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October 19, 2023
Vanessa Countryman, Secretary
U.S. Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549

Re: **File No. S7-30-22; Release No. 34-96494; Regulation NMS: Minimum Pricing Increments, Access Fees, and Transparency of Better Priced Orders**

Investors Exchange LLC ("IEX") respectfully submits additional information on the Commission's proposal to reduce the Rule 610 cap on protected quote access fees.[1] IEX previously submitted comments on this issue and other aspects of the Commission's proposed updates to various aspects of Regulation NMS.[2]

IEX and numerous other commenters, a broad cross-section of market participants including many of the largest, most sophisticated institutional investors in the country, support a reduction in the access fee cap. The general consensus of these commenters supports a reduction to $0.001 ("10 mils") per share for all stocks priced at or more than $1.00 per share.[3]

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[1] Securities Exchange Act Release No. 96494, 87 FR 80266 (December 29, 2022) ("Proposing Release").

[2] *See* IEX Comment Letter (3/20/2023) https://www.sec.gov/comments/s7-30-22/s73022-20160364-328968.pdf ("IEX First Comment Letter").

[3] A broad spectrum of market participants strongly advocates for reducing the access fee cap. *See, e.g.*, Citigroup Letter (3/31/2023) (supporting a substantial reduction from the current 30-mil access fee cap under Rule 610 of Reg NMS); Blackrock Letter (3/31/2023) ("We agree with the Commission that access fees are outdated and oversized relative to other trading costs; further, lowering fees would mitigate the detrimental effect of access fees on order routing, price transparency, and market quality in many securities."); Invesco Ltd. Letter (3/31/23) ("Invesco recommends the Commission adopt an access fee cap of $0.001 for protected quotations in all NMS stocks trading above $1.00."); The Capital Group Companies Letter (3/31/23) ("We believe that a simple reduction of access fees across all venues to $0.001 would go a long way in mitigating order routing conflicts…."); Brandes Investment Partners, L.P. Letter (3/31/23) ("A reduction in the access fee to $0.001…is warranted and would deliver immediate benefits to investors by reducing costs to access liquidity and the perverse incentives created by the rebate system."); Vanguard Group, Inc. Letter (3/31/23) ("The current $0.003 per share cap on access fees in Rule 610(c) of Regulation NMS has negative effects on markets and investors. The Commission should take an initial step toward mitigating these effects by lowering this cap to no more than one tenth of a cent per share, even if it ultimately decides not to proceed with the proposed tick size changes."); Ontario Teachers' Pension Plan Board *et. al* Letter (3/31/23) ("We support the proposed reduction in the access fee cap for all NMS securities to $0.001 per share from the current level of $0.003"); BMO Capital Markets Corp. Letter (3/31/23) ("We are supportive of reducing the access fee cap to 10 mils, and we agree with the concerns the Commission cited in their proposal. . . "); JPMorgan Chase & Co. Letter (3/31/23) ("Therefore, we recommend a simple, uniform access fee cap of $0.001 (10 mils) for all stocks trading at or above $1.00."); XTX Markets Letter (3/31/23) ("…we support reducing the access fee cap for all securities to $0.001"); American Securities Association Letter (3/31/23) ("Not surprisingly, we strongly support reducing access fees to 10 mils for all NMS securities because it will reduce the overall cost of exchange trading."); Council of Institutional Investors (3/30/23) ("CII generally supports the proposed reduction in the access fee cap to $0.001 per share from the current level of $0.003, for securities priced at greater than $1 per share."); Better Markets Letter (3/31/23) ("Better Markets supports the SEC's proposed reduction of access fees from $0.003 per share, or 30 mils, to $0.001, or 10 mils.").

In this letter, we provide additional data and analysis that further demonstrate the need for a reduction in the access fee cap for all NMS stocks. This letter also responds to comments objecting to such a reduction in the fee cap from a small set of commenters. Although high access fees serve private economic interests of certain parties, they do not advance—and indeed undermine—the interests of investors and the Commission's policy objectives for the access fee cap.[4]

- Reducing the access fee cap is well within the Commission's statutory authority.

- Reducing the access fee cap will prevent distortions in pricing that undermine the goal of causing orders to be routed to markets displaying the best-priced quotations. The cap is not meant to enable or support the payment of rebates in general or any particular level of rebate payments.

- The current access fee cap has become out of step with the statutory purposes because it is substantially disproportionate to other measures of trading costs and fees charged by other market venues. These differences have caused the very types of distortions the Commission sought to avoid. The Commission should update the cap to better achieve its intended purpose.

- The existing fee cap has contributed to a long-term trend towards greater non-displayed trading because it allows exchanges to use the privileged status of protected quotes to impose higher costs on investors than they would pay on alternative trading systems ("ATSs") and other venues. Thus, by being out of step with fees that are subject to market forces, the current cap harms market transparency and price discovery.

- A small set of commenters defend the distortions caused by the current access fee limit, but their comments rest on false premises and ignore substantial evidence supporting an update to the access fee limit.

Legal and Regulatory Background

The Securities Acts Amendments of 1975 (the "1975 Amendments") gave the SEC broad authority to adopt rules that facilitate a national market system for securities.[5] Congress's goal was to ensure that investors can effectively access the best prices for securities, wherever those prices originate. Congress specifically directed the SEC to consider the availability of "[n]ew data processing and communications techniques [that] create the opportunity for more

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[4] As set forth below, these commentors' narrow focus on their own incentives runs counter to the fundamental investor protection principles mandated by Congress and that guide the access fee cap rule proposals. *See, e.g.*, *The Nasdaq Stock Market LLC, et al. v. SEC*, No. 21-1100 (D.C. Cir. May 24, 2022) ("MDIR Decision"), at 15 (upholding the Commission's rulemaking and explaining that "[p]etitioners equate competition with their own competitive position. But a policy change can disadvantage certain participants while simultaneously enhancing competition in the market").

[5] *See* 15 U.S.C. 78k-1(a).

efficient and effective market operations."[6] Congress further directed the Commission to assure, among other things: (i) "economically efficient execution of securities transactions," (ii) "fair competition among brokers and dealers, among exchange markets, and between exchange markets and markets other than exchange markets," and (iii) "the practicality of brokers executing investors' orders in the best market."[7]

Regulation NMS implemented these Congressional directives. A major component was Rule 611, the "Order Protection Rule", which gave preference to certain displayed, automated quotations, preventing participants from trading at inferior prices without first seeking to trade with these protected quotations. The Commission also required that these best-priced quotations be widely disseminated and available on fair and non-discriminatory terms to all market participants.

In adopting Regulation NMS, the Commission recognized that it needed to limit the maximum fees that individual markets could charge to access protected quotations. Otherwise, markets with protected quotes could abuse this new regulatory status by charging excessive fees, which would contravene Congress' statutory directives by impeding fair competition and limiting price transparency. Accordingly, Rule 610 established an access fee cap. This cap was critical to support the statute's goals of promoting fair and efficient execution, fair competition among broker-dealers and markets, and the practicability of brokers executing investors' orders in the best market.[8]

The Commission clearly explained how the protection of the best prices and the ability to efficiently access these prices was directly related to its regulatory purpose:

> [P]rotection of the best displayed and accessible prices will promote deep and stable markets that minimize investor transaction costs….The transaction costs associated with the prices at which [investors] orders are executed represent a continual drain on their long-term savings….Minimizing these investor costs to the greatest extent possible is the hallmark of efficient markets, which is a primary objective of the NMS."[9]

Consistent with this purpose, the SEC sought to limit the ability of exchanges to impose a hidden "toll" on access to the best prices: "Outlier markets might well try to take advantage of intermarket price protection by acting essentially as a *toll booth* between price levels."[10]

The Commission has clear statutory authority to adopt Rule 610 and to make appropriate subsequent adjustments to the access fee cap. First, the sources for protected quotations are always self-regulatory organizations. Therefore, the Commission has the obligation, under

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[6] *See* 15 U.S.C. 78k-1(a)(1)(B); *See also* Securities Exchange Act Release No. 51808, 70 FR 37496, June 29, 2005 ("Regulation NMS Adopting Release"), at 37497.

[7] *See 15 U.S.C. 78k-1(a)(1)(c)(i), (ii), and (iv).*

[8] *Id.*

[9] Regulation NMS Adopting Release, at 37498.

[10] *Id.* at 37545 (emphasis added).

section 15A(b)(5), to assess whether their charges, including access fees, are equitable. The Commission can prescribe general principles for that assessment by rule, including by specifying caps on certain categories of fees. Second, section 11A calls for, among other things, rules to "assure the prompt, accurate, reliable, and fair collection, processing, distribution, and publication of information with respect to quotations for and transactions . . . and the fairness and usefulness of the form and content of such information."[11]

The access fee cap fits squarely within those statutory mandates.[12] As the Commission has long recognized, by giving special regulatory status to certain quotations as "protected," Regulation NMS confers a privileged status in the competition for orders. That privileged status is central to how Regulation NMS promotes the collection, processing, distribution, and publication of information about quotations and transactions. A cap on the fee for accessing protected quotes is a natural concomitant to ensure that the distribution of quotation information is "fair." Without the cap, Regulation NMS might foster prompt distribution of information about quotations but would not be ensuring "fair" distribution of market information because market participants would face an undue burden to access those quotes.

