May 24, 2018

Via Electronic Mail (rule-comments@sec.gov)

Mr. Brent J. Fields, Secretary
Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

Re: Transaction Fee Pilot for NMS Stocks, File No. S7-05-18

Dear Mr. Fields:

The Healthy Markets Association appreciates the opportunity to offer comments to the Securities and Exchange Commission regarding its March 14, 2018 Proposal for a Transaction Fee Pilot for NMS Stocks (the Proposal).[1] The main parameters of the Proposal are well-considered, including that it would:

- Be implemented directly as a Commission Rule, instead of an NMS Plan;
- Include all appropriate exchanges;
- Include a "no rebate" bucket; and
- Include a broad scope of stocks for inclusion.

That is not to say that the Proposal cannot be improved: it can. For example, as discussed in greater detail below, we are particularly concerned by the Proposal's lack of explicit controls for different types of order routing incentives, as well as its potential exclusion of some "market maker" incentives.

Nevertheless, the broad outlines of the Proposal are constructed in a manner to provide significant information regarding the impacts of transaction fees and rebates on order routing behavior. We are extremely pleased by the thoughtful Proposal, and we urge the Commission to improve upon it and implement it without delay.

[1] *Transaction Fee Pilot for NMS Stocks*, SEC, 83 Fed. Reg. 13008 (Mar. 26, 2018), *available at*

HEALTHY MARKETS
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# About Healthy Markets

The Healthy Markets Association is an investor-focused not-for-profit coalition working to educate market participants and promote data-driven reforms to market structure challenges. Our members, who range from a few billion to hundreds of billions of dollars in assets under management, have come together behind one basic principle: Informed investors and policymakers are essential for healthy capital markets.[2]

# Background

The issues addressed by this Proposal arise from an overly complex market structure that lacks both transparency and robust competition. The Proposal is intended to explore the extent to which two types of significant order routing incentives -- exchanges' transaction fees and rebates -- may be impacting brokers' order routing decisions.[3] Of course, brokers' best execution obligations require them to route based on their customers' best interests, not their own. In fact, FINRA has explicitly stated that brokers "should not allow access fees charged by particular venues to inappropriately affect their routing decisions, and, in general, a firm's routing decisions should not be unduly influenced by a particular venue's fee or rebate structure."[4]

Unfortunately, brokers' customers generally don't currently know exactly how their brokers route their orders, nor do they have a complete understanding of their brokers' conflicting incentives. Regulators often have even less information. Given the lack of transparency in both incentives and order routing behavior, it is not surprising that best execution has been difficult to enforce.[5]

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[2] To learn more about Healthy Markets, please see our website at http://www.healthymarkets.org.

[3] While transaction fees and rebates are common in the United States, they are not the only potential incentives that could create conflicts of interest for brokers in order routing. Notably, under the MiFID II regime in Europe, the regulatory focus has been on eliminating "inducements" that could create the "principal-agent problem." That is more than just fees and rebates. Thus, while this Proposal addresses significant contributors to a current conflict of interest in the US markets, it will not eliminate or address all potential sources of that conflict.

[4] FINRA, *Notice to Members 15-46: Guidance on Best Execution Obligations in Equity, Options and Fixed Income Markets*, Nov. 2015, *available at* http://www.finra.org/sites/default/files/notice_doc_file_ref/Notice_Regulatory_15-46.pdf.

[5] To date, despite hundreds of millions of dollars in regulatory enforcement actions against brokers and ATS operators regarding their institutional order routing and execution practices, there has only been one recent "best execution" case by FINRA, and that was in the retail trading context. *E*Trade Securities,*

To address some of these basic concerns, the Commission has, over the years, adopted several proscriptive rules designed to help protect investors, promote brokers' fulfillment of their best execution responsibilities, and ensure fair access to market centers. These include the access fee cap under Rule 610(c) and the order protection rule under Rule 611. We share the frustrations of many that these proscriptive rules may give rise to other unintended consequences and market complexities.[6] On the other hand, in the absence of useful disclosures to investors and the Commission, these proscriptive substantive limits are essential.

Nevertheless, despite these rules, there is significant evidence that brokers are routing orders in ways that may maximize the brokers' profits, but not necessarily provide their customers with "best execution."[7] Order routing incentives may also distort the markets in deleterious ways.

While disclosure may not necessarily cure all market structure ills, improved disclosures of order routing incentives and practices -- including on a trade-by-trade basis -- would dramatically improve market participants' and the Commission's ability to ensure brokers are fulfilling their best execution obligations.[8]

For decades, market venues have offered rebates to attract order flow.[9] As the Commission thoughtfully explains in the Proposal,

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*LLC*, FINRA Letter of Acceptance, Waiver, and Consent, No. 20130368815-01, (2016), *available at* http://www.finra.org/sites/default/files/fda_documents/2013036881501_FDA_RB7X2749.pdf. In many of these institutional order routing enforcement actions, however, the facts demonstrated that brokers were, in fact, routing orders in ways, or permitting others' activities, that benefited the brokers' financial interests and were not in the best interests of the customers whose orders they were handling.

[6] *See, e.g.*, Hester M. Peirce, *Remarks before the SIFMA Equity Market Structure Conference*, Apr. 18, 2018, *available at* https://www.sec.gov/news/speech/speech-peirce-041818.

[7] For example, we note that venues that may exhibit lower effective spreads and total transactions costs for investors appear to enjoy significantly smaller market share than venues that appear to offer lower quality executions, but appear to have greater incentives (and lower costs) for brokers. While best execution is not exclusively a "best price" standard, this discrepancy nevertheless raises significant questions as to whether the agents are fulfilling their duties to their principals, or are instead succumbing to the classical concerns of a "principal-agent problem."

[8] Importantly, the Commission has separately proposed dramatically expanding brokers' disclosure obligations to both their customers and the public. *Disclosure of Order Handling Information*, SEC, 81 Fed. Reg. 49432 (Jul. 27, 2016), *available at* https://www.gpo.gov/fdsys/pkg/FR-2016-07-27/pdf/2016-16967.pdf ("Order Routing Proposal"). We reiterate our request for the Commission to implement revised order handling reforms without delay.

[9] Memorandum from the Commision Staff of the Division of Trading and Markets to the Equity Market Structure Advisory Committee, *Maker-Taker Fees on Equities Exchanges*, Oct. 20, 2015, available at https://www.sec.gov/spotlight/emsac/memomaker-taker-fees-on-equities-exchanges.pdf (offering a detailed discussion on the origins and evolutions of market venues' order routing incentives).

> [t]he predominant model that has emerged in the U.S. equities markets is the ''maker-taker'' fee model, in which, on the one hand, a trading center pays its broker-dealer participants a per share rebate to provide (i.e., ''make'') liquidity in securities and, on the other hand, the trading center assesses them a fee to remove (i.e., ''take'') liquidity. The trading center earns as revenue the difference between the fee paid by the ''taker'' of liquidity and the rebate paid to the provider or ''maker'' of liquidity.[10]

Trading centers that offer "taker-maker" pricing operate using an inverted structure, where a fee is assessed on the provider of liquidity and the rebate is paid to the taker.

With the adoption of Rule 610 under Regulation NMS,[11] access fees to take liquidity were limited to not more than 30 cents per 100 shares. Importantly, there was no magical reason for the selection of this level. Rather, at the time Reg NMS was adopted well-over a decade ago, 30 cents per 100 shares "largely codified the prevailing fee level set through competition among the various trading centers."[12] The Rule 610(c) cap does not limit the fee charged on an inverted exchange, the practical economics are nevertheless similar.[13]

As the Commission staff has also noted, "[t]he Rule 610 cap on fees indirectly limits the size of the rebates that an exchange can offer because exchanges typically use fees collected on one side of the transaction to fund the rebates they pay on the other side."[14] That said, the rebates may, and often do, exceed the fees paid. In fact, in many instances, execution venues may further subsidize orders beyond the fees assessed on the other side of the transactions.[15] Further, unlike fees, which may be known at the

[10] Proposal, at 13009.
[11] Regulation NMS, SEC, 70 Fed. Reg. 37496 (Jun. 29, 2005), *available at* https://www.sec.gov/rules/final/34-51808.pdf.
[12] Proposal, at 13010 (citing Regulation NMS, at 37545 (stating that ''the $0.003 fee limitation is consistent with current business practices, as very few trading centers currently charge fees that exceed this amount'')).
[13] Proposal, at 13010.
[14] SEC Staff Memorandum to the Equity Market Structure Advisory Committee, at 3, Oct. 15, 2015, *available at* https://www.sec.gov/spotlight/emsac/memo-maker-taker-fees-on-equities-exchanges.pdf; see also Proposal, at 13010.
[15] Chester S. Spatt, *Is Equity Market Structure Anti-Competitive?,* at 4, May 24, 2018 (finding that "Maximum rebates offered by various exchange exceed the cap on fees under Regulation NMS (30 mills per share). Hence, cross-subsidization of trading is not uncommon.").

time of the transaction, the amount of a rebate ultimately paid for a particular transaction may not be.[16]

The maker-taker pricing model dominates the current exchange market shares. While numerous execution venues have experimented with other pricing structures to attract order flow, those efforts have met extremely limited success[17].

