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Thank you Chairman Reed and members of the subcommittee for giving me the opportunity to speak to you today about the U.S. equity markets on behalf of the Securities and Exchange Commission ("SEC" or "Commission").

The U.S. equity markets have undergone a transformation in recent years due in large part to technological innovations that have changed the way that markets operate. As markets evolve, the Commission must continually seek to preserve the essential role of the public markets in promoting efficient price discovery, fair competition, and investor protection and confidence.

For this reason, the Commission is undertaking a broad review of equity market structure to assess its performance in recent years and determine whether market structure rules have kept pace with, among other things, changes in trading technology and practices. This review will address the advantages and disadvantages of matters including high frequency trading, sponsored access, and dark forms of liquidity. In fact, the Commission has already proposed rules related to banning flash orders and three issues designed to shed greater light on dark pools. Before I discuss these efforts in greater detail, however, let me provide some important background.

Background: Operation of U.S. equity markets

The United States has a highly competitive market with a large number of participants, including exchanges, electronic communications networks or "ECNs," alternative trading systems or "ATSs," over-the-counter ("OTC") market makers, and

proprietary trading firms. Currently, ten registered exchanges trade equity securities. An exchange brings together the orders of multiple buyers and sellers and is required to provide the best bid and offer prices for each stock that it trades, as well as last-sale information for each trade that takes place on that exchange. This information is collected and made public through consolidated systems that are approved and overseen by the SEC. Any investor in the United States can see the best quotation and the last-sale price of any listed stock, in real time. This transparency is a key element of the national market system mandated by Congress.

Under that system, the SEC seeks to promote competition among trading venues, since this can lead to benefits for institutional and retail investors, including lower transaction costs, improved liquidity and execution, enhanced price discovery, and more choices for investors. The SEC also seeks to ensure there is proper coordination among all trading centers, and is mindful of any potentially harmful effects of having orders placed in different markets rather than a single, central market.

Competition among markets has increased dramatically, especially in recent years. Thirty-four years ago, when Congress charged the SEC with creating an integrated national market system, the New York Stock Exchange ("NYSE") accounted for the vast majority of trading volume in listed stocks and Nasdaq was becoming a major market for OTC stocks. NYSE and Nasdaq still play a significant role, but other markets, including ECNs and ATSs that didn't exist a decade ago, are now major participants in the national market system.

As a preliminary matter, let me describe ATSs and their origin, since certain types of ATSs figure prominently in market structure issues that I will discuss in a moment. ATSs are broker-dealers that match the orders of multiple buyers and sellers according to

established, non-discretionary methods. Although these types of systems have existed since the late 1960s, they began to proliferate in the mid 1990s in response to technological developments that made it easier for broker-dealers to match buy and sell orders. In 1998, the SEC created a new regulatory framework, called Regulation ATS, which sought to reduce barriers to entry for these systems and promote competition and innovation, while appropriately regulating the exchange functions that they performed.

Currently, there are 73 active, registered ATSs, and they trade all types of securities. Four of these ATSs have chosen to publicly display their best orders in the consolidated quote stream as exchanges do and to allow their quotes to be accessed (at least indirectly) by any investor. This subgroup of ATSs is known as ECNs. Over the last 15 years, ECNs have driven many beneficial changes in the equity marketplace, such as faster trading technologies, new pricing strategies, and robust intermarket linkages. Some ECNs have merged with registered exchanges or have registered as exchanges themselves. For example, BATS, the newest registered exchange, was until recently an ECN. Direct Edge, which is currently an ECN, is applying to become a registered exchange. Not only have ECNs, as well as other ATSs, acquired significant market share, the competition they have brought to the markets has caused incumbent exchanges to adapt and compete to provide better services to investors.

Another type of ATS is the so-called dark pool. An ATS that operates as a dark pool does not provide quotes into the public quote stream. The number of active dark pools transacting in stocks that trade on major U.S. stock markets has increased from approximately 10 in 2002 to approximately 30 in 2009. For the second quarter of 2009, the combined trading volume of dark pools was approximately 7.2% of the total share volume in these stocks, with no individual dark pool executing more than 1.3%. Like

ECNs, dark pools operating under Regulation ATS must register as broker-dealers and become members of FINRA. The Commission has recently been reviewing the regulatory structure applicable to dark pools.

Although the phrase "dark pool" is new, the concept is old. Dark liquidity – meaning orders and latent demand that are not publicly displayed – has been present in some form within the equity markets for many years. Traders are loath to display the full extent of their trading interest. Imagine a large pension fund that wants to sell a million shares of a particular stock. If it displayed such an order, the price of the stock would likely drop sharply before the pension fund could sell its shares. So the pension fund, assuming it could execute its trade at all, would be forced to sell at a worse price than it might have if information about its order had remained confidential.

In the not-so-distant past, the pension fund might have placed the order, or some part of it, with a broker-dealer, which would attempt to find contraside interest (whether on the floor of an exchange or by calling around to other traders), preferably without giving up enough information to move the market against its client. Information leakage about a larger order was a serious problem, and the "market impact" of large orders would impose a major cost on investors.

