
Are You Afraid of the Dark?: How the New York Attorney General Is Shedding Light on Dark Pools and High Frequency Trading

“And then there is maybe the greatest cost of all: Once very smart people are paid huge sums of money to exploit the flaws in the financial system, they have the spectacularly destructive incentive to screw the system up further, or to remain silent as they watch it being screwed up by others.”¹

I. INTRODUCTION

Similar to nearly every industry in the world, technology forever changed Wall Street.² Electronic trading effectively started to replace human buyers and sellers in the early 1990s, but few could anticipate the speeds at which high-frequency trades occur today.³ Savvy quants—mathematicians who use quantitative techniques to make market predictions—began to dominate the finance world in the early 2000s through the use and development of complex trading strategies and algorithms.⁴ These changes altered the trading landscape as more venues, known as pools, became available to participants in the U.S. equity market, such as the dark pool alternative trading system (ATS).⁵

Dark pools became attractive to investors because, unlike trading in “lit”

1. MICHAEL LEWIS, FLASH BOYS: A WALL STREET REVOLT 266 (W.W. Norton & Co., Inc. ed., 1st ed. 2014).

2. See *id.* at 3-4 (highlighting gradual shift toward computerized trading after 1987 stock market crash). The human traders on the floor of the New York Stock Exchange are merely anachronisms used for television clips; “[t]he U.S. stock market now trades inside black boxes, in heavily guarded buildings in New Jersey and Chicago.” *Id.* at 3.

3. See SCOTT PATTERSON, DARK POOLS: THE RISE OF THE MACHINE TRADERS AND THE RIGGING OF THE U.S. STOCK MARKET 7 (Crown Bus. ed., 2013) (analyzing change in market dynamic due to trading at warp speeds devoid of human contact); see also LEWIS, *supra* note 1, at 9 (emphasizing prior trade speed’s human limits). The only constraint now is the distance between data centers. See LEWIS, *supra* note 1, at 9. Today trades can occur at millisecond speeds; a trade from Chicago to New York takes about a tenth of the time it takes to blink. See *id.* at 9-10.

4. See PATTERSON, *supra* note 3, at 333-34 (acknowledging transition from white-collar financiers to programming prodigies and expert mathematicians).

5. See Harry Frischer & Brian Friedman, *SEC Proposes Rules To Enhance Transparency and Oversight of Alternative Trading Systems to Clients*, PROSKAUER ROSE LLP: CORPORATE DEFENSE AND DISPUTES, (Nov. 19, 2015), http://www.corporatedefensedisputes.com/2015/11/sec-proposes-rules-to-enhance-transparency-and-oversight-of-alternative-trading-systems/?utm_source=Mondaq&utm_medium=syndication&utm_campaign=inter-article-link [<http://perma.cc/RY8T-3CPH>] [hereinafter Proskauer Memorandum] (discussing percentage of equity trading that occurs in ATSS in the United States today); Christopher Mercurio, Note, *Dark Pool Regulation*, 33 REV. BANKING & FIN. L. 69, 69 (2013) (explaining increase in trading venues and recent shift toward increased trading in dark pools).

pools, such as New York Stock Exchange (NYSE) or National Association of Securities Dealers Automated Quotation (NASDAQ), trading that occurs in dark pools does not reveal buyer or seller identities, and transactions are not initially displayed to the public.⁶ This structure is ideal for investors looking to make large trades because it cloaks investors' actions from competitors, minimizing price movements and predatory trading.⁷ The obscurity of these pools, in conjunction with the sophisticated minds behind these trades, ultimately led to widespread manipulation and legal front-running.⁸

Until June 2015, there had been little legal action against the firms taking advantage of investors through high-frequency trading (HFT).⁹ The New York

6. See PATTERSON, *supra* note 3, at 5 (detailing reasons for investors' switch to controversial dark pool trading). These pools had many attractive qualities—such as their lack of transparency—but also their novelty meant they were virtually unregulated. See *id.* at 5; see also LEWIS, *supra* note 1, at 42-43 (noting only brokers who run dark pools know what orders occur in real time); Mercurio, *supra* note 5, at 69-70 (outlining various investor incentives for trading in dark pools); Scott Patterson, 'Dark Pools' Face Scrutiny, WALL ST. J. (June 5, 2013, 9:55 PM), <http://www.wsj.com/articles/SB10001424127887324069104578527361102049152> (indicating advantages and reservations behind these "lightly regulated, off-exchange trading venues").

7. See Christina N. Davilas, *New Dark Pool Regulation on the Horizon*, LAW360 (June 14, 2013, 11:51 AM), <http://www.law360.com/articles/450159/new-dark-pool-regulation-on-the-horizon> [<https://perma.cc/WQ65-6Q2J>] (describing proponent's argument for dark pool trading, despite critics remarks of increased probability of manipulation); see also Mercurio, *supra* note 5, at 69 (illustrating competitive advantages achieved through trading in dark); Christian Asare & Keisha Potter, *Regulators, Don't Drain Dark Pools*, AM. BANKER (Sept. 3, 2015), <http://www.americanbanker.com/bankthink/regulators-dont-drain-dark-pools-1076512-1.html> (emphasizing positive attributes of dark pool trading).

8. See LEWIS, *supra* note 1, at 101 (indicating front-running has always plagued Wall Street). "Every systemic market injustice arose from some loophole in a regulation created to correct some prior injustice." *Id.* Many in the industry attribute more recent front-running to the Securities and Exchange Commission's (SEC) 2007 Regulation National Market System (Reg NMS), which intended to address the issues arising from HFT and dark pools. See PATTERSON, *supra* note 3, at 48-49 (explaining high-frequency traders profit off SEC-instituted market-structure change); *60 Minutes: Is the U.S. Stock Market Rigged?* (CBS television broadcast Aug. 17, 2014), <http://www.cbsnews.com/news/michael-lewis-stock-market-rigged-flash-boys-60-minutes/> [<http://perma.cc/YE4K-MUWJ>] (addressing unfair practices leading to massive profits from dark pools trades).

9. See Complaint at 1-4, 7, *People v. Barclays Cap., Inc.*, 1 N.Y.S.3d 910 (N.Y. Sup. Ct. 2015) (No. 14-0451391) [hereinafter *Barclays Complaint*] (alleging Barclays committed fraud in operating its dark pool, Barclays LX); see also Chris Dolmetsch, *Barclays Must Face N.Y. Attorney General's Dark Pool Suit*, BLOOMBERG BUS. (Feb. 13, 2015, 5:53 PM), <http://www.bloomberg.com/news/articles/2015-02-13/barclays-must-face-n-y-attorney-general-s-suit-over-dark-pool> [<http://perma.cc/Z3J4-K957>] (affirming NY AG's ability to pursue claim against Barclays); Scott Patterson & Andrew R. Johnson, *New York Attorney General Sues Barclays Over Stock-Trading Business*, WALL ST. J. (June 25, 2014, 6:31 PM), <http://www.wsj.com/articles/new-york-attorney-general-plans-lawsuit-against-barclays-1403723283> (explaining gravity of complaint filed and allegations against Barclays); Rob Tricchinelli, *SEC Proposes New Disclosures for Dark Pools*, BLOOMBERG BNA (Nov. 19, 2015), <http://www.bna.com/sec-proposes-new-n57982063741/> [<http://perma.cc/TXQ4-33EZ>] (outlining allegations Barclays misstated what "algorithmic traders" do in dark pool to subscribers). As of July 2015, news leaked that New York Attorney General Schneiderman would also target Credit Suisse and their dark pool, Crossfinder, which by some measurements is the largest dark pool on Wall Street. See John D'Antona Jr., *New York AG Has Credit Suisse in His Sights*, TRADERS MAG. ONLINE NEWS (July 28, 2015), http://www.tradersmagazine.com/news/crossing_networks/new-york-ag-has-credit-suisse-in-his-sights-114196-1.html [<http://perma.cc/S32K-9M7M>]; Kevin Dugan, *Schneiderman Eyes 'Dark Pool' Settlement with Credit Suisse*, N.Y. POST (July 28, 2015, 5:00 PM), <http://nypost.com/2015/07/28/schneiderman-n-eyes-dark-pool-settlement-with-credit-suisse/> [<http://perma.cc/9GKU-FENE>] (highlighting likelihood of settlement); Charlie Gasparino, *NY AG Preps Case Against Credit Suisse Dark Pool*, FOX BUS. (July 27, 2015),

Attorney General (NY AG), Eric Schneiderman, brought the first big case under a little-known state law from the 1920s, the Martin Act, which grants the NY AG the power to regulate and investigate securities fraud.¹⁰ In efforts to boost investor confidence and ensure the markets work for the entire general public, Schneiderman hopes to stifle the fundamentally unfair situations that HFT has created at the expense of the rest of the market.¹¹

This Note aims to provide a useful overview of the development of the U.S. stock market and show how lawsuits, such as the one against Barclays, will shape the U.S. stock market's future.¹² Part II of this Note will present a detailed assessment of HFT, relevant SEC regulations, and a history of the Martin Act.¹³ Part III will discuss the current case against Barclays and how regulators should proceed in handling contemporary dark pool and HFT crises affecting the U.S. stock market and, in turn, its investors.¹⁴ This Note advocates for an approach that seeks a balance between a free market economy and clear regulations, so as to avoid further market exploitation.¹⁵

<http://www.foxbusiness.com/industries/2015/07/27/ny-ag-preps-case-against-credit-suisse-dark-pool/> [<http://perma.cc/2F9B-CXCC>] (noting case likely civil action surrounding latency arbitrage, similar to Barclays case); Charles Gubert, *SEC Outlines Tougher Regime for Dark Pools*, TRADE (Nov. 19, 2015), <http://www.thetra.denews.com/Asset-Classes/Equities/SEC-outlines-tougher-regime-for-dark-pools/> [<http://perma.cc/5Y4Y-HCKX>] (mentioning cases against Credit Suisse and Barclays in addition to other related settlements).

