

HIGH-FREQUENCY TRADING, ORDER TYPES, AND THE EVOLUTION OF THE SECURITIES MARKET STRUCTURE: ONE WHISTLEBLOWER’S CONSEQUENCES FOR SECURITIES REGULATION

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Abstract

This Article analyzes—through the lens of securities regulation—the contributions of Haim Bodek, an advocate of reforming the securities market structure and a whistleblower who brought attention to several questionable practices of high-frequency traders and trading venues, including their use of complex and, arguably, nontransparent order types. More specifically, the Article addresses several key issues raised and discussed by Haim Bodek, such as the order type controversy and its implications for high-frequency traders, the status of self-regulatory organizations, trading obligations and privileges of market makers, and the duty of best execution, and aims to fit these issues into the evolving boundaries of civil liability under federal securities law and the reach of a private right of action.

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I. INTRODUCTION

“Market structure matters.”¹ This maxim captures the contributions of Haim Bodek: his efforts to understand the transformation of the securities industry and the phenomenon of high-frequency trading (HFT), his advocacy for reforming the architecture of securities markets, and his role as a whistleblower alerting the regulators and general public about certain questionable practices of high-frequency traders (HFTs) and trading venues.² In addition to the media exposure, Bodek’s recent book is an insider’s account offering a unique perspective on the rapid evolution of the securities market structure as a complex interaction of regulatory and technological forces, the pivotal role played by HFT in this process, and the impact of these changes on other market participants.³

Bodek has labeled certain trading practices as “unfair,” “unethical,” “improper,” “opportunistic,” “artificial,” “discriminatory,” and “anticompetitive”⁴—of course, from the standpoint of public policy offered by a badly burned insider rather than over-moralistic indignation of an outsider. However, aside from his guidance for the future regulatory design, it is essential to consider whether these practices violate federal securities law and, more specifically, trigger a private right of action. Bodek himself hypothesized that “liability concerns are holding up the reform process and open dialogue,”⁵ which illustrates how the existing debates are shaped by the fear of private lawsuits and scrutiny of regulatory agencies, such as the U.S. Securities and Exchange Commission (SEC).

This Article weaves Bodek’s contributions into the mosaic of federal securities law, which is also evolving but naturally lagging behind the transformation of the securities industry. More specifically, the Article addresses such issues as the order type controversy and its implications for high-frequency traders, the status of self-regulatory organizations, trading obligations and privileges of market makers, and the duty of best execution. The Article aims to fit these issues—and hence predict their impact on private litigation and government enforcement actions—into the evolving boundaries of civil liability under federal securities law with the emphasis on its antifraud prohibition, which is embodied by section 10(b) of the Securities Exchange Act of 1934 (Exchange Act) and Rule 10b-5 adopted by the SEC, and the corresponding availability of a private right of action.⁶ The Article concludes

1. This phrase is an unregistered trademark of the consulting firm headed by Haim Bodek. *The Professional Page of Haim Bodek*, DECIMUS CAPITAL MKTS., LLC, <http://haimbodek.com> (last visited Mar. 12, 2014).

2. These contributions are extensively profiled in a recent journalistic account of transformational changes in the securities industry. SCOTT PATTERSON, *DARK POOLS: HIGH-SPEED TRADERS, AI BANDITS, AND THE THREAT TO THE GLOBAL FINANCIAL SYSTEM passim* (rev. ed. 2013).

3. HAIM BODEK, *THE PROBLEM OF HFT: COLLECTED WRITINGS ON HIGH FREQUENCY TRADING & STOCK MARKET STRUCTURE REFORM* (2013).

4. *Id.*

5. *Id.* at 79.

6. Section 10(b) of the Exchange Act is only one of several antifraud provisions with varying features provided by the federal securities statutes. See NORMAN S. POSER & JAMES A. FANTO, *BROKER-DEALER LAW AND REGULATION* § 17.01[B] (4th ed. 2007 & Supp. 2013). However, this particular provision, together with

by evaluating Bodek's contributions from the standpoint of the existing tools of federal securities law and the outlook for the future regulatory design.

II. THE ORDER TYPE CONTROVERSY

Bodek's overarching contribution pertains to the order type controversy—a critical inquiry into causes and implications of the expanding menu of execution commands and their design⁷—and to use his own analogy, some practices relating to order types are like a matchup of chess pieces and ignorant checkers pieces.⁸ Bodek's realization of the significance of certain order type practices leading to their subsequent exposure has been making waves,⁹ and, without any doubt, the SEC's ongoing investigation of “how requests for order types are enacted, vetted and approved at each exchange before they get to the Commission”¹⁰ can be traced back to him.¹¹ The order type controversy was also one of the key points in the recent congressional hearings,¹² in which a

Rule 10b-5, is perhaps the cornerstone of the antifraud framework and the key driver of private securities litigation, for which the availability of an *implied* private right of action has been universally recognized. *See, e.g., Janus Capital Grp., Inc. v. First Derivative Traders*, 131 U.S. 2296, 2301–02 (2011) (“Although neither Rule 10b-5 nor § 10(b) [of the Exchange Act] expressly creates a private right of action, this Court has held that ‘a private right of action is implied under § 10(b).’ That holding ‘remains the law,’ but ‘[c]oncerns with the judicial creation of a private cause of action caution against its expansion.’”) (internal citations omitted).

7. For one of the earliest sources offering an insightful analysis of the order type design, see Fischer Black, *Equilibrium Exchanges*, FIN. ANALYSTS J., May–June 1995, at 23. For formal models touching on design-related issues, see Sabrina Buti & Barbara Rindi, *Undisclosed Orders and Optimal Submission Strategies in a Limit Order Market*, 109 J. FIN. ECON. 797 (2013); David Easley & Maureen O'Hara, *Order Form and Information in Securities Markets*, 46 J. FIN. 905 (1991); Avi Wohl, *The Feasibility of an Index-Contingent Trading Mechanism*, 43 MGMT. SCI. 112 (1997); David P. Brown & Craig W. Holden, *Pegged Limit Orders* (May 2005) (unpublished manuscript) (on file with author), available at <http://ssrn.com/abstract=744667>. For a discussion of the definitional aspect, see Gary Stone & Aaron Weiner, *On Defining an Order and Order Types*, BLOOMBERG TRADEBOOK (Aug. 6, 2013), <http://www.bloombertradebook.com/blog/defining-an-order-and-order-type>.

8. BODEK, *supra* note 3, at 13. Interestingly, one of the earliest proposals to expand the order type menu aimed at *protecting* certain types of market participants, such as exchange specialists and retail traders, from arbitragers as proto-HFTs. Merton H. Miller, *Index Arbitrage and Volatility*, FIN. ANALYSTS J., July–Aug. 1990, at 6. The same author also remarked that, “[g]iven the wonders of electronics, the limit-order book could be programmed to handle a wide variety of new kinds of customer contingency orders.” *Id.* at 7.

9. *See, e.g.,* PATTERSON, *supra* note 2, *passim*; Interview by Adam Cox with Haim Bodek, *The Campaigner*, AUTOMATED TRADER MAG., Q3 2013, at 10; Sal Arnuk & Joseph Saluzzi, *Who Is Haim Bodek?*, THEMIS TRADING LLC (Oct. 19, 2012), <http://blog.themistrading.com/who-is-haim-bodek>; Herbert Lash, *Complaints Rise over Complex U.S. Stock Orders*, REUTERS (Oct. 19, 2012), <http://www.reuters.com/article/2012/10/19/us-exchanges-ordertypes-idUSBRE89I0YU20121019>.

10. Tom Steinert-Threlkeld, *SEC Eyes Order Type Development*, TRADERS MAG., Apr. 2013, at 17, 17 (quoting John Polise, SEC Office of Compliance Inspections and Examinations); *see also* NAT'L EXAM PROGRAM, U.S. SEC. & EXCH. COMM'N, EXAMINATION PRIORITIES FOR 2013 9 (2013), available at <http://www.sec.gov/about/offices/ocie/national-examination-program-priorities-2013.pdf> (stating that the SEC's staff “will conduct inspections of equities exchanges to determine the types of orders available and the internal governance process around how order types are proposed, implemented, and monitored post-implementation”); NAT'L EXAM PROGRAM, U.S. SEC. & EXCH. COMM'N, EXAMINATION PRIORITIES FOR 2014 9 (2014), available at <http://www.sec.gov/about/offices/ocie/national-examination-program-priorities-2014.pdf> (stating that the SEC's staff “will continue its review of order types by focusing on the options exchanges”).

11. *See* Scott Patterson & Jean Eaglesham, *Exchanges Get Closer Inspection*, WALL ST. J., Nov. 20, 2012, at C1 (“The SEC probe into order types was fueled by a 2011 whistleblower complaint by former Wall Street trader Haim Bodek . . .”).

12. *Computerized Trading: What Should the Rules of the Road Be? – Part I: Hearing Before the Subcomm. on Sec., Ins., & Inv. of the S. Comm. on Banking, Hous., & Urban Affairs*, 112th Cong. 5, 7–8, 11, 14–16, 35, 37–39, 41–42, 60, 70, 73, 75–78, 81 (2013) [hereinafter *Senate Hearings on Computerized*

newspaper article discussing Bodek's exposure of these practices was referenced.¹³ Even a representative of a leading securities industry group admitted that "there are predatory order types that some may argue also add liquidity, but get in the way of institutional orders,"¹⁴ which is another illustration of the paradigm shift pioneered by Bodek.

More generally, there are different reasons for the growing number of order types, which now go far beyond basic market and limit orders, and, in many instances, there is nothing sinister about recent additions. As a representative of a leading securities exchange described these reasons, although leaving some ambiguity with respect to "economic results," "Some [order types] are to comply with Regulation NMS; some of them are to guarantee economic results; some of them are to compete with some of the practices, customer segmentation, et cetera, that happens off-exchange [or] to replicate certain behaviors, some of which used to happen nonelectronically."¹⁵ Furthermore, certain order types at least partly owe their existence to the competition between securities exchanges and other trading venues,¹⁶ as players in the latter category "use their regulatory advantage as a competitive edge to develop order functionality and this often drives client demands for Exchange order types."¹⁷ Indeed, it is possible that the order type race emerged over a decade ago as a result of the competitive interaction of newcomers among trading venues, including electronic communication networks (ECNs) that historically have not been required to submit their order types for SEC approval.¹⁸ A related aspect is illustrated by the assertion that

Trading: Part I; *Computerized Trading: What Should the Rules of the Road Be? – Part II: Hearing Before the Subcomm. on Sec., Ins., & Inv. of the S. Comm. on Banking, Hous., & Urban Affairs*, 112th Cong. 8–9, 21–23, 39, 52–53, 66–67, 69–70 (2013) [hereinafter *Senate Hearings on Computerized Trading: Part II*]. The order type controversy was also discussed—although generally in more neutral terms in the context of technology and market complexity and without referencing Bodek's role—at the recent roundtable held at the SEC. U.S. SEC. & EXCH. COMM'N, *ROUNDTABLE ON TECHNOLOGY AND TRADING: PROMOTING STABILITY IN TODAY'S MARKETS* 45–49 (Oct. 2, 2012), available at <http://www.sec.gov/news/otherwebcasts/2012/tr100212-transcript.pdf>.

13. *Senate Hearings on Computerized Trading: Part I*, *supra* note 12, at 14 (mentioning Scott Patterson & Jenny Strasburg, *For Superfast Stock Traders, a Way To Jump Ahead in Line*, WALL ST. J., Sept. 19, 2012, at A1).

14. Tom Steinert-Threlkeld, *Out of Order*, TRADERS MAG., Jan. 2013, at 20, 22 (quoting Jennifer Setzenfand, Chairman of the Security Traders Association); see also PATTERSON, *supra* note 2, at 318 ("Order types are being created to attract predatory traders.") (quoting Justin Kane, Rainier Investment).

15. *Senate Hearings on Computerized Trading: Part II*, *supra* note 12, at 22 (remarks of Joseph Mecane, Executive Vice President and Head of U.S. Equities, NYSE Euronext).

16. See *id.* at 52 (responses to written questions of Sen. Jack Reed, Chairman, Subcomm. on Sec., Ins., & Inv. of the S. Comm. on Banking, Hous., & Urban Affairs, from Joseph Mecane, Executive Vice President and Head of U.S. Equities, NYSE Euronext) ("More recently and significantly, Exchanges have developed order types to attempt to compete with practices that are allowed by non-Exchange venues, some of which are undisplayed.")

17. *Id.* at 53.

18. See, e.g., *How Best To Integrate Order Flow*, in *COPING WITH INSTITUTIONAL ORDER FLOW* 59, 78 (Robert A. Schwartz et al. eds., 2005) (remarks of Michael Cormack, President, Archipelago Holdings, LLC) ("[As of 2003] Archipelago [a unit of a registered securities exchange] and the ECN community in general have a variety of order types that facilitate different strategy implementations We have so many orders, I cannot even remember all of them. But we keep developing new ones. When Archipelago is compared to Tradebook or Instinet, we are always competing on our order types.")

“[e]xchanges now function as broker-dealers in many ways,”¹⁹ and this competitive factor also had an effect on the order type race.²⁰ Furthermore, while the expansion of order type menus is in some ways a U.S.-centric phenomenon, there are similarities in other countries’ securities markets:

Most other countries have not suffered order type proliferation and complexity [of the securities market structure] to this scale, and queue priority is generally achieved through more traditional latency differentials. That said Europe has also seen some interesting new order types come into play from alternative venues called [multilateral trading facilities] and [it is expected that] more will arise in due course as volumes continue to stay low and order types increasingly become differentiators for venues.²¹

Bodek’s analysis starts out with stressing the importance of the competitive environment and the corresponding symbiosis of HFTs and trading venues:

Any exchange that attained any competitive advantage with a new product, fee structure, or market structure change would find that its competitors rapidly responded with comparable innovations or outright clones. Exchanges struggled to differentiate themselves in a manner where they could establish a compelling product that would retain and grow the volume of their most sought-after and favored high-volume clients.²²

Not surprisingly, this environment fueled the demand for new order types with customized features. As one employee of a securities exchange described this process, “[w]e created all these different order types to accommodate how [some market participants] wanted to trade. We tweaked how the order would interact with our book according to what they wanted. A lot of the unique orders were created at the request of a customer, typically a high frequency customer.”²³ According to Bodek, some dangerous mutations occurred at precisely this stage. The essence of his argument is that “order matching engine practices [associated with the use of special order types] that served to preference HFTs over the public investor [that] either currently exist or have existed on nearly every major electronic exchange” include the following

19. *Market Structure: Ensuring Orderly, Efficient, Innovative and Competitive Markets for Issuers and Investors: Hearing Before the Subcomm. on Capital Mkts. & Gov’t Sponsored Enters. of the H. Comm. on Fin. Servs.*, 112th Cong. 117 (2012) [hereinafter *House Hearing on Market Structure*] (prepared testimony of Daniel Mathisson, Head of U.S. Equity Trading, Credit Suisse).