Unfortunately, the maker-taker pricing model creates a fundamental conflict of interest for brokers looking to route their customers' orders.[18] On the one hand, broker-dealers owe their customers best execution. On the other hand, broker-dealers are typically incentivized to "avoid fees or earn rebates—both of which typically are not passed through the broker-dealer to its customers—from the trading centers to which they direct those orders for execution."[19]

At its worst, a broker is incentivized to route an order to the venue that pays it the most (or costs the least), instead of the venue that has the highest likelihood of offering the best execution for its customers, such as one that offers a higher probability of execution or meaningful price improvement.[20] In many ways, the fee and rebate structure is remarkably similar in impact to the payment for order flow that has come to dominate the retail trading environment. The broker has to choose: best execution for

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[16] Spatt, at 5.

[17] See SEC Staff Memorandum to the Equity Market Structure Advisory Committee, Oct. 15, 2015, *available at* https://www.sec.gov/spotlight/emsac/memo-maker-taker-fees-on-equities-exchanges.pdf

[18] Some brokers may be compensated on a "cost plus" methodology, in which the customer on whose behalf the broker is working would absorb the costs associated with the transaction, plus the broker's commission. Such an arrangement would reduce the financial incentive of a broker to route the order to a particular venue based on its own separate costs or benefits. However, as discussed in detail below, unless the broker was compensated on this model for all customers, then the broker may still be incentivized to route to particular venues to hit specific pricing tiers.

[19] Proposal, at 13010.

[20] In 2014, the U.S. Senate Permanent Subcommittee on Investigations held a groundbreaking hearing highlighting these exact concerns. *Conflicts of Interest, Investor Loss of Confidence, and High Speed Trading in U.S. Stock Markets*, Hearing before the Permanent Subcommittee on Investigations, Committee on Homeland Security and Government Affairs, June 17, 2014, *video available at* http://www.hsgac.senate.gov/subcommittees/investigations/hearings/conflicts-of-interest-investor-loss-of-confidence-and-high-speed-trading-in-us-stock-markets. Similarly, for an overview of many institutional investors' concerns with the maker-taker pricing model, we urge you to review an October 17, 2015 presentation to the EMSAC made by Capital Group's Matt Lyons. Matt Lyons, *EMSAC - Presentation on Maker Taker Pricing*, Oct. 17, 2015, *available at* https://www.sec.gov/spotlight/capital-group-presentation-matt-lyons-emsac.pdf.

the customer or maximizing its own profit.[21] This conflict of interest directly calls into question whether brokers may be fulfilling their best execution obligations.[22]

For example, using publicly available TAQ data, it appears as though trading on some exchanges is more likely to result in executions where the price will move immediately after a customer's execution, in the direction the customer may have preferred. For example, a market participant may have its buy order executed at $10.01 on an exchange, only to see the price move to $10.00 nearly immediately after the execution. While market structure experts may call this "venue toxicity," a lay person might think of this as a big item going on sale the day after you bought it. It's buyers' remorse. It happens often through no fault of the buyer. And it is likely no accident. In fact, in some venues, as much as 50% or more of the trading may occur just under 2 milliseconds before a price change.

Further, the period of time an order may rest on some exchanges before it is filled may be greater and the fill rate may be lower on some exchanges, yet these exchanges may enjoy greater market share. Why? How does it benefit the customer to wait longer, have a lower chance of getting filled, and then have a higher likelihood of having "buyer's remorse?" Why do some brokers route market orders to venues that provide them with speedy executions (but also pay them the most), yet route limit orders to venues with long queues? Brokers can't simply keep routing orders to preferred venues when they know better executions may be available elsewhere. And they also can't keep their head in the sand and ignore venues that may offer better executions, simply because the economics for the broker may be less favorable. In fact, brokers are obligated to "compare the quality of the executions it is obtaining via current order routing and

[21] See *Conflicts of Interest, Investor Loss of Confidence, and High Speed Trading in U.S. Stock Markets*, Hearing of the Permanent Subcommittee on Investigations, Senate Committee on Homeland Security and Government Affairs, 113th Cong., (2014), video available at https://www.hsgac.senate.gov/subcommittees/investigations/hearings/conflicts-of-interest-investor-loss-of-confidence-and-high-speed-trading-in-us-stock-markets.

[22] *See, e.g.*, Robert H. Battalio, Shane A. Corwin, and Robert H. Jennings, *Can Brokers Have It All? On the Relation Between Make-Take Fees and Limit Order Execution Quality*, Journal of Finance 71, 2193–2237 (2016), *available at* http://onlinelibrary.wiley.com/doi/10.1111/jofi.12422/full (finding that some broker-dealers route nonmarketable orders to the trading center offering the highest rebate, and do so in a manner that may be inconsistent with their duty of best execution); Chester S. Spatt, *Are Equity Market Rebates Anti-Competitive?*, Apr. 20, 2018 (working draft available upon request to the author).

execution arrangements (including the internalization of order flow) to the quality of the executions that it could obtain from competing markets."[23]

This Proposal explores why brokers route their orders the ways they do: it focuses on brokers' incentives. In other jurisdictions, regulators have specifically prohibited inducements that create these types of conflicts of interest, such as payments for order flow. The Commission's focus on brokers' incentives is both necessary and consistent with the worldwide trend to increasingly scrutinize brokers' compliance with their best execution obligations.[24]

Investors, brokers, and even executives of leading market venues,[25] have suggested that a ban on rebates could reduce conflicts of interest and complexity. Perhaps in recognition that a ban might be too draconian of a step for the Commission to take directly, many experts and policymakers[26] have urged the Commission to adopt a pilot program to study the effects to aid in the discovery of optimal price points and to reduce the obvious conflicts of interest.[27] In 2015, Nasdaq even went so far as to unilaterally dramatically lower access fees and rebates in 14 stocks for four months.[28]

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[23] FINRA, *Notice to Members 15-46: Guidance on Best Execution Obligations in Equity, Options and Fixed Income Markets*, Nov. 2015, *available at* http://www.finra.org/sites/default/files/notice_doc_file_ref/Notice_Regulatory_15-46.pdf.

[24] See, e.g., FINRA, *2018 Regulatory and Examinations Priorities Letter*, Jan. 8, 2018, *available at* http://www.finra.org/industry/2018-regulatory-and-examination-priorities-letter; see also, Financial Conduct Authority, *Investment managers still failing to ensure effective oversight of best execution*, Mar. 3, 2017, available at https://www.fca.org.uk/publications/multi-firm-reviews/investment-managers-failing-ensure-effective-oversight and Financial Conduct Authority, *TR14/13 - Best execution and payment for order flow*, July 31, 2014, *available at* https://www.fca.org.uk/publications/thematic-reviews/tr14-13-best-execution-and-payment-order-flow.

[25] *See, e.g.*, Matthew Leising and Sam Mamudi, *Sprecher of ICE Says Banning Maker-Taker Would Simplify Trading*, Bloomberg, Feb. 12, 2014 (quoting Jeffrey Sprecher, CEO of Intercontinental Exchange Group Inc.), *available at* https://www.bloomberg.com/news/articles/2014-02-12/sprecher-of-ice-says-banning-maker-taker-would-simplify-trading.

[26] *See, e.g.*, H.R. 1216, the Maker-Taker Conflict of Interest Reform Act of 2015, 114th Cong. 2015. *See also* Letter from Charles Schumer, U.S. Senator, to Hon. Mary Schapiro, Chair of SEC, May 10, 2012 ("These models create a conflict of interest, as brokers may be incentivized to execute trades on a particular venue even if that venue is not offering the best price.").

[27] While the maker-taker pricing model dominates in the U.S., order routing incentives vary significantly around the world. The Board of the International Organization of Securities Commissions (IOSCO), *Report on Order Routing Incentives*, CR07/2016, Dec. 2016, *available at* http://www.iosco.org/library/pubdocs/pdf/IOSCOPD551.pdf.

[28] Notice of Filing and Immediate Effectiveness of Proposed Rule Change To Amend NASDAQ Rules 7014 and 7018, Sec. and Exch. Comm'n, 80 Fed. Reg. 594 (Jan. 6, 2015), *available at* https://www.gpo.gov/fdsys/pkg/FR-2015-01-06/pdf/2014-30903.pdf.

Unfortunately, that brief study "involved a small sample of stocks on a single market for a short duration, all of which make it difficult to draw inferences about what would happen if all exchanges participated in the same experiment simultaneously."[29]

Many market participants have remained concerned with the conflicts of interest for routing brokers arising from these fees and rebates, and there has still been no thorough analysis of the issue.

On July 8, 2016, the SEC''s Equity Market Structure Advisory Committee recommended that the Commission "propose a pilot program to adjust the access fee cap under rule 610."[30] The key substantive parameters of the EMSAC Recommendation were for the Commission to conduct a study of randomly selected stocks and ETFs with over $3 billion in market capitalization for a two-year period. The securities would have been broken into four buckets:

1. Control bucket;
2. $.0020 per share access fee cap;
3. $.0010 per share access fee cap; and
4. $.0002 per share access fee cap.

While we applauded that effort, the recommendation left open many opportunities for improvement, including that it did not cover as broad of a list of stocks as possible, it didn't include all exchanges, and it didn't include a "no rebate" or "zero" bucket.