10. See N.Y. GEN. BUS. LAW § 352(1) (McKinney 2014) (providing NY AG with broad investigatory powers); Bob Pisani, *Why Barclays Is in a Pickle: Meet the Martin Act*, CNBC (June 26, 2014, 4:17 PM), <http://www.cnbc.com/id/101793483#> [<http://perma.cc/V59F-SQQB>] (explaining origins of Martin Act and difficulty of disputing charges brought under this state law).

11. See Press Release, Eric T. Schneiderman, N.Y. Att'y Gen., Remarks by Attorney General Eric T. Schneiderman to the 2013 Bloomberg Markets 50 Summit (Sept. 24, 2013), <http://www.ag.ny.gov/press-release/remarks-attorney-general-eric-t-schneiderman-2013-bloomberg-markets-50-summit> [<http://perma.cc/HA9R-8XCT>] [hereinafter 2013 Bloomberg Markets 50 Summit Remarks] (detailing Schneiderman's intent to address new breed of insider trading during term as NY AG); Eric T. Schneiderman, N.Y. Att'y Gen., Remarks on "Insider Trading 2.0—A New Initiative to Crack Down on Predatory Practices" at New York Law School (Mar. 18, 2014), http://www.ag.ny.gov/pdfs/HFT_and_market_structure.pdf [<http://perma.cc/TD3Z-DMHU>] (outlining overall platform and efforts as NY AG to combat unfair practices).

12. See *infra* Parts II-III.

13. See *infra* Part II.

14. See *infra* Part III.

15. See *infra* Parts III.B-C. See generally 6 F. A. HAYEK, THE COLLECTED WORKS OF F.A. HAYEK, GOOD MONEY: PART II: THE STANDARD (Stephen Kresge ed., 1999) (discussing business and monetary cycles and how free markets best coordinate human actions); Robert Enlow, *A Century of Freedom and Free Markets: Celebrating Milton Friedman*, FOX NEWS (July 31, 2012), <http://www.foxnews.com/opinion/2012/07/31/century-freedom-and-free-markets-celebrating-milton-friedman> [<http://perma.cc/98E7-RXR7>] (elucidating general concepts of free enterprise system as conveyed by economist Milton Friedman); *Definition of 'Free Market,'* INVESTOPEDIA, <http://www.investopedia.com/terms/f/freemarket.asp> (last visited Oct. 8, 2015) [<http://perma.cc/R3YV-Q9XX>] (defining free market economy as one with little government control).

II. HISTORY

A. *From Buttonwood Trees to Pushing Buttons*

In mid-May of 1792, twenty-four brokers stood under a buttonwood tree on Wall Street and signed an agreement that would start the trade of securities and create what is known today as the NYSE.¹⁶ Although trading still conjures up an image of a frantic exchange floor, crowded with men yelling in expensive suits, that picture is no longer accurate.¹⁷ Virtually no traders have worked on the floor since 2007, a trend that began after the 1987 stock market crash.¹⁸ When the market fell by 22.61% on Black Monday, October 19, 1987, brokers deliberately did not answer their phones, making it impossible for small investors to sell stocks; this response, or lack thereof, triggered the gradual switch to computers.¹⁹

At the time of the Black Monday crash, nearly all trades went through middlemen, known as market makers.²⁰ This system forced ordinary Americans to utilize these brokers if they wanted to trade on the major exchanges; thus their services came at a hefty fee.²¹ This fee, called the “spread,” was the difference between what the market maker paid for a stock

16. See Ellen Terrell, *History of the New York Stock Exchange*, LIBR. OF CONGRESS, http://www.loc.gov/rr/business/hottopic/stock_market.html (last updated Oct. 2012) [www.perma.cc/0P65ZMPow8a] (narrating early beginnings of Wall Street and NYSE); *Architects of the World's Markets*, INTERCONTINENTAL EXCHANGE, <https://www.intercontinentalexchange.com/about#architects> (last visited Oct. 8, 2015) [http://perma.cc/W6F4-7RKG] (highlighting chronology of eleven exchanges and five clearing houses under Intercontinental Exchange, including NYSE); see also PATTERSON, *supra* note 3, at 68 (discussing start of NYSE and its preference for select insiders over everyday investors).

17. See Edward M. Eng et al., *Finding Best Execution in the Dark: Market Fragmentation and the Rise of Dark Pools*, 12 J. INT'L BUS. & L. 39, 40 (2013) (highlighting market evolution and switch from physical trading floor to electronic trading); Jonathan R. Macey & Maureen O'Hara, *From Markets to Venues: Securities Regulation in an Evolving World*, 58 STAN. L. REV. 563, 563-64 (2005) (emphasizing technological changes and restructuring of securities market due to nonhuman market participants); see also LEWIS, *supra* note 1, at 2-3 (explaining dated perceptions of trading floors and less tangible current structure); PATTERSON, *supra* note 3, at 7 (marking shift to “placeless, faceless . . . cyber market” controlled by computers and algorithms).

18. See LEWIS, *supra* note 1, at 3 (tracing technological shift back to 1987 crash, when rules changed to favor computers).

19. See *id.* at 2-3, 99 (explaining shift to computers leveled playing field for small investors).

20. See PATTERSON, *supra* note 3, at 73-74 (defining role of middlemen in context of stock transactions). Market maker is the common terminology associated with these middlemen brokers; however, brokers from NASDAQ were officially called market makers, and brokers from NYSE were technically called specialists. See *id.*; see also Edwin Batista, *A Shot in the Dark: An Analysis of the SEC's Response to the Rise of Dark Pools*, 14 J. HIGH TECH. L. 83, 87-88 (2014) (describing market-maker phenomenon preceding computerized trade matching).

21. See IRENE ALDRIDGE, *HIGH-FREQUENCY TRADING: A PRACTICAL GUIDE TO ALGORITHMIC STRATEGIES AND TRADING SYSTEMS* 10 (John Wiley & Sons, Inc. ed., 2d ed. 2010) (emphasizing market makers' position at center and most profitable level of financial hierarchy); PATTERSON, *supra* note 3, at 73 (detailing profitability scheme for market makers); Batista, *supra* note 20, at 87-88 (noting market makers capitalized on their intermediary status, earning immense profits off processing trades).

and what he charged to sell it back to investors.²² For decades, market makers were the financial elite, profiting off of the average Joe saving for retirement and college educations; this exploitation spurred the movement to computerized trading, as both programmers and the SEC sought to level the playing field through eliminating these middlemen.²³ The crash of 1987 serves as more than a turning point in this analytical timeline: it reveals the interconnectedness of the events in Wall Street's insidious history that have contributed—and are strikingly analogous—to the current situation involving HFT and dark pools.²⁴

22. See PATTERSON, *supra* note 3, at 73 (elucidating “spread” concept behind market-maker pay structure).

23. See *id.* at 73-74 (exposing greed of market makers and reasoning for switch to direct trades); LEWIS, *supra* note 1, at 99-100 (stipulating SEC's response to 1987 crash as way to eliminate forced reliance on market makers). At this time, regulators mandated a Small Order Execution System (SOES), which allowed ordinary investors to send orders to the market electronically and bypass the use of middlemen. See LEWIS, *supra* note 1, at 100. Regulators addressed the problem at hand, but again failed to think through potential consequences: advanced traders quickly gamed SOES, which put the little guy at a disadvantage. See *id.*; see also Jerry W. Markham & Daniel J. Harty, *For Whom the Bell Tolls: The Demise of Exchange Trading Floors and the Growth of ECNS*, 33 J. CORP. L. 865, 900 (2008) (indicating deficiencies behind SOES regulation used to relegate market makers); Batista, *supra* note 20, at 87-88 (emphasizing market makers earned “enormous profits” at expense of common investor). The shift to decimalization, or the trading of stocks in pennies, also propelled the switch to HFT because it was more difficult for human traders and significantly narrowed profit margins. See LEWIS, *supra* note 1, at 109; PATTERSON, *supra* note 3, at 34 (explaining decimalization's negative effect on market-maker profits). Ron Paul remarked, “Tragically, the innocent who understand little about the complexity of the monetary system suffer the most, while those who are in the know reap great profits whether the market is going up or down.” RON PAUL, *END THE FED 2* (2009).

24. See LEWIS, *supra* note 1, at 99-101 (connecting current and past market injustices and citing 1987 crash as first form of HFT). Lewis calls attention to the patterns of unscrupulous behavior on Wall Street, which have continually led to targeted SEC regulations that ultimately create new loopholes for exploiting investors. See *id.* Even Machiavelli in the early 1500's recognized this political paradox: “For one change always leaves a dovetail into which another will fit.” NICCOLÒ MACHIAVELLI, *THE PRINCE 15* (Paul Moliken et al. eds., N.H. Thomson trans., Prestwick House ed. 2005). Former transactional trader and businessman, Nassim Nicholas Taleb, adeptly describes this exact conundrum: “Because of opacity [in complex systems], an intervention leads to unforeseen consequences, followed by apologies about the ‘unforeseen’ aspect of the consequences, then to another intervention to correct the secondary effects, leading to an explosive series of branching ‘unforeseen’ responses, each one worse than the preceding one.” NASSIM NICHOLAS TALEB, *ANTIFRAGILE: THINGS THAT GAIN FROM DISORDER 11* (Random House, Inc. ed., 2012); cf. Markham & Harty, *supra* note 23, at 903 (asserting adoption of electronic trading initially equivalent to “the democratization of the financial markets”); Aubrey Gallo, Note, *Dark Pool Liquidity*, 29 REV. BANKING & FIN. L. 88, 93 (2009) (explaining recent intention of SEC regulation and its inadvertent outcome); David Bogoslaw, *Big Traders Dive Into Dark Pools*, BUSINESSWEEK (Oct. 3, 2007), <http://www.businessweek.com/stories/2007-10-03/big-traders-dive-into-dark-poolsbusinessweek-business-news-stock-market-and-financial-advice> [<http://perma.cc/V6DD-LB5Z>] (arguing SEC policy change encouraged use of ATs and yielded different result than intended). Nobel Prize winning economist, Milton Friedman, said, “One of the great mistakes is to judge policies and programs by their intentions rather than their results.” WPIX New York, *The Open Mind with Richard D. Heffner: Interview with Milton Friedman*, YOUTUBE (Dec. 7, 1975), <https://www.youtube.com/watch?v=JfdRpyfEmBE> [<http://perma.cc/FN45-74R5>] [hereinafter *Interview with Milton Friedman*]; see also Hilary J. Allen, *A New Philosophy for Financial Stability Regulation*, 45 LOY. U. CHI. L.J. 173, 178 (2013) (noting uncertainty behind regulator efforts given complex nature of financial industry).

