup> See Letter from Seth Merrin, Chief Executive Officer, Howard Meyerson, General Counsel, and Vlad Khandros, Corporate Strategy, Liquidnet, to Securities and Exchange Commission, dated March 26, 2010 ("Liquidnet Comment Letter"), citing The TABB Group, LLC, "US Equity High Frequency Trading: Strategies, Sizing and Market Structure," September 2009 (Institutional traders "... would like a better understanding of how their orders are handled. Without more empirical data on how orders are handled, it is very difficult for them to make intelligent decisions regarding with whom to trade and how to trade.") and Dushyant Shahrawat, CFA, William Butterfield and Stephen Bruei, TowerGroup, "The Changing Electronic Trading Landscape: Assessing the Drivers for 2010 and Beyond," January 18, 2010 ("The buy-side trade desk must have a strong knowledge of the operating and business models of the various execution venues and the way algorithms work with dark pools, exchanges, and electronic communications networks ("ECNs").

<sup>&</sup>lt;sup>13</sup> As discussed below, payments for order flow and other monetary incentives can influence where a broker and other trading venues route an order. Information regarding such payments and incentives would assist investors in determining how and where to route an order and where potential conflicts of interest may exist.

<sup>&</sup>lt;sup>14</sup> Our members report that while they receive information about the venue at which an order was executed, they often do not receive information about what occurred prior to execution. For example, an order could have been routed to several different venues prior to execution for a brief period of time and rested on those venues until the order was routed elsewhere. Such information can help provide a more complete picture of the quality of execution provided by a broker and other execution venues as well as provide insight into the potential leakage of information about an order that may have occurred during the time it was exposed at the trading venues that did not execute the order.

<sup>&</sup>lt;sup>15</sup> As with the prior recommended disclosures, this disclosure would provide insight into any potential conflicts that may exist in order routing and execution.

<sup>&</sup>lt;sup>16</sup> Our members report that, after informing a broker that they do not want their orders to be disseminated via IOIs, they often find out that their orders were, in fact, disseminated using IOIs via an affiliated trading venue of the broker.

Ms. Elizabeth M. Murphy April 21, 2010 Page 9 of 29

- Policies and procedures to control leakage of information regarding a customer's order and other confidential information<sup>17</sup>
- Information regarding the internalization of orders, including the revenue generated by internalization and the percentage of shares executed internally 18
- Cancellation rates of orders and policies and procedures regarding the use of IOC orders 19

We believe disclosure of this type of information will go far towards assisting both investors in their trading decisions,<sup>20</sup> and regulators and others in understanding the performance of the current market structure.<sup>21</sup>

# 2. Current Regulatory Tools for Measuring Market Performance and Market Quality

The Release requests comment on whether the current rules regarding measuring market quality and disclosing order routing practices should be updated or expanded to provide different or additional information to investors. Currently, the rule relating to measuring market quality is Rule 605 of Regulation NMS, and the rule relating to the disclosure of order routing practices is Rule 606 of Regulation NMS.<sup>22</sup>

<sup>&</sup>lt;sup>17</sup> As discussed below, the confidentiality of information regarding orders is arguably the most significant consideration for funds when trading.

<sup>&</sup>lt;sup>18</sup> As discussed in Section IV of our letter, internalization represents a significant percentage of the volume of the securities markets and is an example of undisplayed liquidity with which institutional investors, for the most part, cannot interact. Increased disclosure surrounding this practice can allow institutional investors to better understand the routing decisions of internalizers and any potential conflicts that may exist regarding internalization.

<sup>&</sup>lt;sup>19</sup> As discussed in Section V of our letter, the amount of cancelled orders and the use of IOC order types can create "noise" in the markets for institutional investors who need to trade in large size and may lead to other concerns for the efficiency of the securities markets in general.

<sup>&</sup>lt;sup>20</sup> While we believe the recommended information must be made readily available to investors, we are open to the manner in which this information is disseminated. We realize that some of the recommended disclosures may only be appropriate to be disclosed directly to the customer of a broker or other trading venue. In these cases, while the Commission should require broadly that the information be disclosed to assure that investors have access to the information, we believe the specific manner of dissemination can be left to industry best practices. To this end, we encourage brokers and other trading venues to work with investors to determine the best solution. The Commission should determine the manner in which certain of the information above would be disclosed to the public.

<sup>&</sup>lt;sup>21</sup> We believe it will be critical that regulators examine and utilize the information above and consider enforcement actions against those market participants that, for example, do not adhere to their disclosed policies and procedures.

<sup>&</sup>lt;sup>22</sup> The Commission adopted these rules in November 2000. See Securities Exchange Act Release No. 43590 (Nov. 17, 2000), 65 FR 75414 (December 1, 2000). Rule 605 requires market centers to prepare and make available to the public monthly reports in electronic form that categorize their order executions and include statistical measures of execution quality including, for example, the opportunity for price improvement, the likelihood of execution, the speed of execution, and the trading characteristics of the security, together with other non-price factors such as reliability and service. Rule 606

Ms. Elizabeth M. Murphy April 21, 2010 Page 10 of 29

While these rules have resulted in comparable statistics across market centers in the metrics covered by the rule, they have not proven useful to institutional investors, including funds, regarding some of the information needed to determine how and where to route large orders under current market conditions. For example, the Release notes that Rule 605 does not include any statistics measuring the execution quality of orders submitted for execution at opening or closing prices; the commission costs of orders, access fees, or liquidity rebates; or the amount of time that canceled non-marketable orders are displayed in the order book of a trading center before cancellation. We believe that these are the types of disclosures, reflecting information on recent market structure developments, which would be helpful to investors and others in assessing current market performance.

Rules 605 and 606 were drafted primarily with the interests of individual investors in mind and are focused on the execution of smaller orders. Large-sized orders are excluded from both rules. We therefore support the Commission either updating or expanding Rules 605 and 606 to provide additional information to investors, possibly incorporating some of the recommended disclosures by broker-dealers and other trading venues discussed above.

## **B.** Long-Term Investors

The Commission, in its consideration of trading and market structure issues, has focused on the interests of, and the challenges facing, long-term investors. Where the interests of long-term investors and short-term professional traders diverge, the Commission has repeatedly emphasized that its duty is to uphold the interests of long-term investors. We believe this is a worthy and practical goal and that the Commission should continue to examine the differences between long-term investors and short-term traders when crafting new, or updating existing, regulations.<sup>23</sup>

The Release requests comment on the circumstances when an investor should be considered a "long-term investor" and if a time component is needed to define a long-term investor. The Institute believes that it will be extremely difficult, and potentially problematic, to create an explicit definition of a "long-term investor" or to determine a time frame that would distinguish a "long-term investor" from other types of investors. For example, funds represent millions of long-term investors in the securities markets but some funds may employ shorter-term trading strategies, in whole or in part, to achieve long-term goals. It seems difficult, if not impossible, to craft a definition that could take into account the myriad circumstances under which investing decisions are made.

requires broker-dealers that route customer orders in NMS stocks and options to make publicly available quarterly reports that disclose the execution venues to which they route non-directed orders.

<sup>&</sup>lt;sup>23</sup> As discussed in more detail below, short-term traders bring certain benefits to the securities markets, such as providing liquidity, short-term traders also raise questions regarding the impact of their trading practices on the securities markets and investors in those markets.

Ms. Elizabeth M. Murphy April 21, 2010 Page 11 of 29

For these reasons, we believe the Commission should not explicitly define a "long-term investor" for purposes of trading and market structure issues and should instead consider who is *not* a long-term investor if it determines the need to distinguish between types of investors in this manner. We believe that, as a starting point, the Commission could look to the characteristics of a proprietary firm engaged in high frequency trading identified in the Release.<sup>24</sup>

### C. Measuring Institutional Investor Transaction Costs

The Release notes that, given the focus on long-term investors, it is important to determine the useful metrics for assessing the performance of the current market structure for these investors. The Release notes that most of the Commission's past analyses of market performance have focused on the execution of smaller orders rather than attempting to measure the overall transaction costs of institutional investors to execute large orders, partly because of the complexity of measuring these costs.

Funds employ transaction cost analysis for a variety of reasons. Most funds analyze transaction costs to assess their brokers' trading performance. Other uses for transaction cost analysis are to measure the performance of a fund's trading desk, to identify outlier trades and problem portfolio trades and to allow a fund's compliance department to examine issues surrounding best execution.

Funds currently utilize various measurement techniques to monitor and evaluate their portfolio transaction costs and the quality of their executions. Different funds use different measures for a variety of reasons, including, for example, the size of the fund complex, availability of resources, a fund's investment objectives and strategies (e.g., index funds, momentum funds and international funds may all utilize different measurements), and the markets in which their portfolio securities trade.

Many fund complexes, particularly larger fund complexes, utilize their own transaction cost analysis methods, or a combination of their own analysis and those of outside firms specializing in evaluating transaction costs. While these outside firms provide useful information to complement the transaction cost analysis performed internally by funds and, in general, accurately reflect the transaction costs experienced by institutional investors, our members report that these firms experience the same difficulties as other market participants in assessing execution quality and market performance under the current market structure. Most significantly, given the complexity of the current market structure, and the lack of transparency regarding certain trading practices (as discussed above in Section III.A.), accurately measuring overall institutional investor transaction costs can be challenging.

<sup>&</sup>lt;sup>24</sup> Certain types of both retail and institutional investors will be considered "long-term investors" using these characteristics. While we believe that the Commission should distinguish between long-term investors and short-term traders when assessing market structure issues, we also believe it will be necessary to distinguish between retail and institutional investors for certain purposes, due to the different ways in which these investors trade. We will discuss the particular needs of institutional investors in further detail below.

Ms. Elizabeth M. Murphy April 21, 2010 Page 12 of 29

The Commission most recently examined the feasibility of quantifying overall fund transaction costs in its concept release on measures to improve the disclosure of these costs. <sup>25</sup> In the concept release, the Commission requested comment on quantifying all transaction-related costs incurred by funds and requiring funds to disclose such a measure. The Institute's letter on the concept release noted the challenges in measuring these costs. <sup>26</sup> Most significantly, market participants, academics and others utilize various measures and a combination of approaches to determine transaction costs. To the best of our knowledge, there is still no single generally accepted method or product that has been developed to capture all the necessary and relevant data from a fund and generate objective and consistent measurements and we do not believe that the Commission should mandate a single or static approach to analyzing transaction costs.

## IV. Undisplayed Liquidity

Much of the current debate over the structure of the U.S. securities markets has centered on the proliferation of undisplayed, or "dark," liquidity and the venues that provide such liquidity, particularly so-called "dark pools."

### A. Fund Use of Undisplayed Liquidity

The Release defines "undisplayed liquidity" as trading interest that is available for execution at a trading center, but is not included in the consolidated quotation data that is widely disseminated to the public. As the Release notes, undisplayed liquidity is not a new phenomenon. Funds have long been significant users of undisplayed liquidity and the trading venues that provide such liquidity. These venues provide a mechanism for transactions to interact without displaying the full scale of a fund's trading interest, thereby lessening the cost of implementing trading ideas and mitigating the risk of information leakage. These venues also allow funds to avoid transacting with market participants who seek to profit from the impact of the public display of large orders to the detriment of funds and their shareholders. As we have stated in several letters to the Commission, the confidentiality of information regarding fund trades is of significant importance to Institute members. 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.

<sup>&</sup>lt;sup>25</sup> SEC Release Nos. 33-8349, 34-48952 and IC-26313 (December 18, 2003), 68 FR 74820 (December 24, 2003) (Request for Comments on Measures to Improve Disclosure of Mutual Fund Transaction Costs).

<sup>&</sup>lt;sup>26</sup> See Letter from Amy B.R. Lancellotta, Senior Counsel, Investment Company Institute, to Jonathan G. Katz, Secretary, Securities and Exchange Commission, dated February 23, 2004 (Commission Request For Comments on Measures to Improve Disclosure of Mutual Fund Transaction Costs).

<sup>&</sup>lt;sup>27</sup> See, e.g., Letters from Paul Schott Stevens, President, Investment Company Institute, to Christopher Cox, Chairman, Securities and Exchange Commission, dated September 14, 2005, August 29, 2006, and September 19, 2008.

Ms. Elizabeth M. Murphy April 21, 2010 Page 13 of 29

At the same time, we recognize that while venues providing undisplayed liquidity bring certain benefits to funds, not displaying orders detracts to some extent from market transparency. We therefore understand the Commission's desire to examine trading venues that do not display quotations to the public and its concerns about, for example, the creation of a two-tiered market. As discussed above, the Institute has long advocated for regulatory changes that would result in more displayed quotes and believes that increasing overall transparency in the markets would lead to a more efficient marketplace.

