May 25, 2018

Mr. Brent J. Fields
Secretary
Securities and Exchange Commission
100 F Street NE
Washington, DC 20549–1090

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

Dear Mr. Fields:

Citadel Securities[1] appreciates the opportunity to provide comments to the Securities and Exchange Commission (the "Commission") on its proposal to establish a Transaction Fee Pilot for NMS stocks (the "Pilot").[2] Empirical data is critical when evaluating whether a potential change to equity market structure is consistent with the Commission's core mission to protect investors, maintain fair, orderly and efficient markets and facilitate capital formation. We detail below several recommendations that are designed to enhance the utility of the Pilot while minimizing associated costs. In short, we recommend that the Commission:

I. **Establish Clear Objectives and Measurement Criteria and Leverage Existing Data Sources**. The Commission should clearly specify the questions that are intended to be answered by the Pilot, and the criteria that will be used to measure results and to draw policy conclusions. In addition, the Commission should rely on existing data sources where possible to reduce implementation costs and to ensure that there is sufficient data to evaluate the Pilot, including data that distinguishes between agency and principal orders and data that facilitates the evaluation of execution quality at the parent order level (rather than the child order level);

II. **Protect Market Participant Confidentiality**. Any data that is made publicly available in connection with the Pilot must be published in a manner that protects market participant confidentiality;

III. **Eliminate the "Zero-Rebate" Test Group**. We recommend substituting the "zero-rebate" test group with a test group that lowers the access fee cap to $0.0002, in line with the original Equity Market Structure Advisory Committee ("EMSAC") recommendations. The "zero-rebate" test group may significantly increase transaction costs for investors, while failing to provide informative data on the questions that are intended to be answered by the Pilot;

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[1] Citadel Securities is a leading global market maker across a broad array of fixed income and equity securities. In partnering with us, our clients, including asset managers, banks, broker-dealers, hedge funds, government agencies and public pension programs, are better positioned to meet their investment goals. On an average day, Citadel Securities accounts for approximately 20 percent of U.S. listed equity volume, 21 percent of U.S. listed equity option volume, and more than 37 percent of all retail U.S. listed equity volume.

[2] 83 Fed. Reg. 13008 (March 26, 2018), available at: https://www.gpo.gov/fdsys/pkg/FR-2018-03-26/pdf/2018-05545.pdf ("Proposed Transaction Fee Pilot").

IV. **Better Calibrate the Number of Pilot Stocks**. The size of each test group should be reduced from 1,000 NMS stocks to a number closer to that recommended by the EMSAC;

V. **Refrain From Including a "Trade-At" Provision**. We agree with the Commission's proposal not to include a "trade-at" provision as part of this Pilot, as doing so would significantly increase the implementation costs and complexity of the Pilot without improving market quality and risks negatively impacting execution quality for retail investors; and

VI. **Designate a Sensible Start Date**. The Pilot should only begin after the proposed amendments to Rule 606 have been implemented and the Tick Size Pilot has concluded in order to reduce implementation costs and complexity and to safeguard the integrity of the Pilot. Implementing the Rule 606 amendments will also assist the Commission in evaluating the impact of the Pilot in relation to potential conflicts of interest between broker-dealers and their customers as a result of transaction-based fees and rebates.

I. Clearly Defining the Objectives and Measurement Criteria for the Pilot, and Leveraging Existing Data Sources Where Possible

We recommend that the Commission clearly set forth (a) the questions that are intended to be answered by the Pilot, (b) the criteria that will be used to measure results, and (c) the data required to conduct the analysis. In our view, the Commission's proposal lacks sufficient detail regarding these topics.

As part of designing a successful pilot, we recommend that the Commission first identify the specific concerns regarding current market structure that require additional data to effectively analyze. These concerns should then be translated into precise questions that are empirically verifiable, which become the objectives of the pilot. In the current proposal, the Commission lists several topics relating to transaction-based fees and rebates that could be potential areas of focus, including potential conflicts of interest between broker-dealers and their customers, impacts on order routing decisions more generally, and overall effects on market and execution quality.[3] However, the proposal lacks sufficient detail regarding the core objectives of the Pilot - i.e. the specific hypotheses that are intended to be tested and the questions that are ultimately intended to be answered. Providing additional specificity will assist the Commission in designing a pilot that generates useful and actionable data while minimizing associated costs on market participants.