B. *Need for Speed*

Until 2002, eighty-five percent of stocks were traded on either the NYSE or the NASDAQ (never both), but three years later, the two exchanges became public, for-profit corporations.²⁵ This transition incited an influx of competition, and, by 2008, there were thirteen exchanges, and stocks were no longer limited to trading on a single one.²⁶ The SEC initially pushed the exchanges to incorporate in efforts to respond to public complaints of “cronyism” into their practices, though arguably this change just prompted the creation of a new hierarchy centered on speed.²⁷

Electronic trading utilized order-matching algorithms to bring buyers and sellers together, capitalizing on operational efficiencies and risk management, while simultaneously decreasing transaction costs and trading errors.²⁸ While spreads were significantly smaller than those that market makers made, HFT firms cashed in, due to the sheer volume of transactions they were able to execute in seconds, or more specifically, microseconds.²⁹ In addition to pure

25. See LEWIS, *supra* note 1, at 34-35 (citing exchanges’ shift from utilities to publically-owned corporations as catalyst for changed industry landscape). Dan Mathisson, creator of the nation’s largest dark pool, Credit Suisse’s Crossfinder, described this switch as the root cause of the market’s HFT problem today; the exchanges were so focused on the bottom line that they failed to “maintain[] a healthy venue for companies to list stocks and for investors to profit from the growth of American capital.” PATTERSON, *supra* note 3, at 341.

26. PATTERSON, *supra* note 3, at 342 (explaining shift to multiple exchanges and impact on stock trades); see also LEWIS, *supra* note 1, at 34-35 (indicating increased number of exchanges); Annabelle Ju, *A Top Rival of Dark Pools Concedes They Do Have a Purpose*, BLOOMBERG BUS. (Feb. 5, 2015, 1:25 PM), <http://www.bloomberg.com/news/articles/2015-02-05/a-top-dark-pool-rival-concedes-they-have-role-in-stock-markets> [http://perma.cc/B2E7-FMLM] (noting regulations insinuated competition between dominant market operators).

27. See LEWIS, *supra* note 1, at 35 (stating pressure from SEC and general public led to incorporation of main stock exchanges). This is another event in Wall Street’s history that began with concrete, benevolent intentions, but served to lay the foundation for a strikingly similar, yet even graver problem. See *id.* at 68-69. “The U.S. stock market was now a class system, rooted in speed, of haves and have-nots The haves enjoyed a perfect view of the market; the have-nots *never saw the market at all.*” *Id.* at 69; see also Jeremy Grant, *High-Frequency Trading: Up Against a Bandsaw*, FIN. TIMES (Sept. 2, 2010, 10:21 PM), <http://www.webcitation.org/61qfViXXS> [http://perma.cc/55ST-EVMV] (remarking shift to HFT created “playground for specialised trading” working against capital formation). The original function of the stock market was specifically to foster capital formation, which some believe has been significantly undermined, due to the switch to computerized trading. See Grant, *supra*. The greater number of exchanges and venues available to traders today, which all have varying systems, speeds, and fees, have created widespread fragmentation, leading to the exploitation of operational differences of exchanges and venues, but little economic benefit or positive effect on capital formation. See *id.* Furthermore, this fragmentation, coupled with HFT, is especially troubling to experienced traders because it vitiates two important and basic functions of the market: “orderly and fair price formation.” *Id.*

28. See PATTERSON, *supra* note 3, at 256 (emphasizing increased monetary, transparency, safety, and efficiency as justifications of HFT); Markham & Harty, *supra* note 23, at 903-04 (discussing benefits of electronic trading and algorithms).

29. See PATTERSON, *supra* note 3, at 35 (articulating economics and strategy of HFT). Despite thinner spreads, HFT took advantage of scale at almost no risk by continually reinvesting a small amount of money. See *id.* Scale is practically an understatement because while trades were happening in milliseconds in the early 2000s—“two hundred times the average speed of human thought”—they are now happening in one-millionth of a second (a microsecond). *Id.* at 206. Up to this point, exchanges used fiber optic cables and even

numerosity, the firms quickly exploited other ways to stay ahead through the use of order types and colocation.³⁰

1. Coding Decoded

The algorithms high-frequency traders used are so complex that it took some time for even experienced traders to understand what occurred behind trades.³¹ Algorithms begin by first determining the best way to slice up an order because orders are typically large and attempting to buy all the shares at once would drive up the price.³² In addition to determining the number of shares to be purchased, the algorithms also dictate when to purchase orders, as well as at what price.³³ These algorithms, known as order types, communicate trader intentions and indicate how buy or sell orders should interact with other

microwaves to achieve these speeds. See Scott Patterson, *High-Speed Stock Traders Turn to Laser Beams*, WALL ST. J. (Feb. 11, 2014, 11:00 PM), <http://www.wsj.com/articles/SB10001424052702303947904579340711424615716>. This, however, may be a thing of the past, as there is talk that at least one major Wall Street bank has backed Anova Technologies, LLC's project to link exchange data centers by laser. See *id.* (describing "technological arms race" in efforts to increase trade speeds and efficiency); see also Alyse Gould, *Regulating High-Frequency Trading: Man v. Machine*, 12 J. HIGH TECH. L. 273, 282-83 (2011) (noting cost and risk advantages of HFT, as well as superior profitability structure). Increased profitability from HFT stems not only from the ability to trade large quantities at fast speeds, but also from the significant cost efficiencies derived from executing more accurate trades that require minimal human interaction. See Gould, *supra*, at 283.

30. See PATTERSON, *supra* note 3, at 47-48 (discussing common uses of order types in HFT); see also LEWIS, *supra* note 1, at 61, 63 (explaining latency concept and importance of colocation in decreasing trade times); Gould, *supra* note 29, at 283 (outlining variety of order types and strategies used).

31. See LEWIS, *supra* note 1, at 31-34 (detailing how HFT order types initially baffled experienced traders and technologists); Michael Lewis, *Wall Street's Flash Mob*, VANITY FAIR, Apr. 2015, at 114-18, <http://www.vanityfair.com/news/2015/03/michael-lewis-flash-boys-one-year-later> [<http://perma.cc/MQ79-NWCP>] (reiterating complexity of situation which served financial intermediaries, despite its potentially innocent origins). Brad Katsuyama, former Global Head of Electronic Sales and Trading at Royal Bank of Canada, was among the first to discover the puzzling effects of complex HFT order types, which were causing his company to suffer significant losses. See LEWIS, *supra* note 1, at 34. He initially described the phenomenon "as if someone knew what he was trying to do and was reacting to his desire to sell before he had fully expressed it." *Id.* at 32. Experienced trader and Wall Street insider, Haim Bodek, also shared Katsuyama's suspicion that his computer was not bugged, but rather there was a greater cause affecting his trades. See PATTERSON, *supra* note 3, at 47-48. Bodek's firm, like most in the country, used order algorithms, but it took an exchange representative divulging nonpublic information for Bodek to learn how orders were being abused. See *id.* at 47-48. "We are witnessing the rise of a new class of inverse heroes, that is, bureaucrats, bankers . . . and academics with too much power and no real downside and/or accountability. They game the system while citizens pay the price." TALEB, *supra* note 24, at 6.

32. See ALDRIDGE, *supra* note 21, at 277-80 (recognizing importance of slicing order in preventing dilution of profitability); LEWIS, *supra* note 1, at 74-75 (detailing how algorithms breakdown large orders for cost effective reasons); Michael Mackenzie, *U.S.: High Frequency Trading Dominates the Debate*, FIN. TIMES (Oct. 20, 2009, 4:57 PM), <http://www.ft.com/cms/s/0/fa347c26-bc41-11de-9426-00144feab49a.html> [<http://perma.cc/NP4Q-QRC4>] (noting breakdown of large orders commonplace in today's equity market). "The main objective of high frequency traders involves minimising risk and posting small deal sizes that enable them to move in and out of trades extremely quickly, arbitraging between spreads available on different exchanges and platforms, and even between the speed of trading available on them." Mackenzie, *supra*.

33. See LEWIS, *supra* note 1, at 74-76 (articulating different trader decisions communicated through order algorithms).

orders.³⁴ Limit orders are most prevalent, as they allow traders to specify constraints, whereas market orders instruct the exchange to buy regardless of market conditions.³⁵ More complex, compound orders, not widely known by the general trading community, quickly surpassed these original order types; this is one angle high-frequency traders utilized to swindle investors.³⁶

2. *Location, Location, Location*

In addition to abusing the plain limit orders, high-frequency traders also exploited server proximity, which gave high-frequency traders market data before everyone else; this coveted proximity became known as colocation.³⁷ Despite the fact that some exchanges are located hundreds of miles apart, this propinquity gave traders access to price information even faster than if they were to be located on the same street.³⁸ This dramatically affected high-

34. See PATTERSON, *supra* note 3, at 47 (explaining function of order types and how they interface with exchanges to communicate trades).