Ideally, funds would like as much liquidity as possible to be executed in the displayed markets. Nevertheless, there is real value in enabling entities, such as funds, that frequently trade in large amounts to have access to venues that do not disclose their trading interest. We therefore believe it is imperative that venues trading undisplayed liquidity remain available to funds. We would be concerned if any Commission proposal impeded funds as they trade securities in venues providing undisplayed liquidity, whether it be through trading large blocks or through other trading methods.<sup>28</sup>

It also will be important for the Commission in examining any future rulemaking to consider the varying business models and trading mechanisms of venues providing undisplayed liquidity. For example, some dark pools, such as block crossing networks, offer specific size discovery mechanisms that are critical for funds in the anonymous execution of large-sized orders. Other dark pools and ATSs operate in a manner more akin to broker-dealer trading venues and we believe arguably should be treated differently from venues such as block crossing networks for purposes of regulation.<sup>29</sup>

The Release requests comment on the order execution quality provided to investors executing orders in venues providing undisplayed liquidity. In general, we believe that the quality of execution provided by these venues to funds is very good. However, as with any type of trading venue, execution results will vary depending on a number of factors such as the specific venue's business model, the type of security the fund is seeking to trade, and overall market conditions at the time of the trade. It also is important to note that given the number of different types of venues providing undisplayed liquidity, it is difficult to provide an all encompassing view about the order execution quality provided by these types of venues.

<sup>&</sup>lt;sup>28</sup> For example, as we stated in our comment letter on the Commission's recent proposal relating to non-public trading interest, certain aspects of that proposal could result in ATSs becoming more "dark" to avoid regulation and/or broker-dealers increasing their execution of orders internally, continuing the lack of transparency to investors. Similarly, instead of sending out IOIs, a trading venue could instead use IOC orders to "ping" the market. As discussed below, our members report that IOC orders themselves can prove problematic for funds as they trade large blocks. *See* ICI Non-Public Trading Interest Letter, *supra* note 5.

<sup>&</sup>lt;sup>29</sup> Currently, only a small portion of trades in ATSs take place in venues specializing in trading large blocks of securities. More often, funds must break up their larger "parent" orders into smaller "child" orders and execute these orders in other types of ATSs. The liquidity for the majority of fund orders often cannot be found in the specialized block ATSs.

### B. Public Price Discovery and Undisplayed Liquidity

A long-standing concern regarding undisplayed liquidity is whether its trading volume has reached a sufficiently significant level that it impairs the quality of public price discovery. The Institute has expressed concerns in the past about the impact of undisplayed liquidity on the price discovery process. We believe the time is ripe for the Commission to examine the impact of certain undisplayed liquidity on price discovery, as well as potential ways to encourage the further public display of orders.

## 1. <u>Undisplayed Liquidity Handled by OTC Market Makers - Internalization</u>

Broker-dealer internalized order flow represents a significant portion of undisplayed liquidity that funds do not have an opportunity, for the most part, to trade against, and that therefore can make trading large orders more difficult. The Commission seeks comment on undisplayed liquidity handled by OTC market makers through internalization. According to the Release, broker-dealer internalization accounts for approximately 17.5 percent of the total share volume of NMS stocks, more than the amount of share volume attributed to dark pools as a whole.

Internalization raises a variety of concerns. For example, internalization may increase market fragmentation because it can result in customer orders not being publicly exposed to the market. In addition, internalization may raise conflicts between broker-dealers and their customers because they can result in broker-dealers executing customer orders at the displayed quotations, thus foregoing the opportunity for price improvement for those orders in order to maximize the profits of the broker-dealers involved in such relationships.<sup>30</sup>

The Commission has attempted to address certain aspects of the practice of internalization in a variety of ways, most significantly through disclosure of broker-dealer order handling practices and the requirement that broker-dealers give special scrutiny to internalization during their regular and rigorous best execution reviews.<sup>31</sup> Both of these approaches, however, provide only a limited means to deal with the conflict of interests that may exist in the practice.

<sup>&</sup>lt;sup>30</sup> See Colby/Sirri Article, supra note 6, at p. 174 ("The liquidity provider's direct trading with these orders may or may not benefit the orders themselves, depending on the prices and conditions under which they are executed, and the degree of competitiveness in the market to purchase order flow. Irrespective of whether the orders are benefited, however, the fragmentation of trading that results from the internalization of these orders necessarily reduces the interaction of orders that helps create liquidity.").

<sup>&</sup>lt;sup>31</sup> In particular, the Commission adopted amendments to Rule 10b-10 under the Securities Exchange Act of 1934 ("Exchange Act") to require broker-dealers to include on confirmations a statement whether payment for order flow is received by the broker-dealer for transactions and the fact that the source and nature of the compensation received in connection with the particular transaction will be furnished upon written request of the customer. In addition, the Commission adopted new Exchange Act Rule 11Ac1-3 (now Rule 607 of Regulation NMS) to require broker-dealers to disclose to customers, when a new account is opened and annually thereafter, (1) the broker-dealers' policies regarding receipt of payment for order flow, including a statement as to whether any payment for order flow is received for routing customer orders and a detailed description of the nature of the compensation received; and (2) the broker-dealers' policies for determining where to route customer orders that are the subject of payment for order flow absent specific instructions

We do not suggest that internalization be prohibited. We recommend, however, that the Commission take further action to ensure that internalized orders receive best execution. Specifically, any order executed through internalization should be provided with "significant" price improvement.<sup>32</sup> Such a requirement would ensure that the internalizing broker-dealer provides at least some amount of "significant" price improvement to an internalized order, thus addressing one of the concerns regarding internalization noted above. It also would address other concerns by potentially resulting in more customer orders being exposed to the market if the amount of internalized orders is reduced.

## 2. Trade-At Rule and Trade-Through Rule with Depth of Book Protection

The Release requests comment whether the Commission should consider a "trade-at" rule that would prohibit any trading center from executing a trade at the price of the NBBO unless the trading center was displaying that price at the time it received the incoming contra-side order.<sup>33</sup> The Release also revisits the issue of a trade-through rule with depth of book protection and requests comment whether trade through protections should be expanded to cover the depth of the book. Regulation NMS' trade through rule only prohibits a trading center from trading through the best displayed quote of a market center.

When Regulation NMS was proposed, the Institute supported the establishment of a uniform trade-through rule for all market centers.<sup>34</sup> Our comment letter stated that, by affirming the principle of price priority, a trade-through rule should encourage the display of limit orders, which in turn would improve the price discovery process and contribute to increased market depth and liquidity. The letter also stated that a trade-through rule would increase investor confidence in the securities markets by helping to eliminate an impression of unfairness when an investor's order executes at a price worse than the displayed quote.

The Institute believes the same arguments set forth in support of the trade-through rule would apply to a trade-at rule and a trade-through rule with depth of book protection. However, at this time, the Institute does not support the adoption of a trade-at rule for the securities markets or the expansion of the trade-through rule to cover depth of book protection. Most significantly, a trade-at rule would

from customers, including a description of the extent to which orders can be executed at prices superior to the national best bid and national best offer.

<sup>&</sup>lt;sup>32</sup> We question whether providing price improvement to internalized orders in, for example, increments of hundredths of a penny is providing meaningful price improvement.

<sup>&</sup>lt;sup>33</sup> The Release notes that under this type of rule, a trading center that was not displaying the NBBO at the time it received an incoming marketable order could either: (1) execute the order with significant price improvement (such as the minimum allowable quoting increment (generally one cent)); or (2) route intermarket sweep orders ("ISOs") to full displayed size of NBBO quotations and then execute the balance of the order at the NBBO price.

<sup>34</sup> See ICI Regulation NMS Letter, supra note 5.

Ms. Elizabeth M. Murphy April 21, 2010 Page 16 of 29

be difficult to implement and operate under the current market environment. As the Release notes, published quotes today may not reliably indicate the true prices that are actually available to investors due to the disparities that exist in the fees charged by market participants. In particular, many trading venues that display their quotes in the public quotation system typically charge per share "access fees" to non-subscriber market participants that trade with the orders that the venues display. The Institute does not believe that access fees should be reflected in the displayed quote because, as the Release notes, this would lead to subpenny pricing, which we oppose, for the reasons set forth below.<sup>35</sup>

A trade-through rule with depth of book protection also has potential downsides. Such a rule could, to some extent, turn the market into a large consolidated limit order book, a so-called "CLOB." While some Institute members would support a CLOB-like market structure, others believe that a CLOB could stifle the creation of new or different ATSs and could make it more difficult for a broker-dealer to work a large order, as it would have to satisfy interest on one or more markets that was below the top of book.<sup>36</sup>

## 3. Subpennies

The Release notes that there may be greater incentives for broker-dealer internalization in low-priced stocks as the minimum one cent per share pricing increment established under Regulation NMS is much larger on a percentage basis than it is in higher-priced stocks. In response to this concern, the Commission requests comment on whether it should consider reducing the minimum pricing increment for lower priced stocks (i.e., allow for "subpennies"). Recent reports also have indicated that NYSE Euronext and Nasdaq may petition the Commission to revisit the current restrictions on subpennies in Regulation NMS<sup>37</sup> and expand eligibility of subpenny pricing from stocks with a share price below \$1.00 to stocks with a share price below \$10.00.<sup>38</sup>

<sup>&</sup>lt;sup>35</sup> At this time we also are not recommending the adoption of a "trade-at" rule to address concerns relating to internalization. A trade-at rule could stifle development of ATSs that act in a purely agency capacity by limiting their ability to execute if they are not quoting at the NBBO. Moreover, under a trade-at rule, a market maker could quote at the NBBO and still internalize orders without providing any price improvement. Consequently, it would be far more useful for the Commission to require significant price improvement for internalized orders than to force a trade-at rule for all trading centers.

<sup>&</sup>lt;sup>36</sup> Some market participants have suggested that the Commission revisit instituting an "opt-out" exception to a tradethrough rule. The Institute did not support the trade-through proposal's "opt-out" exception when Regulation NMS was proposed, and our position has not changed. We see no practical reason why a market participant would ignore better priced orders in the market, especially if a market participant can access and execute against those orders, automatically and with certainty. In addition, an opt-out exception is inconsistent with the principle of price protection for limit orders. We continue to believe that an opt-out exception would undermine the ability of the Commission's proposals to achieve their stated objectives of encouraging the display of limit orders and enhancing investor confidence in the markets.

<sup>&</sup>lt;sup>37</sup> See, e.g., Nina Mehta, SEC May Allow Subpenny Pricing for More Stocks, Bloomberg (February 23, 2010).

<sup>&</sup>lt;sup>38</sup> In proposing Regulation NMS, the Commission expressed concerns that superior subpenny quotes on alternative markets that were not transparent and readily accessible to average investors could be harmful to those investors and to the markets as a whole. At the same time, the Commission believed that including subpenny quotes in the best publicly disseminated

Ms. Elizabeth M. Murphy April 21, 2010 Page 17 of 29

While the Institute strongly supported the move to decimalization and the trading of securities in minimum increments of one penny, we have strongly opposed the entry of orders and the quoting of securities in subpennies. As we noted in our comment letter in response to the Commission's concept release regarding the impact of trading and potentially quoting securities in subpennies, <sup>39</sup> permitting the entry of orders and the quoting of securities in subpennies would eliminate much of the benefit brought by decimalization and would exacerbate many of the unintended consequences that have arisen in the securities markets since its implementation, which have proven harmful to funds and their shareholders.

Most significantly, many of the difficulties that funds have faced trading large orders has been caused by increased instances of stepping-ahead of orders. Permitting the entry of orders and the quoting of securities in subpennies would allow a trader to gain priority over another trader by bidding as little as \$0.001 more for the same security, an amount that is virtually meaningless in terms of actual costs of obtaining the position (i.e., ten cents for 100 shares). This potential for the increased stepping-ahead of orders would exacerbate the current disincentive for market participants to enter any sizeable volume into the markets and would reduce further the value of displaying orders.

The Institute also is concerned about the effect of quoting securities in subpennies on market transparency and depth. The reduction in quoted market depth as the result of quoting in penny increments arguably is one of the developments that have adversely affected institutional investors' ability to execute large orders. The Institute believes that displaying consolidated quotes in subpenny increments could further reduce the displayed quote size and overall depth of the markets. For these reasons, we would oppose any reduction in the minimum pricing increment for Regulation NMS stocks.

prices could also harm investors and the markets. Among other things, the Commission was concerned that subpenny quoting was likely to further decrease market depth and increase the incidence of market participants stepping ahead of standing limit orders for an economically insignificant amount. Moreover, the Commission was concerned that the potential benefits of marginally better prices that subpenny quotes might offer in securities priced above \$1.00 per share were not likely to justify the costs that would result from such a change. In response to these concerns, the Commission adopted Rule 612 of Regulation NMS to prohibit market participants from accepting, ranking, or displaying orders, quotes, or indications of interest in a pricing increment finer than a penny in any NMS stock, other than those with a share price below \$1.00.

