ORAL ARGUMENT SCHEDULED OCTOBER 11, 2019
No. 19-1042, consolidated with Nos. 19-1043, 19-1046, 19-1049, 19-1053, 19-1054

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

NEW YORK STOCK EXCHANGE LLC, ET AL.,

Petitioners,

v.

SECURITIES AND EXCHANGE COMMISSION,

Respondent,

On Petitions for Review of a Rule
of the Securities and Exchange Commission

BRIEF OF *AMICI CURIAE* INVESTMENT COMPANY INSTITUTE AND COUNCIL OF INSTITUTIONAL INVESTORS IN SUPPORT OF RESPONDENT AND DENIAL OF THE PETITIONS FOR REVIEW

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CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES

(A) Parties and *Amici*: Except for *amici* Investment Company Institute, Council of Institutional Investors, Investors Exchange LLC, GTS Securities LLC, Citadel Securities LLC, and IMC Chicago, LLC, and any *amici* who have not yet appeared in this appeal, all parties, intervenors, and *amici* that appeared in the proceedings below and that appear in this Court are listed in petitioners' brief.

(B) Ruling under Review: The rule under review is the Securities and Exchange Commission's final rule entitled Transaction Fee Pilot for NMS Stocks, Release No. 34-84875, 84 Fed. Reg. 5202 (Feb. 20, 2019).

(C) Related Cases: These consolidated cases have not previously been before this Court or any other court. To *amici*'s knowledge, there are no other related cases.

CORPORATE DISCLOSURE STATEMENT

The Investment Company Institute ("ICI") is the leading association representing regulated funds globally, including mutual funds, exchange-traded funds, closed-end funds, and unit investment trusts in the United States, and similar funds offered to investors in jurisdictions worldwide. ICI seeks to encourage adherence to high ethical standards, promote public understanding, and otherwise advance the interests of funds, their shareholders, directors, and advisers. ICI's members manage total assets of US$23.3 trillion in the U.S., serving more than 100 million U.S. shareholders, and US$6.9 trillion in assets in other jurisdictions. ICI carries out its international work through ICI Global, with offices in London, Hong Kong, and Washington, DC. ICI has no parent company, and no publicly held company owns ten percent or more of its stock.

The Council of Institutional Investors ("CII") is a nonprofit, nonpartisan association of pension funds, other employee benefit funds, endowments and foundations, with combined assets of approximately $4 trillion. CII's non-voting members include asset management firms with more than $35 trillion under management. CII is a leading voice for effective corporate governance, strong shareowner rights and vibrant, transparent and fair capital markets. CII promotes policies that enhance long-term value for U.S. institutional asset owners and their beneficiaries. CII has no parent company, and no publicly held company owns ten percent or more of its stock.

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GLOSSARY

CII	Council of Institutional Investors
Commission or SEC	United States Securities and Exchange Commission
Exchanges	The Nasdaq Stock Market LLC, New York Stock Exchange LLC, NYSE Arca, Inc., NYSE American LLC, NYSE National, Inc., NYSE Chicago, Inc., Cboe BZX Exchange, Inc., Cboe BYX Exchange, Inc., Cboe EDGA Exchange, Inc., Cboe EDGX Exchange, Inc.
ICE	Intercontinental Exchange, Inc.
ICI	Investment Company Institute
IEX	Investors Exchange LLC
NMS	National Market System
NYSE	NYSE Group, Inc.

INTEREST OF *AMICI CURIAE*[1]

This case concerns a pilot program that the Securities and Exchange Commission ("Commission" or "SEC") adopted to assess how the manner in which national securities exchanges price transactions affects equity market quality and investor outcomes. The pilot temporarily modifies constraints on exchange transaction pricing in Rule 610 of Regulation NMS to "facilitate an empirical evaluation" of whether exchange transaction fees and rebates influence the way brokers route orders on behalf of customers, including mutual funds, pension funds, and other institutional investors. *See* Transaction Fee Pilot for NMS Stocks, 84 Fed. Reg. 5202, 5204 (Feb. 20, 2019).

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[1] All parties consent to the filing of this brief. No counsel for any party authored this brief in whole or in part. No party or party's counsel, and no other person or entity,

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As representatives of many of the largest investors in U.S. equity markets, ICI and CII have a strong interest in ensuring that equity markets serve the interests of investors. ICI's and CII's members experience firsthand the harms from the transaction pricing schemes that exchanges currently employ, and strongly support the Commission's transaction fee pilot, which represents a sound approach for determining whether permanent changes to transaction fee rules would improve equity market quality.