Now, nearly two years after that recommendation, and more than five years after these issues first rose to prominence in the press, market participants and the Commission still do not know how transaction fees and rebates really influence order routing behavior, execution quality, or market quality overall. The Proposal is designed to do just that.[31]

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[29] Proposal, at 13011.
[30] EMSAC, *Recommendation for an Access Fee Pilot*, July 8, 2016, *available at* https://www.sec.gov/spotlight/emsac/recommendation-access-fee-pilot.pdf (hereinafter, "EMSAC Recommendation").
[31] Proposal, at 13014.

# Review of the Proposal

The Proposal would, for trading in all NMS stocks with a share price at or above $2, create four groups with different pricing parameters.[32]

| Group | Applicable Fees | Rebates and Linked Pricing |
|---|---|---|
| Test Group 1 | Cap lowered to 15 cents per 100 shares for removing and providing displayed liquidity | Not capped |
| Test Group 2 | Cap lowered to 5 cents per 100 shares for removing and providing displayed liquidity | Not capped |
| Test Group 3 | Rule 610(c) cap of 30 cents per 100 shares remains (including no cap on fees for providing liquidity) | Prohibited* |
| Control Group | Rule 610(c) cap of 30 cents per 100 shares remains (including no cap on fees for providing liquidity) | Not capped |

*As discussed in greater detail below, the Proposal would permit a limited market maker exception.

## Analysis of Included Trading Venues

The Proposal would include all equities exchanges.[33] In addition to excluding options exchanges, the Proposal would also not include Alternative Trading Systems (ATSs).[34]

We strongly believe that, to prevent gaming or other unintended consequences, it is very important for the pilot to cover as many equity execution venues as possible.[35]

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[32] Proposal, at 13015.
[33] Proposal, at 13015.
[34] Proposal, at 13015.
[35] We agree with the Proposal's determination to exclude options exchanges from the pilot for the reasons articulated in the Proposal. We note, however, that these products are inextricably linked and may produce unintended trading consequences.

We agree that the Commission's determination that the pilot should collect data on all equities exchanges, even though the fees charged on inverted exchanges may not otherwise be subject to the Rule 610(c) fee cap. Nevertheless, the regulatory framework for all equities exchanges is sufficiently similar to permit ready inclusion of them.

While we might prefer, in the abstract, for ATSs to be included in the pilot, we worry that doing so might introduce significant complexity and delays. Unfortunately, the current regulatory framework for ATSs does not readily lend itself for inclusion in the pilot. For example, some ATSs may not clearly assess any transaction-specific fees or rebates. Thus, imposing the terms of the pilot on these execution venues could force firms to first significantly modify their pricing regimes.[36] Even further, it's not entirely clear that even if modified, the pilot's terms would not be readily avoided. That's because many ATSs are also operated as part of brokers' other order routing services. Thus, a fee or rebate could be assessed or provided in ways that are intended to be captured by the Proposal, but likely would not. Attempting to reconcile this inconsistency could further complicate the pilot, and may still prove ineffective.

Further, while we worry about a shift in order routing away from exchanges to ATSs (who can still offer rebates) or single dealer platforms that may provide payment for order flow, we think that the impacts may be muted somewhat by the lack of protected quotes on ATSs and other factors. Further, while we might expect to see some shifts in order routing behavior as a result of the pilot, that is precisely the point. Put another way, if we see a massive shift in quote and trading activity from exchanges to ATSs, then the pilot would appear to have demonstrated that the fees and rebates appear to play a significant role. Then, we would want to examine the impact of that shift on firms' execution quality, as well as the overall market quality.

While the Proposal would exempt ATSs from the pilot, we nevertheless believe that the Commission and market participants will need to be increasingly diligent with their brokers to ensure that any shifts (including to ATSs) are justified based on "best execution" considerations, and not simply as a result of the brokers' proprietary cost considerations.[37] To do this effectively, however, we believe that investors would benefit

[36] Letter from William P. Neuberger and Andrew F. Silverman, Morgan Stanley, to Brent J. Fields, SEC, May 19, 2016, available at https://www.sec.gov/comments/s7-23-15/s72315-37.pdf (explaining how ATS fees may be bundled with brokerage service fees).

[37] See, FINRA, *Notice to Members 15-46: Guidance on Best Execution Obligations in Equity, Options and Fixed Income Markets*, Nov. 2015, *available at* http://www.finra.org/sites/default/files/notice_doc_file_ref/Notice_Regulatory_15-46.pdf; see also FINRA, *2018 Regulatory and Examinations Priorities Letter*, Jan. 8, 2018, *available at* http://www.finra.org/industry/2018-regulatory-and-examination-priorities-letter.

significantly from the enhanced disclosures that would be required by separate pending SEC proposals regarding ATSs[38] and order routing.[39] Accordingly, we urge the Commission to adopt those outstanding rules without delay.

Again, we are disappointed that ATSs may be excluded from the pilot, but recognize the Proposal's analysis that it could create significant challenges for ATSs and their customers, and believe their exclusion is thus justifiable.

## Analysis of Included Securities

As with the scope of trading venues, we believe that the scope of covered securities should be as broad as reasonably practicable.

The Proposal, in our view, takes a well-considered approach by casting a broad net, and including all common stocks and Exchange Traded Products with a price of at least $2 at the time of the start of the pre-Pilot Period.[40] We would be concerned that, if ETPs or other NMS stocks are excluded from the pilot, the Commission and market participants would not only lose the potentially valuable information gained from their inclusion, but the pilot might also be compromised by complex "work-arounds", such as the creation and proliferation of ETPs that could be traded without being subject to the pilot parameters. If the Commission elects to exclude ETPs, we urge the Commission to monitor for, and restrict, these potential work-arounds.

On the other hand, we recognize that inclusion of ETPs may create different trading costs in similarly-constructed exchange traded products. That's because ETPs with identical underlying components could be put in different pilot groups. For ETPs, differences in overall trading costs may be particularly impactful because overall fees are often a key competitive differentiation between similarly constructed ETPs. Thus, if

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[38] *Regulation of NMS Stock Alternative Trading Systems*, SEC, 80 Fed. Reg. 80998 (Dec. 28, 2015), *available at* https://www.gpo.gov/fdsys/pkg/FR-2015-12-28/pdf/2015-29890.pdf. Healthy Markets has offered detailed comments to this proposal. See, e.g., Letter from Dave Lauer, Healthy Markets Association, to Brent J. Fields, SEC, Feb. 26, 2016, available at https://www.sec.gov/comments/s7-23-15/s72315-18.pdf (Healthy Markets ATS Proposal Comment Letter I).

[39] Order Routing Proposal. Healthy Markets has offered detailed comments to this proposal. *See, e.g.*, Letter from Tyler Gellasch, Healthy Markets Association, to Brent J. Fields, SEC, Sept. 26, 2016, *available at* https://www.sec.gov/comments/s7-14-16/s71416-19.pdf; *see also*, Letter from Tyler Gellasch and Chris Nagy, Healthy Markets Association, to Brent J. Fields, SEC, Jan. 6, 2017, *available at* https://www.sec.gov/comments/s7-14-16/s71416-1464340-130322.pdf.

[40] Proposal, at 13017.

the Commission elects to include ETPs, it should be careful to work with ETP providers, monitor for potential changes, and take any appropriate action as may be in the public interest.

If a security in a Test Group closed at a price below $1 during the pilot, it would be removed from the pilot.[41] In choosing the $2 and $1 thresholds, the Proposal follows the reasonable parameters established during Commission's controversial Tick Size Pilot. Both of these stock pricing parameters seems appropriate. By setting the initial pilot securities as those with prices of at least $2, the Commission is including significant sample sizes across multiple market capitalizations, which is essential. Further, the Proposal's determination to pull out securities that close at under $1 during the pilot seems appropriate, especially given the fundamentally different fee structures applicable to stocks with prices less than $1.00.[42]

We note that by linking the inclusion of securities to dollar trading levels, and not market capitalization, the Proposal would allow for study of the impacts of transaction fees and rebates across a maximally broad spectrum of NMS stocks, from small-cap to mega-cap stocks.[43] We agree with that approach. Importantly, we also think that there is likely significant value to analyzing these order routing incentives on the basis of the stock prices of the listed securities.

Consistent with its broad-based approach, the Proposal similarly does not allow for corporate issuers to "opt-out" of the pilot. While we are sympathetic to concerns that the pilot may lead to decreased quote (and perhaps trade) volumes on exchanges, we are also deeply worried that an "opt out" provision for issuers could reduce the representativeness of the test, particularly for lower-priced and small-cap stocks. We further worry that exchanges seeking to preserve their market share, may pressure or even directly incentivize corporate issuers listed on their venues to opt out. If any issuer "opt out" provision is permitted, we would urge the Commission to clearly articulate the purpose (which should be other than to simply avoid the pilot's potential results), and construct it very narrowly.

The Proposal engages in an interesting discussion of the potential impacts of rebates on trading in securities of different market capitalizations, noting that some researchers have found rebates

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[41] Proposal, at 13017.
[42] *See, e.g.*, 17 CFR 242.610(c)(setting the fee cap at 0.3% when the protected quote is less than $1).
[43] Proposal, at 13018.

