Testimony of
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Submitted before the
The Committee on Financial Services
Subcommittee on Capital Markets and Government Sponsored Enterprises
United States House of Representatives

Hearing on:
Market Structure: Ensuring Orderly, Efficient, Innovative and
Competitive Markets for Issuers and Investors
Wednesday, June 20, 2012

Chairman Garrett, Ranking Member Waters, and Members of the Subcommittee thank you for the opportunity to submit written testimony in connection with this very important hearing regarding key market structure issues.

1. Brief history of Knight

Knight Capital Group, Inc. (Knight) opened for business in 1995.[1] Built on the idea that the self-directed retail investor would desire a better, faster and more reliable way to access the market, Knight began offering execution services to discount brokers. Today, Knight services some of the world's largest institutions and financial services firms, providing superior trade executions in a cost effective way for a wide spectrum of clients in multiple asset classes, including: equities (domestic and foreign securities), fixed income securities, derivatives, and currencies. Today, Knight through its affiliates, makes markets in equity securities listed on the

[1] Knight Capital Group, Inc., through its subsidiaries, is a major liquidity center for foreign and domestic equities, options, futures, fixed income securities, and currencies. On active days, Knight can execute in excess of 10 million trades, with volume exceeding 20 billion shares. With offices in the U.S., Europe and Asia, Knight's clients include more than 5,000 broker-dealers and institutional clients. Currently, Knight employs more than 1,500 people worldwide. For more information, please visit: www.knight.com.

New York Stock Exchange (NYSE), Nasdaq, NYSE Amex, the OTC Bulletin Board, and OTC Markets. Knight typically executes approximately 4 million trades per day. In 2011, Knight:

- Made markets in (or traded) approximately 19,000 securities.
- Executed more than one trillion shares (approximately 4 billion per day) in U.S. equities.
- Executed more than 900 million equity trades (approximately 4 million per day).
- Traded more than $6.4 trillion in notional value (over $24 billion per day).

The majority of the trades we execute today are on behalf of retail investors. Although retail customers do not come to us directly, their brokers do. We count amongst our clients some of the largest retail brokerage firms in the U.S., including: Scottrade, TD Ameritrade, Fidelity, Raymond James, E*Trade, Pershing, Vanguard and Wells Fargo. In addition, we service some of the largest institutions in the country. These institutional clients send us orders on behalf of mutual funds and pension plans, whose ultimate clients are, of course, small investors.

Knight has spent the last 17 years evolving our technology infrastructure so that it can process millions of trades a day on behalf of the retail investor – in a fast, reliable, cost effective manner, while providing superior execution quality and service. Our data centers are some of the largest and most reliable in the industry. We spend tens of millions of dollars every year making our technology platform better, faster and more reliable. Today, we have the capacity to process 20 million trades per day. We have connectivity to nearly every source of liquidity in the equities market, and our trade response times are measured in milliseconds. Our years of research and development, technology platform enhancements, and connectivity to liquidity wherever it resides is all brought to bear in our endeavor to secure best execution on behalf of our customers (and, in turn, their customer – the retail investor). Importantly, access to this sophisticated gateway is available to nearly every investor in the country.

As a result, we believe that Knight is uniquely qualified to comment on the market structure issues which are the focus of this hearing – "*…to examine equity market quality,*

innovation, competition and the impact that market structure has on smaller issuers." At their core, these issues revolve around notions of execution quality, liquidity, fair access and responsible rulemaking through rigorous cost-benefit analysis – all of which form the foundation for our capital markets. As we have noted previously, and as you will undoubtedly see upon the careful analysis of all of the relevant data, the U.S. equity market is the best functioning and fairest market globally. This has been achieved through fact-based decisions, prudent rulemaking, structural transparency and timely and efficient disclosure, all of which are products of a competitive and fair market structure that allows choice and fosters innovation.

2. There has never been a better time to be an investor

There has never been a better time to be an investor (large or small) in U.S. equities. Execution quality (speed, price, and liquidity) are at historically high levels, while transaction costs (explicit and implicit) are at historically low levels.

> Virtually every dimension of U.S. equity market quality is now better than ever. Execution speeds have fallen, which greatly facilitates monitoring execution quality by retail investors. Retail commissions have fallen substantially and continue to fall. Bid-ask spreads have fallen substantially and remain low, although they spiked upward during the financial crisis as volatility increased. Market depth has marched steadily upward. Studies of institutional transactions costs continue to find U.S. costs among the lowest in the world.
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> *Equity Trading in the 21st Century.* James J. Angel, Lawrence E. Harris, and Chester S. Spatt (February 23, 2010).