20. For instance, in connection with one order type proposed by NASDAQ, there was a sentiment that the trading venue would essentially compete with broker-dealers offering similar services. See Order Disapproving a Proposed Rule Change by NASDAQ Stock Market LLC To Establish “Benchmark Orders,” Exchange Act Release No. 68,629, 78 Fed. Reg. 3928, 3929–31 (Jan. 11, 2013).

21. WILL PSOMADELIS & STUART BADEN POWELL, SCHRODER INV. MGMT. LTD., KNOW YOUR COUNTERPARTY: THE NEW PARADIGM OF EQUITY MARKET MICROSTRUCTURE AND THE IMPACT TO INSTITUTIONAL INVESTORS 4 (2013), available at <http://www.schroders.com/staticfiles/Schroders/Sites/australia/pdf/30082013-know-thy-counterparty.pdf>.

22. BODEK, *supra* note 3, at 3–4. On a related note, Bodek also expressed a concern over the ownership of securities exchanges by HFTs, which constitutes a serious conflict of interest. *Id.* at 73–74.

23. PATTERSON, *supra* note 2, at 237 (quoting an anonymous employee of Archipelago, which ultimately became NYSE Arca).

features:

- unfair order handling practices that permit HFTs to step ahead of investor orders in violation of price-time priority
- unfair rebooking and repositioning of investor orders that permit HFTs to flip out of toxic trades
- unfair conversion of investor orders eligible for maker rebates into unfavorable executions incurring taker fees [under the maker-taker pricing model]
- unfair insertion of HFT intermediaries in between legitimate customer-to-customer matching
- unfair and discriminatory order handling of investor orders during sudden price movements.²⁴

Going beyond judgments of unfairness of these order types as “shortcuts” that could have been employed only by a small subset of sophisticated and technologically equipped market participants, the key problem is that, “being central to the ‘guaranteed economics’ arrangement afforded HFTs [by securities exchanges], these order matching engine practices are, for the most part, undocumented.”²⁵ Of course, “undocumented” implies “selectively disclosed,” and, in Bodek’s experience, “exchange marketing departments tended to segment their customer base, differentiating between institutional clients and [HFTs] . . . [Y]ou were either marketed unfair advantages like queue-jumping or you weren’t.”²⁶ This informational asymmetry also pushed Bodek to take everything to the public arena and become a whistleblower par excellence: “The thing that really got me to be more of a critic of HFT was that the rule descriptions did not match what was going on at the exchanges.”²⁷ Furthermore, such undocumented features could hardly have been reverse-engineered:

24. BODEK, *supra* note 3, at 11–12; *see also* PATTERSON, *supra* note 2, at 50 (describing how these order types “acted effectively as an invisible trap that made other firms pay the ‘take’ fee” and how Bodek’s own firm, Trading Machines, was affected).

25. BODEK, *supra* note 3, at 12; *see also* *House Hearing on Market Structure*, *supra* note 19, at 75 (prepared testimony of Kevin Cronin, Global Head of Equity Trading, Invesco) (expressing concerns that certain “order types facilitate strategies that can benefit market participants at the expense of long-term investors or that are potentially abusive or manipulative” and stating that members of the Investment Company Institute, an association of institutional investors, “report that the transparency surrounding these order types is severely lacking”).

26. BODEK, *supra* note 3, at 9. Interestingly, these practices may not be unique to the United States. For instance, a recent commentary on securities markets in Australia quoted a government report’s finding that “one or more crossing system operators may be offering specific order types to an exclusive subset of their clients and advising these clients how to benefit from these order types” and asserted that “[this] finding[] should alarm buy side firms.” PSOMADELIS & POWELL, *supra* note 21, at 7 (quoting AUSTL. SEC. & INVS. COMM’N, REPORT NO. 331, DARK LIQUIDITY AND HIGH-FREQUENCY TRADING para. 230, at 60 (Mar. 2013), available at [http://www.asic.gov.au/asic/pdf/lib.nsf/lookupByFileName/rep331-published-18-March-2013.pdf/\\$file/rep331-published-18-March-2013.pdf](http://www.asic.gov.au/asic/pdf/lib.nsf/lookupByFileName/rep331-published-18-March-2013.pdf/$file/rep331-published-18-March-2013.pdf)). *See also* AUSTL. SEC. & INVS. COMM’N, *supra*, para. 230, at 61 (“[T]hese exclusive clients [may be advised] on how to capture more of the spread from other clients’ aggressive market orders [by using such order types].”).

27. Laurie Carver, *Exchange Order Types Prompt Fears of HFT Conspiracy*, RISK MAG. (Apr. 23, 2013), <http://www.risk.net/risk-magazine/feature/2261626/exchange-order-types-prompt-fears-of-hft-conspiracy>.

[N]ot even the most sophisticated user would have been able to determine how top HFT firms employed special order types by scrutinizing exchange [application programming interface] manuals and regulatory filings. The most important details (e.g. intended usage cases, intended order interaction sequences, order precedence rules, etc.) are not documented in any adequate manner.²⁸

In that respect, Bodek's insights provide a very different perspective from several earlier debates over pros and cons of *plainly visible* features of certain order types, such as the heated debate on the "flash order" functionality²⁹ or the clashing views on "pegged" orders.³⁰ Yet another related consideration is that "speed is simply a prerequisite for effective utilization of special order types and market microstructure."³¹ Conversely, "[l]iquidity seemed to dry up if you were using the right order types and strategies but were not fast enough to maneuver to get to the top of the queue."³²

Furthermore, according to Bodek, the very existence of special order types set the stage for many high-speed trading strategies: "HFT was and is all about these HFT-oriented order types, as well as other even more sophisticated derivatives of such order types. In fact, modern HFT would cease to be profitable without HFT-oriented order types."³³ In addition, Bodek argued that the importance of certain other HFT-associated practices, some of which, like layering and spoofing, could be placed more easily in the realm the traditional doctrine of market manipulation,³⁴ is not that great relative to "HFT scalping," a category that involves the use of special order types:

28. BODEK, *supra* note 3, at 48.

29. For various comments on the proposed elimination of flash orders, see *Proposed Rule: Elimination of Flash Order Exception from Rule 602 of Regulation NMS*, U.S. SEC. & EXCH. COMM'N, <http://www.sec.gov/comments/s7-21-09/s72109.shtml> (last modified Jan. 20, 2011).

30. See, e.g., *Dangerous Order Types*, NANEX (Nov. 15, 2012), <http://www.nanex.net/aqck2/3681.html> (criticizing a pegged order type proposed by a U.S. trading venue and stating that "[w]ith over a dozen exchanges and thousands of stocks, it doesn't take a rocket scientist to understand that this could flood a network pretty fast [and] also create a dangerous feedback loop if the networks become unsynchronized, which would happen if they get too full."). Compare Jeffrey MacIntosh, Op-Ed., *Unfair Trade*, NAT'L POST (Toronto), Jan. 13, 2009, at FP13 (stating that, "[e]xploiting the absence of inter-market price-time priority [in Canadian securities markets], some trading venues have created order types that pose a danger to the virtual single market" and arguing that pegged orders interfere with the process of price discovery), with James Hymas, *Predatory Trading*, ADVISOR'S EDGE REP., Apr. 2010, at 10, 10–11, available at http://www.himinvest.com/media/advisor_1004.pdf (critiquing MacIntosh's position and arguing that, by using pegged orders, "retail investors will be able to level the playing field to compete more effectively in illiquid markets with the institutional investors and their access to algorithmic trading").

31. BODEK, *supra* note 3, at 23.

32. *Id.* at 16.

33. *Id.* at 14.

34. See, e.g., TECHNICAL COMM., INT'L ORG. OF SEC. COMM'NS, FR09/11, FINAL REPORT, REGULATORY ISSUES RAISED BY THE IMPACT OF TECHNOLOGICAL CHANGES ON MARKET INTEGRITY AND EFFICIENCY 30 (2011), available at <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD361.pdf> ("Momentum ignition, quote-stuffing, spoofing and layering are some examples of existing trading practices which may have an abusive and manipulative purpose and that may benefit from the edge of HFT-style technology and the complex and fragmented nature of modern financial markets.") (footnote omitted).

Many forms of adverse selection, unexpected slippage and escalating transaction costs can be tied to specific features of HFT scalping practices and exchange order matching engine features. . . . However, the core activity of HFT scalping strategies might be inadvertently attributed to less prevalent abuses such quote stuffing, spoofing, ping-pong, or more discriminatory order anticipation and “statistical front-running” models. Many of the effects are correctly attributed to HFT firms, but are byproducts of large scale HFT scalping strategies rather than primary strategies in of themselves.³⁵

Moreover, conventional approaches to order execution employed by the buy-side community may fail to achieve their goals: “Popular techniques to limit market impact, such as order slicing and various weighted averaging strategies, can backfire when they interact with HFT scalping strategies employing special order types and market microstructure features.”³⁶

Nevertheless, despite doom-and-gloom forecasts for the securities market structure, the situation is changing, and a big chunk of credit should go to Bodek. One global observation is that “[s]ome of the more egregious HFT-oriented features appear to have been neutralized through order matching engine modifications.”³⁷ One impetus for this cleanup was the revelation of specific instances of noncompliance with order matching rules at some trading venues,³⁸ whether true computer glitches or not. This trend is also illustrated by a quiet modification of the “sliding” order type—as a “non-controversial” change—by BATS.³⁹

In its turn, the SEC appears to apply greater scrutiny to order type proposals, which manifested itself in the recent disapproval of the “benchmark” order submitted by NASDAQ.⁴⁰ Calls for a greater level of

35. BODEK, *supra* note 3, at 14. For a discussion of the taxonomy of “HFT scalping,” see *id.* at 19.

36. *Id.* at 27.

37. *Id.* at 50.

38. See, e.g., Gregg Wirth, *Direct Edges Discloses Order-Handling Discrepancies*, TRADERS MAG. ONLINE NEWS (Jan. 17, 2013), <http://www.tradersmagazine.com/news/direct-edge-order-handling-problems-110750-1.html> (registration required).

39. Notice of Filing and Immediate Effectiveness of a Proposed Rule Change by BATS Exchange, Inc. To Amend Rules Related to Price Sliding Functionality, Exchange Act Release No. 68,791, 78 Fed. Reg. 8617 (Jan. 31, 2013). For a prior admission by BATS of the existence of certain ambiguities and inaccuracies in this order type’s documentation, see Notice of Filing and Immediate Effectiveness of a Proposed Rule Change by BATS Exchange, Inc. To Amend BATS Rules Related to Price Sliding Functionality, Exchange Act Release No. 67,657, 77 Fed. Reg. 50,199 (Aug. 14, 2012). For a critique of this BATS order type and similar order types adopted by other securities exchanges, which are categorized by Bodek as “hide and light,” see BODEK, *supra* note 3, at 14, 36. Bodek also pointed out that “BATS, being particularly aggressive with the adoption of special order types that ‘hide and light,’ summed up quite elegantly the appeal of such order types: ‘Display-Price Sliding eliminates the need for traders to retry orders multiple times in rapid succession trying to be high in priority at the next NBBO price.’” *Id.* at 36 (quoting BATS GLOBAL MKTS., INC., DISPLAY-PRICE SLIDING v. 1.3.1 (2011), available at http://www.batstrading.com/resources/features/bats_exchange_pricesliding.pdf).

40. Order Disapproving a Proposed Rule Change by NASDAQ Stock Market LLC To Establish “Benchmark Orders,” Exchange Act Release No. 68,629, 78 Fed. Reg. 3928 (Jan. 11, 2013); see also Letter from Eric Pritchett, Chief Exec. Officer, Potamus Trading, LLC, to Elizabeth M. Murphy, Sec’y, U.S. Sec. & Exch. Comm’n 6 (Mar. 5, 2013), available at <http://www.sec.gov/comments/sr-nasdaq-2013-014/nasdaq2013014-1.pdf> (arguing that “the SEC—until its recent ruling against NASDAQ’s Benchmark Order Proposal . . . —has been very accommodative of Rule proposals relating to order types proposed by . . . U.S. equity exchanges”). But see *Senate Hearings on Computerized Trading: Part II*, *supra* note 12, at 23 (remarks of Eric Noll, Executive Vice President and Head, Nasdaq OMX Transaction Services) (“[For] many

disclosure of order type practices⁴¹—sometimes accompanied by demands for regulatory intervention in this area⁴²—have not remained unnoticed.⁴³ Some exchanges, notably, NASDAQ, have started providing more disclosure “specifically to allay concerns of unfair asymmetries in special order types,”⁴⁴ and further progress may be expected. Similarly, NYSE Arca submitted a proposal—peppered with the word “clarify”—relating to its rules on order types and modifiers.⁴⁵ On a related note, IEX, a new trading venue with many innovative features, adopted a simple menu of order types and modifiers and emphasized that it has no features allowing “to discriminate . . . against specific order types” and that all of its order types are available to all users “in any capacity, on a uniform basis.”⁴⁶ Also, as suggested by Bodek, the shift away from the use of special order types might be one of the key factors behind the much-discussed collapse in HFT profits, although he also stated that “this decrease is largely driven by reductions in overall market volume.”⁴⁷

order types, many variations on order types . . . we have been asked by the SEC to withdraw them for a variety of reasons, having to do with their view of what is the appropriate market structure.”)

41. See, e.g., *Senate Hearings on Computerized Trading: Part I*, *supra* note 12, at 70 (prepared testimony of Larry Tabb, Chief Executive Officer, TABB Group) (“Exchanges, and for that matter [alternative trading systems], ECNs, internalizers and even brokers need to begin to provide greater transparency, descriptions, and concrete examples of how each order type works, how fees / rebates are generated, where they show up in the book queue, how and when they route out, and how these order types change under the various market conditions.”).

42. Letter from Raymond M. Tierney III, President & Chief Exec. Officer, & Gary Stone, Chief Strategy Officer, Bloomberg Tradebook LLC, to Elizabeth M. Murphy, Sec’y, U.S. Sec. & Exch. Comm’n 3–4 (June 28, 2013), available at <http://www.sec.gov/comments/s7-02-10/s70210-406.pdf> (stating that the buy-side participants in a workshop held by Bloomberg Tradebook are “looking for more order type disclosure from the exchanges” and “would like the [SEC] to set forth a principle of disclosure and transparency that exchanges should follow [including] a standard matrix of information and disclosure [w]hen exchanges file for rule changes to offer new order types” and proposing to the regulatory agency a disclosure format for trading venues that would address, among other things, order types’ features and their interaction).