ARGUMENT

Over the past decade, the system of fees and rebates that exchanges apply to securities transactions has drawn significant criticism from a broad and diverse spectrum of market participants, academics, and regulators. These critics have described

other than *amici*, their members, and counsel, contributed money that was intended to fund preparing or submitting the brief.

how the maker-taker model, the predominant transaction pricing scheme, harms investors by distorting both the structure of equity markets and the behavior of a wide range of market participants, including brokers, market makers, and stock exchanges. *See, e.g.*, Memo. from the SEC Div. of Trading & Markets, *Maker-Taker Fees on Equities Exchanges* 4–6 & nn.17–21 (Oct. 20, 2015) ("DTM Maker-Taker Memo").[2] Notably, these critics have included the petitioners here, the major national securities exchanges (the "Exchanges") that form the heart of the national market system. As the CEO of the New York Stock Exchange's parent company, Intercontinental Exchange ("ICE"), said in 2014, the maker-taker model "hurts everybody in the market." Christine Stebbins, *ICE CEO Sprecher Wants Regulators To Look at 'Maker-Taker' Trading*, Reuters (Jan. 26, 2014).[3]

The Commission designed the transaction fee pilot at issue in this litigation to investigate these criticisms and inform any future reforms to the rules governing exchange transaction fees. *See* 84 Fed. Reg. at 5203. Now, however, the Exchanges suggest that the maker-taker model does not even "presen[t] a problem that is in need of a solution," Br. 26, and fault the Commission for undertaking the pilot instead of adopting one of the alternatives they proposed, Br. 52–56. Neither argument has merit. As the Exchanges themselves have recognized, the maker-taker model presents a number

[2] https://www.sec.gov/spotlight/emsac/memo-maker-taker-fees-on-equities-exchanges.pdf

[3] https://www.reuters.com/article/us-intercontinentalexchange-nyse-spreche/ice-ceo-sprecher-wants-regulators-to-look-at-maker-taker-trading-idUS BREA0Q05J20140127

of significant problems for equity markets, which the Commission reasonably decided to study before undertaking any broad, permanent reforms. And, as the Commission explained, those problems are far broader than the narrow range of issues the Exchanges' alternative proposals would address. The transaction fee pilot is a constructive and long overdue first step toward fixing an outdated and byzantine pricing model that is badly in need of reform. It should be allowed to proceed.

I. The SEC Reasonably Concluded That The Maker-Taker Model Presents Problems Worthy of Study.

Contrary to the Exchanges' suggestion that the maker-taker model presents no problems worthy of investigation, the maker-taker model harms investors in several respects. First, it creates conflicts of interest that can lead brokers to route investors' orders based on where the brokers will receive the highest rebates or incur the lowest fees, rather than based on where investors will receive the best execution. Second, it increases market complexity by contributing to the proliferation of new trading venues and complex new order types. And third, it reduces price transparency by obscuring the true costs of trades. The Commission reasonably concluded that these harms necessitate further study to inform future regulatory reform.

A. Maker-taker pricing creates conflicts of interest that can undermine the duty of best execution brokers owe investors.

The first major problem with the maker-taker model—and with its inverse, the taker-maker model—is that they undermine brokers' duty of best execution. Maker-taker exchanges offer generous rebates to "make" liquidity (*i.e.*, to offer to buy or sell securities) and offset those rebates by charging hefty fees to "take" liquidity (*i.e.*, to accept those offers). Taker-maker exchanges offer the opposite pricing structure.[4] These arrangements encourage brokers to route investors' orders to venues with advantageous transaction pricing models for *brokers*, rather than venues with high execution quality for *investors*. They thus create a conflict of interest for brokers and increase the risk that investors' orders will not be completed in the most efficient and cost-effective manner.

Brokers play a vital role in equities markets. When an investor decides to buy or sell a given security, the investor relies on a broker to obtain the best price for the overall transaction. Sometimes this is fairly straightforward. If, for example, a retail investor wants to buy 100 shares of Apple at the best price currently displayed on any national securities exchange, the Commission's Order Protection Rule requires a broker to send the investor's order to the exchange displaying the cheapest price or else find a matching offer. *See* 17 C.F.R. § 242.611.

When, however, an investor wants a better price than is currently available, or wants to buy or sell more shares of a security than are available at the best price, achieving the best price for the overall transaction is more complicated. Take, for example, an institutional investor who wants to buy 100,000 shares of Apple. Typically, the investor

[4] *Amicus* IEX charges flat fees to both the maker and the taker, without paying rebates. It supports the pilot.

will break the 100,000 share "parent order" into smaller "child orders," and assign the execution of those orders to one or more brokers. To execute its piece of the larger transaction, a broker generally will "work" the order—divide it into still smaller pieces and route those pieces to various trading venues for execution.[5]

To obtain the best price for its client, the broker must route the orders to the right trading venues in the right manner. In the United States, there are 13 public equities exchanges, 32 alternative trading systems trading public equities,[6] and numerous over-the-counter public equities dealers, but they are not all equally advantageous to investors. For example, as discussed below, the likelihood and speed of finding a willing counterparty and completing a trade vary among different venues. As a result, the broker's choice of venue can affect whether a trade happens, when it happens, at what price it happens, and ultimately whether and to what extent an investor realizes the benefits of having a given security in its portfolio. *See* Disclosure of Order Handling Information, 81 Fed. Reg. 49,432, 49,435 (June 27, 2016) ("[I]n a fragmented market

[5] Although routing and execution decisions were once made manually, by individual brokers, that is generally no longer the case. Today routing decisions rely on sophisticated algorithms and "smart order routing systems" developed by large broker-dealer firms. These algorithms and systems consider a variety of factors, including transaction fees and rebates, in determining how to route orders. Thus, while it is still accurate to say that brokers decide how to route orders, it is more precise to say that brokerage firms decide what inputs and trading strategies to encode in their algorithms and routing systems, which in turn make routing determinations. *See* Disclosure of Order Handling Information, 81 Fed. Reg. 49,432, 49,433 (June 27, 2016).