Third, the access fee limit was supported by specific Congressional direction to adopt rules ensuring fair competition and the fairness and reasonableness of quotation information. When the Commission adopted the current access fee cap, it explained that the cap is needed to prevent exchanges from charging fees that distort the true prices faced by market participants. The SEC further stated that the particular scenario where exchanges charge high access fees and pass most of those fees through as rebates to liquidity providers would cause the type of price distortion it sought to avoid:

> If outlier markets are allowed to charge high fees and pass most of them through as rebates, the published quotations of such markets would not reliably indicate the true price that is actually available to investors or that would be realized by liquidity providers. Section 11A(c)(1)(B) of the Exchange Act authorizes the Commission to adopt rules assuring the fairness and usefulness of quotation information. For quotations to be fair and useful, there must be some limit on the extent to which the true price for those who access quotations can vary from the displayed price.[13]

In issuing the SEC Proposal, the Commission correctly noted that deterring the practice of charging higher access fees and using most of those fees to fund rebate payments was among its objectives in setting the cap in 2005.[14]

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[11] *See 15 U.S.C. 78k-1*.

[12] *See NYSE v. SEC,* No. 19-1042, (D.C. Cir., June 16, 2020), concurring, Judge Pillard ("The fee cap in Rule 610(c) is the product of Commission rulemaking under its Section 23 and Section 11A authority, and nobody disputes that those provisions authorize the Commission to change the cap.").

[13] Regulation NMS Adopting Release, at 37545.

[14] Proposing Release, 87 FR 80288, at p. 90 n.270 (explaining that charging higher access fees to fund higher rebates "was one of the concerns the Commission identified when it approved the access fee caps" and citing to Regulation NMS Adopting Release).

Finally, the Commission explained that these price distortions would undermine the purpose of price protection – to cause orders to be routed to markets displaying the best-priced quotations and thereby encourage participants to submit displayed limit orders.

It is important to note that, when the Commission adopted the cap, its focus was on limiting the distortive impact of disproportionate access fees, not on facilitating the ability of markets to pass them through as rebates. In fact, the above quote reflects the *only* respect in which the Commission viewed access fees and rebates as related – that is, a fee limit was needed to *avoid* distortive pricing of the type that occurs when access fees are primarily passed through to other participants in the form of rebates.

As explained in detail below, the pricing distortions the Commission was concerned about when it adopted Regulation NMS have become acute today due to changed market conditions. The bulk of executions against displayed quotes pay the maximum fee, with the overwhelming share of that revenue being passed through as rebates. Further, the introduction of "inverted" venues that pay rebates to access rather than provide displayed orders, and the use of highly-skewed rebate tiers, has created even more price distortion and misaligned incentives. As a result, brokers are incentivized to route orders away from best-displayed exchange quotes in order to avoid the high fees – precisely the result the Commission sought to avoid when it first adopted the cap. These problems demand a response. The response most consistent with the Commission's statutory authority and the evidence before the Commission is to reassess, and reduce, the fee cap.

The Access Fee Rate Set in 2005 is Antiquated

As described in our first comment letter, the SEC chose 30 mils as the original access fee cap 18 years ago because it reflected market conditions at that time.[15] The Commission's purpose in adopting that access fee cap was to prevent exchanges from exploiting the regulatory market preference, under then-new Regulation NMS, for their "protected" quotes, by increasing their access fees.

Market conditions have dramatically changed in the 18 years since the SEC first set the access fee cap. For example, the New York Stock Exchange ("NYSE") was still largely a floor-based market and Nasdaq was not yet registered as a national securities exchange.[16] Today, the reasoning that the Commission used in 2005 dictates that it should lower the fee cap because the 30 mil cap is no longer consistent with market conditions. Exchanges today are able to charge higher prices than others in the market, precisely because of the "protected quote"

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[15] *See* Investors Exchange LLC Letter (Mar. 20, 2023), s73022-20160364-328968.pdf (sec.gov).

[16] At around the time that the access fee cap was being considered in 2005, NASDAQ as the national securities exchange we know today did not exist. NASDAQ was operating three different systems, SuperMontage, Brut, and INET, and later received approval in 2006 to integrate these systems to become a national securities exchange. At the time of the setting of the access fee cap, NASDAQ was utilizing what we would consider today as antiquated technologies of computer-to-computer interfaces. Moreover, NASDAQ was essentially operating ATSs, which if used as a benchmark today for competitive pricing largely reflect a 10 mils access fee. *See* SEC Approval Order of In the Matter of the Application of The Nasdaq Stock Market LLC for Registration as a National Securities Exchange (Jan 13, 2006), Findings, Opinion, and Order: In the Matter of the Application of The Nasdaq Stock Market LLC for Registration as a National Securities Exchange; Release No. 34-53128; File No. 10-131; January 13, 2006.

status. That is what the SEC sought to prevent in 2005, in furtherance of the statutory goal of fair distribution of quotation information.

There have been significant advancements in technology and electronic trading since the Commission first adopted the access fee cap, and the amount of off-exchange trading volume has substantially increased in parallel with a substantial decrease in displayed trading in relation to overall trading. The Commission has previously recognized that reduced displayed trading is a problem because it impedes the fair and transparent distribution of pricing and transaction information that Congress directed the Commission to protect. Addressing that problem is another sound reason to reduce the access fee cap, because (as discussed below) the 30-mil cap is among the forces driving the shift away from displayed trading.

Below, we provide additional data and analysis explaining how changes in market conditions support a substantial, across-the-board reduction in the access fee limit. The evidence shows that this reduction will counter the market distortions that have resulted from the existing cap. A substantial reduction in the fee cap will also allow displayed prices to be better aligned with the true costs of execution, creating better incentives for participants to route orders to markets with the best displayed prices.

The Need for a Substantial, Uniform Reduction in the Access Fee Cap

The existing access fee cap, adopted in 2005, does not reflect the efficiency gains and technology advances that have occurred since that time.

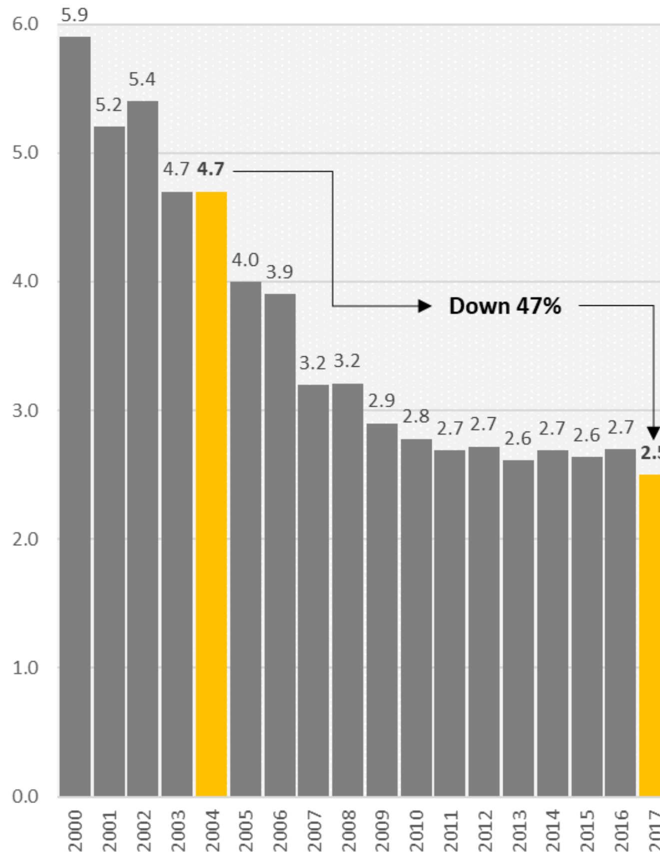
It is beyond dispute that "the securities market has evolved dramatically" since the Commission adopted Rule 610 in 2005.[17] In determining whether access fees reflect current market dynamics, the most relevant measures are other elements of trading costs that affect all investors trading on-and off-exchange. Evaluating trading costs in 2023 depends on comparing access fees to other costs to trade in the markets in general. Two of the most important measures of other costs to trade are commission costs and average spreads, because they apply to every investor trade executed in the market.

By any measure, overall commission rates have declined substantially from those that prevailed in 2005. One analysis[18] published by Greenwich Associates in 2018 suggests that commissions declined by 50% since the early 2000s. Specifically, from 2004 (when Reg NMS was initially proposed[19]) to 2017 (the last date in the Greenwich study), commissions declined by 47%.

[17] MDIR Decision, at 4 (noting that "[s]ince the Commission adopted Regulation NMS in 2005 the securities market has evolved dramatically").