43. Of course, the ambiguity of disclosure or its lack of specificity—for whatever reason—might subsequently create the incentive for trading venues to disclose information to a select group of market participants.

44. BODEK, *supra* note 3, at 53; see also Peter Chapman, *Direct Edge Publishes Guide to Order Types*, TRADERS MAG. ONLINE NEWS (Sept. 20, 2013), <http://www.tradersmagazine.com/news/Direct-Edge-Publishes-Guide-to-Order-Types-111550-1.html> (registration required). But see Letter from Raymond M. Tierney III & Gary Stone to Elizabeth M. Murphy, *supra* note 42, at 3 (“Some buy-side participants wanted to see more complex examples [than the ones provided by NASDAQ]—such as how the order types and the matching engine handle display with reserve orders.”).

45. Notice of Filing of a Proposed Rule Change by NYSE Arca, Inc. To Comprehensively Update Rules Related to the Exchange’s Order Types and Modifiers, 78 Fed. Reg. 62,745 (Oct. 9, 2013); see also Order Approving a Proposed Rule Change by NYSE Arca, Inc. To Comprehensively Update Rules Related to the Exchange’s Order Types and Modifiers, Exchange Act Release No. 71,331, 79 Fed. Reg. 3907 (Jan. 16, 2014).

46. IEX ATS, Initial Operation Report, Amendment to Initial Operation Report and Cessation of Operations Report for Alternative Trading Systems (Form ATS) 12–14 (Oct. 22, 2013), available at <https://s3.amazonaws.com/iextrading/docs/Form+ATS-Redacted.pdf>.

47. BODEK, *supra* note 3, at 49; see also Matthew Philips, *How the Robots Lost: High-Frequency Trading’s Rise and Fall*, BLOOMBERG BUSINESSWEEK (June 6, 2013), <http://www.businessweek.com/articles/2013-06-06/how-the-robots-lost-high-frequency-tradings-rise-and-fall> (describing the drop in the HFT industry’s profits to approximately \$1 billion in 2012 and discussing such factors as industry saturation, falling trading volume and volatility, and rising costs of private data feeds and co-location services offered by trading venues); Lu Wang, *Getco Profit Drops 90% as Equity Volumes Slump*, BLOOMBERG (Apr. 15, 2013), <http://www.bloomberg.com/news/2013-04-15/getco-profit-drops-90-to-16-2-million-as-equity-volumes-slump.html> (stating that one of the leading players in the HFT space experienced a ninety percent decrease in profits in 2012).

More generally, the voluminous documentation generated by the wide variety of order types is often perceived as spam-like.⁴⁸ Furthermore, a powerful argument is that “the complexity of these order types that is adding unnecessary complexity to the market, which is already an extremely complex system as it is . . . not very well understood even by the most advanced participants, especially at how these different complex systems interact.”⁴⁹ Even from the standpoint of technology, “in isolation, most of the order types made sense, but going back to the testing point and integration testing, the whole suite of order types . . . actually presents a pretty huge challenge . . .”⁵⁰ Yet, given calls to simplify the current complexity of order type menus,⁵¹ one thought-provoking observation is that the very existence of this complexity is symptomatic of the current state of the securities market structure,⁵² which points to the necessity of deeper reforms.

III. ANY HOOK FOR HIGH-FREQUENCY TRADERS?

There are several possibilities to consider in the process of fitting the order type controversy under the coverage of the federal antifraud prohibition with respect with HFTs: (1) an order type simply has undocumented features; (2) an order type has undocumented features that potentially violate some regulatory norm under federal securities law, such as an SEC rule; and (3) the actual functioning of an order type contradicts its formal documentation in the form of a rule of a self-regulatory organization (SRO) filed with and approved by the SEC or another similarly vetted SRO rule, such as order matching rules of individual trading venues.⁵³

48. See, e.g., Steinert-Threlkeld, *supra* note 14, at 22 (“[T]he head of one of the industry’s largest electronic brokerages, who declined to be quoted on the record because of the size of his business, says it is extremely difficult to get a handle on how each order type works, even if you try to keep up with all the filings made on the subject by the exchanges.”); see also *id.* at 24 (“Figuring out how each [order type] works defies the ability of the human brain to absorb, evaluate and adapt.”).

49. U.S. SEC & EXCH. COMM’N, *supra* note 12, at 46 (remarks of Dave Lauer, Consultant, Better Markets).

50. *Id.* at 48 (remarks of Sudhanshu Arya, Managing Director, Investment Technology Group).

51. See, e.g., *Senate Hearings on Computerized Trading: Part I*, *supra* note 12, at 42 (prepared testimony of Andrew Brooks, Head of U.S. Equity Trading, T. Rowe Price); Tom Steinert-Threlkeld, Mathisson: Institute ‘Universal Order Types,’ TRADERS MAG. ONLINE NEWS (May 16, 2013), <http://www.tradersmagazine.com/news/mathisson-institute-universal-order-types-111202-1.html> (registration required). The SEC’s sister agency, the Commodity Futures Trading Commission, also put on the agenda “the possible standardization and simplification of order types that have complex logic embedded within them.” Concept Release on Risk Controls and System Safeguards for Automated Trading Environments, 78 Fed. Reg. 56,542, 56,563 (Commodity Futures Trading Comm’n Sept. 9, 2013). But see Steinert-Threlkeld, *supra* note 14, at 29 (“I don’t think there are too many order types. A lot of the dynamic, fast-type trading that was taking place a couple years ago has sort of been arbitrated out of the market by the law of diminishing returns as more players entered and drove down profits.”) (quoting Ian Winer, director of equities trading, Wedbush Securities).

52. See *Senate Hearings on Computerized Trading: Part II*, *supra* note 12, at 22 (remarks of Joseph Mecane, Executive Vice President and Head of U.S. Equities, NYSE Euronext) (“[T]he order type evolution is largely because the market structure that we have creates the need or the demand for different order types [I]f we want to review the order type issue or simplify the markets, we should simplify the market structure that they operate in, and there will be less need for these order types.”).

53. As noted earlier, Bodek compared the order type practices in question to other trading practices that are likely to be classified as manipulative, and, arguably, there is a meaningful difference between these two

The scenario of the mere existence of undocumented features applies to the case of nondisclosure—as opposed to false or misleading disclosure—of these features by trading venues. In theory, this scenario should be prevented by the mathematically precise nature of the disclosed documentation, but it is still feasible, while perhaps narrow in the legal sense, in light of the overall technological sophistication and complexity. Overall, this scenario would be the hardest one to apply for catching HFTs. Even if the behavior of trading venues actually amounted to deliberate concealment of certain order type features to the advantage—and knowledge—of HFTs as their preferred clients with a very material effect on other market participants,⁵⁴ it would have been difficult to attach some form of deception, duty to disclosure, or direct or implied misrepresentation to HFTs under the current jurisprudence relating to the federal antifraud prohibition. Furthermore, these market participants typically transact at arm’s-length with others and, accordingly, are not subject to agency obligations.⁵⁵ Also, it would be hard to fit the order type controversy into the framework of insider trading regulation with HFTs being treated as “insiders,” although these market participants are definitely on the “inside” in Bodek’s analysis. Putting aside other doctrinal hurdles, the substance of an order type’s functionality by itself does not have a direct impact on a security’s market price—despite the fact that such an order type may take advantage of short-term price trends and fluctuations. After all, this functionality does not convey any “inside” or “outside” information affecting underlying companies or, arguably, even any *confidential* information about

categories. See BODEK, *supra* note 3, at 9. Turning to the legal definition of manipulative practices under the federal antifraud prohibition, which are essentially synonymous with price manipulation, they have been defined as “artificially affecting market activity in order to mislead investors.” *Santa Fe Indus., Inc. v. Green*, 430 U.S. 462, 477 (1977); see also *United States v. Bongiorno*, No. 05 Cr. 390 (SHS), 2006 WL 1140864, at *5–7 (S.D.N.Y. May 1, 2006) (discussing the applicable case law in the context of the distinction between manipulative practices that have an artificial impact and deceptive practices, with both of them being under the coverage of the federal antifraud prohibition). In some sense, however, manipulative practices under the federal antifraud prohibition also involve deception, *Ernst & Ernst v. Hochfelder*, 425 U.S. 185, 199 (1976), but not exclusively so.

54. See BODEK, *supra* note 3, at 9 (“If you were an HFT, you were most likely provided entirely different marketing materials [by securities exchanges] than if you were an agency broker responsible for routing institutional orders.”); *id.* at 5 (“The introduction of HFT-oriented special order types and related order matching engine practices for specific exchange [application programming interface] upgrades frequently resulted in an immediate and often severe impact upon the transaction costs associated with different classes of participants, often with HFTs benefitting at the expense of the rest of the exchange’s customer base.”).

55. While there is some case law favoring liability of broker-dealers for *nondisclosure* of certain characteristics of the underlying market for the security itself, its emphasis is on the existence of a customer-broker relationship. See ALAN R. BROMBERG & LEWIS D. LOWENFELS, *BROMBERG AND LOWENFELS ON SECURITIES FRAUD AND COMMODITIES FRAUD* § 13:79 (2d ed. 2007 & Supp. 2013). For the same reason, it is unlikely that the order type controversy could come under the doctrine of front-running, even though it is conceivable that some order types may be used for that purpose by HFT-style market participants engaging in both agency and principal trading: “[B]y definition [HFTs] are not able to pursue front running: They do not have customer flow and therefore no private order flow information that they could abuse.” EUREX, *HIGH-FREQUENCY TRADING – A DISCUSSION OF RELEVANT ISSUES* 22 (2013), available at http://www.eurexchange.com/blob/exchange-en/4038-4046/426058/2/data/presentation_hft_media_workshop_chi_nyc_en.pdf. Although some HFT strategies are based on detecting “hidden liquidity” and anticipating other market participants’ orders, they are outside the scope of front-running. For a discussion of “liquidity detection” strategies employed by HFTs, see PETER GOMPER ET AL., *HIGH-FREQUENCY TRADING* 28–29 (2011), available at <http://ssrn.com/abstract=1858626>.

the incoming order flow.⁵⁶ To go one iteration further, even if trading venues, as a result of their symbiosis with HFTs, disclosed order type-related information containing half-truths, let alone plainly false statements,⁵⁷ this hypothetical would hardly be sufficient to catch HFTs as *primary* violators.⁵⁸ On the other hand, there is a possibility of the SEC going after HFTs if another party, such as a securities exchange, is identified as a primary violator.⁵⁹ On a related note, the regulators are indeed looking into “whether exchanges have at times misled them in seeking approval for certain order types or mischaracterized to investors how the orders work,”⁶⁰ which may potentially uncover something beyond mere nondisclosure.

One possible approach to the applicability of the federal antifraud prohibition to HFTs is to identify a violation of some regulatory norm under federal securities law in a way that *defrauds* other market participants. Putting away broader normative goals articulated in the federal securities statutes, the pivotal issue is whether specific order type practices directly contradict Regulation NMS,⁶¹ especially its Rules 610 and 611 that address various aspects of order matching, such as the ban on locked and crossed markets and the “trade-through” principle.⁶² Bodek himself referred to “the corruption of

56. See *United States v. Libera*, 989 F.2d 596, 601 (2d Cir. 1993) (conditioning the public nature of a piece of information on whether this “information is fully impounded in the price”); RALPH C. FERRARA ET AL., *FERRARA ON INSIDER TRADING AND THE WALL* § 2.01[2] (2d ed. 2001 & Supp. 2013) (discussing “the test for whether information is public [that] turns on whether it has been internalized by ‘the market’—i.e., whether the security’s price reflects that information” and comparing this test to alternative approaches).

57. See *SEC v. Gabelli*, 653 F.3d 49, 57 (2d Cir. 2011), *rev’d on other grounds*, 133 S. Ct. 1216 (2013) (“The law is well settled . . . that so-called ‘half-truths’—literally true statements that create a materially misleading impression—will support claims for securities fraud.”); *Schlifke v. Seafirst Corp.*, 866 F.2d 935, 944 (7th Cir. 1989) (“[Under Rule 10b-5] incomplete disclosures, or ‘half-truths,’ implicate a duty to disclose whatever additional information is necessary to rectify the misleading statements.”).

58. See *Cent. Bank of Denver, N.A. v. First Interstate Bank of Denver, N.A.*, 511 U.S. 164, 191 (1994) (stating that “[a]ny person or entity . . . who employs a manipulative device or makes a material misstatement (or omission) on which a purchaser or seller of securities relies may be liable as a primary violator under 10b-5, assuming *all* of the requirements for primary liability under Rule 10b-5 are met.”); see also *Stoneridge Inv. Partners, LLC v. Scientific-Atlanta, Inc.*, 552 U.S. 148, 160 (2008) (rejecting the “scheme liability” theory under the federal antifraud prohibition on the basis of the analysis of reliance); *Regents of the Univ. of Cal. v. Credit Suisse First Boston (USA), Inc.*, 482 F.3d 372, 392 (5th Cir. 2007) (“In the wake of *Central Bank* . . . conspiracy is no longer a viable theory of § 10(b) liability.”); *Dinsmore v. Squadron, Ellenoff, Plesent, Sheinfeld & Sorkin*, 135 F.3d 837, 843 (2d Cir. 1998) (stating that, “where the requirements for primary liability [under the federal antifraud prohibition] are not independently met, they may not be satisfied based solely on one’s participation in a conspiracy in which *other parties* have committed a primary violation”).

59. In the aftermath of the *Central Bank* decision that marked the end of private lawsuits for aiding and abetting under the federal antifraud prohibition, the SEC—as opposed to a private litigant—had acquired the power to bring action against “any person that knowingly provides substantial assistance” to a primary violator. Private Securities Litigation Reform Act of 1995, Pub. L. No. 104-67, § 104, 109 Stat. 737, 757 (codified as amended at 15 U.S.C. § 78t(e) (2006 & Supp. V 2011)). More recently, this provision was strengthened by inserting “or recklessly” after “knowingly.” Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 929O, 124 Stat. 1376, 1862 (2010) (codified at 15 U.S.C. § 78t(e) (2006 & Supp. V 2011)).

60. *Patterson & Strasburg*, *supra* note 13.

61. Regulation NMS, Exchange Act Release No. 51,808, 70 Fed. Reg. 37,496 (June 9, 2005) (to be codified at 17 C.F.R. pts. 200, 201, 230, 240, 242, 249, & 270).