35. See *id.* (introducing common order types and their respective communicative functions); see also LEWIS, *supra* note 1, at 169 (explaining creation of limit order as means to diminish risk of market orders).

36. See LEWIS, *supra* note 1, at 170-71 (highlighting enigmatic qualities of new and multi-faceted order types). The order types that began to surface were like puzzles: “written in a language barely resembling English and seemingly designed to bewilder anyone who dared to read them.” *Id.* at 170. The order types themselves were excessively complicated, but so were their true purposes—orders were not necessarily made to actually make trades, but rather to obtain information about the behavior and intentions of other investors at the lowest possible cost and risk. See *id.* at 171.

37. See LEWIS, *supra* note 1, at 79 (explaining effects of proximity to exchange servers). High-frequency traders put their servers in the same building as the exchange and as close to the exchange’s matching engine as possible, giving them an unparalleled speed advantage. See *id.* “Colo[cation] would form the backbone of high-frequency trading and eventually become the model for how securities were traded everywhere, with giant server-packed data centers rising up around the world.” PATTERSON, *supra* note 3, at 200. In 2010, the NYSE built a 400,000 square foot building in New Jersey that allowed trading firms to put their servers next to the NYSE’s matching engine; a pod there cost up to \$10,000 per month, and this was just the first of many trading data centers. See *id.* at 281-83. Interestingly, e-commerce power player, Amazon, also decided to utilize colocation by moving into a Proctor & Gamble warehouse in an effort to: get into the everyday product market; increase sales channels by “piggybacking” on supplier warehouses and distribution networks; reduce moving and storage costs, subsequently enabling them to better compete with Wal-Mart and club stores, like Costco Wholesale Corporation; and further cut the time it takes to reach the consumer. See Andre Mouton, *Amazon Considers ‘Co-location’ with Proctor & Gamble*, USA TODAY (Oct. 21, 2013, 12:59 PM), <http://www.usatoday.com/story/tech/2013/10/21/amazon-proctor-gamble-products/3143773/> [http://perma.cc/GY5M-L5BC] (discussing economical upsides of colocation and potential downsides because of low-margin items and shipping costs); Serena Ng, *Soap Opera: Amazon Moves in with P&G*, WALL ST. J. (Oct. 14, 2013, 10:52 PM), <http://online.wsj.com/news/articles/SB10001424052702304330904579135840230674458> (focusing on Amazon’s ability to better compete with price, while providing even faster delivery); Yuki Noguchi, *Moving in with Manufacturers, Amazon Delivers a New Approach*, NPR (Oct. 28, 2013, 11:58 AM), <http://www.npr.org/2013/10/28/240742832/moving-in-with-manufacturers-amazon-delivers-a-new-approach> (communicating vast benefits of colocation, including expansion of Amazon’s warehouse footprint and new sales channels).

38. See Michael J. McGowan, Note, *The Rise of Computerized High Frequency Trading: Use and Controversy*, 2010 DUKE L. & TECH. REV. 16, ¶ 20 (2010) (discussing benefits of colocation and its profitability scheme for high-frequency traders); Mackenzie, *supra* note 32 (elucidating arbitrage concept and how it relates to colocation). For instance, if a given stock was selling for two cents fewer on one exchange,

frequency traders' profits because, as a result of their advance knowledge, they were able to capitalize on price discrepancies between exchanges.³⁹ Traders began to use this same strategy to also profit off price discrepancies between dark pools and the lit market.⁴⁰ This strategy benefited both public and private exchanges, as it incentivized traders to fragment the marketplace; more sites, where the same stocks changed hands, meant more opportunities to front-run investors.⁴¹ Many critics contend that, over the years, SEC regulations inadvertently supported the proliferation of dark pool trading and, more generally, HFT.⁴²

C. Regulators or Instigators?: A Brief History of the SEC and Relevant Regulations

Following the Depression and the Stock Market Crash of 1929, the federal government decided to regulate the securities market, which subsequently led to the enactment of the Securities Act of 1933 and the Securities Exchange Act

high-frequency traders would quickly acquire stock at the cheaper price, only to make a two-cent profit by instantly selling it on the other exchange. See PATTERSON, *supra* note 3, at 200.

39. See *supra* note 38 and accompanying text (emphasizing advantages gained from exploiting colocation).

40. See PATTERSON, *supra* note 3, at 202 (describing latency arbitrage and exploitation of price discrepancies between dark and lit pools). High-frequency traders profit in these transactions because of the "latency" of the system, or the length of time it takes information to move from point A to point B. *Id.* Similar to most HFT strategies, profits are individually small, but add up significantly, as they are done thousands of times per day; financial market research and advisory firm, TABB Group, estimated that latency arbitrage strategies aggregated an excess of \$21 billion in annual profits in 2009. See Rob Iati, *The Real Story of Trading Software Espionage*, INFORMATIONWEEK WALLSTREET & TECH. (July 10, 2009, 12:32 PM), [http://www.wallstreetandtech.com/trading-technology/the-real-story-of-trading-software-espionage/a/d-id/1262125? \[http://perma.cc/PN97-GZXZ\]](http://www.wallstreetandtech.com/trading-technology/the-real-story-of-trading-software-espionage/a/d-id/1262125? [http://perma.cc/PN97-GZXZ]). The SEC played right into the high-frequency traders' latency game through the 2007 implementation of Reg NMS, which, despite good intentions, effectively gave a small class of insiders the ability to preview the market and trade on that knowledge. See LEWIS, *supra* note 1, at 98 (explaining unintended consequences of implementing Reg NMS).

41. See LEWIS, *supra* note 1, at 111 (acknowledging high-frequency traders' motivation behind market fragmentation). Over the last few years, trading has increasingly shifted from public exchanges, like NYSE, to private platforms, like dark pools. See Nathaniel Popper, *As Market Heats Up, Trading Slips into Shadows*, N.Y. TIMES (Mar. 31, 2013), http://www.nytimes.com/2013/04/01/business/as-market-heats-up-trading-slips-into-shadows.html?pagewanted=all&_r=0. In 2013, an estimated forty percent of stock trading took place away from the public exchanges; regulators, as well as critics of HFT and dark pools, worry it would ultimately "obscure the true prices of stocks and scare away ordinary investors." *Id.* In addition to fears of impaired price competition, critics also argue this shift simply serves to shield manipulative practices. See Davilas, *supra* note 7.

42. See LEWIS, *supra* note 1, at 97-98 (highlighting unintended consequences of SEC's Reg NMS loophole and its substantive effect on HFT); PATTERSON, *supra* note 3, at 245 (maintaining Reg NMS institutionalized high-frequency traders' ability to apply strategies to heavily traded stocks); Davilas, *supra* note 7 (indicating original intentions of Reg NMS and incidental encouragement of dark pools). Nassim Taleb compares the decisions of policy-makers to "mistak[ing] the economy for a washing machine that continuously needs fixing (by him) and blow[ing] it up." TALEB, *supra* note 24, at 10. Finally, free market proponent, Milton Friedman, emphasized that greed occurs in every system, and inhibiting individuals from pursuing their own interests by instead forcing them to succumb to bureaucratic orders serves only to weaken that system. See *Interview with Milton Friedman*, *supra* note 24.

of 1934 ('34 Act).⁴³ The former affects the primary market and sought to mandate disclosure of material information by issuers.⁴⁴ The latter, which created the SEC, focuses on secondary market transactions—those made between investors with little involvement by the original issuer.⁴⁵ In 1975, Congress enacted Section 11A of the '34 Act, linking the various securities markets through increased communication and updated data processing facilities, known as securities information processors (SIP).⁴⁶ The objective of this national market system was to increase overall market efficiency and enhance competition by disclosing more information to brokers, dealers, and investors.⁴⁷ Following this structural change, dark pools emerged in the 1980s and remained formally unregulated until the adoption of Regulation ATS (Reg ATS) in 1998.⁴⁸

Due to the increase in private pools, Reg ATS mandated these venues to either register as a broker, become an official exchange, or remain exempt due to limited transaction volumes.⁴⁹ By authorizing the existence of these other venues, the SEC concurrently expressed its dissatisfaction with the exchange duopoly present at the time.⁵⁰ Many of the properties that make dark pools

43. See WILLIAM A. KLEIN ET AL., *BUSINESS ASSOCIATIONS: CASES AND MATERIALS ON AGENCY, PARTNERSHIPS, AND CORPORATIONS* 399-400 (Thomson Reuters/Foundation Press, 8th ed. 2012) (delineating catalysts and timeline of regulation of U.S. securities market). See generally Securities Act of 1933, ch. 38, 48 Stat. 74 (codified as amended at 15 U.S.C. §§ 77a-77aa (2012)); Securities Exchange Act of 1934, ch. 404, 48 Stat. 881 (codified as amended at 15 U.S.C. §§ 78a-78pp (2012)).

44. See KLEIN ET AL., *supra* note 43, at 399 (detailing main objective of Securities Act of 1933 and its effect on issuers).

45. See *id.* at 400 (explaining effects of the '34 Act and its impact on investors).

46. See Davilas, *supra* note 7 (describing congressional enactment of Section 11A of '34 Act). The SIP's original intention was to provide a real-time snapshot of the U.S. stock market and foster market fairness; HFT, however, ultimately undermined this objective. See LEWIS, *supra* note 1, at 97.

47. See 15 U.S.C. § 78k-1 (2012) (stating economic efficiency and fair competition as public interest concerns); see also Davilas, *supra* note 7 (elucidating general concept and advantages of national market system).