[18] *See* https://www.wsj.com/articles/sec-to-rule-nyse-nasdaq-didnt-justify-market-data-fee-increases-1539721232

[19] *See* https://www.sec.gov/files/rules/proposed/34-49325.pdf



More recent data[20] provided by Bloomberg Intelligence estimates that the average commission in 2020 was 1.45 cents per share, thereby suggesting that commissions have declined by nearly 70% since 2004. Moreover, according to Bloomberg, algorithmic trading has come to represent the largest portion of institutional volume, while also accounting for the smallest commissions (~60 mils per share, meaning access fees in relation to commissions are becoming a significantly larger portion of overall transaction costs).

This trend is clearly not sustainable. Today, the access fee cap represents a significant portion of institutional commission costs, compared to the single digit percentages that it represented in 2005. It is clearly well within the purview of the SEC to ensure that the cap is adjusted to benefit investors and improve market competition.

Similarly, just as access fees have become larger in relation to commissions, they have also become larger in relation to average spreads. It is generally acknowledged that spreads have also declined steadily and significantly since 2005.[21] Although commissions and spreads have

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[20] *See* https://assets.bbhub.io/professional/sites/10/2021_02-Market-Structure-Buyside-Survey-US.pdf

[21] *See, e.g.*, Goldman Sachs Letter (5/24/2018) (explaining that spreads have "considerably narrowed" and "commission rates have contracted" since the Commission adopted the access fee cap in 2005), s70518-3711788-162473.pdf (sec.gov); Citigroup Letter (3/31/2023) (""CGMI has previously supported a reduction from the current 30-mil access fee cap (30 cents per 100 shares) under Rule 610 of Reg NMS

declined, access fees for protected quotes have stayed largely at the maximum level set by Rule 610. The overwhelming proportion of transaction volume executed on national stock exchanges is subject to the maximum access fee of 30 mils. Meanwhile, volume executed on ATS's and other venues outside of exchanges is typically subject to substantially lower costs of access, in the range of ten mils and lower.

What enables the exchanges to charge fees that exceed market levels is the regulatory "protected" status of their quotes—exactly the result that the Commission sought to avoid when it set an access fee cap. The 30-mil cap may have been appropriate in the market conditions of 2005, but it is an anachronism today.

Because the 30-mil cap exceeds the typical cost to trade on non-protected venues, it encourages investors to seek alternatives to accessing displayed quotes.[22] As explained in detail below, this dynamic drives order flow to dark, off-exchange venues, undermining the Congressional directives for the Commission to promote price transparency and a high level of investor protection.[23]

Additionally, the current access fees are unreasonably high when taking into consideration the lower exchange costs stemming from increased efficiencies and technology advancements that have occurred since 2005. Digital innovations and efficiencies since 2005 have undoubtedly reduced the costs of collecting, storing, processing, and transmitting information. Technological advances have brought major improvements in connectivity of systems, in computing power, in data processing, and in newly created and usable data. These significant technology advancements and efficiencies have alleviated transaction costs. Nonetheless, despite reduced costs, increased efficiency, and all the new data and computing power available, the access fee cap has remained fixed at an inflated level that reflects the technology capabilities of 2005.

In contrast to the significant declines in trading costs due to technology advancements and market efficiencies, access fees have remained unchanged. As noted by SIFMA in its review and recommendations for reform submitted to the Commission, access fees now represent an outsized portion of transaction costs:

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to less than 10 mils, as spreads have narrowed and commissions have decreased considerably since Reg NMS was adopted in 2005."); *see also* Citigroup Letter (8/7/2014) (explaining that "spreads have significantly narrowed" and "commission rates have dramatically declined," and "[a]s a result, today' s 30-mil cap on access fees that the exchanges can charge to access liquidity on their venues represents a more significant percentage of the economics of each trade."), s70210-416.pdf (sec.gov)

[22] *See* Virtu Financial, Douglas Cifu, Letter (Dec. 19, 2014) (stating that Virtu "submits that a reduction in the market access fee cap to a level that is reflective of current market dynamics will ultimately reduce the distortive effect of the maker-taker pricing and simplify our overall fragmented market structure" and encouraging "the Staff to consider a reduction in the market access fee cap"). https://www.sec.gov/comments/4-657/4657-63.pdf.

[23] *See* Decimus Capital Markets, LLC Letter (Apr. 25, 2016) at 8 (stating that "the prevalence of high access fees in lit markets, as a consequence of the race to the maximum permissible access fee, is one of the chief factors driving order flow off-exchange"). 26529-63.pdf (sec.gov); BMO Capital Markets Corp. Letter, March 31, 2023 (supporting a reduced access fee cap given the various concerns the Commission cited in its proposal including, among other things, that the high prices charged to investors drives orders to non-exchange trading centers as market participants seek to avoid higher exchange fees).

> While the fee cap in Rule 610 may have made sense in 2005, it is now "hard coded" into Commission rules, and it therefore has not adjusted with market developments over time. Competitive pressures, increased efficiencies from automation, and electronic trading have each operated to reduce these transactions costs – but not access fees. As a result, access fees, when incurred, have become an outsize element of overall transaction costs.[24]

Various industry commenters have also pointed to the disconnect between increased efficiencies in trading and the persistence of access fees set at the maximum rate. This includes major institutional investors who have had to directly bear the brunt of these fees[25] and a major exchange company.[26]

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[24] *See* SIFMA Letter (10/24/2014) SIFMA Submits Comments to the SEC in reference to Recommendations for Equity Market Structure Reforms; SIFMA Letter on Equity Market Structure Reform (12/5/2017) ("The access fee cap has not been adjusted since 2005 when Regulation NMS was adopted, and it has become outdated and no longer reflects the market's prevailing economics.") ("SIFMA has been on the record for some time on the need to lower the access fee cap.") SIFMA-Letter-to-SEC-on-Near-Term-Priorities.pdf; *see also* Citigroup Global Markets Inc. Letter (8/7/2014) (explaining that a cap on access fees should be reduced in light of changing market economics since the cap was chosen by the Commission circa 2004) https://www.sec.gov/comments/s7-02-10/s70210-416.pdf; JPMorgan Chase & Co. Letter (3/31/23) (supporting a reduction in access fees as "consistent with the Commission's objective of ensuring that access fees make up a meaningfully smaller proportion of the per share quotation price").

[25] *See, e.g.*, Vanguard Comment Letter (3/31/2023) ("Markets have become considerably more efficient since 2005, and as the Commission suggests in the proposal, current access fee caps may not be reflective of the actual costs trading centers incur to provide execution services against protected quotations."); Ontario Teachers' Pension Plan Board ("OTPP"), the Alberta Investment Management Corporation ("AIMCo"), the California State Teachers' Retirement System ("CalSTRS"), the California Public Employees' Retirement System ("CalPERS"), the Canada Pension Plan Investment Board ("CPPIB"), the Teacher Retirement System of Texas ("TRS"), and the group of undersigned public pension plans, (collectively "Pension Fund Group Letter") (3/31/2023) ("The existing cap, adopted in 2005, does not reflect the enormous efficiency gains from technology advances since that time."); Invesco Ltd. Letter (3/31/2023) ("We also agree with the Commission's statement that market efficiencies have developed since the adoption of Rule NMS such that access fee caps should be reduced to reflect current trading costs"); Citigroup Letter (3/31/2023) (""CGMI has previously supported a reduction from the current 30-mil access fee cap (30 cents per 100 shares) under Rule 610 of Reg NMS to less than 10 mils, as spreads have narrowed and commissions have decreased considerably since Reg NMS was adopted in 2005."); *see also* Council of Institutional Investors (3/30/23) (commenting that the "existing system disadvantages institutional investors"); Better Markets Letter (3/31/23) (commenting that costs have dropped with the advent of advances in technology and a reduction in access fees will impose lower costs on investors, which is especially true as to institutional investors that pay a significant proportion of the access fees).

[26] Intercontinental Exchange Group, Inc. ("ICE"), which owns, among other things, the New York Stock Exchange ("NYSE"), has long supported reducing the access fee cap because, since 2005, competitive and technological advancements have reduced spreads and commissions, causing access fees to become a larger portion of overall transaction costs. See "ICE's Six Recommendations for Reforming Markets," WALL ST. J. (Dec. 18, 2014), available at: https://www.wsj.com/articles/BL-MBB-31078 (arguing for a reduction in the access fee cap from $0.003 to $0.0005); *see also* Letter from Stacy Cunningham, President, NYSE, to Brent J. Fields, Secretary, SEC, dated October 2, 2018, avail. at https://www.sec.gov/comments/s7-05-18/s70518-4470779-175854.pdf.