62. *Id.* at 37,631–32 (to be codified at Access to Quotations, 17 C.F.R. § 240.610, and Order Protection Rule, 17 C.F.R. § 240.611). These rules are formulated as obligations of trading venues rather than obligations of market participants themselves, but some of them require trading venues to regulate *their members* in certain ways.

price-time priority” introduced by certain order type practices,⁶³ but he also noted the persistent efforts of trading venues and HFTs to fit these practices into the framework of Regulation NMS:

Modern HFT strategies thrived in the new electronic marketplace, seemingly tuned perfectly to the implementations of Regulation NMS that precisely dictated the inner working of the marketplace, including price movement and order handling. By circumventing the intent of Regulation NMS with a myriad of legal exceptions and clever regulatory workarounds, HFTs exploited fragmentation to their benefit at the expense of institutional investors.⁶⁴

It gets even more interesting: “Ironically, many of the most abusive features were introduced under the pretense of complying with R[egulation] NMS”⁶⁵ This trend is exemplified by the phenomenon of “queue jumping”: “HFT is about being first in the queue, period. That is an HFT’s primary alpha. The implementation of R[egulation] NMS in 2007 changed the mechanisms for achieving queue position in a price-time priority market. This fundamentally changed trading strategies and exchange matching practices.”⁶⁶ More generally, Regulation NMS did establish several foundations for order matching procedures, such as the “trade-through” principle, but it also granted a great degree of deference to individual trading venues.⁶⁷ Overall, violations of Regulation NMS are unlikely to provide a basis for civil liability of HFTs who use such orders because of their compliance—however formalistic—with this regulatory norm. In any instance, the bulk of the burden of compliance with Regulation NMS is on trading venues rather than individual market participants. With that in mind, Bodek’s prescription is forcefully clear: “To address the market structure crisis head on, we need to reassess Regulation NMS in the context of its original purpose and intent—to bind a fragmented

63. BODEK, *supra* note 3, at 48.

64. *Id.* at 65. For instance, as described by Bodek, the DAY ISO, i.e., an “intermarket sweep order,” “addresses conditions in which Regulation NMS puts constraints upon an order to simultaneously satisfy the ban on locked markets stipulated by Rule 610 and the trade-through rule stipulated by Rule 611” and has “the remarkable ability to step ahead of orders resting on the book at the same price.” *Id.* at 42. Interestingly, an empirical study concluded that “ISO trades are more informed than [non-ISO] trades.” Sugato Chakravarty et al., *Clean Sweep: Informed Trading Through Intermarket Sweep Orders*, 47 J. FIN. & QUANT. ANALYSIS 415, 416 (2012).

65. BODEK, *supra* note 3, at 4–5.

66. *Id.* at 30. For a further discussion of queue jumping / “hide and light” trading strategies, see *id.* at 33–37, 45, 48. Furthermore, “queue jumping is extremely difficult to detect in market data or any type of ‘experimental’ testing unless you have already been made aware of the operational mechanisms behind this advantage.” hbodek [Haim Bodek], Comment to *Locked Markets, Priority and Why HFTs Have an Advantage: Part 2: Hide & Light*, TABB FORUM (Oct. 24, 2012), <http://tabbforum.com/opinions/locked-markets-priority-and-why-hfts-have-an-advantage-part-2-hide-and-light#comments> (registration required). Interestingly, one anonymous trader at an HFT firm provided the following description of the interaction between HFTs and trading venues, which hints at selective disclosure of queue jumping features: “We talk a lot to the exchanges, to optimise the order type for a given trade. Sometimes you’ll want to pay the rebate and sometimes want to take it – but what’s really essential is to jump to the head of the queue. You pay for it, but you jump to the head.” Carver, *supra* note 27.

67. Regulation NMS itself uses the term “rules of priority and precedence” with respect to a “national securities exchange.” 70 Fed. Reg. at 37,623 (to be codified at NMS Security Designation and Definitions, 17 C.F.R. § 242.600(b)(65)(i)). The same term was used in Order Execution Obligations, Exchange Act Release No. 37,619A, 61 Fed. Reg. 48,290, 48,329 (Sept. 6, 1996) (to be codified at 17 C.F.R. pt. 240).

marketplace into an effective national market system that serves long term investors.”⁶⁸

Finally, if the actual functioning of an order type violates the underlying SRO rule or other order matching procedures in this SRO’s rulebook and HFTs use this order type to take advantage of this discrepancy, there might be a private right of action under the federal antifraud prohibition.⁶⁹ As stated in a recent appellate decision in support of a private right of action in the context of violations of SRO rules:

[Such] rules themselves are part of the apparatus of federal securities regulation . . . adopted by notice-and-comment rulemaking (not by the mechanism of contract, which requires consent by all affected persons) and are subject to review and change by the SEC. Some of these rules are the source of legal duties, and not revealing to investors a failure to comply with one’s duties about transactions in their securities can lead to liability under the [federal] securities acts.⁷⁰

More generally, “violations of [SRO] rules may be probative of plaintiff’s claims under the antifraud provisions of the [federal] securities laws,”⁷¹ and this principle should be especially important when such SRO rules govern the trading process and thus set specific parameters of individual transactions. In fact, the Second Circuit recently revisited its own precedent⁷² and raised the possibility of catching violations of SRO rules—in the context of the

68. BODEK, *supra* note 3, at 67. One of Bodek’s suggestions is “a full or partial repeal of the ban on locked markets” provided by Rule 610 of Regulation NMS, *id.* at 68, and he noted the existence of substantial support in the securities industry for this measure, *id.* at 54. This issue in fact is closely tied to the order type controversy: “To facilitate HFT strategies and get these players to the top of queue in light of Rule 610 and its ban on locked markets, exchanges began creating a number of new special order types.” *Id.* at 33. Bodek also acknowledged an earlier criticism of this component of Regulation NMS as contradictory to the price-time priority principle. *Id.* at 87–88 (discussing Letter from Manoj Narang, Chief Exec. Officer, Tradeworx, Inc., to Elizabeth M. Murphy, Sec’y, U.S. Sec. & Exch. Comm’n app. (Apr. 21, 2010), available at <http://www.sec.gov/comments/s7-02-10/s70210-129.pdf>).

69. For the author’s analysis of civil liability under federal securities law, including its antifraud prohibition, for violations of SRO rules and the evolution of the relevant case law, as well as the resistance of some courts to recognizing a private right of action in such circumstances, see Stanislav Dolgoplov, *Providing Liquidity in a High-Frequency World: Trading Obligations and Privileges of Market Makers and a Private Right of Action*, 7 BROOK. J. CORP. FIN. & COM. L. 303 *passim* (2013). The availability of a private right of action for violations of SRO rules under various provisions of the Exchange Act other than section 10(b) or under the mere existence of the broad regulatory scheme established by federal securities law appears to be very questionable. *See id.* Summarizing the applicable case law, another commentator concluded that “it is generally held that violation of a rule of a self regulatory [sic] organization will not, by itself, support a private right of action [but it] can form the basis of a 10b-5 action, provided, of course, that all of the elements of a 10b-5 claim can be established.” THOMAS LEE HAZEN, *THE LAW OF SECURITIES REGULATION* § 14.26[2] (6th ed. 2009 & Supp. 2013) (footnote omitted).

70. *Kurz v. Fid. Mgmt. & Research Co.*, 556 F.3d 639, 641–42 (7th Cir. 2009).

71. *Kirkland v. E.F. Hutton & Co.*, 564 F. Supp. 427, 443 (E.D. Mich. 1983); *see also* Hoxworth v. Blinder, Robinson & Co., 903 F.2d 186, 200 (3d Cir. 1990) (agreeing with the assertion that violations of SRO rules “may be probative in demonstrating a course of conduct amounting to fraud” in the context of claims under the federal antifraud prohibition) (quoting *Newman v. L.F. Rothschild, Unterberg, Towbin*, 651 F. Supp. 160, 162–63 (S.D.N.Y. 1986)); *Utah State Univ. v. Bear, Stearns & Co.*, 549 F.2d 164, 171 (10th Cir. 1977) (arguing that “[t]he conclusory statement . . . that the violations of the exchange and association rules ‘operated as a fraud and deceit upon the plaintiffs’ is insufficient to sustain a claim of fraud or deceit [for the purposes of the federal antifraud prohibition]”).

72. *United States v. Finnerty*, 533 F.3d 143 (2d Cir. 2008).

underlying trading process—under the federal antifraud prohibition as deceptive practices, given the existence of “a formal adjudicatory decision on the subject” by the SEC.⁷³ The administrative adjudication in question specifically based its demonstration of deceptive conduct on the assertion that “absent disclosure to the contrary by [the exchange specialist], those who submitted orders executed by him . . . were entitled to believe that he would execute their orders in a manner consistent with [his] duties [including those set by the applicable SRO rules].”⁷⁴ Adding a layer of complexity, this adjudication was a settlement “not binding on any other person or entity,”⁷⁵ which imposes limitations on its precedential value.⁷⁶ However, the SEC had previously reserved the right to “use an opinion issued in connection with a settlement to state views on the issues presented in that case that [it] would

73. *VanCook v. SEC*, 653 F.3d 130, 140 n.8 (2d Cir. 2011) (citing David A. Finnerty, Securities Act Release No. 9033, Exchange Act Release No. 59,998, 95 SEC Docket 2534, 2535 (May 28, 2009)); see also *SEC v. Rana Research, Inc.*, 8 F.3d 1358, 1364 (9th Cir. 1993) (“Judicial decisions defining the conduct necessary to constitute a Rule 10b-5 violation do apply to actions by the SEC as well as private parties.”). The *VanCook* court specifically relied on the principle of deference—subject to certain limitations—to administrative agencies’ statutory interpretation under *Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837 (1984). Another principle, which could be seen as an implication of *Chevron*, articulated in such decisions as *Bowles v. Seminole Rock & Sand Co.*, 325 U.S. 410 (1945), and *Auer v. Robbins*, 519 U.S. 452 (1997), is the one of deference—also subject to certain limitations—to administrative agencies’ interpretation of their own rules. The Second Circuit, with a reference only to *Chevron*, similarly stated that “[the] later interpretation of Rule 10b-5 [by the SEC] ‘trumps’ our prior interpretation.” *VanCook*, 653 F.3d at 140 n.8; see also *United States v. Royer*, 549 F.3d 886, 899 (2d Cir. 2008) (sustaining the SEC’s adoption of the “knowing possession standard” in Rule 10b5-1 promulgated under section 10(b) of the Exchange Act, as such “determination is itself entitled to deference,” and citing *Chevron*); *Roth ex rel. Beacon Power Corp. v. Perseus, L.L.C.*, 522 F.3d 242, 247–48 (2d Cir. 2008) (“defer[ring] to the SEC’s interpretation of [Rule 16b-3 promulgated under section 16(b) of the Exchange Act], including one articulated in its *amicus* brief;” and citing *Auer* and *Chevron*); *Markowski v. SEC*, 274 F.3d 525, 529 (D.C. Cir. 2001) (sustaining the SEC’s interpretation of Rule 10b-5 in the context of the scope of market manipulation and citing *Chevron*).

74. *Finnerty*, 95 SEC Docket at 2535. The earlier administrative adjudication touching on this matter was a settlement with the specialist firm that had employed David A. Finnerty, and the SEC utilized the rationale of implied misrepresentations—rather than deceptive practices—in order to extend the reach of the federal antifraud prohibition to individual specialists. *Fleet Specialist, Inc.*, Exchange Act Release No. 49,499, 82 SEC Docket 1895, 1895, 1900 (Mar. 30, 2004). Additionally, this adjudication is not entirely clear on whether this result hinges on the existence of violations of the applicable SEC rule or the similarly worded NYSE rule standing by itself. For a discussion of the reach of the federal antifraud prohibition to violations of SRO rules based on the rationale of implied misrepresentations, see Dolgoplov, *supra* note 69, *passim*.

75. *Finnerty*, 95 SEC Docket at 2534 n.1.

76. As pointed out in a subsequent decision of an administrative judge with the SEC with respect to the same controversy and the same defendant, “[I]t goes without saying, as the Commission has many times stressed, that settlements are not precedent.” David A. Finnerty, Initial Decision Release No. 381, 96 SEC Docket 1098, 1135 (ALJ July 13, 2009); see also *In re Morgan Stanley & Van Kampen Mut. Fund Sec. Litig.*, No. 03 Civ. 8208 (RO), 2006 WL 1008138, at *5 (S.D.N.Y. Apr. 14, 2006) (“[S]tatements made by the SEC . . . in the settlement documents are not law; they are rather untested assertions made by litigants.”); *In re Synovis Life Techs., Inc. Sec. Litig.*, No. Civil 04-3008 ADM/AJB, 2005 WL 2063870, at *8 (D. Minn. Apr. 25, 2005) (“[A]dministrative orders [of the SEC] entered into in contemplation of settlement and are not legal precedent.”). For a general critique of the encroachment of settlements with the SEC on the formation of legal precedent, see Danné L. Johnson, *SEC Settlement: Agency Self-Interest or Public Interest*, 12 *FORDHAM J. CORP. & FIN. L.* 627 (2007); Zachary W. Carter, Dorsey & Whitney LLP, *The SEC’s “Settlement-Prudence”: “Law” Creation Through a Coercive Settlement Process* (June 30, 2004) (unpublished manuscript) (on file with author), available at <http://www.lawseminars.com/materials/07SDAMNY/carter.pdf>. Intriguingly, even *Cady, Roberts & Co.*, Exchange Act Release No. 6668, 40 S.E.C. 907 (Nov. 8, 1961), a seminal administrative adjudication that laid the foundation for insider trading regulation, was based on a settlement explicitly extending the reach of several antifraud provisions of the federal securities statutes, including section 10(b) of the Exchange Act, together with Rule 10b-5. *Id.* at 907.

apply in other contexts,⁷⁷ and the regulatory agency's interpretation should be accorded at least some degree of deference.⁷⁸

Overall, the order type controversy appears to fit the pattern in order to extend the reach of the antifraud prohibition for violations of SRO rules to HFTs even if they do not directly communicate with or otherwise make explicit representations to other market participants.⁷⁹ Violations of SRO rules by HFTs should not be sheltered from liability even when the SRO in question is complicit.⁸⁰ However, the reach of the federal antifraud prohibition to these practices of HFTs is not a foregone conclusion, and a fact-intensive inquiry is still required. This inquiry is likely to hinge on the content of SRO rule filings related to order types and other SRO rules governing order matching

77. George J. Kolar, Exchange Act Release No. 46,127, 77 SEC Docket 2944, 2947 (June 26, 2002); see also SIG Specialists, Inc., Exchange Act Release No. 51,867, 85 SEC Docket 2060, 2066 n.36 (June 17, 2005) ("Although [cited authorities] are [settlements with the SEC or a trading venue] that have limited precedential value, they are consistent with our determination to hold [a specialist firm] liable for the misconduct at issue [in a contested proceeding].").