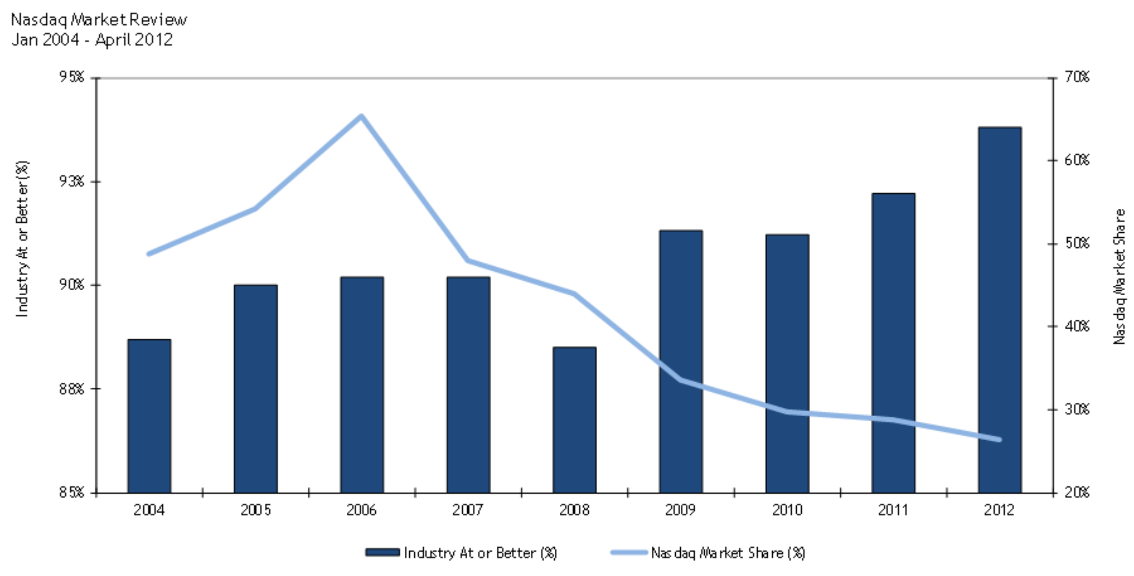
The U.S. equity markets are the fairest, most transparent and most liquid markets in the entire world. Remember that during the course of the last few years, with the exception of two notable exceptions, the equity markets worked flawlessly. As will be discussed in more detail below, the two exceptions were May 6, 2010 – the so called, "flash crash" and, more recently,

Nasdaq's handling of the initial public offering (IPO) of Facebook Inc. on May 18, 2012. The SEC has taken a number of measured and reasonable steps to address the issues associated with the flash crash. Currently, Nasdaq is preparing a rule filing to address the damages sustained by market participants and investors as a result of its technology and operational failures in connection with the Facebook IPO. The industry anxiously awaits the outcome, and hopes that the remedial measures taken by Nasdaq will fully address the entire scope of damages sustained by market participants. Aside from these two unfortunate days, the equities markets have performed extremely well. One may not have liked the direction prices went at times but all investors could act on their investment decisions swiftly and with surety -- distinguishing themselves in their reliability and robustness.

An extraordinarily important fact, however, continues to be overlooked -- investors have seen *substantial* improvements in execution quality over the last 5-7 years.

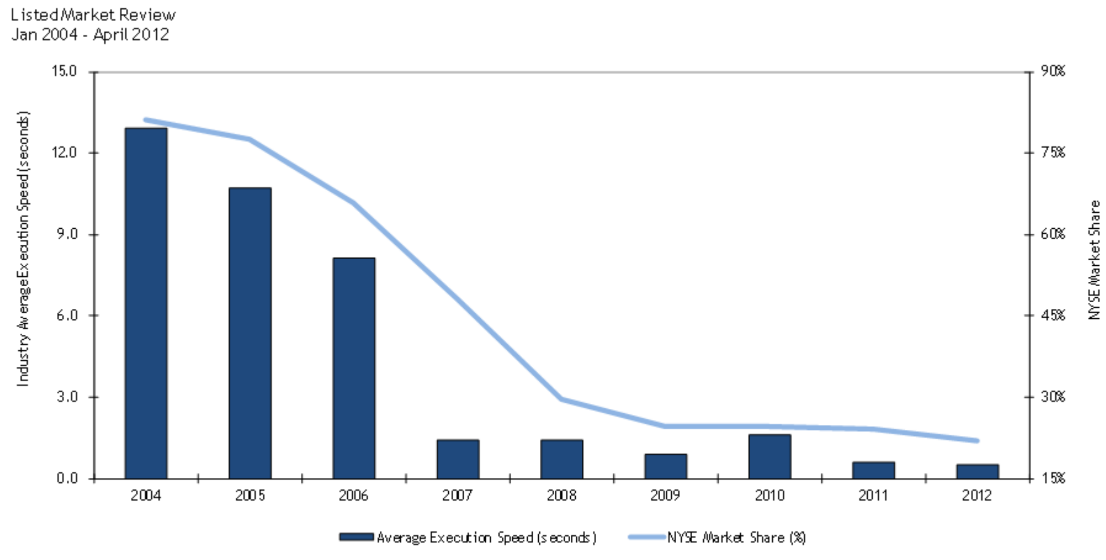
For example:

a. The amount of times investors receive a price better than the national best bid or offer (NBBO) has risen significantly over the years.