> are distortive and unnecessary for liquid large capitalization companies because, to the extent that those securities already trade at spreads no wider than the minimum trading increment, the rebate cannot serve to narrow the quoted spread further and the high fee that offsets the rebate undermines price transparency because a quote at the same displayed price on different equities exchanges (with different levels of fees) less closely reflects the actual net price to trade at any one exchange.[44]

The Proposal continues by presenting the argument that rebates could help narrow quoted spreads, which may be particularly valuable for small-cap and mid-cap stocks, which "can face persistent challenges in attracting liquidity."[45]

While this is a fascinating debate, and one that has raged for years, it is one that could use detailed study -- and data. For that reason, we agree with the Proposal's determination to include stocks across capitalization levels, from small-cap on up.[46]

The impact of fees and rebates on securities with different liquidity and trading volumes is a key objective of the pilot. And while we might speculate, as the Proposal does, about potential impacts on securities with different capitalization levels and trading profiles,[47] we don't think that this exercise is valuable. Rather, that is the point of the pilot: to provide market participants and the Commission with the data needed to make those analyses.[48]

The Proposal contends that this pilot may run concurrently with the ongoing Tick Size Pilot without significant interference.[49] Given the Commission staff's announcement that

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[44] Proposal, at 13018 (citing James Angel, Lawrence Harris, and Chester Spatt, *Equity Trading in the 21st Century*, Quarterly Journal of Finance 1, (2011), *available at* https://doi.org/10.1142/S2010139211000067.),

[45] Proposal, at 13018 (citing Joe Ratterman and Chris Concannon, BATS, *Open Letter to U.S. Securities Industry Participants Re: Market Structure Reform Discussion*, at 1, Jan. 6, 2015, *available at* http://cdn.batstrading.com/resources/newsletters/OpenLetter010615.pdf).

[46] Proposal, at 13018.

[47] For example, while many may focus on market capitalization, we might speculate that rebates and linked pricing may have greater influence on order routing behaviors for lower priced stocks.

[48] We note that question 14 specifically requests input on the pilot's impact on capital formation. Proposal, at 13019. However, the Proposal elsewhere explicitly states the primary objectives of the Proposal, which do not include studying potential capital formation. Proposal, at 13014.

[49] Proposal, at 13018-13019.

the Tick Size Pilot will be permitted to end in October 2018,[50] we are not convinced that the very remote possibility of this added complexity is worth significant contemplation. Further, we do not believe that there needs to be any particular lag in time between the completion of the active period in wider ticks from that Pilot and the beginning of the pre-Pilot period for this study. Once the wider ticks are out of the system, the market will adapt to an equilibrium baseline state (i.e., the way it was before the pilot) extremely quickly. Therefore, we would urge the Commission to not delay the implementation of the revised Proposal based upon the Tick Size Pilot.

## Analysis of Group Construction and Pilot Parameters

Under the Proposal, the Commission to create an initial List of Pilot Securities, that would include 1,000 securities in each of Test Group 1, Test Group 2, and Test Group 3.[51] All remaining eligible securities would be assigned to the Control Group.[52] Securities in each Group would be selected through "stratified sampling by market capitalization, share price, and liquidity."[53] We believe that these parameters are consistent with the Proposal's broad scope and approach, and would offer the opportunity for statistically significant analyses of the results.[54]

<u>Test Groups 1 and 2</u>

Test Groups 1 and 2 would not directly limit the payments of rebates or linked pricing, the study of which is the primary purpose of the Proposal. However, both of these groups would adopt fee caps, which is widely expected to reduce rebates and linked pricing. As described in more detail below, this focus on fees, as opposed to rebates, is frustrating, but understandable.

In Test Group 1, equities exchanges would not be able to impose any fee or fees for the display of, or execution against, the displayed best bid or offer of such market in NMS

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[50] Brett Redfearn, *Remarks at the Equity Market Structure Symposium Sponsored by the University of Chicago and the STA Foundation*, Apr. 10, 2018, *available at* https://www.sec.gov/news/speech/speech-redfearn-2018-04-10.
[51] Proposal, at 13019.
[52] Proposal, at 13019.
[53] Proposal, at 13019. Notably, while the Proposal suggests that it would also account for stocks included in the currently-running Tick Size Pilot, we do not think this will be necessary, as we expect the pilot here will be implemented after the Tick Size Pilot is ended in October 2018.
[54] See Proposal, at 13020.

stocks that exceeds or accumulates to more than $0.0015 per share. Thus, this fee cap would apply to both fees assessed for providing or removing liquidity.[55]

Test Group 2 is essentially identical to Test Group 1, except the cap is set to $0.0005 per share.[56] In both Test Groups 1 and 2, like the current Rule 610(c) fee cap, the cap would apply to only transactions against the protected quote.[57]

In both cases, the selected cap levels appear to well-justified. In Test Group 1, the cap is reduced significantly, but still to a level that would appear to permit significant (albeit lower) rebates using the current funding structure. Test Group 2, by contrast, is intended to have a "materially lower cap than Test Group 1 to further reduce the potential distortion created by current level as of rebates, while continuing to permit, for the preponderance of exchange transaction volume, the ability of an exchange to maintain its net profit on a transaction."[58] In taking this approach, the Proposal asserts that

> an exchange would only have that amount (or less" to fund the rebate it pays to the other side of the transaction, unless it uses other sources of revenue to subsidize the rebate. Therefore, the Commission expects that Test Group 2's $0.0005 cap would significantly reduce, if not eliminate, the likelihood that an exchange would choose to offer rebates at their current levels for Pilot Securities in this group, while nevertheless retaining the ability of exchanges to compete by offering rebates if they so choose.[59]

We agree with the overall result that a $0.0005 level is appropriate. However, as discussed below, we are not entirely convinced that exchanges would not subsidize the rebate with other revenue sources, including other transaction, market data, and connectivity fees. In fact, there is already significant evidence to suggest that some exchanges are already subsidizing rebates with other revenues.[60] Thus, the limitation on fees may impact the magnitude of rebates paid, but this connection is indirect, at best.

[55] Proposal, at 13021.
[56] Proposal, at 13022.
[57] Proposal, at 13022.
[58] Proposal, at 13022.
[59] Proposal, at 13022.
[60] Chester S. Spatt, *Is Equity Market Structure Anti-Competitive?,* at 4, May 24, 2018 (finding that "Maximum rebates offered by various exchange exceed the cap on fees under Regulation NMS (30 mills per share). Hence, cross-subsidization of trading is not uncommon.").

Nevertheless, we agree that the decrease of fees is, by itself, a reduction of a market distortion, and should be considered. Further, to the extent that rebates have been traditionally funded by exchanges by the fees collected, we agree that this may lead to rebate reductions. However, this, again, is part of the reason why a study is needed.

The reduced transaction fee caps, similar to the existing Rule 610(c) limit on access fees, would also only apply to top-of-book orders for displayed liquidity.

We recommend that the Commission consider splitting each of Test Group 1 and Test Group 2. Test Group 1A would exist as currently structured, and Test Group 1B would include a "no rebate or linked pricing" constraint (including the application to depth-of-book and non-displayed liquidity) similar to Group 3. We would recommend repeating this for Test Group 2 as well. This would improve the ability of market participants, researchers, and the Commission to isolate the impacts of each of the transaction fees and rebates. Accordingly, we would recommend recalibrating the number of securities in each Test Group and the Control Group to rebalance them more equally. We recognize that this would result in 5 total test groups.

Alternatively, if the Commission is worried about the potential increase in complexity from such an approach, then we would recommend considering eliminate Test Group 1 (or our proposed Test Groups 1A and 1B), since the reduction in transaction fees in Test Group 1 is least likely to provide valuable data for the the study.

Test Group 3

Test Group 3 in the Proposal is constructed significantly differently than Test Groups 1 and 2. In Test Group 3,

> equities exchanges generally would be prohibited from offering rebates, either for removing or posting liquidity, and, as discussed further below, from offering a discount or incentive on transaction fee pricing applicable to removing (providing) liquidity that is linked to providing (removing) liquidity. In addition, for the reason discussed below, Test Group 3 would be unique in that the prohibition on rebates would apply not only to displayed top-of-book liquidity, but also would apply to depth-of-book and non displayed liquidity. In contrast, Test Groups 1 and 2, like the Rule 610(c) fee cap, only cap fees for the execution of an order

> against a ‘‘protected quotation,’’ which is defined as an exchange’s displayed top-of-book quote. While rebates would be prohibited in Test Group 3, transaction fees for securities in Test Group 3 would remain subject to the current $0.0030 access fee cap in Rule 610(c) for accessing a protected quotation.

Put another way, while the fee caps remain the same as under current Rule 610(c), rebates and linked pricing (which the pilot would seek to indirectly reduce in Test Groups 1 and 2) are eliminated. As we at Healthy Markets have said repeatedly, the maker-taker pricing model and rebates create a fundamental conflict of interest for brokers looking to route their customers’ orders. At its worst, a broker is incentivized to route an order to the venue that pays it the most (or costs the least), instead of the venue that that has the highest likelihood of fostering best execution for its customers.[61]

If a broker is incentivized by a rebate of X to route to Exchange A, and that rebate is reduced to ½X, it is possible that the broker’s routing behavior may not change. But that does not mean that the broker isn’t impermissibly allowing its pecuniary interests to influence its routing decisions to the detriment of its customers’ execution quality. The only sure-fire way to do that is to eliminate that conflict of interest altogether.