[6] *See* SEC, *Form ATS-N Filings and Information*, https:// www.sec.gov/divisions/marketreg/form-ats-n-filings.htm (last modified July 12, 2019).

structure with many different market centers trading the same security, the order routing decision is critically important ....").

How a broker executes a trade is just as important. "Each time an order is routed to a venue, and each time an actionable indication of interest is sent to a market participant, information is revealed about that order and the potential existence of a larger institutional order from which it may be derived." 81 Fed. Reg. at 49,440. Too aggressive a strategy, therefore, can alert other market participants to an investor's interest, cause the security's price to move against the trade (a phenomenon known as "price impact"), and divulge valuable information to competitors (so-called "information leakage"). *See id.* Too passive a strategy, meanwhile, carries risks similar to those associated with slow execution speed: if the price moves while the trade is unfolding, the investor may lose out on gains it would have had from owning the security earlier, and may ultimately pay a higher price for the transaction. "Accordingly, broker-dealers must balance the need to sufficiently expose the customer's trading interest to achieve execution, with the risk that such exposure might cause prices to move in a less favorable direction to the detriment of execution quality." *Id.*

These concerns are especially salient for large investors, such as regulated funds, asset managers, and institutions. *See* CII, *Policies on Other Issues: Guiding Principles for Trading Practices, Commission Levels, Soft Dollars and Commission Recapture* (noting that "current brokerage industry practices" regarding trading costs "may be antithetical to the fiduciary obligation of obtaining best execution, and hold too much potential for conflicts of interest and abuses").[7] Because these investors often buy or sell large blocks of particular securities, their trades face the greatest risks of price impact, information leakage, and delayed execution. *See* 81 Fed. Reg. at 49,436. Indeed, the SEC has recognized that certain "market participants closely monitor order and execution activity throughout the markets, looking for patterns that signal the existence of a large institutional order, so that they can use that information to their trading advantage." *Id.* at 49,440. The size of large investors' trades also makes these risks more costly; a price difference of pennies per share can translate to millions of dollars annually—millions of dollars that, in the case of mutual funds, pension funds, and other pooled investment vehicles, reduce returns for fund investors or beneficiaries, typically workers and retirees investing for their most important financial goals. Thus, large investors have a "compelling interest in the order handling decisions of their executing brokers." *Id.* at 49,433. Minimizing trading risks and obtaining the best price requires maximizing execution quality: completing the trade in the right way, at the right speed, at the right venues.

The law recognizes the importance of execution quality by imposing on brokers a duty of best execution. *See* FINRA Rule 5310(a); Regulation NMS, 70 Fed. Reg. 37,496, 37,538 (June 29, 2005) ("A broker-dealer's duty of best execution derives from common law agency principles and fiduciary obligations ...."); *Newton v. Merrill, Lynch,*

[7] https://www.cii.org/policies_other_issues#principles_trading_commission_softdollar (last visited July 29, 2019)

Pierce, Fenner & Smith, Inc., 135 F.3d 266, 270–71 (3d Cir. 1998) (en banc). This duty requires brokers to "use reasonable diligence to ascertain the best market for the subject security and buy or sell in such market so that the resultant price to the customer is as favorable as possible under prevailing market conditions." FINRA Rule 5310(a)(1); *accord* 70 Fed. Reg. at 37,538. This duty aims to ensure that, in a fragmented market, brokers' routing decisions serve the interests of investors.

The maker-taker and taker-maker models, by contrast, give brokers an incentive to make routing decisions that serve their own interests at investors' expense. Because brokers generally do not pass exchange transaction fees and rebates on to investors (their clients), the prevailing fee models encourage them to route client orders in a way that maximizes rebates (which the brokers keep) or minimizes execution fees (which the brokers pay). *See* 84 Fed. Reg. at 5204. These incentives potentially affect the venues a broker routes to as well as the order types that a broker uses to execute a client order.

Consider, for example, marketable orders.[8] Because marketable orders "take" liquidity, brokers may seek to minimize their trading costs by routing such orders to exchanges that charge takers low fees or even, in the case of taker-maker exchanges,

[8] "A marketable order is an unpriced market order or a marketable limit order that is priced at an amount that can be immediately executed at the prevailing market price, such as an order to buy at $9.50 when the best order to sell in the market is for $9.50." DTM Maker-Taker Memo 19 n.77. A "limit order" is "an order to buy or sell a stock at a specific price or better." SEC, *Fast Answers: Limit Orders*, https://www.sec.gov/fast-answers/answerslimithtm.html (last modified Mar. 10, 2011).

offer them rebates. *See* DTM Maker-Taker Memo 19; Stanislav Dolgopolov, *The Maker-Taker Pricing Model and Its Impact on the Securities Market Structure: A Can of Worms for Securities Fraud?*, 8 Va. L. & Bus. R. 231, 235 (2014). Those exchanges, however, are less likely to attract liquidity than high-fee, high-rebate markets because lower taker fees typically mean lower maker rebates, while taker rebates necessitate maker *fees*. *See* DTM Maker-Taker Memo 19 ("all else being equal, such markets would be less attractive to traditional liquidity providers compared to markets that pay a more attractive rebate to post liquidity"). As a result, those exchanges may offer lower fill rates and less liquidity at the best price. *See* 81 Fed. Reg. at 49,439.