48. See PATTERSON, *supra* note 3, at 154 (explaining purpose behind new set of regulations surrounding dark pools); Davilas, *supra* note 7 (remarking on history of dark pools and their initial independence from regulation); Yuka Hayashi, *Regulators Propose Rules To Shed Light on Dark Pools*, WALL ST. J. (Nov. 18, 2015), <http://www.wsj.com/articles/regulators-propose-rules-to-shed-light-on-dark-pools-1447888364> (noting lack of updates to regulations relating to ATSs).

49. See SEC Regulations for ATS, 17 C.F.R. § 242.301 (2014) (detailing requirements for every ATS); see also PATTERSON, *supra* note 3, at 153-54 (explaining shift to electronic trading prompted new requirements for ATSs).

50. See McGowan, *supra* note 38, ¶ 10 (emphasizing SEC underlying message through authorization of alternative venues). Just before the SEC issued Reg ATS in 1998, electronic pools were changing the game entirely and simultaneously weakening the more established bourses; "[b]ig money—the biggest money—was rolling into [private] pools." PATTERSON, *supra* note 3, at 153. The exemption in Reg ATS, which allowed trading to occur without disclosure so long as the trading volume of a given stock remained under five percent, also propelled the growth of dark pool trading because institutional investors sought ways to cloak their trades. See Roberta S. Karmel, *IOSCO's Response to the Financial Crisis*, 37 J. CORP. L. 849, 892-93 (2012) (explaining additional theory for influx of dark pool trading after Reg ATS); Popper, *supra* note 41 (explaining forty percent of trading now occurs in dark pools, accentuating migration to private platforms).

attractive to investors, such as their opacity, nonetheless undercut the fundamental principles of the national market system's structure.⁵¹ For instance, a major challenge posed by the existence of dark pools is that they increase competition among individual markets, known as "fragmentation," which, as previously mentioned, works to the detriment of individual orders.⁵² The SEC attempted to counteract this widespread fragmentation and restore the national market system to its former glory through the implementation of Reg NMS in 2007.⁵³

Reg NMS was a seemingly sensible response by the SEC; like most regulations, however, it inadvertently led to a string of consequences that ultimately thwarted the intended objective.⁵⁴ The SEC formerly held brokers who represented investors to a loose standard of "best execution" when handling stock market orders, but to address front-running concerns, Reg NMS now requires brokers to find the best market prices.⁵⁵ The definition of best price stemmed from the National Best Bid and Offer (NBBO) concept, which selects the lowest ask price and highest bid price across the exchanges; even if a broker could not buy all desired shares at that price, Reg NMS mandates he start there before moving to other exchanges.⁵⁶ Consequently, the required routing of orders made it easy for high-frequency traders to predict where orders would be sent and, in turn, cultivated more opportunities for front-

51. See Davilas, *supra* note 7 (highlighting competing interests of '34 Act and Reg ATS). The dubious properties of trading in the dark have ultimately led to regulator distrust—a major reason why the practice has not gained the same popularity in Europe. See Jeremy Kahn, *Trading in the Dark*, BLOOMBERG BUS. (July 6, 2015, 7:01 PM), <http://www.bloomberg.com/news/articles/2015-07-06/trading-exchange-dark-pools-face-new-competition-in-europe> [<http://perma.cc/SR8H-M5WN>] (offering international perspective and alternative to dark pools).

52. See Davilas, *supra* note 7 (reiterating negative impacts of fragmentation on individual orders and overall market fairness); see also *supra* note 40 (discussing drawbacks of fragmentation and how high-frequency traders have capitalized upon it). "Our markets work best when everyone plays by the same set of rules, when information is provided to the market at the same time, and when capital is actually put at risk. Latency arbitrage runs counter to those principles." Eric T. Schneiderman, *The Need for Speed Is Costing Billions*, N.Y. DAILY NEWS (Apr. 3, 2014, 4:30 AM), <http://www.nydailynews.com/opinion/speed-costing-billions-article-1.1743553>.

53. See PATTERSON, *supra* note 3, at 49 (denoting initial objectives behind adoption of Reg NMS). "[I]t had been an attempt to bind together the fragmented electronic marketplace into a single interlinked web of trading—a true national market system." *Id.*; see also Davilas, *supra* note 7 (explaining how adoption of Reg NMS fits into history and future of dark pool trading).

54. See LEWIS, *supra* note 1, at 97-98 (delineating ramifications of Reg NMS despite SEC's best efforts and intentions); PATTERSON, *supra* note 3, at 49, 239 (diminishing acumen of SEC and explaining severity of market-structure quirks caused by Reg NMS); see also McGowan, *supra* note 38, ¶ 13 (concluding Reg NMS as catalyst for "current electronic trading revolution").

55. See SEC Regulation NMS, 17 C.F.R. § 242.600(b)(7)-(8) (2015) (defining bid and offer to exclude indications of interest); see also Davilas, *supra* note 7 (expressing impact on dark pools from mandating best market price under Reg NMS).

56. See LEWIS, *supra* note 1, at 96-98 (explaining NBBO concept and its effects on orders routed under Reg NMS rules); *Definition of 'National Best Bid and Offer - NBBO'*, INVESTOPEDIA, <http://www.investopedia.com/terms/n/nbbo.asp> (last visited Nov. 19, 2013) [<http://perma.cc/Y8K9-ECGP>] (explaining average person sees NBBO price).

running.⁵⁷ There is, however, a glaring loophole that allows high-frequency traders to circumvent Reg NMS rules entirely: the failure to specify the speed of the SIP that calculated the NBBO.⁵⁸ The technology used to perform calculations for the SIP was outdated, so high-frequency traders created their own, much faster SIP and now have an invaluable picture of the market about twenty-five milliseconds before ordinary investors.⁵⁹

57. See LEWIS, *supra* note 1, at 97-98 (stipulating consequences of NBBO requirement and how it unintentionally accommodated front-running by high-frequency traders). In addition to the problems caused by routing orders to the venue with the best price, changing prices also affected the order queue—"the lineup of buy or sell orders ranked according to priority (whoever was first in line got the trade)." PATTERSON, *supra* note 3, at 49. To please their customers, exchanges soon developed new order types to address the frustration of rerouting; one special type allowed orders at a specific price point to remain hidden at the front of the queue, maintaining their priority and pushing other orders behind it, while the market was still moving. See *id.* at 49-50. Brokers further abused plain vanilla limit orders because they could unknowingly drop right onto these special, hidden orders and be forced to pay the exchange's charge to "take" liquidity. See *id.* at 50. It is widely noted that the addition of complex regulations cannot only destabilize the financial system, but it can also "create opportunities for regulatory arbitrage," such as what we see in this instance of front-running. Allen, *supra* note 24, at 187.

58. See LEWIS, *supra* note 1, at 97-98 (explaining how failure to specify SIP speed led to more market unfairness and HFT dominance); PATTERSON, *supra* note 3, at 49 (noting vast undertaking of mandating NBBO and how calculation really needed "industrial strength computer power").

59. See LEWIS, *supra* note 1, at 97-98 (highlighting critical advantage high-frequency traders through creation of personal SIP). While twenty-five milliseconds seems minute, that equates to twice the time it takes to travel from New York to Chicago and back again—a significant advantage for high-frequency traders. See *id.* at 98. Lewis is personally an advocate for an ATS, known as IEX, which seeks to eliminate this inequity, as well as many others that plague the market. See *infra* Part III.B; see also LEWIS, *supra* note 1, at 175-77 (explaining IEX and high-frequency traders' efforts to combat predatory trading techniques); Letter from Elizabeth K. King, General Counsel and Secretary, NYSE, to Brent J. Fields, Secretary, SEC (Nov. 12, 2015), <http://www.sec.gov/comments/10-222/10222-19.pdf> [<http://perma.cc/HN7D-G7G8>] (reacting to IEX's application for exchange status and discussing IEX model); Sarah Krouse, *IEX Winning Support from Investors as Orders Get Routed Its Way*, WALL ST. J. (Nov. 21, 2014, 9:04 AM), <http://blogs.wsj.com/moneybeat/2014/11/21/iex-winning-support-from-investors-as-orders-get-routed-its-way/> (denoting number of leading brokers routing orders to IEX, suggesting investor support); Mark Melin, *IEX Swings Back at Exchange Establishment*, VALUEWALK (Nov. 24, 2015, 2:00 PM), <http://www.valuewalk.com/2015/11/iex-sec-comments/> [<http://perma.cc/Y27H-YTA8>] [hereinafter *IEX Swings Back*] (discussing industry reaction to IEX's unique operating characteristics); Elvis Picardo, *How IEX Is Combating Predatory Types Of High-Frequency Traders*, FORBES (Apr. 23, 2014, 4:30 PM), <http://www.forbes.com/sites/investopedia/2014/04/23/how-iex-is-combating-predatory-types-of-high-frequency-traders/> (giving overview of IEX ATS and how it functions against norm to improve market fairness); Richard Repetto & Mike Adams, *"Flash Boys" Boosts IEX Trades 40%*, BARRON'S (Apr. 9, 2014), <http://online.barrons.com/articles/SB50001424053111904223604579491593279784328> (emphasizing advantages of IEX and steadily increasing trade volume after release of Lewis's *Flash Boys*). Notably, ex-trader and HFT whistleblower, Haim Bodek, disagrees with Lewis regarding IEX as a viable solution, and he instead advocates for more regulation. See Haim Bodek, *Commentary, Flash Boys 'Simply Misses the Mark'*, TABB F. (Apr. 8, 2014), <http://tabbforum.com/opinions/haim-bodek-flash-boys-simply-misses-the-mark/> [<http://perma.cc/3T TA-XTRC>]; see also Mark Melin, *NYSE Attacks IEX Exchange Proposal, "Flash Boys" Hero Responds*, VALUEWALK (Nov. 15, 2015), <http://www.valuewalk.com/2015/11/nyse-iex/> [<http://perma.cc/9CSA-LMRV>] [hereinafter *NYSE Attacks IEX*] (arguing IEX "solution" undercuts Reg NMS and creates disadvantages due to delay by IEX router).