The Proposal suggests that the Commission has likewise concluded that “only a complete prohibition on rebates will allow the Commission to study directly these conflicts and their effects by observing what would happen in the absence of rebates.”[62] We agree with this decision.

Interestingly, however, Test Group 3 would not lower the existing rule 610(c) fee cap.[63] While the exchanges may not generally pay rebates for Test Group 3 securities, they could still charge significant transaction fees. The Proposal suggests that this is “intended to test, within the current regulatory structure, natural equilibrium pricing for transaction fees in an environment where all rebates are prohibited and exchanges do not need to charge offsetting transaction fees on the contra-side to subsidize those rebates.”[64] Put another way, are current transaction fees as high as they were in 2005 simply because they are used to pay for rebates, or is there some other reason?

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[61] Healthy Markets ATS Proposal Comment Letter I.
[62] Proposal, at 13022.
[63] Proposal, at 13023.
[64] Proposal, at 13023.

Clearly, since the fee cap was first adopted, Commission levels have fallen. As a result, these fees and rebates may now comprise a more material portion of brokers' costs.

However, by capping access fees for taking liquidity at $0.0030 per share, and not capping fees for providing liquidity, the Proposal appears to be introducing an unnecessary complexity. To maximize the comparability of results across the three Test Groups, we recommend that the Commission consider subjecting Test Group 3 to the same definition of "transaction fee" caps as is applied in Test Groups 1 and 2.

Notably, unlike Test Groups 1 and 2, Test Group 3's limitations would also apply to non-displayed and depth-of-book quotes.[65] This eliminates the risk that exchanges could dramatically distort results of the pilot by continuing to offer rebates on non-displayed or depth of book quotes. Again, this general prohibition on rebates and linked pricing will offer market participants and the Commission to see

> the impact of rebates on order routing behavior, execution quality, and market quality … In turn, this data may inform the Commission about the extent to which rebates offered by equities markets are compatible with broker-dealers executing their customers' orders in the best market.[66]

Lastly, despite the prohibition on linked pricing for Test Group 3, the Proposal would permit exchanges to adopt new rules to provide "no-rebate Linked Pricing" to their registered market makers if the discount or incentive is in consideration for meeting specified market quality metrics.[67] This permitted, linked pricing would thus be subject to a new set of market making standards. As discussed in greater detail below, this is a very, very complex issue, and we worry it may both unnecessarily complicate the pilot, while also undermining the results.

Control Group

[65] Proposal, at 13023.

[66] Proposal, at 13023 (citing 15 U.S.C. 78k–1(a)(1)(C)(iv)). Notably, this is also of keen interest to other regulators, including FINRA. See generally, FINRA, *Notice to Members 15-46: Guidance on Best Execution Obligations in Equity, Options and Fixed Income Markets*, Nov. 2015, *available at* http://www.finra.org/sites/default/files/notice_doc_file_ref/Notice_Regulatory_15-46.pdf; see also FINRA, *2018 Regulatory and Examinations Priorities Letter*, Jan. 8, 2018, *available at* http://www.finra.org/industry/2018-regulatory-and-examination-priorities-letter.

[67] Proposal, at 13023.

All eligible securities not allocated to one of the Test Groups would be left in the Control Group.[68] Trading in the Control Group would be conducted pursuant to existing rules. Rule 610(c) would cap access fees at $0.0030 per share, but it would not apply to fees for posting liquidity.[69] This Control Group is entirely appropriate, given the complexity of the study, and the need for a baseline against which to compare the results of the Test Groups.

Pilot Duration

The Proposal would have the pilot run for two years, but to automatically sunset after the first year.[70] It would also be bookended by two six-month study periods.[71] While the EMSAC Recommendation included a limited, three-month "phase in" for a handful of stocks, the Proposal does not.[72] We believe the six-month pre-Pilot and post-Pilot study periods are appropriate, and likely to provide adequate data against which to compare the data from during the pilot period. Many of the metrics that we might expect to be useful when analyzing brokers' order routing as part of the Proposal are likely already captured by the brokers as part of their existing regulatory obligations. Thus, to the extent that the Commission provides greater clarity on required disclosures, we might also urge it to include these metrics for the pre-Pilot and post-Pilot periods.

We recommend that the automatic sunset after one year be removed. Given the complexities of the pilot, and the opportunities for significant market evolutions, we believe that the pilot should be scheduled to run for two years.[73] If, for whatever reason, the Commission determines that the pilot should be revised or ended prior to its scheduled ending, the Commission is fully empowered to do so, as would be in the public interest and consistent with its mission and authority.

## Analysis of Proposed Transaction Fee and Rebate Disclosures

One of the greatest challenges in studying exchanges' order routing incentives is that they are not readily transparent. For example, if an exchange has a rebate or pricing tier, it is not necessarily clear what it is, to whom it may apply, how many firms may be

[68] Proposal, at 13024.
[69] Proposal, at 13024.
[70] Proposal, at 13025.
[71] Proposal, at 13025.
[72] Compare EMSAC Recommendation with Proposal, at 13026. ,
[73] We note the EMSAC Recommendation was for its similar Access Fee Pilot to run for two years. EMSAC Recommendation.

impacted, and what the impact would be on the firm's incentives to route orders to the exchange. Unfortunately, regulators, market participants, researchers and others may not be able to learn the answers, even though these answers may dramatically impact brokers' order routing incentives, and resulting conflicts of interest.

Some have even alleged that rebates and linked pricing opportunities may be custom-designed for specific customers of exchanges. While this allegation would suggest that exchanges may be violating their non-discrimination or other obligations, it nevertheless may be prevalent. But we don't know for sure.

As one academic has succinctly put it, "strengthening disclosure of the use of the various rebate pricing tiers would be useful."[74]

To be clear, exchange filings, including those related to transaction fees and rebates, are all public. However, the complexity, lack of key details, and cross-referencing of those filings makes it difficult, if not impossible, for market participants, researchers, or other third-parties to ascertain the exact levels of fees and rebates applicable to any particular firm or group of firms. In fact, in 2017, we at Healthy Markets have endeavored to review each exchange's filings and create a cost chart for each exchange. Despite decades of experience in this area, including specific expertise in deciphering complex exchange filings,[75] we were unable to reasonably efficiently do so.

In many trading firms, this process is performed manually each month, based on the firms' specific trading experiences and costs. Often, for larger firms, these reviews lead to negotiations with exchanges for customized pricing tiers.

In recognition of the difficulties in ascertaining this information, the Proposal would require the exchanges to post on their websites "downloadable file information on their fees (including rebates) and fee changes during the proposed Pilot (including for the pre-Pilot and post-Pilot Periods) using an eXtensible Markup Language (XML)."[76]This would be a marked improvement, but it would still be nowhere close to adequate to

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[74] Chester S. Spatt, *Is Equity Market Structure Anti-Competitive?*, May 24, 2018 (working draft available upon request to the author).
[75] For years, Healthy Markets Association has reviewed every single filing of the Self-Regulatory Organizations, and summarized them for our members and subscribers in our monthly publication, Market Structure Insights. For additional information on Market Structure Insights, see https://www.healthymarkets.org/market-structure-insights-1/#join.
[76] Proposal, at 13029.

reflect the multitude of complex, customized, and non-transparent pricing schedules applicable to the different firms in the marketplace.

The Exchange Transaction Fee Summary is intended to facilitate comparison of exchanges' basic fee structures and identify changes.[77] But rather than a comprehensive listing of fees and rebates, the proposed new summary would provide "Base" levels (which would be the "standard amount assessed or rebate offered before any applicable discounts, tiers, caps, or other incentives are applied") and "Top Tier" levels (which would be the fee assessed or rebate offered after all applicable discounts, tiers, caps, or other incentives are applied").[78] Exchanges would also have to calculate and disclose on a monthly basis the "average" and "median" per share realized fees and rebates, overall, and by test group.[79] Of course, this is incredibly important and valuable information.

Similarly, it is important for regulators, market participants, researchers, and others to know which firms are subject to which fees. For example, it may be that one or more market makers or large brokers may enjoy remarkably different cost structures than other market participants.

The Proposal recognizes that these rudimentary disclosures "ignore[] significant variation in exchange fee schedules."[80] The Proposal argues that requiring more detailed disclosures could "complicate the data, could be difficult to standardize across exchanges, and could potentially make the Pilot more expensive than proposed."[81] We disagree. We fail to see how it would be so difficult or complicated or expensive to require disclosures of basic distributions of the realized fees and rebates. Further, we are deeply troubled by the proliferation of complex pricing tiers that appear to be often custom-designed for specific, undisclosed trading firms.[82]

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[77] Proposal, at 13029.
[78] Proposal, at 13029.
[79] Proposal, at 13030.
[80] Proposal, at 13030.
[81] Proposal, at 13030.
[82] We separately wonder whether such nearly-impossible to decipher tiers may be consistent with the Exchange Act, including that the exchanges' rules are fully and accurately disclosed, non-discriminatory, and in the public interest. Investors and other market participants currently have little to no information regarding who may qualify for what pricing level. To the contrary, it appears as though this level of pricing transparency is deliberately eschewed, likely to benefit exchanges' competitive pricing models. Unfortunnately, this results in investors not fully understanding the scope of routing incentives for, and the conflicts of interest facing, their brokers.