Furthermore, even if a broker ultimately routes a marketable order to a higher-fee, higher-rebate exchange, "prices can move quickly in today's highly automated, electronic markets, and broker-dealers may miss trading opportunities for an institutional customer by prioritizing low take fee venues in their routing tables." *Id.* Indeed, brokers may *cause* the price to move against the trade by prioritizing low taker-fee exchanges for marketable orders. Knowing that such exchanges attract takers, certain market participants may engage in predatory trading strategies which, in essence, stake out those exchanges by posting nominal amounts of liquidity there to gain the opportunity to interact with the first tranche of large institutional orders and thereby detect potential price moves early on. These firms then use that information to quickly adjust their trading strategies on other markets, often at the expense of the very takers who inadvertently tipped them off. *See* DTM Maker-Taker Memo 19.

Orders that cannot be immediately executed at prevailing prices, known as "nonmarketable limit orders,"[9] face similar problems. Because such an order cannot be executed immediately, a broker may choose to post it to an exchange as a resting offer to buy or sell at the price the order specifies. In so doing, the broker "makes" liquidity. Therefore, under maker-taker pricing, brokers have an incentive to post such orders on the markets offering the highest maker rebates, even where a different market might offer a better possibility of execution.

Indeed, there is good reason to think that maker-taker markets inherently offer worse execution quality. To encourage market participants to make liquidity, exchanges with maker-taker pricing structures generally offer the highest rebates and, consequently, charge takers the highest fees (to subsidize those rebates). This can deter brokers from routing liquidity-taking orders and may create a mismatch between makers and takers. As a result, exchanges that employ maker-taker pricing may have lower fill rates and worse execution speed for nonmarketable orders posted to exchanges with high rebates. *See* DTM Maker-Taker Memo 18–19. In addition, because the highest rebates are typically for *displayed* liquidity, maker-taker pricing may induce brokers to post nonmarketable orders as displayed orders, revealing to the market the investors'

[9] "A nonmarketable order is a limit order that is priced at an amount that cannot be immediately executed at the prevailing market price, such as an order to buy at no more than $9.50 when the best order to sell in the market is for $9.55." DTM Maker-Taker Memo 18 n.73.

trading interest. *See, e.g.*, Cboe Exch., Inc., *Cboe BZX U.S. Equities Exchange Fee Schedule: Effective July 12, 2019*[10] (providing for a rebate of $0.0025 per share for displayed liquidity in certain securities and $0.0015 per share for non-displayed liquidity in the same securities). To conceal that trading interest—by, for example, posting orders as non-display—would directly harm brokers' bottom line.

These problems are hardly theoretical. One study, cited extensively in the adopting release, looked at ten brokers' trading activity in the last quarter of 2012 and found evidence that nine routed nonmarketable orders based on fees and rebates, with four routing limit orders *exclusively* to exchanges offering the largest rebates. *See* Robert Battalio et al., *Can Brokers Have it All? On the Relation Between Make-Take Fees and Limit Order Execution Quality*, 71 J. Fin. 2193 (2016); *see also* 84 Fed. Reg. at 5248. This is perhaps unsurprising given the amounts of money at stake. Nasdaq, for example, paid $830 million in transaction rebates in 2018. Nasdaq, Inc., Annual Report (Form 10-K) at 36 (Feb. 14, 2019). Investors, meanwhile, are left with higher total costs. *See* Letter from Carl Levin, U.S. Senator, to Mary Jo White, Chairman, SEC, at 1–2 & n.2 (July 9, 2014)

[10] https://markets.cboe.com/us/equities/membership/fee_schedule/bzx/ (last visited July 29, 2019)

("Levin Letter") (citing George Sofianos et al., *Smart Routing: All-In Shortfall and Optimal Order Placement*, Goldman Sachs Equity Execution Street Smarts (Jan. 14, 2011)).[11]

The Exchanges themselves have acknowledged that the maker-taker model creates conflicts of interest between brokers and investors. In 2014, the president of the NYSE Group ("NYSE") testified that "elimination of maker-taker pricing ... would reduce the conflicts inherent in such pricing schema." *Conflicts of Interest, Investor Loss of Confidence, and High Speed Trading in U.S. Stock Markets Before the S. Comm. on Homeland Sec. & Governmental Affairs, Permanent Subcomm. on Investigations*, 113th Cong. 32 (2014) (statement of Thomas W. Farley). That same year, Jeffrey Sprecher, the CEO of NYSE's parent, ICE, criticized maker-taker pricing's "corrosive impact," observing that it "misaligns [brokers'] incentive of looking for the best price on behalf of their customer[s]." Jeffrey Sprecher, Chairman & CEO, Intercontinental Exchange Grp., Inc., *15th Annual Credit Suisse Financial Services Forum*, at 7 (Feb. 12, 2014) ("Sprecher Transcript").[12] In 2015, the BATS exchange echoed these concerns in an open letter calling for a "greater than 80% fee reduction in the access fee cap." Open Letter from Joe Ratterman, CEO, BATS, and Chris Concannon, President, BATS, to U.S. Securities Industry Participants,