Historically, many dark pools developed as computerized ways of searching for contraside trading interest while preserving confidentiality. While early dark pools were designed to cross large orders, and such pools still exist today, most of the newer dark pools are designed to trade smaller-sized orders. In some cases, these small orders are derived from large ‘parent’ orders that have been chopped up into smaller pieces. In addition, some small orders represent orders that the broker-dealer operating the ATS is attempting to cross internally, rather than lose the execution to another market.

Looking at overall U.S. equity market structure, competition among different markets appears to have yielded significant benefits to investors, both retail and institutional: lower commissions, tighter spreads, faster execution speeds, and greater systems capacity. And from a systemic risk standpoint, having a network of interlinked markets is preferable to having a single point of failure. When trading is disrupted in one market, which happens occasionally, volume quickly migrates to other markets.

Our equity markets have faced serious tests since the onset of the financial crisis, and generally the markets have performed well. Despite record volumes and volatility, particularly in the fall of 2008, the markets for U.S.-listed securities have remained open and continued to operate in a fair and orderly manner and to perform their vital price discovery function. Buyers and sellers could see current prices and expect to execute their trades promptly at the prices they saw on their screens.

But markets continually evolve, and among the questions that have been raised about recent changes in the market are questions about whether certain current market practices might create a two-tiered market. The Commission's job is to make sure that the core principles of the Exchange Act – fairness, efficiency, and best execution – are maintained as the markets, and the environment in which they operate, change. So the challenge for regulators is to monitor these changes and update regulation when needed. The Commission currently is taking a broad and critical look at market structure practices in light of the rapid development in trading technology and strategies. I will address some steps the Commission has taken recently, and some that I anticipate it may take in the near future.

Commission Action on Market Structure Reforms

Flash Orders

In September, the SEC proposed to prohibit the practice of flashing marketable orders. In general, flash orders are communicated to certain market participants and either executed immediately or withdrawn immediately after communication. Flash orders are exempt from the Exchange Act's quoting requirements as the result of an exemption formulated when most trading took place on the floors of the exchanges. The exception was originally intended to facilitate manual trading in the crowd on exchange floors by excluding quotations that were then considered "ephemeral" and impractical to include in the consolidated quotation data.

The Commission is concerned that the exception for flash orders, whether manual or automated, from Exchange Act quoting requirements is no longer necessary or appropriate in today's highly automated trading environment. The consolidated quotation stream is designed to provide investors with a source of information for the best prices in a listed security, rather than forcing investors to obtain such information by subscribing to all of the data feeds of the many exchanges and ATSs that trade listed securities. The flashing of order information could lead to a two-tiered market in which the public does not have access, through the consolidated quotation data streams, to information about the best available prices for U.S.-listed securities that is available to some market participants through proprietary data feeds.

In addition, the recipients of the flashed order can trade at the same price as the displayed quote without publicly quoting themselves. At the same time, the investor who is publicly quoting may miss out on the opportunity to receive an execution. The recipients of the flashed order also may obtain an informational advantage by seeing and

being able to react to orders in the market before others can. As a result, flash orders could lead to a two-tiered market where the public does not have equal access to information about the best available prices for listed securities.

Flash orders also offer potential benefits to certain types of market participants. For example, for those seeking liquidity, the flash mechanism may attract additional liquidity from market participants who are not otherwise willing to display their trading interest publicly, and could help lower the transaction costs of those responding to flash orders. Flash orders may be executed through the flash process for lower fees than those charged by many markets for accessing displayed quotations.

Taking these factors into consideration, the Commission recently proposed to ban flash orders, noting that while flash orders may potentially be providing benefits to certain traders, it may no longer serve the interests of long-term investors or the markets as a whole. The Commission has stated, both in adopting Regulation NMS and in proposing to ban flash orders, that the interests of long-term investors should be upheld as against those of professional short-term traders, when those interests are in conflict. The comment period on the proposal to ban flash orders remains open until November 23, and the staff and the Commission look forward to carefully analyzing the comments received.

Dark Pools

Last week, the SEC made additional proposals related to market structure. These proposals relate to three issues relevant to dark pools and so-called actionable "indications of interest" or "IOIs." IOIs, like flash orders, potentially create two-tiered markets in which selected participants are made aware of prices that are available in the market but that other investors don't know about. IOIs are used by some market makers

and dark pools to alert certain other market participants about available trading opportunities. Some of these IOIs are actionable IOIs: they contain enough information for a recipient to act on them in the same way it would act on quotes.

Therefore, the Commission has put forth three proposals in this area. The first proposal would require actionable IOIs to be treated like quotations and be subject to the same disclosure rules that apply to quotations. The second proposal would lower the ATS trading volume threshold for displaying best-priced orders in the consolidated quote stream. Currently, an ATS, if it displays orders to more than one person, must display its best-priced orders to the public when its trading volume for a stock is 5% or more. This proposal would lower that percentage to 0.25%, meaning that dark pools that use actionable IOIs and exceed the volume percentage threshold would be required to publicly display those actionable IOIs as quotes. Taken together these changes would help make the information conveyed by actionable IOIs available to the public instead of just to a select group.