78. Notably, the U.S. Supreme Court stated that "[an] interpretation of the ambiguous text of § 10(b) [of the Exchange Act], in the context of formal adjudication, is entitled to deference if it is reasonable." SEC v. Zanford, 535 U.S. 813, 819–20 (2002) (citing *United States v. Mead Corp.*, 533 U.S. 218, 229–30 & n.12 (2001) (discussing the application of *Chevron*)). While the similar language of "a formal adjudicatory decision" in connection with *Chevron* was used in *VanCook*, 653 F.3d at 140 n.8, the examples given in *Zanford*, 535 U.S. at 229, were not settlements, and, overall, it remains unclear whether a settlement would be considered "formal." Compare *Ala. Power Co. v. U.S. Dep't of Energy*, 307 F.3d 1300, 1312 (11th Cir. 2002) ("Although the [U.S. Supreme] Court has granted *Chevron* deference even when no administrative formality was required, the settlement agreement in this case, like the 'classification rulings' in *Mead*, 'present a case far removed not only from notice-and-comment process, but from any other circumstances reasonably suggesting that Congress ever thought [there should be deference].'" (alteration in original) (internal citation omitted) (citing and quoting *Mead*, 533 U.S. at 230–31), and *McRill v. Nationwide Credit, Inc.*, No. 12-2175, 2012 WL 6727974, at *5 (C.D. Ill. Dec. 6, 2012) ("[T]he [court-approved] consent decree, which was binding on [on a different third party] only because it agreed to the decree . . . do[es] not carry the force of law, as understood by *Chevron*."), and *CFTC v. Hanover Trading Corp.*, 34 F. Supp. 2d 203, 206 n.19 (S.D.N.Y. 1999) ("While . . . construction of a statute by an administrative agency charged with its administration is entitled to substantial weight [under *Chevron*], a consent order simply memorializes an agreement of the parties to end litigation upon certain terms. An unsubstantiated assertion of a legal proposition in such a document is untested in the adversary crucible. . . . Hence, it is not necessarily reliable evidence of an agency's considered view of the issue."), with *SEC v. Blackwell*, 291 F. Supp. 2d 673, 694 (S.D. Ohio 2003) ("[A] consent decree . . . still represents an interpretation of the Commission that is entitled to deference under *Chevron* . . ."). On the other hand, there may be shades of deference: "*Chevron* did not eliminate *Skidmore*'s holding that an agency's interpretation may merit some deference *whatever its form*, given the 'specialized experience and broader investigations and information' available to the agency, and given the value of uniformity in its administrative and judicial understandings of what a national law requires." *Mead Corp.*, 533 U.S. at 220 (emphasis added) (internal citations omitted) (quoting and citing *Skidmore v. Swift & Co.*, 323 U.S. 134, 139–40 (1944)). But see *Rice v. Midland Credit Mgmt., Inc.*, 933 F. Supp. 2d 1040, 1046–47 (N.D. Ill. 2013) (refusing to accord the *Skidmore* deference to a court-approved settlement pertaining to the controversy in question and discussing the potential application of this type of deference to settlements in the context of the applicable case law). See also *In re New Times Sec. Serv., Inc.*, 371 F.3d 68 *passim* (2d Cir. 2004) (discussing the limits of deference under *Chevron* and *Skidmore* in the context of the SEC's decision-making).

79. This qualification was one of the stumbling blocks in *United States v. Fimmerty*, 533 F.3d 143, 148–50 (2d Cir. 2008).

80. Given the possibility that some HFTs might have actively participated in drafting the order type documentation, including publicly available sources disseminated by trading venues, one question is whether such HFTs could be held liable under the federal antifraud prohibition as de facto "makers" of material misstatements and omissions contained in these sources. Given the existing jurisprudence, such as *Janus Capital Group, Inc. v. First Derivative Traders*, 131 U.S. 2296 (2011), this theory of liability appears to be weak. Cf. DAVID A. LIPTON, *BROKER-DEALER REGULATION* § 5:33 (1987 & Supp. 2013).

procedures and the existence of specific violations.⁸¹

IV. PERILS OF SELF-REGULATION AND THE SCOPE OF REGULATORY IMMUNITY

The appropriate self-regulatory role of securities exchanges is one of the key considerations in the debate over the regulatory design of the securities market structure.⁸² Bodek's suggestion to "[e]liminate the self-regulatory status of for-profit exchanges"⁸³ may sound like a drastic measure, although its implementation may take various—and milder—forms. However, it is hard to argue with his qualification that, "[a]t the bare minimum, for-profit exchanges must be frequently scrutinized by regulators to ensure that their business development interests are not compromising their ability to maintain fair and non-discriminatory markets."⁸⁴ It is also hard to disagree with Bodek's assertion that SROs' conflicts of interest are "a very real systemic risk to the marketplace."⁸⁵ Yet, rather than restricting experimentation with different business models via rulemaking under the protection of the SRO status and thus possibly threatening true innovation—despite the continuing presence of some perverse incentives—there are other feasible resolutions of the crisis of self-regulation in the securities industry. One possibility is a voluntary delegation or even a mandatory transfer of enforcement and surveillance functions by SROs to a third party, such as the Financial Industry Regulatory Authority (FINRA).⁸⁶ On the other hand, the rulemaking function would not

81. Of course, the federal antifraud prohibition does not extend to damages caused by preempted transactions under *Blue Chip Stamps v. Manor Drug Stores*, 421 U.S. 723 (1975), a scenario that is possible in connection with such order types practices.

82. See, e.g., *Senate Hearings on Computerized Trading: Part II*, *supra* note 12, *passim*; Daniel M. Gallagher, Comm'r, U.S. Sec. & Exch. Comm'n, Remarks at SIFMA's 15th Annual Market Structure Conference: Market 2012: Time for a Fresh Look at Equity Market Structure and Self-Regulation (Oct. 4, 2010), <http://www.sec.gov/news/speech/2012/spch100412dmg.htm>; Elisse B. Walter, Comm'r, U.S. Sec. & Exch. Comm'n, Remarks at SRO Outreach Conference (May 13, 2013), <http://www.sec.gov/news/speech/2013/spch051313ebw.htm>.

83. BODEK, *supra* note 3, at 71. This proposal is certainly not unique. See, e.g., *House Hearing on Market Structure*, *supra* note 19, at 38 (testimony of Daniel Mathisson, Head of U.S. Equity Trading, Credit Suisse) ("You should not be able to be a for-profit and a not-for-profit at the same time. It is time for policymakers to correct this mistake by removing exchanges' SRO status."); Interview by Mike O'Hara with Dave Lauer, *Fixing the US Equity Market Structure*, TRADING MESH (July 12, 2013), <http://www.thetradingmesh.com/pg/blog/mike/read/106012> (registration required) ("[T]he root of the problem in that the for-profit self-regulatory organization (SRO) is nonsensical. It doesn't make any sense to be a self-regulatory entity but be for-profit because you have an inherent conflict of interest there."); see also Letter from Theodore R. Lazo, Managing Dir. & Assoc. Gen. Counsel, Sec. Indus. & Fin. Mkts. Ass'n, to Mary Jo White, Chairman, U.S. Sec. & Exch. Comm'n 5 (July 31, 2013), available at <http://www.sifma.org/comment-letters/2013/sifma-submits-comments-to-the-sec-requesting-a-review-of-the-self-regulatory-structure-of-securities-markets> ("The elimination of exchanges' SRO status would in large part codify existing practice, while eliminating the remaining competitive imbalance . . . streamline regulatory processes and make self-regulation more efficient through centralization of SRO functions at a single regulator.").

84. BODEK, *supra* note 3, at 72.

85. *Id.*

86. The voluntary delegation option is in fact becoming popular. See, e.g., Press Release, Direct Edge & Fin. Indus. Regulatory Auth., Direct Edge Selects FINRA for Market Surveillance (May 22, 2013), <http://www.finra.org/Newsroom/NewsReleases/2013/P265419> (stating that "FINRA will have surveillance oversight of more than 90% of U.S. equities trading"); see also Notice of Filing of a Proposed Rule Change by NASDAQ Stock Market LLC To Assume Operational Responsibility for Certain Surveillance Activity

be outsourced under this scenario, still leaving in place various conflicts of interest.

Another approach lays in testing—or perhaps reexamining—the boundaries of regulatory immunity of SROs,⁸⁷ given the for-profit status of trading venues and their corresponding profit-generating activities.⁸⁸ The doctrine of regulatory immunity acts as a shield deflecting private—but not government—lawsuits from securities exchanges and certain other entities, such as FINRA, in their capacity as SROs⁸⁹ for official actions in the context of the broad regulatory scheme established by federal securities law.⁹⁰ The coverage of this doctrine is extensive: it is enjoyed even in cases of fraudulent conduct, including claims under the federal antifraud prohibition.⁹¹ Likewise,

Currently Performed by FINRA Under the Exchange's Authority and Supervision, Exchange Act Release No. 70,159, 78 Fed. Reg. 50,123, 50,125 (Aug. 12, 2013) (stating that despite the proposed reallocation of regulatory responsibilities, "FINRA will continue to perform the vast majority of surveillance activity for NASDAQ's equities markets, in many cases using patterns that incorporate data from other market centers"). *But see* Gallagher, *supra* note 82 ("We need to ask whether allowing exchanges to outsource the bulk of their regulatory responsibilities to FINRA through regulatory services agreements risks implicitly transforming the meaning of SRO to 'selectively regulatory organizations.'").

87. For a mix of sources discussing the concept of regulatory immunity of SROs and the applicable case law, see Jennifer M. Pacella, *If the Shoe of the SEC Doesn't Fit: Self-Regulatory Organizations and Absolute Immunity*, 58 WAYNE L. REV. 201 (2012); Rohit A. Nafday, Comment, *From Sense to Nonsense and Back Again: SRO Immunity, Doctrinal Bait-and-Switch, and a Call for Coherence*, 77 U. CHI. L. REV. 847 (2010); Craig J. Springer, Note, *Weissman v. NASD: Piercing the Veil of Absolute Immunity of an SRO Under the Securities Exchange Act of 1934*, 33 DEL. J. CORP. L. 451 (2008).

88. In addition to the doctrinal analysis, a public policy perspective pertains to potential distortionary impact of regulatory immunity of SROs as for-profit entities, given the forces of competition in today's securities markets. *See, e.g.*, Letter from Theodore R. Lazo to Mary Jo White, *supra* note 83, at 7–8 (arguing that, "as exchanges have converted into for-profit enterprises, most, if not all, of their activities have become commercial in nature and not deserving of immunity" and, "[w]ith exchanges seeking to engage in more broker-dealer-like activities, the risk grows that exchanges will claim that more of these commercial ventures are entitled to immunity based on some incidental regulatory aspect").

89. *See* 15 U.S.C. § 78c(a)(26) (2006 & Supp. V 2011) ("The term 'self-regulatory organization' means any national securities exchange, registered securities association, or registered clearing agency, or [for certain purposes] the Municipal Securities Rulemaking Board . . .").

90. *See* *Standard Inv. Chartered, Inc. v. Nat'l Ass'n of Sec. Dealers*, 637 F.3d 112, 115 (2d Cir. 2011) ("[A]n SRO and its officers are entitled to absolute immunity from private damages suits in connection with the discharge of their regulatory responsibilities. This immunity extends both to affirmative acts as well as to an SRO's omissions or failure to act.") (internal citations omitted); *Weissman v. Nat'l Ass'n of Sec. Dealers*, 500 F.3d 1293, 1297 (11th Cir. 2007) (en banc) ("Absolute immunity [for an SRO] is not appropriate unless the relevant conduct constitutes a delegated quasi-governmental prosecutorial, regulatory, or disciplinary function."); *D'Alessio v. NYSE, Inc.*, 258 F.3d 93, 105 (2d Cir. 2001) ("[An SRO] stands in the shoes of the SEC in interpreting the securities laws for its members and in monitoring compliance with those laws [and thus] should be entitled to the same immunity enjoyed by the SEC when it is performing functions delegated to it under the SEC's broad oversight authority."); *Sparta Surgical Corp. v. Nat'l Ass'n of Sec. Dealers*, 159 F.3d 1209, 1214 (9th Cir. 1998) ("[SROs] do not enjoy complete immunity from suits; it is only when they are acting under the aegis of the Exchange Act's delegated authority that they so qualify."). There is some guidance on the required regulatory "depth" of the function in question. *Compare* *Weissman*, 500 F.3d at 1298 ("[W]e . . . reject a standard that would grant SROs absolute immunity for all activity that is merely 'consistent with' their delegated powers."), *with* *In re NYSE Specialists Sec. Litig.*, 503 F.3d 89, 100 (2d Cir. 2007) ("While [some] actions may not appear to form the heart of the regulatory functions delegated to [a trading venue] as an SRO, they [may] nonetheless [be] central to effectuating [its] regulatory decisionmaking."). Several cases also maintained that one manifestation of the regulatory nature of the function in question is its role in protecting investors. *See* *Sparta Surgical*, 159 F.3d at 1215; *Opulent Fund, L.P. v. Nasdaq Stock Mkt., Inc.*, No. C-07-03683 RMW, 2007 WL 3010573, at *5 (Oct. 12, 2007 N.D. Ca. 2007). However, this test seems to have looser boundaries, and perhaps it is more relevant for less formal methods of regulation.

91. *See, e.g.*, *In re NYSE Specialists Sec. Litig.*, 405 F. Supp. 2d 281, 302–04 (S.D.N.Y. 2005), *aff'd in part, rev'd in part*, 503 F.3d 89, 96–102 (2d Cir. 2007); *DL Capital Grp., LLC v. NASDAQ Stock Mkt., Inc.*,

“there [is no] implied private right of action against an SRO for violating Section 19(g) of the Exchange Act, which requires the SROs to enforce their own rules.”⁹² Still, by definition, SROs may be subject to private lawsuits for their activities as private businesses. Indeed, in that respect, securities exchanges are not—or should not be—different from trading venues that do not enjoy the protection of regulatory immunity, such as alternative trading systems / ECNs, which are not registered as SROs.⁹³

One potential problem lays in distinguishing official and private activities of a trading venue, as it may function:

[A]s an SRO within the meaning of the Securities Exchange Act . . . which vests it with a variety of adjudicatory, regulatory, and prosecutorial functions, including implementing and effectuating compliance with securities laws; promulgating and enforcing rules governing the conduct of its members; and listing and de-listing stock offerings [and] as a private corporation [that] may engage in a variety of non-governmental activities that serve its private business interests, such as its efforts to increase trading volume and company profit, as well as its daily administration and management of other business affairs.⁹⁴

On the surface, it is hard to fit the order type controversy on either side of the official-private distinction, as the trading venue-HFT symbiosis, while very much profit-oriented, is in fact regulation-based and relies on formal procedures, including the SEC’s approval. On the other hand, this judicial pronouncement does not imply that “governmental” activities by definition preclude profit-based motivations. In fact, several courts have specifically adopted this position,⁹⁵ although there has been some doctrinal struggle

No. 03 Civ. 9730 (CSH), 2004 WL 993109, at *5–6 (May 3, 2004), *aff’d*, 409 F.3d 93, 97–99 (2d Cir. 2005). Not surprisingly, some commentators have argued that the fraud exception to regulatory immunity is desirable from the standpoint of public policy. *See, e.g.*, Pacella, *supra* note 87, at 233 (“A fraud exception to SRO immunity would help to ensure that SROs are held accountable during those times that they may act out of self-interest or engage in fraud in furtherance of their business motives.”). *But see* Platinum Partners Value Arbitrage Fund, L.P. v. Chi. Bd. Options Exch., 976 N.E.2d 415, 427 (Ill. App. Ct. 2012) (Lampkin, J., dissenting) (“[P]recedent and common sense militate against carving out a fraud exception to an SRO’s absolute immunity because recriminatory lawsuits would disrupt the SRO’s exercise of its duties if plaintiffs could circumvent the absolute immunity doctrine by concocting some claim of fraud.”) (citing *DL Capital*, 409 F.3d at 98–99).