[11] https://www.hsgac.senate.gov/imo/media/doc/Ltr%20to%20SEC%20Chairman%20White%20re%20Equity%20Market%20Structure%20(July%209%202014).pdf

[12] http://ir.theice.com/~/media/Files/I/Ice-IR/events-presentations/transcript/csfb-transcript-2-2014.pdf

at 1 (Jan. 6, 2015) ("BATS Open Letter").[13] "[A] substantial reduction in access fees, and their corresponding rebates," BATS explained, "would help remove conflicts or a perception of conflicts with respect to those highly liquid securities that no longer receive liquidity incentives" and "will also reduce incentives to route away from the exchanges." *Id.* at 4. Even in these very proceedings, NYSE has acknowledged that the Battalio equity market study "suggests that broker-dealers may route customer orders based on fee and rebate considerations." Comment Letter from Elizabeth K. King, General Counsel, NYSE, to Brent J. Fields, Secretary, SEC, at 5 (May 31, 2018).[14]

Finally, the concern that maker-taker undermines the duty of best execution is shared across the political spectrum. Senator Schumer (D-NY) has warned that the maker-taker model "create[s] a conflict of interest, as brokers may be incentivized to execute trades on a particular venue even if that venue is not offering the best price." Letter from Charles E. Schumer, U.S. Senator, to Mary Schapiro, Chairman, SEC (May 10, 2012);[15] *see also* Levin Letter 1–2. Senator McCain (R-AZ) echoed that critique, calling for further study of whether "investors are harmed by their brokers' conflict of interest." *Conflicts of Interest, Investor Loss of Confidence, and High Speed Trading in U.S. Stock*

[13] http://advisorselect.com/transcript/BATSGlobalMarkets/open-letter-to-the-u-s-securities-industry

[14] https://www.sec.gov/comments/s7-05-18/s70518-3755194-162578.pdf

[15] https://web.archive.org/web/20120517005607/http://www.schumer.senate.gov/record.cfm?id=336748&

Markets Before the S. Comm. on Homeland Security & Governmental Affairs, Permanent Subcomm. on Investigations, 113th Cong. 6 (2014). And federal regulators across different presidential administrations have sounded similar alarms. *See, e.g.*, U.S. Dep't of the Treasury, *A Financial System that Creates Economic Opportunities: Capital Markets* 62 (Oct. 2017) ("Treasury is concerned that maker-taker markets ... may create misaligned incentives for broker-dealers."); Mary Jo White, Chairman, SEC, Keynote Address at the Security Traders Association Annual Market Structure Conference: *Equity Market Structure in 2016 and for the Future* (Sept. 14, 2016) (maker-taker fees "raise concerns about, among other things, conflicts of interest between brokers and their customers"). This widespread recognition of the conflicts inherent in maker-taker fee structures contradicts the Exchanges' baseless suggestion that the transaction fee pilot is a solution in search of a problem.

B. Maker-taker pricing increases market complexity.

The second problem with the maker-taker model is that it significantly increases market complexity by fueling the proliferation of new trading venues and new order types. Such needless complexity harms investors by fragmenting liquidity, increasing the cost and risk of trading, and tilting the field in favor of high-speed intermediaries over traditional investors.

The relationship between the maker-taker model and market complexity runs through a class of traders implementing high-speed trading strategies that generally aim to profit by making markets (*i.e.*, earning the difference between the bid and the offer) or from modest changes to stock prices over time periods as short as a few milliseconds.

These strategies are designed, at least in part, to harvest rebates and avoid fees. *See* Dolgopolov, *supra*, at 250. And they are wildly profitable, in part because they account for more than half the trading volume in equity markets.

To compete for order flow from these extremely high-frequency, high-volume traders, the exchanges have implemented different fee and rebate structures designed to enhance high-speed traders' ability to control the amount of their transaction fees and to obtain priority in exchanges' order books so that their trades execute first, before those of any other investor. This competition has entailed the creation of new exchanges because a single exchange cannot operate with more than one pricing model simultaneously. The NYSE Group now has five equities exchanges, CBOE has four, and Nasdaq three, each with a different transaction fee and rebate structure. *See* DTM Maker-Taker Memo 22; Cboe Global Markets, Inc. Annual Report (Form 10-K) at 8 (Feb. 22, 2019); Nasdaq 2018 10-K at 9–10; Sprecher Transcript 7. The CEO of NYSE's parent company has even acknowledged that offering different pricing structures is the *raison d'être* of the new exchanges: "if we could get rid of maker-taker pricing, we would theoretically just be able to go down to one medallion and we would eliminate the number of exchanges, which are fragmenting the markets." Sprecher Transcript 7.