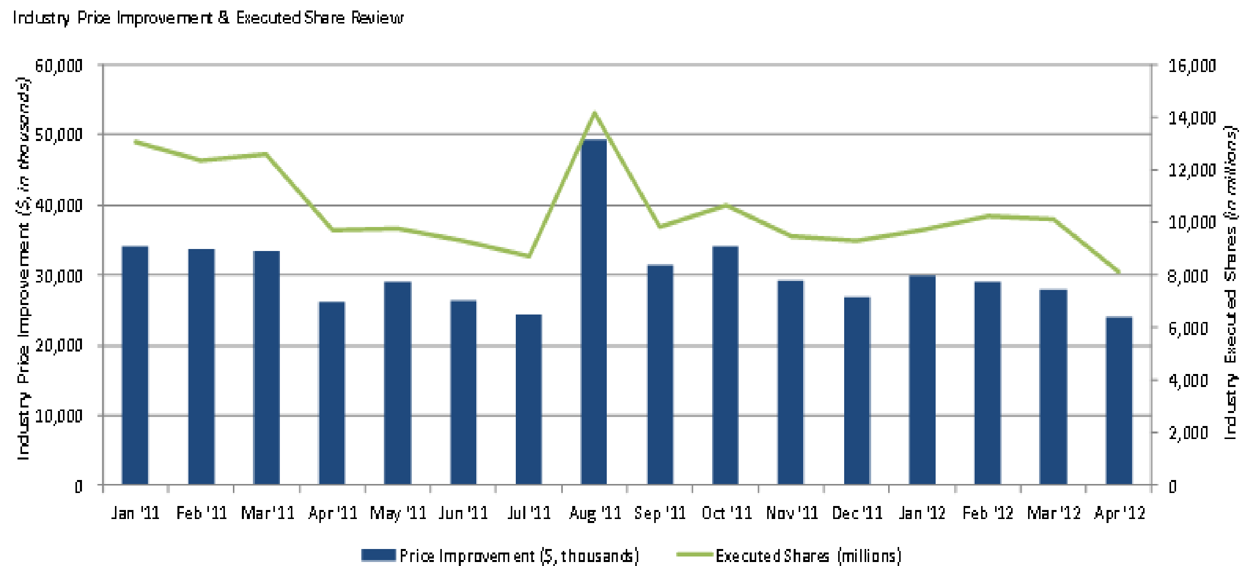
Calculations are for held market orders of order sizes 100-1999 shares. Data Source: Thomson Transaction Analytics.

b. Today, the industry average execution speed for retail market orders is less than one second. In 2004, it took more than nearly 12 seconds to execute that same order.



Calculations are for held market orders of order sizes 100-1999 shares. Data Source: Thomson Transaction Analytics.

c. Market makers frequently execute trades at prices better than the NBBO. In 2010, more than $200 million in price improvement was provided to investors by market makers. In 2011, more than $300 million in price improvement was provided. This money ends up directly in the pockets of investors, and flows back into the economy.



Data Source: Thomson Transaction Analytics

The facts show that investors have benefited greatly over the years as a direct result of the developments in market technologies. In fact, in speaking before the STA's Annual Meeting on October 4, 2007 after the adoption of Regulation NMS, former SEC Commissioner Annette L. Nazareth stated that,

> Today, the landscape has changed dramatically. In August of this year [2007], for example, NYSE's market share in NYSE-listed equities was approximately 45.8%. <u>For the first time, ATSs and ECNs are now competing head-on with the listed markets…What a difference true competition makes</u>! (emphasis supplied)

High speed computers, dark pools, etc. are not the problem; indeed, they are the culmination of our free-market system – competition. Competition has led to better executions (both speed and price) for investors. We should not look to impede competition; rather we should always look for ways to enhance it. That is what keeps the U.S. capital markets great. Former SEC Chairman Arthur Levitt got it right when he said,

> Investors large and small have always been served well by those looking to build the deepest possible pool of potential buyers and sellers, maker trades at a better price, and all as quickly as possible…More liquidity, better pricing and faster speeds are the building blocks of healthy, transparent markets, and we must always affirm those goals.
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> *Wall Street Journal* -- August 17, 2009.

3. <u>Trading Technologies</u>

Retail investors are able to harness the connectively and lightning-fast technology made available to them by their brokers and the execution venues that handle their order flow. From a speed and access point of view, investors are able to access some of the best trading technology available today – at little or no cost.