92. POSER & FANTO, *supra* note 6, § 16.06[A].

93. Historically, not every trading venue functioning as an SRO has in fact been a “securities exchange” registered with the SEC. For instance, NASDAQ had dropped its “securities association” status and became an exchange quite recently. *See* Application of The Nasdaq Stock Market LLC for Registration as a National Securities Exchange, Exchange Act Release No. 53,128, 71 Fed. Reg. 3550 (Jan. 13, 2006).

94. *Weissman*, 500 F.3d at 1296.

95. *See, e.g.*, *Opulent*, 2007 WL 3010573, at *5 n.1 (“That Nasdaq happens to profit from its activities is not critical. The immunity inquiry turns on the nature of the challenged conduct, not its profitability . . .”) (citing *P’ship Exch. Sec. Co. v. Nat’l Ass’n Sec. Dealers*, 169 F.3d 606, 608 (9th Cir. 1999)); *Dexter v. Depository Trust & Clearing Corp.*, 406 F. Supp. 2d 260, 263 (S.D.N.Y. 2005), *aff’d*, 219 Fed. App’x 91 (2d Cir. 2007) (“[The plaintiff’s] argument that immunity does not apply because the [SRO’s] actions violated a bankruptcy court order and § 12(a) of the Exchange Act, in the furtherance of ‘unprotected illegal, proprietary profit-making activities’ . . . miss the point of absolute immunity. The purpose of absolute immunity is to protect all conduct of an SRO from liability, so long as the conduct ‘aris[es] out of the discharge of its duties under the Exchange Act.’ . . . SROs [do not] lose their immunity because, in addition to their regulatory functions, they also are profit-making and profit-seeking enterprises.”) (alteration in original) (quoting

between function- and motive-based factors.⁹⁶ Furthermore, representative cases piercing SROs' regulatory immunity have been made under the circumstances appearing substantially less "official" compared to the role played by securities exchanges in the order type controversy, such as several advertisements featuring or implicitly referring to a listed company⁹⁷ or actions relating to calculations and dissemination of price information for an index.⁹⁸ Indeed, the protection of regulatory immunity was extended in similar controversies involving allegations of special preferences given to a select group, such as that the SRO is question "[in] violat[ion of] its own internal rules . . . permitt[ed certain market participants to engage in] trading ahead,"⁹⁹ "created illegitimate exceptions [for certain market participants] to the Firm Quote Rule [established by SEC and SRO rules],"¹⁰⁰ or set an ex-dividend date in violation of a court order and the Exchange Act in order "to protect the interests of its members who had profited by trading in cancelled shares."¹⁰¹ False or misleading disclosures relating to SRO rule filings are connected to a regulatory activity with even less ambiguity, and the existing case law analogously shielded an SRO from allegations of misstatements in a proxy solicitation relating to the bylaws' amendments in order to create a consolidated SRO, with these amendments subsequently approved by the SEC,¹⁰² and refused to scrutinize a manner of announcing regulatory decision by an SRO.¹⁰³ In addition, a securities exchange may specifically disclaim liability—via SEC-approved rules—for certain activities potentially relevant for the order type controversy. For instance, NASDAQ's Rule 4626(a) states that, subject to certain limitations, including a special compensatory scheme for the Facebook IPO glitch:

D'Alessio, 258 F.3d at 104); see also *Weissman*, 500 F.3d at 1297 ("To determine whether an SRO's conduct is quasi-governmental, we look to the objective nature and function of the activity The test is not an SRO's subjective intent or motivation . . . although there may be some correlation between motive and intent and the function being performed.") (citing *Bogan v. Scott-Harris*, 523 U.S. 44, 54 (1998)).

96. For instance, one of the minority opinions in *Weissman* asserted that "[b]y granting too much credence to [the plaintiff's] profit-motive theory of the case, the majority unduly constricts the scope of an SRO's absolute immunity for what are quintessentially regulatory functions." *Weissman*, 500 F.3d at 1315 (Tjoflat, J., dissenting). A dissenting opinion in another case similarly criticized the majority for extending the reach of a private right of action and pointed out that "profits are irrelevant to the regulatory immunity analysis." *Platinum*, 976 N.E.2d at 430 (Lampkin, J., dissenting). Another case interpreted the holding in *Weissman* as "suggest[ing] that actions taken to 'increase trading volume' are non-regulatory." *Opulent*, 2007 WL 3010573, at *5 (quoting *Weissman*, 500 F.3d at 1296). However, different regulatory regimes offered by competing SROs, which of course include their respective order type menus, implicitly or explicitly have the aim of increasing trading volume. On the other hand, *Opulent* emphasized the trading venue's active role in calculating and disseminating an index price—and creating this index in the first place—ultimately asserting that the trading venue's "market facilitating actions . . . were non-regulatory." *Id.* at *5.

97. *Weissman*, 500 F.3d at 1293.

98. *Opulent*, 2007 WL 3010573, at *5 ("SEC approval of a rule imposing a duty on an SRO is not the *sine qua non* of SRO immunity; engaging in regulatory conduct is.")

99. *In re NYSE Specialists Sec. Litig.*, 503 F.3d 89, 99 n.4 (2d Cir. 2007).

100. *Gurfein v. Ameritrade, Inc.*, 411 F. Supp. 2d 416, 422 (S.D.N.Y. 2006).

101. *Dexter v. Depository Trust & Clearing Corp.*, 406 F. Supp. 2d 260, 262–63 (S.D.N.Y. 2005).

102. *Standard Inv. Chartered, Inc. v. Nat'l Ass'n of Sec. Dealers*, 637 F.3d 112, 114–17 (2d Cir. 2011).

103. *DL Capital Grp., LLC v. NASDAQ Stock Mkt., Inc.*, 409 F.3d 93, 98 (2d Cir. 2005).

Nasdaq and its affiliates shall not be liable for any losses, damages, or other claims arising out of the Nasdaq Market Center or its use [including those] related to a failure of the Nasdaq Market Center to deliver, display, transmit, execute, compare, submit for clearance and settlement, adjust, retain priority for, or otherwise correctly process an order, Quote/Order, message, or other data entered into, or created by, the Nasdaq Market Center¹⁰⁴

However, one state case, which is somewhat of an outlier, allowed the plaintiff to proceed with claims against an options exchange and a clearing agency under state law, including various antifraud provisions of the applicable securities statute, for alleged selective disclosure of information relating to a strike price adjustment to certain market participants.¹⁰⁵ The court concluded:

[W]hile the price adjustment itself may have been a regulatory decision, the manner in which it was disclosed—privately and prematurely—to the John Doe defendants was not . . . [The] defendants . . . did not *publicly* announce this regulatory decision: the price reduction was privately disseminated only to certain market participants, and that disclosure did not serve any regulatory or governmental purpose.¹⁰⁶

A vocal dissent criticized the majority opinion in *Platinum*, describing the plaintiff's claim against the SROs as aiming at "their participation in a system to generate revenue by disclosing material information to insiders, [in order] to circumvent the doctrine of absolute immunity and distinguish this case from the well-established precedent that has found absolute immunity for an SRO's announcement of its regulatory decisions and acts."¹⁰⁷ The dissent further stated that "an allegation that an SRO announced a regulatory decision in a manner that failed to inform all market participants simultaneously fails to move a claim outside the ambit of the SRO's delegated power and, thus, outside the scope of the SRO's regulatory immunity,"¹⁰⁸ referring to a prior decision that involved allegations of selective disclosure by an SRO of its regulatory actions to certain market participants.¹⁰⁹ Ultimately, the takeaway in *Platinum* is in several parallels between its circumstances and the order type controversy, namely selective disclosure of information that created advantages in the trading process for a select group in connection with a regulatory action. Accordingly, this decision creates an avenue for pursuing securities exchanges involved in questionable order type practices at least in

104. *NASDAQ Stock Market Rules*, NASDAQ OMX GRP., INC., <http://nasdaq.cchwallstreet.com> (follow "Rule 4000" hyperlink) (last visited Mar. 12, 2014); see also Letter from Joan C. Conley, Senior Vice President & Corporate Sec'y, NASDAQ OMX, to Elizabeth M. Murphy, Sec'y, U.S. Sec. & Exch. Comm'n 2 (Dec. 7, 2012), available at <http://www.sec.gov/comments/sr-nasdaq-2012-090/nasdaq2012090-23.pdf> ("Nasdaq Rule 4626(a) protects Nasdaq from liability for all 'claims arising out of the NASDAQ Market Center or its use' . . . and similar rules are in effect at all other US exchanges.").

105. *Platinum Partners Value Arbitrage Fund, L.P. v. Chi. Bd. Options Exch.*, 976 N.E.2d 415, 422 (Ill. App. Ct.), *appeal denied*, 981 N.E.2d 1003 (Ill. 2012).

106. *Id.*

107. *Id.* at 429 (Lampkin, J., dissenting).

108. *Id.*

109. *Id.* (citing *In re NYSE Specialists Sec. Litig.*, 503 F.3d 89, 100 (2d Cir. 2007)).

state courts under state law.¹¹⁰

Overall, while Bodek's contributions may serve as a guide for reforming the self-regulatory framework, they are unlikely to lead to a successful piercing of the immunity shield of SROs—at least in federal courts—in the absence of a judicial about-face. On the other hand, state courts may create some commotion, perhaps resulting in a significant monetary liabilities or preemptive settlements for securities exchanges. Once again, a fact-intensive inquiry will be required in order to prove or suggest the existence of SROs' fraudulent conduct.

V. TRADING OBLIGATIONS AND PRIVILEGES OF MARKET MAKERS

The regulatory framework applicable to market makers as providers of liquidity remains an important issue. On the other hand, the scope of “market making” is more uncertain, as liquidity is provided by both formal, i.e., designated, market makers with trading obligations and privileges and HFTs as informal market makers without such obligations and privileges, which, however, may receive special incentives in the context of the maker-taker pricing model.¹¹¹ Furthermore, HFTs may mix market making and proprietary trading, such as statistical arbitrage, and, accordingly, it is potentially difficult to delineate these two categories.¹¹² However, this mixture of trading strategies is by no means novel,¹¹³ and it is likely to have been practiced rather

110. Of course, the Securities Litigation Uniform Standards Act of 1998, Pub. L. No. 105-353, 112 Stat. 3227, effectively banned securities fraud class actions in state courts and hence diverted lawsuits with a large number of plaintiffs and dispersed damages to federal courts. Importantly, in *Platinum*, there was just one plaintiff with a very large stake as a purchaser of 50,000 put options, 976 N.E.2d at 419, and the order type controversy may similarly yield individual plaintiffs with large stakes, such as institutional investors, but a big chunk of potential damages is likely to be dispersed.

111. See Concept Release on Equity Market Structure, Exchange Act Release No. 61,358, 75 Fed. Reg. 3594, 3598–99, 3607 (Jan. 14, 2010). While the maker-taker pricing model reinforces informal market making, this model is not necessarily incompatible with the existence of designated market makers, which may even receive greater liquidity rebates compared to everyone else. In any instance, there is a lot of controversy relating to the maker-taker pricing model, including its effectiveness as a liquidity-enhancing mechanism, and there is some empirical evidence to support the view that this model is biased toward more liquid securities. Stanislav Dolgoplov, *Linking the Securities Market Structure and Capital Formation: Incentives for Market Makers?*, 16 U. PA. J. BUS. L. 1, 38–40 & nn.140–47 (2013). In his turn, Bodek argued that some HFT scalping strategies “are favorably subsidized by rebate [sic] in the maker-taker market model.” BODEK, *supra* note 3, at 20. Furthermore, he criticized the tiered rebate structure employed by some trading venues and suggested “a reduction in the fee cap . . . to encourage the development of more robust volumes on exchanges running alternative market models.” *Id.* at 70–71. For a discussion of the origins and evolution of the maker-taker pricing model, see PATTERSON, *supra* note 2, *passim*.

112. Letter from Manoj Narang to Elizabeth M. Murphy, *supra* note 68, app. at 9. It is also illustrative that GETCO, now known as KCG after the merger with Knight Capital, one of the leaders of the HFT industry, had recently described virtually all of its short-term trading activities on the principal basis as “market making.” Knight Holdco, Inc., Registration Statement (Form S-4) 74–75 (Feb. 13, 2013), available at <http://www.sec.gov/Archives/edgar/data/1569391/000119312513053260/d484578ds4.htm>. This firm, in fact, often plays the role of a designated market maker. See, e.g., *id.* at F-8; see also Press Release, GETCO & NYSE Euronext, GETCO Expands Market Making Services at NYSE (Nov. 30, 2011), <http://www.nyse.com/press/1322564176498.html>; Press Release, NYSE Euronext, GETCO and Knight Capital Group Combine NYSE Designated Market Maker Units (June 28, 2013), <http://www.nyse.com/press/1372416110357.html>. However, a substantial portion of GETCO's revenues probably came from other forms of proprietary trading contrasted to market making as such.