Various pricing tiers create facially discriminatory pricing practices for exchanges, and may create significant market distortions. For example, larger brokers who may hit tier levels could have dramatically different costs and revenues than smaller brokers on the same exchange for what would otherwise be the same order. This subsidy for the largest firms may also play a significant role in firms' order routing practices. Aside from impacting the brokers' economics of a trade, it may also impact how they treat their own customers. For example, a broker with a less-sophisticated customer may send orders to a venue so that the firm would reach a certain tier threshold, despite the broker's awareness that executions on that venue may often result in inferior execution outcomes to investors. However, the same broker, if faced with the same order from a more-sophisticated customer may not.

Further, when combined with our concerns regarding rising market data and connectivity costs, we fear that the Commission is permitting the discrimination against smaller firms, and reducing competition. In recent years, the number of brokers has declined. These economics may have nothing to do with the quality of service the smaller brokers provide, but rather their abilities to qualify for what are essentially volume discounts--notwithstanding the facts that the discount providers (the exchanges) are obligated by the Exchange Act to not discriminate between customers. Even further, as discussed in greater detail below, at least one exchange representative has publicly suggested that exchange operators might respond to the pilot by tiering market data and connectivity revenues. Obviously, this would simply recreate another set of order routing incentives and market distortions. But it would also exacerbate an already disappointing practice of discriminating against smaller brokers. This would appear to be in direct conflict with the SEC's mission to promote competition and fair and efficient markets.

The Commission could require the data in the Proposal, while also requiring additional disclosures, such as, on a monthly basis:

1. the number of pricing tiers for each exchange, and
2. the number of firms who qualified for that tier, and
3. the average and volume-weighted median net true-cost of all trades for firms in that tier.

This additional information could shed significant light on investors seeking to understand their brokers' order routing behavior. Indeed, if these disclosures were to be viewed in conjunction with brokers' detailed order routing disclosures, investors may have a far-more detailed understanding of their brokers' incentives and fulfillment of their best execution obligations.

While the Proposal would simply ask each exchange to post this information on its website, we suggest that aggregating this information from different websites into one centralized repository would greatly ease utilization, as well as improve the likelihood of spotting errors and omissions. While we are generally agnostic as to where such an aggregation might occur, we note that FINRA would appear to be uniquely suited for this task.

## Analysis of Proposed Order Routing Disclosures

The Proposal would require exchanges to post on their websites each month data containing two sets of order routing data in pipe-delimited ASCII format.[83] In particular,

> the Commission is proposing that each equities exchange would be required to post publicly two datasets on their websites in pipe-delimited ASCII format. One dataset would include daily volume statistics of liquidity-providing orders by security and by anonymized broker-dealer, separating held and not-held orders. The second dataset would include daily volume statistics of liquidity-taking orders by security and by anonymized broker-dealer, separating held and not-held orders.[84]

This information would be necessary, but not sufficient, to fully understand the "potential conflicts of interest associated with transaction-based fees and rebates and the effects that changes to those fees and rebates have on order routing behavior, execution quality, and market quality."[85] In addition, we would urge the Commission to require the disclosure of directed orders. Because those orders are directed, the same level of discretion and conflicts of interest that are the primary focus of the Proposal are not readily present. However, we caution against excluding them from the proposal because doing so may lead to various avoidance techniques and unintended

[83] Proposal, at 13031.
[84] Proposal, at 13031 (citing proposed Rule 610T(d)).
[85] See Proposal, at 13032.

consequences. Further, because this information is already readily reported to FINRA's Order Audit Trail System, it should be practicably reasonable to require it.

We agree that basic order information

> will permit a closer examination of how broker-dealers may change their order routing behavior in response to changes in fees and rebates at each exchange. Because broker-dealers may respond differently to differing levels of fees and rebates and the inherent conflicts of interest fees and rebates present when making routing decisions, the Commission preliminarily believes that data at the broker-dealer level would facilitate statistical analysis of those differences and the conflicts of interest associated with them. The order routing data also would provide valuable information on order type, order size, time to execution, and information on order execution, cancellation, and reroutes, all of which should facilitate analysis into routing behavior in response to differing levels of fees and rebates. In addition, this same information would also facilitate an analysis of the effects that changes to transaction-based fees and rebates may have on execution and market quality by permitting a close examination of matters such as liquidity concentration and competition for order flow among equities exchanges in different fee and rebate environments.[86]

The identities of the brokers would be known to only the SEC.[87]

Unfortunately, this information does not, by itself, tell enough of a complete story for investors to fully understand their brokers' order routing incentives or behavior. That's because it only reflects the exchanges' views, not those of the brokers or investors. But it is the brokers' actions that matter for best execution. Thus, if a broker routes an order to its ATS, takes it back, then routes it to a third-party ATS that pays it, then takes it back, then routes it to an exchange, takes it back, and then routes it to another exchange, where it is executed, this tortured life cycle would be difficult, if not

[86] Proposal, at 13032.
[87] Proposal, at 13032. Notably, we believe it is important for market participants and academics to know, even if anonymized, the aggregated activities of each broker across multiple venues.

impossible, to identify. And any measures or analyses of execution quality would be isolated to each potential venue.[88] That, of course, would not be an accurate reflection of the order's handing and execution quality.

For this additional information, investors will need the types of information likely to be subject to the Proposed Order Handling Rules.[89] Some firms are already engaging in highly sophisticated, order-life cycle analyses, as a result of their negotiations with their brokers. However, this level of analysis is expensive, difficult to develop, and requires extensive voluntary broker cooperation. That is not currently common. However, if the Commission were to adopt a revised Order Routing Proposal,[90] these efforts would be greatly aided.

Lastly, as with the Transaction Fee Summary data, the Proposal would ask each exchange to post this order routing information on its website. Again, we suggest that aggregating this information from different websites into one centralized repository would greatly ease utilization, as well as improve the likelihood of spotting errors and omissions. While we are generally agnostic as to where such an aggregation might occur, we note that FINRA would appear to be uniquely suited for this task.

# Additional Considerations

In addition to our thoughts above, there are several other significant issues that we urge the Commission to consider.

## Commission Rule vs. NMS Plan

The implementation of the Proposal is too complex and important of a task to be outsourced to the Self-Regulatory Organizations (SROs) through the NMS Plan process. This is particularly true since the exchanges themselves have expressed such significant concerns with the approach detailed by the Proposal.

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[88] Notably, the Proposal would anonymize broker identities, but they would remain consistent across exchanges, so as to permit the Commission and researchers to easily combine data from multiple exchanges and see a picture of brokers' overall order routing behaviors. Proposal, at 13032. We agree that this is critically important to understanding the potential conflicts of interest associated with fees and rebates, and their impacts on order routing. See generally, Proposal, at 13032.
[89] Order Routing Proposal.
[90] See, e.g., Order Routing Proposal (proposing, inter alia, that brokers would provide their customers with detailed, standardized information regarding the handling of their orders).

We appreciate that the Proposal would implement the pilot directly via a Commission Rule. And while this will unquestionably impact the level consideration and analysis required of the SEC, we believe that the benefits of direct Commission action far outweigh these costs.

We understand why the Commission may be tempted to direct the SROs to develop a pilot program. By asking the SROs to do it, the Commission would be relieved of the burdens of identifying and addressing all of the details. It could also exploit the significant differences between the administrative procedures related to a rule proposal versus an agency order, including the necessity of comprehensive cost-benefit analysis. And it may relieve the Commission of some litigation risks. This approach would likely make the NMS Plan route "quicker to the starting line" than a direct rule proposal.

Unfortunately, if the Commission were to direct the SROs to create a NMS Plan consistent with the Proposal, the Commission would be directing one set of for-profit market participants to develop a study that directly impacts their own bottom lines.[91] Recent experience with the NMS Plan process, including for the development of the Consolidated Audit Trail (CAT) and the Tick Size Pilot, suggests that such a process would result in unnecessary complexity and result in significant delays. We agree with the approach taken in the Proposal, which is to propose the pilot directly through an amendment to Reg NMS.

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[91] We agree with the growing chorus of market participants and experts that argue that NMS Plan governance deserves significant reforms, including through the direct inclusion of other market participants. That said, we also question whether the NMS Plan process is, in its entirety, outdated. Since it was first adopted, the SROs have both proliferated in number and become for-profit entities. Conceptually, we are concerned any time the regulatory apparatus is outsourced to market participants who may have their financial interests conflict with their regulatory ones. Simply broadening participation to include more for-profit market participants (such as broker-dealers and investment advisers) may reduce concerns with the balance of the NMS Plans, but may also lead to regulatory stagnation and even more conflicts of interest. We are not convinced that all of these conflicts of interest would completely offset each other. Further details regarding Healthy Markets' views on NMS Plan Governance can be found in our testimony before the House Financial Services Capital Markets Subcommittee in November 2017, our Market Data rulemaking petition in the SEC in January 2018, and our recent comment letters objecting to two recent SIP filings. Hearing on Implementation and Cybersecurity Protocols on the Consolidated Audit Trail Before the House Financial Services Committee, Subcommittee on Capital Markets, Securities and Investment, 115th Cong. (2017) (Statement of Tyler Gellasch), *available at* https://financialservices.house.gov/uploadedfiles/hhrg-115-ba16-wstate-tgellasch-20171130.pdf; Letter from Tyler Gellasch, Healthy Markets Association to Jay Clayton, SEC, Jan. 17, 2018, *available at* https://www.sec.gov/rules/petitions/2018/petn4-717.pdf ("Healthy Markets Market Data Petition"); *see e.g.*,Letter from Tyler Gellasch, Healthy Markets Association, to Brent J. Fields, SEC, Apr. 11, 2018, *available at* https://www.sec.gov/comments/sr-ctacq-2017-04/ctacq201704-3420092-162185.pdf ("Healthy Markets CTA/CQ Plan Letter").