Because the access fee cap has remained fixed, competitive pressures have not reduced fees. As the SIFMA review explains, these market forces have been stymied by the practice of using access fees to fund rebates to "liquidity makers":

> Notably, while Rule 610 sets the maximum access fees, it does not set any minimums. If efforts to avoid access fees have led to more off-exchange trading, one would expect competitive pressures to result in exchanges reducing access fees to regain market share. However, this expected dynamic has been stymied by a collective action problem. Because the vast majority of access fees charged to "liquidity takers" are used to fund rebates paid to "liquidity makers," an exchange that reduces access fees must also reduce liquidity rebates. Such an action would result in a first-mover disadvantage. If one exchange were to reduce access fees and liquidity rebates, market participants that would otherwise be liquidity makers, such as market makers or less aggressive traders, would likely immediately shift their order flow away, as they would be economically better off trading on the exchanges that did not yet reduce their access fees. As a result, while it appears that there is support even from some exchanges to reduce access fees, none has taken the step to do so on its own.[27]

This collective action problem persists today and still stymies the ability of market forces to address the distortive effects of high access fees. As a result, rebates are used by exchanges to compete for order flow among themselves, but that does not mean that they are necessary to attract liquidity once the "collective action problem" is addressed.

Evidence of and Industry Comments Pointing to Pricing Distortions

There is ample evidence that maintaining the access fee cap at its current level has led to distortions the Commission sought to avoid. A simple illustration shows why. A broker sending a buy order to access a quote to sell at a best-displayed price of $10.01 on a maker-taker exchange charging the usual fee[28], with the national best bid and offer ("NBBO") at $10.00-$10.01, must pay the full spread of one cent in addition to the 30-mil access fee. In contrast, trading with an OTC market maker charging no access fee at a price of $10.009 would allow the broker to obtain a price 40 mils better, with the access fee representing substantially more savings than the marginal price improvement. In that scenario, assuming a full pass-through of execution fees, an investor would be better off receiving an execution at $0.002 *worse* than the NBBO on a market that did not charge access fees than buying at the national best offer on an exchange that did. That is the crux of the regulatory rent that protected markets enjoy. The investor would receive a better result even at a trading venue that charges some access fee, so long as that fee was substantially less than the exchange's fee. That is the case on virtually every ATS, single-dealer platform ("SDP"), and OTC market maker. In reality, because of the

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[27] *See* SIFMA Letter (10/24/2014) SIFMA Submits Comments to the SEC in reference to Recommendations for Equity Market Structure Reforms. *See also Maker-Taker Under the Microscope*, Markets Media Group, https://www.marketsmedia.com/sta-magazine-2016/maker-taker-under-the-microscope/ (explaining the history of the maker-taker model that was originated when electronic trading venues were in their infancy and interviewing the individual who created the model back in 1997 who stated at a 2014 roundtable discussion: "The reasons we came out with maker-taker pricing no longer exist." Also explaining that the maker-taker pricing scheme has contributed to unnecessary market complexity, conflicts of interest between brokers and their customers, and market fragmentation).

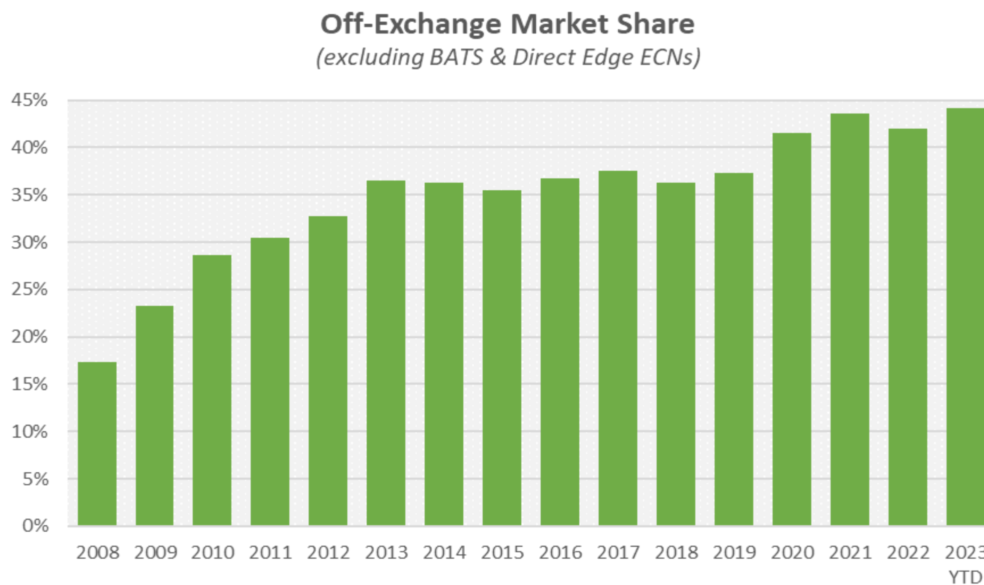
[28] As noted above, the overwhelming proportion of execution volume for orders accessing displayed quotes are charged the maximum fee of 30 mils.

operation of Rule 611, a broker would place the order with an OTC market maker with a price at or slightly better than the NBBO, but still the change in access fee would generate most of the savings. That dynamic drives a deterioration of the pricing information that the NBBO is designed to represent. It also means that more volume is driven to markets that do not operate under transparent rules that are approved by the Commission, have surveillance and other self-regulatory responsibilities, and are subject to a high level of regulatory oversight.

The growth of so-called "inverted" taker-maker venues has further increased the distortion of best prices. In the case of a market that offers a typical take "rebate" of approximately 20 mils, while the displayed price of $10.01 may be the same as that on a maker-taker venue, the actual difference in cost between the two sides amounts to 50 mils, fully half of the minimum spread.

Moreover, the picture is even more clouded by the use of opaque rebate tiers, in which the most favorable pricing is available only to a handful of brokers.[29] As a result of tiered pricing, the economics of posting or trading with a displayed quote can vary depending on the firm and exchange and is unknowable to other participants. From all these developments, it is clear that the distortions the SEC was concerned about in 2005 have materialized.

More evidence of the impact of these distortions can be seen in the growth of off-exchange trading venues since Reg NMS. The total portion of off-exchange market volume is at all-time highs. Excluding the volume of BATS and Direct Edge ECNs[30], off-exchange market volume has risen from 17% in 2008 to over 44% so far in 2023, an increase of over 150%.



Source: Cboe Global Markets, various Press Releases from BATS Trading and Direct Edge

[29] *See* Letter from John Ramsay, Chief Market Policy Officer, IEX, to Vanessa Countryman, Secretary, SEC, dated September 20, 2023; IEX, "Why Rebate Tiers are Anti-Competitive", avail. at https://www.iex.io/article/why-exchange-rebate-tiers-are-anti-competitive.

[30] Prior to their exchange approval, both BATS and Direct Edge were ECNs whose trading volume was reported to the Trade Reporting Facility. Because the majority of their volume was displayed, they are excluded from this data, which illustrates the continued rise of non-displayed trading volume which seeks to avoid high access fees.

As further detailed below, numerous industry comments, both before and after the publication of the SEC Proposal, have pointed to the connection between the current fee cap and high access fees and price distortions that have driven brokers away from executing orders on an exchange.[31] In proposing to reduce the cap, the Commission correctly reasoned doing so would ameliorate these distortions and the harm to market efficiency.[32]

The American Securities Association ("ASA"), an organization devoted to representing regional financial services firms that serve Main Street Investors, has aptly explained the problem created by maintaining the current access fee cap:

> The mandatory access fee of 30 mils in Reg NMS has distorted pricing and increased overall transaction costs. This has occurred because for-profit exchanges use their market power to extract monopoly rents through the mispricing of market participants' access to displayed liquidity."[33]

The ASA commented that reducing the access fee cap to 10 mils for all NMS securities would directly address the problem because it would "(1) lead to an increase in investor interaction with displayed quotes, (2) provide an economic reason for all participants to submit displayed quotes to an exchange, and (3) end the corrosive and discriminatory nature of the current exchange fee and rebate system…".[34]

In sum, a review of market trends and current market conditions demonstrates that substantially reducing the fee cap would respond to the directives Congress gave to the Commission in the 1975 Amendments, including the direction to promote efficient trading and facilitate fair competition:

- Other measures of trading costs have been compressed by market competition and by technological change, while access fees have stayed largely unchanged. The result is that access fees represent a much larger share of investors' overall costs to trade than was the case in 2005.

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[31] *See infra n.* 23; *see also* BMO Capital Markets Corp. Letter, March 31, 2023 (commenting that "[r]educing the access fee cap to 10 mills reduces the magnitude of the problems created by the 30-mill fee cap in the market. A fee cap of 10 mills provides ample room for exchanges to create incentives, charge premium or discount prices, and earn a profit, all while lowering the distortive effects they have on the equity market."); American Securities Association Letter (3/31/23) (supporting the SEC reducing access fees given that "the mandatory access fee of 30 mils in Reg NMS has distorted pricing and increased overall transaction costs.").

[32] "Lowering the access fee caps would lower the total amount of access fees collected and rebates distributed, reducing, though not eliminating, any distortionary effects of exchange rebates on order routing and likely improving market efficiency." Proposing Release, at 80303.