<sup>&</sup>lt;sup>39</sup> See Subpenny Concept Release Letter, supra note 5.

<sup>\*&</sup>quot;We do not recommend that the minimum price variation be decreased further. We are particularly concerned about the effect of a small minimum price variation on order display and on transaction costs of large traders." Angel/Harris/Spatt Paper, supra note 10.

Ms. Elizabeth M. Murphy April 21, 2010 Page 18 of 29

### V. High Frequency Trading

One of the focuses of the Release is the impact of high frequency trading on the securities markets. According to the Release, estimates of HFT volume in the U.S. equity markets typically are 50 percent of the total market volume or higher. Other estimates calculate these figures to be closer to 60 to 70 percent of the total volume. Given the significant market volume that HFT represents, high frequency traders and issues connected to HFT have garnered the attention of regulators, Congress, and market participants in general.<sup>41</sup>

As the Release notes, HFT firms can be organized in a variety of ways, including as a proprietary trading firm, as the proprietary trading desk of a multi-service broker-dealer, or as a hedge fund. While there is no formal definition of HFT, the Release notes that characteristics often attributed to HFT firms are: (1) the use of extraordinarily high-speed and sophisticated computer programs for generating, routing, and executing orders; (2) 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 (i.e., not carrying significant, unhedged positions over-night).

The Release distinguishes between long-term investors and professional traders such as high frequency traders. As the Release notes, long-term investors are market participants who provide capital investment and are willing to accept the risk of ownership in listed companies for an extended period of time. Unlike long-term investors, professional traders generally seek to establish and liquidate positions in a shorter time frame. Accordingly, these traders often have different interests than investors concerned about the long-term prospects of a company.

### A. Impact of HFT on the Securities Markets

The debate about the impact of HFT on the securities markets clearly is still in its infancy and there is no consensus on the overall impact of HFT on the securities markets.

Funds do not object to HFT per se. HFT arguably brings several benefits to the securities markets in general and to investors in the markets, including providing liquidity, tightening spreads, and playing a role as the "new market makers." At the same time, there are potential concerns

<sup>&</sup>quot;See, e.g., Statement of Senator Edward E. Kaufman (Del.), Regulatory Agencies Increasingly Concerned About High Frequency Trading, March 2, 2010. See also Carol L. Clark, The Federal Reserve Bank of Chicago, Chicago Fed Letter, "Controlling Risk in a Lightening-Speed Trading Environment," March 2010; Sal Arnuk and Joseph Saluzzi, Latency Arbitrage: The Real Power Behind Predatory High Frequency Trading, A Themis Trading LLC White Paper, December 4, 2009; Quantitative Services Group (QSG), Liquidity Charge & Price Reversals: Is High Frequency Trading Adding Insult to Injury?, February 2010; and Investment Technology Group, Understanding and Avoiding Adverse Selection in Dark Pools, November 2009 ("ITG Study").

Ms. Elizabeth M. Murphy April 21, 2010 Page 19 of 29

associated with HFT. These include concerns relating to many of the HFT characteristics noted above, including operational advantages or the potential for gaming through the use of high-speed computer programs for generating, routing, and executing orders, and the use of co-location services and individual data feeds offered by exchanges and others to minimize network and other types of latencies. In addition, the submission of numerous orders that are cancelled shortly after submission can create unnecessary market traffic and misleading market "noise." Of particular concern, our members report that strategies employed by HFT (as well as by other market participants) often are designed to detect the trading of large blocks of securities by funds and to trade with or ahead of those blocks.<sup>42</sup>

No matter what the analysis of the benefits and costs of HFT to the markets concludes, we believe the issues surrounding this trading practice are ripe for further examination by the Commission because of the significant amount of the daily trading volume that HFT now constitutes.

## B. Need for Increased Transparency of High Frequency Traders and HFT Practices

There is an immediate need for more information about high frequency traders and the practices of HFT firms. Many of the Release's questions regarding the impact of HFT on long-term investors, including funds, are difficult to answer in any comprehensive manner due to the lack of transparency regarding the operations of HFT firms.

As discussed in further detail below, transparency about HFT firms is needed in several areas, 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.<sup>43</sup> We believe it would be extremely helpful for regulators and investors both to have access to this information to better understand the impact of HFT on the markets and, for investors, to make more efficient trading decisions.

We are pleased that the Commission has taken the first step towards increasing transparency regarding HFT by proposing a large trader reporting system that would allow the Commission to better identify large market participants, collect information on their trades, and analyze their trading activity.<sup>44</sup>

<sup>&</sup>lt;sup>42</sup> See, e.g., ITG Study, supra note 41 ("Although high-frequency trading firms play an important role in displayed markets by tightening the spreads, they are often the cause of short-term adverse selection in dark pools. And, due to the overwhelming participation level of high-frequency trading firms in dark pools, adverse selection is occurring much more frequently to the detriment of buyside participants.").

<sup>&</sup>lt;sup>43</sup> As discussed above in Section III, we believe transparency is needed regarding the trading practices of many market participants, not only HFT firms. We therefore are not singling out HFT firms for any particular regulatory requirements surrounding transparency and suggest that disclosure and other requirements regarding execution practices be applied uniformly across all trading venues and market participants.

<sup>&</sup>lt;sup>44</sup> See Securities Exchange Act Release No. 61908 (April 14, 2010). See also Statement of SEC Commissioner Elisse B. Walter at Commission open meeting regarding large trader reporting requirement, April 14, 2010 ("Well-regulated markets").

## C. HFT Strategies

Rather than attempt to create a precise definition of HFT, the Release focuses on particular strategies and tools that may be used by HFT firms and examines whether these strategies benefit or harm market structure performance and the interests of long-term investors. The Release discusses four types of trading strategies – passive market marking, arbitrage, structural, and directional. We will focus on the impact of two of these strategies on investors, passive market making and directional, and related issues of liquidity rebates and IOC orders in the markets.<sup>45</sup>

## 1. <u>Liquidity Rebates and Passive Market Making Strategies</u>

The Commission generally seeks comment on the quality of liquidity provided by HFT firms that engage in "passive market making" and the benefits and drawbacks of liquidity rebates in light of their use by such firms. The Commission describes "passive market making" as primarily involving the submission of non-marketable resting orders (bids and offers) that provide liquidity to the marketplace at specified prices. The Commission notes that while HFT firms engaged in passive market making may sometimes take liquidity if necessary to liquidate a position rapidly, the primary sources of profits for HFT firms under this strategy are from earning the spread by buying at the bid and selling at the offer and capturing any liquidity rebates offered by trading centers to liquidity-supplying orders. 46

#### a. Background on Liquidity Rebates

Liquidity rebates became a prominent feature of the markets as a result of the business practices of ECNs and Nasdaq. At the time the Commission incorporated ECN orders into the public quotation system, ECNs and Nasdaq vigorously competed with each other for order flow. To attract liquidity onto their limit order books, ECNs and Nasdaq began offering liquidity rebates to reward market participants for submitting "resting" limit orders that gave depth to the trading book. They also imposed a per-share access fee on the incoming marketable orders that execute against the resting limit orders and thereby "remove liquidity" from the book. Because non-subscribers could not place limit orders on an ECN's book and therefore could not receive the rebates, the fees that they paid acted as a subsidy to the subscribers that placed standing limit orders on the ECN's book.

require that regulators have the tools and information they need to conduct surveillance as well as investigations of manipulative, abusive, or other illegal activity, and to better understand market participants. To do this effectively, regulators and self-regulators must have timely and accurate information.")

<sup>&</sup>lt;sup>45</sup> While our letter focuses on the impact of these two strategies, we believe the other two strategies discussed in the Release – the arbitrage and structural strategies – also are worthy of examination.

<sup>&</sup>quot;The practice of providing liquidity rebates is associated with what is often referred to as the "maker/taker" model. In the maker/taker model, trading venues charge access fees to traders who "take" liquidity with marketable orders and pay rebates to limit order providers who "make" liquidity by placing standing limit orders.

Ms. Elizabeth M. Murphy April 21, 2010 Page 21 of 29

The use of liquidity rebates quickly moved to marketplaces other than Nasdaq and ECNs. Other exchanges began to use rebates or variations of this pricing methodology. Some ATSs other than ECNs also began to employ rebates in an attempt either to gain order flow for a new market venue through attractive pricing arrangements or to incentivize the routing of certain types of orders.

As a result of the impact on order routing caused by liquidity rebates and access fees, the Commission considered a variety of proposals to address these issues when it proposed Regulation NMS. Ultimately, the Commission limited access fees such that they could not be more than a de minimis amount.<sup>47</sup> While Regulation NMS capped access fees, it did not eliminate or limit liquidity rebates. If anything, the practice of providing liquidity rebates has become more pronounced in recent years, and most if not all equity exchanges have moved to a model of providing liquidity rebates to persons who post liquidity in their markets.

## b. Fairness of Liquidity Rebates

The Commission requests comment whether liquidity rebates are unfair to long-term investors because they tend to be paid primarily to HFT firms engaging in passive market making strategies, or whether they generally benefit long-term investors by promoting narrower spreads and more immediately accessible liquidity.

The Institute 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. For example, 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. Practices such as these, in turn, may ultimately harm investors because their limit orders may not be executed.<sup>48</sup> At the same time, it is unclear what benefits liquidity rebates provide to investors.

The Institute does not recommend that liquidity rebates be prohibited at this time, as more should be learned about the effects of this practice. We instead suggest that the Commission, 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. This would provide regulators and the public with important information to assess routing decisions. We further recommend that

<sup>&</sup>lt;sup>47</sup> In particular, Rule 610 of Regulation NMS limits the fees that can be charged for access to quotations to \$0.003 per share (or 0.3 percent of the quotation price per share for quotations less than \$1.00).

<sup>&</sup>lt;sup>48</sup> "[T]he 'make or take' model for pricing exchange services has led to perverse outcomes .... We recommend that the SEC require that all brokers pass through the fees and liquidity rebates to their clients. The SEC also should indicate clearly that the principles of best execution apply to net prices and not to quoted prices." See Angel/Harris/Spatt Paper, supra note 10.

Ms. Elizabeth M. Murphy April 21, 2010 Page 22 of 29

the Commission examine the data generated about liquidity rebate practices and determine whether further rulemaking is necessary to address concerns in this area.

### 2. <u>Directional Strategies</u>

The Release discusses two types of "directional strategies," order anticipation strategies and momentum ignition strategies, where a HFT firm takes a significant, unhedged position based on an anticipation of an intra-day price movement of a particular direction that may contribute to the quality of price discovery in a stock. The Release notes that these strategies may pose particular problems for long-term investors.

## a. Order Anticipation Strategies

The Release states that an order anticipation strategy occurs when a HFT firm seeks 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 HFT 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.<sup>49</sup>

As the Release notes, there is nothing illegal per se about an order anticipation strategy. Many market participants, in addition to HFT firms, utilize sophisticated pattern recognition software to ascertain from available information the existence of a large buyer or seller or use orders to "ping" 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 this type of strategy is beneficial to the markets or to investors, or that it does not interfere with efficient price discovery.

Funds have been concerned about this type of market practice for years. Many market participants, including floor brokers and market makers, used these techniques in the past to obtain an advantage over funds. What has changed, as the Release correctly recognizes, is the technology available to HFT firms that has allowed them to better identify and execute these trading strategies. Technology has made the use of these strategies much easier and cheaper to employ, thereby lowering the risk to users of these strategies. This, in turn, has made trading more difficult for funds that are interested in buying and selling large positions and that are hurt by market participants that trade in front of their orders.

<sup>&</sup>lt;sup>49</sup> The Release notes that any proprietary firm or other person that violates a duty to a large buyer or seller or misappropriates their order information and then uses the information for its own trading to the detriment of the large buyer and seller has engaged in misconduct that already is prohibited, such as forms of front running.