Once the objectives of the Pilot are clearly established, the Commission should then detail the measurement criteria that will be used to assess the results of the Pilot. Without clear, agreed upon metrics, it likely will be challenging to draw policy conclusions from the data generated by the Pilot, thereby reducing its potential benefits.[4] We note that there should be specific measurement criteria for each identified objective of the Pilot. For example, the criteria used to evaluate the impact of the Pilot on market quality should be different from the criteria used to evaluate potential

[3] *See, e.g.*, Proposed Transaction Fee Pilot at 13022.

[4] We note that the EMSAC recommendations contained several proposed measurement criteria.

conflicts of interest between broker-dealers and their customers. We also note it is important that the Commission takes into account factors other than transaction-based fees and rebates that could also influence order routing decisions when considering how to evaluate the results of the Pilot.

Finally, we urge the Commission to ensure that it has access to the necessary data to accurately evaluate the results of the Pilot, utilizing the agreed upon measurement criteria described above. To the extent that the Pilot is intended to evaluate potential conflicts of interest between broker-dealers and their customers as a result of transaction-based fees and rebates, data that distinguishes between agency and principal orders and data that facilitates the evaluation of execution quality at the parent order level (rather than the child order level) is required. Separating agency and principal orders is necessary to isolate and analyze those orders that broker-dealers are routing on behalf of customers. Similarly, analyzing execution quality at the parent order level is critical to understanding the actual impact on investors of any observed changes in market quality on individual venues. In this regard, we recommend that the Commission consider how to best obtain parent-level transaction cost analysis data to supplement data that is being collected regarding market quality on individual venues, as otherwise the economic impact of the Pilot on investors will likely be inconclusive.

When considering the data that is necessary to accurately evaluate the results of the Pilot, we recommend that the Commission leverage existing data sources where possible to reduce implementation costs for market participants and to ensure the availability of data that is fit for purpose. Instead of assembling a new data set specifically for the Pilot, it is preferable to rely directly on the underlying data that is already being collected and provided to the Commission. In this regard, we note that the order routing data proposed to be assembled specifically for the Pilot does not appear to distinguish between agency and principal orders or facilitate the evaluation of execution quality at the parent order level.[5]

We recommend that the Commission consider how to effectively leverage the following data sources in particular. First, the anticipated November 2018 implementation of "CAT Phase 1" would provide the Commission with comprehensive data on all exchange orders and executions for NMS stocks, including broker-dealer order routing information on a customer-by-customer basis. Second, Rule 606 reports provide additional information on the order routing practices and execution performance of individual broker-dealers. While currently limited to non-directed retail orders, these publicly available Rule 606 reports will be expanded to cover institutional orders upon finalization of the amendments proposed in July 2016.[6] In addition, the proposed amendments specifically mandate disclosure of transaction fees paid and rebates received by broker-dealers when routing retail and institutional orders, information that should prove useful for purposes of the Pilot. Given the prospect for additional relevant data, and the significant overlap with the topics to be analyzed in the Pilot, we believe that it is important to first finalize and implement these Rule 606 enhancements before implementing the Pilot.

[5] We note that the proposal does require exchanges to distinguish between held and not-held orders in the dataset proposed to be assembled for the Pilot. However, this distinction typically applies at the parent order level rather than to the child orders received by the exchanges. Therefore, we do not believe this will be effective in distinguishing between agency and principal orders.

[6] *See* 81 Fed. Reg. 49432, 49434 (July 27, 2016), available at: https://www.gpo.gov/fdsys/pkg/FR-2016-07-27/pdf/2016-16967.pdf.

Taking the steps detailed above is necessary to design a successful pilot that yields tangible benefits, such as actionable data that advances the collective understanding of U.S. equity market structure. Otherwise, there is a material risk that the costs associated with the Pilot, including both implementation costs and potential deterioration in market quality, such as increased spreads for certain securities, will outweigh the benefits of the Pilot.

II. Protecting Market Participant Confidentiality in the Publicly Available Data

Irrespective of the data sources used to evaluate the Pilot, it is critical that market participant confidentiality is safeguarded to the extent data is made publicly available in connection with the Pilot. The current Pilot proposal contemplates exchanges making publicly available order routing information for both liquidity-providing and liquidity-taking orders that is "aggregated by day, by security, by exchange, and by broker-dealer on an anonymous basis."[7] Broker-dealers would be assigned a static "Broker-Dealer Anonymization Key" that remains constant throughout the duration of the Pilot.[8]

In our view, publishing order routing data that is disaggregated by broker-dealer using a static "Broker-Dealer Anonymization Key" will allow for the identification of broker-dealers with relative ease. For example, a market participant could direct a large order in a particular symbol to a specific broker-dealer, and then identify the presence of that order in the published data. Market participants may also be able to determine the identity of broker-dealers by comparing the published order routing data to other publicly available data, such as Rule 605 reports.