The market fragmentation arising from the creation of new exchanges contributes to market complexity and harms long-term investors in several ways. *Cf.* 70 Fed. Reg. at 37,499 (noting the Commission's "firm belief that one of the most important goals of the equity markets is to minimize the transaction costs of long-term investors and thereby to reduce the cost of capital for listed companies"). First, market fragmentation increases costs for brokers, and ultimately investors, because brokers must either join each additional exchange or otherwise pay to access it to comply with the requirement to execute trades at (or better than) the best available displayed price, on whatever exchange that price happens to be offered. *See* 17 C.F.R. § 242.611; 70 Fed. Reg. at 37,503 (justifying a transaction fee cap on the ground that, in its absence, "some 'outlier' trading centers might take advantage of the requirement to protect displayed quotations by charging exorbitant fees to those required to access the outlier's quotations"). As ICE's CEO has observed, the "increased technology cost and risks that are born[e] from maintaining connections to as many as 60 trading centers is unnecessary and ultimately increases costs to investors." *The Role of Regulation in Shaping Equity Market Structure and Electronic Trading Before the S. Comm. on Banking, Housing, & Urban Affairs*, 113th Cong. 42 (2014) (statement of Jeffrey Sprecher, Chairman and CEO, ICE). Second, market fragmentation increases market-data costs, as brokers must, as a practical matter, pay for market data from each additional exchange to inform their trading decisions. Third, fragmentation increases compliance costs because each exchange has its own rules and procedures that brokers must follow.[16] And, finally, market fragmentation disperses liquidity, forcing brokers to search across more venues to fill large orders and

[16] In addition, exchanges typically change their pricing structures on a monthly basis to better compete with other venues, requiring brokers to continually update the algorithms they use to route orders. *See* DTM Maker-Taker Memo 21.

thereby increasing the risks of price impact and information leakage. The high-speed intermediaries and exchanges benefit from dispersing liquidity in this manner, at the expense of long-term investors. *See* 81 Fed. Reg. at 49,436, 49,440; Concept Release on Equity Market Structure, 75 Fed. Reg. 3594, 3597–98 (Jan. 14, 2010). And dispersed liquidity forces brokers to invest in high-tech countermeasures to conceal investor trading strategies, creating a wasteful arms race that further increases the costs of trading.

Maker-taker pricing also increases market complexity by spurring the creation of complicated order types designed to maximize rebates. NYSE, for example, "ha[s] as many as 80 different order types, most of which are there to make sure that somebody gets the right rebate or doesn't breach Reg NMS as they're trying to get a rebate." Sprecher Transcript 7. Nasdaq, likewise, offers order types designed solely to "increase market participants' ability to control their provision, or taking, of market liquidity and thus better anticipate trading costs." *See* Nasdaq Global Trading & Market Servs., *Post-Only Order* (2017)[17] (describing a post-only order, which is cancelled or automatically re-priced if it would otherwise be marketable when sent to the exchange so that users can ensure that the order will never result in a take fee and will, if executed, result only in a rebate). These order types can be so complex that even the Exchanges have had difficulty describing them accurately: in 2015, two exchanges agreed to pay $14 million for

[17] https://www.nasdaqtrader.com/content/ProductsServices/Trading/postonly_fact-sheet.pdf

inaccurately describing order types they offered. *See In re EDGA Exch., Inc. & EDGX Exch., Inc.*, Exchange Act Release No. 34-74032, 2015 WL 13016515 (Jan. 12, 2015); *see also* Mary Jo White, Chairman, SEC, Speech to Sandler O'Neill & Partners, L.P. Global Exchange & Brokerage Conference: *Enhancing Our Equity Market Structure* (June 5, 2014) (calling on exchanges to "conduct a comprehensive review of their order types" to "help clarify the nature of their order types and how they interact with each other").

As with market fragmentation, the complexity generated by the proliferation of order types harms investors. It prevents all but the most sophisticated participants from fully understanding how equity markets work and creates an informational advantage that those participants exploit, often to investors' detriment. These effects are inimical to "efficient and effective market operations," "fair and orderly markets," "fair competition among brokers and dealers," and "the best execution" of investors' orders, 15 U.S.C. § 78k-1(a)(1)—that is, to the core goals of the national market system.

C. Maker-taker pricing reduces price transparency.

Finally, maker-taker pricing undermines price transparency by masking the true economic price of trading. With maker-taker pricing, the true price of a transaction is not reflected in displayed quotes because such quotes—which must be in penny increments, *see* 17 C.F.R. § 242.612(a)—do not include the sub-penny fees and rebates on maker-taker (and taker-maker) exchanges. These invisible, sub-penny spreads make ascertaining the true price of a security more complex. As ICE's CEO put it: "The price that we see as a bid/offer price in the market is really not the price because there are rebates and other discounts .... So we don't have a view of the actual price which I think is to a certain degree false advertising when you have a public ticker." Stebbins, *supra*.

Two additional factors exacerbate this lack of transparency. First, on a given exchange, fees and rebates may vary with volume, such that, at the time of execution, even the broker may not know the actual net price of a trade. Dolgopolov, *supra*, at 267–68. Second, across exchanges, fees can vary substantially, such that the net price of a given transaction on one exchange likely will differ from the net price of the same transaction on another. *See* DTM Maker-Taker Memo 27.