D. Backed by Nothing but the Blue Sky

Prior to the creation of the SEC, individual state laws, known colloquially as blue-sky laws, regulated the offering and sale of securities to protect against fraud.⁶⁰ The SEC has since preempted many of those laws, but some, unknowingly to most people, still remain; the one relevant to this Note is New York's Martin Act.⁶¹ Arguably the most powerful blue-sky law, the Martin Act delegates a considerable, and controversial, amount of power to the NY AG to regulate and investigate securities fraud.⁶² While fraud can be difficult to prove under federal law, it is extraordinarily straightforward under the Martin Act: one must demonstrate that there has been some misrepresentation or omission of a material fact during the sale or promotion of securities.⁶³ Moreover, the NY AG's discretion is not subject to judicial review when dealing with a Martin Act violation.⁶⁴ Unsurprisingly, most cases lead to a hefty settlement because public investigations are fair game under the Act, which gives the NY AG incredible leverage.⁶⁵

After a period of dormancy since its inception in 1921, Eliot Spitzer, former NY AG, utilized the Martin Act's power to go after big banks for the first time in history.⁶⁶ He began with Merrill Lynch, then Salomon Smith Barney, and,

60. See KLEIN ET AL., *supra* note 43, at 414 (describing blue sky laws and their functionality prior to SEC's existence); Pisani, *supra* note 10 (describing blue sky laws' namesake and how they filled void of protection for investors).

61. See N.Y. GEN. BUS. LAW § 352(1) (McKinney 2014) (providing example of enforceable state law not preempted by federal securities laws).

62. See Greg Baker, *Eliot Spitzer, the SEC, and Research Analyst Conflicts of Interest: Assessing the "Balkanization" Criticism of Eliot Spitzer's Analyst Conflict of Interest Case 6-9* (July 29, 2004), <http://web.law.columbia.edu/sites/default/files/microsites/career-services/Eliot%20Spitzer,%20the%20SEC,%20and%20Research%20Analyst%20Conflicts%20of%20Interest.pdf> [<http://perma.cc/6HHG-EY2A>] (emphasizing breadth of power and other unique qualities of Martin Act); Pisani, *supra* note 10 (detailing gravity of power granted to NY AG given this state law).

63. See N.Y. GEN. BUS. LAW § 352(1) (McKinney 2014) (stipulating specific definition of fraud under Act); *People v. Lexington Sixty-First Assocs.*, 345 N.E.2d 307, 311 (N.Y. 1976) (holding fraud and fraudulent practices to "embrace all deceitful practices contrary to . . . common honesty"); *People v. Federated Radio Corp.*, 154 N.E. 655, 657 (N.Y. 1926) (emphasizing "wide meaning" of fraud and its application to acts intended to deceive or mislead); *People v. F.H. Smith Co.*, 243 N.Y.S. 446, 449 (N.Y. App. Div. 1930) (stating fraud should be "liberally and sympathetically construed . . . so far as possible").

64. See *People v. Bunge Corp.*, 250 N.E.2d 204, 208 (N.Y. 1969) (holding NY AG must be given complete discretion, as intervention could jeopardize purpose of suit); Baker, *supra* note 62, at 7-8 (marking on breadth of power and unparalleled discretion given to NY AG under Martin Act).

65. See Baker, *supra* note 62, at 6-8 (describing how authorization of public investigations gives NY AG leverage in reaching settlements); Pisani, *supra* note 10 (explaining reason for higher percentage of settlements under Martin Act).

66. See Baker, *supra* note 62, at 6 (commenting on Spitzer's resurrection of Martin Act and its use as strong enforcement tool); Mike McIntire, *Two Views of Spitzer: Populist Warrior or Reckless Business Foe*, N.Y. TIMES (Oct. 15, 2006), http://www.nytimes.com/2006/10/15/nyregion/15spitzer.html?pagewanted=print&_r=0 (analyzing Spitzer's controversy stunning community by using little-known state law to win court order); Walter Olson, *Devil's Bargain: Wall St. & the Martin Act*, N.Y. POST (Aug. 30, 2011, 4:00 AM), <http://nypost.com/2011/08/30/devils-bargain-wall-st-the-martin-act/> [<http://perma.cc/FTZ4-XR3V>] (explaining

eventually, he secured a \$1.4 billion settlement with ten other investment-banking firms.⁶⁷ He gained a national reputation as an activist against the duplicitous conduct on Wall Street, leveling the playing field to the benefit of the average American.⁶⁸ His many critics, however, asserted that he recklessly attacked corporate America at a particularly volatile time—just after 9/11—doing little to alter the bullish distribution in the market, and focusing more on elevating his own political stature.⁶⁹

As part of his Insider Trading 2.0 Initiative, current NY AG, Eric Schneiderman, also decided to wage war against a major financial institution, Barclays, through the use of the Martin Act.⁷⁰ Schneiderman accused the bank of running its dark pool, at one time the second largest in the country, for the benefit of high-frequency traders.⁷¹ The complaint alleges Barclays also misrepresented how client orders were routed, in addition to downplaying the degree to which high-frequency traders were involved with their ATS.⁷² Given the Act's ascendancy, Barclays attempted to have the case dismissed; it argued the Martin Act does not apply to the operation of dark pools, which fall under the SEC's federal oversight, but the NY AG's office quickly countered by

history of Martin Act and Spitzer's unique utilization against big businesses); Nicholas Thompson, *The Sword of Spitzer*, LEGAL AFF. (May/June 2004), http://www.legalaffairs.org/issues/May-June-2004/feature_thompson_mayjun04.msp [<http://perma.cc/5ENB-A9AL>] (detailing resurgence of Martin Act due to Spitzer's reign as NY AG in early 2000s).

67. See Press Release, N.Y. Att'y Gen., Sec. Ny Attorney General, Nasd, Nasaa, Nyse and State Regulators Announce Historic Agreement To Reform Investment Practices (Dec. 20, 2002), <http://www.ag.ny.gov/press-release/sec-ny-attorney-general-nasd-nasaa-nyse-and-state-regulators-announce-historic> [<http://perma.cc/U77L-BTHP>] (detailing terms of agreement reached with ten affected investment firms); U.S. Sec. & Exch. Comm'n, *SEC Fact Sheet on Global Analyst Research Settlements*, <http://www.sec.gov/new/s/speech/factsheet.htm> (last updated Apr. 28, 2003) [<http://perma.cc/L9WG-TDDR>] (giving overview of joint investigation conducted by Spitzer, SEC, and four other prominent regulators). See generally *SEC v. Bear, Stearns & Co.*, 626 F. Supp. 2d 402 (S.D.N.Y. 2009) (granting settlement terms relating to civil actions filed against ten investment banks).

68. See McIntire, *supra* note 66 (noting viewpoints on Spitzer after his attack on Wall Street institutions).

69. See *id.* (acknowledging Spitzer's attacks "bordered on reckless"); see also Brett Nelson, *A Decade After Eliot Spitzer's Crusade, "Sell" Is Still a Dirty Word on Wall Street*, FORBES (Sept. 27, 2012, 9:38 AM), <http://www.forbes.com/sites/brettnelson/2012/09/27/a-decade-after-eliot-spitzers-crusade-sell-is-still-a-dirty-word-on-wall-street/> (comparing market ratings before Spitzer's global settlement to those in 2009). Bullish ratings, or those substantiated by analyst investors who believe the stock price will rise, which dominated the market in previous years, have surprisingly continued to rise despite Spitzer's now decade-old crusade. See Nelson, *supra*. In addition to Spitzer's crusade perhaps not being an ideal way to regulate markets, it seems incongruous that a state-elected official could affect the Nikkei Index so significantly and impose penalties that seemingly do not match the harms. See Thompson, *supra* note 66 (delineating pitfalls and consequences following Spitzer's prolific use of Martin Act).

70. See generally *Barclays Complaint*, *supra* note 9; Schneiderman, *supra* note 11 (detailing role in oversight of Wall Street and ensuring market works for entire investing public); *supra* note 9 and accompanying text (describing potential for similar NY AG suit against Credit Suisse).

71. See *Barclays Complaint*, *supra* note 9, at 1-4, 7 (describing allegations against Barclays and their dark pool, Barclays LX); see also Patterson & Johnson, *supra* note 9 (providing figure regarding Barclays's dark pool size); Pisani, *supra* note 10 (giving overview of Barclays case and stated accusations).

72. See Patterson & Johnson, *supra* note 9 (expanding on allegations made against Barclays in suit NY AG Schneiderman brought).

emphasizing the Act's well-established scope.⁷³ The suit certainly came at a time when dark pools and HFT faced increased scrutiny, so perhaps Schneiderman would receive less flack than Spitzer for targeting the big bank.⁷⁴

In February 2015, months after the filing of the Barclays lawsuit, Justice Shirley Werner Kornreich of the State Supreme Court in Manhattan rejected Barclays's effort to dismiss the case; if the allegations were true, Justice Kornreich felt failure to investigate further would diminish investor confidence and compromise the integrity of dark pools.⁷⁵ Despite affirming Schneiderman's ability to pursue a claim, Justice Kornreich clarified that this would not turn into a "battle over the legality of high-speed trading," nor would the NY AG's cursory public policy arguments sway the court.⁷⁶

III. ANALYSIS

A. *Marring the Martin Act*

Given the latitude of the Martin Act and the leverage it grants the NY AG, it is refreshing to see Justice Kornreich's skepticism as to why the institutional investors, allegedly harmed by the bank, had not brought private suits instead, and she berated the NY AG for failing to include specifics in the complaint.⁷⁷

73. See Scott Patterson, *New York Attorney General Responds to Barclays*, WALL ST. J. (Sept. 16, 2014, 8:34 PM), <http://www.wsj.com/articles/new-york-attorney-general-responds-to-barclays-1410903004> (reporting on Barclays's motion to dismiss and likelihood of failure against omniscient Martin Act); see also David W. Beehler & Thomas F. Berndt, *How New Litigation May Change "Dark Pool" Trading*, ROBINS KAPLAN LLP (Nov. 20, 2014), <http://www.robinskaplan.com/resources/articles/how-new-litigation-may-change-dark-pool-trading> [<http://perma.cc/9MZ8-UQDZ>] (noting Barclays asserted SEC, instead of NY AG, should regulate dark pools and related activities); Gina Chon, *Barclays Fights Back in Dark Pool Case*, FIN. TIMES (Jan. 22, 2015, 7:14 PM), <http://www.ft.com/intl/cms/s/0/bf70688e-a250-11e4-aba2-00144feab7de.html#axzz3oleOKOMJ> [<http://perma.cc/W6YN-TLH7>] (explaining Barclays's efforts to dismiss case and status of suit as of January 2015); Jonathan Stempel, *Barclays Fails To Win Dismissal of NY 'Dark Pool' Lawsuit*, REUTERS (Feb. 13, 2015, 5:15 PM), <http://www.reuters.com/article/2015/02/13/us-barclays-newyork-darkpool-lawsuit-idUSKBN0LH2B220150213> [<http://perma.cc/BMA5-ZBYM>] (summarizing Justice Kornreich's decision to ultimately deny Barclays' motion to dismiss).