## Rebates vs. Transaction Fees

The Proposal is intended to study, amongst other things, brokers' conflicts of interest rising from transaction fees and rebates in making routing decisions.[92] It is neither a "rebate" pilot nor an "access fee" pilot. It is a loose combination of the two.

As the Proposal notes, in recent years, "a variety of concerns have been expressed about the maker-taker fee model, in particular the rebates [exchanges] pay to attract orders."[93] Both transaction fees and rebates may distort brokers' behavior, in what might otherwise be viewed as a classic agency problem: will the broker route in a manner that best suits its economic interests or those of its customer?[94]

Unfortunately, the Proposal appears to unnecessarily blur the distinctions between these two sets of potential distortions. We urge the SEC to separately address (1) transaction fees and (2) rebates and other incentives. For example, a broker could send an order to a venue where it might not have to pay a fee, over an exchange where it would have to pay. But that is a separate question of whether the broker would send an order to a venue where it gets a rebate versus one where it doesn't. In both scenarios, the broker may be putting its own economic interests ahead of its customer's interests--potentially violating its duty of best execution.

Given the number and vast breadth of the pilot's securities, and duration, separately examining the impact of fees and rebates should be possible.

Of course, the level of fees and the sizes of rebates themselves have historically been linked. That is because, historically, exchanges have used a portion of the fees collected to turn around and pay the rebates. Thus, a reduction in the fee cap might be expected to result in a reduction or elimination of the rebates or other routing incentives.

[92] Proposal, at 13016.
[93] Proposal, at 13010.
[94] Proposal, at 13016.

[95] However, despite the historical linkage between transaction fees and rebates, the two are separate and distinct.

Unfortunately, while there has been widespread discussion on access fee levels, and market participants have a reasonable understanding of how they operate, the known rebates and linked pricing magnitudes are not nearly as well known. For example, the exact sizes of fees are clearly published in exchange rules. On the other hand, public disclosures by the exchanges and market participants about the magnitudes and details regarding rebates and other incentives are virtually non-existent. Further, oversight of the magnitudes of these common order routing incentives is extremely limited.

Further, while the Proposal and market participants repeatedly argue that lowering transaction fees may result in lowering the rebates paid by exchanges, that is not certain.[96] There is already ample evidence to suggest that some exchanges currently use revenues from other sources to subsidize their order routing incentives, including rebates.[97] If transaction fees are capped for securities in Test Groups 1 and 2, as detailed in the Proposal, it is not entirely clear what impact that would have on rebates and other order routing incentives offered by the exchanges. It is possible -- and perhaps even likely -- that the rebates decrease. However, it could also be that the exchanges maintain their incentives for securities in Test Groups 1 and 2 by supplementing the lost transaction fees with other revenues. Thus, the Commission and market participants should be clear that while these Test Groups would cap one set of market distortions (the fees), they do not necessarily cap another (rebates and other incentives).

We appreciate why the Commission appears to have made the focus on transaction fees for these two Test Groups: it has a ready mechanism already established to control

[95] See, Proposal, at 13022 (stating that lowering the transaction fee cap to $0.0005 "means an exchange would only have that amount (or less) to fund the rebate it pays to the other side of the transaction, unless it uses other sources of revenue to subsidize the rebate."); *see also*, Letter from Elizabeth King, NYSE, to Brent J. Fields, SEC, May 13, 2016, *available at* https://www.sec.gov/comments/265-29/26529-66.pdf, (explaining how lowering the transaction fee caps as recommended by the EMSAC would reduce the direct costs paid by brokers to access displayed exchange quotations, but would also "effectively limit the rebates paid by exchanges to attract liquidity").
[96] See, e.g., Proposal at 13022-13023 ("While Test Group 2's low cap should reduce the likelihood that a market will offer a material rebate because the cap would limit the market's ability to offset the rebate by charging a slightly higher fee to the other side of the transaction, the possibility exists that rebates would nevertheless continue to be offered in Test Group 2.").
[97] Chester S. Spatt, *Are Equity Market Rebates Anti-Competitive?*, at 3, Apr. 20, 2018 (finding that exchanges often pay rebates in excess of the caps currently, suggesting that cross-subsidization is already occurring).

them and significant knowledge upon which to base its determinations of appropriate test fee cap levels. However, we would hope the Commission would directly reduce or eliminate rebates and other incentives in these test groups. This study is about more than just transaction fees.

Conversely, Test Group 3 does not address the distortions created by transactions fees at all, but instead generally prohibits rebates and linked pricing. Again, the Proposal would focus on only one of the two sources of the conflict of interest for brokers.

In this scenario, the Proposal would ostensibly suggest exchanges may compete with each other and ATSs by changing their transaction fees (which may no longer be needed to subsidize incentives in those securities).[98] In Test Group 3, only the access fees for taking liquidity are capped at the Rule 610(c) level of $0.0030 per share, but fees assessed for providing liquidity (such as on an inverted venue) are not capped at all.

This may lead to potentially perverse results. If exchanges are still permitted to offer rebates and other incentives in Test Groups 1 and 2, as well as the Control Group, and can even offer some incentives to market makers for orders in Test Group 3, then we suspect that the exchanges may use the "excess" transaction fees in Test Group 3 securities to subsidize those incentives. In fact, exchanges may look to modify their fee structures to charge more for providing liquidity as a way to compensate for "lost" revenues. Again, the potential unintended consequences here seem potentially significant, and we urge the Commission to be diligent in its review of potential exchange modifications.

## Exchanges' Responses: Other Order Routing Incentives

The Proposal seems to assume that the exchanges' pricing models and market participant behavior would remain static before and during the implementation of the pilot. We are not convinced. In particular, we suspect that most exchanges would continue to seek to: (1) provide incentives for order routing, to the extent permitted, and (2) maximize revenues. We do not find it logical to assume that the impacted exchanges would respond by simply declining to offer significant rebates or other incentives.

One reason we think the exchanges are going to aggressively pursue order routing incentives despite the pilot is because they have said they will. For example, one

[98] Proposal, at 13022-13023.

exchange representative recently told a conference room of attendees that his company would consider linking market data and connectivity costs to transactions.[99] While exchanges have historically argued that their market data and connectivity offerings and fees are fixed, and available to all who seek to purchase them, the exchanges could change course and selectively offer higher volume customers discounts. This would create entirely new questions for the Commission regarding fair access, non-discrimination, and other concerns.

At a basic level, to the extent that exchanges want to continue with rebates, they still can for most trading. Under Test Group 1, Test Group 2, and the Control Group, there is no cap on rebates or linked pricing. So while the transaction fees may be reduced in the two test groups, there is still the opportunity for exchanges to offer rebates--without limitation. Similarly, the Control Group continues the current market structure parameters for fees and rebates. So while the exchanges' abilities to generate the revenues to pay for rebates is potentially limited by the applicable fee caps in Test Groups 1 and 2, there is nothing to say that the exchanges couldn't impose new fees or raise the revenues from other sources. This may include imposing new transaction fees or raising existing ones--either within those test groups or in other securities (such as in the Control Group).[100]

Further, we think it may be at least plausible that exchanges may seek to offer rebates funded from other means outside of the transaction context. It would not surprise us, for example, if the exchanges sought to use revenues arising from public and private market data to subsidize rebates and linked pricing incentives.[101]

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[99] Statement of Brian Harkins, Cboe, before the Security Traders Association 84th Annual Market Structure Conference, *summary available at* https://www.bostonsecuritiestraders.com/wp-content/uploads/2017/10/09-13-17-STA-Conference-Day-1.pdf ("Harkins Pilot Remarks").

[100] We have assumed that the Commission would not adopt a prohibition on exchanges' modifying their fee structures during the pilot period. That said, we note that any modifications could significantly complicate the pilot, and potentially significantly undermine its efficacy. On the other hand, such changes could potentially lead to improved market quality and other metrics.

[101] In January 2018, Healthy Markets Association joined an increasingly vocal chorus of leading market participants in expressing frustrations with conflicts of interest, costs, and complexities arising from the provision of public and private market data. Healthy Markets Market Data Petition. Since then, we have begun objecting to particularly troubling filings regarding market data. *See,e.g.*, Healthy Markets CTA/CQ Plan Letter.

It is possible that exchanges may look to increase these other revenue sources both to (1) pay for rebates, and (2) compensate for potential lost market share and trading revenues.

Further, to the extent that rebates are limited by funding or prohibited, it would seem likely some exchanges may offer other forms of incentives to attract order flow, such as selective discounts on market data or connectivity offerings.

Given these concerns, we urge the Commission to propose significant additional disclosures for exchanges to promote transparency in the "true total cost" of trading on their venues. While the transaction fee summary and order routing disclosures in the Proposal are important, they are not sufficient for individual market participants to meaningfully assess their brokers' performances. Further, we urge the Commission to carefully scrutinize exchange filings related to other revenue sources, particularly for both public and private market data, connectivity, and other services.