[33] Letter from Christopher Iacovella, President & CEO, ASA, to Vanessa Countryman, Secretary, SEC, March 31, 2023, avail. at s73222-20163332-333215.pdf (sec.gov), at 5.

[34] *Id.*

- On all the largest exchanges, access fees generally match the maximum rate allowed under the current cap, and the bulk of those fees are passed through as rebates, based on the Commission's estimate of an average "net capture rate" of 2 mils per share.[35]
- The existing fee cap has been associated with a proliferation of complicated fee structures by "maker-taker" as well as "taker-maker" exchanges, causing displayed prices to become even less closely aligned with the true cost to trade.
- Brokers have been led to route orders away from displayed exchange quotations in favor of execution on other dark, less regulated, off-exchange venues.
- Institutional investors in particular have strongly endorsed a reduction in the fee cap to 10 mils, reacting to the impact of the existing fee cap on their trading.

Response to Certain Comments

One commenter, Nasdaq, Inc. ("Nasdaq"), defends the current access fee cap but none of its arguments provides a sound basis to depart from substantial evidence demonstrating that the current access fee cap should be lowered.

Nasdaq's Arguments Cannot Be Reconciled With Substantial Evidence

For over a decade, the Commission conducted "rigorous . . . study" of whether "the current fee structure distorts the market in ways that harm investors."[36] One of the key "issues the Commission's review flagged was the emerging norm of high rebates offered by maker-taker exchanges," and "[c]oncern over the maker-taker pricing model gained steam" as far back as 2015.[37] And the Commission published rulemakings "describ[ing] in detail problems perceived by the current fee structure's detractors."[38] The problems resulting from maker-taker exchanges included "widespread" evidence that they created a "number of market failures," including "[b]roker-dealer conflicts of interest," "[r]educed transparency" and "[b]enefits accessible only to high-volume broker-dealers."[39] The Commission has deliberately and thoughtfully considered these concerns over the years, conducting ongoing reviews and evaluating substantial evidence.[40] As explained below, Nasdaq does not offer a sound basis to depart from that substantial evidence demonstrating that the Commission should lower the access fee cap.

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[35] IEX First Comment Letter, at 23.

[36] *N.Y. Stock Exch. LLC v. Sec. & Exch. Comm'n*, 962 F.3d 541, 562 (D.C. Cir. 2020) (Pillard, J., concurring).

[37] *Id*.

[38] *Id*. at 563.

[39] *Id*.

[40] *See* IEX First Comment Letter https://www.sec.gov/comments/s7-30-22/s73022-20160364-328968.pdf (explaining that the Commission's current proposals do not arise in a vacuum, and in fact, the proposals stem from years of ongoing review, gathering of substantial comments, and the deliberate consideration of the views of numerous stakeholders).

Comparison to Irrelevant Cost Measures

Nasdaq references overall inflation measures and compares access fees to average stock prices, but neither argument supplies a reasoned basis for maintaining the current access fee cap. General inflation is a poor measure of changes in costs to trade, as it does not focus on data processing or transaction matching. It also provides no information on the cost to trade on exchanges compared to the costs to access ATSs or other venues, which is what influences brokers' decisions about where to send orders.[41]

Similarly, the price of an S&P 500 stock has no bearing on the costs and prices for exchange trading and the cost for members to access exchanges. For example, in deciding whether to buy Google stock, participants may compare the stock price of Google to other Internet companies. But in deciding whether to trade on an exchange, investors compare the cost to trade on an exchange to the cost to trade on an ATS, single dealer platform ("SDP"), or other type of venue. Nasdaq does not suggest that a particular ratio between trading costs and average stock prices would be the "right" ratio. At best, Nasdaq appears to invoke a vague concept of fairness in which an exchange ought to be allowed to receive a given percentage of the share price as a transaction rent. That concept, however, contradicts the Commission's long-held principles for regulating exchange fees.

In evaluating cost measures pertinent to technology companies like exchanges, the Commission would have a far more reasonable basis to consider the dramatic increase in efficiencies in data processing and data storage, as detailed above. In fact, advancements in data processing and communications technology were the factors Congress cited in the 1975 Amendments when directing the SEC to facilitate the development of the national market system.[42]

"All-In" Exchange Costs

Nasdaq separately argues that the cost of trading has remained flat, based on its calculation of the "all-in" costs to trade on various exchanges over time. Nasdaq posits that the cost of trading has not increased, when one considers the aggregate cost of trading on an exchange, which includes the cost of market data and connectivity, and other exchange membership costs.

As we have pointed out before, one fallacy in this argument is that no one pays an average cost to trade and averages are skewed by a few traders.[43] The actual cost of trading is determined

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[41] *See* Blackrock Letter (3/31/23) (supporting setting the access fee cap at 10 mils as such "would have the added benefit of aligning exchange fees with prevailing ATS fees and creating a more equitable competitive landscape across trading venues").

[42] *See* Proposing Release at 80267:("Among the findings that guide the Commission in overseeing the national market system, the Commission must consider the availability of "[n]ew data processing and communications techniques [that] create the opportunity for more efficient and effective market operations" and that it is in the public interest, appropriate for investor protection and the maintenance of fair and orderly markets to assure "economically efficient execution of securities transactions," "fair competition among brokers and dealers, among exchange markets, and between exchange markets and markets other than exchange markets," and "the practicality of brokers executing investors' orders in the best market.")

[43] *See* "IEX is 'All In" on Pricing Transparency", February 14, 2019, avail. at https://www.iex.io/article/iex-is-all-in-on-pricing-transparency

on a per firm basis, and per share exchange costs are wildly disparate across different firms. Indeed, the per share rebate payouts are heavily skewed in favor of relatively few firms. According to one exchange executive at an SEC roundtable in 2018, the exchange provided a net payment to five of its highest volume firms, after accounting for all other costs including market data and connectivity.[44]

The per share costs borne by the vast majority of members are much higher than the "average" trading costs used in Nasdaq's argument. And since a large share of overall rebates are paid to the largest trading firms, the per share costs for most brokers accessing liquidity on behalf of investors is also bound to be much higher.

Nasdaq's comment also fails to consider the costs to access exchange displayed quotes compared to the multitude of available alternatives. Rule 610 is concerned about the cost for investors and others to access exchange protected quotes, given the regulatory requirement not to trade through those quotes. What is more relevant in that context is the cost to access protected quotes compared to liquidity at other trading venues.[45] As noted above, ATSs, as one other venue type whose access fees have not been capped by regulation, charge substantially lower fees to access liquidity, typically no more than $0.001 per share, and SDPs or OTC market makers charge substantially lower or no fees to access liquidity (and in the case of market makers, may pay to attract order flow).

Arguments About Harm from Reduced Rebates

As the previous discussion shows, an important purpose for capping access fees is to facilitate the access of investors and others to protected quotes. The purpose is not, and has never been, to allow exchanges to maintain rebate payments at current high levels. Nonetheless, some exchange commenters continue to argue that a substantial reduction in the access fee cap would be "arbitrary and capricious" because it would reduce the rebates that exchanges can pay, which they claim would lead to reduced liquidity on exchanges and harm the interests of investors. None of these arguments hold up to scrutiny.

Relationship of Access Fees to Rebates in General

The first major flaw in the argument that reducing the access fee cap will harm investors by limiting rebates is that the Commission is not proposing to limit rebates. Exchanges have used high access fees as a funding source to pay rebates, but that choice is neither required by regulation nor is it compelled as a practical matter. Therefore, the regulatory decision on the

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[44] *See* Roundtable on Market Data Products, Market Access Services and their Associated Fees, (Oct. 25, 2018), at p.74-75 Roundtable on Market Data and Market Access (sec.gov). (senior executive of Cboe Global Markets stating that "There are four investment banks and six HFTs. Five out of the top 10 get a check from us after the costs of their connectivity and market data. So we are cutting them a check monthly after their costs.")

[45] *See* Division of Market Regulation: Responses to Frequently Asked Questions Concerning Rule 611 and Rule 610 of Regulation NMS (stating that Rule 610 "requires fair and non-discriminatory access to quotations [and] establishes a limit on access fees to harmonize the pricing of quotations across different trading centers"). Responses to Frequently Asked Questions Concerning Rule 611 and Rule 610 of Regulation NMS (sec.gov); *see also* Decimus Capital Markets, LLC Letter (Apr. 25, 2016) (recommending the practical step of a lower access fee cap "as this measure would make lit markets more attractive by decreasing the cost of routing to these trading venues, while impacting brokers' incentives, and encourage more competition between lit and dark markets"). 26529-63.pdf (sec.gov)

appropriate access fee cap is independent from an exchange's commercial decision to use access fees as a subsidy to pay rebates.[46]

Similarly, there is no basis for the suggestion by some commenters that the fee cap should be set based on some specific proportion to the minimum tick increment, or that the Commission intended that result. While access fees that are too large in relation to spreads or tick sizes may distort trading costs, there is no specific regulatory purpose served by requiring that access fees bear a particular relationship to tick sizes. Further, setting different access fee caps based on tick size creates additional complexity, requiring operational changes whenever stocks move from one tick increment to another.[47]

Views of Investors

The second major flaw in the argument that investors will be harmed by a reduction in the access fee cap is that investors themselves strongly and overwhelmingly disagree. Numerous asset managers, pension funds, and other institutional investors, accounting for trillions of dollars in investor assets, have urged the Commission to reduce the access fee cap to 10 mils for all stocks priced at $1 per share or more.[48] These include many of the most sophisticated investors in the world, who as fiduciaries for their clients are keenly attuned to both their costs to access liquidity and the factors that affect liquidity on exchanges. They are eminently capable of assessing the trade-offs and are speaking directly for the interests of those clients.