74. See Matthew Zeitlin, *Barclays Seeks Dismissal of New York "Dark Pool" Lawsuit, Says It Shows No "Actual Harm,"* BUZZFEED (July 24, 2014, 1:15 PM), <http://www.buzzfeed.com/matthewzeitlin/barclays-seeks-dismissal-of-new-york-dark-pool-lawsuit-says#.xlaLJMOoyA> [<http://perma.cc/ZB7G-HW8F>] (predicting favorable public response to Barclays case given curiosity surrounding dark pools and HFT).

75. See Stempel, *supra* note 73 (detailing Justice Kornreich's reasoning for not quashing NY AG's case against Barclays).

76. *Id.* In deciding to move forward with the case, Justice Kornreich shared her apprehension about whether Schneiderman raised a valid Martin Act claim, and, given the sophistication of the dark pool investors affected, she emphasized that he will have to provide many specifics to show the bank lied. See *id.* During oral arguments, Justice Kornreich said, "'How is anybody going to defend against this? . . . It is so conclusory that I have no clue what we're talking about . . . there are absolutely no specifics in this complaint.'" Chon, *supra* note 73; see also Dolmetsch, *supra* note 9 (noting Justice Kornreich's emphasis on how platform has "significant impact on [] outcome of a trade").

77. See Stempel, *supra* note 73 (highlighting areas of weakness in state's argument against Barclays); see also Chon, *supra* note 73 (acknowledging deficiencies of Barclays case, which troubled Justice Kornreich). At

While most would agree that HFT and dark pool activity deserve scrutiny, commencing actions pursuant to the Martin Act seems far less agreeable.⁷⁸ Up to this point, the New York courts have given carte blanche to the prosecution by continually strengthening this archaic law, and there is a traceable pattern of abuse from Spitzer to Schneiderman.⁷⁹ Today, instead of simply protecting the public from financial fraud, the Martin Act serves primarily as a political tool designed to boost reputation and secure reelection; thus, it is a concerning course of action, even for an industry that admittedly needs attention.⁸⁰

B. Pooling our Resources

As mentioned, many of the problems plaguing the U.S. stock market today have stemmed from imprudent government regulations; a better and more appropriate response may come from those who know the situation best: the high-frequency traders themselves.⁸¹ While this solution may seem

this point, several private lawsuits had been filed against the bank on behalf of the entire class of dark pool users, but the fact that the NY AG initially brought the case was concerning to the judge, especially given the complaint's vagueness. *See* Chon, *supra* note 73. One investor class action suit alleges violations of the '34 Act and damages stemming from the drop in Barclays's stock price after the announcement of the NY AG's suit. *See* Beehler & Berndt, *supra* note 73. The other investor class action suit in California also does not address the legality of HFT specifically, but rather makes similar allegations to those Schneiderman made; the class incurred damages because the bank allegedly allowed high-frequency traders to trade ahead of "traditional investors," making prices less favorable. *See id.*

78. *See* Olson, *supra* note 66 (tracing problematic history of Martin Act and its line of abuse by NY AGs). This article captured the gravity of the consequences stemming from politicians' continued use of the Martin Act in the last decade, including Spitzer and now Schneiderman: "I don't like crumbums and grifters either, but might we not be better off if someone had stuck up for their due process rights back when?" *Id.*; *see also* Koreto, *supra* note 62 (stating Martin Act both unnecessary and particularly damaging due to its extension of powers).

79. *See* Olson, *supra* note 66 (indicating business landscape expanded powers under Martin Act while gradually diminishing others' due process rights). The Martin Act was initially effective in forcing swindlers out of New York and into states with less effective policing; since few established businesses pushed back, however, the law's terms were dangerously expanded on the grounds that it was remedial. *See id.* Spitzer was able to gain national acclaim for acting as a sheriff on Wall Street, making the Martin Act's power appealing to all successive NY AGs. *See id.*; Thompson, *supra* note 66 (detailing Spitzer's victories and political legacy from merciless Martin Act investigations).

80. *See* Olson, *supra* note 66 (contending no end in sight regarding self-interested politicians' exploitation of Martin Act). In framing their actions under the guise of investor protection, the past three NY AGs have successfully advanced their own careers, agendas, and reputations at the expense of failing to create efficacious safeguards for the securities industry. *See id.* It is unsettling that Schneiderman proudly remarked at the Bloomberg Markets 50 Summit in 2013 that the law empowers him to do things that not even the federal government can do—a clear indication that he too intended to utilize the law's extraordinary unilateral power. *See* 2013 Bloomberg Markets 50 Summit Remarks, *supra* note 11.

81. *See supra* note 24 and accompanying text (detailing history of Wall Street events and subsequent regulatory failures); *see also* LEWIS, *supra* note 1, at 87-88 (explaining severity of HFT situation and how informed trader had power to change it). "The more [Brad Katsuyama] understood the inner workings of the financial system, the better he might inform the investors . . . who were being abused by that system. And the more pressure they might bring to bear on the system to change." LEWIS, *supra* note 1, at 88; *see also* Picardo, *supra* note 59 (outlining complexity of HFT and how insight of ex-traders may lead to predatory trading solutions). *But see* Allen, *supra* note 24, at 195-203 (offering alternative solution relating to precautionary

counterintuitive, because trader greed undoubtedly fueled the predatory trading schemes enabled by HFT, it also makes perfect sense.⁸² A free-market economy centers on the idea that our quality of life does not improve from arbitrary governmental decisions, but rather from voluntary choices of individuals; government intervention no longer seems justified in this situation because it has done little to defend and protect the individual.⁸³ Thus, an independent exchange, created by an ethical group of ex-traders and designed to combat the problems caused by HFT, serves as an optimal solution.⁸⁴ Scholar, Nassim Nicholas Taleb, stated, “A complex system, contrary to what people believe, does not require complicated systems and regulations and intricate policies. The simpler, the better.”⁸⁵

C. The Bottom Line

The revolutionary exchange, known as IEX, serves as an ideal response to the conflicts of interest afflicting the stock market; it preserves dark pools and

principle concept). Securities law professor, Hilary Allen, argues the precautionary principle should be used in the context of regulation aimed at stabilizing the financial markets, which would force proponents to prove why a given activity should be permitted, as opposed to regulators making a case for given regulation. *See* Allen, *supra* note 24, at 195. She substantiates the validity of this approach, arguing, “Shifting the regulatory burden would help address the informational, resource, and expertise constraints faced by financial regulators.” *Id.* at 198.

82. *See* LEWIS, *supra* note 1, at 88 (emphasizing “moral inertia” problem in financial system, which perpetuated abuse and corruption). Although it was narrow self-interests that drove HFT abuse, former trader, Brad Katsuyama, understood the gravity of the situation: “I think there’s only a few people in the world who can do anything about this. If I don’t do anything . . . there’s no one to call.” *Id.* Katsuyama and his decision to create IEX would have impressed Professor Milton Friedman; much before HFT’s domination of the U.S. equity market, Friedman stated that the free market structure, governed by the decisions of individuals, and not the government, responds to marketplace greed in a way far superior to other economic structures. *See Interview with Milton Friedman, supra* note 24. Conversely, while the piece arguably lacks some credibility, due to its acrimonious overtones, the ex-trader and HFT whistleblower vehemently disagrees that IEX serves as a long-term solution and instead proposes to reform market regulations, specifically Reg NMS. *See* Bodek, *supra* note 59.

83. *See* Enlow, *supra* note 15 (discussing facets of free enterprise system and where Friedman believed government intervention should end). Twentieth century economist and philosopher, F.A. Hayek, said, “[M]oney is certainly too dangerous an instrument to leave to the fortuitous expediency of politicians.” HAYEK, *supra* note 15, at 120. More specifically, government intervention seems particularly unsuitable in this instance, as major HFT firms, like Getco, were getting increasingly close with federal regulators—more than 200 SEC staffers had taken jobs at HFT firms or firms that lobbied on their behalf since 2007. *See* LEWIS, *supra* note 1, at 105-06. “[S]implicity has been difficult to implement . . . it is against the spirit of a certain brand of people who seek sophistication so they can justify their profession.” TALEB, *supra* note 24, at 11; *see also* PAUL, *supra* note 23, at 2 (emphasizing money can work to maintain free society and limit political power).

84. *See* LEWIS, *supra* note 1, at 242-43 (explaining alternative exchange created to reintegrate free market economy facets and simplify complicated market structure); Picardo, *supra* note 59 (describing IEX as potential solution for creating more balanced marketplace).