Once the identity of a specific broker-dealer is determined from the published order routing data, a significant amount of insight may be gained regarding its trading strategies. Throughout the duration of the Pilot, any market participant, including competitor firms, could use the data to discern information regarding the broker-dealer's (a) market share and activity in a given security, (b) overall routing practices, and (c) relative aggressiveness or passiveness in specific securities. Strategies used by institutional buyside clients to execute large orders may also be susceptible to reverse-engineering, including the methods for dividing these large orders across multiple trading centers.

Publishing data in a format that enables other market participants to reverse-engineer proprietary trading strategies hinders free and fair competition among market participants and significantly increases the costs associated with the Pilot. Similar confidentiality concerns were recognized and addressed in the design of the Tick Size Pilot, where data was ultimately published in an aggregated format by groups of trading centers.[9] At a minimum, we respectfully request that the Commission adopt a similar approach under this Pilot. For example, order routing data aggregated across all broker-dealers could be useful in providing market-wide statistics that complement the routing data already made available by exchanges.

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[7] Proposed Transaction Fee Pilot at 13031.

[8] *Id.* at 13032.

[9] *See* 82 FR 13901 (March 15, 2017) (SR-FINRA-2017-006), available at: https://www.gpo.gov/fdsys/pkg/FR-2017-03-15/pdf/2017-05082.pdf.

To the extent academic researchers require additional data that is segmented by broker-dealer, it should be possible for the Commission to provide disaggregated data, using anonymized identifiers for each broker-dealer. In doing so, the Commission should take steps to categorically ensure that the data is only used for research purposes, including, at a minimum, requiring a non-disclosure agreement similar to what is used for the Municipal Securities Rulemaking Board's ("MSRB") Historical Transaction Data Product.[10] This approach would enable academics to access the data collected by the Commission that is best suited for their purposes, rather than being solely dependent on a data set assembled specifically for the Pilot.

III. Eliminating the "Zero-Rebate" Test Group

We urge the Commission to reconsider the design of "Test Group 3." As proposed, this test group would prohibit exchanges from offering transaction-based rebates while leaving the current $0.0030 cap on access fees unchanged. We are concerned that this design will significantly increase transaction costs for investors, while failing to provide informative data on the questions that are intended to be answered by the Pilot.

By prohibiting rebates while leaving the access fee cap unchanged, proposed "Test Group 3" asymmetrically alters current market structure through the imposition of new regulatory constraints. Both the asymmetric nature of the test group and the presence of additional regulatory constraints undermine suggestions that "Test Group 3" constitutes a free market experiment leading to "natural equilibrium pricing for transaction fees."[11] Instead, we are concerned that this design will prove to be an economic windfall for exchanges, particularly when taking into account other aspects of market structure that continue to support exchange pricing power, such as Regulation NMS order routing requirements for broker-dealers. As a result, transaction costs may increase for investors, and exchanges may focus on using the increased fees to create new types of trading incentive and profit-sharing programs.

The proposed design of this test group is also unlikely to provide informative data to evaluate potential conflicts of interest between broker-dealers and their customers as a result of transaction-based fees and rebates, which is the central focus of the Pilot. Instead of eliminating potential conflicts, this test group would provide exchanges with the flexibility to propose a variety of new fee structures for liquidity-taking orders up to the $0.0030 fee cap, thereby potentially creating new order routing conflicts that would need to be considered when evaluating the data.

In our view, the pilot structure recommended by the EMSAC is less likely to negatively impact investors and is more effective in analyzing broker-dealer order routing practices at various access fee and rebate levels. By including a test group that lowers the fee cap to $0.0002, the expectation is that rebates would also be lowered to a *de minimis* amount, thereby enabling order routing practices to be analyzed in an environment with minimal transaction-based fees and rebates.[12]

[10] *See* 81 FR 64215 (Sept. 19, 2016) (SR-MSRB-2016-09), available at: https://www.gpo.gov/fdsys/pkg/FR-2016-09-19/pdf/2016-22419.pdf.

[11] Proposed Transaction Fee Pilot at 13023.

[12] *See* EMSAC Recommendations.