Furthermore, numerous investors and independent industry associations have expressed serious concern, supported by economic and cost/benefit analysis,[49] that payment methods involving high rebates reduce market efficiency. As commentors have explained, the payment of

[46] An exchange's *choice* to pay substantial rebates to a handful of liquidity providers cannot possibly be a justification to prohibit the Commission from exercising its authorities to review current fee structures and propose adjustments that benefit the market and investors at large. If such was the case, the Commission's hands would be inappropriately tied from improving the fairness of our securities markets based on the "narrow focus on the [exchange's] own incentives," thereby ignoring "the broader context in which the Commission adopted the Rule." *The Nasdaq Stock Market LLC, et al. v. SEC,* No. 21-1100 (D.C. Cir. May 24, 2022).

[47] Commenters that have argued the access fee should be reduced only in proportion to a reduction in the tick size have not explained why this is consistent with the regulatory purpose for limiting the prices that exchanges can demand for accessing displayed quotes. Allowing higher access fees for less liquid stocks would create a higher incentive to seek non-exchange executions in those stocks, and maintaining a fixed, lower fee cap for all stocks would not prevent an exchange from offering a higher rebate for liquidity in less actively-traded names if it chose to do so.

[48] *See supra* at n.3.

[49] *See* Chester Spatt, *"Is Equity Market Exchange Structure Anti-Competitive?"* (Dec. 28, 2020) (using economic principles to identify a variety of ways in which equity market rebates reflects anti-competitive practices that provide a mechanism by which exchanges are engaging in price discrimination). https://www.cmu.edu/tepper/faculty-and-research/assets/docs/anti-competitive-rebates.pdf.; *see also* Michael Warlan, *SEC Equity Market Structure Proposals: A Buy-Side View*, Traders Magazine (Oct. 5, 2023) (explaining that "creating a lower and single and consistent access fee cap would benefit investors through reduced costs" and that rebates have led to a "degradation in 'real' liquidity and has effectively transferred some of this cost to investors; the majority of that is borne by buy-side institutions"). SEC Equity Market Structure Proposals: A Buy-Side View - Traders Magazine

high rebates can distort order routing practices,[50] harm the price discovery process,[51] allow for price discrimination, and stifle competition.[52]

Compensating for Risks of Liquidity Suppliers

Nasdaq also argues that a 30-mil access fee cap, which subsidizes rebates at current levels, is needed to compensate for high risks faced by liquidity providers. In particular, Nasdaq points to rising costs from two sources: the costs of adverse selection from making markets on exchange, and the costs created by fragmentation and off-exchange trading and segmentation. This claim does not supply a reasoned basis to maintain the access fee cap because it ignores the role that Nasdaq and other exchange companies that charge the maximum access fee on the majority of their executions have played in creating these conditions as a byproduct of their own

[50] *See, e.g.*, Vanguard Comment Letter (3/31/2023) (explaining that the current pricing models "harm investors" as they "can create conflicts of interest with a broker's obligation to obtain best execution for a customer, undermine market transparency because fees and rebates do not appear in the prices displayed by exchanges or provided on trade reports, and contribute to market complexity by encouraging rebate arbitrage strategies."); Pension Fund Group Letter (3/31/2023) (explaining that the current pricing models "clearly disadvantages institutional investors" and that rebates create conflicts of interests by influencing where a broker sends a displayed order even when the investor could receive a better execution on another market).

[51] *See, e.g.*, *Themis Trading Letter* (3/31/2023) (explaining that they have long contended that rebates distort order routing and harm the price discovery process); The Capital Group Companies Letter (3/31/2023) (stating that they have long supported the Commission "addressing the conflict faced by brokers related to incentives created by access fees and rebates in the maker/taker model" and advocating for a reduction of access fees to mitigate order routing conflicts); *see also* SIFMA Letter on Equity Market Structure Reform (3/29/2017) 26529-1674696-149276.pdf (sec.gov); American Securities Association Letter (3/31/23) ("The maximum access fee is used by regulated for-profit exchanges to subsidize maximum rebate payments, and this subsidy creates conflicts of interest in order routing that does not lead to better execution quality for investors."); Better Markets Letter (3/31/23) (commenting that "fees and correlated rebates create conflicts of interest that distort order routing decisions and compromise compliance with the duty of best execution. Indeed, there is evidence that exchanges that pay the highest rebates often provide worse execution quality.").

[52] Proof Services LLC Letter (3/31/2023) (commenting as an institutional broker that rebate tiers "as currently constituted should be a source of shame for our industry," and explaining that pricing tiers have grown so complex that they have become effectively "bespoke pricing" that undermines faith in the fairness of market access); Healthy Markets Association*, Letter to Gary Gensler re: Transaction Pricing Practices* (November 16, 2022) (discussing the facial inconsistency between the customer-based pricing tiers and what is required under the Exchange Act, and explaining the inherent conflicts of interest and competitive disadvantages created by rebate pricing tiers) https://healthymarkets.org/wp-content/uploads/2022/12/HMA-Ltr-re-Volume-Based-Pricing-11-16-22-1.pdf; Decimus Capital Markets, LLC Letter (Apr. 25, 2016) at 3 (stating that "the National Best Bid and Offer could be distorted by variations in fee-rebate structures, potentially hurting market participants whose orders are disadvantaged by routing practices that do not minimize costs".) 26529-63.pdf (sec.gov); *see also* RBC Capital Markets Letter (Mar. 31, 2023) (supporting lower access fees); at 2 n.4 (citing to RBC Capital Markets Letter (Nov. 22, 2013) (explaining that the practice of professional traders that trade to make money from collecting rebates "accomplishes little in the way of true price discovery or best execution," "does not help the individual investor," reduces transparency by "distorting the price-discovery process" and has led to mainly negative consequences). s70210-411.pdf (sec.gov); *see also* RBC Report (2018) s70518-4527261-176048.pdf (sec.gov).

commercial decisions that increase the risks and costs faced by liquidity providers. IEX agrees that liquidity providers incur high costs from adverse selection, resulting from the ability of some of the fastest trading firms to access displayed quotes in discrete moments when the price of the NBBO is likely to "tick" in favor of the taker and against the liquidity provider. IEX has produced extensive data showing that the cost of adverse selection is closely correlated to the charging of maximum access fees, rendering them as venues of last resort.[53] There is ample public data on this market-wide phenomenon, the cost it imposes on investors, and its detrimental impact on displayed liquidity and price discovery.[54]

The "toxicity", or degree of adverse selection, of trading on exchange is also driven by the high cost to access liquidity compared to other venues. Many SDPs (where there is only one counterparty to trade against), charge less than exchanges (or charge no fee) to access liquidity. Similarly, ATSs and other off-exchange venues generally charge rates much lower than the access fees imposed by most exchanges. Because their cost of access is so much higher than on other venues, exchanges become the venue of "last resort." Consequently, a higher proportion of taking activity there is driven by using microsecond "tick" predictions. In contrast, institutional orders that take liquidity without seeking to profit from adverse selection are more likely to avoid exchange liquidity because of the high access fees and have ample cheaper alternatives. This further increases the toxicity on exchanges.