We already know that some exchanges offer rebates in excess of their applicable transaction fees, and that there are more ways to incentivize order routing than just rebates. Under the pilot, we might expect this may become more prevalent and pronounced. The Commission should be prepared to proactively address developments that may undermine the intent of the pilot or create other unintended consequences.

## Risks of the Market Maker Exception

The Proposal's market maker exception appears to create unnecessary complexities, may undermine the utility of the pilot, and may discriminate against competing brokers.

In the Proposal, rebates and linked pricing would be prohibited in Test Group 3 securities, but an exchange could adopt new rules that would allow the exchange to provide incentives to its registered market makers. The exchange would first need to propose, via a regulatory filing, new market making standards which would allow the exchange to provide non-rebate linked pricing.

While the objectives of this exception are laudable, the implementation may be difficult and risky. In particular, the exception would have to be very narrowly scoped.

If a firm is simultaneously providing a beneficial service to the markets, such as by acting as a bona fide market maker on a particular exchange, that does not preclude the same firm from nevertheless routing orders for customers based on its own self-interest, potentially in violation of its best execution obligations. The first activity is arguably improving the markets, while the latter activity is the primary focus of the Proposal. In this case, it is the capacity in which the firm is operating that matters.

For example, assume a broker acts as both a market maker on an exchange and routes orders there on behalf of its clients. That broker may still have a conflict of interest in its routing to that particular venue. In fact, its conflict of interest may be greater for orders routed to that venue, because of its other relationship to it.

The primary focus of the Proposal is the conflict of interest facing brokers as agents, and not necessarily the incentivization of market makers. Accordingly, if a market maker is sending orders to the exchange on its own behalf, we believe that this activity may not give rise to the concerns most directly sought to be addressed by the Proposal. On the other hand, if the same market making firm is acting as agent or in a riskless principal capacity for customers, then that is precisely the activity that is within focus of the Proposal. To be effective, the pilot must not exclude these orders from coverage. To do otherwise would be to allow some firms to effectively avoid it.

In fact, if a market making firm were able to obtain a rebate or other incentive that could be applied to its customer-facing business, that would create a new, unlevel playing field for brokers. Firms that would qualify as market makers would be able to have lower costs in their customer businesses (as agent or as riskless principal) than brokers who were not so-designated. This could easily have the unintended consequence of dramatically altering the competitive landscape in the brokerage business--in favor of the firms that may be able to qualify as "market makers."

If the pilot were to cover market makers' agency and riskless principal trading, but narrowly exempt their proprietary trading (as discussed above), the market makers could still have greater conflicts of interest than we might deem appropriate. That's because it may simply be too difficult to truly separate out those businesses. The only way that this could reasonably not create an unfair advantage for market makers engaging in customer routing would be for them to not directly benefit -- such as in its own proprietary trading -- from its combined routing activities. Again, that would be yet another undisclosed incentive that might impact order routing behavior that would not be captured by the pilot.[102]

[102] As Cboe's Brian Harkins and former NYSE official Joe Mecane have explicitly stated, and as we discuss elsewhere in this letter, rebates are only but one form of order routing incentive. Exchanges can use a multitude of other potential incentives to attract order routing, including by offering different costs for market data or connectivity. *See, e.g.*, Harkins Pilot Remarks; see also, Statement of Joe Mecane,

Accordingly, if the Commission adopts a "market making" exception, it should be very careful to ensure that it only applies to the market maker's principal trading in a "market making" function, and that any linked pricing benefits are for that trading only. One potential way to do that would be to force a market maker to separate out those businesses and certify to the Commission and disclose to the public that it receives no incentives for trading on a particular venue for its customers' businesses. Otherwise, the market making firm's customers may again have a conflicted broker who may be incentivized to route their orders to the exchange offering the market making incentive. And it will also have a competitive advantage over other brokers seeking to route customers' orders.

Lastly, consideration of a "market making" standard is a massive undertaking.

If the Commission seeks to review market making obligations and benefits more broadly, we would welcome the discussion. We have long advocated for improvements to market making standards, including adopting a new federal NMS market making standard.[103] Market makers serve an important role in providing liquidity to securities and help contribute to the overall health and efficiency of the capital markets. As the US markets have evolved from a central liquidity framework to the current fragmented system, market making obligations have not kept pace with this modern framework.

Currently, market making standards in the securities markets are generally left to the trading centers to develop. A firm designated as a "market maker" on one trading center may not be designated as a market maker on another. Similarly, the obligations and benefits of being a "market maker" vary from venue to venue. The current framework results in inconsistent expectations for market participants and regulators.

As expressed above, we are concerned that the market making exception to linked pricing in the Proposal could be used to exclude activities intended to be covered by the pilot, and may dilute the efficacy of the pilot. To avoid this result, we urge the Commission to engage in a thorough development and consideration of a market

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Citadel, before the Security Traders Association 84th Annual Market Structure Conference, *summary available at* https://www.bostonsecuritiestraders.com/wp-content/uploads/2017/10/09-13-17-STA-Conference-Day-1.pdf.

[103] Presentation of Chris Nagy, Healthy Markets Association, to the Equity Market Structure Advisory Committee Market Qualtiy Subcommittee on April 8, 2016 *available at* https://www.sec.gov/spotlight/equity-market-structure/emsac-market-quality-subcommittee-040816.htm.

making standard,[104] as well as limitations to separate any benefits accruing to market makers as a result of that activity from those same firms' agency or riskless principal trading.

## The Direct Costs of Implementing the Proposal Would Be Minimal

Some may argue that implementing the changes required by the Proposal would be difficult or expensive, and would suggest that the Commission's cost-benefit analysis of the Proposal must reflect all of the costs of all fee changes throughout the pilot into its analysis.

Of course, this approach would be to ignore the realities of the modern market infrastructure. Every single month, there is typically over 100 self-regulatory organization rule filings, and many often relate to various elements of order routing incentives and costs. Further, routing brokers and market makers frequently update their order routing algorithms -- often multiple times a month -- to reflect not only changes to the exchanges' rules, but also their progress towards various pricing tiers and other potential incentives. In fact, the exchanges themselves have acknowledged that a pilot of this nature would not be difficult to logistically implement.[105]

## The Commission Should Provide Canadian Regulators with the Opportunity to Coordinate

As we wrote in our December 2016 letter,[106] Canadian interests in studying order routing incentives have been similar to those in the United States. Since the Proposal was released, the Canadian Securities Administrators (CSA) have announced that they are coordinating with the Commission on a potential parallel pilot.[107] For the reasons

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[104] We at Healthy Markets have recommended a "market making" standard. See Letter from Tyler Gellasch, Healthy Markets Association, to Brent J. Fields, SEC, at Appendix A, Mar. 17, 2017, *available at* https://www.sec.gov/comments/sr-chx-2017-04/chx201704-1648304-148475.pdf.
[105] See, e.g., Harkins Pilot Remarks.
[106] Letter from Tyler Gellasch, Healthy Markets Association, to Brent J. Fields, SEC, Dec. 23, 2016, *available at* https://static1.squarespace.com/static/5576334ce4b0c2435131749b/t/5873cfbed482e9b4a8e9ee92/1483984830951/HMA+Comment+re+AFP12-23-16.pdf.
[107] Canadian Securities Administrators, *CSA Staff Notice 23-322 Trading Fee Rebate Pilot Study*, Mar. 16, 2018, *available at* https://www.osc.gov.on.ca/documents/en/Securities-Category2/csa_20180316_23-322_trading-fee-rebate-pilot-study.pdf.

detailed by the CSA and our prior letter, we urge the Commission to continue to work with your Canadian counterparts to give them the opportunity to implement an analogous study. While efforts to coordinate across the border should not be used to justify any delay by the SEC, the inclusion of Canadian markets may greatly aid investors who trade securities in both markets particularly if a security selected for inclusion in the pilot trades in both markets.

## How will Success be Measured?

While the Proposal goes into significant detail about the terms and conditions of each test bucket, it does little in the way of explaining how success (or failure) will be measured. Under what conditions will the Pilot be a success? Under what conditions will it be considered a failure?

We would hope the Commission and market participants would want to use the pilot to examine potential changes in venues utilized, as well as measures of execution quality, and overall market quality. But what are those measures? What data would you need to to assess them? Without first knowing exactly what it is you want to measure, it is difficult to know what disclosures to require. For example, the proposed Transaction Fee Summary and the Order Routing Disclosures still do not provide market participants with enough information to meaningfully understand -- much less quantify the impacts of -- their brokers' routing incentives and behavior.

We recommend that the adopting release contain more specific information to be analyzed and definitions of certain measures.

## Conclusion

Amidst growing concerns with brokers' conflicts of interest, market participants, experts, and policymakers have been clamoring for the Commission to adopt a study to address order routing incentives for years. The Proposal marks a fantastic step towards that study, and we applaud you for your work.

We urge the Commission to revise and adopt the Proposal without delay.

Sincerely,

Ty Gellasch

Tyler Gellasch
Executive Director

Cc: Hon.Jay Clayton, Chairman
Hon. Michael S. Piwowar, Commissioner
Hon. Kara M. Stein, Commissioner
Hon. Hester Peirce, Commissioner
Hon. Robert J. Jackson, Jr., Commissioner
Brett Redfearn, Director of the Division of Trading and Markets