Ms. Elizabeth M. Murphy April 21, 2010 Page 23 of 29

While this strategy may not be in violation of any specific regulation, several aspects of the strategy are akin to methods that market participants may use to game the markets. We therefore recommend that the Commission examine whether any new regulations are necessary to address firms that are conducting an order anticipation strategy and whether certain order anticipation strategies should be considered as improper or manipulative activity. 50

## b. IOC Orders and the Practice of "Pinging"

The Commission requests comment on whether the use of "pinging" orders to access undisplayed liquidity should be prohibited or restricted. The Commission describes a "pinging" order as an IOC order that can be used to search for and access all types of undisplayed liquidity, including liquidity at dark pools and undisplayed order types at exchanges and ECNs. IOC orders are defined as market or limit orders that are automatically executed against the full size of a displayed quotation, with any unexecuted portion of the orders immediately cancelled.<sup>51</sup>

IOC orders have increased recently due arguably, in part, to the growth in HFT. The frequent use of IOCs is a double-edged sword. High frequency traders employing these orders provide liquidity to the market. On the other hand, our members are concerned that much of the order flow from these types of orders only provide "noise" to the market in that they offer only fleeting liquidity in small size. The frequent placement and cancellation of orders also can provide a confusing and disjointed indication of the current NBBO. Finally, we are concerned that some of these orders are predicated upon informational advantages about trades or orders (through, for example, the use of high-speed tape feeds) or are attempts to ferret out the existence of larger orders being executed (through algorithms or broker handling) in order to trade ahead of these orders.

The Institute believes that the Commission should act to address the increasing number of order cancellations in the securities markets. At the very least, this is an area worthy of further Commission examination including considering whether requirements should be put in place to restrict certain types of IOCs or "pinging" in specific contexts, or whether a fee or "penalty" should be imposed on cancelled orders that would discourage the current risk-free use of IOCs.

<sup>&</sup>lt;sup>50</sup> A "momentum ignition strategy" occurs when the HFT firm may initiate a series of orders and trades (potentially along with spreading false rumors in the marketplace) 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 "spoof" the algorithms of other traders into action and cause them to buy (sell) more aggressively. We believe this strategy raises concerns similar to the order anticipation strategy and should be addressed by the Commission in the same manner as recommended above.

<sup>&</sup>lt;sup>51</sup> See, e.g., NYSE Rule 13 (definition of a "Regulation NMS-compliant Immediate or Cancel Order"). IOC orders have been around since at least the 1970s. See, e.g., Securities Exchange Act Release No. 14987 (July 24, 1978), 43 FR 33854 (August 1, 1978) (order approving a proposed rule change by the Midwest Stock Exchange to adopt several order types, including an "immediate or cancel" order).

#### D. Tools Utilized by HFT to Obtain Market Access

There are a number of tools that HFT firms use to obtain the fastest market access possible to satisfy the manner in which they need to trade. One of these tools is "co-location." Another is using certain advantages arising from the current structure of trading center data feeds and market data distribution.<sup>52</sup>

#### 1. Co-Location

The Commission requests comment on the fairness of co-location services and whether they benefit or harm long-term investors and market quality, including whether they provide HFT firms with an unfair advantage. As the Commission describes in the Release, co-location is a service offered by trading centers that operate their own data centers and by third-parties that host the matching engines of trading centers. The trading center or third-party rents space to market participants that enables them to place their servers in close physical proximity to a trading center's matching engine. Co-location helps minimize network and other types of latencies between the matching engine of trading centers and the servers of market participants. They assist HFT firms in that they reduce the time to access trading venues to submit orders, as well as to receive execution reports and other messages from the trading venue.<sup>53</sup>

The Commission has taken the position that co-location services offered by exchanges are subject to the requirements in the Exchange Act. The terms of co-location services therefore must not be unfairly discriminatory and the fees must be equitably allocated and reasonable. The Institute believes that these are the appropriate standards by which the Commission should judge co-location services offered by exchanges and, rather than banning such services, the Commission should subject them to standards that ensure fairness and equity in their allocation.

## 2. Trading Center Data Feeds and Market Data Distribution

The Release states that an important tool used by HFT firms is the individual data feeds offered by many exchanges and ECNs. Specifically, some HFT firms opt to use individual data feeds to avoid the latency between consolidated data feeds and individual trading center data feeds. The Release notes that when the Commission adopted Regulation NMS, it did not require a market center to synchronize the delivery of its data to end-users with delivery of data by a plan processor to end-users. In particular,

<sup>&</sup>lt;sup>52</sup> The Commission has proposed to address other tools used by high frequency traders that have raised concerns for the securities markets including certain market access arrangements and flash orders. The Institute supported requiring broker-dealers to implement risk management controls and supervisory procedures reasonably designed to manage the risks associated with market access. See ICI Flash Order Letter, supra note 5. The Institute also supported the Commission's proposal to eliminate the exception for "flash orders" from the quoting requirements of the Exchange Act. Id.

<sup>&</sup>lt;sup>53</sup> The Release cites obtaining the fastest delivery of market data through co-location arrangements as an example of a structural strategy used by HFT, *i.e.*, exploiting structural vulnerabilities in the market or in certain market participants.

Ms. Elizabeth M. Murphy April 21, 2010 Page 25 of 29

the Commission decided to eliminate the provisions in the Exchange Act that prohibited the independent distribution of market data. In making this change, the Commission only required that market data be distributed on terms that are "fair and reasonable" and "not unreasonably discriminatory."

Given the extra step required for market centers to transmit data to plan processors, and for plan processors to consolidate the information and distribute the information to the public, the information in individual data feeds of exchanges and ECNs generally reaches market participants faster than the same information in the consolidated data feeds. The Commission estimates that the average latency in the provision of information on quotes and trades by plan processors as opposed to direct feeds from market centers is less than 10 milliseconds. While this latency may seem de minimis, in reality it may provide a valuable advantage to those who obtain direct feeds from market venues as those persons may be able to perceive a pricing change and act upon it before the change is discernable to the rest of the marketplace.

To address concerns about the latency for investors receiving market data, the Institute believes that the Commission should consider eliminating the two-tiered distribution of consolidated quote and tape information. Specifically, we recommend that all market participants receive market data feeds from the same source, so that there is no time advantage available to some market participants from the choice of data feed. We recognize that some market participants will still have access to faster data transmission through more powerful computer capabilities on their end after distribution of the data to a common source, but that is merely a function of the participant's choice of resources to devote to their own internal computer processing. We believe this type of advantage is different than a built-in advantage due to the choice of data feed lines.

#### E. Regulatory Obligations on HFT Firms

As the Release notes, firms that employ passive market making strategies largely have replaced more traditional types of liquidity providers in the equity markets, such as exchange specialists on manual trading floors and OTC market makers that trade directly with customers. While such passive market making firms are liquidity providers like specialists, they generally are not given special time and place privileges in exchange trading. They also are not subject to the trading obligations that in the past had accompanied such privileges.

Specialists traditionally had been subject to special restrictions on their trading activity in light of their time and place advantages in the exchange markets. In particular, specialists had two primary duties: (1) performing their "negative obligation" to execute customer orders at the most advantageous price with minimal dealer intervention, and (2) fulfilling their "affirmative obligation" to offset imbalances in supply and demand. Specialists were required to participate as both broker (or agent), absenting themselves from the market to pair executable customer orders against each other, and as dealer (or principal), trading for the specialists' dealer or proprietary accounts when needed to facilitate price continuity and fill customer orders when there was no available contra parties to those orders.

Since the adoption of Regulation NMS and the corresponding increase of electronic trading, the NYSE has replaced its specialist system with a Designated Market Maker ("DMM") system and has scaled back on the negative and affirmative obligations of the DMMs.<sup>54</sup> Non-specialist market makers on other exchanges are not subject to negative obligations, but they are subject to a requirement to maintain a fair and orderly market. Exchanges vary as to the specific obligations imposed on market makers to fulfill this responsibility. While OTC market makers are not subject to such negative and affirmative obligations, they are subject to certain quoting obligations under the Exchange Act and SRO rules.<sup>55</sup>

While HFT firms provide liquidity to the markets, they are under no obligation to do so and pick and choose to provide liquidity and capture spreads 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. To address these issues, we recommend that the Commission examine the trading activity of HFT firms versus the liquidity they provide and consider whether HFT firms should be subjected to quoting obligations similar to that of OTC market makers or any other regulations similar to the affirmative and negative obligations of specialists and market makers.

### F. Exchange Traded Funds

In the section of the Release discussing the arbitrage strategy employed by high frequency traders, the Release asks several questions regarding ETFs, including whether the impact of ETF trading has been positive or negative for long-term investors and overall market quality.

As the Release notes, ETFs have become an increasingly popular investment vehicle. Over the past decade, demand for ETFs has grown markedly as investors – both institutional and retail – have increasingly turned to them as investment options in their portfolios. As of the end of 2009, there were 797 ETFs on the market with more than \$777 billion in total net assets. 56

<sup>54</sup> The NYSE recently granted DMM status to GETCO, one of the largest HFT firms.

<sup>55</sup> In particular, Rule 602 of Regulation NMS (the firm quote rule) requires an OTC market maker to submit its best bids, best offers and quotation sizes for an exchange-traded security to a national securities association if the volume of the OTC market maker's transactions for that security exceeds one percent of the aggregate reported trading volume for that security during the most recent calendar quarter. In light of Nasdaq's registration as an exchange, the Commission has granted an exemption from this requirement that allows an OTC market maker to communicate its best bids, best offers and quotation sizes to Nasdaq (as opposed to FINRA), provided Nasdaq meets certain conditions. Under Nasdaq Rule 4612, OTC market makers seeking to post quotations in Nasdaq must register as market makers. As registered market makers, they are obligated under Nasdaq Rule 4613 to engage in a course of dealings for their own account to assist in the maintenance, insofar as reasonably practicable, of fair and orderly markets, and to enter and maintain two-sided quotations and trade for their own accounts on a continuous basis.

<sup>&</sup>lt;sup>56</sup> Source: Investment Company Institute. For more information on ETFs, see 2009 Investment Company Institute Fact Book at <a href="https://www.icifactbook.org">www.icifactbook.org</a>. Data excludes ETFs that primarily invest in other ETFs.

Ms. Elizabeth M. Murphy April 21, 2010 Page 27 of 29

ETFs bring several benefits to the securities markets, and to investors in the markets. For example, the trading of ETFs provides liquidity not only in the ETF itself, but also in the underlying securities comprising the ETF. In addition, ETFs provide market participants, such as market makers, with an efficient way to hedge their positions. ETFs also allow investors better and more diversified access to markets they may not otherwise have had, including narrow sectors of the markets and relatively illiquid markets. For these reasons, we believe the impact of ETF trading has been positive for overall market quality.

### VI. Impact of Market Structure on Other Areas

The Release focuses on the structure of the equity markets and does not focus on the markets for other types of instruments that are related to equities. The Release nevertheless requests comment on the extent to which the issues identified in the Release are intertwined with other markets and on the impact of globalization on the U.S. market structure.

#### A. Review of Fixed Income Markets Needed

Compared to the attention given to the equity markets by regulators and Congress relating to regulatory reform, there has been far less debate about the fixed income markets. This clearly has not been the result of the lack of need for reform in this area.<sup>57</sup> Many of the issues discussed above with respect to the equity markets, such as the need for increased transparency by certain market participants, addressing conflicts of interest that may be present, and whether regulation in general has kept pace with how securities are traded, are all present in the fixed income markets, perhaps to an even greater degree. The Institute has long advocated for reform in this area, particularly relating to municipal securities.<sup>58</sup>

Disclosure in the municipal securities markets is significantly substandard when compared to that available to equity investors. Comprehensive, accurate, and accessible disclosure is critical to investors in the municipal securities markets, particularly because of the complexity, diversity, and sheer number of securities in this market. At the end of 2009, investors held 35 percent of the \$2.8 trillion municipal securities market through funds, and households held another 35 percent directly.<sup>59</sup> These

<sup>&</sup>lt;sup>57</sup> See Statement of SEC Commissioner Elisse B. Walter at open meeting regarding Release, January 13, 2010 ("... I believe that the market structure of the fixed income market deserves close Commission attention. The decentralized market structure of the fixed income market, as distinguished from the equity market, may contribute to its higher transaction costs, poor transparency – particularly pre-trade, and lesser liquidity – and thus deserves greater scrutiny.")

<sup>&</sup>lt;sup>58</sup> See, e.g., Letters from Karrie McMillan, General Counsel, Investment Company Institute, to Florence Harmon, Acting Secretary, U.S. Securities and Exchange Commission, dated July 25, 2008 and September 22, 2008.

<sup>59 2009</sup> Investment Company Institute Fact Book.

Ms. Elizabeth M. Murphy April 21, 2010 Page 28 of 29

investors need timely and efficient access to information to perform credit analysis, make informed investment decisions, monitor their securities portfolios, and protect themselves from fraud.

Legislative action will be necessary to develop a more robust disclosure regime for municipal securities. The Tower Amendment, adopted in 1975, currently prohibits the Commission (and the Municipal Securities Rulemaking Board) from directly or indirectly requiring issuers of municipal securities to file documents with them before the securities are sold. Because of these restrictions, the disclosure regime for municipal securities is woefully inadequate and the regulatory framework is insufficient for many investors in today's complex marketplace. Most significantly, the disclosure is limited, non-standardized, and often stale, and the disparities from the corporate issuer disclosure regime are numerous. As active participants in the municipal securities markets, our members are keenly interested in having timely access to relevant and reliable information relating to municipal securities offerings.