Recent data published by BestEx Research[55] compares off-exchange and on-exchange trading costs. The conclusion is that adverse selection of off-exchange retail trades is a small fraction of the adverse selection experienced by liquidity providers trading on exchanges. This provides further evidence that the primary driver of volume trading off-exchange is a flawed ecosystem in which most exchanges provide worse execution quality and use high rebates to compensate for it. As long as exchanges remain venues of last resort due to their high access fees, the experience for liquidity providers will be sub-par, and they will seek to be compensated for that experience through rebates. Conversely, IEX believes that modernizing the access fee cap and bringing exchange access fees in line with off-exchange trading venues will reduce the need for

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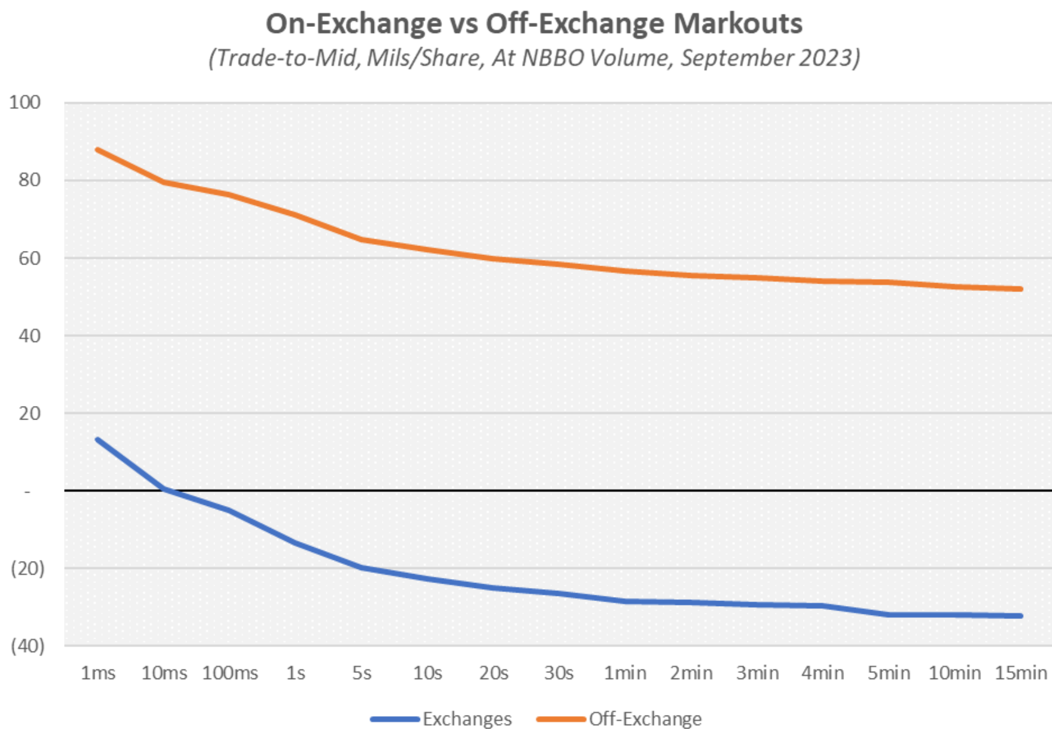
[53] Other important factors that enable latency arbitrage include the varying speed of exchange connectivity, exchange market data distribution, the distance between exchange data centers, and other factors that are within the control of each exchange.

[54] *See* SEC Approval Order (8/26/2020), at 51, Order Approving a Proposed Rule Change to Add a New Discretionary Limit Order Type Called D-Limit (sec.gov) (noting that several commenters with institutional trading experience explained that "many market participants are reluctant to post displayed liquidity because of their prior experience with having that interest be adversely selected by latency arbitrage traders with whom they cannot reasonably compete"); *see also, e.g.*, Goldman Sachs Comment Letter (2/26/2020) (explaining that adverse selection has a negative effect on the national market system and discussing the critical importance of efficient price discovery for displayed orders and the need to mitigate latency arbitrage practices as they do not advance the goals of the Exchange Act) sriex201915-6873861-210636.pdf (sec.gov); Jefferies Comment Letter (2/5/2020) (commenting on the problem of adverse selection of getting "picked off" by arbitrage-based strategies relying primarily on speed) sriex201915-6772521-208081.pdf (sec.gov); T. Rowe Price Comment Letter (2/5/2020) (commenting on the "disincentive to all market participants to provide displayed quotes in fear of getting 'picked off' when the price of a security is in transition to a new price level continues to plague displayed markets") sriex201915-6772531-208082.pdf (sec.gov).

[55] https://www.bestexresearch.com/insights/the-good-the-bad-the-ugly-of-payment-for-order-flow.

exchange avoidance and naturally result in a better experience for liquidity providers, one that will not need to be "offset" by rebate payments.

Expanding the analysis of BestEx Research to compare the mark-outs of on-exchange vs off-exchange executions at the NBBO demonstrates that liquidity providers on exchanges experience a significant amount of adverse selection, especially compared to off-exchange executions.[56] If these "benign" orders seeking better prices off-exchange more often accessed displayed quotes, this by itself would improve the overall experience of liquidity adders and serve as a non-rebate incentive for market-makers.



IEX has shown that, through market and product innovation, exchange orders do not need to rely on distortive rebates to compensate liquidity providers for the impacts of adverse selection. IEX's D-Limit order type is a prime example. D-Limit counters latency arbitrage by using a publicly disclosed mathematical signal, by which IEX identifies discrete moments when there is a high likelihood that the NBBO will move in a direction adverse to the displayed order in the next two milliseconds. In those moments, IEX reprices the displayed order by one tick increment less aggressive than the then-current NBBO. In approving the order type, the Commission summarized the purpose and benefit:

> Even though the CQI is mostly off and comes on only when certain market-moving conditions are present, those small increments of time are meaningful on IEX because, as discussed above, a material amount of activity occurs during those moments. In those rare moments when market prices are in transition, a race condition exists between liquidity providers who want to reprice their on-exchange displayed liquidity to reflect the

[56] Source: Analysis of NYSE TAQ market data, IEX market data

> changing market prices and the liquidity takers who want to take before those updates can occur. This creates information asymmetries and can lead to other externalities, which can affect the willingness of many market participants to post displayed liquidity because it subjects their orders to adverse selection when prices move and they are not able to see or react as fast to those changing conditions. In turn, this race can have a meaningful effect on all market participants because it can incentivize investors to trade in the dark, either off exchange or through non-displayed exchange order types. The result is that a valuable source of liquidity may instead seek out dark non-exchange trading venues where the speed traders' advantages are moot, but in doing so this liquidity is no longer displayed to and accessible by the market as a whole. Such an outcome does not advance the Exchange Act's goal of promoting fair and orderly securities markets. IEX's D-Limit order type seeks to compete with those other trading venues by incentivizing more displayed liquidity through improved execution quality for liquidity providers.[57]

Nasdaq offers a chart purporting to show differences in execution quality for displayed trading among various exchanges in June of 2020. However, Nasdaq fails to mention that the month it selected was just before the introduction of IEX's D-Limit. Data from the month D-Limit launched shows a very different picture. As shown below, IEX had moved to the second-best position among all exchanges in terms of percentage of time IEX was "at the inside" of the NBBO in S&P 500 stocks. And IEX did so through innovation in product development, not paying significant rebates funded by charging the maximum access fee.[58]

Nasdaq's initial chart (replicated below[59]) from June 2020 shows the largest rebate-paying venues with the highest percentage of time with the best prices in S&P 500 stocks.

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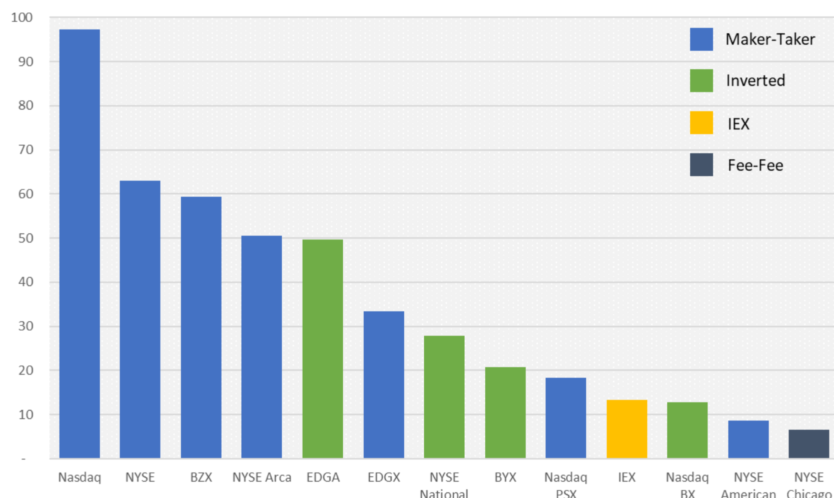
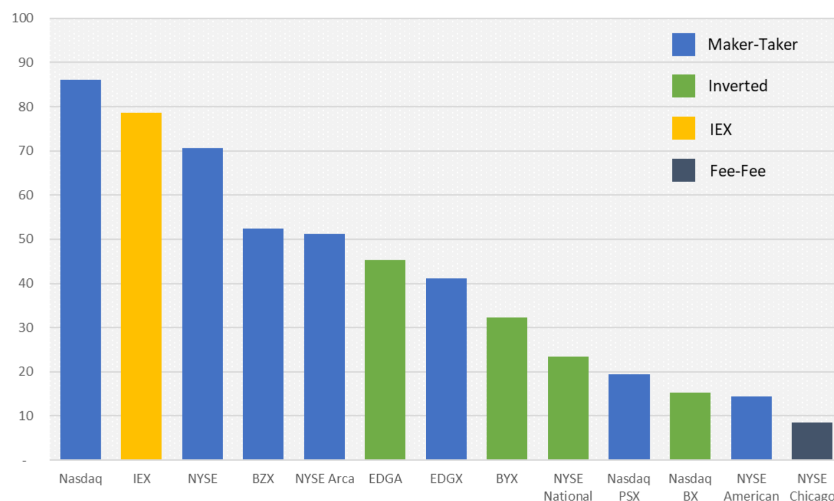
[57] *See* SEC Approval Order (8/26/2020), at 18, Order Approving a Proposed Rule Change to Add a New Discretionary Limit Order Type Called D-Limit (sec.gov). In *Citadel Securities LLC v. SEC*, No. 20-1424, (D.C. Cir. 7/29/2022), the D.C. Circuit Court upheld the SEC's approval of IEX's D-Limit order type, explaining that latency arbitrage strategies of certain liquidity providers relying on speed advantages causes investors to bear the costs of adverse selection and holding that "substantial evidence" supports the SEC's findings. Applying the "great deference" that the Court affords the SEC when interpreting Regulation NMS and making "determinations based upon highly complex and technical matters," the Court rejected a high-speed liquidity providers' attempt to thwart positive advancements that the SEC determined benefits all market participants.