Furthermore, the degree to which the maker-taker model distorts pricing has increased in recent years. When the Commission adopted a transaction fee cap of $0.003 per share in 2005, it stated that, "[f]or 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." 70 Fed. Reg. at 37,584. Since then, narrower spreads and lower trading commissions have left transaction fees and rebates accounting for a larger share of transaction costs, and, thus, a larger percentage of the variance between displayed and true prices—a point the Exchanges themselves have recognized. *See ICE's Six Recommendations for Reforming Markets*, Wall St. J. (Dec. 18, 2014);[18] BATS Open Letter 3 (calling for the fee cap to be "reevaluated for potential market distortions given the

[18] https://blogs.wsj.com/moneybeat/2014/12/18/ices-six-recommendations-for-reforming-markets/

substantially altered broker models and reductions in commissions since the implementation of Regulation NMS").

The complexity of maker-taker pricing amplifies the difficulty of determining true trading costs, especially for smaller investors, impairing their ability to evaluate the quality of the executions they receive. Maker-taker fees and rebates obscure prices to the point where only significant effort, time, and investment in sophisticated and expensive technologies can decipher the quality of executions. Given the importance of execution quality, market structure must facilitate investors' ability to evaluate their brokers' performance. By undermining price transparency, maker-taker pricing does the reverse, to the detriment of investors and markets.

II. The Commission Reasonably Explained Why The Alternatives The Exchanges Proposed Were Insufficient To Achieve The Pilot's Purposes.

As the foregoing demonstrates, the Commission reasonably decided to investigate the wide variety of problems associated with maker-taker pricing to inform future regulation of transaction pricing. *See* 84 Fed. Reg. at 5203. The Exchanges, however, assert that the Commission decided to undertake the transaction fee pilot without "meaningfully consider[ing]" any of the four alternative proposals they put forward. Br. 54. This is clearly not so. The Commission explained why the pilot is the *only* way to obtain the information needed to understand the full range of concerns surrounding the maker-taker model, and why the proposed alternatives were insufficient.

First, the Exchanges fault the Commission's reasons for refusing to use existing data or enhance disclosure requirements as substitutes for the pilot. According to the Exchanges, the Commission rejected these alternatives solely on the ground that it "sought broader information regarding 'all potential impacts from fees and rebates' that could not be obtained through these disclosures," but failed to "actually identify" any potential impacts that "could not be measured through these alternative methods." *Id.* (quoting 84 Fed. Reg. at 5228). Both parts of this argument are wrong.

To begin with, the Commission *did* offer other reasons these alternatives would not work. The Commission provided a detailed explanation—which the Exchanges inexplicably ignore—as to why existing data are no substitute for the information the Commission will obtain from the pilot. *See* 84 Fed. Reg. at 5250–53. It explained, for example, that existing data regarding broker-dealer routing practices—which the Commission recently enhanced at the Exchanges' urging, *see* Amendments to Disclosure of Order Handling Information, 83 Fed. Reg. 58,338 (Nov. 19, 2018)—still are "not granular enough to thoroughly study conflicts of interest" and "will not enable researchers to look at the full picture of how a broker-dealer responds to fees" because the data are aggregated quarterly, but the exchanges revise their fee schedules multiple times within a quarter. 84 Fed. Reg. at 5251. Because of these and other limitations, the Commission concluded that existing information "is insufficient by itself to determine the impact of exchange transaction fees and rebates on broker-dealer order routing decisions." *Id.*

Moreover, the Commission observed that "[e]ven with perfect data," it still would not "have comprehensive, empirical evidence to study the effects on the market that the Pilot is intended to study," because "researchers would struggle to identify the causality necessary to robustly link fee and rebate effects on order routing to order execution quality." *Id.* at 5253. Without a pilot, researchers could not tell whether fees and rebates drove order-routing, or vice-versa, which "might lead the Commission to draw incorrect conclusions." *Id.* The Exchanges simply ignore these other reasons.

The Exchanges also ignore that the Commission identified potential impacts from maker-taker pricing that existing data and enhanced disclosures could not measure. The Commission explained that because these alternatives "focu[s] only on one narrow aspect of the Pilot—studying the conflicts of interest between brokers and their customers when exchanges pay rebates," *id.* at 5227–28—they "would not provide sufficient data to evaluate the effects of transaction fees and rebates on market quality[,] execution," *id.* at 5227 n.311, and order-routing behavior, *id.* at 5251. Nor would these alternatives provide information on "how fees and rebates may affect stocks differently depending on their liquidity." *Id.* at 5228.

These reasonable explanations are fatal to the Exchanges' argument. Whether or not the Exchanges *agree* with the Commission's explanations is beside the point. These were the Commission's judgments to make, and the Commission more than adequately explained why it found the proposed alternatives inadequate. Nothing more is required. *See Taylor v. FAA*, 895 F.3d 56, 66 (D.C. Cir. 2018).