Municipal securities are only one segment of the fixed income market. Attention should also be given to issues such as trade reporting for fixed income securities and certain trading practices of broker-dealers and other market participants. As a start, we urge the Commission to issue a comprehensive concept release examining the fixed income markets to gather comments from a wide variety of market participants to assist in determining what regulatory changes are needed to best serve investors. The Institute believes that such an examination is long overdue and that investors would be well served by a study of developments in this area.

#### B. Globalization

The issues surrounding the trading of securities by funds and other institutional investors are no longer purely a domestic matter. Many funds have intricately linked global trading desks and must be concerned not only about the regulation and structure of the securities markets in the United States but also in other jurisdictions in which they trade.

Jurisdictions around the world are starting to, or are already facing, many of the issues raised by the Release.<sup>61</sup> As the Commission examines its current, and considers further, initiatives relating to the

<sup>&</sup>lt;sup>60</sup> See, e.g., Speech by SEC Commissioner Elisse B. Walter, Regulation of the Municipal Securities Market: Investors Are Not Second-Class Citizens, 10th Annual A. A. Sommer, Jr. Corporate, Securities and Financial Law Lecture, New York, New York, October 28, 2009 ("In my view, we should no longer treat muni investors as second-class citizens – hence the subtitle of my talk today. While we have to make proper allowances for the unique needs of municipal issuers, we do not have to tolerate investors in municipal securities being given 'second class treatment' under the federal securities laws. Investors deserve the same level of high-quality disclosure and protection in the municipal market as they currently get in the corporate market and should not have to be forced to rely on good-faith voluntary disclosure.")

<sup>&</sup>lt;sup>61</sup> For example, the European Union's Markets in Financial Instruments Directive ("MiFID") imposed a set of requirements on European market participants similar to those adopted by the Commission. These changes have resulted in a significant increase in competition in Europe, with the current securities exchanges being challenged by a significant number of new

Ms. Elizabeth M. Murphy April 21, 2010 Page 29 of 29

reform of the regulation of the U.S. securities markets, we urge it to work closely with foreign regulators to create consistent and sensible cross-border regulations.

We commend the Commission for its participation in several global efforts to reform the regulation of the securities markets, such as the efforts of the International Organization of Securities Commission's ("IOSCO") and the Committee of European Securities Regulators ("CESR"). We urge the Commission to work with these and other groups and to coordinate actions when possible. Our increasingly global markets demand such cooperation among national regulators to avoid negative consequences of incongruent regulatory requirements and to encourage regulatory synergies as funds pursue an increasing cross-border presence in the interest of fund shareholders.

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

cc: The Honorable Mary L. Schapiro
The Honorable Kathleen L. Casey
The Honorable Elisse B. Walter
The Honorable Luis A. Aguilar
The Honorable Troy A. Paredes

Robert W. Cook, Director James Brigagliano, Deputy Director David Shillman, Associate Director Division of Trading and Markets

Andrew "Buddy" Donohue, Director Division of Investment Management

Henry T. C. Hu, Director Division of Risk, Strategy, and Financial Innovation U.S. Securities and Exchange Commission



1401 H Street, NW, Washington, DC 20005-2148, USA 202/326-5800 www.ici.org

June 1, 2010

Ms. Elizabeth M. Murphy
Secretary
Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549

Re: Market Structure Roundtable (File No. 4-602)

Dear Ms. Murphy:

The Investment Company Institute<sup>1</sup> is writing to provide comments in advance of the Commission's June 2 roundtable regarding the current U.S. equity market structure. The roundtable focuses on issues raised by the Commission's recent concept release requesting comment on several market structure issues, including market structure performance, high frequency trading and undisplayed liquidity.<sup>2</sup> As the Institute discussed in its comment letter on the concept release, a copy of which is attached, we strongly support the Commission's examination of the current structure of the U.S. equity markets and whether the rules governing the markets have kept pace with the significant changes in technology and trading practices.

The issues considered by the concept release and to be discussed at the roundtable have taken on increased importance given the events that occurred in the markets on May 6. It is clear that the large and sudden price dislocations experienced on May 6 were, at least in part, the result of inefficiencies in the current U.S. market structure. Most significantly, while the securities markets have become highly automated and increasingly complex and fragmented, the rules governing the markets

¹ The Investment Company Institute is the national association of U.S. investment companies, including mutual funds, closed-end funds, exchange-traded funds (ETFs), and unit investment trusts (UITs). ICI seeks to encourage adherence to high ethical standards, promote public understanding, and otherwise advance the interests of funds, their shareholders, directors, and advisers. Members of ICI manage total assets of \$11.97 trillion and serve almost 90 million shareholders.

<sup>&</sup>lt;sup>2</sup> See SEC Release No. 61358 (January 14, 2010), 75 FR 3594 (January 21, 2010) (Concept Release on Equity Market Structure), available at <a href="http://www.sec.gov/rules/concept/2010/34-61358.pdf">http://www.sec.gov/rules/concept/2010/34-61358.pdf</a>.

Ms. Elizabeth M. Murphy June 1, 2010 Page 2 of 7

have not kept pace with the level of complexity and growth of the wide variety of trading venues and market participants.

The structure of the securities markets has a significant impact on Institute members, who are investors of over \$11 trillion of assets and who held 28 percent of the value of publicly traded U.S. equity outstanding at the end of 2009. We are institutional investors, but invest on behalf of almost 90 million individual shareholders. Registered investment companies and their shareholders therefore have a strong interest in ensuring that the securities markets are highly competitive, transparent and efficient, and that the regulatory structure that governs the securities markets encourages, rather than impedes, liquidity, transparency, and price discovery. Consistent with these goals, we have strongly supported Commission efforts to address issues that may impact the fair and orderly operation of the securities markets and investor confidence in those markets.

Our letter reiterates several of the comments made in our letter on the concept release regarding the issues to be discussed at the roundtable and expresses our initial views on some of the market structure issues raised by the events of May 6. We will supplement our letter with further comments after the roundtable.

## I. Need for Increased Transparency of Information Regarding the Securities Markets

Given the complexities of the current market structure, one of the areas in which Commission action will be critical is the need for increased transparency regarding specific trading issues such as the order routing and execution practices of broker-dealers and other trading venues, as well as about broader market issues such as high frequency trading ("HFT") and undisplayed liquidity.<sup>3</sup>

As the events of May 6 illustrated, sufficient information about a growing portion of trading in the securities markets is lacking. Improved information about current trading practices and market participants would allow investors to make better informed investment decisions. The importance of initiatives to address disclosure to investors is discussed in our comment letter.

Regulators also would greatly benefit from better market information, as has been made starkly apparent in the aftermath of the severe decline in stock prices on May 6; the Commission has been unable to readily gather meaningful and comprehensive information about the activities of the markets

<sup>&</sup>lt;sup>3</sup> As discussed in greater detail in our comment letter on the concept release, we recommend that the Commission 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; the need for more public disclosure about how orders provided to brokers are handled; and better trade reporting by all types of execution venues regarding order execution. We also recommend that the Commission 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.

Ms. Elizabeth M. Murphy June 1, 2010 Page 3 of 7

and market participants. As Chairman Schapiro stated in her recent testimony on the events of May 6,4 there is a critical need for the Commission to develop the tools necessary to easily identify large traders to evaluate their trading activity. This need is heightened by the fact that large traders, including certain high frequency traders, are playing an increasingly prominent role in the securities markets.

The Commission has recently taken a number of steps to improve the transparency of market information. The recently proposed large trader reporting system would enhance the Commission's ability to identify large market participants, collect information on their trades, and analyze their trading activity. In addition to the large trader reporting proposal, the Commission just last week proposed a rule to require self-regulatory organizations to jointly develop, implement and maintain a consolidated audit trail. Together, these proposals should significantly improve the ability of the Commission to conduct comprehensive trading analyses. We urge the Commission to continue to examine ways to improve transparency about current trading practices and market participants.

### II. Role of Liquidity Providers

The role of liquidity providers under the current market structure has garnered the attention of regulators, Congress, and market participants in general. Much of this focus has been on the increased presence of high frequency traders in the marketplace, and the effect their activities may have on the markets.

Funds do not object to HFT per se. HFT arguably brings several benefits to the securities markets, including providing liquidity and tightening spreads. At the same time, however, there are potential concerns associated with HFT. These include, among other things, the operational advantages, or the potential for "gaming," through the use of high-speed computer programs for generating, routing, and executing orders. Of particular concern, Institute members report that strategies employed by HFT (as well as by other market participants such as hedge funds) often are designed to detect the trading of large blocks of securities by funds and to trade with or ahead of those blocks.

<sup>&</sup>lt;sup>4</sup> See Testimony of Chairman Mary L. Schapiro, Examining the Causes and Lessons of the May 6<sup>th</sup> Market Plunge, before the Subcommittee on Securities, Insurance, and Investment of the United States Senate Committee on Banking, Housing, and Urban Affairs, May 20, 2010, available at <a href="http://www.sec.gov/news/testimony/2010/ts052010mls.htm">http://www.sec.gov/news/testimony/2010/ts052010mls.htm</a> and testimony of Chairman Mary L. Schapiro, Testimony Concerning the Severe Market Disruption on May 6, 2010, before the Financial Services Subcommittee on Capital Markets, Insurance and Government Sponsored Enterprises of the U.S. House of Representatives, May 11, 2010, available at <a href="http://www.sec.gov/news/testimony/2010/ts051110mls.htm">http://www.sec.gov/news/testimony/2010/ts051110mls.htm</a>.

<sup>&</sup>lt;sup>5</sup> See SEC Release No. 61908 (April 14, 2010), 75 FR 21456 (April 23, 2010) (Large Trader Reporting System), available at <a href="http://www.sec.gov/rules/proposed/2010/34-61908.pdf">http://www.sec.gov/rules/proposed/2010/34-61908.pdf</a>.

<sup>&</sup>lt;sup>6</sup> See SEC Release No. 62174 (May 26, 2010) (Consolidated Audit Trail), available at <a href="http://www.sec.gov/rules/proposed/2010/34-62174.pdf">http://www.sec.gov/rules/proposed/2010/34-62174.pdf</a>

Ms. Elizabeth M. Murphy June 1, 2010 Page 4 of 7

The role of HFT and traditional liquidity providers such as market makers has taken on more significance since the events of May 6, as the sudden absence of liquidity in the markets played a critical role in the severe decline in stock prices. As discussed in the joint CFTC-SEC preliminary report on the May 6 events,<sup>7</sup> it appears that some liquidity providers temporarily did not participate in the market to support some stocks as the prices of those stocks traded sharply downward. The failure of these firms to continue to participate in the markets calls into question their value as a reliable source of liquidity.<sup>8</sup>

To address concerns regarding the absence of liquidity in times of market stress, we recommend that the Commission examine the trading activity of HFT firms, the liquidity they provide, and consider whether HFT firms should be subjected to quoting obligations similar to that of OTC market makers, or other regulations similar to the affirmative and negative obligations of specialists and market makers. Currently, while HFT firms provide liquidity to the markets, they are under no obligation to do so and pick and choose to provide liquidity and capture spreads when it is in their interest. HFT firms can therefore act as *de facto* market makers at times of their choosing, but without being subject to any quoting obligations. We also recommend that the Commission examine whether more stringent obligations are necessary for traditional market makers in times of market stress. We are pleased that the Commission is looking at the data from May 6 and considering the types of obligations that should apply to certain liquidity providers.

## III. Undisplayed Liquidity and the Need for Increased Public Display of Orders

Much of the current debate over the structure of the U.S. securities markets has centered on the proliferation of undisplayed, or "dark," liquidity. Funds have long been significant users of undisplayed liquidity and the trading venues that provide such liquidity. These venues provide a mechanism for transactions to interact without displaying the full scale of a fund's trading interest, thereby lessening the cost of implementing trading ideas and mitigating the risk of information leakage. These venues also allow funds to avoid transacting with market participants who seek to profit from the impact of the public display of large orders to the detriment of funds and their shareholders.

<sup>&</sup>lt;sup>7</sup> See Report of the Staffs of the CFTC and SEC to the Joint Advisory Committee on Emerging Regulatory Issues, Preliminary Findings Regarding the Market Events of May 6, 2010, dated May 18, 2010, available at <a href="http://www.sec.gov/sec-cftc-prelimreport.pdf">http://www.sec.gov/sec-cftc-prelimreport.pdf</a>.