Market venues spend hundreds of millions of dollars every year on technology, including data centers, communication lines and infrastructure. They look for new and improved ways to

source and access liquidity, in the most effective and efficient manner (including, dark pools, co-location, and countless order types). The investor community is provided access to many of these tools and technologies without charge (other than, of course, the small commission they pay their broker). That's right -- investors get access to nearly all liquidity pools and they can harness some of the fastest and most sophisticated technologies in the world. For example, as noted above, Knight is connected to all key liquidity pools. We deploy some of the fastest, most sophisticated trading technology in the world, all of which is brought to bear for the purpose of executing our clients' orders. Simply put, if a retail investor gives a market order to buy 500 shares of Starbucks to his broker and that broker routes the order to Knight (or, many other execution venues), that order will likely be executed at the NBBO, or better, in a fraction of a second. The cost to the investor is simply the commission paid to their broker (typically, less than $10). Knight, as well as most other non-exchange execution venues, provides access to all of its technology, liquidity, and gateway to the marketplace at no charge to the retail investor.

These different forms of market structure are needed for different participants. The retail investor truly benefits from this vigorous competition and resulting choices provided. These market processes are designed to facilitate the sourcing of liquidity and enhancing execution quality. Remember, the retail investor is not operating alone. Retail investors place their orders with sophisticated executing brokers who have access to the various liquidity pools in the market. Additionally, brokers often turn to executing venues (like, Knight and others) to gain further access to the markets. Taken together (the broker and the execution venue), these robust resources are brought to bear for the benefit of retail investors – providing them with a vibrant gateway into the marketplace and unprecedented access and liquidity.

4. Competition and Innovation

We fully support this Subcommittee's initiative to review the broad range of market developments which have helped shape our equity markets in recent years. Competition and innovation have led to advancements in trading technologies over the last several years. In fact, Regulation NMS helped pave the way for competition to thrive among market participants. In addressing the STA at its Annual Meeting on October 13, 2006, SEC Commissioner Nazareth stated,

> Two of the Commission's primary goals for Reg NMS are to promote vigorous competition among markets and to remove any competitive advantages that the old rules may have given manual markets. All evidence to date indicates that these goals are well on their way to being met.

Those advancements have resulted in more liquidity, more price improvement and faster executions. Investors of all shapes and sizes (from small retail investors to large institutions) are reaping the fruits of those endeavors. As former SEC Commissioner Kathleen L. Casey noted on October 21, 2009,

> Competition has transformed the equity markets. We have moved light years from the slow manual trading that once characterized the New York Stock Exchange. We have moved well beyond the NYSE/Nasdaq duopoly. Today, the U.S. equity markets offer more benefits to more investors than at anytime in history. Over the past decade, advances in technology, coupled with paradigm-shifting regulatory actions such as Regulation ATS, have lowered barriers to entry. The resulting vigorous competition for customer order flow among numerous trading venues — including so-called "dark pools" — has led to more choices of trading centers, greater speed and liquidity, financial innovation, tighter spreads, and lower execution costs. Investors, particularly individual investors, have reaped the benefits of the fierce competition that has developed in this area. Therefore, it is imperative that we not take any regulatory actions that would impede or unintentionally reverse this considerable progress.

5. Sensible rule-making

Regulatory fine tuning is necessary in a market as dynamic as U.S. equities. Given the many market structure changes that have taken place in recent years, a holistic examination of the U.S. equity market structure is timely, relevant and necessary. We believe it is especially important to craft effective trading rules. As the renowned statistician W. Edwards Deming once said, "In God We Trust; all others must bring data." The best rulemaking is based on a careful analysis of all relevant facts. We urge the SEC to look closely at the statistical evidence of how efficiently the equities markets currently operate; to assess how much value the current system brings to all investors; and, to insure that any rulemaking withstands a rigorous cost-benefit analysis.

Knight has advocated repeatedly that competition, rather than mandated and prescribed paths to trading, benefits market participants and all investors. For example, the SEC's Rule 605 is an excellent example of regulation that increases competition by promoting transparency and comparability. The rule requires market participants to post their execution statistics in accordance with standardized reporting metrics, thus enabling order routing firms to make more informed routing decisions to meet their clients' needs. This has increased competition and pressured market participants to continuously strive to improve their execution capabilities for customer orders, while resulting in dramatically reduced costs for investors. We believe the dramatic decrease in brokerage commissions and the split-second executions for most marketable orders in recent years is a direct result of these competitive forces; it was not driven by regulatory fiat. Additionally, SEC Rule 606 requires brokers to disclose on a quarterly basis the venues to which it routed order flow, as well as any payment for order flow arrangement. The adopting release to Rule 606 states, in part:

> The purpose of requiring disclosure concerning the relationships between a broker-dealer and the venues to which it routes orders is to alert customers to potential conflicts of interest that may influence the broker-dealer's order-routing

> practices. Currently, Rule 10b-10(a)(2)(i)(C) requires a broker-dealer, when acting as agent for the customer, to disclose on the confirmation of a transaction whether payment for order flow was received and that the source and nature of the compensation for the transaction will be furnished on written request. In addition, Exchange Act Rule 11Ac1-3(a) requires broker-dealers to disclose in new and annual account statements its policies on the receipt of payment for order flow and its policies for routing orders that are subject to payment for order flow. The Commission believes that disclosure of potential conflicts of interest in conjunction with a quantitative description of where all non-directed orders are routed may provide customers with a clearer understanding of a broker-dealer's order routing practices than is provided under current rules. (emphasis supplied)

Regardless of any payments received, the SEC and self-regulatory organizations (SROs), like FINRA and the NYSE, have made it very clear, that the broker's first obligation is to seek best execution. The SEC has stated:

> The Commission anticipates that improved disclosure of order routing practices will result in better-informed investors, will provide broker-dealers with more incentives to obtain superior executions for their customer orders, and will thereby increase competition between market centers to provide superior executions. Currently, the decision about where to route a customer order is frequently made by the broker-dealer, and broker-dealers may make that decision, at least in part, on the basis of factors that are unknown to their customers. The Rule's disclosure requirements will provide investors with a clearer picture of the overall routing practices of different broker-dealers. The Commission contemplates that this will lead to greater investor involvement in order routing decisions and, ultimately, will result in improved execution practices. Because of the disclosure requirements, broker-dealers may be more inclined (or investors may direct their broker-dealers) to route orders to market centers providing superior executions. Broker-dealers who fail to do so may lose customers to other broker-dealers who will do so. In addition, the improved visibility could shift order flow to those market centers that consistently generate the best prices for investors. This increased investor knowledge and involvement could ultimately have the effect of increasing competition between market centers to provide superior execution. (emphasis supplied)
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> See, SEC Release No. 34-43590 (November 17, 2000).

This is precisely the type of transparency which has led to fierce competition among market centers. That healthy competition has resulted in the extraordinary levels of execution quality retail investors enjoy today. In addition, many of the measures taken subsequent to the

flash crash, also demonstrate the careful, measured approach the SEC has taken when adopting new marketplace regulations addressing systemic risk while not trying to micro-manage the markets. Those measures included: stock-by-stock circuit breakers, clarifying the erroneous trade rules, sponsored access rules, and the recently adopted limit-up/limit-down rules.

Trade At

We urge the SEC and other regulators to never lose sight of the importance of cost-benefit analysis. For example, various iterations of the "trade at" rule continue to be proposed by certain market participants. For the last 25 years, the SEC has consistently rejected these proposals, noting that a competitive, choice-driven market is far better for investors. Internalization is one such benefit for investors. Internalization offers retail and institutional investors a cheap, fast and safe method for executing their orders. Internalization exists because of client demand for best execution. It is an execution choice that enables investors to get the best possible price (often better than what is displayed in the market), along with low transaction costs and minimal information leakage. As noted previously, one of the many quantifiable benefits of internalization include price improvement which is money directly back into the pockets of investors. That is, investors can receive prices that are better than what are displayed in the market. Internalization is available for all investor types and access has been significantly democratized by the extremely networked lattice structure of venues. To move away from this networked venue system, with its lit and dark venues that offer more execution flexibility would be a step backward. From the point of view of smaller market participants, such as retail investors, the market has never been so inclusive and efficient. The readily available access to numerous venues has allowed small investors to reap the benefits of internalization via price improvement, enhanced liquidity, and improved spreads. Furthermore, we have seen no

quantitative and qualitative justification offered for taking steps to change or slow internalization.

A "trade-at" regime, or moves to limit internalization, would add significant costs to retail and institutional orders: implicitly by minimizing competition and competitive innovation, explicitly by forcing many users of lower cost alternative venues to pay access fees. It would minimize the opportunities for price improvement (and eliminate sub-penny price improvement) to retail orders as they would always trade at the NBBO. It would reduce liquidity provided by market makers as increased costs would outweigh their liquidity provision ability in most cases. It would vastly increase quote message traffic and quote flickering as firms would be forced to be at the NBBO (likely at the lowest permissible quantity) to service their customers. It could place retail investors at a disadvantage to high frequency trading firms (HFTs). It would significantly diminish the ability of investors, including long-term investors, to use non-displayed trading venues (which typically do not place orders into the displayed markets) to handle their sensitive order flow. The requirement that such a venue either offer price improvement at least in the amount of the minimum increment in order to execute at the NBBO would be difficult given that many stocks trade in penny increments. Consider the following example:

Assume the market in ABCD:

Bid	**Offer**
10.00 (100 sh.)	10.01 (100)
9.99 (100)	10.03 (100)
9.98 (100)	10.05 (200)
9.96 (100)	10.06 (100)

- An investor wants to buy 400 shares.
- If the market maker internalizes that order, it could provide up to 400 shares at $10.01 (and many times it will price improve to $10.009).
- In a "trade at" regime, the same order would be routed into the market. The order could be executed at an average of $10.035, and an access fee of up to $0.003/share could be charged.
- In this example, under a "trade at" rule, the investor could pay 2.9¢ more per share (or an extra $11.60) on the exact same order. [$10.035 + $0.003 = $10.038 - $10.009 = $0.029].
- Consequently, investors could pay hundreds of millions of dollars more each year for trades in a "trade at" regime

In short, "trade-at" would stifle innovation and set the U.S. equity market back more than a decade as many of the new business models that have been introduced would no longer exist. The detrimental consequences of such a radical move far outweigh any possible benefit.

NYSE Retail Liquidity Program

In October 2011, the NYSE submitted a rule proposal to the SEC in which it seeks to establish a liquidity program to attract retail order flow to the NYSE through the provision of price improvement from non-displayed sub-penny orders posted by professional Retail Liquidity Providers ("RLPs") on the NYSE book. Although not yet filed with the SEC, it is our understanding that Nasdaq and possibly other exchanges are considering something similar. We have filed comment letters with the SEC in which we have urged the SEC to carefully study and analyze the sweeping implications of this proposed rule filing, especially the impact on Regulation NMS and the move to sub-penny quoting/ranking, prior to making a final decision on the rule. Rule 612 of Regulation NMS (i.e., the "sub-penny rule") specifically prohibits:

> "*…market participants from displaying, ranking, or accepting quotations in NMS stocks that are priced in an increment of less than $0.01, unless the price of the quotation is less than $1.00.*"
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> Regulation NMS Adopting Release, SEC Release No. 34-51808. (June 9, 2005).

As one of the more actively debated components of Regulation NMS, Rule 612 was the subject of numerous comment letters. Thus, material changes to this rule, like those contemplated by the NYSE proposal require careful consideration. The NYSE contends that the pilot period would reveal all potential problems and issues. The dispositive flaw in this argument is that the "pilot" will consist of securities traded on only one market venue. The NYSE fails to recognize that if approved, the proverbial slippery slope will be that many market participants will seek similar relief, thereby thrusting the U.S. equities markets into a sub-penny quoting/ranking environment without adequate study and analysis. A pilot program that allows only one venue to receive an

exemption from Regulation NMS is not a realistic test scenario and is unlikely to reveal any useful data.

Accordingly, in determining whether to approve or adopt new rules (e.g., trade at, RLP, etc.), we have urged the SEC to evaluate carefully all available empirical evidence, consider thoroughly the potential for unintended consequences, and insure that the benefits associated with any such proposal far exceed the costs.

6. The displayed markets are valid and robust

Some have argued that the value of the displayed markets is somehow eroded when trading occurs off an exchange. We disagree. We believe the displayed or "lit" markets are robust, execute the majority of trading volume in U.S. equities and, thus, the NBBO is a fair and accurate representation of the best prices available in the marketplace. As a result, trades executed off of an exchange predominately occur at the NBBO (or better) which is completely consistent with both the letter and spirit of Regulation NMS. Nevertheless, as noted, the majority of trading volume today continues to take place on an exchange. In fact, the lit markets (NYSE, Nasdaq, Direct Edge, BATS and the regional exchanges) account for approximately 70% of overall market volume. Regulation ATS and Regulation NMS helped to break the monopoly the exchanges had on market share. In fact, one of the "darkest pools" was the old specialist system on the floor of the NYSE. For years the specialists controlled trading information and access to data. Barriers to entry were lowered and competition was able to flourish, forcing the NYSE and Nasdaq to compete for market share, rather than simply demand it as a birth right. Former SEC Commissioner Casey properly noted:

> This trading volume migration from the incumbent exchanges to other venues that publicly display trading interest demonstrates the robust competition among trading centers for customer order flow. It also

> demonstrates that non-displayed liquidity has not materially reduced the quantity of publicly disseminated trade information. Therefore, it appears that an obsessive focus on the rise of dark ATSs is misplaced. Quoting venues in the aggregate are doing just fine, and the competition among them is a good thing, not something we need to "correct."
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> SEC Open Meeting, Commissioner Kathleen L. Casey (October 21, 2009)

Market participants of all shapes and sizes actively trade both in displayed and undisplayed venues. If the prices in the displayed venues are not valid, trading firms quickly enter the displayed venues with orders and trades until the pricing is corrected. If this did not occur, those price dislocations would cause all venues (dark and lit) to be irrational. Thus, any suggestion that undisplayed venues do not contribute to price discovery is illogical. Market participants trade in both venues, insuring that pricing is rational and *bona fide.*