[58] Further, Nasdaq tries to support its weak argument that exchanges need to pay high rebates by pointing to trading in a single stock, Interactive Brokers (IBKR), during part of 2018, based on the claim that average market-wide spreads were wider after IBKR moved its primary listing from Nasdaq to IEX. This argument is unsound for various reasons. First, the 2018 time period Nasdaq selected occurred prior to the introduction of IEX's D-Limit order, which for the first time provided protection from adverse selection to displayed orders on IEX. To contrast, in August 2023, while IEX continued to offer no rebates, IEX ranked ahead of four large "maker-taker" exchanges in time/size of quoting at the NBBO for the same symbol. Second, IEX had only a single listing during this period, meaning market makers had less incentive to take the steps needed to compete to act as market makers. There is no basis for extrapolating from that particular circumstance to draw conclusions about rebates and liquidity in general. Third, Nasdaq's argument implies that listing markets have some special impact in determining average intra-day spreads, which in fact are set by trading on all exchanges.

[59] Source: NYSE TAQ Market Data



However, data from October 2020[60], the first month IEX's D-Limit order type became available, paints a different story. With the improved performance and reduced adverse selection IEX was able to offer, IEX's % of time with the best prices increased six-fold, without the payment of rebates.



This serves as strong evidence that the question is not whether exchanges can pay rebates or how they are used to draw liquidity from one exchange to another, but how exchanges can find better ways to reduce the impact of adverse selection. If adverse selection is addressed in different ways, through higher investor demand resulting from lower costs to access protected quotes and innovations to serve that increased demand, market participants will have strong incentives to provide liquidity and maintain tight bid-ask spreads, even if rebates are reduced.

Nasdaq also argues that the costs of providing liquidity have increased because of "fragmentation and off-exchange trading and segmentation." We agree that this is an important

[60] Source: NYSE TAQ Market Data

factor affecting costs to provide liquidity, but, again, this is a problem created by exchanges. As discussed previously, off-exchange trading has grown in tandem with the desire to avoid the high cost of accessing exchange quotes and the related high level of toxicity of the trades that do interact with those quotes. Further, market fragmentation has increased due to the proliferation of individual exchanges under the same exchange family, differentiated only or primarily by variations in the specific fee structure used by each exchange. This type of fragmentation necessarily reduces the amount of liquidity that can be aggregated in a single exchange, serving the interests of only exchange companies that can secure fees harvested by multiple markets, each with their own protected quotes.

In sum, we believe the Commission should align access fees with current trading costs in a way that will incentivize markets to compete for order flow based on their displayed prices because doing so would align with the 1975 Amendment's objectives. Arguments made by Nasdaq do not fit those objectives because maintaining the status quo limits competition and price transparency. And Nasdaq's arguments are contradicted by the evidence demonstrating that charging high access fees in order to fund rebates is not necessary to compensate the risks and costs of providing liquidity.[61]

Other Arguments

Further, the same commenters argue that a substantial reduction in access fees would result in a "parade of horribles" of hidden costs to investors, in the form of worse NBBO prices, wider spreads, higher costs for retail investors, and less liquidity for thinly-traded securities. None of those claims withstands scrutiny or has a factual basis.[62]

The speculation that various harms would arise from trading on other markets does not account for, much less outweigh, the tangible cost reductions that would arise from lower access fees. Further, as noted above, this speculation rests on unwarranted assumptions about the choices individual exchanges would make in the event that the access fee cap is reduced.

Reducing access fees serves each of the purposes of the 1975 Amendments by increasing on-exchange trading, improving price discovery, enhancing competition between exchanges, brokers, and market makers, and reducing investor costs. Additionally, reducing access fees by two-thirds would improve execution quality on exchanges by making the cost to access their displayed liquidity more competitive with the trading costs of other market centers. This, in turn,

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[61] *See* The Clearpool Group Letter, SEC Roundtable on Market Data and Market Access (Oct. 23, 2018) (independent broker commenting that the rebate pricing structures have created an environment that presents a potential barrier to entry into the markets for many smaller firms and stating that "[s]maller broker-dealers cannot wait for market driven solutions to address concerns raised by the costs of trading and to create a more competitive or equitable environment for market participants, as it is clear that exchanges have little interest in changing the status quo"). 4729-4555206-176185.pdf (sec.gov)

[62] Moreover, to the extent Nasdaq's comment letter seeks to call into question the SEC's authority to set access fee caps, we find such contention baseless. No other market participant has challenged, as a form of "ratemaking", the Commission's authority to adjust the access fee cap as needed based on changes in the market. As discussed above, and as a federal court opinion noted in 2018, the Commission's authority to establish a cap and to modify it based on reasoned justifications is undisputed. *See NYSE v. SEC,* No. 19-1042, (D.C. Cir., June 16, 2020), concurring, Judge Pillard, ("The fee cap in Rule 610(c) is the product of Commission rulemaking under its Section 23 and Section 11A authority, and nobody disputes that those provisions authorize the Commission to change the cap.").

would mean that exchanges would no longer be treated as "venues of last resort" due to their high costs of access. With broader demand to access liquidity by institutional investors that are not seeking to benefit from adverse selection, liquidity providers will incur less costs from adverse selection as a proportion of their total trading and will have greater incentives to supply liquidity.

Similarly, there is no basis for conjecturing that lower access fees would widen spreads. Even assuming exchanges would choose to substantially reduce rebate payments, the benefit of increased demand for exchange liquidity would provide a compensating benefit as noted above. The fact that exchanges use rebates to draw orders from other exchanges says nothing about the ability of exchanges to attract more orders that now go to off-exchange venues by using lower access fees and offering better execution quality.

It is also likely that reduced access fees could benefit retail investors. Retail orders are generally "benign", meaning that they do not pose the same adverse selection costs as orders from some other participants. For that reason, there is substantial interest by other participants, including institutional investors, in interacting with this order flow. Particularly if the Commission adopts our suggestion to use its authority to allow exchanges to fully display the price and size of orders willing to interact with retail orders, in 10 mil increments, retail investors would stand to benefit from greater competition to interact with their orders.

For the same reasons, speculation about harm to the market for thinly-traded securities is unfounded. Those securities would also benefit from more demand related to reduced costs to access displayed liquidity. And, as explained above, there is nothing that would prevent an exchange from paying higher rebates to attract lit orders in less-liquid stocks, if it chose to do so. There is no basis for saying that the Commission may not reduce access fees because to do so would limit the use of access fee revenue as a convenient funding source for any rebates an exchange decides to pay.

Conclusion

Congress charged the SEC with facilitating the development of a national market system and gave it broad authority to determine how best to protect investors, assure economically efficient execution of securities transactions, and promote fair competition. In exercise of that authority, in 2005, the Commission established a national market system designed to favor displayed, automated quotations by exchanges so that investors can effectively access the best prices for securities. It adopted a limit on the fees that could be charged to access those prices to prevent exchanges from abusing this new privileged status and to avoid price distortions that would undermine Congressional objectives. The Commission also specifically warned against exchanges charging higher access fees as a means to pass through higher rebates as contrary to the directives of ensuring fair and transparent prices for investors.

Eighteen years later the costs to access exchange quotes have remained pegged at the previously determined maximum fee, which represents an artificially inflated price to the detriment of investors and markets overall. The overwhelming weight of evidence and commentary from market participants shows that the current access fee cap is outdated, not aligned with current market conditions (representing a disproportionate amount of investors' trading costs), and has led to the very pricing distortions that were warned against when the cap was approved.

Further, the charging of excessive access fees has resulted in significant fee disparities between exchanges and off-exchange trading venues – driving order flow to dark, less regulated, venues at an alarming rate leading to a record proportion of volume trading off-exchange. The record shows that a substantial and comprehensive reduction in the access fee limit is not only justifiable under the broad authority given by Congress, but also necessary to update the rules to serve the statutory and regulatory purpose of maintaining fair and efficient markets for the benefit of all market participants.

Sincerely,

John Ramsay
Chief Market Policy Officer, IEX