<sup>&</sup>lt;sup>8</sup> We agree with Chairman Schapiro that the sources of the selling pressure on May 6 must be considered, specifically the extent that the wave of selling on May 6 came from proprietary firms employing "directional" strategies triggered by signals that attempt to exploit short-term price movements. As we discussed in our comment letter on the concept release, we recommend that the Commission examine whether any new regulations are necessary to address firms that are conducting, for example, an "order anticipation strategy" and whether certain order anticipation strategies should be considered as improper or manipulative activity.

Ms. Elizabeth M. Murphy June 1, 2010 Page 5 of 7

At the same time, we recognize that while venues providing undisplayed liquidity bring certain benefits to funds, not displaying orders detracts to some extent from market transparency. We therefore understand the Commission's desire to examine trading venues that do not display quotations to the public and its concerns about, for example, the creation of a two-tiered market. The Institute has long advocated for regulatory changes that would result in more displayed quotes and believes that increasing overall transparency in the markets would lead to a more efficient marketplace. We support the Commission's efforts to examine the impact of certain undisplayed liquidity on price discovery on the markets, while balancing the competing goal of protecting fund shareholders from the effects of information leakage.

## IV. Market Structure Issues Arising from May 6 Events

The events of May 6 highlight the need to examine several other areas not specifically addressed in the concept release. These include 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 use of market orders; (4) an examination of the inconsistent practices of exchanges regarding addressing major price movements in stocks; and (5) better coordination across all types of markets. These issues take on importance for all exchange-traded securities, including exchange-traded funds ("ETFs"). ETF trades comprised a majority of the trades that were cancelled on May 6. The large number of ETF trades that were cancelled was, at least in part, the result of inefficiencies in the current U.S. market structure.

#### A. Circuit Breakers

The events of May 6 highlighted inconsistencies among the various exchanges regarding market-wide circuit breakers as well as the need for individual stock circuit breakers. The Commission has taken the initial step of proposing stock-by-stock specific circuit breakers. The Institute strongly supports this initiative and will be submitting formal comments on the proposals.

#### B. Reform of Clearly Erroneous Rules

On May 6, many trades were cancelled according to the securities markets' "clearly erroneous rules," which provide the various securities exchanges with the ability to cancel trades effected at prices that were sharply divergent from prevailing market prices. We are pleased by the commitment of the Commission to work with the exchanges and FINRA to improve the process for breaking erroneous trades, by assuring speed and consistency across markets. The current arbitrary nature by which the

<sup>&</sup>lt;sup>9</sup> We also recognize that increased transparency about the execution of undisplayed orders, including the chain of market participants involved in the execution, could be helpful to regulators to address some of the difficulties experienced in understanding the trading activity on May 6.

<sup>&</sup>lt;sup>10</sup> See SEC Press Release 2010-80, SEC to Publish for Comment Stock-by-Stock Circuit Breaker Rule Proposals, May 28, 2010, available at http://www.sec.gov/news/press/2010/2010-80.htm.

Ms. Elizabeth M. Murphy June 1, 2010 Page 6 of 7

threshold level for correcting trades is set clearly does work effectively and does not operate in the best interests of investors.

### C. Use of Market Orders

As illustrated on May 6, an abnormally large order or influx of orders can quickly use up all available liquidity across the markets, resulting in orders breaking through many price levels in an effort to obtain an execution at any price. This possibility has raised concerns about the use of market orders by investors and whether market orders should be permitted. We support the examination of the current practices surrounding the use of market orders, particularly the use of stop loss orders and the related issue of the use of stub quotes by market makers. On May 6, the use of market orders when stop loss orders were triggered may have led to automated selling that resulted in executions at aberrant prices. The use of stub quotes may have further exacerbated the market decline, as they were executed as the only bids left in some stocks.

#### D. Inconsistent Exchange Practices

The combination of the NYSE "going slow" after the "liquidity replenishment points" in several stocks were triggered and several exchanges declaring "self help" against NYSE Arca severely limited liquidity on those exchanges that continued to execute orders in an automated fashion. This contributed to the severe imbalance of sell orders to buy orders and the resulting decline in stock prices. The Commission intends to study the impact of trading protocols at the exchanges that are designed to address major price movements in stocks and other unusual trading conditions, including the use of trading pauses by individual exchanges that supplement the market-wide circuit breakers, and "self-help" protocols that allow the markets to avoid routing to exchanges that are perceived to be responding too slowly. The Institute supports promoting consistency by the exchanges in both these areas.

### E. Need for Coordination Across All Types of Markets

The events of May 6 showed the interdependency of the equity, options and future markets. For example, one area that has received much attention is trading in E-mini S&P 500 futures that day, and the connection between price discovery for the broader stock market and activity in the futures markets. We strongly support the examination of the linkages between all of these markets and whether rules need to be made consistent across all types of markets.

<sup>11</sup> A market order is an order to buy or sell a stock at the best available market price. A stop-loss order has a "stop price" that, for sell orders, are lower than current prices. When the stop price is reached, the order turns into a market order to sell. A stub quote is used by market makers when their liquidity has been exhausted, or if they are unwilling to provide liquidity, to comply with their obligation to maintain a continuous two-sided quotation.

Ms. Elizabeth M. Murphy June 1, 2010 Page 7 of 7

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

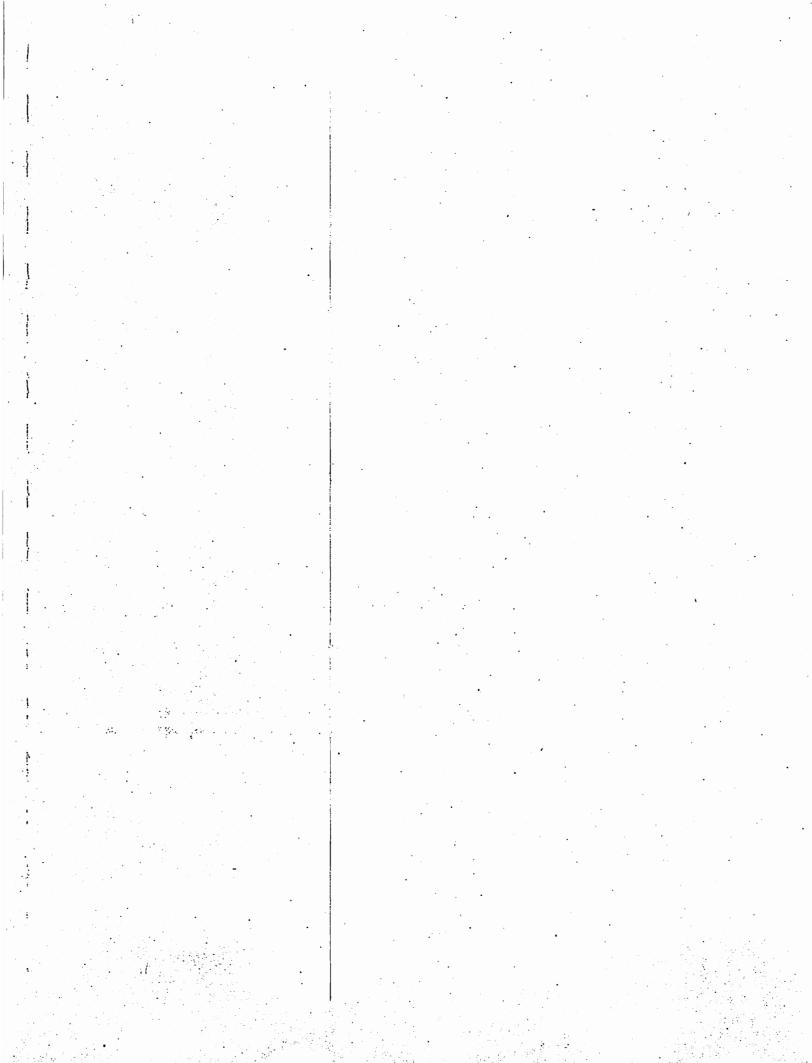
Karrie McMillan General Counsel

cc: The Honorable Mary L. Schapiro
The Honorable Kathleen L. Casey
The Honorable Elisse B. Walter
The Honorable Luis A. Aguilar
The Honorable Troy A. Paredes

Robert W. Cook, Director James Brigagliano, Deputy Director David Shillman, Associate Director Division of Trading and Markets

Andrew "Buddy" Donohue, Director Division of Investment Management U.S. Securities and Exchange Commission

Attachment





June 23, 2010

Ms. Elizabeth M. Murphy Secretary Securities and Exchange Commission . 100 F Street, N.E. Washington, D.C. 20549

Re: Market Structure Roundtable (File No. 4-602)

Dear Ms. Murphy:

The Investment Company Institute<sup>1</sup> is writing to follow-up on its earlier submission regarding the Commission's June 2 roundtable examining the current U.S. equity market structure.<sup>2</sup> We are pleased that the Commission held the roundtable to facilitate a discussion of the critical issues impacting the securities markets, including how investors are faring under the current market structure, high frequency trading and undisplayed liquidity, and the relationship of these issues to the market events that occurred on May 6, 2010.

Despite the differing views expressed by roundtable participants on many of the issues discussed, it was clear that most participants agreed that an examination of the current structure of the U.S. equity markets is warranted given the significant changes in the markets. In addition, most participants believed that given the events that occurred on May 6, the issues considered at the roundtable have taken on increased importance.

Our prior submission discusses in detail our recommendations on the reform of the current market structure. We urge the Commission to move expeditiously to examine the issues facing our markets and to consider the Institute's recommendations on behalf of significant buyside participants.

<sup>&</sup>lt;sup>1</sup> The Investment Company Institute is the national association of U.S. investment companies, including mutual funds, closed-end funds, exchange-traded funds (ETFs), and unit investment trusts (UITs). ICI seeks to encourage adherence to high ethical standards, promote public understanding, and otherwise advance the interests of funds, their shareholders, directors, and advisers. Members of ICI manage total assets of \$11.97 trillion and serve almost 90 million shareholders.

<sup>&</sup>lt;sup>2</sup> See Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated June 1, 2010.

# I. Issues Addressed in SEC Market Structure Concept Release

The recommendations set forth by the Institute in our prior submission for the roundtable and in our comment letter on the Commission's concept release on the U.S. equity market structure<sup>3</sup> were echoed by many roundtable participants.<sup>4</sup> In particular, we were pleased that several roundtable participants, representing both the buyside and the sellside, called for increased transparency regarding specific trading issues such as the order routing and execution practices of broker-dealers and other trading venues. Improved information about current trading practices and these market participants would allow investors to make better informed investment decisions and would assist regulators in understanding and surveiling the markets, a need that was made starkly apparent in the aftermath of the May 6 market events.

As expected, there was no agreement on the benefits or costs of high frequency trading to the securities markets.<sup>5</sup> We particularly agree with the statements of many participants regarding the need for more transparency and an examination of the current rules and regulations surrounding high frequency trading. For example, one roundtable participant highlighted the need for: (1) more information about high frequency traders and the practices of high frequency trading firms; (2) an examination of whether high frequency trading firms should be subjected to certain quoting obligations; (3) an examination of the strategies employed by high frequency trading firms; (4) a means to curb the increasing number of order cancellations in the securities markets; and (5) an examination of the incentives that currently exist for market participants to route orders to particular venues.<sup>6</sup> As the Commission continues to examine the role of high frequency trading, we echo these and other related concerns.

<sup>&</sup>lt;sup>3</sup> See Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated April 21, 2010.

<sup>&</sup>lt;sup>4</sup> See, e.g., Statement of Larry Leibowitz, Chief Operating Officer, NYSE Euronext, at SEC Market Structure Roundtable, June 2, 2010 (among the moderate steps that should be looked at are obligations to the market by liquidity providers and incenting of displayed liquidity, as well as additional disclosure and scrutiny of order handling practices, both for institutional and retail orders).

<sup>&</sup>lt;sup>5</sup> See, e.g., Statement of Sal Arnuk, Co-Founder and Partner, Themis Trading, at SEC Market Structure Roundtable, June 2, 2010 ("While we believe that there may in fact be some beneficial types and attributes of HFT, we also know first-hand that there are dark and murkier portions."); but see Statement of Jeffrey Wecker, President & Chief Executive Officer, Lime Brokerage, at SEC Market Structure Roundtable, June 2, 2010 ("High frequency trading provides a dramatic increase in liquidity, increased competition, promotes electronic efficiencies and lowers the cost of trading, both through narrower spreads and lower commissions – all of which have contributed to making the United States equity markets the best in the world).

<sup>&</sup>lt;sup>6</sup> See Statement of Kevin Cronin, Global Head of Equity Trading, Invesco, at SEC Market Structure Roundtable, June 2, 2010.