7. Suggested rule-making

Knight firmly believes that the U.S. equity markets are the fairest most efficient markets in the world. However, we recognize that ongoing, incremental regulatory changes are crucial to keep pace with a highly innovative equity market. We believe that the following rule changes are worthy of serious consideration and may help to restore investor confidence.

a. Representative Patrick McHenry proposal.
b. A consolidated audit trail.
c. A review of access fees, including the elimination of the maker/taker model.
d. Wider spreads for certain tiers of securities; e.g., high-priced stocks, less liquid stocks, etc.
e. Market maker obligations, including a time in force for market maker quotations.

a. McHenry Proposal

Representative Patrick McHenry has drafted a legislative proposal, the "Liquidity Enhancement for Small Public Companies Act," to ensure that adequate liquidity exists for smaller issuers. Knight fully supports this proposal. The bill seeks to promote the development

of market quality incentive programs by permitting issuers, exchanges, or any other company approved by the SEC or an exchange to provide financial incentives to market makers that adhere to standards of market quality established by an exchange. Nasdaq had proposed something similar on April 6, 2012 (SEC Release No. 34-66765). In its filing, Nasdaq seeks to:

> … add new Rule 5950 (Market Quality Program) to enable market makers that voluntarily commit to and do in fact enhance the market quality (quoted spread and liquidity) of certain securities listed on the Exchange to qualify for a fee credit pursuant to the Exchange's Market Quality Program, and to exempt the Market Quality Program from Rule 2460 (Payment for Market Making).

As a leading market maker of U.S. equities, Knight supports initiatives designed to improve the liquidity and transparency of the equities markets. Market makers play a critical role in helping to insure the equities markets are vibrant and robust – this is particularly important in less active securities. We believe that the McHenry and Nasdaq proposals will benefit all market participants including, issuers, investors (institutional and retail), liquidity providers, and the overall U.S. economy by encouraging smaller companies to go public.

b. Consolidated Audit Trail (CAT)

Knight supports the SEC's stated goal of creating a more robust and effective cross-market order and execution tracking system. Knight believes that the U.S. markets today are well regulated and this is underscored by considerable volumes of data collected by regulators, such as OATS, ACT, OTS, COATS, Blue Sheets and other SRO audit trails. Knight supports market transparency and a thoughtful regulatory reporting structure that allows trading information to be made available to SROs and the SEC in a timely and consistent manner. In determining whether to adopt CAT, we have urged the SEC to evaluate and leverage all existing regulatory systems.

c. Access Fees

Access fees have been at the core of nearly every debate that has taken place around market structure for almost two decades – taking hold after the SEC Order Handling Rules were adopted in 1996 (SEC Release No. 34-37619A, footnote 272. September 6, 1996). The so-called "maker-taker" model is an exchange or trading platform pricing system that gives a transaction rebate to market makers providing liquidity (the makers); and charges a transaction fee to customers who take liquidity out of the market (the takers). Firms that "make" a trade post buy/sell offers and are paid a fee, typically between about 20 cents and 30 cents for every 100 shares traded. Firms that "take" those shares are charged a fee (the majority of retail investors are "takers" of liquidity). It was certainly not anticipated at that time, when spreads were multiples of what they are now, that this "communications charge" would become such a large component of the cost associated with a trade, or a profit center which had become the basis for routing and trading practices. As spreads have narrowed over the years, a $0.003/share access fee has become a significant cost associated with the trade. Indeed, in a one penny spread environment, access fees have the effect of increasing the economic spread by 60% (assuming $0.003 on each side of the quote). We therefore suggest that the SEC re-evaluate access fees in connection with its review of equity market structure, and consider eliminating the maker/taker model to insure we properly align market incentives with *bona fide* trading activities.

d. Wider spreads for certain securities

Knight fully supports the proposal to widen spreads for certain tiers of securities, including higher priced stocks, less liquid stocks, etc. In a one-penny spread environment it is very often difficult to aggregate meaningful volume at the one-penny increments for certain securities. As a result, it is difficult for investors to transact in these stocks, and makes it more challenging for smaller companies to go public.

In that regard, on April 5, 2012, the Jumpstart Our Business Startups Act (the "JOBS Act") was signed into law. The stated goal of the JOBS Act is to promote job growth by easing the capital raising process for small and mid-sized companies. Many of the reforms included in this bill aim to reduce the regulatory burdens and cost of raising capital associated with previous public and private offering rules. Knight fully support the "tick-size" study offered by Representative David Schweikert that was included in Title I, Section 106(b) of the JOBS Act. Under this section, the SEC is directed to conduct a study examining:

- the transition to trading and quoting securities in one penny increments, also known as decimalization;
- the impact that decimalization has had on the number of initial public offerings since its implementation relative to the period before its implementation;
- the impact that this change has had on liquidity for small and middle capitalization company securities and whether there is sufficient economic incentive to support trading operations in these securities in penny increments.