At the same time, both proposals would exclude from their requirements certain narrowly targeted IOIs related to large orders. These size discovery mechanisms currently are offered by dark pools that specialize in large trades. In particular, the proposal would exclude IOIs for $200,000 or more that are communicated only to those who are reasonably believed to represent current contra-side trading interest of equally large size. The ability to have a method for connecting investors desiring to trade shares in large blocks could enable those investors to trade efficiently in sizes much larger than the average size of trades in the public markets.

As you know, Chairman Schapiro has expressed concern about transparency in dark pools generally. I mentioned earlier that all trades, even those in dark pools, have to

be reported to the consolidated tape in real time. However, under the current system, investors can see only that a trade occurred somewhere off an exchange. They don't know which ATS executed the trade, or even whether it was executed in a dark pool at all.

Therefore, the Commission also proposed to create a similar level of post-trade transparency for ATSs, including dark pools, as for registered exchanges. Specifically, the proposal would amend existing rules to require real-time disclosure of the identity of dark pools and other ATSs on the public reports of their executed trades. As with the Commission's IOI proposal, this proposal also would exclude the identification of the ATS for large trades of $200,000 or more, to prevent potential detrimental information leakage that could interfere with the ability of institutions to efficiently trade large blocks of stock.[1] In considering post-trade transparency, some have suggested that such transparency may compromise proprietary trading strategies and allow the market to ascertain the trading interest of investors, while others have suggested that post-trade transparency disclosures do not raise such concerns.

Looking Forward

But these steps are just the beginning. As Chairman Schapiro has indicated, now is an appropriate time to take a broad look at the whole of U.S. equities market structure. Over the coming months, I anticipate that the SEC will consider additional issues relating to dark liquidity more broadly, perhaps by issuing a concept release.

Dark liquidity is offered not just by dark pools, but by large dealer firms that internalize customer orders, ECNs, ATSs, and registered exchanges, which have a variety of dark order types. As part of the Chairman's directive to take a broad look at market

[1] The proposals discussed above do not attempt to address all of the issues regarding dark liquidity.

structure issues, the staff plans to examine whether the degree or nature of trading with dark liquidity has changed in recent years and, if so, whether it is having detrimental effects on the quality of the markets, such as efficient price discovery.

Another practice that is being examined by the Commission staff is high frequency trading. While the term lacks a clear definition, which partially explains the confusion on the subject, it generally involves a trading strategy where there are a large number of orders and also a large number of cancellations (often in subseconds), and moving into and out of positions, often many times in a single day.

High frequency trading plays a significant role in today's markets by providing a large percentage of the displayed liquidity that is available on the registered securities exchanges and other public markets. Many are concerned, however, that high frequency trading can be harmful, depending on the trading strategies used, both to the quality of the markets and the interests of long-term investors.

The Commission recognizes concerns have been raised that high frequency traders have the ability to access markets more quickly through high-speed trading algorithms and co-location arrangements. This ability may allow them to submit or cancel their orders faster than long-term investors, which may result in less favorable trading conditions for these investors. This quicker access could, for example, enable high frequency traders to successfully implement "momentum" strategies designed to prompt sharp price movements and then profit from the resulting short-term volatility. In combination with a "liquidity detection" strategy that seeks solely to ascertain whether there is a large buyer or seller in the market (such as an institutional investor), a high frequency trader may be able to profit from trading ahead of the large order.

High frequency trading, however, can also play a constructive role. Some have argued that high frequency traders played a role in continuing to provide liquidity during the recent market turmoil. High frequency trading may also help to reduce market spreads. I expect that the Commission would seek the public's views on the potential benefits and drawbacks associated with high frequency trading, perhaps by issuing a concept release to explore these issues in greater detail.

Commission staff is also exploring ways for the Commission to use its statutory authority to assure that the Commission has better baseline information about high-frequency traders and their trading activity. This would help to enhance the Commission's ability to identify large and high-frequency traders and their affiliates.

Another market structure issue that the Commission staff is exploring is sponsored access – also known as "direct market access" or "DMA" – where broker-dealer members of an exchange allow non-members – in many cases, high frequency traders – to trade on that exchange under their name. As electronic trading has become the norm, this type of access to exchange execution systems has increased significantly. In some cases, broker-dealers offer sponsored access to customers without requiring the orders to pass through the broker-dealers' systems. The appeal of the arrangement is that it helps preserve anonymity and enables the fastest possible trading. There are, however, a variety of risks involved when trading firms have unfiltered access to the markets. These risks can affect many of the participants in a market structure, including the trader's broker, the exchanges, and the clearing entities. Sponsored access could raise concerns about whether sponsoring broker-dealers impose appropriate and effective controls on sponsored access to fully protect themselves and the markets as a whole from

financial risk, and to assure compliance with all regulatory requirements. The Commission staff is looking at these issues.

In evaluating these market structure issues, the SEC is focused on the protection of investors, maintaining fair, orderly, and efficient markets, and facilitating capital formation.

Thank you for giving me the opportunity to speak to you today on behalf of the Securities and Exchange Commission. I welcome any questions you may have.