Ms. Elizabeth M. Murphy June 23, 2010 Page 3 of 4

Finally, as panelists recognized, undisplayed liquidity provides an important mechanism for transactions to interact without displaying the full scale of an investor's trading interest, thereby lessening the cost of implementing trading ideas and mitigating the risk of information leakage. Other panelists noted that these venues can impede transparency. We continue to support the Commission's efforts to examine the impact of certain undisplayed liquidity on price discovery on the markets, while balancing the competing goal of protecting fund shareholders and other investors from the effects of information leakage.

## II. Market Structure Issues Arising from May 6 Events

While the roundtable focused on the three major issues highlighted in the concept release, the events of May 6 and the related market structure issues were a strong underlying theme during the discussions. In our prior submission, we discussed 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 use of market orders; (4) an examination of the inconsistent practices of exchanges regarding addressing major price movements in stocks; and (5) better coordination across all types of markets.

The Commission has focused on implementing the stock-by-stock circuit breaker pilot<sup>8</sup> and the national securities exchanges and FINRA have now filed proposed rules to clarify the process for breaking erroneous trades. We urge the Commission to move quickly to address the other market structure issues noted above. Most significantly, in addition to the market structure issues under the purview of the Commission that need to be examined, we urge a more robust discussion and examination of the linkages and interdependency of the equity, options and futures markets. We have seen how the connection between price discovery for the broader stock market and activity in the futures markets impacted events on May 6. It will be critical for the development of effective regulation that these markets work together as new regulations are developed.

<sup>&</sup>lt;sup>7</sup> See, e.g., Statement of Daniel Mathisson, Managing Director, Credit Suisse, at SEC Market Structure Roundtable, June 2, 2010 ("Institutional traders, who collectively invest the savings of millions of Americans, expend a great deal of effort finding ways to buy and sell large amounts of stock in a manner that will not adversely move stock prices and hurt their investors. To accomplish this, traders have always used a variety of trading techniques, including the use of "dark" liquidity.")

<sup>&</sup>lt;sup>8</sup> The Institute remains concerned about the exclusion, to date, of exchange-traded funds ("ETFs") from the stock-by-stock circuit breaker pilot. As we noted in our comment letter on the SRO circuit breaker proposals, given the impact on ETFs of the market events on May 6, we believe it is imperative that ETFs be included in the circuit breaker pilot program as soon as possible. *See* Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated June 3, 2010.

Ms. Elizabeth M. Murphy June 23, 2010 Page 4 of 4

As always, if we can be of any assistance as the Commission continues its examination of trading and market structure issues, 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

cc: The Honorable Mary L. Schapiro
The Honorable Kathleen L. Casey
The Honorable Elisse B. Walter
The Honorable Luis A. Aguilar
The Honorable Troy A. Paredes

Robert W. Cook, Director James Brigagliano, Deputy Director David Shillman, Associate Director Division of Trading and Markets

Andrew "Buddy" Donohue, Director Division of Investment Management U.S. Securities and Exchange Commission



June 3, 2010

Ms. Elizabeth M. Murphy Secretary Securities and Exchange Commission 100 F Street, N.E. Washington, D.C. 20549

Re: SRO Single Stock Circuit Breaker Proposals (File Nos. SR-BATS-2010-014, SR-BX-2010-037, SR-NASDAQ-2010-061, SR-NSX-2010-05, SR-NYSE-2010-39, SR-NYSEArca-2010-41, SR-NYSEAmex-2010-46, SR-ISE-2010-48, SR-EDGA-2010-01, SR-EDGX-2010-01, SR-CBOE-2010-047, SR-FINRA-2010-025)

Dear Ms. Murphy:

The Investment Company Institute<sup>1</sup> is writing to provide comments on the proposed single stock circuit breakers filed by the national securities exchanges and the Financial Industry Regulatory Authority ("FINRA") in response to the market events of May 6. The events of May 6 highlighted the need to implement a trading pause for individual securities in times of market stress to mitigate instances of sudden market volatility. The proposed circuit breakers are designed to implement such a pause.

The Institute strongly supports single stock circuit breakers. The proper functioning of the securities markets is critical for Institute members, who are investors of over \$11 trillion of assets on behalf of almost 90 million individual shareholders. Registered investment companies and their shareholders have a strong interest in ensuring that the securities markets are highly efficient and that the regulatory structure that governs the securities markets promotes such efficiency.

¹ The Investment Company Institute is the national association of U.S. investment companies, including mutual funds, closed-end funds, exchange-traded funds (ETFs), and unit investment trusts (UITs). ICI seeks to encourage adherence to high ethical standards, promote public understanding, and otherwise advance the interests of funds, their shareholders, directors, and advisers. Members of ICI manage total assets of \$11.97 trillion and serve almost 90 million shareholders.

Ms. Elizabeth M. Murphy June 3, 2010 Page 2 of 4

While the proposed circuit breakers are a meaningful first step, other inefficiencies in our current market structure highlighted by the events of May 6 also must be addressed without delay. Specifically, there is an immediate need to examine: (1) procedures for resolving clearly erroneous trades; (2) the use of market orders; (3) the inconsistent practices employed by exchanges to address major price movements in stocks; and (4) the lack of coordination across markets in the event of a market disruption. In addition to these specific issues, the issues addressed by the Commission's concept release on the current U.S. equity market structure should be examined to further improve our markets.<sup>2</sup>

#### I. Circuit Breaker Proposals

Under the proposed rules, trading in a stock would pause across U.S. equity markets for a five-minute period in the event that a stock experiences a ten percent change in price over the preceding five minutes. The circuit breaker would be in effect only from 9:45 a.m. to 3:35 p.m. Eastern Time. The circuit breakers would first be implemented via a pilot program consisting of the stocks comprising the S&P 500 index. We understand, however, that the parameters of the pilot are subject to change and that the scope of the pilot will expand beyond S&P 500 securities to include other securities such as exchange-traded funds ("ETFs") (discussed below). The pilot program would last until December 10, 2010.

At this time, and without sufficient data or experience to fully assess the operation of the proposed circuit breaker in times of market stress, we do not have a definitive view whether the proposed parameters will accomplish the Commission's goal of addressing temporary and severe dislocations in the securities markets. We support the Commission's approach of using the pilot period "to make appropriate adjustments to the parameters or operation of the circuit breaker as warranted based on ... experience." It is clear that the implementation of the circuit breakers will entail addressing several complex issues regarding its operation. We therefore urge the Commission to work closely with all market participants throughout the pilot program to resolve any issues that may arise. To that end, the Institute will supplement our views on the pilot program as necessary.

<sup>&</sup>lt;sup>2</sup> See SEC Release No. 61358 (January 14, 2010), 75 FR 3594 (January 21, 2010) (Concept Release on Equity Market Structure), available at <a href="http://www.sec.gov/rules/concept/2010/34-61358.pdf">http://www.sec.gov/rules/concept/2010/34-61358.pdf</a>. See also Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated April 21, 2010.

<sup>&</sup>lt;sup>3</sup> See, e.g., Testimony of Chairman Mary L. Schapiro, <u>Examining the Causes and Lessons of the May 6th Market Plunge</u>, before the Subcommittee on Securities, Insurance, and Investment of the United States Senate Committee on Banking, Housing, and Urban Affairs, May 20, 2010, available at <a href="http://www.sec.gov/news/testimony/2010/ts052010mls.htm">http://www.sec.gov/news/testimony/2010/ts052010mls.htm</a>

<sup>&</sup>lt;sup>4</sup> For example, the opening and re-opening processes for securities after a pause, the status of existing orders once a pause goes into effect, and how information about imbalances will be disseminated, among other things, all have yet to be fully resolved.

Ms. Elizabeth M. Murphy June 3, 2010 Page 3 of 4

## II. Inclusion of Exchange-Traded Funds in Circuit Breaker Pilot

The May 6 market event impacted both individual securities and ETFs. As a result of the severe market decline, many trades were cancelled according to the securities markets' "clearly erroneous rules," which provide the various securities exchanges with the ability to cancel trades effected at prices that were sharply divergent from prevailing market prices. For trades effected on May 6, the exchanges determined to cancel any trades effected from 2:40 p.m. to 3:00 p.m. at prices 60 percent away from the last trade at or before 2:40 p.m. ETF trades comprised a majority of the cancelled trades - approximately seventy percent of the trades according to the joint CFTC-SEC preliminary report on the May 6 events.<sup>5</sup>

Given the impact on ETFs of the market events on May 6, we believe it is imperative that ETFs be included in the circuit breaker pilot program as soon as possible. We are encouraged by the Commission's recognition that ETFs should soon be part of the pilot. We are concerned, however, that if circuit breakers exist for individual securities contained in an ETF's basket, but not for the ETFs themselves, ETFs could again suffer disproportionately during a market event similar to that of May 6.

Of immediate concern is the initial pilot program's failure to include ETFs that track the S&P 500 or other indices with substantially overlapping securities. The market price of an ETF is typically highly correlated to the market price of its basket of component securities. Under normal circumstances, ETFs will maintain this correlation even when trading has been halted for one or two component securities. An ETF may experience a slight deviation from the price of its basket because of the challenge of pricing the non-trading security; the ETF's market makers may also slightly widen the spread on the ETF to account for the risk associated with uncertain pricing of the non-trading security. Once the security begins trading again, the ETF price will typically realign with its basket in short order.

As illustrated on May 6, however, when multiple underlying securities experience trading halts or slowdowns (i.e., the NYSE going into "slow mode"), the correlation between the prices of an ETF and its underlying basket may experience more severe dislocation. This scenario could repeat itself if circuit breakers on several S&P 500 securities are triggered before ETFs containing those securities are

<sup>&</sup>lt;sup>5</sup> See Report of the Staffs of the CFTC and SEC to the Joint Advisory Committee on Emerging Regulatory Issues, Preliminary Findings Regarding the Market Events of May 6, 2010, dated May 18, 2010, available at <a href="http://www.sec.gov/sec-cftc-prelimreport.pdf">http://www.sec.gov/sec-cftc-prelimreport.pdf</a>.

<sup>&</sup>lt;sup>6</sup> See, e.g., Testimony of Chairman Mary L. Schapiro, supra note 2 (stating that the pilot program's scope should "expand ... to securities beyond the S&P 500 (including ETFs) as soon as practicable.").

<sup>&</sup>lt;sup>7</sup> A related concern is that the proposed circuit breaker pilot is not coordinated across other exchange-traded instruments whose value is correlated to securities included in the pilot, such as futures and options.

<sup>&</sup>lt;sup>8</sup> See Appendix, "Effect of Aberrant Trading on May 6 on ETFs," for a more detailed discussion of ETF performance on May 6.

Ms. Elizabeth M. Murphy June 3, 2010 Page 4 of 4

included in the pilot program. We therefore urge the Commission to include in the pilot program, as soon as possible, ETFs that track the S&P 500 or indices with substantially overlapping securities. As additional stocks are added to the circuit breaker pilot, ETFs containing those securities also should be added at the same time. Additionally, while we believe it is appropriate for the pilot program to apply the same circuit breaker triggers to ETFs initially (*i.e.*, ten percent change in price over the preceding five minutes), we urge the Commission and exchanges to use the pilot program to consider whether a different trigger is appropriate for ETFs.

If you have any questions on our comment letter, please feel free to contact me directly at (202) 326-5815, Ari Burstein at (202) 371-5408, or Mara Shreck at (202) 326-5923.

Sincerely,

/s/ Karrie McMillan

Karrie McMillan General Counsel

cc: The Honorable Mary L. Schapiro
The Honorable Kathleen L. Casey
The Honorable Elisse B. Walter
The Honorable Luis A. Aguilar
The Honorable Troy A. Paredes

Robert W. Cook, Director James Brigagliano, Deputy Director Division of Trading and Markets

Andrew J. Donohue, Director
Division of Investment Management
U.S. Securities and Exchange Commission

Appendix

<sup>&</sup>lt;sup>9</sup> Consistent with this approach, because closed-end funds are also exchange traded products, as securities in which they invest are added to the pilot, closed-end funds whose portfolios are substantially comprised of these securities also should be added to the pilot.



July 19, 2010

Ms. Elizabeth M. Murphy Secretary Securities and Exchange Commission 100 F Street, N.E. Washington, D.C. 20549

Re: SRO Single Stock Circuit Breaker Proposals (File Nos. SR-BATS-2010-18, SR-BX-2010-044, SR-NASDAQ-2010-079, SR-NSX-2010-08, SR-NYSE-2010-49, SR-NYSEArca-2010-61, SR-NYSEAmex-2010-63, SR-ISE-2010-66, SR-EDGA-2010-05, SR-EDGX-2010-05, SR-CBOE-2010-065, SR-FINRA-2010-033, SR-CHX-2010-14)

Dear Ms. Murphy:

The Investment Company Institute' strongly supports the proposed amendments, filed by the national securities exchanges and the Financial Industry Regulatory Authority, to expand the single stock circuit breaker pilot program. Specifically, the proposed amendments add securities included in the Russell 1000 Index as well as a number of exchange-traded products, including specified exchange-traded funds ("ETFs"), to the current pilot program.