We look forward to the SEC's study and believe the results will indeed show that the securities of emerging growth companies should be quoted and traded using a minimum increment of greater than $0.01 – for example, $0.05.

e. Market Maker Obligations

Knight has previously proposed to the SEC that it consider adopting additional market maker obligations. Historically, market maker rules were designed to require market makers to maintain two-sided markets to ensure that investors can buy or sell a security any time and at a competitive price. In fact, during the recent Facebook IPO, many market making firms did just that. They processed hundreds of millions of shares of investor orders despite the technology issues experienced by Nasdaq. As a result of these extraordinary efforts to service investor needs during a highly dysfunctional IPO opening, media reports have estimated that market making firms lost more than $450 million. As we have noted above, our sincere hope is that Nasdaq takes the necessary measures to address the full scope of the industry losses.

Over the years, as the market structure changed, market maker obligations have evolved into the current rule set. Although there have been some changes adopted post-May 6, 2010 (e.g., the elimination of stub-quotes), now is an opportune time to update rules and establish clarity around what qualifications and obligations market makers should be expected to meet in return for any benefits they receive.

While there are important specific elements that must be considered when adopting any new market maker rules, as a policy matter we support rules that would impose even stronger obligations on market makers. For example:

- Based on the price and average daily volume (ADV) of the stock, market makers should be required to quote "at the inside" at various tier levels (5-10% of the time during market hours), with minimum size requirements (200, 500, 1000 shares).
- Market makers should face higher capital requirements. Due to the risk associated with increased market maker obligations, capital requirements for market makers should be based on their quoting obligations in addition to the existing position based capital requirement.
- Market makers should be required to keep their quotes "live" for at least one second. In today's world of hyper-speed trading, it is sometimes difficult to access quotations which appear in the market because they are cancelled in fractions of a second after being posted. Although many may view this recommendation as too aggressive, we firmly believe market maker quotes should not be permitted to be cancelled for a minimum of one second to enable other maker participants to access that quote. In our view, this will restore a good deal of credibility to the posted quotations in the market, and will eliminate a good deal of trading behavior which does not contribute meaningful liquidity to the market.

We believe these proposals represent meaningful reform that will make our markets better and more resilient, particularly in times of high volatility and price dislocation.

<u>Conclusion</u>

Knight appreciates the constructive roles this Committee and Subcommittee have played in the oversight of the markets and the rulemaking process. Your oversight helps to ensure that the U.S. capital markets remain competitive and innovative, thus benefiting all investors.

We also fully support this Subcommittee's and SEC's initiatives to review the broad range of market developments which have helped shape our equity markets in recent years. Competition and innovation, spurred by insightful rule changes fostered by the SEC, have resulted in dramatic improvements in market technologies and execution quality for the benefit of public investors – large and small. The U.S equity markets are the most liquid and efficient in the entire world, and have performed exceedingly well over the last decade. From an execution quality perspective, we believe that there has never been a better time to be an investor in U.S. equities. The advantages are considerable, including: speed and stability, price improvement, and a significant reduction in transaction costs. The empirical and statistical evidence available show tremendous investor benefits under the current trading and regulatory market structure.

We echo the comments of many of the members of Congress, the SEC Chairman and SEC Commissioners that these important issues must be driven by the careful analysis of empirical data, and not be driven by emotion or politics. Indeed, former SEC Commissioner Casey stated quite pointedly,

> [I] think it is necessary for the Commission to first develop a deeper understanding of the whole range of U.S. equity market structure issues before we consider adopting these amendments. In my view, it is important that regulators act with humility. Sometimes we don't know what we don't know, and if we rush to regulate without a complete understanding of the extent to which complex and dynamic activities may be interrelated, the specter of unintended consequences looms large. The regulatory process for rethinking market structure, like short selling, needs to be driven by data, not politics or unfounded assumptions.
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> SEC Open Meeting, Commissioner Kathleen L. Casey (October 21, 2009)

We are confident that an independent SEC will be careful and thoughtful in its work - and not be swayed by any market participant's self-interest. We urge the Committee, Subcommittee, and the SEC to look closely at the statistical evidence of how efficiently the equities markets

currently operate; to assess how much value the current system brings to all investors; and to insure that any rulemaking withstands a rigorous cost-benefit analysis. Rules that are approved without statistical analysis, and simply under the auspices of a pilot, can have significant unanticipated consequences to the marketplace and investing public. In short, we must insure that any proposed new rules do not do more harm than good.

Thank you for your interest in these issues and for the opportunity to contribute to this important dialogue.