113. For instance, some market makers in English securities markets in the mid-nineteenth century,

often by both formal and informal market makers. Moreover, the incentive to mix market making and proprietary trading has been reinforced by the abolition of the “negative obligation” applicable to designated market makers by several trading venues, notably, the New York Stock Exchange (NYSE).¹¹⁴ Another observation is that traditional institutional investors have not really emerged as major providers of liquidity, despite having been expected to do so, and potential reasons may include specialization, expertise, and intermediation / agency problems.¹¹⁵

Bodek himself admitted that he used to subscribe to the misconception that HFT “was simply another name for automated or electronic market making.”¹¹⁶ In his opinion, a troublesome set of strategies employed by HFTs only resembles traditional market making:

HFT scalping is predatory in its aim of stepping ahead of institutional order flows. It can be characterized as an opportunistic and discriminatory mimic of traditional market making—where HFT uses opaque advantages, including special order types, instead of explicit market making privileges—without the market making obligations. It is not a traditional spread-scalping strategy that posts on each side of the spread, relying on speed to jump ahead of the rest of the market.¹¹⁷

Bodek proposed the following solution to this problem and related concerns:

To the degree that advantages and asymmetries exist in the market for certain classes of participants, such advantages must be made completely transparent and for the most part should be associated with adequate performance in meeting market maker obligations. The movement away from official market maker roles at many venues has resulted in an overall market environment where the “new market makers” (i.e. HFTs) share no responsibility in serving the investing public, maintaining fair and orderly markets, or developing concentrated order flow sources into the venue. The re-

which were described as “speculative jobbers,” might have employed this approach. See HENRY KEYSER, *THE LAW RELATING TO TRANSACTIONS ON THE STOCK EXCHANGE* 26–27 (London, Henry Butterworth 1850).

114. See Order Approving a Proposed Rule Change by New York Stock Exchange LLC To Create a New NYSE Market Model, Exchange Act Release No. 58,845, 73 Fed. Reg. 64,379, 64,380 (Oct. 24, 2008) (stating that “designated market makers” would no longer be subject to “a specialist’s negative obligation not to trade for its own account unless reasonably necessary to the maintenance of a fair and orderly market”).

115. Compare Paul Brakke, *Commentary on On the Existence of an Optimal Tick Size*, 10 REV. FUTURES MKTS. 75, 76 (1991) (“[W]hy couldn’t pension funds, for instance, be the market-maker? They have very large inventories of assets and pretty much zero cost of inventory since they are already long in these assets. It seems to me that the pension funds are in a much better position on any given trade to take a position, and are much better capitalized than any market-maker on the floor. The only thing missing is . . . the electronic hookup to a centralized exchange.”), with EDGAR PEREZ, *THE SPEED TRADERS: AN INSIDER’S LOOK AT THE NEW HIGH-FREQUENCY TRADING PHENOMENON THAT IS TRANSFORMING THE INVESTING WORLD* 79 (2011) (“I don’t foresee traditional investment managers shifting their focus to becoming market makers or developing statistical arbitrage strategies.”) (quoting Aaron Lebovitz, *Infinium Capital Management*). For some empirical evidence on the function of providing liquidity by some mutual funds at least during the pre-HFT era, see Zhi Da et al., *Impatient Trading, Liquidity Provision, and Stock Selection by Mutual Funds*, 24 REV. FIN. STUD. 675 (2011).

116. BODEK, *supra* note 3, at 1.

117. *Id.* at 23.

establishment of market making roles with incentives will assist in enhancing the integrity and liquidity of the marketplace.¹¹⁸

Echoing Bodek's position, there is a growing skepticism over HFT as a viable replacement for designated market makers with trading obligations and privileges, and this sentiment is not necessarily a call for greater governmental regulation but rather a solution through private ordering by trading venues themselves. For instance, Bodek's proposal was preceded by a criticism of HFTs as informal market makers and an assertion that "[m]arket makers should be subject to affirmative obligations [and] have meaningful quoting requirements."¹¹⁹ Some calls for such reforms even came from the HFT industry itself: "Flash crashes, miniflash crashes and other market disruptions demonstrate the need for additional obligated liquidity in our market."¹²⁰

The early vision of obligation- and privilege-free—and perhaps merely automated—market making shared by many financial economists¹²¹ now appears idealistic if not naïve. Even without debating whether a certain group of market participants has or should have the abstract duty to "serve the public," it appears that obligation- and privilege-free market making is often economically inefficient, and one potential explanation is that liquidity in securities markets has characteristics of an externality/public good and hence requires explicit or implicit subsidies for its providers.¹²² The weight of

118. *Id.* at 69–70.

119. Letter from R.T. Leuchtkafer (pseud.) on File No. S7-02-10 (Apr. 16, 2010), <http://www.sec.gov/comments/s7-02-10/s70210-107.htm>. The same commentator also asserted the following:

A HFT market making firm can easily demand as much or more liquidity throughout the day than it supplies. Crucially, its liquidity supply is generally spread over time during the trading day but its liquidity demands are highly concentrated to when its risk models tell it to rebalance. Unfortunately regulators do not know what these risk models are. So in exchange for the short-term liquidity HFT firms provide, and provide only when they are in equilibrium (however they define it), the public pays the price of the volatility they create and the illiquidity they cause while they rebalance.

Id.

120. *Senate Hearings on Computerized Trading: Part I*, *supra* note 12, at 47 (prepared testimony of Chris Concannon, Partner and Executive Vice President, Virtu Financial, LLC). Interestingly, right after the Flash Crash of May 6, 2010, several leading HFT firms approached the SEC, perhaps as a preemptive measure, with a proposal to enhance trading obligations of market makers. *See* Letter from John A. McCarthy, Gen. Counsel, GETCO, LLC, Christopher R. Concannon, Partner, Virtu Fin., LLC, & Leonard J. Amoruso, Gen. Counsel, Knight Capital Grp., Inc., to Robert Cook, Dir., Div. of Trading & Mkts., U.S. Sec. & Exch. Comm'n 1–2 (July 9, 2010), *available at* <http://www.sec.gov/comments/s7-02-10/s70210-255.pdf>.

121. N.Y. STOCK EXCH., REPORT OF THE COMMITTEE TO STUDY THE STOCK ALLOCATION SYSTEM Exh. B-2, at 134–35 (Jan. 27, 1976) ("The best system should be one in which the Exchange keeps the limit orders, and there are competing market makers with no rules.") (quoting an anonymous economist); Eugene F. Fama, *Efficient Capital Markets: A Review of Theory and Empirical Work*, 25 J. FIN. 383, 399 n.22 (1970) ("It does not seem technologically impossible to replace the entire [trading] floor . . . with a computer, fed by many remote consoles, that kept all the books now kept by the specialists, that could easily make the entire book on any stock available to anybody (so that interested individuals could then compete to 'make a market' in a stock) and that carried out transactions automatically."); Daniel R. Siegel, *The Competitive World of Electronic Trading*, in INNOVATION AND TECHNOLOGY IN THE MARKETS: A REORDERING OF THE WORLD'S CAPITAL MARKET SYSTEMS 3, 11 (Daniel R. Siegel ed., 1990) ("The most likely scenario is that by the year 2000 . . . [t]here will be no designated market-makers or other entities with special access to the market."); Hans R. Stoll, *Reconsidering the Affirmative Obligation of Market Makers*, FIN. ANALYSTS J., Sept.–Oct. 1998, at 72, 80 ("That an affirmative obligation reduces volatility or makes markets more efficient is not evident. . . . Markets will function well without an affirmative obligation. Market makers need no regulatory obligations and should not receive special privileges.")

122. *See* Dolgoplov, *supra* note 111, at 4–5 nn.8–9.

empirical research, in fact, indicates that the existence of trading obligations of market makers—balanced with privileges—tends to improve market quality in many instances.¹²³ One empirical study even points to the importance of “a market maker obligated to maintain a market” in the context of liquid securities during a period of extreme volatility exemplified by the Flash Crash of May 6, 2010,¹²⁴ although pushing such obligations to the extreme scenario of “catching a falling knife” is bound to be counterproductive.¹²⁵ A related—but distinct—question is whether HFTs are currently providing *additional* liquidity in securities markets, given their coexistence with designated market makers on many trading venues, and this question is a part of the explosion of empirical research on HFT.¹²⁶ Furthermore, any improvements in liquidity—or some of its dimensions—introduced by HFT have to be balanced against other potential consequences.¹²⁷ In fact, a recent empirical study of transactions in stocks on NASDAQ found that “HFT increases the trading costs of traditional institutional investors,”¹²⁸ as expressed by execution

123. For a summary of empirical studies, see *id.* at 5 n.10. For a discussion of the disappearance or diminished value of traditional trading privileges of market makers, which of course has affected the ability of trading venues to impose trading obligations on these market participants, and the emergence of new trading privileges, such as issuer-to-market maker compensation arrangements, see *id. passim*.

124. Thomas J. Boulton et al., *The Flash Crash: Effects on Shareholder Wealth and Market Quality*, 23 J. FIN. INTERMEDIATION 140, 146 (2014). It was even argued that the Flash Crash “was a crisis aggravated, if not caused, by loosely regulated market makers.” Letter from R.T. Leuchtkafer (pseud.) on File No. S7-02-10 (July 15, 2010), <http://www.sec.gov/comments/s7-02-10/s70210-258.htm>.

125. See Dolgoplov, *supra* note 69, at 353–54 nn.259–60.

126. See Evangelos Benos & Satchit Sagade, *High-Frequency Trading Behaviour and Its Impact on Market Quality: Evidence from the UK Equity Market 20* (Bank of Eng., Working Paper No. 469, 2012), available at <http://www.bankofengland.co.uk/research/Documents/workingpapers/2012/wp469.pdf> (analyzing transactions in FTSE 100 stocks and concluding that, while some HFTs “mostly supply liquidity,” others “mostly consume it”); Jonathan A. Brogaard, *High Frequency Trading and Its Impact on Market Quality 40* (Nov. 22, 2010) (unpublished manuscript) (on file with author), available at http://fisher.osu.edu/supplements/10/10463/Jonathan_Brogaard_Paper.pdf (analyzing transactions in stocks on the NYSE and NASDAQ and concluding that “HFT tends to improve market quality”); Jiading Gai et al., *The Externalities of High-Frequency Trading 29* (Nov. 16, 2012) (unpublished manuscript) (on file with author), available at <http://www.securitytraders.org/wp-content/uploads/2013/01/The-Externalities-of-High-Frequency-Trading.pdf> (analyzing transactions in stocks on NASDAQ and concluding that “fleeting orders, or orders with a life less than 50 milliseconds, have a trivial contribution to liquidity and no contribution to price efficiency”).

127. See Stephen Bain & Shary Mudassar, *The Hidden Cost of Tighter Spreads*, TABB FORUM (Mar. 25, 2013), <http://tabbforum.com/opinions/the-hidden-cost-of-tighter-spreads> (registration required) (“[I]t seems clear that the behavior incented by today’s market has *increased effective spread costs* for investors by eroding the quality and reliability of the liquidity provided. This is particularly true when ‘liquidity providers’ have the ability to instantaneously morph into active position takers.”); see also PRAGMA SEC., *HFT AND THE HIDDEN COST OF DEEP LIQUIDITY 5* (2012), available at http://www.pragmatrading.com/sites/default/files/pragma_commentary_hft_and_cost_of_deep_liquidity.pdf (“By competing to earn spreads and rebates by providing liquidity, HFTs crowd out directional traders’ passive orders, force them to cross the spread more often, and result in higher trading costs for investors.”); DAVID WALSH, *BASELINE CAPITAL, CHANGING TECHNOLOGY IN CAPITAL MARKETS: A BUY SIDE EVALUATION OF HFT AND DARK TRADING 17* (Nov. 2012), available at http://www.fsc.org.au/downloads/uploaded/Changing%20Technology%20in%20Capital%20Markets_2182.pdf (“In one sense, HFTs provide a form of liquidity that the market *does not demand* – short term, high turnover volume or liquidity with no net inventories”); Álvaro Cartea & José Penalva, *Where Is the Value in High Frequency Trading?*, 2 Q.J. FIN. 1250014-1, 1250014-4 to -5 (2012) (hypothesizing that the presence of HFT leads to greater price impact and suggesting that “liquidity is better measured through total cost of trade execution”).

128. Lin Tong, *A Blessing or a Curse?: The Impact of High Frequency Trading on Institutional Investors*, at ii (Nov. 2013) (unpublished manuscript) (on file with author), available at <http://ssrn.com/abstract=2330053>.

shortfall, a multidimensional measure that “captures the bid-ask spread, the market impact, and the drift in price while the ticket is executed,”¹²⁹ and this finding may have a connection to the order type controversy. Moreover, the study concluded that, “if anything, HFT represents an ephemeral and expensive source of liquidity provision to institutional investors”¹³⁰ and suggested that “the electronic market making strategies employed by [HFTs] also increases institutional trading costs, although at a smaller magnitude relative to the case when [HFTs] engage in direction trading.”¹³¹ By contrast, another empirical study analyzed transactions in stocks on the London Stock Exchange and found that HFT has no effect on institutional investors’ execution costs, as captured by “the bid-ask spread, market impact and price drift while executing the order.”¹³²

One implication of the growing attention on trading obligations and privileges of market makers is their potential liability for violations and abuses of such obligations and privileges under federal securities law, including its antifraud prohibition.¹³³ For instance, there is some evidence that the ban on “stub quotes” is still frequently broken by market makers.¹³⁴ While keeping in mind that several order types on specific trading venues are available only to designated market makers,¹³⁵ another interesting issue is whether the use of certain other order types by these market participants constitutes a violation of their trading obligations.

The issue of civil liability of market makers in connection with their trading obligations and privileges under federal securities law is not new under the moon, and even the SEC several decades ago had reservations about a broad reach of private lawsuits in such circumstances:

129. *Id.* at 3.

130. *Id.* at 4.

131. *Id.* at 26.

132. Jonathan Brogaard et al., *High-Frequency Trading and the Execution Costs of Institutional Investors* 2, 10 (U.K. Fin. Servs. Auth., Occasional Paper No. 43, 2013), available at <http://www.fsa.gov.uk/static/pubs/occpapers/op43.pdf>.

133. For the author’s analysis of this issue, see Dolgoplov, *supra* note 69, *passim*.

134. *Stub Quote Rule Violations – Letter to Mary Schapiro*, NANEX (Aug. 11, 2011), <http://www.nanex.net/Research/StubRuleViolations/StubViolations.html>. For a background discussion of “stub quotes” and their prohibition through SRO rules, see Dolgoplov, *supra* note 69, at 345–46 nn.221–27. Interestingly, one empirical study “suggest[ed] that restrictions on stub quoting, which increase dealers’ obligations to quote near the NBBO, may benefit financial markets in that it encourages dealers to provide liquidity.” Jared F. Egginton et al., *Dealers and Changing Obligations: The Case of Stub Quoting* 22 (Dec. 21, 2012) (unpublished manuscript) (on file with author), available at <http://ssrn.com/abstract=2192703>.