Second, the Exchanges suggest that the Commission rejected the alternative of strengthening the duty of best execution simply because the maker-taker model has "long been the subject of debate." Br. 55. But this too is wrong. Addressing this alternative alongside several other market-structure initiatives, the Commission explained that these proposals "may implicate equity market structure questions that are narrower or broader than, or independent of, exchange fee models." 84 Fed. Reg. at 5228. Strengthening the duty of best execution would not address concerns over market quality or complexity because the duty focuses narrowly on brokers' conflicts of interest. *See* Comment Letter from Edward T. Tilly, Chairman & CEO, Cboe, to Brent J. Fields, Secretary, SEC on Proposed Transaction Fee Pilot for NMS Stocks, at 22 (May 25, 2018) (proposing strengthening the duty to "mitigate potential conflicts of interest").[19]

Finally, the Exchanges argue that the Commission failed to reasonably address the proposal that issuers be allowed to opt out of the pilot. The Exchanges concede that the Commission considered this proposal, rejecting it because "allowing issuers to opt out could undermine the representativeness of the Pilot's treatment groups and

[19] https://www.sec.gov/comments/s7-05-18/s70518-3718531-162484.pdf. Moreover, FINRA guidance already addresses the relationship between the duty of best execution and maker-taker pricing, warning that "firms should not allow access fees charged by particular venues to inappropriately affect their routing decisions, and, in general, a firm's routing decisions should not be unduly influenced by a particular venue's fee or rebate structure." FINRA, *Regulatory Notice 15-46*, at 6 (Nov. 2015).

potentially bias the Pilot's results, depending on the number and characteristics of issuers that opt out." 84 Fed. Reg. at 5213. The Exchanges fault this explanation as insufficient because the Commission "made no effort to ascertain the number or characteristics of those issuers that would actually exercise an opt-out right." Br. 55. Fundamentally, however, this argument overlooks that the Commission had good reason to fear that an opt-out would undermine the pilot's results, having received several dozen letters from issuers asking to be excluded. *See* 84 Fed. Reg. at 5212 n.137. The Exchanges also ignore the Commission's concern that the characteristics possibly correlated with the decision to opt out may be "unobservable." *Id.* at 5297.

The Exchanges nevertheless suggest that the Commission should have surveyed issuers about their willingness to participate voluntarily in a pilot. Br. 55. But this suggestion gets the burden regarding alternatives backwards: it was incumbent on the proponents of the opt-out alternative to show that it would *not* skew the results, and "there is nothing unreasonable in [the Commission's] demand that proponents furnish the proposed alternatives with adequate support." *Cent. Me. Power Co. v. FERC*, 252 F.3d 34, 44 (1st Cir. 2001). The opt-out proposal threatened the pilot's ability to provide broad, useful lessons for the national market system, and the Commission reasonably refused to adopt it without any evidence that it would not impair this core purpose.

The Exchanges also fail to recognize that the Commission was not persuaded that the pilot would harm issuers. *See* 84 Fed. Reg. at 5289 ("[T]he Commission does not expect the Pilot will have significant effects on the ability of firms to raise capital.").[20] Given these "uncertain harms" and the serious concern that an opt-out would undermine pilot results, the Commission reasonably judged it imprudent to jeopardize the "collection of useful and representative data" by adopting this proposal. *Id.* at 5213.

In short, the Commission reasonably concluded that the pilot is necessary to illuminate the full range of problems associated with current transaction fee pricing models, and reasonably explained why the proposed alternatives either would not provide the information needed or would undermine the pilot's results. The Exchanges' contrary arguments either entirely ignore or fail to meaningfully grapple with the Commission's reasoning, and provide no basis to disturb the rule.

CONCLUSION

For the foregoing reasons, the transaction fee pilot is urgently needed and furthers the Commission's core statutory obligation to maintain fair, orderly, and efficient securities markets. *Amici* therefore respectfully urge the Court to deny the petitions for review and allow the transaction fee pilot to proceed.

[20] *Amici* agree with this conclusion. Companies' stocks should not become less attractive investments if they are included in a pilot test group because market structure is not a consideration that drives investment decisions of long-term investors, such as regulated funds and the advisers that act on their behalf.

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CERTIFICATE REGARDING SEPARATE BRIEF

Pursuant to D.C. Circuit Rule 29(d), I certify that a separate amicus brief is necessary because of the unique perspective offered by *amici* as the leading representatives of regulated funds and institutional investors, which together are among the largest investors in U.S. equities markets.

/s/ *Eric D. McArthur*

CERTIFICATE OF COMPLIANCE

This brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and type-style requirements of Fed. R. App. P. 32(a)(6) because it has been prepared in a proportionally spaced typeface using Microsoft Word in 14-point Garamond font.

This brief complies with the word-count limitation under Fed. R. App. P. 29(a)(5) and 32(a)(7)(B) because it contains 6485 words, not counting the parts excluded by Fed. R. App. P. 32(f) and Circuit Rule 32(e)(1).

/s/ *Eric D. McArthur*

CERTIFICATE OF SERVICE

I hereby certify that on August 1, 2019, I electronically filed the foregoing brief with the Clerk of the Court using the CM/ECF System, which will send notice of such filing to all registered CM/ECF users.

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