IV. Better Calibrating the Number of Pilot Stocks

Under the Commission's proposal, each of the three test groups in the Pilot would contain 1,000 NMS stocks. This is a material portion of the entire U.S. equities market and would represent a significant departure from the approach taken in the Tick Size Pilot, where each test group contained 400 securities,[13] and from the recommendations of the EMSAC, which suggested that each test group contain 100 securities.[14]

In addition to the implementation costs associated with including such a significant portion of the U.S. equities market in a pilot exercise, the Commission should also consider the unintended consequences that may result, including the difficulties in unwinding such an expansive market structure experiment. Unless a new permanent access fee and rebate regime is implemented immediately following the Pilot, the end of the Pilot would mean that the access fee cap for the 2,000 stocks in "Test Group 1" and "Test Group 2" would be raised from $0.0015 and $0.0005, respectively, to $0.0030, and rebates would be re-introduced for the 1,000 stocks in "Test Group 3." Such sudden reversals relating to access fees and rebates could prove to be more disruptive to market participants and overall market quality than the actual implementation of the Pilot.

The proposal to include 1,000 NMS stocks in each test group appears to be designed, at least in part, to address the possibility that this Pilot would commence prior to the termination of the Tick Size Pilot, thereby requiring each Pilot test group to be further divided into two subgroups.[15] Given that the Tick Size Pilot is scheduled to end in October 2018, we respectfully request that the Commission ensure that the two pilots do not overlap. This will enable the Commission to reduce implementation costs and complexities for market participants by minimizing the number of NMS stocks affected by a pilot at any one time, while also maintaining the statistical significance of the exercise.

We note that the EMSAC also recommended that the Commission have the ability to terminate the Pilot early to the extent market quality metrics indicate significant deterioration.[16] In our view, it is prudent for the Commission to retain this power, particularly given the number of NMS stocks proposed to be covered by the Pilot.

V. Refraining from Including a "Trade-At" Provision

We agree with the Commission's proposal not to include a "trade-at" provision as part of this Pilot. Such a provision would significantly increase the implementation costs and complexity of

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[13] *See* Plan to Implement a Tick Size Pilot Program Submitted to the Securities and Exchange Commission Pursuant to Rule 608 of Regulation NMS Under the Securities Exchange Act of 1934, available at: https://www.sec.gov/rules/sro/nms/2015/34-74892-exa.pdf.

[14] *See* Recommendation for an Access Fee Pilot (July 8, 2016), available at: https://www.sec.gov/spotlight/emsac/recommendation-access-fee-pilot.pdf ("EMSAC Recommendations").

[15] *See* Proposed Transaction Fee Piot at 13020.

[16] *See* EMSAC Recommendations.

the Pilot, as the number of test groups would be expected to double,[17] and would risk negatively impacting execution quality for retail investors. In addition, while the Pilot is intended to analyze the impact of transaction-based fees and rebates on broker-dealer order routing practices, including a "trade-at" provision would independently impact these same order routing practices for entirely different reasons. As a result, the statistical power of the Pilot to isolate the impact of transaction-based fees and rebates on order routing practices and levels of on-exchange trading activity could be undermined, leaving important questions unanswered.

Preliminary analysis of the Tick Size Pilot data[18] does not appear to show any market quality improvements resulting from the inclusion of a "trade-at" provision. In fact, there is a general lack of data to support any suggestion that a "trade-at" feature enhances overall market quality and liquidity. At a minimum, we would urge the Commission to fully analyze the data generated by the Tick Size Pilot before considering including a "trade-at" provision in additional pilots.

VI. Designating a Sensible Start Date

As stated above, we believe it is important that the proposed Pilot not overlap with the Tick Size Pilot, which is scheduled to end in October 2018. This will reduce implementation costs and complexity for market participants.

In addition, the Rule 606 amendments proposed in July 2016 should be finalized and implemented prior to the start of the Pilot. Doing so will provide additional data regarding order routing practices and will safeguard the integrity of the Pilot by ensuring that any changes to broker-dealer order routing practices that result from the increased transparency mandated by amended Rule 606 are isolated from any similar changes that result from the design of the Pilot. In this regard, we note that it appears the Commission expects to vote on the final Rule 606 amendments soon.[19]

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[17] Proposed Transaction Fee Pilot at 13070.

[18] We note that a "trade-at" provision was included in the Tick Size Pilot due to its particular design, which sought to test the impact of larger tick sizes in less liquid stocks while addressing concerns that these larger tick sizes could incentivize order flow to migrate off-exchange, thereby undermining the very concept the pilot was designed to test. *See id.*

[19] *See* "Remarks at the Equity Market Structure Symposium Sponsored by the University of Chicago and the STA Foundation," Chairman Jay Clayton (April 10, 2018), available at: https://www.sec.gov/news/speech/speech-clayton-2018-04-10.

We appreciate the opportunity to provide comments on the proposed Transaction Fee Pilot. Please feel free to call the undersigned at [redacted] with any questions regarding these comments.

Respectfully,

/s/ Stephen John Berger

Managing Director, Government & Regulatory Policy