As the proposals note, adding the proposed additional securities is a step towards addressing concerns that the scope of the pilot currently may be too narrow. In addition, as discussed further below, including ETFs in the pilot addresses several concerns previously expressed by the Institute regarding their exclusion from the first phase of the pilot.<sup>2</sup> We appreciate the exchanges' addressing these concerns on a timely basis.

The Investment Company Institute is the national association of U.S. investment companies, including mutual funds, closed-end funds, exchange-traded funds (ETFs), and unit investment trusts (UITs). ICI seeks to encourage adherence to high ethical standards, promote public understanding, and otherwise advance the interests of funds, their shareholders, directors, and advisers. Members of ICI manage total assets of \$11.42 trillion and serve almost 90 million shareholders.

<sup>&</sup>lt;sup>2</sup> See Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated June 3, 2010.

Ms. Elizabeth M. Murphy July 19, 2010 Page 2 of 3

# Inclusion of ETFs in Circuit Breaker Pilot Program

The proposal requests comment on a number of issues regarding the inclusion of ETFs within the circuit breaker pilot program and, in particular, the benefits and risks of including ETFs in the pilot.

When the first phase of the pilot was proposed, the Institute expressed concerns over the failure to include ETFs that track the S&P 500 Index or other indices with substantially overlapping securities, many of which securities would be part of the pilot. As we explained in our prior letter, the market price of an ETF is typically highly correlated to the market price of its basket of component securities. Under normal circumstances, when trading has been halted for one or two component securities, an ETF may experience a slight deviation from the price of its basket because of the challenge of pricing the non-trading security; the ETF may also trade with a wider spread to account for the associated risk. Still, the price of the ETF should retain a correlation to its basket.

As illustrated on May 6, 2010, however, when multiple underlying securities experience trading halts or slowdowns, combined with the impact of a number of inefficiencies in our current market structure, the correlation between the prices of an ETF and its underlying basket may experience more severe dislocation. This scenario could repeat itself if circuit breakers on several S&P 500 Index or Russell 1000 Index securities are triggered before ETFs containing those securities are included in the pilot. We therefore are highly supportive that the proposal includes the proposed ETFs in the pilot. Excluding ETFs from circuit breakers that contain the individual securities comprising the ETFs' baskets creates risks that ETFs could again suffer disproportionately during a market event similar to that of May 6, which risks far outweigh any perceived benefits of excluding such ETFs.

The proposals also note that the amendments include several ETFs on broad-based indices that also underlie options and futures products and that some commenters, particularly the non-equity exchanges, have raised concerns about whether halting an index-based ETF may adversely impact an index-based option or future. The events of May 6 illustrate the interdependency of the equity, options and futures markets and the need for coordinating across all types of markets. The Institute strongly supports the examination of the connection between price discovery for the equity markets and activity in the futures markets and whether rules need to be made consistent across all types of markets. We also recognize concerns that the circuit breaker pilot is not coordinated across other exchange-traded instruments whose value is correlated to securities included in the pilot, such as futures and options. The need for an examination of, and action on, these issues, however, should not prevent the inclusion in the pilot of ETFs on broad-based indices. Delaying implementation of the current proposals would put these ETFs at risk should the component securities experience volatility similar to that experienced on May 6.3

<sup>&</sup>lt;sup>3</sup> Several questions remain regarding the parameters that should be used to determine which ETFs should be included in the pilot. For example, the proposed amendments do not include leveraged ETFs. The proposals explain that because the 10 percent trigger for circuit breakers in the pilot is not being amended, and because the exchanges do not believe that a 10 percent price movement is an appropriate threshold for leveraged ETFs, the exchanges are not proposing to include

Ms. Elizabeth M. Murphy July 19, 2010 Page 3 of 3

If you have any questions on our comment letter, please feel free to contact me directly at (202) 326-5815, Ari Burstein at (202) 371-5408, or Mara Shreck at (202) 326-5923.

Sincerely,

/s/ Karrie McMillan

Karrie McMillan General Counsel

cc: The Honorable Mary L. Schapiro
The Honorable Kathleen L. Casey
The Honorable Elisse B. Walter
The Honorable Luis A. Aguilar
The Honorable Troy A. Paredes

Robert W. Cook, Director James Brigagliano, Deputy Director Division of Trading and Markets

Andrew J. Donohue, Director
Division of Investment Management
U.S. Securities and Exchange Commission



July 19, 2010

Ms. Elizabeth M. Murphy Secretary Securities and Exchange Commission 100 F Street, N.E. Washington, D.C. 20549

Re: Clearly Erroneous Executions (File Nos. SR-BATS-2010-16, SR-CHX-2010-13, SR-EDGA-2010-03, No. SR-EDGX-2010-03, SR-ISE-2010-62, SR-FINRA-2010-32, SR-BX-2010-40, SR-NASDAQ-2010-76, SR-NSX-2010-07, SR-NYSE-2010-47, SR-NYSEAmex-2010-60, and SR-NYSEArca-2010-58)

Dear Ms. Murphy:

The Investment Company Institute¹ strongly supports the concept underlying the proposed amendments, filed by the national securities exchanges and the Financial Industry Regulatory Authority ("FINRA"), to change the rules relating to clearly erroneous executions ("CEE").² The amendments would clarify the process for breaking erroneous trades by imposing specific parameters by which trades would be broken and provide uniform treatment across the exchanges for CEE reviews. We believe, however, that the parameters proposed in the amendments may result in unintended consequences, as discussed below. We urge the

<sup>&</sup>lt;sup>1</sup>The Investment Company Institute is the national association of U.S. investment companies, including mutual funds, closed-end funds, exchange-traded funds (ETFs), and unit investment trusts (UITs). ICI seeks to encourage adherence to high ethical standards, promote public understanding, and otherwise advance the interests of funds, their shareholders, directors, and advisers. Members of ICI manage total assets of \$11.42 trillion and serve almost 90 million shareholders.

<sup>&</sup>lt;sup>2</sup> See SEC Release No. 62340 (June 21, 2010), File No. SR-BATS-2010-16; SEC Release No. 62336 (June 21, 2010), File No. SR-CHX-2010-13; SEC Release No. 62338 (June 21, 2010), File No. SR-EDGA-2010-03; SEC Release No. 62339 (June 21, 2010), File No. SR-EDGX-2010-03; SEC Release No. 62330 (June 21, 2010), File No. SR-ISE-2010-62; SEC Release No. 62341 (June 21, 2010), File No. SR-FINRA-2010-32; SEC Release No. 62342 (June 21, 2010), File No. SR-BX-2010-40; SEC Release No. 62334 (June 21, 2010), File No. SR-NASDAQ-2010-76; SEC Release No. 62331 (June 21, 2010), File No. SR-NSX-2010-07 SEC Release No. 62333 (June 21, 2010) File No. SR-NYSE-2010-47; SEC Release No. 62332 (June 21, 2010), File No. SR-NYSEAmex-2010-60; and SEC Release No. 62335 (June 21, 2010), File No. SR-NYSEArca-2010-58.

Ms. Elizabeth M. Murphy July 19, 2010 Page 2 of 4

Commission to carefully examine the risks of the proposed numerical guidelines before approving the exchanges' and FINRA's amendments.

Under current rules, there is no clearly defined framework for breaking erroneous trades, and exchanges have discretion to choose the specific percentage threshold at which to break trades. Consequently, on May 6, exchanges broke trades that were more than 60 percent away from the "reference price" in a process that was not transparent to market participants and did not operate in the best interest of investors. The uncertainty surrounding the CEE rules, and therefore the risks associated with entering buy orders during the downslide, caused some market makers, who normally would be making two-sided markets, to step away from the market. The absence of market makers and other professional traders' significantly reduced the supply of liquidity in the market. Specifically, their absence allowed the influx of sell orders to sweep quickly through available liquidity on the exchanges' order books in an effort to obtain an execution at any price, thereby contributing to the rapid and dramatic May 6 market decline.

By making it clearer when, and at what prices, trades would be broken, the proposed amendments would provide greater certainty to market makers and other traders of the CEE review process, and should reduce the frequency with which these market participants step away from the market in times of stress. The amendments also would limit the exchanges' discretion to diverge from the established procedures and numerical guidelines in the rules, again providing greater certainty to market participants.

Some members, however, have highlighted concerns with the specific parameters for breaking trades in the proposed CEE amendments. For example, there may be the potential for manipulation in events involving multiple stocks that are not subject to the single stock circuit breaker pilot program. The proposed amendments would break trades that are at least 10 percent away from the reference price for market events involving between five and twenty

<sup>&</sup>lt;sup>3</sup> The "reference price" is typically the last sale before pricing is disrupted.

<sup>&</sup>lt;sup>4</sup> See Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated June 3, 2010 ("IC1 June 2010 Letter"). See also, Statement of Leonard J. Amoruso, Senior Managing Director and General Counsel Knight Capital Group, Inc., before the CFTC-SEC Advisory Committee on Emerging Regulatory Issues, June 22, 2010, available at <a href="http://www.sec.gov/comments/265-26/265-26-20.pdf">http://www.sec.gov/comments/265-26/265-26-20.pdf</a>. Market makers have anecdotally indicated to members that as a price approaches a decline of 10 percent from opening, they will step away to avoid being exposed to negative selection (when one side of a hedge transaction is completed, while the other side is cancelled, leaving the trader exposed).

<sup>&</sup>lt;sup>5</sup> Other professional traders, such as high frequency traders, have no obligation or incentive to trade during times of market stress. See ICI June 2010 Letter.

<sup>&</sup>lt;sup>6</sup> See SEC Press Release 2010-98, SEC Approves New Stock-by-Stock Circuit Breaker Rules, dated June 10, 2010, available at http://www.sec.gov/news/press/2010/2010-98.htm.

Ms. Elizabeth M. Murphy July 19, 2010 Page 3 of 4

stocks and at least 30 percent away for events involving more than twenty stocks. Presumably, the use of a larger percentage for events involving more than twenty stocks is designed to accommodate price discovery in broader market events. What is to prevent a market participant, however, from forcing a market event into the 30 percent category by manipulating the stock of a twenty-first stock, in order to have the flexibility to trade at wider spreads with respect to the twenty-one stocks affected by the market event? We do not believe it would be difficult or costly to compel this outcome because of the advances in trading technology and the potentially small amount of capital that would be required to push down the price of a single stock.

We also request that the Commission require the exchanges and FINRA to provide clarity in the proposed amendments regarding the application of the CEE rules intra-day. For example, if a market decline triggers the CEE rules intra-day with respect to a stock that was priced at \$25.01, so the CEE price is below \$25, the proposed amendments do not explain at what price trading would be calculated for the next potential application of the CEE rules. Would it be at 5 percent for stocks between \$25 and \$50 or 10 percent for stocks priced at less than \$25?

While we support the proposed amendments, we note that the changes only address the procedural component of the CEE rules. The amendments do not speak specifically to the use of the rules by market participants. Members report that market participants often seek to use the rules to break trades that are disadvantageous to them, as opposed to "clearly erroneous." Further, some exchanges do not rigorously review CEE claims and regularly grant the request to break trades. We encourage the Commission to ensure that exchanges are vigilant in ascertaining that trades are broken only when truly erroneous –i.e., obviously incorrect or resulting from extraordinary market conditions or circumstances in which the cancellation of the trade is necessary to maintain a fair and orderly market or to protect the public interest. Otherwise, the uncertainty surrounding the rules will continue to plague the markets.

Finally, we note that the proposed amendments complement last month's Commission approval of a uniform set of single stock circuit breakers. We commend the Commission, the exchanges, and FINRA for their efforts to quickly address problems in our current market structure which contributed to the events of May 6. In moving forward, we reiterate to the Commission our belief in the importance of addressing without delay other inefficiencies in our current market structure and in doing so with holistic solutions where possible.

Ms. Elizabeth M. Murphy July 19, 2010 Page 4 of 4

If you have any questions on our comment letter, please feel free to contact me directly at (202) 326-5815, Ari Burstein at (202) 371-5408 or Heather Traeger at (202) 326-5920.

Sincerely,

/s/ Karrie McMillan

Karrie McMillan General Counsel

cc: The Honorable Mary L. Schapiro
The Honorable Kathleen L. Casey
The Honorable Elisse B. Walter
The Honorable Luis A. Aguilar
The Honorable Troy A. Paredes

Robert W. Cook, Director James Brigagliano, Deputy Director Division of Trading and Markets

Andrew J. Donohue, Director
Division of Investment Management
U.S. Securities and Exchange Commission