135. See, e.g., Order Approving a Proposed Rule Change by NASDAQ Stock Market LLC To Adopt a New Market Maker Peg Order Available to Exchange Market Makers, Exchange Act Release No. 67,584, 77 Fed. Reg. 47,472 (Aug. 2, 2012); Notice of Filing and Immediate Effectiveness of a Proposed Rule Change by BATS Exchange, Inc. To Modify Market Maker Peg Order Functionality, Exchange Act Release No. 69,310, 78 Fed. Reg. 21,447 (Apr. 4, 2012); Notice of Filing and Immediate Effectiveness of a Proposed Rule Change by Chicago Board Options Exchange, Inc. To Adopt a Market-Maker Trade Prevention Order on CBOE Stock Exchange, Exchange Act Release No. 65,662, 76 Fed. Reg. 71,612 (Nov. 1, 2011).

Given the inherent uncertainty in the practical application of the general standards of “affirmative” and “negative” specialist obligations, and the subjective basis of judgments thereon . . . the imposition of civil liability for failure to conform to these obligations could well have been regarded as inappropriate. In addition, any civil liability that might arise could be of a far-reaching nature. It might extend not only to investors with whom specialists had improperly engaged, or failed to engage, in transactions, but also to persons who claimed that the prices at which they effected transactions among themselves were adversely influenced by the specialist’s action or inaction.¹³⁶

Yet, the argument for the reach of the federal antifraud prohibition remains viable—even in the context of trading obligations and privileges set by SRO rules, which often have a high degree of specificity.¹³⁷ Furthermore, given the inherently limited scope of this prohibition, merely negligent or involuntary violations by market makers would not be covered. As an illustration, while commenting on yet another electronic glitch, Bodek made the following observation: “[Y]ou have to question if the exchange itself has provided an adequately safe environment for meeting market maker obligations. Did the exchange implement adequate risk controls in the order matching engine and to what extent were the parameters set intelligently and/or audited by the market maker and exchange?”¹³⁸

VI. THE DUTY OF BEST EXECUTION

Given the sophistication of execution strategies and techniques exposed by the order type controversy, one key question pertains to the role of the brokerage community acting on behalf of non-HFT market participants. Bodek observed that securities exchanges and HFTs themselves are playing the blame-shifting game by arguing that “sell-side brokers and their buy-side clients . . . were negligent in developing adequate competencies in the appropriate use of exchange features commonly exploited by HFTs” despite the fact that these features were communicated “in an exclusive and nonpublic manner.”¹³⁹ However, looking forward, this situation might change: “As the issues of exchange order handling continue to be reviewed, I expect to see additional pressures on execution service providers to demonstrate greater competency for fulfilling best execution fiduciary duties using the advanced exchange features.”¹⁴⁰ This perspective is particularly important because a

136. *Securities Industry Study: Hearings Before the Subcomm. on Sec. of the S. Comm. on Banking, Housing & Urban Affairs*, 93d Cong. pt. 4, at 68 (1972) (Comments of Commissioner Philip A. Loomis, Securities and Exchange Commission, on Securities Industry Study, Regulation of Specialists on the New York and American Stock Exchanges and Responses to Issues and Questions Set Forth Therein).

137. See Dolgoplov, *supra* note 69, at 340–41.

138. *NYSE’s Amex Market Hit with Thousands of Erroneous Trades*, HAIM BODEK’S BLOG (Feb. 25, 2012), <http://haimbodek.com/blog/?p=235>.

139. BODEK, *supra* note 3, at 47–48.

140. *Id.* at 50; see also *id.* at 55 (describing “a hybrid electronic trading approach for institutional investors that serves to assist in fulfilling best execution fiduciary duties in the heavily fragmented US

violation of the duty of best execution may trigger liability under the federal antifraud prohibition.¹⁴¹ Furthermore, a representation of best execution outside a customer-broker relationship—for instance, by an exchange specialist—may similarly be actionable under the same rationale.¹⁴²

The duty of best execution is deemed to be “a broker’s bedrock obligation,”¹⁴³ which has a long history.¹⁴⁴ One frequently cited precedent provides the following definition of this duty:

The duty of best execution, which predates the federal securities laws, has its roots in the common law agency obligations of undivided loyalty and reasonable care that an agent owes to its principal. Since it is understood by all that the client-principal seeks his own economic gain and the purpose of the agency is to help the client-principal achieve that objective, the broker-dealer, absent instructions to the contrary, is expected to use *reasonable efforts* to maximize the economic benefit to the client in each transaction.¹⁴⁵

In other words, complying with this duty requires a cost-benefit analysis of efforts exerted by a broker. Furthermore, as noted by some commentators, “Owing to rapid changes in technology and market practices, it is not always possible to define what efforts by the broker-dealer to seek best execution of a customer’s order are ‘reasonable.’”¹⁴⁶

While there are some general guidelines on various dimensions of the duty of best execution, such as “price, order size, trading characteristics of the security, speed of execution, clearing costs, and the cost and difficulty of executing an order in particular market, as well as the potential for price improvement,”¹⁴⁷ the recent case law reflecting the realities of the current securities market structure does not offer much guidance. For instance, in its dictum pronouncement, one appellate decision summarily dismissed the

electronic marketplace”).

141. *Newton v. Merrill, Lynch, Pierce, Fenner & Smith, Inc.*, 135 F.3d 266 (3d Cir. 1998); *Opper v. Hancock Sec. Corp.*, 250 F. Supp. 668 (S.D.N.Y.), *aff’d*, 367 F.2d 157 (2d Cir. 1966); *see also* Order Execution Obligations, Exchange Act Release No. 37,619A, 61 Fed. Reg. 48,290, 48,322 (Sept. 6, 1996) (“A broker-dealer’s duty of best execution derives from common law agency principles and fiduciary obligations, and is incorporated both in SRO rules and, through judicial and [SEC] decisions, in the antifraud provisions of the federal securities laws.”).

142. *See Last Atlantis Capital LLC v. ASG Specialist Partners*, 749 F. Supp. 2d 828, 834 (N.D. Ill. 2010).

143. POSER & FANTO, *supra* note 6, § 16.03[B].

144. Francis J. Facciolo, *A Broker’s Duty of Best Execution in the Nineteenth and Early Twentieth Century*, 26 PACE L. REV. 155 (2005). In one of its earliest incarnations, this duty was described as a broker’s obligation “to act in good faith and use due diligence in making the sale with a view to realize the greatest price practicable.” *Day v. Jameson*, 25 N.E. 238, 240 (N.Y. Ct. App. 1890). Another early case referred to a broker’s obligation “not only to purchase in the manner directed by [his customer], with reasonable diligence as to time, but also to purchase at the best price obtainable whenever the purchase was made.” *Wahl v. Tracy*, 121 N.W. 660, 661 (Wis. 1909).

145. *Newton*, 135 F.3d at 270 (emphasis added); *see also* *Magnum Corp. v. Lehman Bros. Kuhn Loeb, Inc.*, 794 F.2d 198, 200 (5th Cir. 1986) (“The implicit agreement between customer and stockbroker is that the latter will use *reasonable efforts* to execute the order promptly at the best obtainable price.”) (emphasis added).

146. POSER & FANTO, *supra* note 6, § 16.03[B].

147. *Morgan Stanley & Co.*, Exchange Act Release No. 55,726, 90 SEC Docket 1625, 1626 (May 9, 2007).

importance of private data feeds provided by individual securities exchanges: “[A] broker-dealer [does not] need to purchase depth-of-book data in order to meet its duty of best execution (which requires it to exercise reasonable diligence to obtain favorable order execution terms for customers).”¹⁴⁸ In any instance, the emphasis of the case law on best execution has been on breaches of the duty of loyalty,¹⁴⁹ given the multiplicity of roles played by many securities firms and corresponding conflicts of interest, rather than the duty of care, which is more relevant for the concern described by Bodek.¹⁵⁰

One court articulated that the execution of certain complex orders—for instance, “not-held” orders, which are specifically designated by customers as such—requires a higher level of effort from the standpoint of the duty of best execution.¹⁵¹ But what about the necessity of using special order types to accomplish more general objectives in the absence of specific instructions of a customer?¹⁵² In general, the diffusion of knowledge about trading practices and specific tools offering superior execution is not instantaneous: it is a dynamic process. On the flip side, “[b]ecause the scope of the duty of best execution is constantly evolving . . . broker-dealers have long been required to conform customer order practices with changes in technology and markets.”¹⁵³ While some order type features may be—or have been—undocumented, there

148. *NetCoalition v. SEC*, 615 F.3d 525, 530 n.6 (D.C. Cir. 2010). The Securities Industry and Financial Markets Association, one of the litigants in *NetCoalition*, later offered the following argument: “While broker-dealers are required to buy core data by Regulation NMS Rule 603(c), as a practical matter, they must also buy non-core data [provided by private data feeds]. This is because core data only shows the current best bid or offer price for a few hundred shares in the market at a time.” Letter from Theodore R. Lazo to Mary Jo White, *supra* note 83, at 10 n.27.

149. See David A. Lipton, *Best Execution: The National Market System’s Missing Ingredient*, 57 NOTRE DAME L. REV. 449, 470–72 (1982) (noting that, historically, “[t]he holdings in best execution cases [under federal securities law] are generally not limited to conflict of interest situations [but] [i]n practice, however, best execution has not been employed in situations involving a mere lack of diligence” and discussing potential explanations for this phenomenon); see also POSER & FANTO, *supra* note 6, §16.03[A]–[B] (comparing the duties of care and loyalty owed by a broker to a customer and describing the case law and administrative adjudications on the duty of best execution).

150. However, Bodek also referred to some potential conflicts of interest. See BODEK, *supra* note 3, at 75 (“Institutional investors . . . have outsourced their problems to sell-side brokers, many of which run dark pools which are direct competitors to exchanges. More often than not, the dark pools are as toxic as the lit exchanges, and they are trading with the same counterparties in even less transparent environments.”).

151. See *SEC v. Pasternak*, 561 F. Supp. 2d 459, 507–08 (D.N.J. 2008) (“Plain vanilla best execution occurs where an order for a small amount of shares is executed immediately at the best available price, which must be inside the national best bid and offer price for that stock. This type of best execution applies to market or limit orders. In contrast, sophisticated best execution applies to not-held orders for high-volume, volatile stock.”); see also *id.* at 482 (quoting the definition provided by the National Association of Securities Dealers that a “not-held” order is “an order voluntarily categorized by the customer” as such).

152. Alternatively, brokers may take a more proactive role—either voluntarily or through regulatory requirements—in educating their customers about available order types, which of course would depend on the formers’ competence and the latters’ trading objectives and sophistication. See, e.g., Hymas, *supra* note 30, at 11 (arguing that “all order types available to a retail brokerage through its membership in various exchanges should be disclosed to its clients”).

153. *Newton v. Merrill, Lynch, Pierce, Fenner & Smith, Inc.*, 135 F.3d 266, 271 (3d Cir. 1998). In connection with that statement, the court also interpreted a contemporaneous SEC report as “expressly recogniz[ing] a duty on the part of broker-dealers to periodically examine their practices in light of market and technology changes and to modify those practices if necessary to enable their clients to obtain the best reasonably available prices.” *Id.* (citing DIV. OF MKT. REGULATION, U.S. SEC. & EXCH. COMM’N, MARKET 2000: AN EXAMINATION OF CURRENT EQUITY MARKET DEVELOPMENTS, at V-4 (1994), available at <http://www.sec.gov/divisions/marketreg/market2000.pdf>).

is a learning curve, and, as trading venues are cleaning up their practices and moving toward greater transparency, the “reasonableness” hurdle may be surpassed.¹⁵⁴ Given the taxonomy of the duty of best execution, which includes “the duty to execute promptly; the duty to execute in the appropriate market; and the duty to obtain the best price,”¹⁵⁵ the choice of an order type may potentially influence all of these dimensions. For instance, using a “wrong” order type may result in a worse price, delayed execution, or even its non-consummation.¹⁵⁶ Analogously, different trading venues may have order types with varying degrees of attractiveness for a given objective.

VII. CONCLUSION

Bodek’s analysis offers a diagnosis—and a promise—for securities markets. Technological developments cannot be reversed, and the search for regulatory arbitrage and loopholes cannot be stopped, but their adverse impact should be contained to the extent possible. In any instance, despite its evolution, the securities market structure may look very different in the near future: “HFT strategies will still exist, but their role will once again be limited by their natural scale and volume.”¹⁵⁷ Rewinding back to today, some of the problems described by Bodek can potentially be addressed by the existing tools of federal securities law, including private lawsuits, although other problems are beyond its current reach, which requires changes in the regulatory design itself.

Once again, Bodek’s chief contribution is in unleashing the order type controversy, which may die in a quiet manner with the continuing cleanup or go out with a bang. While the explosion in the number of order types often reflects the adjustment of securities markets to the new fragmented, hypercompetitive, and computerized architecture, this diversity is also a result of the symbiosis of HFTs and trading venues, which appears to have led to additional layers of complexity and informational asymmetry accompanied by nontransparent transfers of wealth. Putting aside the sunlight’s deterrence effect demonstrated by the recent order type-related changes in the securities industry, there are several feasible approaches to such questionable practices under the federal antifraud prohibition. Once again, the issue of proof is complex, as it would require a forensic reconstruction of a multitude of transactions, a comparison with an alternative universe based on the “correct” trading protocol, an access to the underlying code, and details of secret communications between trading venues and certain market participants.

154. See also POSER & FANTO, *supra* note 6, § 16.03[A][1] (“In determining the applicable standard of care [owed by a broker to a customer] in a particular situation, a court may consider a variety of sources, including the rules of the self-regulatory organizations, the internal rules and practices that the brokerage firm has adopted to govern the conduct of its employees, industry custom, and professional practice.”).

155. *Id.* § 16.03[B].

156. See, e.g., BODEK, *supra* note 3, at 41 (“[B]rokers unfamiliar with the necessity and nuances of accessing HFT-oriented markets with [intermarket sweep orders] in fast moving markets limit the liquidity available to their clients and leave many orders unfilled, a practice that effectively shields HFTs from toxic marketable order flows and subsidizes the profits of HFT scalping strategies.”).

157. *Id.* at 8.

Furthermore, the implications of the order type controversy for securities regulation also have relevance for other scenarios when an SRO grants certain nontransparent privileges to a select group of market participants.¹⁵⁸

158. In lieu of a postscript, the author wishes to state that he is familiar with the proprietary report on order type practices prepared by Justin Schack and Andrew Upward of Rosenblatt Securities. The report's authors seem to be cautious in their approach to the order type controversy: "We've been critical of some functionality . . . but we find no evidence that exchanges or automated proprietary traders have conspired to create 'killer' order types that disadvantage end investors, as some critics have contended." Peter Chapman, *No Order Type Conspiracy, Rosenblatt Study Says*, TRADERS MAG., Aug. 2013, at 8, 8 (quoting the report). *But see* PSOMADELIS & POWELL, *supra* note 21, at 3 (referencing the report with the qualification that "the area of concern is on both the understanding of the order type in question and any differences between the marketing of an order type and the reality of its function").