85. TALEB, *supra* note 24, at 11; *see also* Allen, *supra* note 24, at 186-88 (reiterating important point relating to ineffectiveness of “overly-detailed regulation”). An inherent risk of complicated regulations is ineffectiveness, but it can also “destabilize the financial system by adding further complexity to an already complicated environment.” Allen, *supra* note 24, at 186-87.

HFT, but also creates fairness without federal intervention.⁸⁶ Mutual and hedge funds, as opposed to major Wall Street players, funded the IEX solution, and these investors, in addition to IEX employees, have less than five percent stakes in the company.⁸⁷ Furthermore, IEX limits order types, prohibits colocation, nixes rebates in favor of flat trade fees, and provides no advance previews of customer order data.⁸⁸ Perhaps the most genius element of IEX, however, is the 350 microseconds of latency imposed, which effectively eliminates the opportunity for high-frequency traders to front-run other dark pool users.⁸⁹ As IEX's impressive share volume demonstrates, this new market solution was not only successful, but also well received by large institutions in the industry—something rarely said about government regulations.⁹⁰

86. See LEWIS, *supra* note 1, at 173-74 (explaining intentions behind creating IEX). “[I]t wasn’t high-frequency trading in itself that was pernicious; it was its predations. It wasn’t necessary to eliminate high-frequency traders; all that was needed was to eliminate the unfair advantages they had, gained by speed and complexity.” *Id. Contra* IEX Swings Back, *supra* note 59 (acknowledging industry reactions, which argue IEX’s methods create “unfair advantage” and offset accuracy of NBBO). Many established exchanges, such as NYSE and NASDAQ, wrote comment letters following IEX’s application to become an exchange in September 2015, which primarily allege that IEX’s hallmark “speed bump” creates a disadvantage for orders ultimately not executed on the exchange. *Id.*; NYSE Attacks IEX, *supra* note 59 (opposing IEX exchange application given issues relating to lack of disclosure and proprietary router system). The most significant argument embedded within the polemical NYSE letter was that the IEX Point of Presence system violates Reg NMS because the intentional delay means orders are not executed or cancelled immediately and thus, since these actions are not automatic, IEX’s quotes are in violation of “the second prong of [Reg NMS’s] definition of an automated quote.” NYSE Attacks IEX, *supra* note 59; see generally King, *supra* note 59 (expressing dissatisfaction with IEX’s tactics and using Seinfeld reference to discredit business model).

87. See LEWIS, *supra* note 1, at 178-79 (articulating purpose of investor agreement as one focused on diminishing conflicts of interest). This approach, which prohibited owners from trading directly on the exchange, aligned incentives closely with that of all stock market investors. See *id.*; Picardo, *supra* note 59 (reiterating intent behind IEX’s decision to be exclusively investor-owned).

88. See LEWIS, *supra* note 1, at 178-79 (explaining IEX’s solution for creating fairness without banning HFT); Picardo, *supra* note 59 (outlining methods IEX used to combat predatory trading).

89. See LEWIS, *supra* note 1, at 177-78 (describing reason for creating latency arbitrage and how they simulated effects of distance); Picardo, *supra* note 59 (defining latency and how it effectively prevents predatory trading).

90. See Lewis, *supra* note 31 (suggesting support from “silent majority” could monumentally impact IEX’s success); Krouse, *supra* note 59 (suggesting IEX has notable investor support since brokers make routing changes at request of clients); Picardo, *supra* note 59 (quantifying IEX’s success by comparing share volume on exchange to other thirteen exchanges); Repetto & Adams, *supra* note 59 (denoting significant increases in IEX trade volumes since its inception in October 2013). Not long after its launch, IEX handled over twenty million shares a day and surpassed four major exchanges, including NYSE MKT and the Chicago Stock Exchange. See Picardo, *supra* note 59. One of the first breakthroughs that propelled IEX forward was the early support it received from Goldman Sachs. See LEWIS, *supra* note 1, at 241 (detailing how Goldman Sachs’s orders on IEX strengthened reputation and appeal). Additionally, big firms had even more incentive to trade on IEX because it promoted and utilized two areas that likely would be tarnished, or maybe even prohibited, if regulations were involved: HFT and dark pools. See *id.* at 179. “If high-frequency traders performed a valuable service in the financial markets, they should still do so, after their unfair advantages ha[ve] been eliminated.” *Id.*

D. Taking Stock of the Situation

The shift to electronic trading, as well as the many other developments that stemmed from that advance, monumentally changed the U.S. stock market; it is, however, ultimately still evolving.⁹¹ The lit market, while more regulated and publically accessible than the dark, became overwhelmingly less favorable to the traditional investor, who was harmed by the exchanges' profit-centered decisions to cut deals with high-frequency traders.⁹² The dark pools initially served as a refuge from the greedy exchanges, which ruthlessly used regular investor trades as liquidity bait, but soon these too became tainted with avidity.⁹³ Despite the negative attention dark pools and HFT have received, they still serve a meaningful purpose, as they have notably reduced costs and increased operational efficiencies.⁹⁴ Therefore, instead of advocating for regulation that would eradicate or wholly diminish the value of these strategies, it is more important to improve on strategy structure to encourage a more meritorious outcome.⁹⁵

Although NY AG Eric Schneiderman's case against Barclays put all major financial institutions on notice and alerted the general community to the situations involving dark pools, it is unlikely to have a considerable impact on the future of HFT or dark-pool trading.⁹⁶ The decision to address this highly scrutinized and misunderstood topic through a Martin Act suit is so reminiscent of the Spitzer era and the subprime mortgage crisis that it undercuts the persistent overtones of righteous indignation.⁹⁷ Furthermore, Congress and the SEC offer little hope for cogent reform.⁹⁸ The agency is crippled by fear that any rule changes will spur inadvertent negative consequences.⁹⁹ This fear is

91. See *supra* Part II.B (tracing evolution of stock market and emphasizing industry effects of electronic trading).

92. See *supra* Part I, Part II.B (describing attractive qualities of dark pool trading and its eventual corruption by HFT).

93. See *supra* Part II.B (outlining high-frequency traders' methods to exploit liquidity in dark pools).

94. See Asare & Potter, *supra* note 7 (imploing regulators to recognize continued importance of dark pools despite problematic aspects); Ju, *supra* note 26 (observing support of dark pools extends to direct competitors, like NYSE); see also Mercurio, *supra* note 5, at 69 (underscoring competitive advantages and favorable qualities of dark pools). There is a genuine sense in the market, confirmed by the chief executive officer of the NYSE, that dark pools should remain, in part because there is currently no alternative, exchange or otherwise, that can better handle the execution of block trading. See Ju, *supra* note 26.

95. See *supra* note 94 and accompanying text (highlighting attractive aspects of dark pools and bolstering their continued market importance).

96. See Stempel, *supra* note 73 (inferring suit will not have broader implications based on Justice Kornreich's commentary). Justice Kornreich was clear from the beginning this case would focus solely on the issue at bar—the Barclays LX dark pool—not HFT as a whole. See *id.*; *supra* Part III.A (discussing Justice Kornreich's contentious reaction to Barclays case and NY AG's complaint).

97. See *supra* Part II.D (elucidating Martin Act's history as political tool and comparing current to prior use by Spitzer).

98. See Part II.C and accompanying text (assessing inefficiencies, as well as negative implications, of prior regulations instituted by Congress and SEC).

99. See *supra* note 24 and accompanying text (observing disconnect between intentions of SEC

warranted, given the SEC's track record, but failure to take any action is equally unhelpful.¹⁰⁰ Moreover, because the agency's knowledge of the trading landscape trails so far behind that of the sophisticated minds who are front-running the system, it only makes sense to turn to those people for solutions.¹⁰¹

IV. CONCLUSION

Brad Katsuyama and all of the ex-traders and programmers who created IEX, exemplify leaders in their field. They are guiding investors, brokers, and regulators toward an effective solution that targets specific aspects of this unique problem, all without federal or political intervention. Our society should encourage this style of management because it not only preserves our country's economic foundation, but it also promotes guidance from morally responsible leaders—a matter acutely relevant to this industry.

The suit against Barclays will not address the overarching question of HFT legality, which further suggests it is no more than a rung on NY AG Schneiderman's political career ladder. Although it is ultimately unclear how the market will continue to evolve, focusing on structure, simplicity, and clarity will be critical. Finally, it is vital to move forward knowing the system can always be improved. "Think left and think right and think low and think high. Oh, the things you can think up if you only try!"¹⁰²

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regulations and their ultimate outcome).

100. *See id.* Just before the publication of this Note, on November 18, 2015, the SEC released a rule proposal, which would require ATSs to file a new form, ATS-N; this form would include information relating to the operational aspects of the ATS and be available for public viewing on the SEC's Electronic Data Gathering, Analysis, and Retrieval website, commonly known as EDGAR. *See Hayashi, supra* note 48; Proskauer Memorandum, *supra* note 5 (discussing potential effects of new rule and assessing new disclosure responsibilities for ATSs). The increased disclosure would also be required to include any potential conflicts of interests between the broker-dealer-run venues and their clients, an issue at the heart of the Barclays case. *See id.*; Gubert, *supra* note 9 (recognizing regulatory effort to combat conflicts of interest as inherent purpose of proposed rule). Chairman Mary Jo White said the information currently available about order handling and the relationships between the venue and the client, as well as the relationship between the operating broker-dealer and its venue, is not enough for investors to "perform deeper or meaningful analyses or compare trading venues." Tricchinelli, *supra* note 9.

101. *See supra* note 31 and accompanying text (explaining widespread industry confusion and how tenacious traders, like Katsuyama, uncovered HFT schemes).

102. DR. SEUSS, OH, THE THINKS YOU CAN THINK! 38 (Random House, Inc. 1975).